THE POSITIVE PARENTING PILOT PROJECT: REVISITED

BY

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A Thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of

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ABSTRACT

The Positive Parenting Pilot Project was a study based on the concept that a parent who had an abused/deprived childhood is more likely to have defective parenting skills in adulthood expressed as a maladaptive syndrome involving parent and child and it attempted to observe if the phenomenon occurred. The project followed a group of women during pregnancy and confinement and continued the observation of the mother-child relationship during the first 18 months of life. The Positive Parenting Pilot Project Revisited was a project designed to determine how the children and families involved in the original project had fared over time. The study design involved a retrospective review of the Children's Hospital of Winnipeg medical record files for those children and their siblings who had been enrolled in the original Positive Parenting Pilot Project. The review was done 10 years after the completion of the original project. Fifty-four women completed the project. Demographic data and data related to health, social and community outcomes were collected. A final "risk" score was determined and compared with the prenatal risk score and the risk score at 18 months. A chi-square analysis was done. There were no statistically significant results. Detailed case histories were recorded. There were changes in the "risk" status of the families over time. Further longitudinal outcome studies and interventions aimed at addressing individual familial and community factors were recommended.

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I would like to thank Dr. Ken McRae and Jeanne Hurd for involving me in the initial P4 Project. This was my first exposure to a research project and it led to my ultimate enrollment in the Community Health Sciences Program. To all the individuals who worked on the original P4 Project - it was a tremendous example of team work between the Women's Centre and Children's Hospital.

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PREFACE

Violence against children has been manifested in every conceivable manner: physically, emotionally, through neglect, by sexual exploitation and by child labor (Kempe and Helfer, 1980). Various forms of child abuse and neglect have been present for centuries and in many cultures. The "rediscovery of the abused child" was ushered in by a radiologist, Dr. John Caffey, who reported it in 1946 as a new syndrome in which subdural hematomas in infants were often associated with atypical fractures of the limb and rib. However, it was not until 1962 when C. Henry Kempe referred to the "Battered Child Syndrome" that the medical profession and the public allowed themselves to undo their denial of child abuse by treating that continuing tragic human condition (Kempe and Helfer, 1980). The concern over the abused and neglected child has increased significantly over the past several decades. This increase in public awareness has been accompanied by an equally rapid expansion in the understanding of the nature of the abuse and neglect problem, its ever increasing incidence, the psychodynamics of those who abuse and are abused and new methods of therapeutic intervention (Kempe and Helfer, 1980).

Johnson (1990) reported on the study findings of a Study of National Incidence and Prevalence of Child Abuse and Neglect in the United States. This study, published in 1988, was based on cases recognized and reported to the investigators by community professionals in a sample of 29 counties. This

study revealed that reported maltreatment had increased by 66% since 1980 and that physical abuse had increased by 58%. The reported increase may be due in part to society's increased sensitivity and recognition of the issue as well as mandated reporting laws rather than solely to an increase in the incidence of abuse. In the Study of National Incidence and Prevalence of Child Abuse and Neglect, the fatality rate was 0.1%--one out of every one thousand abused children dies. Helfer (1982) describes an overall annual incidence of children who are abused and or neglected at the approximate rate of 10-15/1000 children per year. Since abuse and neglect harm the child's developmental state which does not heal in the same manner as do many physical injuries, these figures are cumulative (Helfer, 1982). It is estimated that the prevalence of child abuse in the general population is between 1-2%. (Schmidt, 1980)

Screening of the parent who is at high risk of having major difficulty interacting with his or her child is one of the secondary preventive approaches that has been considered. The use of screening tests to focus program efforts on a population at high risk is a useful part of the public health approach to many types of diseases. In each case, the utility of predictive screening must be examined in terms of the prevalence of the condition, the performance of the screening instrument, the effectiveness of available treatments, the costs of various program components and the nature of alternative approaches to the problem (Daniel et al, 1978).

The low prevalence of child abuse combined with even the most

optimistic estimates of screening effectiveness implies that any child abuse screening program will yield large numbers of false positives--non-abusing families labelled as abusing or potentially abusing. The large social cost of this type of labelling makes such an approach unacceptable (Daniel et al, 1978). Gelles (1983) believes that screening for prediction will never be feasible because even an instrument that was accurate more than 90% of the time would make one false prediction for each true prediction, based upon an estimated rate of 5% for serious family violence. A screening predictive tool that would be acceptable to society as a whole has not yet been developed.

The review of the literature will examine the effectiveness of predictive studies adhering to the principles of screening and their effectiveness in altering outcomes. Another issue that needs to be addressed with screening programs is whether early prediction will alter the outcome.

Many of the populations followed in the various research studies were not followed for extensive periods of time. Altmeier et al (1984) stated that prediction appeared to be possible for only two years following the interview. Murphy et al (1985), however, reported that there are no answers as to what may happen in "high risk families" where no abuse or neglect has as yet been noted. It is possible that after the passage of a few years a much larger percentage of these children may be victims. Taylor et al (1988) state that longitudinal research is "mandated," and further suggests that this is the challenge that faces child advocates in the scientific community. Helfer (1982)

states that the comprehensive long-term study of individual cases is to be encouraged.

Hegyvary (1991) states that "outcomes" is a general term used in regard to end results of treatment and effectiveness of care. Lohr (1988) states that there has been a shift in the definition of outcome measures in recent years. Lohr (1988) indicated that the classic definition included the five "Ds"--death; disease; disability; discomfort; and dissatisfaction. The recent shift toward more positive aspects of health includes survival rates, states of physiological, physical and emotional health, and satisfaction with health care services. Hegyvary (1991) also indicated that timing must be taken into account in any delineation of indicators of end results of care and treatment. Hegyvary (1991) suggested that it is desirable to evaluate outcomes at more than one time interval. The timing of desired achievements at various points in the process of life is the underlying theme of studies of outcomes.

The Positive Parenting Pilot Project (hereafter referred to as the P4 Project) was a study based on the concept that a parent who had an abused/deprived childhood is more likely to have defective parenting skills in adulthood expressed as a maladaptive syndrome involving parent and child and it attempted to observe if the phenomenon occurred. The project followed a group of women during pregnancy and confinement and continued the observation of the mother and child relationship during the first 18 months of life. The P4 Project was designed to look at the issue of parenting skills in the

absence of overt abuse. It was anticipated that the analysis would be used as baseline data for the subsequent design of preventive programming, hence the term "Pilot" Project. The P4 Project also provided an opportunity to evaluate outcomes for a cohort at more than one time interval. The prenatal and 18-month data had been well documented. The P4 Project required much effort and the commitment of many people. The author was interested in knowing how these children and families had fared over time. Could we learn more about our early involvement with an "at risk" population group?

CHAPTER ONE: LITERATURE REVIEW

A. INTRODUCTION

This review of the literature includes both research and theoretical readings. The articles were identified from comprehensive computer searches of the following indexes--Medline, CINAHL (Cumulative Index Nursing and Allied Health Literature), and from comprehensive reviews of Index Medicus and bibliography reviews. The first section deals with the concept of prevention as it relates to child abuse and neglect. Seven articles were critically reviewed and the details of this analysis are included in Appendix I - Table IX. The second section deals with the issue of prediction as it relates to the prevention of child abuse and neglect. Twenty-one articles were critically reviewed and the detailed analysis is included in Appendix II - Table X (1-21). The third section deals with the issue of programming related to the prevention of child abuse and neglect. Seven articles were analyzed and this review is included in Appendix III - Table XI.

The literature review reinforces the issue that prevention and prediction of child abuse and neglect is complex and multifaceted. There has been an increasing awareness of the need to prevent child maltreatment. Martin and Elmer (1992) state that numerous research and clinical studies suggest that maltreated individuals suffer from a complex set of psychological, interpersonal,

social and intellectual deficits. Among these are problems reflecting the abused individual's inability to deal in an effective way with feelings. These include a basic mistrust of self and others, interpersonal relationships, ingrained feelings of low self worth and a sense of helplessness, which in turn may create more long-term difficulties in the more concrete tasks of living (obtaining and keeping a job, maintaining adult relationships, successfully raising children, etc.).

Both the financial and human costs associated with child maltreatment, although crudely estimated, are staggering (Daro, 1988). She based this statement on a report of the American Association for Protecting Children (AAPC). The AAPC stated that 23,648 children were reported with serious physical injury due to maltreatment in 1983. This classification covers such impairments as brain damage, skull fractures, bone fractures, internal injuries, poisoning and burns. Daro calculated that if half these children were hospitalized for 5.2 days, the mean length of stay for fractures, the in-patient medical costs would exceed 20 million dollars. The costs for rehabilitation and special education in the subsequent years were estimated at 7 million dollars. In addition, approximately 18% of substantiated cases of maltreatment are placed in foster care, which would cost 460 million dollars in the first year and 646 million dollars in subsequent years. For adolescent maltreatment victims, Daro estimated that a delinquency rate of 20% would cost 14.8 million dollars, assuming these adolescents would spend an average of 20 years in a correctional facility. Moreover, as stated previously, many of the long-term

sequelae of maltreatment could impede future earning capacity and productivity. Assuming that such losses are incurred only by children with severe injuries and that the losses are limited to 5-10% of total potential earnings, Daro estimates that maltreatment results in 658 million dollars to 1.3 billion dollars in lost productivity.

There is the possibility that early efforts to enhance family functioning could be more effective than interventions after maltreatment has already occurred (Dubowitz, 1989). It would be helpful therefore to have an acceptable predictive screening tool that could be utilized. The literature review demonstrates that the research on prediction is very complex. Many of the studies have methodological and sampling difficulties. A screening test must demonstrate reliability and validity. For a screening test to be reliable requires obtaining the same answer or drawing the same conclusion when the test is repeated a second time. The matter of validity is divided into two areas: sensitivity and specificity. Sensitivity is the probability that a "case" will be properly identified by the screen (i.e., will be screened positive). Specificity is the probability that a "non-case" will be properly identified (i.e., screened negative). Obviously, a good screening test will have both high sensitivity and high specificity. The ability to predict the presence or absence of disease from test results is dependent on the prevalence of the disease in the population tested as well as on the sensitivity and specificity of the test. If the prevalence is low, as in the case of child abuse, both the screen and the treatment

modality must be of very high quality.

The Canadian Task Force on the Periodic Health Examination (1986) uses three sets of criteria to evaluate a preventive screening maneuver:

1. Risks and benefits;
2. Sensitivity, specificity and predictive value;
3. Safety, simplicity and acceptability to the patient.

Many of the research articles reviewed did not address these issues. The issue of the identification of false positives on a screening manoeuvre and subsequent "labelling" has been discussed previously in the Preface and has many implications for the development of an acceptable screening tool. Several screening tools were discussed in the articles reviewed but none have been acceptably validated. There have also been few longitudinal prospective studies which have followed the cohort in order to evaluate outcomes and their relationship to the previously identified risk factors.

Many of the program description articles reviewed had methodological and evaluative difficulties. These programs have not been replicated, thus making it difficult to assess the validity and reliability of their findings.

B. THE POSITIVE PARENTING PILOT PROJECT (P4 PROJECT)

The Positive Parenting Pilot Project (P4 Project) was a descriptive study.

Data collection included interviews with the prospective parent in the prenatal period and observations in the postpartum and neonatal period.

The methodology included interviewing prospective mothers during their first pregnancy, collecting data as to:

1. Her attitude towards her pregnancy (partner);
2. Information as to her childhood;
3. Observations as to her behavior during the delivery and perinatal period;
4. Observations of the mother and child during the first 18-24 months of life.

The P4 Project is summarized in Table I.

The study results indicated that less educated, unmarried and mothers with an unstable partner were more likely to be in the "abnormal" range. The first prenatal interview and the delivery room predictions were found to be significantly associated with outcome (p. values of 0.027 and 0.079 respectively). However, the majority of the correct predictions were due to the high number of low-risk mothers. In terms of outcome, 40 mothers were found to be "normal" at the time of the final scoring and 14 mothers were found to be "abnormal" at the time of the final scoring. Of the 14 mothers found to be

"abnormal" on final score, 9 mothers were predicted as low-risk (false negative) by prenatal interview, and 7 mothers were predicted as low-risk (false negative) by delivery room observations. Of the 40 normal mothers, 34 were correctly identified - a specificity of 85%. The results of the multivariate analysis indicated that 76.9% of the high-risk mothers and 82.5% of the low-risk mothers could be identified by combining the prenatal scores, delivery room scores and the following demographic data--marital status, race, education and partner.

At the end of the 18 months, 13 mothers were known to have experienced "community trouble." "Community trouble" was defined at the time of the P4 Project as a temporary or permanent guardianship of the child by Child and Family Services, and/or the child had been abandoned, and/or a referral to the Children's Hospital Child Protection Centre had been made. Of the 13 family situations, 3 children had been apprehended permanently, 3 children had been apprehended on a temporary basis, 4 children had been abandoned, and 3 children had been referred to the Child Protection Centre. Of these 13 family situations, 6 had been previously scored as normal. The conclusion was that "community trouble" did not imply inadequate parenting.

Of the 14 family situations which had been scored as "abnormal," 7 presented as experiencing "community trouble" and 7 presented with no obvious community problems.

At the end of 18 months, 13 children had a marked depression in language development. Normal developing language at 36-40 weeks had been

apparent previously with these 13 children.

TABLE I: P4 PROJECT SUMMARY
McRae et al (1984) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
McRAE et al (1984)	Descriptive Pilot Project	Sample drawn from the Women's Centre Outpatient Department Inclusion criteria: 1. First pregnancy 2. 17 years and older 3. No indication of an immediate move from the area Socioeconomic status was homogeneous A mixture of racial backgrounds was assured because	At 34-36 weeks gestation mothers were interviewed using a revised Maternal Adaptation to Pregnancy Questionnaire - Data collected prospectiviely - these were done by social workers Reaction to Live Birth - a questionnaire was done at delivery by an obstetric nurse - this was scored Observations of labor and delivery were done by obstetric nurses	Correlation of: 1. Demographic data with outcome 2. Specific interviews and observations with outcome 3. Normals and abnormals with outcome 4. Multivariate analysis Combining prenatal scores Delivery room scores Demographic data	Final pediatric mother-child interaction score consisted of: 1. The mother's score at the last visit: 0 1 2 Low Med High 2. The average of the mother's scores throughout the project: 0 1 2 Low Med High 3. A report as to the child's development: 0 - Normal;	Inclusion criteria are well defined. Obstetric nurses were trained in the recording of observations, intertest reliability was 94%. All prenatal labor and delivery room observations and postpartum observations were concealed from subsequent examiners - blinding was done. Consent was obtained. The questionnaire	No random assignment. No control group. High number of low-risk mothers - was this due to the fact that high-risk mothers do not present for prenatal care? The bulk of the correct predictions - specificity - sensitivity were due to the number of low-risk mothers. The study results would not have been generalizable, due to the

TABLE I: P4 PROJECT SUMMARY
McRae et al (1984) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
McRAE et al (1984) (cont.)		of the population dynamics of the Women's Centre	Postpartum Fact Sheet done during 4 days postpartum by an obstetric nurse Mother-infant Interactions Assessment - done by obstetric nurses - this was scored Brazelton Neonatal Behavior Assessment Scale - done by 72 hours by one of two pediatric residents Yale Child Developmental Schedules were done monthly	Marital status Race Education	1 - 1 Factor depressed 2 - D.Q. 90 x 2 - 1 Factor 4. Evidence of bonding: 0 - Good bilateral bonding 1 - Baby bonds with someone except mom 2 - No bonding Scoring out of a range of 0-8: Anyone scoring 0-1 - considered normal mother-child relationship	was pretested on a population similar to the study population	population sample Certain terms not defined (e.g., "defective parenting skills") Author raised the issue of whether the project influenced the outcome - was it in essence a confounder? There was no description of the numbers of individuals who were approached about the study and who refused to participate - what happened to them?

TABLE I: P4 PROJECT SUMMARY
McRae et al (1984) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
McRAE et al (1984) (cont.)			during the first year of the baby's life and at 15 and 18 months by Child Development Specialists Mother-Infant Interaction Assessment at 1, 3, and 6 months was done by nurses in the Neonatal Clinic at Children's Hospital Nurses in the Neonatal Clinic made contact with the mother during the postpartum period		2 or above - abnormal		

CHAPTER TWO: METHODOLOGY

A. INTRODUCTION

The methodology of my study will be described as follows:

B. Statement of Objectives

C. Statement of Hypotheses

D. Study Sample

E. Study Design

F. Study Flowchart

G. Study Instrumentation

H. Study Variables

I. Study Analysis

B. STATEMENT OF OBJECTIVES

The objectives of my research project are:

1. To describe the health, social and community outcomes for the children and families who originally participated in the Positive Parenting Pilot Project (P4 Project)--between the years 1981-1983.
2. To determine the natural history of a previously identified "at risk" cohort.

C. STATEMENT OF HYPOTHESES

In this research proposal, the following terms will be used: "health", "social" and "community" outcomes and "risk" status. The following null hypotheses will be tested.

1. There will be no difference between the "health," "social" and "community" outcomes seen at 18 months and the "health," "social" and "community" outcomes identified 10-12 years later for the children and families involved in the P4 Project.
2. There will be no difference in the identified "risk" status of the families over time.

D. STUDY SAMPLE

The inclusion criteria for the study sample included the children and siblings of the families who had agreed to participate in the P4 Project. The criteria for inclusion in the P4 Project were:

1. the woman's first pregnancy;
2. the woman was 17 years of age or older;
3. the woman did not plan to immediately move from the area.

Fifty-four of the 64 women who had agreed to participate in the P4 Project completed the project. The study will report on the follow-up of the 54 subject cohort and as many of their siblings as could be identified.

Ten families did not complete the project. Of these 10 families, 4 dropped out after the first prenatal visit, 2 babies' fathers refused to allow their partners to participate, 3 families were lost after one to three pediatric visits and 1 infant died at the time of delivery.

E. STUDY DESIGN

The study design involved a retrospective review of the Children's Hospital of Winnipeg medical record files for those children and their siblings who had been enrolled in the P4 Project. A copy of the original consent form is included in Appendix IV. A copy of the study flow chart is included on page 25.

Fifty-four women and their children had originally completed the project. The Children's Hospital of Winnipeg medical record files of these children were reviewed. The Children's Hospital of Winnipeg medical record files were reviewed by two nurses between April-September 1993. One of the nurses is a registered nurse and the second nurse has a baccalaureate degree in nursing. Both nurses have much clinical experience--22 and 30 years of nursing experience, most of it at the Children's Hospital of Winnipeg. Both nurses were familiar with the population from which the sample was drawn.

Six of the hospital medical record files of the original cohort were reviewed independently by each of the two reviewers to assess inter-rater reliability.

Scores were assigned independently. If there was a difference in the rating the issue was reviewed by the coders and a consensus achieved. If the data was missing or not applicable, this was coded as 8 or 9 respectively.

As many siblings as possible were identified. This was done by reviewing the cohort file carefully for documentation of any siblings. The

number of sibling files reviewed was 69.

The risk scoring was done at the end of the process. The "final" risk score was based on the health, social, and community outcomes that had been identified in the 1993 review of the files. The final risk score was done prior to reviewing the prenatal risk score and the 18-month risk score in order to ensure that the final risk scoring process was not influenced by knowing the previous two scores. The author was blinded to these two previous results.

The outcomes that influenced the final risk scoring were a history of nonaccidental trauma, identification of concerns about sexual abuse, identified school-related difficulties, identified behavioral problems, and identified family stressors (e.g., a history of substance abuse and/or a history of family violence, a change of guardianship, involvement of Child and Family Services and whether or not the child and his/her siblings had ever been apprehended).

The prenatal risk score had been based on the Prenatal Intake Questionnaire and the Late Maternal Adaptation to Pregnancy Questionnaire. These questionnaires had been completed by the social workers involved with the original P4 Project. The author used the P4 social worker's score to assign risk. The original data was reviewed to determine this score. The scoring was coded as high, medium or low. Copies of both original questionnaires and the scoring tool for the Prenatal Intake Questionnaire are included in Appendix V.

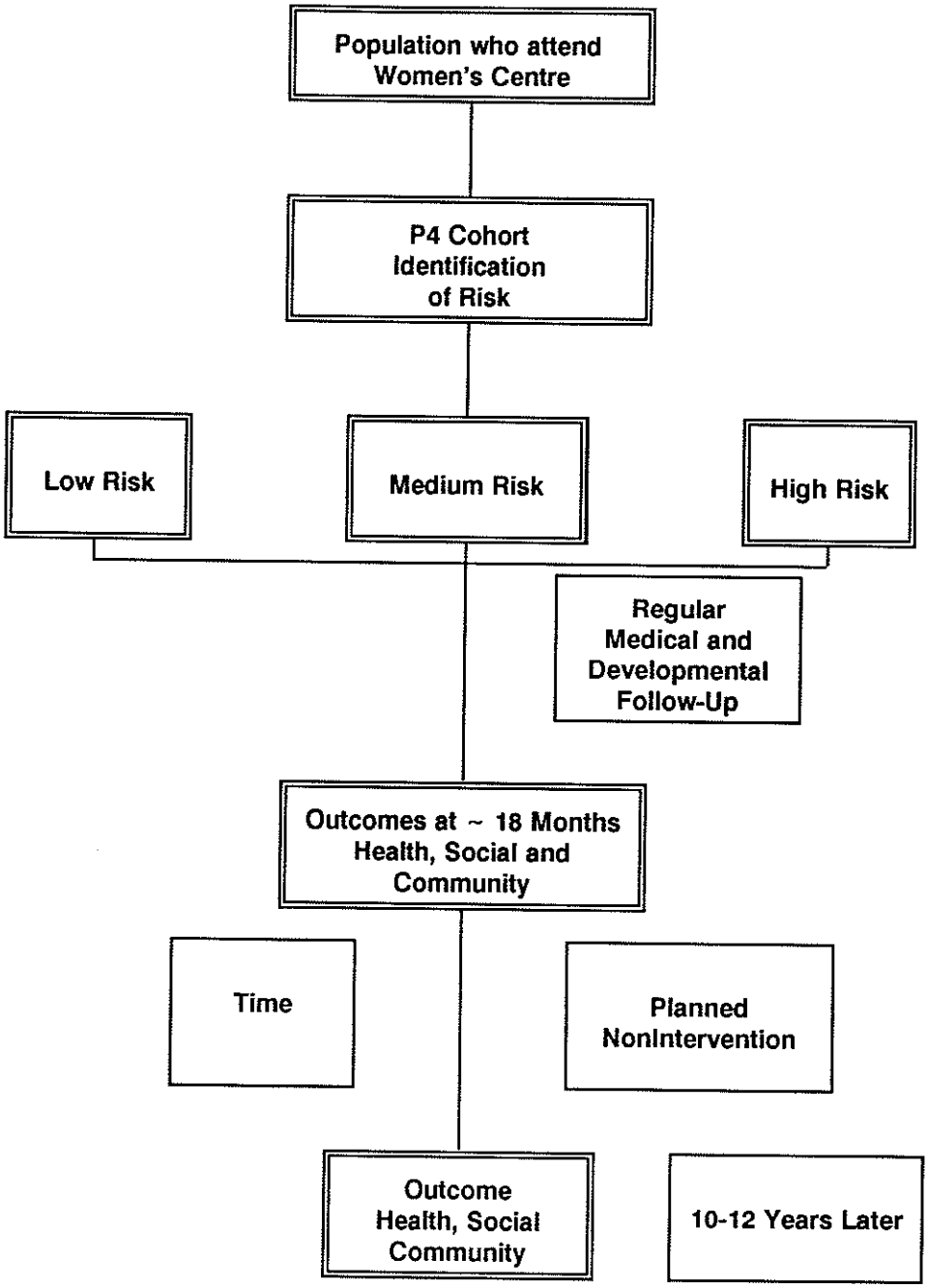
If the scores on the above two questionnaires differed (i.e. one was scored as medium and the other was scored as low) a review of all of the

written material in the file was done by the author and a risk score assigned utilizing the additional information on the subject. The assignment of this risk score was carried out without referring to the final risk score. However, the potential for an inadvertent bias was possible because the process was not entirely blind.

The risk score at 18 months was formed on the basis of the last Child Development Clinic assessment and the P4 summary that was recorded by Dr. Ken McRae (Director of the Children's Hospital Child Development Clinic) at the end of the original P4 Project. At each Child Development Clinic assessment, a measurement tool entitled "Measurement of Mother-Child Attachment--First Year Clinical Observation of Contact Between Mother and Child" was completed. A copy of this assessment tool is included in Appendix VI. The scoring was coded again as high, medium and low.

The copies of the original questionnaires, the scoring tool and the "Measurement of Mother-Child Attachment--First Year Clinical Observation of Contact Between Mother and Child" have been reformated to meet Thesis requirements.

F. STUDY FLOWCHART



G. INSTRUMENTATION

A data capture instrument to collect the information on the study cohort was developed for this study. The major categories are demographic data, health outcomes, social outcomes and community outcomes. This instrument is included in Appendix VII.

A similar instrument to collect the sibling data was formulated. This instrument is included in Appendix VIII. The major categories are demographic data, health outcomes, social outcomes and community outcomes. Construct validity was achieved by having the instruments reviewed by local experts on child abuse and study design.

A coding book was used to code the data that was collected on the original cohort and on the sibling group. This coding book is included in Appendix IX.

The coding book also included the demographic data that was collected at the time of the original P4 Project.

H. VARIABLES

The following variables were collected in the demographic data base;

- child's name
- child's sex
- chart number
- mother's name
- mother's date of birth
- father's name
- father's date of birth
- same biological father for all children
- mother's age when second child born
- date when child last seen at Children's Hospital
- number of siblings
- names of siblings
- siblings - date of birth
  - chart number
- socioeconomic status - employed
  - unemployed
- ethnic status - Caucasian
  - non-Caucasian
- birth weight

- birth height
- head circumference
- apgars
- documented substance abuse during pregnancy
    - alcohol
    - solvents
    - smoking
    - other drugs
- length of newborn stay
- is the child living with his/her original guardians
- date when guardianship changed
- risk determination
    - prenatal
    - 18 months
    - final review
- has the child lived in homes other than legal guardian
- if yes number of homes lived in

The demographic data that was included from the original P4 database included:

- agreed to participate in the study
- age in years when patient was registered in the project

- marital status - single
- married
- living as married

- race - Caucasian
- non-Caucasian

- residence - temporary
- regular place of residence

- duration of stay at the residence - up to 3 months
- 3-6 months
- 6 months to 1 year
- 1-2 years
- more than 2 years

- number of people in the residence - 1 person
- 2 persons
- 3-4 persons
- more than 4 persons

- type of residence - private house
- apartment
- hotel/rooming house

- change in residence in last 12 months - no change
- 1 change only
- 2-4 changes

- more than 4 changes

- schooling - up to grade 4
- up to grade 5-8
- up to grade 9-11
- up to grade 12

- diploma - yes
- no

- vocational training - yes
- no

- work - employed
- unemployed

- partner - husband
- boyfriend
- common-law
- unknown

Health outcomes included the following variables:

- height - percentile
- weight - percentile
- immunization status
- number of well child visits
- number of emergency visits
- emergency visits related to - illness

- accidents/injuries

- ingestions

- hospital admissions - number and reason

- concerns regarding failure-to-thrive

- number of visits related to - nonaccidental trauma

- age at time of incident

- define incident

- sexual abuse concerns - age at time of incident

- define incident

- identified major health problems

Social outcomes included the following variables:

- identified developmental delays

- hearing impairment

- speech delay

- visual impairment

- identified school-related difficulties

- identified family stressors

- family violence

- substance abuse

- identified behavior problems

Community outcomes included the following variables:

- involvement with Child and Family Services

- involvement with the Women's Hospital/Children's Hospital Department of Social Work
- Occupational Therapy/Physiotherapy (OT/PT) referrals
- involvement of the family with the Child Guidance Clinic
- involvement of the family with the Society for Manitobans with Disabilities
- apprehensions documented in the medical record file

I. ANALYSIS

Data analysis methods included frequencies, percentages, cumulative frequencies and cumulative percentages for the risk-scoring categories, prenatal, 18 months and the final risk score and for all of the health, social, and community outcome data.

A chi-square analysis (3 X 2 table) was done using the prenatal risk score (high, medium and low) and the various outcome data. The chi-square analysis (3 X 2 table) was repeated with the 18-month risk score and the final risk score and the various outcome data.

A chi-square analysis (2 X 2 table) was also done using the prenatal risk score (combining the high and medium categories into one and the low category remained alone) and the various outcome data. The categories were combined because of the small number in each cell. This analysis was repeated with the 18-month risk score and the final review score. The sensitivity, specificity, positive predictive value, negative predictive value and accuracy of the prenatal and 18-month predictions were calculated using the combined categories. These results are included in Table II and Table III.

The analysis also included two detailed case studies. The analysis of the outcomes for the remainder of the study cohort is included in Appendix XII.

CHAPTER THREE: FINDINGS AND DISCUSSION

A. INTRODUCTION

The findings of the analysis will be reviewed in the following order:

B. Two detailed case descriptions

C. Summary of the health outcome data

D. Summary of the social outcome data

E. Summary of the community outcome data

F. Summary of the chi-square analysis

G. The mother's demographic data from the previous data base

H. Themes identified in reviewing the P4 prenatal files

I. Study limitations

J. Study strengths

B. CASE DESCRIPTIONS

To begin my review of the study findings I have chosen two case examples which describe how two families have fared over time.

Case I

At the time of the prenatal risk assessment, it was noted that this was a planned pregnancy, the mother was described as being happy to be pregnant and the mother's mother was noted to be happy about the pregnancy. Mother stated that her partner was not part of the planning but she stated "I think he's happy." A concern was expressed about whether the mother was realistic regarding her expectations of the range of her infant's potential behavior, and the actual restrictions that caring for an infant would/could impose and the change in lifestyle, however minimal, she might experience. The prenatal risk assessment was low.

At the 18-month assessment, the baby is described as "irritable but cooperative" with the assessment. Good development is noted. Mom and her partner are described as both being up to the crib and are pleased with C.W.'s progress. The risk assessment at 18 months was low.

At the time of the final assessment, the following health outcomes were identified. C.W. is identified as being deaf and is wearing two hearing aides. Sexual abuse allegations were made when C.W. was 8 years and 4 months of

age. C.W. had witnessed the sexual assault of her brothers. At the time of the incident C.W. was naked and the incident occurred in the presence of drug abusers.

The following social outcomes were identified. C.W. is known to have a developmental delay. A hearing impairment was identified in the time frame from 18 months until the final review. A speech delay was noted in the first 18 months and in the time frame from 18 months until the final review. A visual impairment was noted in the first 18 months and in the time frame from 18 months until the final review. School-related issues were described. A family history of substance abuse and family violence is described in the first 18 months and in the time frame from 18 months until the final review. C.W. is also described as experiencing behavioral problems and at the time of this review C.W. was not living with her natural guardians.

The following community outcomes were identified. Child and Family Services was involved in the first 18 months and in the time frame from 18 months until the final review. There was involvement of the Children's Hospital Department of Social Work in the first 18 months. The Child Guidance Clinic was involved with the family. The Society for Manitobans with Disabilities was involved in the time frame from 18 months until the final review. In the medical record file two apprehensions are documented. The length of the two apprehensions is not clear from the review of the medical record file.

The following health outcomes for C.W.'s siblings are identified.

Sibling #1 is described as being deaf and has a major dermatitis on both feet. Third party sexual abuse allegations occurred to sibling #1 at age 5. Sibling #2 has been diagnosed as autistic. Third party sexual abuse allegations occurred at age 3 to sibling #2. No health outcomes of concern are noted for sibling #3, who was 2 months old at the time of the final review.

The following social outcomes for C.W.'s siblings are identified. Sibling #1 is noted to have a speech delay and a hearing impairment. Sibling #1 and sibling #2 are described as having school-related issues. A family history of substance abuse and family violence is described for sibling #1 and for sibling #2. Sibling #1 and sibling #2 are described as having behavioral problems. Sibling #1 and sibling #2 were not living with their natural guardians at the time of the final review.

Sibling #2 is described as having a developmental delay, a hearing impairment and an identified speech delay. A family history of substance abuse is described for sibling #3.

The following community outcomes were identified. Sibling #1 and sibling #2 have been involved with Child and Family Services, the Child Guidance Clinic and the Society for Manitobans with Disabilities. Sibling #2 was noted to be involved with the Children's Hospital Department of Social Work. Sibling #1 and sibling #2 have been apprehended twice according to the medical record file. Sibling #3 is involved with Child and Family Services and the Children's Hospital Department of Social Work. Sibling #3 is currently the

only child in the mother's care. The final risk assessment score for case #1 was high. It is important to note that the severity of the children's medical problems, deafness, autism, may have impacted on the mother's ability to cope and provide care for her children.

Case II

At the time of the prenatal risk assessment, it was noted that the mother was from an extremely deprived background. The mother described that her father was very strict. Her father hit her with his hand and with a whip, sometimes when she was bad and sometimes when nothing had occurred. She stated that she remembers no one person about whom she has good memories. The mother had been involved with prostitution prior to becoming pregnant. The mother states that her good times relate to getting away with being destructive and defiant. The mother has stated that she was proud that her boyfriend could handle his problems by beating up on his enemies. Mother is described as having had a variety of experiences with institutions for girls, foster homes and jail. Mother is described as having no concept of what it will mean to be a parent. The prenatal risk assessment was high.

At 18 months it was noted that there was warmth and caring between mother and child. Mother states that she uses both grandparents to help care for the child. The 18-month risk assessment was low.

At the time of the final assessment, the following health outcomes were

identified. B.M. had had five admissions to hospital--intussusception, meningococcemia with meningitis, herpangina, pharyngitis and tonsillitis, and a tonsillectomy and adenoidectomy. The admissions described concerns about neglect issues. B.M. had one visit to the emergency department following an ingestion of Dettol (a cleaning agent) at age 4 years 6 months.

The following social outcomes were identified for B.M. A developmental delay was noted in the first 18 months and in the time frame from 18 months until the final review. A speech delay was noted in the first 18 months and in the time frame from 18 months until the final review. A history of substance abuse and family violence is also described in the first 18 months and in the time frame from 18 months until the final review.

The following community outcomes are described for B.M. Child and Family Services is described as being involved in the first 18 months and in the time frame from 18 months until the final review. The Children's Hospital Department of Social Work was involved in the first 18 months. Two apprehensions were recorded in the medical record file and B.M. was in the care of Child and Family Services at the time of the final review.

The following health outcomes for the siblings are identified. An incident of nonaccidental trauma is described for sibling #1 at age six. Third party sexual abuse allegations are described for sibling #1 at age 5 years and 8 months.

The following social outcomes for the siblings are identified. A history of

substance abuse is described for sibling #1 and sibling #2. Sibling #1 and sibling #2 are described as having behavioral problems. A speech and developmental delay is described for sibling #2. School-related issues are described for sibling #2. A family history of violence is described for sibling #2.

The following community outcomes for the siblings have been identified. Child and Family Services is described as being involved with sibling #1 and sibling #2. Three apprehensions are recorded for sibling #1 and sibling #2 in the medical record file.

The final risk assessment score was high.

C. HEALTH OUTCOME DATA

In reviewing the available health outcome data of the original cohort 2 (3.7%) of the children at the time of the final review were at the 5th percentile for weight and 1 (1.85%) child was below the 5th percentile for weight. The weight patterns fall within a normal distribution. The final height percentile data was limited due to missing data--heights were recorded less often as the child grew older. Of the 2 children whose weight was at the 5th percentile, 1 was in the high-risk and one in the low-risk category. The 1 child whose weight was less than the 5th percentile fell into the low-risk category.

The immunization status of 50 (92.6%) of the original cohort at the time of the medical record review was up-to-date. Data was incomplete on 4 children. The immunization rate for this cohort is high. Of the 4 children whose immunizations were not up-to-date according to a review of the medical record file and a review of the Manitoba Immunization Monitoring System, there was 1 child in each of the three risk categories. Data was missing on 1 child as this child had been adopted at birth.

The mean number of Children's Clinic visits per child from birth until the time of the final review was 26.96 with the range being 3 to 92 visits. The median number of visits was 22. The number of visits per year per family was 3.34--based on a sample of 44 for whom the number of Children's Clinic visits were known. There is no baseline data available regarding the average number

of visits a family may make to the Children's Clinic every year. This data may not be an accurate reflection of care as many children had more than the average number of visits and many children were not followed at the Children's Clinic on a regular basis. Four families had over 70 visits. Each of the children in these 4 families had identified chronic health problems. The families may also have attended elsewhere for care--walk-in clinics or utilized the Envoy service (this is a service where physicians make house calls). It may also be that high-risk families may be more likely to attend Children's Clinic and the "low-risk" families to attend a private physician's office. It would follow that high-risk families would have more visits recorded in the hospital file.

The mean number of emergency visits per child was 7.98 with the range being 1 to 33 visits. The median number of visits was 8. The number of emergency visits per family per year was 1.08--based on a sample of 44 for whom the number of emergency visits was known. Four children had over 20 emergency visits during the study period. Six children had emergency visits following an ingestion--one of the children had a visit to the Emergency Department following an ingestion in the first 18 months. It is interesting to note that 4 of the 6 children who presented to the Emergency Department following an ingestion were in the high-risk category, 1 was in the medium-risk category and 1 was in the low-risk category.

There were no children in the study group who were diagnosed with failure-to-thrive. Thirty-one (57.4%) of the children had at least one hospital

admission.

Sixteen children (29.6%) in the first 18 months were identified as having a major health problem and 12 children (22.2%) were identified as having a major health problem in the time frame from 18 months until the final review. Ten of the children identified in the first 18 months were also identified as having a major health problem in the time frame from 18 months until the final review. The major health problems identified are included in Table II.

The percentage of nonaccidental trauma in the first 18 months was 5.6%. The percentage of nonaccidental trauma in the time frame from 18 months until the final review was 9.3%--both figures are higher than the prevalence rate of 1-2%. The percentage of sexual abuse in the cohort was 14.8%--the percentage identified as in-family (involving an individual in the family) was 3.7% and the percentage identified as third party (involving an individual who did not live in the home) was 9.3%.

The health outcome data is summarized on Table III.

TABLE II: IDENTIFIED MAJOR HEALTH PROBLEMS

HEALTH PROBLEM	COHORT	SIBLINGS
UTI	7	1
Primary pulmonary TB	1	0
Anemia	6	4
Glomerular Nephritis	1	0
Osgood-Schlatters	1	
Febrile Seizures	3	1
Abstinence Syndrome	0	1
TB Contact	3	2
Asthma	4	3
Congenital Dislocated Hip	2	
CMV	1	
Monoparesis Right Arm	1	
Eczema	2	4
Epilepsy	1	0
Polymorphus Light Eruption	1	
Fetal Alcohol Effects	2	
Meningitis	1	
PDA Repair	0	1
Bronchiolitis	0	1
Hypertonia	0	1
Deafness	1	1
Autism	0	1

TABLE III: HEALTH OUTCOME DATA

- characteristic evident in the first 18 months

- characteristic evident in the time period from 18 months until the final review

- characteristic evident during the entire observation period

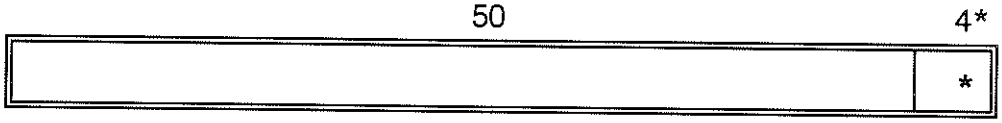
WEIGHT PERCENTILE (5th percentile)
Final Review

2

WEIGHT PERCENTILE (<5th percentile)
Final Review

1

IMMUNIZATION STATUS UP TO DATE



*not known

IDENTIFIED MAJOR HEALTH PROBLEM

D. SOCIAL OUTCOME DATA

One of the 2 children identified as having a developmental delay during both time frames has been identified as having Fetal Alcohol Effects and one of the children has been identified as having neurological abnormalities and a monoparesis of his right arm. Of the 9 children identified with a developmental delay, 6 were in the high-risk group and 3 were in the medium-risk group.

The child identified as having a hearing impairment at 18 months was identified as being in the medium-risk group and the other 2 children were identified as being in the high-risk group. The 1 child who had a significant hearing loss had also been identified as having a developmental delay in the time frame from 18 months until the time of the final review.

Two of the 7 children who had been identified as having a speech delay in both time frames were also identified as having a developmental delay in both time frames and 2 other children with a speech delay in both time frames were also identified as having a developmental delay in the first 18 months. Of the 17 children identified with a speech delay during both time frames, 7 were in the high-risk category, 3 in the medium-risk category and 7 in the low-risk category.

Thirteen children had been identified with school-related issues, for example, academic difficulties. One of the 13 had been identified with a hearing impairment in the time frame from 18 months until the time of the final review, and 1 had been identified with a developmental delay at 18 months. One child

had been identified with a developmental delay and a speech delay in the time frame from 18 months until the time of the final review and 1 child had been identified as having a developmental delay and a hearing impairment in the time frame from 18 months until the final review and a speech delay in the time frame from 18 months until the final review. Of the 13 children identified, 8 children were in the high-risk category and 5 were in the medium-risk category.

Identified family stressors included family violence and substance abuse.

Of the 15 families where family violence was identified as an issue, 11 were in the high-risk category, 2 in the medium-risk category, 1 in the low-risk category, and there was 1 family where the data was missing.

Of the 21 families where substance abuse was identified as an issue, 14 were in the high-risk category, 5 were in the medium-risk category, 1 was in the low-risk category, and there was 1 family where the data was missing.

Of the 11 families where the children were identified as having behavioral problems, 10 families were in the high-risk category and 1 family was in the medium-risk category.

Of the 17 families where the children lived in homes other than that of their legal guardian, at the final risk assessment 14 families were in the high-risk category, 2 in the medium-risk category and 1 in the low-risk category. In the prenatal risk assessment, 12 of these families had been in the low-risk category, 2 in the medium-risk category and 3 in the high-risk category.

The social outcome data is summarized in Table IV.

TABLE IV: SOCIAL OUTCOME DATA

- characteristic evident in the first 18 months

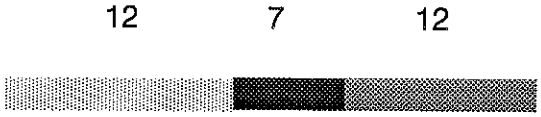
- characteristic evident in the time period from 18 months until the final review

- characteristic evident during the entire observation period

DEVELOPMENT DELAY

HEARING IMPAIRMENT

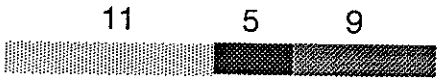
SPEECH DELAY



SCHOOL RELATED ISSUES

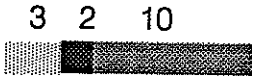
TABLE IV: SOCIAL OUTCOMES DATA (Cont.)

FAMILY VIOLENCE

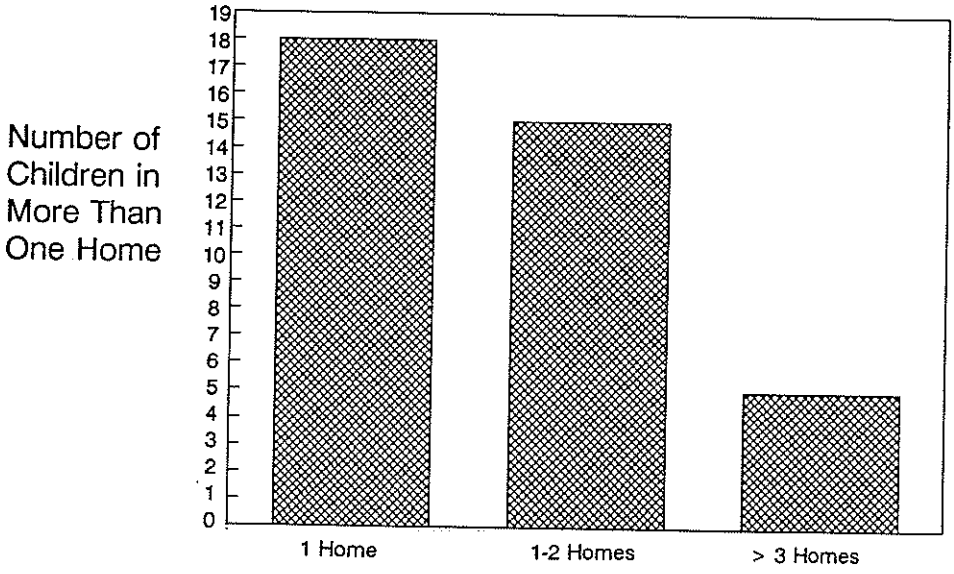


SUBSTANCE ABUSE (ALCOHOL)

BEHAVIOR PROBLEMS



HOMES OTHER THAN LEGAL GUARDIAN DURING STUDY PERIOD



E. COMMUNITY OUTCOME DATA

In reviewing the community outcome data 29 (53.7%) of the families had been involved with Child and Family Services in the first 18 months. Prenatally 4 of the 29 families had been scored as high-risk. Seven had been scored as medium-risk and 17 had been scored as low-risk and there was 1 family where the prenatal risk score was missing. If a mother is under 18 at the time of delivery a referral is made to Child and Family Services. Ten of the P4 mothers were 17 at the time of delivery and were referred to Child and Family Services. Seventeen (31.5%) of the families were involved with Child and Family Services in the time frame from 18 months until the final review. All of those families were scored as high-risk at the time of the final review.

Five of the children were apprehended during the first 18 months. Four of those families had been scored as low-risk prenatally and 1 family had been scored as high-risk. Each of these five children were apprehended once. Nine children were apprehended in the time frame from 18 months until the final review. These 9 families had been scored as high-risk at the time of the final assessment. Of the 9 children, three were apprehended once, 5 children were apprehended twice, and one child was apprehended five times.

The Women's Hospital and Children's Hospital Department of Social Work were involved with 29 (53.7%) families in the first 18 months, which is consistent with the number of referrals to Child and Family Services in the same

time frame. The Children's Hospital Department of Social Work was involved with 7 (13.0%) of the families in the time frame from 18 months until the time of the final review. Five of the 7 families were scored as high-risk at the time of the final assessment and 2 of the families were scored as medium-risk at the time of the final assessment.

A referral to occupational therapy/physiotherapy was made on 6 (11.1%) of the children in the first 18 months. One of the 6 families was scored as high-risk prenatally, 2 of the families were scored as medium-risk and 3 of the families were scored as low-risk prenatally. Two (3.7%) children were referred to occupational therapy/physiotherapy in the time frame from 18 months until the time of the final review and 1 of the families was scored as medium-risk at the time of the final review.

Eleven (20.4%) of the children were referred to the Child Guidance Clinic. Six of the 11 families had been scored as high-risk at the time of the final review and 5 of the families had been scored as medium-risk. Seven of the children who had been referred to the Child Guidance Clinic had also been identified as having a behavior problem at the time of the final review.

No children were referred to the Society for Manitobans with Disabilities in the first 18 months and only 1 child (1.9%) was referred to the Society for Manitobans with Disabilities in the time frame from 18 months until the final review. That family had been scored as high-risk at the time of the final review.

There was a difference in the health, social and community outcomes

seen at 18 months and the health, social and community outcomes identified 10-12 years later for some of the children and families involved in the P4 Project.

The community outcome data is summarized in Table V.

TABLE V: COMMUNITY OUTCOME DATA

- characteristic evident in the first 18 months

- characteristic evident in the time period from 18 months until the final review

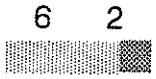
- characteristic evident during the entire observation period

COMMUNITY OUTCOME DATA

APPREHENSION

DEPARTMENT OF SOCIAL WORK

OCCUPATIONAL THERAPY/PHYSIOTHERAPY REFERRALS



CHILD GUIDANCE CLINIC

SOCIETY FOR MANITOBANS WITH DISABILITIES

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F. STATISTICAL ANALYSIS

The chi-square analysis in 2 X 2 tables were:

Pre-risk X 0 (birth) - [FINAL REVIEW]

Pre-risk X 18 months

Pre-risk X F1

Risk 18 X F1

The variables used were:

Hospital admission

Failure-to-thrive

Nonaccidental trauma

Sexual abuse

Identified health problems

Developmental delay

Hearing impairment

Speech delay

Visual impairment

Family history - substance abuse

Family history of violence

Identified behavior problems

Child and Family Services

Children's Hospital Department of Social Work

OT/PT Referral

Society for Manitobans with Disabilities

Apprehensions

Child Guidance Clinic

School-related issues

There were no statistically significant results in the chi-square analysis. The lack of statistical findings may have been related to the small sample size.

The sensitivity of the prenatal predictions was 41.18% and the specificity was 65.0%. The positive predictive value was 66.66% and the negative predictive value was 60.60%. These results are recorded in Table VI.

The sensitivity of the 18-month prediction relevant to the final outcome was 43.75% and the specificity was 90.0%. The positive predictive value was 87.5% and the negative predictive value was 50.0%.

These results are recorded in Table VII.

In the P4 Project six mothers initially were identified as being high-risk. At 18 months, 4 mothers were identified as being "high-risk". At the time of the final review these same mothers remained high-risk and 18 more mothers became high-risk.

This review showed that over time 62.5% of the initially identified low-risk families fared more poorly over time, either becoming "medium" or "high-risk". On the other hand, 50% of the initially identified high-risk mothers did better, over time becoming either "medium" or "low-risk". There were also differences

in the identified "risk" status of the families over time. The null hypothesis was rejected. A graph of the risk scoring, prenatal, 18-month and final risk score is included in Appendix X.

These results reinforce the difficulties related to prediction.

TABLE VI: PRENATAL PREDICTIONS AND FINAL ASSESSMENT

PRENATAL PREDICTIONS				
		HIGH & MEDIUM		LOW
HIGH	6	3	1	2
MEDIUM	15	6	4	5
LOW	32	13	7	13

FINAL ASSESSMENT				
		MEDIUM-HIGH	LOW	
P4 Predictions	MEDIUM-HIGH	14	7	21
	LOW	20	13	33
		34	20	54
Sensitivity	14/34	=	41.18	
Specificity	13/20	=	65.0	
+ ve	Predictive Value	14/21	=	66.66
- ve	Predictive Value	20/33	=	60.60
Accuracy		34/54	=	62.96%

TABLE VII: 18-MONTH PREDICTIONS AND FINAL ASSESSMENT

18-MONTH PREDICTIONS				
		HIGH & MEDIUM		LOW
HIGH	4	4		0
MEDIUM	12	5	5	2
LOW	36	12	6	18

FINAL ASSESSMENT				
		MEDIUM-HIGH	LOW	
18 Month Assessment	MEDIUM-HIGH	14	2	16
	LOW	18	18	36
		32	20	52
Sensitivity	14/32	=	43.75	
Specificity	18/20	=	90.0	
+ ve	Predictive Value	14/16	=	87.5
- ve	Predictive Value	20/33	=	50.0
Accuracy		32/52	=	61.5%
Prevalence		32/52	=	61.5%

G. MOTHER'S DEMOGRAPHIC DATA

The mother's demographic data that was collected in the prenatal period gives some idea of the cohort and its characteristics. The data is summarized in Table VIII.

Table VIII (A)	Racial Origin
Table VIII (B)	Marital Status
Table VIII (C)	Type of Residence
Table VIII (D)	Residence
Table VIII (E)	Duration of Stay at the Residence
Table VIII (F)	Changes in Residence
Table VIII (G)	Number of People in the Residence
Table VIII (H)	Schooling
Table VIII (I)	Diploma
Table VIII (J)	Vocational Training
Table VIII (K)	Work
Table VIII (L)	Partner

When the numbers in the graphs do not add up to 54, this is due to missing data.

TABLE VIII (A): MOTHER'S DEMOGRAPHIC DATA
RACIAL ORIGIN

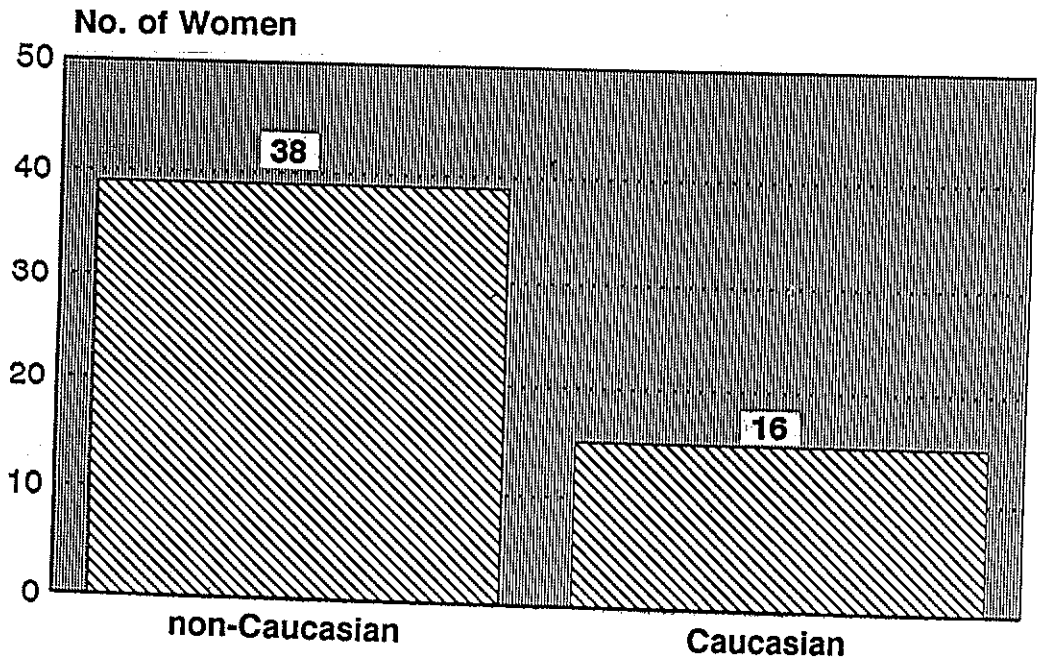


TABLE VIII (B): MOTHER'S DEMOGRAPHIC DATA
MARITAL STATUS

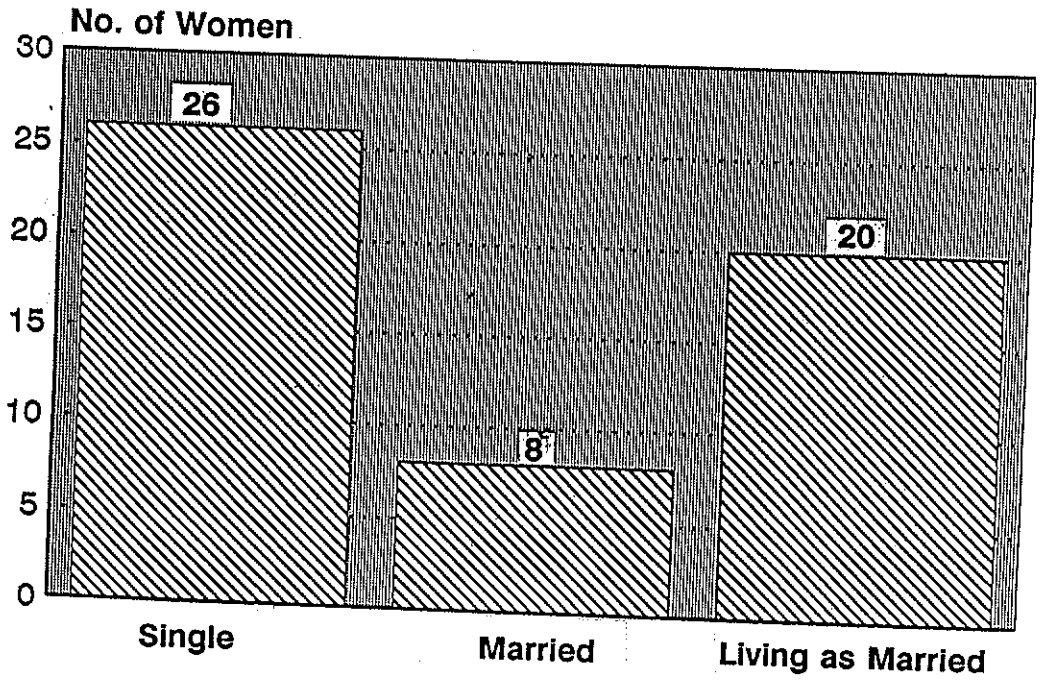


TABLE VIII (C): MOTHER'S DEMOGRAPHIC DATA
TYPE OF RESIDENCE

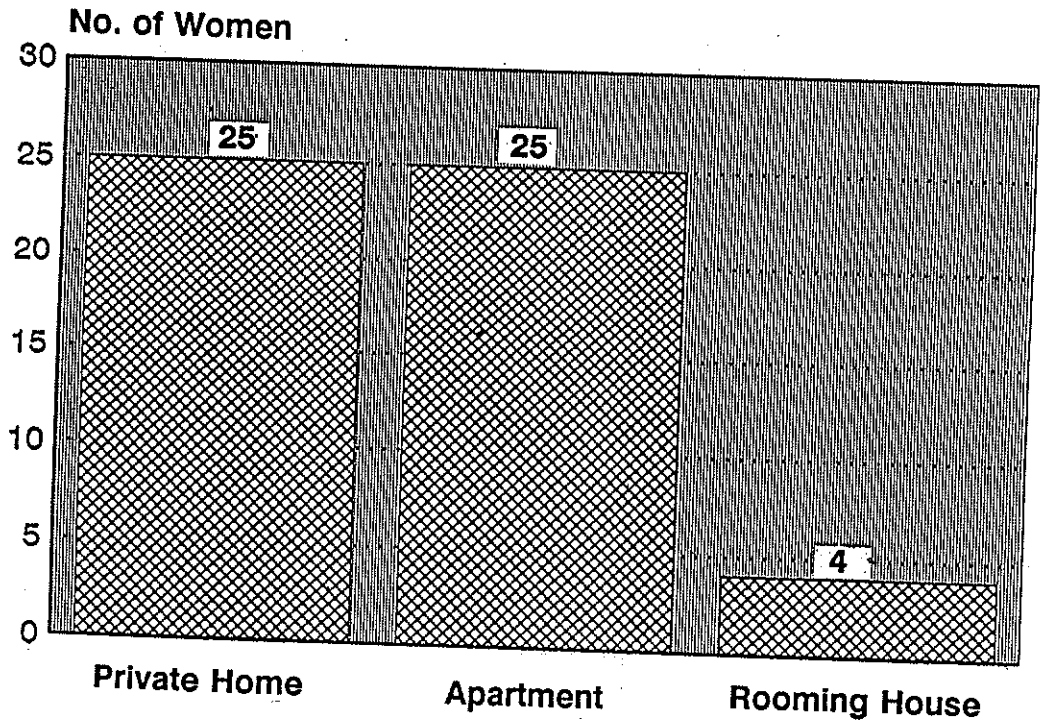


TABLE VIII (D): MOTHER'S DEMOGRAPHIC DATA
RESIDENCE

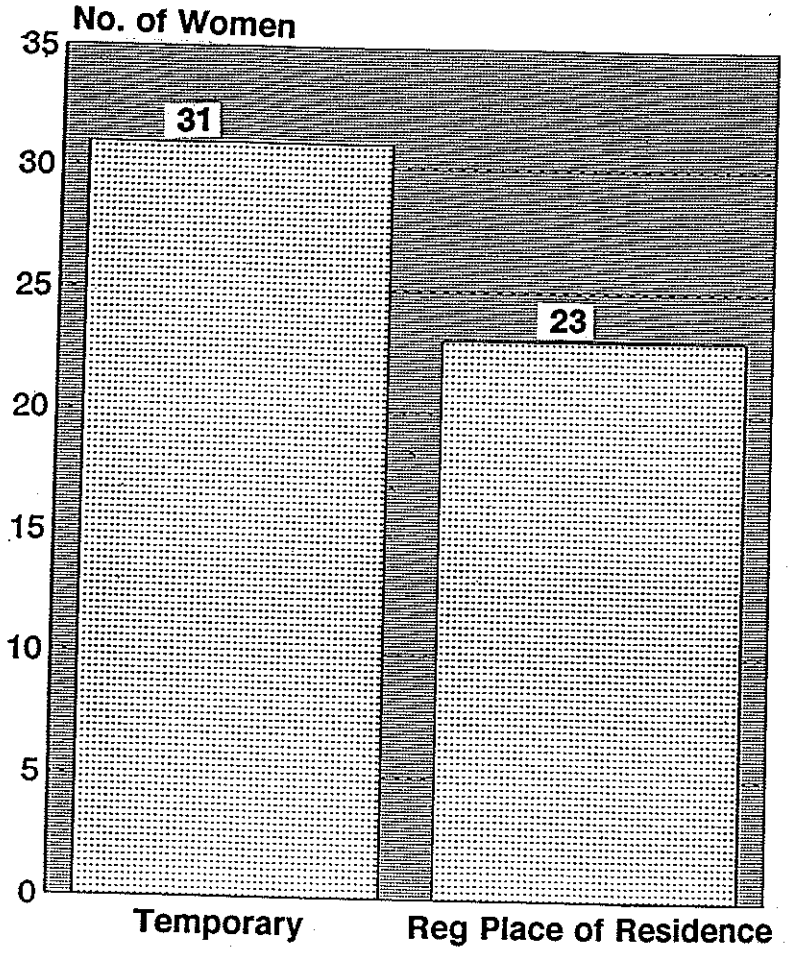


TABLE VIII (E): MOTHER'S DEMOGRAPHIC DATA
DURATION OF STAY AT THE RESIDENCE

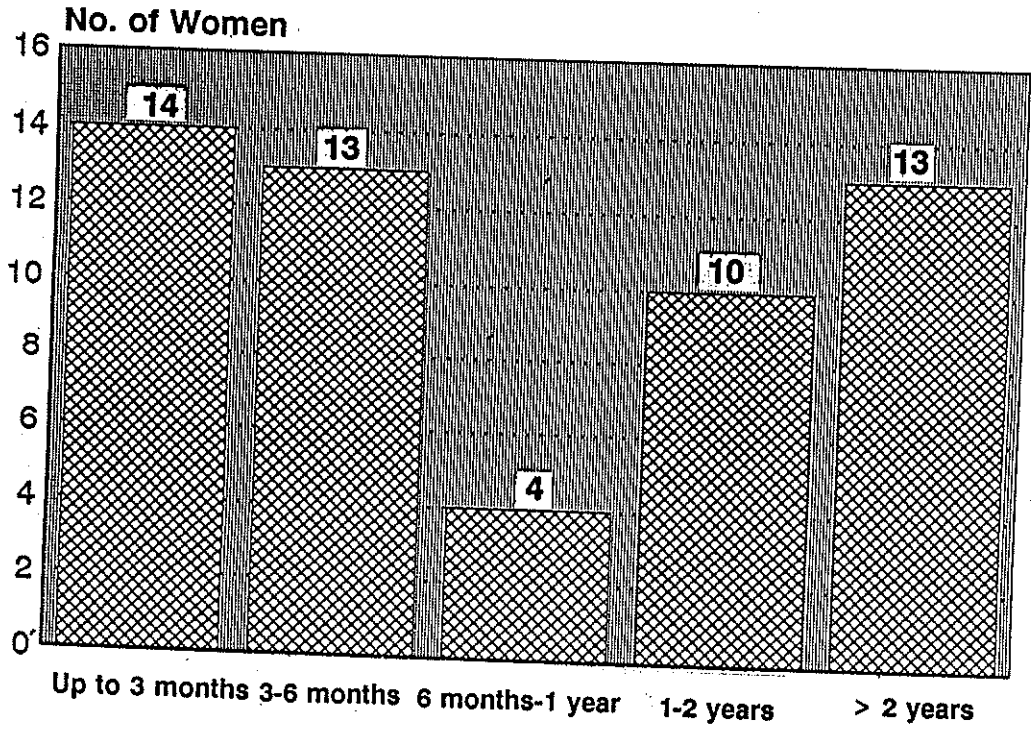


TABLE VIII (F): MOTHER'S DEMOGRAPHIC DATA
CHANGES IN RESIDENCE IN THE PAST 12 MONTHS

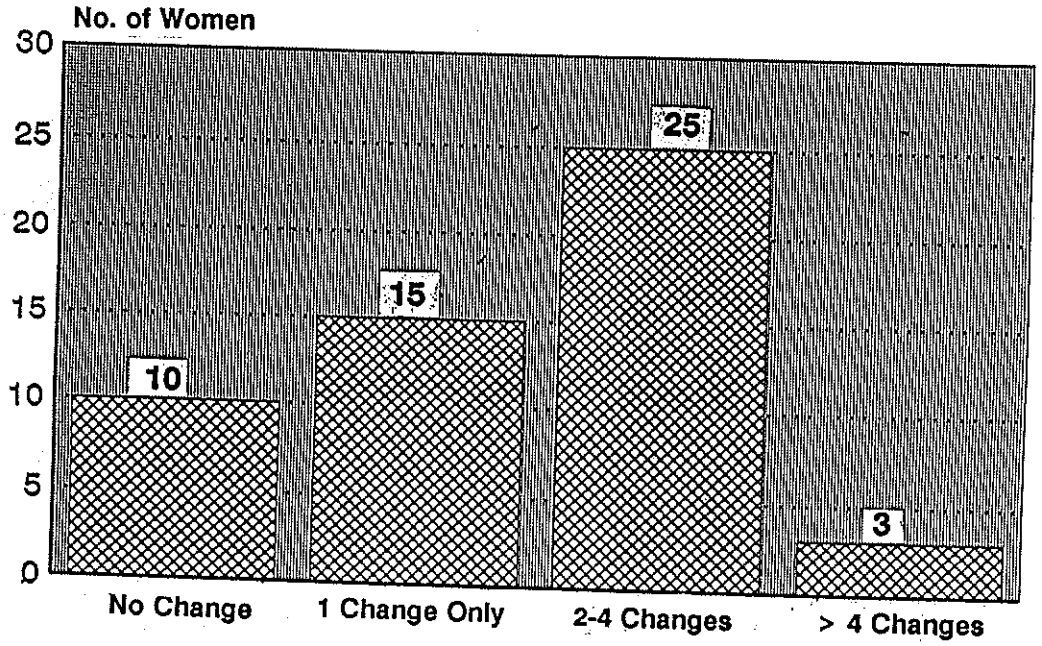


TABLE VIII (G): MOTHER'S DEMOGRAPHIC DATA
NUMBER OF PEOPLE IN THE RESIDENCE

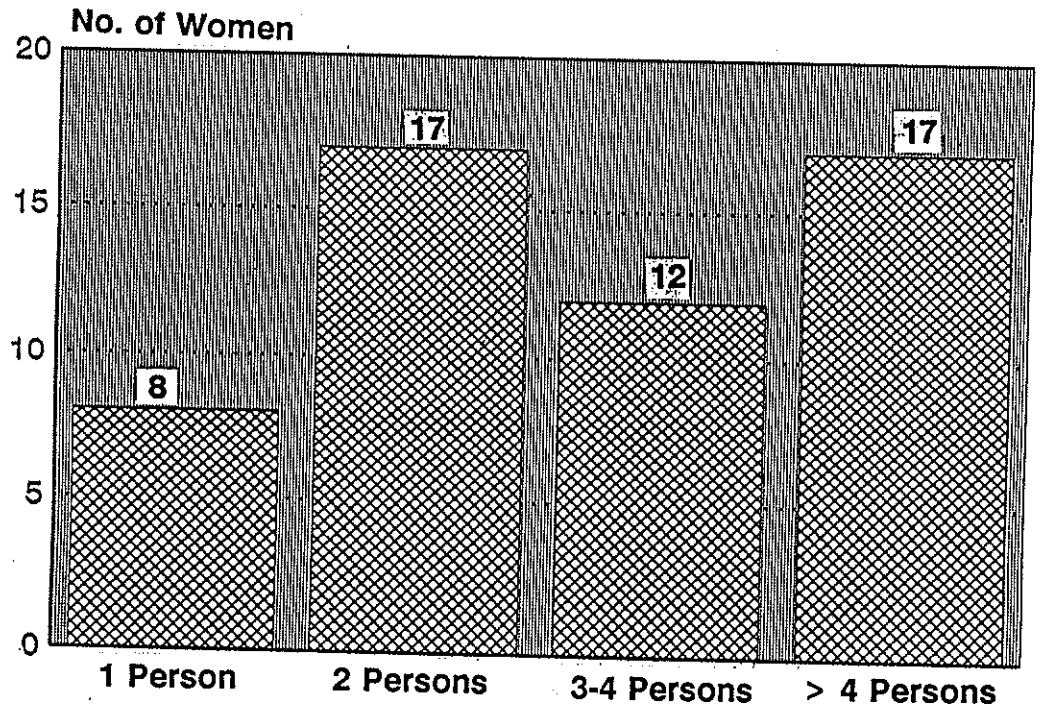


TABLE VIII (H): MOTHER'S DEMOGRAPHIC DATA
SCHOOLING

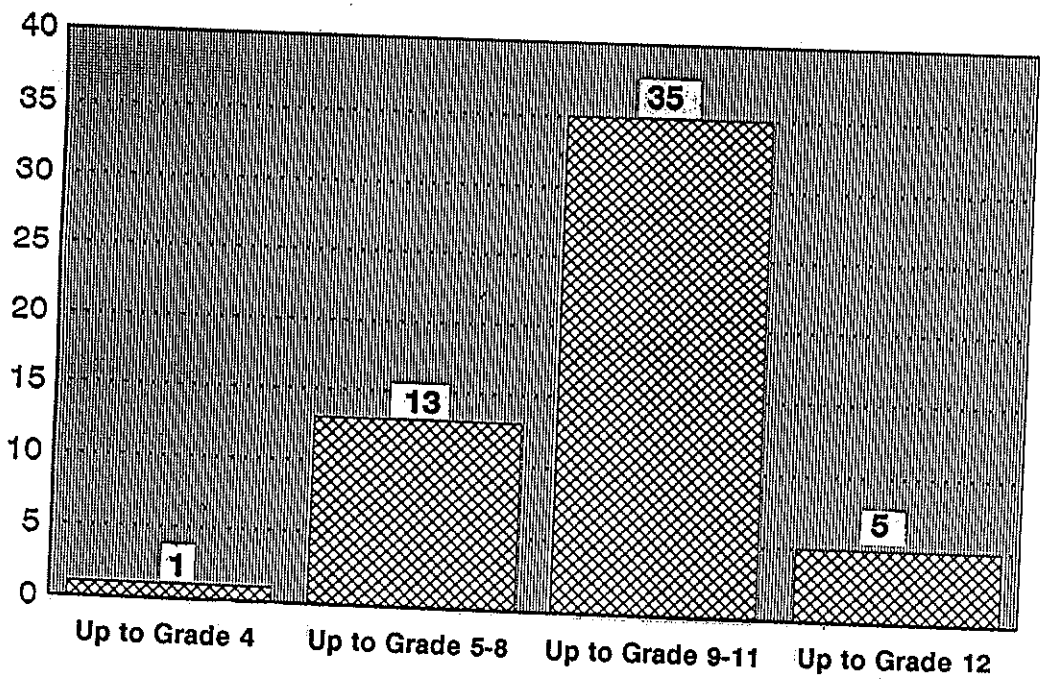


TABLE VIII (I): MOTHER'S DEMOGRAPHIC DATA
DIPLOMA

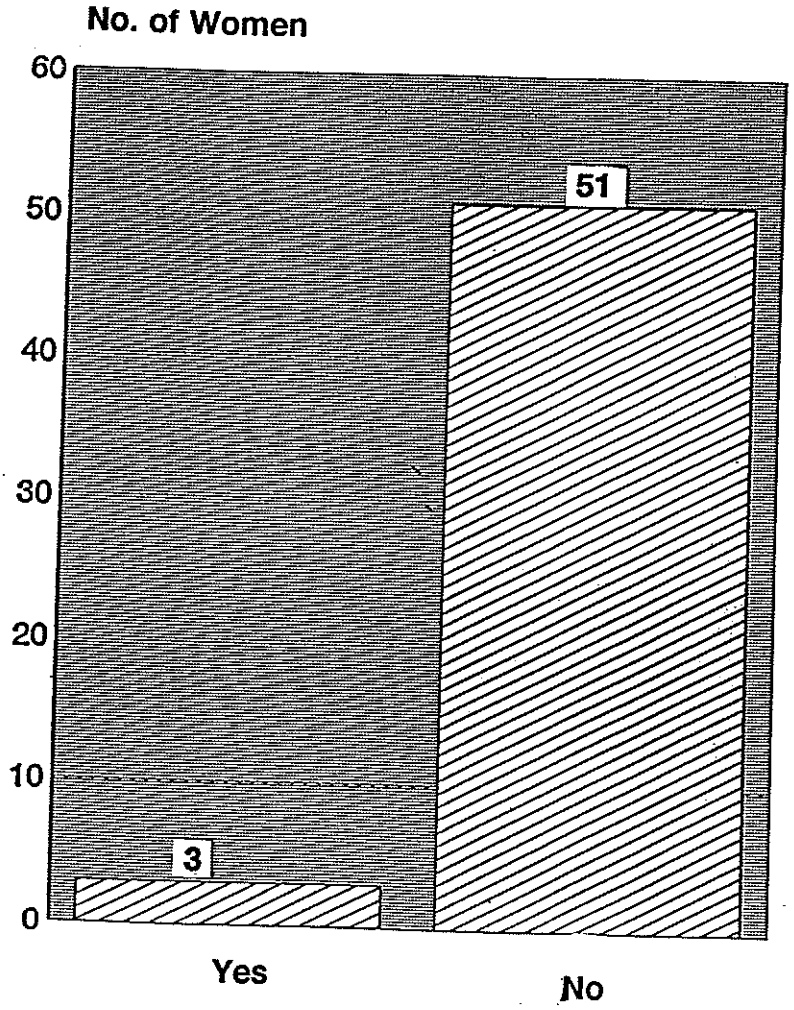


TABLE VIII (J): MOTHER'S DEMOGRAPHIC DATA
VOCATIONAL TRAINING

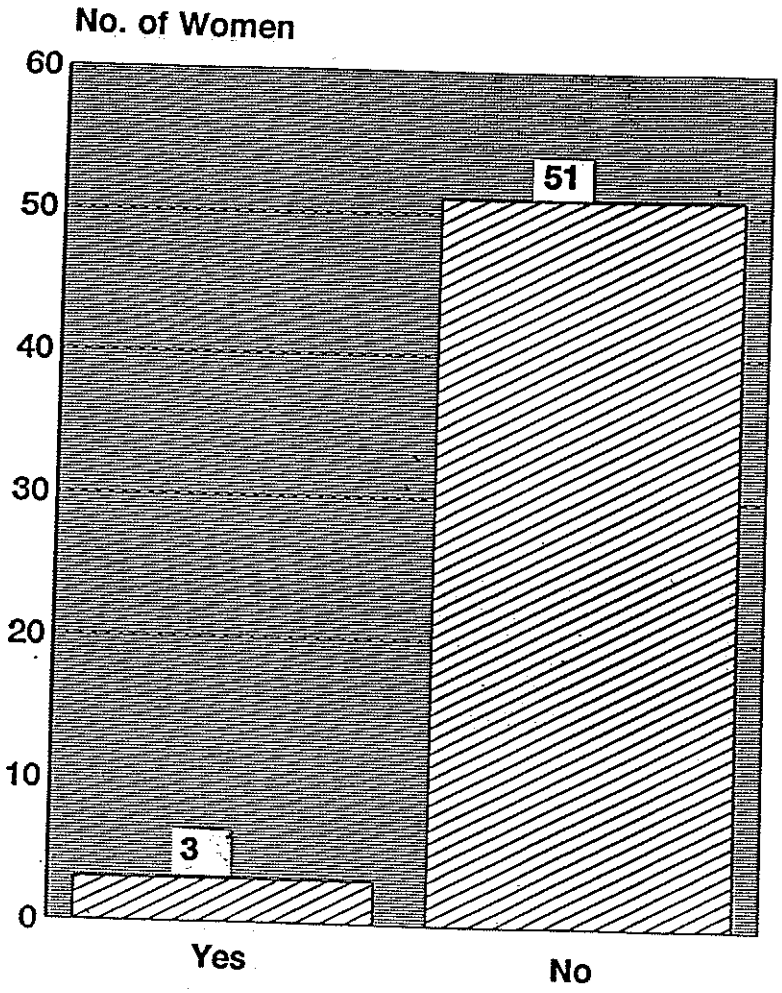


TABLE VIII (K): MOTHER'S DEMOGRAPHIC DATA
WORK

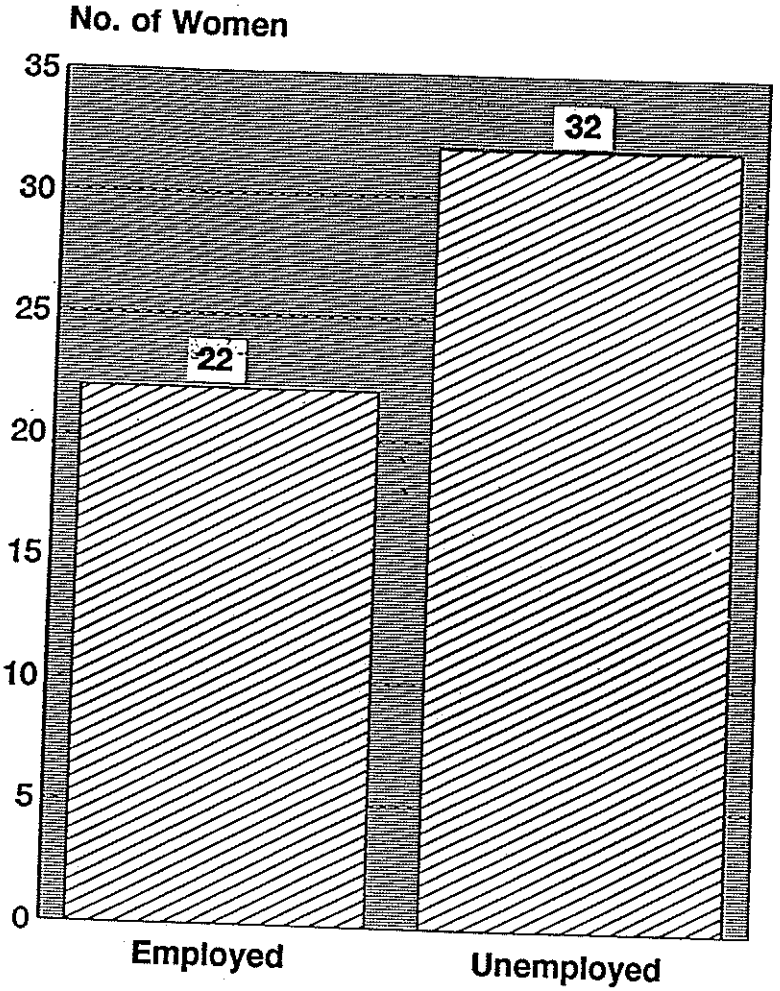
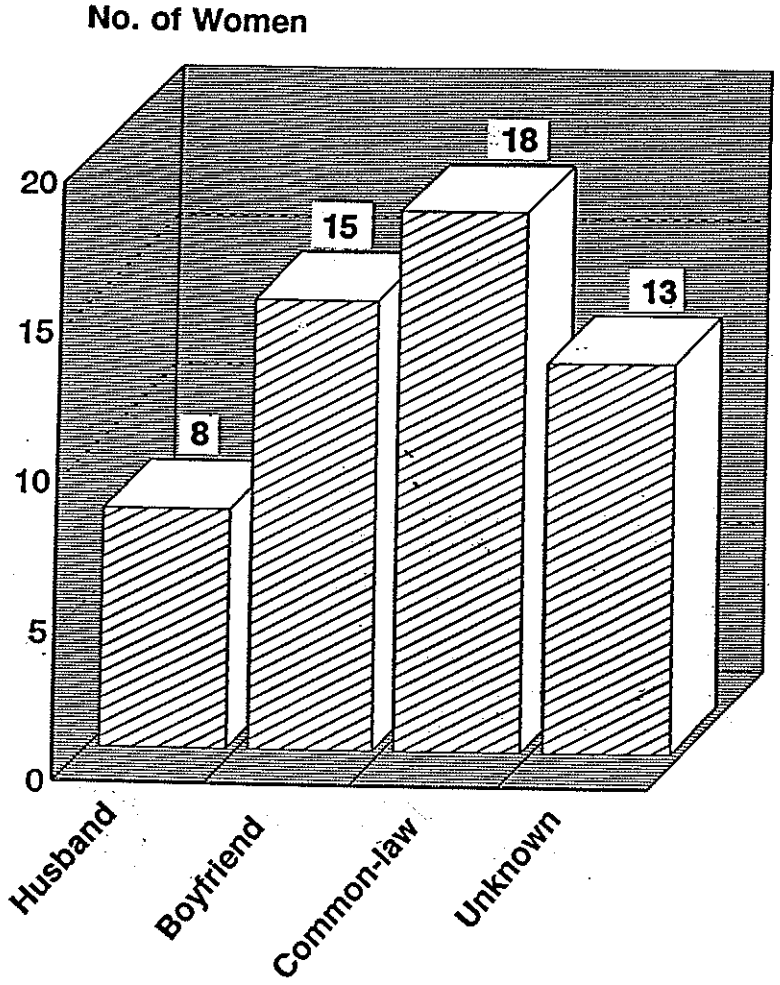


TABLE VIII (L): MOTHER'S DEMOGRAPHIC DATA
PARTNER



H. THEMES - P4 PRENATAL FILES

In reviewing the prenatal P4 files on the mothers several themes were identified:

- Mothers were identified as having a poor concept of parenting;
- Mothers were described as having a deprived family background;
- The mother identified that she had no one person that she could turn to/no one person about whom she had good memories;
- The mother was described as having tenuous support systems;
- The mother had a history of substance abuse prenatally;
- The mother had a history of physical and sexual abuse herself as a child;
- Mother's decreased intellectual status;
- The mother's relationship with her partner.

In identifying the previously described outcomes that impacted on the final risk score, I developed a risk model which I thought demonstrated the issues that were identified. A copy of the risk model is in Appendix XI.

I. STUDY LIMITATIONS

The limitations of this study include:

1. This is a retrospective not a prospective study. I reviewed the medical record file from the birth record onward until the time of the final visit to the Children's Clinic. Only the initial 18 months of the P4 Project data was collected prospectively.

2. This study included only a review of the Children's Hospital of Winnipeg medical record files. Many families may have received care at different clinics/hospital settings resulting in an under-reporting of the outcomes. High-risk families are transient and often use alternate settings for medical care or do not seek medical care. This may also have impacted on the outcomes that were identified. However, the Children's Hospital of Winnipeg is a pediatric tertiary care centre--most children who are seriously ill/injured are seen here.

3. The review has depended on data that was recorded in the medical record file. Any variation in consistency of data collection may have impacted on the outcomes identified.

4. The original P4 Project was a description of a program which included both subjective and objective outcomes. Although no "specific intervention" was involved, the project did provide families with much support, caring and continuity of care during the first 18 months after

their babies were born. The staff involved with the project made many efforts to reach out to the families. This attention may have impacted in a positive way on the outcomes identified and the "risk status" that was identified at 18 months. The level of intense interaction, for example monthly visits to the Neonatal Clinic and monthly visits to the Child Development Clinic did not continue after 18 months, effectively ending the enhanced involvement.

5. The P4 Project involved mothers who attended the Women's Centre Out-Patient Department. The Women's Centre Out-Patient Department provides services to a multi-ethnic low socioeconomic group who live in the core area of Winnipeg. The original sample size was limited by the resources available. It would be difficult to generalize from this cohort to the larger population in Winnipeg given the demographic characteristics of the previously described cohort. However, the study could be generalized to a similar high-risk population.

6. The review was based solely on the medical record file. The study parameters did not include accessing any information from community agencies. Accessing information from community agencies may have increased some of the outcome data available.

7. Several of the families were involved with the hospital for a short period of time, thus limiting the data that was available. The median length of follow-up was 9.407 years.

8. In the time frame from 18 months until the final review, some families fared better and some families experienced more difficulties. It was beyond the scope of the study to document the multiple confounding variables that may have affected the families over time. For example, the families may have had additional community support (i.e., a homemaker who was helpful and/or supportive). Some further insight into the confounding variables may have been obtained if an interview component had been part of the project.

9. Two of the children were adopted at birth--no outcome data was available.

10. Limited data was recorded on the father.

J. STUDY STRENGTHS

The strengths of this study include:

1. Most of the research studies of this nature done in the past have only followed families for limited periods of time. The literature describes studies with follow-up of 3 months (Lealman, 1979), 24 months (Gray et al, 1977), 1-2 years (Murphy et al, 1985), (Olds et al, 1986), 3 and 12 months (Adler et al, 1991) (Geddes, 1979), and 21-48 months (Altmeier et al, 1984). This study was unique in that it did attempt to address the issue of longitudinal follow-up and how the involved families had fared over time.
2. Inclusion criteria for the study was identified.
3. Specific health, social and community outcomes and their variables were defined.
4. There was only a small amount of attrition from the original study cohort.
5. Two individuals reviewed the medical record files. The inter-rater reliability was 96%.
6. The median length of follow-up for families receiving their care at Children's Clinic was 9.407 years. Many families still come to Children's Clinic for their primary care.

CHAPTER FOUR: DISCUSSION AND RECOMMENDATIONS

In this chapter I will be describing the study implications but also share some of my thoughts on future directions.

A. STUDY IMPLICATIONS

This study reinforces the need to look at not only intermediate outcomes but also long-term outcomes. There is a need to follow specific populations beyond early childhood in order to determine what does happen with families over time. It is unclear what the long-term outcome for the child will be if he/she is exposed over time to potentially negative events, for example a family history of substance abuse. Bays (1990) critically reviewed the literature on the relationship between alcoholism and child abuse. Bays, in this review, noted that two authors, Leonard and Jacob, had described the paucity of literature attempting to examine this issue and that they had stated that more and better research is needed. Bays stated that these statements apply all the more to studies on the relationship, if any, between drug abuse and child abuse.

The immunization rate for this cohort was high. According to Martin (1980), there are medical problems for which the mistreated child is at increased risk other than the identified signs of abuse and neglect which first lead to identification of maltreatment. Martin (1980) states that abused children

have poorer medical care than other children when compared to children with accidental trauma. Abused children were noted to have seven times more chances of having other significant lapses in child care (e.g., a lack of immunizations, inadequate hygiene, erratic treatment of illness, etc.). The P4 study cohort did not consist entirely of mistreated children but did consist of an "at risk" population group. Martin's article, however, is based on American data which may reflect problems of access to medical care in the American health care system and limited preventive care (e.g. immunizations) especially when families may not be in a position to pay for that care.

Four of the families who presented to the Emergency Department following an ingestion were in the high-risk group. Martin (1980) states that mistreated children have a much greater incidence of presenting at hospital emergency rooms with ingestions of a variety of poisonous substances.

This author had been involved in the original P4 Project, I was most interested to see how these families had fared over time. The medical record file provides only "a small snapshot" in which the outcomes for the family can be identified. The medical record file review has shown that the families in this project experienced many difficulties over time. The medical record review also demonstrated that families, despite many difficulties, were actually doing fairly well. The resiliency of some children would be consistent with the results of the longitudinal follow-up study by Werner and Smith (1982). This review of the P4 cohort also reinforced the view that health status alone cannot be used to

determine how well a family is doing. Children's Clinic places a priority on immunizations and strives to ensure that all children are immunized. The high immunization rate may also be a reflection of the fact that many efforts were made to ensure follow-up of the children during the first 18 months of the project.

Much of the literature reviewed addressed the issue of prediction. This study and the outcomes identified have reinforced the fact that it is difficult/impossible to predict how families will fare over time. Altemeier (1984) states that prediction appeared to be possible for only 2 years following the interview.

Howard Brody and Betty Gaiss (1976) in their review of the ethical issues in early identification and prevention of unusual child rearing practices outline the following ethical issues:

1. A balance of the rights among all parties involved with the child, the parents and society at large, must be achieved.
2. Major distinctions must be observed between after-the-fact and before-the-fact intervention as well as between those services to a patient who comes to a health worker as compared to mass distribution of services. What is appropriate in one case may not be appropriate in another.
3. Both parts of the program--the screening for and the training of high-risk parents must be designated either as mandatory (routine)

or as voluntary and the inherent problems with each taken into consideration.

4. For any voluntary part of the program, a proper mode of consent and guarantees including disclosure of all necessary information about the nature of the program must be designed.
5. Elements of the program that might have a coercive influence on parents must be identified and minimized.
6. Since a few parents inevitably will be mistakenly labelled as "high-risk" through false positive results, the emotional impact of such labelling must be minimized.

Despite the problems attached to the issue of prediction, there are often risk factors identified which require intervention and supportive services.

As a community, we promote the need for primary and secondary prevention. Preventative programming is expensive, often lacks an effective evaluation component and suffers from an inappropriately short period of follow-up. Garbarino (1986) states that we will go no further in our goal of eradicating child abuse until evaluation of prevention programs is taken as seriously as the ideas that formulate the programs.

As a society and a community we must recognize and understand that unless specific, identified population groups receive supportive services and interventions, the outcomes identified with the high-risk families in this cohort will continue. In this current cohort, 3 of the adolescents are currently experiencing

difficulties; 1 adolescent girl is not coming home at night, she is drinking and believed to be sexually active but not using any method of contraception. One of the boys is experiencing problems with aggressive behavior, his sister at age nine has experienced three incidents of sexual molestation and she is currently demonstrating some sexually acting out behaviors. One of the other boys is seen as being out of the control of his mother--he is lying, stealing and often not returning home at night.

B. FUTURE DIRECTIONS

In the review of the literature on prevention several important areas were identified:

1. Few programs have been evaluated correctly (Helfer 1982, Dubowitz 1989, Garbarino 1986).
2. It is unclear how long a case and control group must be followed to evaluate the effect of the program (Helfer, 1982).
3. A multifaceted community approach is necessary (Helfer, 1982).
4. Prevention should be conceptualized as an integrated concept which implies intervention at multiple levels: family, community and culture (Parke 1982, Daro 1988).
5. Prevention efforts need to address the multiple causal correlates of maltreatment if they are to maximize potential savings (Daro, 1988).
6. The issue of "patchwork prevention" versus "total reform prevention" (Garbarino, 1986).

Many of the articles stressed the need for further longitudinal research studies (Taylor, 1988). Ayoub (1992) stated that longitudinal changes in family functioning over time have not been mapped in detail. Ayoub (1992) further stated that one question that must be addressed in future work is how the individual's and family's emotional potentiating factors change over time.

Helfer and Kempe (1980) in their writings on primary prevention described the stages of development in a cyclical fashion with various intervention programs occurring at different times in the life cycle. These intervention programs included perinatal coaching, home care training, expanded well baby care, interpersonal cognitive problem solving skills, interpersonal skills teaching for junior high school and high school, a crash course in childhood for adults and pre-parent refresher courses. Their idea was that this type of programming would be available to the community at large.

Child maltreatment is generally rooted in multiple and interacting individual, familial and environmental factors (Dubowitz, 1990). Interventions need to address as many of these contributory issues as possible.

Garbarino and Kostelney (1992) describe the community dimensions of child maltreatment. These authors state that child maltreatment takes place in a social as well as a psychological and cultural context. Prevention, treatment and research needs to incorporate this contextual orientation. For many purposes, this means examining high-risk neighbourhoods as well as high-risk families as the context for child maltreatment. Garbarino and Kostelney (1992) stated that, based on their study, child maltreatment rates can be responsive to social change (i.e., the energizing effect of community mobilization).

Ayoub (1992) states that, with decreased funding being available, many "brief" intervention programs have proliferated. Ayoub (1992) states that the findings of her study argue against a "quick fix" approach and suggest that

continuous long-term early intervention is one way that improvement in family function can be ensured with families at serious risk of maltreatment.

Schorr (1989) states that the basic Head Start programming proved to be sound. When three to five-year-old children are systematically helped to think, reason, and speak clearly; when they are provided hot meals, social services, health evaluations and health care; when families become partners in their children's learning experiences, are helped toward self-sufficiency and gain greater confidence in themselves as parents and as contributing members of the community, the results are measurable and dramatic. Schorr (1989) also states that over the last 20 years, the long-term benefits of pre-school care have been solidly documented; changes in economics and technology have made success at school ever more important as the number of poor children has increased. Furthermore, for a growing subset of poor children, good pre-school care can mean not just a lift but a lifeline. Schorr (1989) states for the children of the shadows--children with parents who are isolated or impaired (by drugs, alcohol, or mental illness), children at special risk of abuse, children growing up in persistent and concentrated poverty, children being raised by a single parent and children of school-age mothers, for those children and their parents good pre-school programs are a necessity.

I believe that some of the strategies described by Helfer and Kempe would have been helpful for many of the mothers both prenatally and after the birth of their child and that maybe even now some of their children would

benefit from some of the intervention strategies if they were in the schools.

Many of the families would also have benefitted from the intensity and comprehensiveness of a Head Start Program.

Child maltreatment must be seen as well in the context of a community problem. Currently, we have diminishing financial resources, diminishing social supports, and an erosion of our social programming. Sawhill (1987), a senior American economist, states that large deficits make it difficult to argue for new social spending because they lower the rate of economic growth and threaten future standards of living. Unfortunately, a failure to invest in the next generation has precisely the same effects. We must begin to listen to what the community is telling us that they need but also listen to what they feel needs to be done to improve life in their communities.

From a social policy perspective, we need to look at this issue not only from an individual and family context but from a community context as well. We need to do some qualitative research with families to understand more about what they are experiencing. We need to do more longitudinal research in this area. Ayoub (1992) states that we need to understand the slow nature of change with "at risk" families so that unrealistic expectations do not cripple service delivery. We also need to develop well researched evaluation tools for any programs that are developed so that we can know if, over time, they work and are effective. Schorr (1989) states that the common elements of successful programs--comprehensiveness, intensiveness, family and community orientation

and staff with time and skills to develop relationships of respect and collaboration add up to first class services. Schorr (1989) states that unshackled from the myth that nothing works, we can assure that children without hope today will have a real chance to become the contributing citizens of tomorrow.

APPENDIX I: TABLE IX -
PREVENTION ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT

SOURCE	TYPE OF ARTICLE	SUMMARY OF FINDINGS
SCHMIDT (1980)	REVIEW	SUMMARY
		Families at high-risk for inadequate parenting can be identified during the perinatal period or during later health care visits Advocated early delivery room contact, rooming-in, teaching sessions on child care, frequent office visits with MD, parenting classes, crisis nurseries, crisis hotlines, etc. Suggested that it was not necessary to wait for a special instrument to predict high-risk families
HELFER (1982)	REVIEW	SUMMARY
		Described two serious methodological errors made in research in this area A. Trying to evaluate a program at the same time that one is trying to develop a program B. Inadequate selection of comparison control groups It is not yet known how long one must follow his/her study and comparison (control) group to demonstrate the effect of the program under study Recommended a multifaceted community approach to prevent child abuse and neglect

DUBOWITZ (1989)	REVIEW	SUMMARY
		Felt that few programs had been evaluated adequately Comprehensive programs that address the multiple contributory factors of child maltreatment are needed
PARKE (1982)	**REVIEW**	**SUMMARY**
		Prevention should be based on the assumption that all participants would benefit from the program whether or not they actually would have abused their children at some point in the future Prevention should be conceptualized as an integrated concept which implies intervention at multiple levels: family, community and culture
LIGHT (1973)	**REVIEW**	**SUMMARY**
	Review related to development of public policy regarding child abuse and neglect	Concluded that the effort to develop a social profile of abusing families to see how they differ from nonabusing families has not yet produced many combinations of variables that discriminate adequately between the two groups
DARO (1988)	**REVIEW**	**SUMMARY**
	Review related to the	Prevention services or

DARO (1988) (Cont.)	REVIEW (Cont.)	SUMMARY (Cont.)
	costs of prevention - intervention	intervening before maltreatment begins offers the opportunity not only to reduce long-term costs associated with abuse and neglect but also to reduce short-term costs To suggest that society should be committed to preventing child abuse is commendable; to accomplish this goal within current fiscal restraints and with regard for a family's right to privacy is another Prevention efforts need to address the multiple causal correlates of maltreatment if they are to maximize potential savings Secondary prevention efforts carry with them a potential stigma - no dollar value can be ascribed to a family's loss of privacy or to the social stigma of being viewed as a potential child abuser - these issues represent very real "costs" for early intervention Two recommendations: **A.** Prevention services should be available to all children and families regardless of need **B.** Utilize existing formal and informal service systems in strengthening parenting skills

GARBARINO (1986)	REVIEW	SUMMARY
	Review related to evaluation of programs directed toward child	Difficulties in evaluating programming success are related to different definitions

GARBARINO (1986) (Cont.)	REVIEW (Cont.)	SUMMARY (Cont.)
	abuse and neglect prevention **Issues in policy, programming and research**	of the issue Several different approaches to documenting incidence and prevalence exist Evaluation efforts must utilize multiple measures (e.g., Need to measure changes in the incidence of child death and serious injury, costs and outcomes of treatment, hospital, emergency room treatment, standards for parental disciplinary practice and knowledge and attitudes concerning the range of behaviors that constitute or increase the risk for abuse) Two basic approaches to prevention exist: **A.** Addressing discrete pieces of the problem of child abuse in isolation from the broader socioeconomic, cultural and political context "patchwork prevention" **B.** Initiating total social reform is a prerequisite for progress in preventing child abuse and neglect (i.e., "total reform prevention")

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(1) Gray et al (1977) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Gray et al (1977) (cont.)	Prospective Non-blinded Randomized with control **QUALITY OF EVIDENCE** The evidence has been collected from a randomized controlled trial with limitations	150 families Women having 1st or 2nd baby at the Colorado General Hospital between Nov/71 - March/73	Interview Questionnaire Observations during the labor, delivery, and postpartum period 100 mothers identified at high-risk, randomly assigned to high-risk intervene and high-risk non-intervene groups 50 identified low-risk mothers in the control group 24 months - 25 of each group randomly	Chi-square	Verified reports of abuse and neglect to the Central Child Abuse Registry Injury due to lack of adequate care and supervision Injuries suspicious for inflicted trauma Non-organic failure-to-thrive Relinquishments, foster care placements, parental kidnappings # of incidents thought to be	Random assignment to high-risk intervene, non-intervene groups	Method of random assignment not described Population demographics not well described Interview and questionnaire not completed at the same time for every individual Term "abnormal parenting practices" not defined Results of the screening procedure for the high-risk "non-intervene"

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(1) Gray et al (1977) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Gray et al (1977) (cont.)			selected for detailed review		true accidents Reasons why children no longer in their biological homes Immunization status Denver Developmental Screening Test **STUDY RESULTS** Systematic use of a prenatal interview, questionnaire, labor and delivery room observations, and		were shared with the MD's and nurses responsible for their care - detection bias Only those individuals who sought care were included in the sample - potential bias was created - information lacking on those individuals who did not seek prenatal care Only 25 families in each group were followed up - no information provided about the remainder of

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(1) Gray et al (1977) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Gray et al (1977) (cont.)					postpartum interviews/observations can identify a population at risk for abnormal parenting practices Felt the data from this study demonstrated that it is possible to accurately predict families who are in need of extra services Evidenced by the statistical differences between high-risk groups and the low-risk group in the area of "abnormal parenting		the families in each of the 3 groups Screening procedures not consistently applied Range of follow-up varied - 17 months to 35 months Those followed up at 35 months (vs., those followed at 17 months) - recall bias Denver Developmental Test - ? appropriate for the population

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(1) Gray et al (1977) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Gray et al (1977) (cont.)					practices" A qualitative difference in injuries in the study group An increased incidence of failure-to-thrive in the high-risk group		Issue of consent not described

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(2) Murphy et al (1985) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION FOLLOWED	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Murphy et al (1985)	Prospective **QUALITY OF EVIDENCE** Nonrandomized controlled trial with limitations	547 women Women attending a combined Maternal and Infant, Children and Youth Project	Women interviewed between 3 and 6 months gestation using a Family Stress Checklist As a result of the interview, individuals were placed in the following groups: no risk, low, moderate, and high-risk Reviewed all files of mothers and children whose mothers had scored 35+ - when the children were between 1 to 2 years	Scoring of the interview - percentages	Birth Risk Factors Mild neglect or questionnable bonding Child neglect Child abuse **STUDY RESULTS** The general clinic population showed a remarkably low incidence of risk factors even in a low income, racially mixed, very young population	Population is well described	Interviews not done at the same time Informed consent not obtained Issue of self reporting bias Concern regarding chart review factors to determine mild neglect Only reviewed 100 files of the original sample - no indication of what happened to the rest It is not clear if families attended at more than one

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(2) Murphy et al (1985) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION FOLLOWED	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Murphy et al (1985) (cont.)			Control group chosen from mothers with total scores of 0 - 10 prenatally but matched in age, marital status, living arrangements, relationship with the father of the child, previous parental experience		Neither teenage nor single status appeared to contribute significantly to abuse - neglect - risks Data presented marked similarity in scores between mothers and fathers - the message is that a careful evaluation needs to be done on both parents or partners in abuse and neglect cases Family stress checklist turned out to be a remarkably accurate predictor		location for their care Generalizability of the study Recommendations do not follow from data base Poorly defined categories in the Family Stress Checklist Follow-up done at different time periods

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(3) Edgeland et al (1979) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Edgeland et al (1979)	Prospective **QUALITY OF EVIDENCE** The evidence was obtained from a nonrandomized control trial with limitations	275 women Women receiving prenatal care at a Maternal and Infant Care Clinic	"At risk" nature of the sample is defined by low socioeconomic status 36 Weeks of pregnancy a battery of tests was given to assess personality characteristics Mother/infant interaction in a feeding situation in the home observed at 3 months	Chi-square Discriminant function analysis	At birth, direct assessment of neonate with the Brazelton Neonatal Assessment 3 month mother-infant interaction observed in the home: Behaviors observed, quality of verbalization, expressiveness, quality of physical contact, facility in caretaking, sensitivity, cooperation, responsiveness **STUDY RESULTS**	Inter-observer reliability discussed	Concern regarding consent Concern regarding the number of tests that were administered at 36 weeks gestation - how did they maintain client interest? Definition of "inadequate" and "good" mothers "Good" mother not matched to "inadequate" mother "Inadequate" value-laden term

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(3) Edgeland et al (1979) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Edgeland et al (1979) (cont.)					The authors suggested that variables taken from an inter-active situation, where a mother's response is in-fluenced by the baby's preceding behavior, are the most useful in discriminating good from "inadequate" mothers The strength of the prediction, based on the 9 variables repre-senting informa-tion from the baby evaluation, the mother's evaluation, and the interactive		Sample size followed small - impacting on the power of the study

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(3) Edgeland et al (1979) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Edgeland et al (1979) (cont.)					evaluation is seen in the 85% correct classification rate achieved This analysis represents a multifactorial approach to conceptualizing child abuse and the results indicate that this approach is more accurate than using a single variable The most critical variable is the early relationship between the caretaker and the infant		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(4) Geddes et al (1979) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Geddes et al (1979)	Prospective **QUALITY OF EVIDENCE** The evidence was obtained from a nonrandomized control trial with limitations	200 women Referrals accepted from 2 sources: Patients who routinely were seen if they fell within the job description of the social worker (e.g., all single girls) Direct referral from private MD's and other hospital staff	Interviews Questionnaire Referrals were assessed and coded using predetermined criteria Info regarding: coding forwarded to the appropriate 10 workers Follow-up at 3 month intervals following discharge from hospital	Percentage	Relinquishment **STUDY RESULTS** The small sample did not allow any conclusions to be drawn regarding the ability of the predictive criteria to forecast cases of abuse and neglect At the end of the study period 32.4% of the high-risk group were no longer caring for the child The authors also commented on		Demographics of the population are not well defined Generalizability of the sample population - difficult because of inadequate sample description Bias in referrals No blinding of professionals to which individual belongs to which group - detection bias Difficulty in doing research and at the same time intervening with

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(4) Geddes et al (1979) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Geddes et al (1979) (cont.)					the clients: 1. Attitude towards school 2. Attitude towards contraception 3. Attitude towards pregnancy 4. Admission to the Special Care Baby Unit 5. Attitudes towards child rearing		the study population Introduction of the intervention is a confounder Categories in the questionnaire - subjective (e.g., "incompetence likely") Length of follow-up for everyone not identified Issue of relinquishment is discussed - no clear reasons are given for why the infants were relinquished

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(5) Lealman et al (1979) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lealman et al (1979) (cont.)	Prospective **QUALITY OF EVIDENCE** This is a cohort study with minor limitations	2,802 non-Asian infants born in Bradford, England - 1979	A check list of predictors applied to the chart notes Children were considered at risk if at least 3 factors (at least one of which had to be a major factor) was present Children were placed in one of four study groups: A. High-risk intervention group B. High-risk non-intervention group	Percentages	Growth-weight, length, skinfold thickness, head circumference Immunization Attendance at casualty Admission to hospital Deaths Contact with social work agencies Child Abuse Register **STUDY RESULTS**	The 4 study groups were defined Exclusion criteria defined Large sample Study approved by the ethical committee of the Bradford District Hospitals	Study dependent on consistency of chart notes Families may have received care elsewhere, therefore resulting in a detection bias Demographics of the study group not well defined Investigators not able to locate 28 of the 103 families (27%) in the "high-risk" intervene group 19 of the hospital admissions with trauma in the "not at risk" group had

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(5) Lealman et al (1979) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lealman et al (1979) (cont.)			C. High-risk social work group D. Not at risk group Follow-up at 18 months		Two thirds of the actual abuse occurred in the 18% predicted to be at risk In this study, supportive measures did not prevent abuse Those who needed and received the most attention from social workers and health visitors did not do well		only trivial head injuries - yet they were admitted - no rationale was provided Group assignment not random

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(6) Adler et al (1991) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Adler et al (1991)	Prospective **QUALITY OF EVIDENCE** It is a cohort study	317 "low-risk" pregnant women in Newcastle, Austrailia 1st pregnancy 18 - 30 years of age Married or stable "defacto" relationship No serious antecedent health problems	One in four was randomly allocated to a wait control group to control for the possible effects of study involvement Antenatal inter-view conducted between 20 - 32 weeks gestation in the women's home Measures used in the interview included: Inter-view Schedule For Social Interaction, Parental Bonding Instrument, Speilberger State-Trait	Hierarchal regression analysis	MD & Baby Health Centre Sister were contacted for information about consultations for her baby Local hospital records reviewed for obstetrical experiences, casualty attendance, and admissions of the baby Health Utilization Scale was determined **STUDY RESULTS** No evidence that	Inclusion criteria defined Random assignment Consent was discussed The interview at 3 months was done by an interviewer blind to the results of the antenatal interview Interview conducted at 12 months was done by a research assistant blind to the results of both previous interviews	Representative-ness of the study population The antenatal interviews were done at different times - potential impact on the results not addressed Loss of study participants impacts on the power of the study 35 mothers with-drew from the study with no reasons given Study population has to be

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(6) Adler et al (1991) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Adler et al (1991) (cont.)			Anxiety Inventory, Daniel's Scale of Occupational Prestige Interviewed again at 3 and 12 months postpartum 3-month interview: Dimensions of perinatal adjustment Neonatal Perception Inventory Schedule of recent stressful events was included		obstetric experiences, baby's sex or temperment influenced outcome Life Stress Scores unrelated to outcome Mother's feelings about her new role at 3 months highly predictive of her feelings about role at 12 months Women who viewed role more negatively tended to seek more frequent health		committed and interested to participate in all the interviews - self selection bias Well baby checks and immunizations were excluded from the results on the care of the baby - with no reason given Control families not contacted until 15 - 18 months after they were identified as meeting the selection criteria Little information

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(6) Adler et al (1991) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Adler et al (1991) (cont.)			12 Month Interview Perrson-Blen and McNeil Infant Temperament Questionnaire Mother and baby observed in the Ainsworth Strange Situation		consultations for their babies in the 1st year - however result was not significant Women who withdrew from study were compared - only statistically significant difference between groups was in the area of social networks Women who withdrew from the study perceived their intimate network as more adequate than women who continued		given about the control group

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(6) Adler et al (1991) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Adler et al (1991) (cont.)					Study provides no support for use of Parental Bonding Instrument, Spielberger State Trait Anxiety Inventory or the Interview Schedule for Social Interaction as routine screening measures for prediction of subsequent mother-infant difficulties		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(7) Altmeier et al (1984) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Altmeier et al (1984)	Prospective **QUALITY OF EVIDENCE** It is a cohort study	1,400 expectant mothers who attend a city hospital that serves low-income families	Interview administered at the 1st prenatal visit - ranged from 9-40 weeks of pregnancy Following the interview, 273 women were scored as high-risk Subjective impression of the interviewer Follow-up for target children between 21-48 months	Regression analysis	The centralized computer records for the state of Tennessee and Nashville records from both Juvenile Court and the Department of Human Services were searched for reports of child abuse with a resulting injury Siblings were included only if 1st abuse report occurred after the interview Nonorganic failure-to-thrive	Consent to participate was obtained Research assistants were trained - inter-rater reliability 90% Double-blind study Follow-up of the 99 individuals who refused to participate was done Large sample	Demographics not well defined impacting on the generalizability of the study Influence of the timing of the prenatal interviews not explored All abuse incidents may not have been reported; all children may not have been seen following an abuse incident - detection bias Follow-up occurred at different periods

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(7) Altmeier et al (1984) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Altmeier et al (1984)					**STUDY RESULTS** The "first generation" interview identified 65% of families reported for abuse within two years as high-risk The initial form of the interview had 2 major shortcomings: The first was its apparent high rate of false positives since only 6% of the total high-risk population was subsequently reported for		of time

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(7) Altmeier et al (1984) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Altmeier et al (1984) (cont.)					abuse It was felt that this 6% probably reflects the "tip of the iceberg." A second major problem was the relative importance of the subjective impressions of interviewers for prediction of abuse Prediction appeared to be possible for only 2 years following the interview The authors state that the interview		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(7) Altmeier et al (1984) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Altmeier et al (1984) (cont.)					described in this study is not a practical instrument for predicting child abuse		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(8) Dean et al (1978) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Dean et al (1978)	Prospective **QUALITY OF EVIDENCE** This is a case comparison study with limitations	7,700 mothers 1,388 subsequently presented with an injury or failure-to-thrive during the 1st two years of life	Health Visitors administered a Maternal Attitude Questionnaire and recorded a subjective assessment of mother-child interaction between 3-4 months 1,388 children who had presented with injuries or failure-to-thrive and had reached the age of 2 were then matched for age and sex to 1,388 control children from the original population pool Health Visitors	Cluster analysis Analysis of variance Pearsen Product Moment Correlation	Injury or failure-to-thrive during the first 2 years of life Injury classification Accident suspected negligent injury Suspected physical abuse - failure-to-thrive Kind of injury Type of treatment required **STUDY RESULTS** Many of the	Exclusion criteria defined Inter-rater system was in place to code the Health Visitor's assessment Large sample Study results facilitated positive changes in the hospital system	Concern regarding subjectiveness of the coding categories Demographics of the study population are not well defined - affecting study generalizability Health Visitors role - not well defined - could be a potential confounder How often had the Health Visitors visited before the administration of the questionnaire and assessment being done - a

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(8) Dean et al (1978) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Dean et al (1978) (cont.)			assessment coded as: 1. No concern 2. Mild concern 3. Moderate concern 4. Great concern		questions used in the Maternal Attitude Questionnaire seemed to be appropriate when used in interviews with families These questions presented in a written form asked by the Health Visitors lacked an organized scale for response to questions and tended to lose their value There is a significant relationship between: 1. Health Visitor		potential confounder Matching done by age and sex - not by socioeconomic status, birth order, maternal age

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(8) Dean et al (1978) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Dean et al (1978)					Assessment and classification of injuries 2. Health Visitor assessment and type of treatment 3. Within the abuse group itself, a correlation between Health Visitor's assessment and degree of seriousness of child abuse and neglect The results show that children with Health Visitor assessments coded as moderate to great concern are more likely to present to the		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(8) Dean et al (1978) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Dean et al (1978) (cont.)					hospital later with serious accidents, abuse, or failure-to-thrive		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(9) Siegel et al (1980) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Siegel et al (1980)	Prospective **QUALITY OF EVIDENCE** Evidence was obtained from a randomized controlled trial	525 low-income women who were in the 3rd trimester of their pregnancy and who were attending the Public Prenatal Clinic and who delivered at the community hospital	Sample assigned at the time of delivery to one of 4 groups: 1. Both early and extended hospital contact and home visits by a professional infant care worker 2. Early and extended hospital contact only 3. Home visits only 4. Routine hospital and follow-up care without early and extended contact or home visits	Multiple regression analysis	Observations in the home - 30 items of specific mother and infant attachment behavior Reports of child abuse/neglect through 1 year of age were obtained from the county unit for protective services and the state central registry Health care utilization Clinic visits Emergency room visits	Random assignment Inclusion criteria defined Consent was addressed Reasons why study sample did not complete the process were defined Some of the population demographics are described The intervention was well defined Data collectors were blinded	Data only collected on 321 of the women - affecting study generalizability No discussion of the issue of inter-rater reliability Issue of completeness of all abuse/neglect reports It is unclear if the families received care from more than one source

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(9) Siegel et al (1980) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Siegel et al (1980) (cont.)			Data collected by interview during the last trimester of pregnancy		Hospital records Immunizations **STUDY RESULTS** Background variables (race, age, marital status, parity, education, and score derived from a shortened version of the Peabody Picture Vocabulary Test) explained more variance in maternal behavior than did hospital and home support interviews Authors felt the		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(9) Siegel et al (1980) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Siegel et al (1980) (cont.)					background variable data provided support for recommendations for a comprehensive national policy for families and children Study findings indicated that after control for background and other variables, early and extended contact explained variance in several but not all dimensions of maternal attachment when infant was 4 and 12 months of age Absence of		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(9) Siegel et al (1980) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Siegel et al (1980) (cont.)					differences between early and extended contact and control group in reports of child abuse/neglect and health care utilization were consistent with the small effects of the interventions for maternal attachment		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(10) Frommer et al (1973) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Frommer et al (1973)	Prospective **QUALITY OF EVIDENCE** Study did not meet any of the defined criteria	220 women of which 116 were ultimately matched	Questionnaire administered consecutively to all women who met the inclusion criteria and were attending any one of the 3 Antenatal Clinics of the hospital's Department of Obstetrics A group of British-born married primi-gravida who had been separated temporarily or permanently from one or both parents before the age of 11 were matched for age and social	Chi-square	Maternal depression Anxiety Physical complaints Feeding methods and weaning pattern Pregnancies and use of contraceptives Marital problems during the 1st year of the infant's life **STUDY RESULTS** Slightly more of	Inclusion criteria defined Individuals were asked to participate in the study Interviewer was blinded as to group membership	It is not clear what happened to 104 women from the original sample - loss of individuals from the sample therefore impacting on the power of the study Demography of the population not well defined

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(10) Frommer et al (1973) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Frommer et al (1973) (cont.)			class with a group of controls who denied such separations		the controls were anxious about their ability to cope with the baby but twice as many of the "separated" mothers were very depressed By the 2nd post-natal interview, a statistically signi-ficant number of mothers in the separated group left their infant to feed himself by propping him with a bottle The "separated" mothers behavior to their infant seemed to be more readily		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(10) Frommer et al (1973) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Frommer et al (1973) (cont.)					polarized into either over-anxiety to be a perfect mother or "lack of care" than that of the controls There were significantly more major sleeping problems in the separated group's babies at the 2nd postnatal interview A large number of "separated" women were already pregnant again by the time of the first child's first birthday		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(11) Olds et al (1986) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Olds et al (1986)	Randomized clinical trial **QUALITY OF EVIDENCE** Evidence has been obtained from a well designed randomized controlled trial	400 women Small semi-rural community	Assignment of individuals to one of 4 groups: 1. No services were provided during the research project 2. Families provided free transportation for regular prenatal and well child care at local clinics and MD's offices 3. Families received a nurse home visit during pregnancy in addition to screening and transportation services	Multiple regression analysis	Sensory and developmental screening when the babies were 1 and 2 years of age Medical records reviewed Child Abuse/Neglect Registries in 15 states were reviewed Weight and height measurements During interviews at 6, 12, and 24 months, the mothers were interviewed concerning	Inclusion criteria defined Treatment conditions well defined Consent discussed Sources of client recruitment defined - Did these individuals have contact with one another? Mentioned loss of potential study families due to late registration for prenatal care No differences in age, marital status, and	Issue of study sample being generalizable to the population Systematic reporting bias discussed by the authors as a limitation

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(11) Olds et al (1986) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Olds et al (1986) (cont.)			4. Same services but in addition the nurse continued to visit until the child was 2 years of age All families enrolled prior to 30 weeks of pregnancy Infant assessments carried out at 6, 10, 12, 22, and 24 months of age		common infant behavioral problems such as feeding difficulties and crying How mothers responded to these problems **STUDY RESULTS** Among the women at highest risk for caregiving dysfunction - those who were visited by the nurse had fewer instances of verified child abuse/neglect during first 2 years of the	education between those who participated and those who did not Random assignment Medical record review procedure was checked on a systematic and regular basis All interviews and medical record data were collected by staff who were unaware of the families treatment assignments Inter-observer	

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(11) Olds et al (1986) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Olds et al (1986) (cont.)					child's life Were observed in their homes to restrict and punish their children less frequently and they provided more appropriate play materials - their babies seen less often in the emergency room during 1st year of life During 2nd year of life, the babies of all nurse - visited women, regardless of the families' risk status, were seen in the emergency	reliability discussed Demographics of the population defined Issue of study attrition discussed	

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(11) Olds et al (1986) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Olds et al (1986) (cont.)					room fewer times and were seen by physicians less frequently for accidents and poisonings than comparison group babies Treatment differences for child abuse/neglect and emergency room visits were more significant among women who had a lower sense of control of their lives		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(12) Oates et al (1980) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY REVIEW	STRENGTHS	LIMITATIONS
Oates et al (1980)	Case control **QUALITY OF EVIDENCE** This is a case control analytic study with limitations	56 out of a total of 187 cases of child abuse and neglect were reviewed 1-3 years after their initial presentation Each family was compared with a control family matched for education, employment, socioeconimic status, nationality, marital status of the parents, age, sex and health of the child	Structured interview	Chi-square	Denver Developmental Screening Test Obstetric history Experiences with the child during neonatal period Parent's child rearing practices and their expectations for the child Problems of family health, housing, finance and domestic friction **STUDY RESULTS**	Reasons for client attrition were discussed	The entire sample was not followed, therefore impacting on the power of the study Issue of recall bias regarding obstetric history The issue of consent is unclear for the control group The demographics of the population was not well defined It is not known how old the children in the case group were when the abuse and/or neglect

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(12) Oates et al (1980) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY REVIEW	STRENGTHS	LIMITATIONS
Oates et al (1980) (cont.)					There were marked differences in the areas of the mother's childhood and her experiences during the pregnancy and perinatal period, the expectations for the child, child rearing techniques, family and community support, health of the parents and development of the child The increased risk of child abuse when the pregnancy is complicated by		was identified Families were reviewed 1-3 years after an identified incident The time frame during which the original sample (187) was identified is not clear

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(12) Oates et al (1980) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY REVIEW	STRENGTHS	LIMITATIONS
Oates et al (1980) (cont.)					premature delivery and neonatal problems is well recognized and this study confirms those findings		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(13) Rowan (1979) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Rowan (1979)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control study	54 children on the nonaccidental injury register 54 control children born at the same hospital matched by their sex, mother's age and parity Sample of control children stratified into those defined as "at risk" and "actual" nonaccidental injury children	Review of maternity records to follow information collected	Chi-square	Information collected: A. Separation of the mother herself before 11 years of age B. Abnormality of pregnancy C. Abnormality of labor D. Abnormality of puerperium E. Low birth weight baby F. Poor antenatal care G. If child placed in special care unit	Clearly defined the null hypothesis Pilot study was conducted to validate the tools which were to be used in the study Random sample Acknowledged limitations regarding data collection (e.g. maternity records sometimes incomplete) Acknowledged that 3 of the "case" mothers could not be matched	Control sample not matched by socioeconomic status Did not define "abnormality" Demographics of the sample and control group not defined The sample was drawn from any "suspected" cases (vs., "actual cases") - percentage of "suspected" (vs., "actual") cases was not defined Multiple regression techniques not applied

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(13) Rowan (1979) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Rowan (1979) (cont.)					H. Consultation with social work during pregnancy I. Apgar scores less than 9 at 10 minutes **STUDY RESULTS** Study results confirm that the above outcome measures, when grouped together, are reliable predictors of nonaccidental injury to children Statistical significance was found between		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(13) Rowan (1979) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Rowan (1979) (cont.)					the number of possible "at risk" factors in the case group and the control group of mothers In the case group of mothers, 82.98% were found to have one or more factors present compared to 55.32% in the control group of mothers		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(14) Disbrow et al (1979) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Disbrow et al (1979)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control sample with limitations	37 abusive or neglectful families 32 controls Study families recruited from current clients of Child Protective Services Control subjects recruited from Well Child Clinics, a Nutritional Supplement Clinic, and response to radio and newspaper appeals Control sample matched - age of child, age, race, education, marital status of mother	Interview questionnaire During the home visit each subject was interviewed and a videotape was done with mother teaching the child two tasks - one age appropriate, one more difficult Physiological measurements Responses to stimulus tapes	Item analysis Scaling techniques Factor analysis Bivariate and multivariate data analysis	Mother's background Mother's personality Antecedents to early attachment Mother's social network resources Mother's child rearing attitudes Mother's general physiological response Ways parent handled irritating child behavior Parent-child	A great deal of data was collected - at one point in the study, there were 1,122 variables excluding the physiological variables	Not matched by socioeconomic status Sample demographics described minimally, therefore, the sample may not have been representative of the population No matching done regarding status of the father The recruitment process for the control group is not defined Consent process was not

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(14) Disbrow et al (1979) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Disbrow et al (1979) (cont.)					interaction patterns Mother's physiological response to specific child behavior **STUDY RESULTS** Major variables identified Background Personality Antecedents to early attachment Social network resources Parent attitude		described nor was the issue of refusal described Many tests were administered: 1. Individuals who participated needed to be motivated 2. The physiologic measurements may have been potentially intrusive

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(14) Disbrow et al (1979) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Disbrow et al (1979) (cont.)					scales Parent-child interaction Ways of handling irritating child behaviors General physiological response Specific physiological response The comparison of parents who reflected physical abuse with those who neglected their children showed more abusers were		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(14) Disbrow et al (1979) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Disbrow et al (1979) (cont.)					abused themselves as children, more lacked empathy, had lower self-concepts and would have liked to get away from their children but felt trapped Abusers had fewer close friends, had fewer pets, showed fewer differences in heart rate between pleasant and unpleasant scenes Neither abusive nor neglecting parents perceived high		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(14) Disbrow et al (1979) (E)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Disbrow et al (1979) (cont.)					communication between themselves and their children Both abusers and neglectors were low in parental facilitating behavior		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(15) Benedict et al (1985) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Benedict et al (1985)	Retrospective matched pair study **QUALITY OF EVIDENCE** Evidence obtained from a retrospective matched pair study with limitations	532 of a total of 579 children reported to Baltimore Department of Social Services Control group obtained from State of Maryland birth certificates, matched on the basis of the abused child's birth year and sex, maternal race, education and hospital of delivery	Review of birth records	Chi-square Test for paired data Odd's ratio	Maternal demographic data Information on current and past pregnancies including birth interval, type of delivery, trimester prenatal care initiated, previous abortions, still-births and history of prior child deaths Labor and delivery room experience Complications of the current pregnancy	Inclusion criteria defined Discussed why 47 children were not included in the study Demographics of the sample described Acknowledged that the comparison group was comprised of mothers of non-abused children but in fact it could only be determined that there was no abuse report not that there had never been any abuse	Broad operational definition of "maltreatment" (i.e., term "malicious" not defined) The "case" group included "confirmed" as well as "suspected" abuse cases - percentages of each group not defined Incompleteness of data due to family and patient mobility Consistency of data collection by all 16 hospitals Characterization

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(15) Benedict et al (1985) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Benedict et al (1985) (cont.)					**STUDY RESULTS** The study failed to support an association between intrapartum factors (abnormal pregnancy history and labor and delivery experience in families) and subsequent child abuse In this study, mothers in abusive families were younger than mothers in nonabusive families Where mothers had more than 1	Acknowledged that they did not address the issue of teenage parenting or quantity/quality of social supports	of the sample makes generalizability difficult Maternal age was not used in the matching when the comparison group was chosen Education was chosen as an indicator of socioeconomic status Questionable causation: does becoming pregnant cause a young woman to drop out of school thus impacting on her

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(15) Benedict et al (1985) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Benedict et al (1985) (cont.)					child, there was a mean difference of 8 months between groups with mothers in the abuse group having a mean birth interval of 33 months as compared to 41 months for mothers in the nonabusive group 7.1% of abuse mothers started prenatal care in the third trimester or had none at all compared to 3.8% of non-abuse mothers An odd's ratio of		future socio-economic status, or does being poor increase the chance of getting pregnant and then dropping out of school? Multiple regression techniques not utilized One of the variables studied was a history of prior child deaths - no information provided about the cause of the deaths Same mother could have been represented more

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(15) Benedict et al (1985) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Benedict et al (1985) (cont.)					2:12 indicated more than twice the risk of mal-treatment where little or no prenatal care was received Mothers in abusive families appeared at higher risk for having had a child born alive who had died by the time of the birth of the abused child Mothers who had a child who died in the past ap-peared at double the risk of maltreating a		than once in the sample

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(15) Benedict et al (1985) (E)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Benedict et al (1985) (cont.)					subsequent child Abusive families appeared at significantly higher risk for increased number of stillbirths or abortions before the current birth		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(16) Lynch et al (1976) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch et al (1976)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control study with limitations	50 children referred because of abuse/neglect to the Park Hospital for Children Control group - every 20th case referred to the Maternity Hospital Social Work Department over the same period of time	Review of the social work obstetric, pediatric and nursing notes at the maternity hospital The pediatric records were used for information about the features of the abuse and referral to the hospital	Median age Percentages	For the control group - a search was made of the social service records, pediatric, accident and emergency hospital referrals The "at risk" register was checked The 2 groups were compared on the mother's age of delivery, social class, obstetric and neonatal illness, social work contact - source of referral, social problems, concern over	Exclusion criteria for the control group defined Social problems categorized as "defined" or "diffuse" - definition of each was given Allocation to the "defined" or the "diffuse" group was carried out by an independent assessor	Control group not chosen by random methods Every 20th case chosen - systematic bias Children in the control group - different ages - different levels of exposure Health care received may have been in more than one centre - the data may not have been adequately captured The control group was not matched with the case

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
16) Lynch et al (1976) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch et al (1976) (cont.)					mothering **STUDY RESULTS** Median age - case group: 23 years Median age - control group: 25 years 59% of the case group were under 25 years compared to 45% in the control group Case group not represented in social classes I and II		group except on the basis of a referral to the social worker either during pregnancy or neonatal period Difficulties with the inclusion of the "at risk" group 18.8% of the control group were in social class I = I (vs., none in the case group) Judgemental observations - "The potentially abusive mother tends to begin

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(16) Lynch et al (1976) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch et al (1976) (cont.)					24% of the control group babies were transferred to the Special Care Nursery as compared with 59% in the case group 22% of the referrals for the control group (vs., 35% of the case group) came from staff in the Antenatal Clinic. Concern over mother was recorded in the maternity hospital records in 72% of the cases compared with		reproduction early" Potential variability in the charting in all files

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(16) Lynch et al (1976) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch et al (1976) (cont.)					15% of the control group 90% of the case group's social problems categorized as diffuse (vs., 27% of the control group)		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(17) Lynch (1975) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch (1975) (cont.)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control sample with limitations	25 children who had been abused These 25 children were seen consecutively between 1972 and 1974 at the Park Hospital in Oxford, England The siblings (35) acted as the control group	Review of obstetric, neonatal, pediatric notes and, where appropriate, the social worker and general practitioner notes	Percentages	Pregnancy and perinatal experience Early life histories Admissions to Special Care Nursery Other separations - hospital admissions, foster care, child left with relatives/friends for more than 2 days Child ill during the 1st year of life Mother reported as ill, herself, during the 1st	Inclusion criteria defined "Abnormality of pregnancy" defined "Abnormal labor and delivery" was defined Term "illness" defined Demographics of the population defined	Study sample small Using siblings as a control group can result in missing key variables as both groups are exposed to similar family dynamics The children in the case group were of different ages - thus having different periods of time of exposure to the factors of concern - potential detection bias Potential variability in charting

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT (17) Lynch (1975) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch (1975) (cont.)					year of her baby's life **STUDY RESULTS** Adverse factors (abnormal pregnancy, abnormal labor or delivery, neonatal separation, other separations in the first 6 months, illnesses in the 1st year of life and illness in the mother in the first year of the baby's life) were over-represented in the abused group Episodes of ill		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(17) Lynch (1975) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Lynch (1975) (cont.)					health in vulnerable families during pregnancy, delivery, and early childhood put the parent-child bond at risk Although it was felt that any of the adverse factors studied in isolation can be of little predictive value, when taken together, they act as valuable warnings		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT (18) Starr (1988) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Starr (1988)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control study with limitations	87 abusive families 87 control families were recruited from the population Sibling comparisons were also done with 54 families All children in the child abuse sample had had a report filed of suspected or actual child abuse with the County Protective Service Department Control group families were recruited from the	Family participated in 3 interviews in the study office and one home session Data obtained from 3 sources: 1. Hospital records 2. Records of past and current child health care 3. Maternal reports Rating scales and scoring procedures were developed for coding the health information	Matched T-test for continuous variables and chi-square tests for categorical data	Labor and delivery experience Past and current child health care Maternal perceptions of pregnancy, labor, delivery and child health 32 variables studied. **STUDY RESULTS** Few relationships between prenatal and perinatal factors and infant health and subsequent physical abuse	Control group matched on the basis of social class, race, child age and gender The process of selecting siblings was described	Did not specify data collection time frame Multiple regression techniques were not utilized Demographics of both the case and control groups were not well defined - affecting the generalizability of the results Control group chosen from a hospital population which may have affected some of the variables measured - this limitation was

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(18) Starr (1988) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Starr (1988) (cont.)		population of families who had a child admitted to the study hospital for emergency non-trauma-related medical problems			were found, suggesting that early child factors do not play a major part as causes or correlates of abuse The authors did suggest that early ill health is associated with abuse Maltreatment is a complex multiple-determined event		discussed in the paper

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(19) Murphy et al (1981) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Murphy et al (1981)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control study with limitations	80 children on the South Glamorgan Area Review Committee Child Abuse Central Register Each of the children in the case group had either been physically abused or had a history of neglect Case group - children under age 5 when the abuse took place Children in the case group born between 1970 - 1976 The control group	Review of the Cardiff Birth Survey Data The Cardiff Birth Survey is an objective collection of medical and social data on each pregnancy, birth, and postnatal period in South Glamorgan 44 factors were examined from the data provided by the Birth Survey	Chi-square analysis	44 variables studied **STUDY RESULTS** Of the 44 variables, 11 showed significant statistical differences General characteristics: Social class IV, V, unemployed or unknown - statistically significant Marital instability Age of mother at delivery	Objective data from the Cardiff Birth Survey was felt to be reliable	Control group not matched according to socio-economic status Demographics of the case and control group are not defined - affecting study generalizability The specific types of maltreatment in the case group is not defined Lack of clarity regarding length of time that the Birth Survey Records were kept on each child

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(19) Murphy et al (1981) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Murphy et al (1981) (cont.)		80 children matched for date of birth and gender			Significantly fewer mothers less than 20 years in the group of abused children Pregnancy: Length of gestation at booking Fewer mothers in the case group made their 1st antenatal visit later than 20 weeks Fewer antenatal visits in the case group Fewer mothers in the control group		Social class determined based on the occupation of the father No consent was obtained

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(19) Murphy et al (1981) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Murphy et al (1981) (cont.)					attended prenatal classes Fewer mothers in the case group smoked The Baby: There was a significantly fewer number of pre-term infants in the case group There were fewer infants weighing less than 2,500 g in the case group Fewer babies in the case group were admitted to the Special Care		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(19) Murphy et al (1981) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Murphy et al (1981) (cont.)					Nursery Fewer mothers in control group were breast-feeding on the 7th day after delivery		

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(20) Leventhal et al (1984) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Leventhal et al (1984)	Case control **QUALITY OF EVIDENCE** Evidence obtained from a case control study with limitations	Case subjects were chosen from all children who were reported to the Yale - New Haven Hospital Child Abuse Registry over a six year period from 1974-1979 117 case subjects chosen Case subjects were children who had been physically abused, were less than 10 years of age at the time of the abusive incident and were a non-twin birth	The research assistant who reviewed the child's and mother's hospital charts - both cases and controls were blinded to the hypothesis of the study The review of the files began with the child's birth and included events up to the age at which the child had been abused	Matched odd's ratios McNemar's X-Test Paired T-test Two way logistic regression models	Variables studied: Prematurity "term" delivery The birth weight Maternal age Marital status Parity Type of delivery Apgar scores Type of feeding before discharge Neonatal separation greater than 6 hours Mother	Inclusion and exclusion criteria defined A definition of physical abuse is given Medical records at the only other hospital in the New Haven area were reviewed Definition of prematurity, term, low birth weight and young maternal age was given The issue of detection bias is discussed - how it was addressed	Population low socioeconomic status - impact on the generalizability of the study

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(20) Leventhal et al (1984) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Leventhal et al (1984) (cont.)		Controls were selected from the hospital's log of births and were matched on the following variables: sex, race of the mother, birth date within two months, method of payment for the hospitalization at the time of the child's birth, provider of the child's health care at time of birth For each potential control meeting the matching criteria, the hospital chart was reviewed to			discharged from hospital before her baby Major neonatal problems **STUDY RESULTS** No statistically significant association between child abuse and either gestational age or birth weight An association does appear to exist between young maternal age and child abuse	for this study Demographics of the population are well defined Process of selecting controls is well defined	

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(20) Leventhal et al (1984) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Leventhal et al (1984) (cont.)		determine if the child had been reported to the hospital's Abuse and Neglect Registry					

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(21) Leventhal (1981) (A)

SOURCE	TYPE OF RESEARCH (REVIEW)	SAMPLE SIZE/ POPULATION	METHOD	OUTCOME MEASURES / STUDY RESULTS
Leventhal (1981)	Review of 22 case control studies that investigated either of 2 risk factors: 1. Premature or low birth weight of the abused child 2. Young maternal age of the mother of the abused child		Each study was examined to determine compliance with 7 methodologic standards	7 methodologic standards were: 1. Choice of specific control group 2. Avoidance of exclusions that lead to biased cases 3. Avoidance of exclusions that lead to biased control subjects 4. Clear description of the spectrum of abuse 5. Definition of the risk factor 6. Equal detection of child abuse 7. Equal demographic and clinical susceptibility

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(21) Leventhal (1981) (B)

SOURCE	TYPE OF RESEARCH (REVIEW)	SAMPLE SIZE/ POPULATION	METHOD	OUTCOME MEASURES / STUDY RESULTS
Leventhal (1981) (cont.)				**STUDY RESULTS** No study satisfied all 7 standards Two standards: 1. Choice of a specific control group 2. Adjustment for differences in clinical and demographic susceptibility factors most often affected the issues Studies complying with both of these standards indicated that prematurity or low birth weight is not a risk factor for abuse and that young maternal age at the birth of the abused child is likely to be a risk factor Few studies complied with

APPENDIX II: TABLE X - PREDICTION LITERATURE RELATED TO PREVENTION OF CHILD ABUSE AND NEGLECT
(21) Leventhal (1981) (C)

SOURCE	TYPE OF RESEARCH (REVIEW)	SAMPLE SIZE/ POPULATION	METHOD	OUTCOME MEASURES / STUDY RESULTS
Leventhal (1981) (cont.)				the standard concerned with avoidance of detection bias - this failure may have a major effect on the direction of the results of certain studies

APPENDIX III: TABLE XI
PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT

SOURCE	TYPE OF ARTICLE	SUMMARY OF FINDINGS
HELFER (1987)	REVIEW	SUMMARY
		This review article clarifies the relationship between the enhancement of parent-infant interactions and the prevention of child abuse and neglect The perinatal period encompasses the time frame from 1 year before to 18-24 months after the birth of the child - the perinatal period constitutes a "window of opportunity" through which parent-infant interaction may be reinforced offering the possibility of a decrease in the risk of family dysfunction This article contains a detailed discussion of the capabilities of the newborn and places in perspective the difficulty experienced when parents who were themselves mistreated in childhood struggle to establish a system of communication with their own newborn children The Perinatal Intervention Program, a program intended to teach new parents the skills of interaction with their newborns, is described and placed into perspective with other perinatal programs which have been reported to be capable of augmenting the capacity for communication The anticipated outcomes from a hypothetical comprehensive perinatal program are listed including: Improved maternal prenatal health Decrease in prematurity

Decrease in maternal behaviors which adversely affect the fetus (e.g., smoking, drinking)

Shorter labor in the 1st pregnancy

Decrease in the C-section rate

Decreased need for episiotomy

Shortened hospital stay

Enhanced maternal-infant attachment

Improved maternal-infant communication

Decrease in the rate of failure-to-thrive in infancy

Improved maternal postnatal health

Decrease in infant morbidity and mortality

Increase in immunizations in infancy

Decrease in second pregnancies in unwed teens

All of the above outcomes, if they occurred, would result in substantial savings

This type of program requires a strong research/evaluation base

Recommends that a series of studies be carried out to research the anticipated outcomes resulting from comprehensive perinatal intervention programs whose objectives are to enhance parent-infant interactions

Recommends that these studies be carefully designed using a similar protocol implemented at multiple sites throughout the country with data collation and analysis

HELFER (1987) (Cont.)	REVIEW (Cont.)	SUMMARY (Cont.)
		performed at a central base of operation

KEMPE (1976)	DESCRIPTIVE	SUMMARY OF FINDINGS
		Describes a list of observations of parents - to be made in the physician's office or Prenatal Clinic Describes observations that could be made at post partum checkups and pediatric checkups Describes positive observations that can be made as well Suggests what might be done to help "high-risk" families Proposed the lay health visitor concept What will the health visitor do and where will she function She will go out to the home where she will weigh the child and graph the baby's progress on a weight chart, but most importantly, she will look at the child, at the mother, at the setting in which the family lives, and determine how things are going, what problems exist and how the family is coping with these problems - the use of health visitors should be a universal phenomenon Believes that each child is entitled to effective comprehensive health care and that when parents are not motivated to seek it, society, on behalf of the child, must compel it Most of our screening tests ignore the significant problems of parent-child interaction

BARTH (1989)	DESCRIPTIVE	SUMMARY OF FINDINGS
		A task-centered, home-based service to high-risk families is described Data is also presented about service characteristics and their relationship to outcomes Para-professionals provided 6 months of service Before and after the 6-month services, clients completed the Child Abuse Potential Inventory - there was a reduction in child abuse risk from a high to moderately high level Together, clients and para-professionals completed Goal Attainment Scales Acknowledged that there were difficulties in measurement and data collection It is also stated that para-professional services like the Child-Parent Enrichment Project are not designed for unilateral intervention on behalf of highly distressed families Suggests that professionals and paraprofessionals can certainly collaborate better than they commonly do now to reduce child maltreatment - describes task-centered practice as ecological insofar as tasks very often aim to reduce environmental stressors and enhance the client's capacity to solve problems that deplete resources needed for parenting There was no long-term follow-up to determine if the client group had been able to continue on with what had been learned during the project Although the Child Abuse Potential

BARTH (1989) (Cont.)	DESCRIPTIVE (Cont.)	SUMMARY (Cont.)
		Inventory Scores were reduced, it is not clear if any incidents of abuse and/or neglect occurred during the project itself
GABINET (1979)	**DESCRIPTIVE**	**SUMMARY OF FINDINGS**
		The Parenting Program for the Prevention of Child Abuse described in this paper is a program of primary prevention It is a treatment program for individual families referred by agencies which have made a tentative diagnosis of "child abuse potential" In most of these families, no reportable abuse has occurred at the time of the referral The program was offerred as a service which may help the family to cope with stresses, particularly in the area of parent-child relations It was a voluntary program Introduction to the program included a clinical evaluation and administration of the Minnesota Multiphasic Personality Inventory Home visits were made - the major focus was on treatment of the patient's emotional problems To objectify evaluations and to eliminate part of the variability between therapists in estimating improvement, a Parenting Behavior Scale for the measurement of change was developed 4 major areas were measured -

GABINET (1979)	DESCRIPTIVE (Cont.)	SUMMARY (Cont.)
		Relationship with the child, coping with crisis, household and child care responsibilities, and parent's adjustment 77 patients were seen 6 or more times between June 1976 and May 1977 - it was felt that at least 6 visits were required before the therapist could offer the patient sufficient input to make an appropriate evaluation Difficulties in outreach were described as 180 individuals were referred to the program but 113 individuals were seen 5 times or less The program was evaluated as being successful in terms of improving the parents' self-esteem, helping the parents learn to manage their lives better, avoiding crisis and improving impulse control, helping the parents improve relations with their children and become aware of the children as separate individuals and less likely to lose control and injure them It was also concluded that the program prevented child abuse despite the lack of long-term outcome follow-up
AYOUB et al (1982)	**DESCRIPTIVE**	**SUMMARY OF FINDINGS**
		The At Risk Parent-Child Program is a multidisciplinary network agency designed for the secondary prevention of poor parenting and the extremes of child abuse and neglect

Secondary prevention is defined as programs which reduce the disability rate by lowering the prevalence of the disorder

Programs of secondary prevention would include intervention strategies, especially designed to reach families assessed to be at risk of poor parenting, child abuse and neglect, whether or not actual abuse has occurred within the family

The At Risk Parent-Child Program was developed in an effort to identify and treat families at risk of poor parenting and the extremes of child abuse and neglect and failure-to-thrive

This model system of service delivery emphasizes:

1. The coordination of existing community resources to access a target population of families at risk of parenting problems

2. The provision of multiple special services in a neutral location (Ambulatory Pediatric Clinic)

3. The importance of intensive individual contact with a clinical professional who serves as primary therapist, social advocate and service coordinator for client families

Identification and assessment of families is best done during prenatal and perinatal periods

Both formal and informal procedures for screening for risk factors are described and a simple set of "at risk" criteria for use by the hospital nursing staff is provided

Preventive strategies include special

AYOUB et al (1982) (Cont.)	DESCRIPTIVE (Cont.)	SUMMARY (Cont.)
		medical, psychological, social and developmental services, offered in an inpatient, outpatient or in-home setting All direct services to at risk families are supplied by professionals employed within existing local agencies Multiple agency involvement allows a broad based screening capacity which allows thousands of families access to program services 4,741 children received routine screening by hospital nursing staff in 1981; 632 children were referred to an at risk primary professional for formal assessment Of these children and their families who were given clinical assessment, 288 were judged to be at risk of significant parenting problems and were invited to participate in the program - ultimately 103 were enrolled in the voluntary program No statistics are available on the incidence of later reports of suspected child abuse and neglect among those families who refused special services The incidence of suspected abuse and neglect among those receiving initial screening and/or clinical assessment is not available A weakness of this descriptive study is that there is no discussion of an evaluation component which is crucial in determing the effectiveness of the program

APPENDIX III - TABLE XI (B) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Taylor et al (1988) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Taylor et al (1988)	Prospective **QUALITY OF EVIDENCE** Evidence has been obtained from a randomized controlled trial with limitations	42 women were approached with requests for participation in the study 32 mothers eventually volunteered and entered the study The women were approached 1-2 days post partum depending on the mode of delivery	Mothers were randomly assigned to either the control or experimental groups Post and follow-up assessment procedures were employed at one month and 3 months All measures were administered by research team members who were blinded to group membership Subjects in the control group	Scale and item analysis strategies 10 variables remained Multivariate analysis of variance	Outcome criteria: 1. Greater knowledge of infant child development 2. The adoption of more positive child rearing attitudes 3. Increased competency in the parenting role 4. Increased quality of interaction between parent and infant An expectancy scale was utilized	The demographics of the study population is defined Random assignment used Research team members were blinded to group membership thereby decreasing a potential form of bias All instruments were scored twice by independent raters Inclusion criteria defined	It is not clear over what time frame the sample was collected The method of random assignment is not described The methodology is very complicated - this study would be very difficult to replicate Impact of the videotaping on the parent-infant interaction The demographics of each group are not defined

APPENDIX III - TABLE XI (B) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Taylor et al (1988) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Taylor et al (1988) (cont.)			received those services routinely offered to post-partum patients which included an infant bath demonstration and attendance at a mothers breakfast group discussion The experimental model consisted of special in-hospital and after-care services spanning a 4-week period In-hospital services included an introductory meeting with a student nurse		to measure knowledge of child development An attitude scale was employed to assess adoption of positive child-rearing attitudes A behavioral rating was used to measure quality of interaction - 10 minute videotape was done An open-ended questionnaire was developed to measure parental competency	It was acknowledged that the study results can only be thought of as a temporary success - the long-term effects of such intervention are unknown Consent was obtained	

APPENDIX III - TABLE XI (B) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Taylor et al (1988) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Taylor et al (1988) (cont.)			volunteer The student nurse volunteer made home visits at 1, 2, and 3 weeks postpartum Home visits were audiotaped		**STUDY RESULTS** Those mothers who participated in the intervention exhibited a greater understanding of the social/personal and motor/physical aspects of child development, embraced more democratic principles with respect to nurture and discipline-related issues in child rearing, provided more verbal stimulation to their infants and displayed		

APPENDIX III - TABLE XI (B) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Taylor et al (1988) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Taylor et al (1988) (cont.)					increased problem solving skills It was felt that the intervention goal of building strengths or competencies in parenting areas which are predictive of abusive-neglectful parenting outcomes was achieved		

APPENDIX III - TABLE XI (C) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Wieder et al (1983) (A)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Wieder et al (1983)	Descriptive **QUALITY OF EVIDENCE** Evidence has been obtained from a descriptive study	47 multirisk factor families with >200 children 1. All families had to reside, at time of entry into the program, in Prince George County, Maryland 2. All participants had to have at least one child already born so that maternal functioning could be observed and evaluated 3. All participants had to be pregnant at the time of referral,	Each prospective participant was evaluated on: 1. The developmental status of the woman's existing children 2. The degree to which the compromises in functioning would adversely affect the care provided for the unborn child 3. The mother's status on several dimensions bearing on maternal functioning,	Percentage Correlation and coefficient Step wise discriminant analysis Multivariate analysis of variance	1. Presence of psychiatric disorder in participant's family of origin 2. Psychiatric hospitalization 3. Prior contact with mental health professions 4. Physical abuse/neglect of participant before age 18 5. Sexual abuse of participant before age 18 6. Witness to the abuse of others before age 18	Demographics of the population are described Recruitment process described The authors described the methodological difficulties describing the paper as primarily descriptive Individuals were asked to participate in the program	No random assignment to groups Issue of self-disclosure regarding out-come measures - inability to collect data on all participants Loss of women who had originally agreed to participate in the program It is not clear over which time frame the evidence is gathered or when it is gathered - consistency

APPENDIX III - TABLE XI (C) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Wieder et al (1983) (B)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Wieder et al (1983) (cont.)		preferably no later than the second trimester and had decided against obtaining an abortion A small group of 14 women were recruited who, after evaluation, were not felt to be at significant risk for difficulties in mothering - it was recognized that this smaller group was not a true control group 14 low-risk mothers assigned to Group A	based on clinical interviews with the mother, observations of maternal and child function, freeplay observations at home and at the office, clinical assessments of existing children, psychological testing of the mother, and the records, reports of other agencies Intervention included: 1. Organizing service systems on behalf of family's survival		7. Physical abuse of participant after age 18 8. Participant physically abuses/neglects her own children 9. Disruption of significant relationship before age 12 10. Participant's functioning in family before age 18 11. Participant's functioning in peer group before age 18 12. Participant's		Difficulty in replicating the study - the mode of intervention is not well described There was no inter-rater reliability checks

APPENDIX III - TABLE XI (C) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Wieder et al (1983) (C)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Wieder et al (1983) (cont.)		47 mothers assigned to 2 Groups: Group B - Community Referral Group Group C - Comprehensive Treatment Group	needs such as food, housing, medical care 2. Constant emotional relationship with family 3. At times when infant's development was in jeopardy, offered highly technical patterns of care geared to the infant's and family's individual abilities and strengths Developmental assessments of the children		functioning in school before age 18 13. Participant's functioning in family after age 18 14. Participant's functioning in peer group after age 18 15. Participant's functioning in work after age 18 16. Expelled from school 17. Chronic rule violator at home/school		

APPENDIX III - TABLE XI (C) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Wieder et al (1983) (D)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Wieder et al (1983) (cont.)					before age 15 18. Continuous and chronic antisocial behavior in which the rights of others are violated Infant's developmental quotient **STUDY RESULTS** 75% had psychosocial difficulties at the time they presented, as well as historically, and the incidence of		

APPENDIX III - TABLE XI (C) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Wieder et al (1983) (E)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Wieder et al (1983)					misfortune is high 64% of the participants were born into families where identifiable and severe psychiatric dysfunction was present 69% of the participants had a disruption in a significant relationship before the age of 12 years 66% of the participants were exposed to physical and/or sexual abuse as		

APPENDIX III - TABLE XI (C) PROGRAM ARTICLES AS THEY RELATE TO CHILD ABUSE AND NEGLECT
Wieder et al (1983) (F)

SOURCE	TYPE OF RESEARCH	SAMPLE SIZE/ POPULATION	METHOD	STATISTICAL ANALYSIS	OUTCOME MEASURES/ STUDY RESULTS	STRENGTHS	LIMITATIONS
Wieder et al (1983) (cont.)					children Multirisk factor families are rarely able to negotiate an infant's development into the second year of life without difficulties which require specific treatment services		

Health Sciences Centre

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Winnipeg, Manitoba R3A 1R9
Dial Direct (204) - 787-2423

APPENDIX IV: CONSENT FORM

A group of the hospital's doctors, nurses and social workers is interested in learning more about how babies develop during their first year of life. To do this, they want to meet frequently with a chosen group of new mothers and their babies. During each mother's and baby's monthly visit to the hospital, the mother will have the opportunity to ask any questions she may have about her baby's health, her own health, and the baby's care.

If you would like to participate as one of the 50 mothers in this study, you would have your own nurse and specialist in child development during the first year of your child's life. In order to participate in the study and so that we can get to know you and the baby, you will be asked a number of questions about yourself and the baby during your pregnancy and following the baby's birth. All information obtained will be confidential. You are free to withdraw from the group at any time.

I, _____, having read, and understanding the above statement, agree to participate in the study being conducted by Dr. K. McRae.

Witness _____

Date _____

APPENDIX V (A) (1)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

Children's Hospital and Women's Centre
Health Sciences Centre
Winnipeg, Manitoba

Study Number _____

Name _____
(Last) (First) (Middle)

Address _____
(Number and Street)

_____ _____
(Postal Code) (Phone)

Age (Birth Date)

_____/ _____/ _____
(Year) (Month) (Day)

Estimated Gestation _____
(Months)

Marital Status

. . . . . single
. . . . . living as married
. . . . . married
. . . . . separated/divorced
. . . . . widowed

Contraception History (Method used immediately prior to becoming pregnant)

. . . . . None
. . . . . Oral Contraceptives
. . . . . IUD
. . . . . Condom
. . . . . Condom, Diaphram
. . . . . Condom, Diaphram, Foam
. . . . . Diaphram, Foam
. . . . . Foam
. . . . . Rhythm
. . . . . Other, SPECIFY . . . .
. . . . . .

APPENDIX V (A) (2)
POSITIVE PARENTING - PILOT PROJECT (P4)
* PRENATAL INTAKE QUESTIONNAIRE *

Interviewer _____

Length of interview _____ (Minutes)

Date of interview

_____/ _____/ _____
(Year) (Month) (Day)

Agency Referral	**No**	**Yes**	
	.....	.....→→	**Agency** .....

Race

..... Caucasian
..... Amerindian
..... Asian
..... African
..... Other SPECIFY .....

COMMENTS _____

_____

_____

OVERALL RISK SCORE

	P	I
1	.....	.....
2	.....	.....
3	.....	.....
4	.....	.....
5	.....	.....
6	.....	.....
7	.....	.....
8	.....	.....
9	.....	.....
10	.....	.....
11	.....	.....
12	.....	.....
TOTAL	_____	_____

RISK GROUP _____

APPENDIX V (A) (3)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

The first series of questions ask about where you are now living.

1.	Do you think of the place in which you live <u>now</u> as your regular place of residence, or is it a temporary residence?	Regular place of residence	1
		Temporary residence	2
2.	How long have you lived in this place of residence?	No. of Years	
		No. of Months	
3.	And how long have you lived in your community or neighborhood?	No. of Years	
		No. of Months	
4.	<u>Including yourself</u>, how many people live in your household?	No. of People	
5.	Do you own or rent your home?	Own	1
		Rent	2
		Other . . . . . SPECIFY	3
6.	CIRCLE ONE CODE: ASK IF NECESSARY: In what type of residence do you live?	Hotel or rooming house	1
		Apartment	2
		Private house	3
		Mobile home (trailer)	4
		Other (SPECIFY)	5
7.	In how many different places have you lived during the past 12 months? (PROBE FOR NUMBER OF DIFFERENT <u>RESIDENCES</u>)	No. of places	

APPENDIX V (A) (4)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

Next, we will be asking about how far you went in school?

8. **A.** What was the highest grade you completed in school?

No schooling	01
1st - 4th grades	02
5th - 6th grades	03
7th grade	04
8th grade	05
9th - 11th grades	06
12th grade	07
1 year of college	08
2 years of college	09
3 years of college	10
4 years of college	11
Some graduate school	12
Graduate school	13

B. Have you ever received any diploma or degree?

Yes (ASK C)	1
No	2

C. What is you highest diploma or degree?

High school diploma or equiv.	1
Associate degree (Jr. College)	2
Bachelor's degree	3
Master's degree	4
Doctor's degree	5
Other (SPECIFY)	6

9. Have you completed any vocational, business, or technical school?

Yes	1
No	2

APPENDIX V (A) (5)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

10. Before you became pregnant did you have a full time job, did you work at odd jobs or were you not employed?

Full time job (ASK D-F)	1
Part time job (ASK D-F)	2
Work at odd jobs (ASK D-F) . . .	3
Not employed (ASK A)	4

A. Had you been looking for work before you became pregnant?

. . . . . Yes →→→→ (GO TO C)
. . . . . No →→→→ (ASK B)

B. What was the main reason you hadn't been looking for work? RECORD VERBATIM AND CODE

. . . . . Housewife
. . . . . Student
. . . . . Drug or drinking problem
. . . . . Institutionalized
. . . . . Don't want a job
. . . . . No jobs available
. . . . . In this location only temporarily/intend to move
. . . . . Supported by parent(s)
. . . . . Supported by partner
. . . . . Welfare
. . . . . Other SPECIFY. . . .
. . . . . .

C. Have you worked in the past 12 months?

. . . . . Yes (ASK D-F)
. . . . . No (SKIP TO Q. 11)

D. What kind of work (do/did) you do (most recently in the past 12 months)? (PROBE: What (is/was) your job called?)

_____
(occupation)

E. What (do/did) you actually do in that job? (PROBE: What (are/were) some of your main duties?)

_____
_____

F. What kind of place (do/did) you work in? (PROBE: What do they make or do?)

_____
(industry)

APPENDIX V (A) (6)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

11. Do you have a partner at the present time? . . . . . No

. . . . . Yes

Is he your husband, common-law, boyfriend?

_____

Is he the father of your baby? . . . . . No

. . . . . Yes

What is your involvement with the biological father?

_____

ASK ONLY IF MOTHER NOT LIVING WITH BIOLOGICAL FATHER

Which of these statements best describes the way things are?

____ 1. I don't know who the father is.

____ 2. I know who he is, but we don't see each other, he is not involved.

____ 3. I know who he is, we see each other, but he's not living with me.

APPENDIX V (A) (7)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

THE FOLLOWING SERIES OF QUESTIONS IS SCORED

P - patient
I - interviewer

1. Let's now talk about your pregnancy. **P** **I**

Which statement best describes how you feel about it?

____	I did not want to become pregnant and I'm unhappy I'm pregnant - I thought about abortion	4	4
____	I did not want to get pregnant - I'm not happy, but I certainly will continue with it	3	3
____	I did not plan the pregnancy, I was unhappy but now I'm happy about it	2	2
____	I did not plan the pregnancy, but I'm happy about it	1	1
____	I planned the pregnancy and I'm happy to be pregnant	0	0

COMMENTS: _____
_____
_____

INTERVIEWER QUALIFIERS: _____
_____
_____

2. How do you think your partner feels about the pregnancy? QUOTE VERBATIM AND CODE: _____
_____
_____

____	He's not at all interested	4	4
____	He's not that interested	3	3
____	He's sort of interested	2	2
____	He's interested and cares	0	0

INTERVIEWER QUALIFIERS: _____
_____
_____

3. I want to talk with you about how you get on with your partner.

How does he treat you?

QUOTE VERBATIM _____

_____

How does he show his anger generally?

QUOTE VERBATIM _____

_____

If he gets angry with you, how does he show it?

QUOTE VERBATIM _____

_____

Has he ever beaten you?	No	(0)	Yes	(3)
Has he ever beaten another adult?	No	(0)	Yes	(2)
Has he ever beaten a child?	No	(0)	Yes	(4)

(RECORD HIGHEST NUMBER CHECKED.) Score ____

COMMENTS: _____

_____

INTERVIEWER QUALIFIERS: _____

_____

4. What feelings do you have about the baby that's coming?

QUOTE VERBATIM AND CODE _____

_____

_____

____	I really don't think I'll want anything to do with the baby	4	4
____	I'm not looking forward to caring for the baby	3	3
____	I'm not sure how I'll feel about caring for the baby . . .	2	2
____	I'm sort of looking forward to caring for the baby	1	1
____	I'm really looking forward to caring for the baby	0	0

INTERVIEWER QUALIFIERS: _____

_____

5. If you should need help in this pregnancy, on whom would you be able to call?

QUOTE VERBATIM AND CODE: _____

_____

_____

____	No one, I'm alone with no help	4	4
____	No one, but I could get help from Welfare or some other agency if I needed it	3	3
____	No family, but I've already contacted either a nurse or a social worker who I think I could count on		
____	I've got friends and family, but no one person to really count on	2	2
____	I've got friends and family, and I've got at least one person I can really count on	1	2
		0	0

INTERVIEWER QUALIFIERS: _____

_____

6. Looking back on the days when you were growing up, what kind of memories do you have of that time?

Which statement describes them best?

____	I remember my childhood as an awful time	4	4
____	I remember very few good times	3	3
____	I remember some good times	2	2
____	I remember mostly good times	1	1
____	I remember my childhood as a very good time	0	0

COMMENTS: _____

_____

INTERVIEWER QUALIFIERS: _____

_____

7. With whom did you live most of your life?

____	mother	
____	father	
____	mother and father	
____	aunt/uncle/grandparent	SPECIFY _____
____	foster parent	SPECIFY _____
____	older sibling	SPECIFY _____
____	other	SPECIFY _____

(USE THE NAME OF THE PRIMARY CARETAKER IN REMAINDER OF QUESTION)

What are your memories of _____ like?

QUOTE VERBATIM AND CODE: _____

_____

____	I remember _____ as not wanting to have anything to do with me	4	4
____	I remember _____ as not caring and cold towards me	3	3
____	I remember that _____ cared some of the time	2	2
____	I remember that _____ cared for me most of the time	1	1
____	I remember that _____ really cared and loved me	0	0

INTERVIEWER QUALIFIERS: _____

_____

8. Is there some other person or persons whom you have good memories about? (QUALIFY WITH "other than _____" ONLY IF SHE HAS POSITIVE MEMORIES OF _____)

QUOTE VERBATIM AND CODE: _____

_____

____	remembers no one person	4	4
____	remembers occasional person outside home	3	3
____	remembers person(s) often present outside the home	2	2
____	remembers person(s) often present in the home	1	1
____	remembers person(s) as being always present	0	0

INTERVIEWER QUALIFIERS: _____

_____

APPENDIX V (A) (11)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

9. Looking back on the days when you were growing up, let's talk about how you were brought up. What did your parents' expect of you?

Which statement says it best?

____	My parents were very strict (ASK - Could you give me some examples?) _____ _____	4	4
____	My parents were often hard on me (ASK - Could you give me some examples?) _____ _____	3	3
____	My parents really did not care what I did (ASK - Could you give me some examples?) _____ _____	2	2
____	My parents were only occasionally tough on me (ASK - Could you give me some examples?) _____ _____	1	1
____	My parents were fair and reasonable (ASK - Could you give me some examples?) _____ _____	0	0

COMMENTS: _____
_____

INTERVIEWER QUALIFIERS: _____
_____

APPENDIX V (A) (12)
POSITIVE PARENTING - PILOT PROJECT (P4) * PRENATAL INTAKE QUESTIONNAIRE *

10. LET'S NOW TALK ABOUT HOW YOU WERE DISCIPLINED AS A CHILD. SOME CHILDREN ARE SPANKED, SOME CHILDREN ARE PUT IN THEIR ROOMS OR MADE TO STAND IN A CORNER, SOME HAVE A FAVOURITE TOY, A SPECIAL T.V. PROGRAM OR OTHER PLEASANT THING TAKEN AWAY FOR AWHILE AND SOME ARE YELLED AT OR GIVEN A LECTURE. WHAT WAS THE WAY YOU WERE MAINLY PUNISHED AS A CHILD? PROCEED TO APPROPRIATE SECTION ON PHYSICAL, ISOLATION, DEPRIVATION, OR VERBAL PUNISHMENT. AFTER PRIMARY METHOD IDENTIFIED, PROBE AS TO USE OF OTHER METHODS AND COMPLETE APPROPRIATE SECTION(S).

.....	A) PHYSICAL	.....	B) ISOLATION	.....	C) DEPRIVATION	.....	D) VERBAL
(1^0,2^0,3^0,4^0. OR 0 MEANS OF PUNISHMENT)		(1^0,2^0,3^0,4^0, OR 0 MEANS OF PUNISHMENT)		(1^0,2^0,3^0,4^0, OR 0 MEANS OF PUNISHMENT)		(1^0,2^0,3^0,4^0, OR MEANS OF PUNISHMENT)	
....	WITH WHAT WERE YOU GIVEN A SPANKING? PROBE AS TO INSTRUMENT USED AND IF BRUISING OCCURRED. QUOTE _____	.....	WHERE DID YOU HAVE TO GO OR STAND WHEN YOU WERE BAD? GET SPECIFIC LOCATION. QUOTE _____	.....	WHAT SORTS OF THINGS WOULD BE TAKEN AWAY FROM YOU WHEN YOU WERE BAD? GET SPECIFIC OBJECTS/PRIVILEGES. QUOTE _____	.....	EXACTLY HOW DID YOUR PARENTS VERBALLY PUNISH YOU? GET SPECIFICS AS TO LECTURE, YELLING, SWEARING. QUOTE _____
.....	WHERE WERE YOU __(Z)FILL IN FROM ABOVE? PROBE AS TO SPECIFIC AREA(S) OF BODY. QUOTE _____	.....	FOR WHAT REASONS WOULD YOU __(Z)(FILL IN FROM ABOVE AS TO LOCATION)? QUOTE _____	.....	FOR WHAT REASONS WOULD YOU ___(Z) (FILL IN FROM ABOVE AS TO OBJECT/PRIVILEGES)? CIRCUMSTANCES SURROUNDING EPISODE. QUOTE _____	.....	FOR WHAT REASONS WOULD YOU ___(Z) (FILL IN FROM ABOVE AS TO VERBAL PUNISHMENT)? CIRCUMSTANCES SURROUNDING EPISODE QUOTE _____
.....	FOR WHAT SORT OF REASONS WOULD YOU GET ___(Z)? PROBE CIRCUMSTANCES AND ASSOCIATION WITH ETHANOL. QUOTE _____	.....	HOW LONG WOULD YOU ___(Z) AFTER BEING BAD? PROBE AS TO AVERAGE AND GET RANGE AS WELL. QUOTE _____	.....	HOW LONG WOULD YOU ___(Z) AFTER BEING BAD? PROBE AS TO AVERAGE AND GET RANGE AS WELL. QUOTE _____	.....	HOW LONG WOULD YOU ___(Z) AFTER BEING BAD? PROBE AS TO AVERAGE AND GET RANGE AS WELL. QUOTE _____
.....	HOW OFTEN WOULD YOU ___(Z)? GET A RATE, E.G. 1/WEEK. QUOTE _____	.....	HOW OFTEN WOULD YOU BE __(Z)? GET A RATE, E.G. 1/WEEK. QUOTE _____	.....	HOW OFTEN WOULD YOU BE __(Z)? GET A RATE, E.G. 1/WEEK. QUOTE _____	.....	HOW OFTEN WOULD YOU BE __(Z)? GET RATE, E.G. 1/WEEK. QUOTE _____
.....	WERE YOU ALWAYS __(Z) WHEN YOU DID SOMETHING BAD? QUOTE _____	.....	WERE YOU ALWAYS ___(Z) WHEN YOU DID SOMETHING BAD? QUOTE _____	.....	WERE YOU ALWAYS __(Z) WHEN YOU DID SOMETHING BAD? QUOTE _____	.....	WERE YOU ALWAYS __(Z) WHEN YOU DID SOMETHING BAD? QUOTE _____
.....	WERE YOU EVER __(Z) WHEN YOU WERE NOT BAD? PROBE CIRCUMSTANCES AND FREQUENCY. QUOTE _____	.....	WERE YOU EVER __(Z) WHEN YOU WERE NOT BAD? PROBE CIRCUMSTANCES AND FREQUENCY. QUOTE _____	.....	WERE YOU EVER __(Z) WHEN YOU WERE NOT BAD? PROBE CIRCUMSTANCES AND FREQUENCY. QUOTE _____	.....	WERE YOU EVER __(Z) WHEN YOU WERE NOT BAD? PROBE CIRCUMSTANCES AND FREQUENCY. QUOTE _____
TOTAL		TOTAL		TOTAL		TOTAL	

APPENDIX V (A) (13)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

11. When you were a child, did you ever have sexual contact with a family member or family friend?

____	No	0	0
____	Yes →→→ What happened		

QUOTE VERBATIM AND CODE

_____

_____

(PROBE AS TO PRIMARY CARETAKER INTERVENTION)

____	sexual contact with a family member without support from other family members	4	4
____	sexual contact with a family member with intervention and support from another family member	2	2

INTERVIEWER QUALIFIERS _____

_____

12. I would now like you to talk about how you feel about yourself.

Which of these statements best describes the way you see yourself:

____	On the whole I'm satisfied with myself and am able to do things as well as others	0	0
____	Most of the time I feel pretty good about myself and have something to be proud of	1	1
____	At times I feel I am no good at all and do not have much to be proud of	2	2
____	Most of the time, I don't feel good about myself and have little to be proud of	3	3
____	I'm just no good. I can't do anything right	4	4

COMMENTS: _____

_____

INTERVIEWER QUALIFIERS: _____

_____

To complete the questionnaire, I'm going to give you a more detailed set of statements about how you feel about yourself. I'd like you to try and fill them in yourself. If you have any questions, I'll help you.

APPENDIX V (A) (14)
POSITIVE PARENTING - PILOT PROJECT (P4)
*** PRENATAL INTAKE QUESTIONNAIRE ***

CHECKLIST

For each statement check (√) whether you agree, strongly agree, disagree, or strongly disagree with it.

Example:

Strongly Agree	Agree	Disagree	Stongly Disagree
			√

The color red is nice.

(The person answering really doesn't like the color red.)

If you don't understand, the interviewer will help you.

If you do understand, go ahead.

	Strongly Agree	Agree	Disagree	Strongly Disagree
I feel that I am a person of worth, at least on an equal level with others.				
I feel that I have a number of good qualities.				
All in all, I am inclined to feel that I am a failure.				
I am able to do things as well as most other people.				
I feel I do not have much to be proud of				
I take a positive attitude toward myself .				
On the whole, I am satisfied with myself				
I wish I could have more respect for myself				
I certainly feel useless at times				
At times I feel I am no good at all				

APPENDIX V (B)
POSITIVE PARENTING - PILOT PROJECT (P4)
* PRENATAL INTAKE QUESTIONNAIRE *

INTAKE QUESTIONNAIRE
SCORING PLAN

All questions answered

	Score	Risk
12/12	42 - 48	very high-risk
	30 - 41	high-risk
	19 - 29	medium-risk
	7 - 18	low-risk
	0 - 6	very low, or no risk

10 questions answered

	Score	Risk
10/12	35 - 40	very high-risk
	26 - 34	high-risk
	15 - 25	medium-risk
	5 - 14	low-risk
	0 - 4	very low, or no risk

APPENDIX V (C) (1)
POSITIVE PARENTING - PILOT PROJECT (P4)

Children's Hospital and Women's Centre
Health Sciences Centre
Winnipeg, Manitoba

LATE MATERNAL ADAPTATION TO PREGNANCY QUESTIONNAIRE

34 - 36 weeks gestation

			Patient	Interviewer
I.	When did you first see a doctor about your pregnancy?			
	Why did you choose to go at this time?			
	1.	I had missed three periods and wondered why. I didn't think of pregnancy.	4	4
	2.	I saw a doctor after 3 or 4 missed periods. I hoped I wasn't pregnant but thought I would check it out.	3	3
	3.	I went for another reason (unrelated medical problem). I didn't think I was pregnant.	2	2
	4.	I saw a doctor about 1 week after first missed period, guessed I was pregnant, thought I would check.	1	1
	5.	I saw a doctor about 1 week after first missed period. I was sure I was pregnant but thought I would check.	0	0
II.	Having had more time to think about your pregnancy, have you had any change of feelings about it?			
	1.	I didn't want the pregnancy then and I still don't.	4	4
	2.	Regardless of how I felt before, I don't want it now.	3	3
	3.	I didn't want the pregnancy but am feeling better about it now.	2	2
	4.	I didn't plan the pregnancy, but felt happy about it and still do.	1	1
	5.	I planned the pregnancy and have always felt good about it.	0	0

APPENDIX V (C) (2)
POSITIVE PARENTING - PILOT PROJECT (P4)

LATE MATERNAL ADAPTATION TO PREGNANCY QUESTIONNAIRE

34 - 36 weeks gestation

			Patient	Interviewer
III.	How do you think the baby is going to affect your life when you leave the hospital?			
	1.	I haven't thought about it, but feel you don't have to change things for a baby.	4	4
	2.	I have thought about it and can see how I'll be tied down.	3	3
	3.	I have thought about it and will try to manage as best as I can.	2	2
	4.	I have made a few plans so the baby will fit in.	1	1
	5.	I have made plans and arranged for help so we'll do fine.	0	0
IV.	Have you had any thoughts about your baby's appearance and behaviour when he (she) arrives?			
	1.	I haven't thought about it, will wait and see.	4	4
	2.	I haven't thought about it but it better be a good baby so I can manage.	3	3
	3.	I have thought about it but don't know anything about babies.	2	2
	4.	I have thought about it and hope for a healthy baby.	1	1
	5.	I think about it and can hardly wait and see the baby. (no qualifications)	0	0

APPENDIX V (C) (3)
POSITIVE PARENTING - PILOT PROJECT (P4)

LATE MATERNAL ADAPTATION TO PREGNANCY QUESTIONNAIRE

34 - 36 weeks gestation

			Patient	Interviewer
V.	Have you any preference for a boy or a girl and will you be upset if you don't get what you want?			
	1.	I haven't thought about it, and don't care one way or the other.	4	4
	2.	It had better be a boy (girl), I don't want a girl (boy).	3	3
	3.	I don't care but my (partner etc.) wants a boy (girl).	2	2
	4.	I've thought a boy (girl) would be best, but it really doesn't matter.	1	1
	5.	It doesn't matter, I'll love either.	0	0
VI.	Have you any thoughts about how good a mother you'll be?			
	1.	I haven't thought about it, but I'll probably make a mess of it.	4	4
	2.	I haven't thought about it, but if the baby is good I'll be O.K.	3	3
	3.	I have no idea how I'll do.	2	2
	4.	I have thought about it and hope I'll be O.K.	1	1
	5.	I'll be O.K.	0	0

Mother's verbatim comments:

APPENDIX V (C) (4)
POSITIVE PARENTING - PILOT PROJECT (P4)

LATE MATERNAL ADAPTATION TO PREGNANCY QUESTIONNAIRE

34 - 36 weeks gestation

Scoring:

Add scores from each question.

1. ____

2. ____

3. ____

4. ____

5. ____

6. ____

TOTAL ____

Score	Risk
21 - 24	very high
15 - 20	high
9 - 14	medium
4 - 8	low
0 - 3	very low or no risk

APPENDIX VI (1)
POSITIVE PARENTING - PILOT PROJECT (P4)

Children Hospital
Health Sciences Centre
Winnipeg, Manitoba

MEASUREMENT OF MOTHER-CHILD ATTACHMENT -- FIRST YEAR

CLINICAL OBSERVATION OF CONTACT BETWEEN MOTHER AND CHILD

Modalities of interaction observed during feeding, dressing, waiting, examination by professionals.

A. MOTHER

I. Physical contact

1.	Keeps physical distance, other than when asked	4
2.	Occasionally attentive, minimal response to baby	3
3.	Attentive in response to child, indifferent in contact	2
4.	Immediate body response to baby's demands	1
5.	Interest, delight, spontaneous contact with baby	0

II. Visual contact with baby

1.	Ignores baby while under observation	4
2.	Occasional flat visual response to baby	3
3.	Frequent visual contact when baby discussed	2
4.	Frequent spontaneous searching for baby	1
5.	Strong visual contact with verbal & physical moves	0

III. Mother's attitude in comments or questions to or about the child

1.	Negative comments to or about the baby	4
2.	No comments or questions, but focuses on herself	3
3.	Inappropriate comments to or about the baby	2
4.	No comments but sustained visual and body interest in the child	1
5.	Totally positive in all comments to or about baby	0

MOTHER'S COMMENTS VERBATIM: _____

_____

_____

APPENDIX VI (2)
POSITIVE PARENTING - PILOT PROJECT (P4)

MEASUREMENT OF MOTHER-CHILD ATTACHMENT -- FIRST YEAR

B. BABY: SOCIAL ORIENTATION

I. Reaction to the new: people, places, or materials

1.	Accepts the entire situation without fear or inhibition (indiscriminate)	4
2.	Some caution and restraint in first few minutes	1
3.	Aware of strange setting, looks for comfort	0

II. Responsiveness to examiner

1.	Accepting and friendly at once (indiscriminate)	4
2.	Hesitant, soon friendly, doesn't need mother	2
3.	Hesitant, friendly, frequently turns to mom	1
4.	Withdraws, accepts only with mom's contact	0

III. Responsiveness to mother

1.	Indifferent to mother as special person	4
2.	Responds only when mother initiates contact	2
3.	Inviting, demanding mother's attention	1
4.	Demands mom and obviously comforted by mom	0

IV. Object orientation: response to toys and materials

1.	Does not look at or in any way show interest in toy	4
2.	When given materials, glances briefly, no exploiting	3
3.	Plays with materials when given, loses interest fast	2
4.	Sustained interest in toys and objects	1
5.	Excitement with toys, upset when removed	0

COMMENTS: _____

APPENDIX VI (3)
POSITIVE PARENTING - PILOT PROJECT (P4)

MEASUREMENT OF MOTHER-CHILD ATTACHMENT -- FIRST YEAR

Subjective rating of mother-child relationship:

low-risk ____ medium-risk ____ high-risk ____

COMMENTS: _____
_____
_____

Scoring

Mother	10 - 12	very high-risk
	7 - 9	high
	4 - 6	medium
	2 - 3	low
	0 - 1	very low or no risk
Baby	14 - 16	very high-risk
	10 - 13	high
	6 - 9	medium
	2 - 5	low
	0 - 1	very low or no risk

DEVELOPMENTAL EXAMINATION

Chronological age ____
Developmental age ____ D. Q. ____

COMMENTS: _____
_____

Mother's name _____ Hospital number _____

Child's name _____ Hospital number _____

Child's age _____ Mother and child's Study Number _____

Observer _____

Date of observation _____

APPENDIX VII: DATA CAPTURE INSTRUMENT
(A) COHORT DEMOGRAPHICS (1)

1. Child's Name: .....

   Alias (AKA): .....

2. Child's Sex: Male:..... Female: .....

3. Date of Birth (DOB): .....

4. Chart #: .....

5. Mother's Name: .....

   DOB: .....

6. Father's Name: .....

   DOB: .....

7. Same Biological Father for all Children:
   Yes .....
   No .....
   Not Known .....

8. Mother's Age when Child Born: .....

9. Mother's Age When Second Child Born: .....

APPENDIX VII: DATA CAPTURE INSTRUMENT
(A) COHORT DEMOGRAPHICS (2)

10. Date When Child Last Seen at Children's Hospital: .....

11. # of Siblings: Known ..... Not Known .....

12. Names of Sibs:

..... DOB: ..... Chart #: .....

..... DOB: ..... Chart #: .....

..... DOB: ..... Chart #: .....

..... DOB: ..... Chart #: .....

..... DOB: ..... Chart #: .....

13. Socioeconomic Status: Employed: ..... Unemployed .....

14. Ethnic Status: Caucasion: ..... NonCaucasion .....

15. Birth Weight: ..... % .....

16. Birth Height: ..... % .....

17. Head Circumference: ..... % .....

APPENDIX VII: DATA CAPTURE INSTRUMENT
(A) COHORT DEMOGRAPHICS (3)

18. Apgars:

1 Minute	5 Minutes
.....	.....

19. Documented Substance Abuse During Pregnancy:

	Yes	No
Alcohol	.....	.....
Solvents	.....	.....
Smoking	.....	.....
Other Drugs ...		
.....	.....	.....

20. Length of Newborn Stay: ..... Days

21. Is the Child Living With Her/His Original Guardians?

Yes	No
.....	.....

22. Date When Guardianship Changed: .....

23. Risk Determination:

	High	Medium	Low
Prenatal	.....	.....	.....
18 Months	.....	.....	.....
Final Review	.....	.....	.....

APPENDIX VII: DATA CAPTURE INSTRUMENT
(A) COHORT DEMOGRAPHICS (4)

24.	Has the Child Lived in Homes Other Than Legal Guardian?	Yes	No .....
25.	If Yes, # of Homes Lived in:	.....	

APPENDIX VII: DATA CAPTURE INSTRUMENT
(B) HEALTH OUTCOME (1)

1. Name: .....

   AKA: .....

2. DOB: .....

3. Chart #: .....

4. Follow-up: 18 Months 10 - 12 Years

   Specific Date: ....

   Growth Parameters:

   Weight: ....% .... %

   Height: ....% .... %

   Head Circumfer-ence: ....% .... %

5. Immuniza-tion Status: Yes No

   Up-To-Date: ....

APPENDIX VII: DATA CAPTURE INSTRUMENT
(B) HEALTH OUTCOME (2)

	0 - 18 Months		18 Months - Final Follow-up	
6. # Of Well Child Visits:	00-05	. . . .	00-05	. . . .
	06-10	. . . .	06-10	. . . .
	11-15	. . . .	11-15	. . . .
	16-20	. . . .	16-20	. . . .
	>20	. . . .	>20	. . . .

	0 - 18 Months		18 Months - Final Follow-up	
7. Number of Emergency Visits:	00-05	. . . .	00-05	. . . .
	06-10	. . . .	06-10	. . . .
	11-15	. . . .	11-15	. . . .
	16-20	. . . .	16-20	. . . .
	>20	. . . .	>20	. . . .

Illness: . . . . Illness: . . . .

Accidents: . . . . Accidents: . . . .

Ingestions: . . . . Ingestions: . . . .

	Yes	No
8. Hospital Admissions:	. . . .	. . . .

IF YES: # . . . . Reason . . . . .Date of Admission. . . . .

. . . .

. . . .

APPENDIX VII: DATA CAPTURE INSTRUMENT
(B) HEALTH OUTCOME (3)

	18 Months		10-12 Years	
9. Failure-To-Thrive:	Yes	No	Yes	No .....
10. Admission Required:	Yes	No	Yes	No .....
11. Nonaccidental Trauma:	Yes	No	Yes	No .....
IF YES:				
Age at Time of Incident:	.....		.....	
Date of Incident:	.....		.....	
Describe Incident:	.....		.....	
	.....		.....	
12. Sexual Abuse Concerns:	Yes	No	Yes	No .....
IF YES:				
Age at Time of Incident:	.....			
3rd Party:	.....			
In-family:	.....			
More Than One Incident:	.....			
More Than One Offender:	.....			
13. Identified Major Health Problem:	Yes		Yes	
	No		No	

APPENDIX VII: DATA CAPTURE INSTRUMENT
(C) SOCIAL OUTCOME

	18 Months		10-12 Years	
1. Identified/Known Developmental Delays:	Yes	No	Yes	No
Hearing Impairment:	.....	.....	.....	.....
Speech Delay:	.....	.....	.....	.....
Visual Impairment:	.....	.....	.....	.....
	Yes	No	Yes	No
2. School-Related Issues:	.....	.....	.....	.....
	Yes	No	Yes	No
3. Other Identified Family Stressors:				
Substance Abuse:	.....	.....	.....	.....
Family Violence:	.....	.....	.....	.....
	Yes	No	Yes	No
4. Identified Behavior Problems:	.....	.....	.....	.....

APPENDIX VII: DATA CAPTURE INSTRUMENT
(D) COMMUNITY OUTCOME

	18 Months		10-12 Years	
Referrals:	Yes	No	Yes	No
1. Child & Family Services:	.....	.....	.....	.....
2. Children's Hospital Department of Social Work:	.....	.....	.....	.....
3. OT/PT:	.....	.....	.....	.....
4. Child Guidance Clinic:	.....	.....	.....	.....
5. Society for Manitobans with Disabilities:	.....	.....	.....	.....

	Yes	No
6. Has the Child Been Apprehended?	.....	.....
IF YES		
7. # of Apprehensions According to Hospital Files:	.....	.....

APPENDIX VIII: SIBLING DATA BASE - (A) SOCIODEMOGRAPHIC AND OUTCOME DATA (1)

SOCIODEMOGRAPHIC AND OUTCOME DATA	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
1. Name:	.....		.....		.....		.....		.....	
2. DOB:	.....		.....		.....		.....		.....	
3. Chart #:	.....		.....		.....		.....		.....	
4. Child's Sex:	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5. Date When Child Last Seen at Children's Hospital:	.....		.....		.....		.....		.....	
6. Mother's Age When Child Born:	.....		.....		.....		.....		.....	

APPENDIX VIII: SIBLING DATA BASE - (A) SOCIODEMOGRAPHIC AND OUTCOME DATA (2)

SOCIODEMOGRAPHIC AND OUTCOME DATA	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
7. Birth Weight:	.....		.....		.....		.....		.....	
8. Birth Height:	.....		.....		.....		.....		.....	
9. Head Circumference:	.....		.....		.....		.....		.....	
10. Apgars:	.....		.....		.....		.....		.....	
11. Documented History of Substance Abuse During Pregnancy:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Alcohol:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smoking:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Solvents:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other Drugs:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

APPENDIX VIII: SIBLING DATA BASE - (B) HEALTH OUTCOME (1)

HEALTH OUTCOME:	SIBLING #1	SIBLING #2	SIBLING #3	SIBLING #4	SIBLING #5
FAMILY NAME:					
.....	.....	.....	.....	.....	.....
Chart #:	.....	.....	.....	.....	.....
Sex: M....F....	M..... F.....	M..... F.....	M..... F.....	M..... F.....	M..... F.....
1. Growth Parameters:					
Date:	....	....	....	....	....
Height:	....%	....%	....%	....%	....%
Weight:	....%	....%	....%	....%	....%
2. Immunization Status:	YES NO	YES NO	YES NO	YES NO	YES NO
Up-To-Date:	....	....	....	....	....

APPENDIX VIII: SIBLING DATA BASE - (B) HEALTH OUTCOME (2)

HEALTH OUTCOME:	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
3. Emergency Visits:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Illness:										
Accidents/Injuries:										
Ingestions:										
4. Hospital Admissions:										
No:										
Reason:										
5. Failure-To-Thrive:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

APPENDIX VIII: SIBLING DATA BASE - (B) HEALTH OUTCOME (3)

HEALTH OUTCOME:	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
5. (cont.) Admission to Hospital Required?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
6. Nonaccidental Trauma:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
7. Sexual Abuse Allegations?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
If YES, Age at Time of Incident:										
3rd Party:										
In Family:										
More Than 1 Incident:										
More Than 1 Offender:										

APPENDIX VIII: SIBLING DATA BASE - (B) HEALTH OUTCOME (4)

HEALTH OUTCOME:	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
8. Identified Major Health Problem:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

APPENDIX VIII: SIBLING DATA BASE - (C) SOCIAL OUTCOME

SOCIAL OUTCOME	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
1. Identified Developmental Delays										
Hearing Impairment:										
Speech Delay:										
Visual Impairment:										
2. School-Related Issues:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
3. Identified Family Stressors:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Substance Abuse:										
Family Violence:										
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
4. Identified Behavior Problems:										

APPENDIX VIII: SIBLING DATA BASE - (D) COMMUNITY OUTCOME

COMMUNITY OUTCOME	SIBLING #1		SIBLING #2		SIBLING #3		SIBLING #4		SIBLING #5	
1. Referrals:	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Child & Family Services:										
Children's Hospital Department of Social Work:										
OT/PT:										
Child Guidance Clinic:										
Society for Manitobans With Disabilities:										
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
2. Has the Child Been Apprehended?										
IF YES: # of Apprehensions Recorded in Hospital Files:										

APPENDIX IX: CODING BOOK

			Column Number
1.	P4 identification # [STUDY NO]	2 digit	-- -- 1
2.	Agreed to participate in study [AGREE]	1) Yes 2) No	-- 3
3.	Age in years (at time when patient was registered in the project) [AGE]	2 digits	-- -- 4
4.	Marital Status [MARIST]	1) Single 2) Married 3) Living as married	-- 6
5.	Race [RACE]	1) Caucasian 2) non-Caucasian	-- 7
6.	Residence [RESID]	1) Temporary 2) Regular place of residence	-- 8
7.	Duration of stay at the residence [DURRES]	1) up to 3 mo 2) 3-6 mo 3) 6 mo to 1 yr 4) 1-2 yrs 5) more than 2 yrs	-- 9

			Column Number
8.	Number of people in residence [NORES]	1) 1 person 2) 2 persons 3) 3-4 persons 4) more than 4 persons	-- 10
9.	Type of residence [RESTYP]	1) private house 2) apartment 3) hotel/rooming house	-- 11
10.	Changes in residence in last 12 months [RESCHG]	1) no change 2) 1 change only 3) 2-4 changes 4) more than 4 changes	-- 12
11.	Schooling [EDUC]	1) up to grade 4 2) up to gr 5-8 3) up to gr 9-11 4) up to gr 12	-- 13
12.	Diploma [DIP]	1) Yes 2) No	-- 14
13.	Vocational Training [VOC]	1) Yes 2) No	-- 15
14.	Work [EMPLYD]	1) Employed 2) Unemployed	-- 16
15.	Partner [PARTNER]	1) Husband 2) Boyfriend 3) Common-law 4) Unknown	-- 17

			Column Number
16.	Child's Sex [SEX]	1) Male 2) Female	-- 18
17.	Date of Birth [CDOB]	Year	-- -- 19
		Month	-- -- 21
		Day	-- -- 23
18.	Hospital Number [HOSP NO]	9 digit	-- -- -- 25
			-- -- -- 28
			-- -- -- 31
19.	Mother's Date of Birth [MDOB]	Year 88) M/D	-- -- 34
		Month 88) M/D	-- -- 36
		Day 88) M/D	-- -- 38
20.	Father's Date of Birth [FDOB]	Year 88) M/D 99) N/A	-- -- 40
		Month 88) M/D 99) N/A	-- -- 42

			Column Number
		Day 88) M/D 99) N/A	-- -- 44
21.	Same biological father for all children [SBIOFA]	1) Yes 2) No 3) Not known 8) M/D	-- 46
22.	Mother's age when child born [MAGEWCB]	2 digit 88) M/D 99) N/A	-- -- 47
23.	Mother's age when second child born [MAGEWSCB]	2 digit 88) M/D	-- -- 49
24.	Date when child last seen at Children's Hospital [DACHLASE]	Year 88) M/D 99) N/A	-- -- 51
		Month 88) M/D 99) N/A	-- -- 53
		Day 88) M/D 99) N/A	-- -- 55
25.	Number of siblings [NOSIBS]	1 digit 8) M/D 9) N/A	-- 57
26.	Birth weight (in kg) [BWT]	4 digit 8888) M/D	-- -- -- -- 58

			Column Number
	Percentile [BWTPCT]	2 digit	-- -- 62
27.	Birth height (in cm) [BHT]	2 digit 88) M/D	-- -- 64
	Percentile [BHTPCT]	2 digit 88) M/D	-- -- 66
28.	Birth head circumference (in cm) [BHC]	2 digit	-- -- 68
	Percentile [BHCPCT]	2 digit	-- -- 70
29.	Apgar 1 min. [APG1]	2 digit 88) M/D	-- -- 72
	Apgar 5 min. [APG5]	2 digit 88) M/D	-- -- 74
30.	Documented substance abuse during pregnancy [SUBSTAL]	Alcohol 1) Yes 2) No 8) M/D	-- 76
	[SUBSTOL]	Solvents 1) Yes 2) No 8) M/D	-- 77
	[SUBSTSM]	Smoking 1) Yes 2) No 8) M/D	-- 78

			Column Number
	[SUBSTOTH]	Other Drugs 1) Yes 2) No 8) M/D	-- 79
	Card		0 80
	P4 I.D. #	2 digit	-- -- 1
31.	Length of newborn stay (# of days) [NBSTAY]	2 digit 88) M/D	-- -- 3
32.	Is the child living with her/his original guardians? [ORIGGUAR]	1) Yes 2) No 8) M/D	-- 5
33.	Date when guardianship changed [DGUARCH]	Year 88) M/D 99) N/A	-- -- 6
		Month 88) M/D 99) N/A	-- -- 8
		Day 88) M/D 99) N/A	-- -- 10
34.	Risk determination [RISKPRE]	Prenatal 1) High 2) Medium 3) Low 8) M/D	-- 12

			Column Number
	At 18 months [RISK18]	18 months 1) High 2) Medium 3) Low 8) M/D	-- 13
	At end of final assessment [RISKFIN]	Final Review 1) High 2) Medium 3) Low 8) M/D	-- 14
35.	Has the child lived in homes other than legal guardian? [HOTLEGUA]	1) Yes 2) No 8) M/D	-- 15
36.	If answer to #35 is yes - how many homes [NHOMES]	2 digit 88) M/D 99) N/A	-- -- 16
37.	Follow-up growth parameters 18 months - specific date [FUPGR18]	Year 88) M/D 99) N/A	-- -- 18
		Month 88) M/D 99) N/A	-- -- 20
		Day 88) M/D 99) N/A	-- -- 22
38.	Follow-up growth parameters 18 months		
	Weight (in kg) [FUPWT18]	4 digit 8888) M/D	-- -- -- -- 24

			Column Number
	Percentile [FWT18PCT]	2 digit 88) M/D	-- -- 28
	Height (in cm) [FUPHT18]	2 digit 88) M/D	-- -- 30
	Percentile [FHT18PCT]	2 digit 88) M/D	-- -- 32
	Head circumference (in cm) [FUPHC18]	2 digit 88) M/D	-- -- 34
	Percentile [FHC18PCT]	2 digit 88) M/D	-- -- 36
39.	Follow-up growth parameters Final follow-up specific date [FUPGFIN]	Year 88) M/D	-- -- 38
		Month 88) M/D	-- -- 40
		Day 88) M/D	-- -- 42
40.	Follow-up growth parameters Final follow-up		
	Weight (in kg) [FUPWTFI]	4 digit 8888) M/D	-- -- -- -- 44
	Percentile [FWTFIPCT]	2 digit 88) M/D	-- -- 48
	Height (in cm) [FUPHTFI]	3 digit 888) M/D	-- -- -- 50
	Percentile [FHTFIPCT]	2 digit 88) M/D	-- -- 53

			Column Number
	Head circumference (in cm) [FHCFI]	2 digit 88) M/D	-- -- 55
	Percentile [FHCFIPCT]	2 digit 88) M/D	-- -- 57
41.	Immunization status (up-to-date) [IMMST]	1) Yes 2) No 8) M/D	-- 59
42.	# of Children's Clinic visits - 18 months [NCHCL18]	2 digit 88) M/D	-- -- 60
	# of Children's Clinic visits 18 months - final assessment [NCHCLFI]	2 digit 88) M/D 99) N/A	-- -- 62
43.	# of emergency visits - 18 months [NOEM18]	2 digit 88) M/D 99) N/A	-- -- 64
	Illnesses [NOILL18]	2 digit 88) M/D 99) N/A	-- -- 66
	Accidents [NOACC18]	2 digit 88) M/D 99) N/A	-- -- 68
	Ingestions [NOING18]	2 digit 88) M/D 99) N/A	-- -- 70
	# of emergency visits - 18 months - final assessment [NEM18FI]	2 digit 88) M/D 99) N/A	-- -- 72

			Column Number
	Illnesses [NILL18FI]	2 digit 88) M/D 99) N/A	-- -- 74
	Accidents [NACC18FI]	2 digit 88) M/D 99) N/A	-- -- 76
	Ingestions [NING18FI]	2 digit 88) M/D 99) N/A	-- -- 78
	Card		1 80
	P4 I.D #	2 digit	-- -- 1
44.	Hospital admissions [HOSPADM]	1) Yes 2) No 8) M/D 9) N/A	-- 3
	If yes, # of admissions [ADMNO]	2 digit 88) M/D 99) N/A	-- -- 4
45.	Failure-to-thrive 18 months [FTT18]	1) Yes 2) No 8) M/D 9) N/A	-- 6
	Failure-to-thrive - Final assessment [FTTFI]	1) Yes 2) No 8) M/D 9) N/A	-- 7

			Column Number
46.	Failure-to-thrive - admission required - 18 months [FTTADM18]	1) Yes 2) No 8) M/D 9) N/A	-- 8
	Failure-to-thrive - admission required - final assessment [FTTADMFI]	1) Yes 2) No 8) M/D 9) N/A	-- 9
47.	Nonaccidental trauma 18 months [NAT18]	1) Yes 2) No 8) M/D 9) N/A	-- 10
	If yes, # of incidents [NATNO18]	2 digit 88) M/D 99) N/A	-- -- 11
	Nonaccidental trauma - final assessment [NATFI]	1) Yes 2) No 8) M/D 9) N/A	-- 13
	If yes, # of incidents [NATNOFI]	2 digit 88) M/D 99) N/A	-- -- 14
48.	Sexual abuse allegations [SEXAB]	1) Yes 2) No 8) M/D 9) N/A	-- 16
	If yes, # of incidents [NSEXAB]	2 digit 88) M/D 99) N/A	-- -- 17
	Age at time of 1st incident [AGEINC]	2 digit 88) M/D 99) N/A	-- -- 19

			Column Number
	3rd party sexual assault [3PSEAS]	1) Yes 2) No 8) M/D 9) N/A	-- 21
	In-family sexual assault [INFASEAS]	1) Yes 2) No 8) M/D 9) N/A	-- 22
49.	Identified major health problem - 18 months [IDHEPR18]	1) Yes 2) No 8) M/D 9) N/A	-- 23
	Identified major health problem - 18 months - final assessment [IDHEPRFI]	1) Yes 2) No 8) M/D 9) N/A	-- 24
50.	Developmental delay identified - 18 months [DEVDEL18]	1) Yes 2) No 8) M/D	-- 25
	Developmental delay identified - 18 months - final assessment [DEVDELFI]	1) Yes 2) No 8) M/D	-- 26
	Hearing impairment - 18 months [HEARIM18]	1) Yes 2) No 8) M/D	-- 27
	Hearing impairment - 18 months - final assessment [HEARIMFI]	1) Yes 2) No 8) M/D	-- 28
	Speech delay - 18 months [SPDEL18]	1) Yes 2) No 8) M/D	-- 29

			Column Number
	Speech delay - 18 months - final assessment [SPDELFI]	1) Yes 2) No 8) M/D	-- 30
	Visual impairment - 18 months [VISIMP18]	1) Yes 2) No 8) M/D	-- 31
	Visual impairment - 18 months - final assessment [VISIMPFI]	1) Yes 2) No 8) M/D	-- 32
51.	School related issues [SCHRELIS]	1) Yes 2) No 8) M/D 9) N/A	-- 33
52.	Other identified family stressors - substance abuse 18 months [FSUBAB18]	1) Yes 2) No 8) M/D	-- 34
	Substance abuse - 18 months - final assessment [FSUBABF1]	1) Yes 2) No 8) M/D	-- 35
	Family violence - 18 months [FVIOL18]	1) Yes 2) No 8) M/D	-- 36
	Family violence - 18 months - final assessment [FVIOLF1]	1) Yes 2) No 8) M/D	-- 37
53.	Identified behavior problems - 18 months [IDBEPR18]	1) Yes 2) No 8) M/D	-- 38

			Column Number
	Identified behavior problems - 18 months - final assessment [IDBEPRF1]	1) Yes 2) No 8) M/D	-- 39
54.	Child & Family Services referrals - 18 months [CHFS18]	1) Yes 2) No 8) M/D	-- 40
	Child & Family Services referrals - 18 months - final assessment [CHFSFI]	1) Yes 2) No 8) M/D	-- 41
55.	Children's Hospital Department of Social Work - 18 months [CHHOSW18]	1) Yes 2) No 8) M/D	-- 42
	Children's Hospital Department of Social Work - 18 months - final assessment [CHHOSWFI]	1) Yes 2) No 8) M/D	-- 43
56.	OT/PT referrals - 18 months [OTPTRE18]	1) Yes 2) No 8) M/D	-- 44
	OT/PT referrals - 18 months - final assessment [OTPTREFI]	1) Yes 2) No 8) M/D	-- 45
57.	Child Guidance Clinic [CHGUIDCL]	1) Yes 2) No 8) M/D 9) N/A	-- 46

			Column Number
58.	Society for Manitobans with Disabilities - 18 months [SMD18]	1) Yes 2) No 8) M/D	-- 47
	Society for Manitobans with Disabilties - 18 months - final assessment [SMDFI]	1) Yes 2) No 8) M/D	-- 48
59.	Has the child been apprehended? Birth - 18 months [APPRE18]	1) Yes 2) No 8) M/D	-- 49
	Has the child been apprehended? 18 months - final assessment [APPREFI]	1) Yes 2) No 8) M/D	-- 50
60.	If answer to #59 is yes, # of apprehensions		
	Birth to 18 months [NAPP18]	2 digit 99) N/A	-- -- 51
	18 months - final assessment [NAPP18FI]	2 digit 99) N/A	-- -- 53

SIBLING #1

61.	Date of birth - sibling #1 [D0BSIB1]	Year 77) M/D 99) N/A	-- -- 55
		Month 77) M/D 99) N/A	-- -- 57

			Column Number
		Day 77) M/D 99) N/A	-- -- 59
62.	Chart number of sibling #1 [HONOSIB1]	9 digit	-- -- -- 61 -- -- -- 64 -- -- -- 67
63.	Child's sex - sibling #1 [SEXSIB1]	1) Male 2) Female	-- 70
64.	Date when sibling #1 last seen at Children's Hospital [DSIBILSE]	Year 77) M/D 99) N/A	-- -- 71
		Month 77) M/D 99) N/A	-- -- 73
		Day 77) M/D 99) N/A	-- -- 75
	Card		2 80
	P4 I.D. #	2 digit	-- -- 1
65.	Birth weight - sibling #1 (in kg) [BWTSIB1]	4 digit 8888) M/D 9999) N/A	-- -- -- -- 3

			Column Number
	Percentile [BWTSIPCT]	2 digit 88) M/D 99) N/A	-- -- 7
66.	Birth height - sibling #1 (in cm) [BHTSIB1]	2 digit 88) M/D 99) N/A	-- -- 9
	Percentile [BHTSIPCT]	2 digit 88) M/D 99) N/A	-- -- 11
67.	Birth head circumference - sibling #1 (in cm) [BHCSIB1]	2 digit 88) M/D 99) N/A	-- -- 13
	Percentile [BHCSIPCT]	2 digit 88) M/D 99) N/A	-- -- 15
68.	Apgar 1 min. - sibling #1 [APG1SIB1]	2 digit 88) M/D 99) N/A	-- -- 17
	Apgar 5 min. - sibling #1 [APG5SIB1]	2 digit 88) M/D 99) N/A	-- -- 19
69.	Documented substance abuse during pregnancy - sibling #1 [SUBSALS1]	Alcohol 1) Yes 2) No 8) M/D 9) N/A	-- 21
	[SUBSOLS1]	Solvents 1) Yes 2) No 8) M/D 9) N/A	-- 22

			Column Number
	[SUBSSMS1]	Smoking 1) Yes 2) No 8) M/D 9) N/A	-- 23
	[SUBSOTS1]	Other drugs 1) Yes 2) No 8) M/D 9) N/A	-- 24
70.	Growth parameters when sibling #1 last seen Height (in cm) [HTSIWLS]	3 digit 888) M/D 999) N/A	-- -- -- 25
	Height percentile [HTPCTS1]	2 digit 88) M/D 99) N/A	-- -- 28
	Weight (in kg) - sibling #1 [WTS1WLS]	2 digit 88) M/D 99) N/A	-- -- 30
	Weight percentile [WTPCTS1]	2 digit 88) M/D 99) N/A	-- -- 32
71.	Immunization status up to date - sibling #1 [IMMSTS1]	1) Yes 2) No 8) M/D 9) N/A	-- 34
72.	# emergency visits illness-related - sibling #1 [NEMILS1]	2 digit 88) M/D 99) N/A	-- -- 35

			Column Number
	# emergency visits accidents/injuries - sibling #1 [NEMAIS1]	2 digit 88) M/D 99) N/A	-- -- 37
	# emergency visits - ingestions sibling #1 [NEMINGS1]	2 digit 88) M/D 99) N/A	-- -- 39
73.	Hospital admissions - sibling #1 [HOADMS1]	1) Yes 2) No 8) M/D 9) N/A	-- 41
74.	If answer to #73 is yes, # of admissions - sibling #1 [NHOADMS1]	2 digit 88) M/D 99) N/A	-- -- 42
75.	Failure-to-thrive - sibling #1 [FTTS1]	1) Yes 2) No 8) M/D 9) N/A	-- 44
76.	Nonaccidental trauma - sibling #1 [NATS1]	1) Yes 2) No 8) M/D 9) N/A	-- 45
77.	Sexual abuse allegations - sibling #1 [SEXABS1]	1) Yes 2) No 8) M/D 9) N/A	-- 46
	If yes, # of incidents - sibling #1 [NSEXABS1]	2 digit 88) M/D 99) N/A	-- -- 47

			Column Number
	Age at time of 1st incident - sibling #1 [AGEINCS1]	2 digit 88) M/D 99) N/A	-- -- 49
	3rd party sexual assault - sibling #1 [3PSEAS1]	1) Yes 2) No 8) M/D 9) N/A	-- 51
	In-family sexual assault - sibling #1 [IFSEASS1]	1) Yes 2) No 8) M/D 9) N/A	-- 52
78.	Identified major health problem - sibling #1 [IDHEPRS1]	1) Yes 2) No 8) M/D 9) N/A	-- 53
79.	Developmental delay - sibling #1 [DEVDELS1]	1) Yes 2) No 8) M/D 9) N/A	-- 54
	Hearing impairment - sibling #1 [HEARIMS1]	1) Yes 2) No 8) M/D 9) N/A	-- 55
	Speech delay - sibling #1 [SPDELS1]	1) Yes 2) No 8) M/D 9) N/A	-- 56
	Visual impairment - sibling #1 [VISIMPS1]	1) Yes 2) No 8) M/D 9) N/A	-- 57

			Column Number
80.	School-related issues - sibling #1 [SCREISS1]	1) Yes 2) No 8) M/D 9) N/A	-- 58
81.	Identified family stressor substance abuse - sibling #1 [SUBSABS1]	1) Yes 2) No 8) M/D 9) N/A	-- 59
	Family violence - sibling #1 [FVIOLS1]	1) Yes 2) No 8) M/D 9) N/A	-- 60
82.	Identified behavior problems - sibling #1 [IDBEPRS1]	1) Yes 2) No 8) M/D 9) N/A	-- 61
83.	Child and Family Services referrals sibling #1 [CHFSS1]	1) Yes 2) No 8) M/D 9) N/A	-- 62
84.	Children's Hospital Department of Social Work referrals - sibling #1 [CHHOSWS1]	1) Yes 2) No 8) M/D 9) N/A	-- 63
85.	OT/PT referrals - sibling #1 [OTPRES1]	1) Yes 2) No 8) M/D 9) N/A	-- 64

			Column Number
86.	Child Guidance Clinic referrals - sibling #1 [CHGUIDS1]	1) Yes 2) No 8) M/D 9) N/A	-- 65
87.	Society for Manitobans with Disabilities referrals - sibling #1 [SMDS1]	1) Yes 2) No 8) M/D 9) N/A	-- 66
88.	Has the child been apprehended? - sibling #1 [APPRES1]	1) Yes 2) No 8) M/D 9) N/A	-- 67
89.	If the answer to #88 is yes, # of apprehensions - sibling #1 [NOAPPRS1]	2 digit 88) M/D 99) N/A	-- -- 68

SIBLING #2

90.	Date of birth - sibling #2 [DOBSIB2]	Year 77) M/D 99) N/A	-- -- 70
		Month 77) M/D 99) N/A	-- -- 72
		Day 77) M/D 99) N/A	-- -- 74

			Column Number
	Card		3 80
	P4 I.D. #	2 digit	-- -- 1
91.	Chart number of sibling #2 [HONOSIB2]	9 digit	-- -- -- 3 -- -- -- 6 -- -- -- 9
92.	Child's sex - sibling #2 [SEXSIB2]	1) Male 2) Female	-- 12
93.	Date when sibling #2 last seen at Children's Hospital [DSIB2LSE]	Year 77) M/D 99) N/A	-- -- 13
		Month 77) M/D 99) N/A	-- -- 15
		Day 77) M/D 99) N/A	-- -- 17
94.	Birth weight - sibling #2 (in kg) [BWTSIB2]	4 digit 8888) M/D 9999) N/A	-- -- -- -- 19
	Percentile [BWTS2PCT]	2 digit 88) M/D 99) N/A	-- -- 23

			Column Number
95.	Birth height - sibling #2 (in cm) [BHTSIB2]	2 digit 88) M/D 99) N/A	-- -- 25
	Percentile [BHTS2PCT]	2 digit 88) M/D 99) N/A	-- -- 27
96.	Birth head circumference - sibling #2 (in cm) [BHCSIB2]	2 digit 88) M/D 99) N/A	-- -- 29
	Percentile [BHCS2PCT]	2 digit 88) M/D 99) N/A	-- -- 31
97.	Apgar 1 min. - sibling #2 [APG1SIB2]	2 digit 88) M/D 99) N/A	-- -- 33
	Apgar 5 min. - sibling #2 [APG5SIB2]	2 digit 88) M/D 99) N/A	-- -- 35
98.	Documented substance abuse during pregnancy - sibling #2 [SUBSALS2]	Alcohol 1) Yes 2) No 8) M/D 9) N/A	-- 37
	[SUBSOLS2]	Solvents 1) Yes 2) No 8) M/D 9) N/A	-- 38

			Column Number
	[SUBSSMS2]	Smoking 1) Yes 2) No 8) M/D 9) N/A	-- 39
	[SUBSOTS2]	Other drugs 1) Yes 2) No 8) M/D 9) N/A	-- 40
99.	Growth parameters when sibling #2 last seen height (in cm) [HTS2WLS]	3 digit 888) M/D 999) N/A	-- -- -- 41
	Height percentile [HTPCTS2]	2 digit 88) M/D 99) N/A	-- -- 44
	Weight (in kg) - sibling #2 [WTS2WLS]	2 digit 88) M/D 99) N/A	-- -- 46
	Weight Percentile [WTPCTS2]	2 digit 88) M/D 99) N/A	-- -- 48
100.	Immunization status up to date - sibling #2 [IMMSTS2]	1) Yes 2) No 8) M/D 9) N/A	-- 50
101.	# emergency visits illness-related - sibling #2 [NEMILS2]	2 digit 88) M/D 99) N/A	-- -- 51

			Column Number
	# emergency visits accidents/injuries - sibling #2 [NEMAIS2]	2 digit 88) M/D 99) N/A	-- -- 53
	# emergency visits ingestions - sibling #2 [NEMINGS2]	2 digit 88) M/D 99) N/A	-- -- 55
102.	Hospital admissions - sibling #2 [HOADMS2]	1) Yes 2) No 8) M/D 9) N/A	-- 57
103.	If answer to #102 is yes, # of admissions - sibling #2 [NHOADMS2]	2 digit 88) M/D 99) N/A	-- -- 58
104.	Failure-to-thrive - sibling #2 [FTTS2]	1) Yes 2) No 8) M/D 9) N/A	-- 60
105.	Nonaccidental trauma - sibling #2 [NATS2]	1) Yes 2) No 8) M/D 9) N/A	-- 61
106.	Sexual abuse allegations - sibling #2 [SEXABS2]	1) Yes 2) No 8) M/D 9) N/A	-- 62
	If yes, # of incidents - sibling #2 [NSEXABS2]	2 digit 88) M/D 99) N/A	-- -- 63

			Column Number
	Age at time of incident - sibling #2 [AGEINCS2]	2 digit 88) M/D 99) N/A	-- -- 65
	3rd party sexual assault - sibling #2 [3PSEASS2]	1) Yes 2) No 8) M/D 9) N/A	-- 67
	In-family sexual assault - sibling #2 [IFSEASS2]	1) Yes 2) No 8) M/D 9) N/A	-- 68
107.	Identified major health problem - sibling #2 [IDHEPRS2]	1) Yes 2) No 8) M/D 9) N/A	-- 69
108.	Developmental delay - sibling #2 [DEVDELS2]	1) Yes 2) No 8) M/D 9) N/A	-- 70
	Hearing impairment - sibling #2 [HEARIMS2]	1) Yes 2) No 8) M/D 9) N/A	-- 71
	Speech delay - sibling #2 [SPDELS2]	1) Yes 2) No 8) M/D 9) N/A	-- 72
	Visual impairment - sibling #2 [VISIMPS2]	1) Yes 2) No 8) M/D 9) N/A	-- 73

			Column Number
109.	School-related issues - sibling #2 [SCREISS2]	1) Yes 2) No 8) M/D 9) N/A	-- 74
110.	Identified family stressor substance abuse - sibling #2 [SUBSABS2]	1) Yes 2) No 8) M/D 9) N/A	-- 75
	Family violence - sibling #2 [FVIOLS2]	1) Yes 2) No 8) M/D 9) N/A	-- 76
111.	Identified behavior problems - sibling #2 [IDBEPRS2]	1) Yes 2) No 8) M/D 9) N/A	-- 77
112.	Child and Family Services referrals - sibling #2 [CHFSS2]	1) Yes 2) No 8) M/D 9) N/A	-- 78
113.	Children's Hospital Department of Social Work referrals - sibling #2 [CHHOSWS2]	1) Yes 2) No 8) M/D 9) N/A	-- 79
	Card		4 80
	P4 I.D. #	2 digit	-- -- 1

			Column Number
114.	OT/PT referrals - sibling #2 [OTPTRES2]	1) Yes 2) No 8) M/D 9) N/A	-- 3
115.	Child Guidance Clinic referrals - sibling #2 [CHGUIDS2]	1) Yes 2) No 8) M/D 9) N/A	-- 4
116.	Society for Manitobans with Disabilities referrals - sibling #2 [SMDS2]	1) Yes 2) No 8) M/D 9) N/A	-- 5
117.	Has the child been apprehended? - sibling #2 [APPRES2]	1) Yes 2) No 8) M/D 9) N/A	-- 6
118.	If the answer to #117 is yes, # of apprehensions - sibling #2 [NOAPPRS2]	2 digit 88) M/D 99) N/A	-- -- 7

SIBLING #3

119.	Date of birth - sibling #3 [DOBSIB3]	Year 77) M/D 99) N/A	-- -- 9
		Month 77) M/D 99) N/A	-- -- 11

			Column Number
		Day 77) M/D 99) N/A	-- -- 13
120.	Chart number of sibling #3 [HONOSIB3]	9 digit	-- -- -- 15 -- -- -- 18 -- -- -- 21
121.	Child's sex - sibling #3 [SEXSIB3]	1) Male 2) Female	-- 24
122.	Date when sibling #3 last seen at Children's Hospital [DSIB3LSE]	Year 77) M/D 99) N/A	-- -- 25
		Month 77) M/D 99) N/A	-- -- 27
		Day 77) M/D 99) N/A	-- -- 29
123.	Birth weight - sibling #3 (in kg) [BWTSIB3]	4 digit 8888) M/D 9999) N/A	-- -- -- -- 31
	Percentile [BWTS3PCT]	2 digit 88) M/D 99) N/A	-- -- 35

			Column Number
124.	Birth height - sibling #3 (in cm) [BHTSIB3]	2 digit 88) M/D 99) N/A	-- -- 37
	Percentile [BHTS3PCT]	2 digit 88) M/D 99) N/A	-- -- 39
125.	Birth head circumference - sibling #3 (in cm) [BHCSIB3]	2 digit 88) M/D 99) N/A	-- -- 41
	Percentile [BHCS3PCT]	2 digit 88) M/D 99) N/A	-- -- 43
126.	Apgar 1 min. - sibling #3 [APG1SIB3]	2 digit 88) M/D 99) N/A	-- -- 45
	Apgar 5 min. - sibling #3 [APG5SIB3]	2 digit 88) M/D 99) N/A	-- -- 47
127.	Documented substance abuse during pregnancy - sibling #3 [SUBSALS3]	Alcohol 1) Yes 2) No 8) M/D 9) N/A	-- 49
	[SUBSOLS3]	Solvents 1) Yes 2) No 8) M/D 9) N/A	-- 50
	[SUBSSMS3]	Smoking 1) Yes 2) No	-- 51

			Column Number
		8) M/D 9) N/A	
	[SUBSOTS3]	Other drugs 1) Yes 2) No 8) M/D 9) N/A	-- 52
128.	Growth parameters when sibling #3 last seen Height (in cm) [HTS3WLS]	3 digit 888) M/D 999) N/A	-- -- -- 53
	Height percentile [HTPCTS3]	2 digit 88) M/D 99) N/A	-- -- 56
	Weight (in kg) - sibling #3 [WTS3WLS]	2 digit 88) M/D 99) N/A	-- -- 58
	Weight percentile [WTPCTS3]	2 digit 88) M/D 99) N/A	-- -- 60
129.	Immunization status up to date - sibling #3 [IMMSTS3]	1) Yes 2) No 8) M/D 9) N/A	-- 62
130.	# emergency visits illness-related - sibling #3 [NEMILS3]	2 digit 88) M/D 99) N/A	-- -- 63
	# emergency visits accidents/injuries - sibling #3 [NEMAIS3]	2 digit 88) M/D 99) N/A	-- -- 65

			Column Number
	# emergency visits ingestions - sibling #3 [NEMINGS3]	2 digit 88) M/D 99) N/A	-- -- 67
131.	Hospital admissions - sibling #3 [HOADMS3]	1) Yes 2) No 8) M/D 9) N/A	-- 69
132.	If answer to #131 is yes, # of admissions - sibling #3 [NHOADMS3]	2 digit 88) M/D 99) N/A	-- -- 70
133.	Failure-to-thrive - sibling #3 [FTTS3]	1) Yes 2) No 8) M/D 9) N/A	-- 72
134.	Nonaccidental trauma - sibling #3 [NATS3]	1) Yes 2) No 8) M/D 9) N/A	-- 73
135.	Sexual abuse allegations - sibling #3 [SEXABS3]	1) Yes 2) No 8) M/D 9) N/A	-- 74
	If yes, # of incidents - sibling #3 [NSEXABS3]	2 digit 88) M/D 99) N/A	-- -- 75
	Age at time of incident - sibling #3 [AGEINCS3]	2 digit 88) M/D 99) N/A	-- -- 77

			Column Number
	3rd party sexual assault - sibling #3 [3PSEASS3]	1) Yes 2) No 8) M/D 9) N/A	-- 79
	Card		5 80
	P4 I.D. #	2 digit	-- -- 1
	In-family sexual assault - sibling #3 [IFSEASS3]	1) Yes 2) No 8) M/D 9) N/A	-- 3
136.	Identified major health problem - sibling #3 [IDHEPRS3]	1) Yes 2) No 8) M/D 9) N/A	-- 4
137.	Developmental delay - sibling #3 [DEVDELS3]	1) Yes 2) No 8) M/D 9) N/A	-- 5
	Hearing impairment - sibling #3 [HEARIMS3]	1) Yes 2) No 8) M/D 9) N/A	-- 6
	Speech delay - sibling #3 [SPDELS3]	1) Yes 2) No 8) M/D 9) N/A	-- 7

			Column Number
	Visual impairment - sibling #3 [VISIMPS3]	1) Yes 2) No 8) M/D 9) N/A	-- 8
138.	School-related issues - sibling #3 [SCREISS3]	1) Yes 2) No 8) M/D 9) N/A	-- 9
139.	Identified family stressor substance abuse - sibling #3 [SUBSABS3]	1) Yes 2) No 8) M/D 9) N/A	-- 10
	Family violence - sibling #3 [FVIOLS3]	1) Yes 2) No 8) M/D 9) N/A	-- 11
140.	Identified behavior problems - sibling #3 [IDBEPRS3]	1) Yes 2) No 8) M/D 9) N/A	-- 12
141.	Child and Family Services referrals - sibling #3 [CHFSS3]	1) Yes 2) No 8) M/D 9) N/A	-- 13
142.	Children's Hospital Department of Social Work referrals - sibling #3 [CHHOSWS3]	1) Yes 2) No 8) M/D 9) N/A	-- 14
143.	OT/PT referrals - sibling #3 [OTPTRES3]	1) Yes 2) No 8) M/D 9) N/A	-- 15

			Column Number
144.	Child Guidance Clinic referrals - sibling #3 [CHGUIDS3]	1) Yes 2) No 8) M/D 9) N/A	-- 16
145.	Society for Manitobans with Disabilities referrals - sibling #3 [SMDS3]	1) Yes 2) No 8) M/D 9) N/A	-- 17
146.	Has the child been apprehended? - sibling #3 [APPRES3]	1) Yes 2) No 8) M/D 9) N/A	-- 18
147.	If the answer to #146 is yes, # of apprehensions - sibling #3 [NOAPPRS3]	2 digit 88) M/D 99) N/A	-- -- 19

SIBLING #4

148.	Date of birth - sibling #4 [DOBSIB4]	Year 77) M/D 99) N/A	-- -- 21
		Month 77) M/D 99) N/A	-- -- 23
		Day 77) M/D 99) N/A	-- -- 25

			Column Number
149.	Chart number of sibling #4 [HONOSIB4]	9 digit	-- -- -- 27 -- -- -- 30 -- -- -- 33
150.	Child's sex - sibling #4 [SEXSIB4]	1) Male 2) Female	-- 36
151.	Date when sibling #4 last seen at Children's Hospital [DSIB4LSE]	Year 77) M/D 99) N/A Month 77) M/D 99) N/A Day 77) M/D 99) N/A	-- -- 37 -- -- 39 -- -- 41
152.	Birth weight - sibling #4 (in kg) [BWTSIB4] Percentile [BWTS4PCT]	4 digit 8888) M/D 9999) N/A 2 digit 88) M/D 99) N/A	-- -- -- -- 43 -- -- 47
153.	Birth height - sibling #4 (in cm) [BHTSIB4] Percentile [BHTS4PCT]	2 digit 88) M/D 99) N/A 2 digit 88) M/D 99) N/A	-- -- 49 -- -- 51

			Column Number
154.	Birth head circumference - sibling #4 (in cm) [BHCSIB4]	2 digit 88) M/D 99) N/A	-- -- 53
	Percentile [BHCS4PCT]	2 digit 88) M/D 99) N/A	-- -- 55
155.	Apgar 1 min. - sibling #4 [APG1SIB4]	2 digit 88) M/D 99) N/A	-- -- 57
	Apgar 5 min. - sibling #4 [APG5SIB4]	2 digit 88) M/D 99) N/A	-- -- 59
156.	Documented substance abuse during pregnancy - sibling #4 [SUBSALS4]	Alcohol 1) Yes 2) No 8) M/D 9) N/A	-- 61
	[SUBSOLS4]	Solvents 1) Yes 2) No 8) M/D 9) N/A	-- 62
	[SUBSSMS4]	Smoking 1) Yes 2) No 8) M/D 9) N/A	-- 63
	[SUBSOTS4]	Other drugs 1) Yes 2) No 7) M/D 9) N/A	-- 64

			Column Number
157.	Growth parameters when sibling #4 last seen Height (in cm) [HTS4WLS]	3 digit 888) M/D 999) N/A	-- -- -- 65
	Height percentile [HTPCTS4]	2 digit 88) M/D 99) N/A	-- -- 68
	Weight (in kg) - sibling #4 [WTS4WLS]	2 digit 88) M/D 99) N/A	-- -- 70
	Weight percentile [WTPCTS4]	2 digit 88) M/D 99) N/A	-- -- 72
158.	Immunization status up to date - sibling #4 [IMMSTS4]	1) Yes 2) No 8) M/D 9) N/A	-- 74
159.	# emergency visits illness-related - sibling #4 [NEMILS4]	2 digit 88) M/D 99) N/A	-- -- 75
	# emergency visits accidents/injuries - sibling #4 [NEMAIS4]	2 digit 88) M/D 99) N/A	-- -- 77
	Card		6 80
	P4 I.D. #	2 digit	-- -- 1

			Column Number
	# emergency visits ingestions - sibling #4 [NEMINGS4]	2 digit 88) M/D 99) N/A	-- -- 3
160.	Hospital admissions - sibling #4 [HOADMS4]	1) Yes 2) No 8) M/D 9) N/A	-- 5
161.	If answer to #160 is yes, # of admissions - sibling #4 [NOHOADMS4]	2 digit 88) M/D 99) N/A	-- -- 6
162.	Failure-to-thrive - sibling #4 [FTTS4]	1) Yes 2) No 8) M/D 9) N/A	-- 8
163.	Nonaccidental trauma - sibling #4 [NATS4]	1) Yes 2) No 8) M/D 9) N/A	-- 9
164.	Sexual abuse allegations - sibling #4 [SEXABS4]	1) Yes 2) No 8) M/D 9) N/A	-- 10
	If yes, # of incidents - sibling #4 [NSEXABS4]	2 digit 88) M/D 99) N/A	-- -- 11
	Age at time of incident - sibling #4 [AGEINCS4]	2 digit 88) M/D 99) N/A	-- -- 13

			Column Number
	3rd party sexual assault - sibling #4 [3PSEASS4]	1) Yes 2) No 8) M/D 9) N/A	-- 15
	In-family sexual assault - sibling #4 [IFSEASS4]	1) Yes 2) No 8) M/D 9) N/A	-- 16
165.	Identified major health problem - sibling #4 [IDHEPRS4]	1) Yes 2) No 8) M/D 9) N/A	-- 17
166.	Developmental delay - sibling #4 [DEVDELS4]	1) Yes 2) No 8) M/D 9) N/A	-- 18
	Hearing impairment - sibling #4 [HEARIMS4]	1) Yes 2) No 8) M/D 9) N/A	-- 19
	Speech delay - sibling #4 [SPDELS4]	1) Yes 2) No 8) M/D 9) N/A	-- 20
	Visual impairment - sibling #4 [VISIMPS4]	1) Yes 2) No 8) M/D 9) N/A	-- 21
167.	School-related issues - sibling #4 [SCREISS4]	1) Yes 2) No 8) M/D 9) N/A	-- 22

			Column Number
168.	Identified family stressor substance abuse - sibling #4 [SUBSABS4]	1) Yes 2) No 8) M/D 9) N/A	-- 23
	Family violence - sibling #4 [FVIOLS4]	1) Yes 2) No 8) M/D 9) N/A	-- 24
169.	Identified behavior problems - sibling #4 [IDBEPRS4]	1) Yes 2) No 8) M/D 9) N/A	-- 25
170.	Child and Family Services referrals - sibling #4 [CHFSS4]	1) Yes 2) No 8) M/D 9) N/A	-- 26
171.	Children's Hospital Department of Social Work referrals - sibling #4 [CHHOSWS4]	1) Yes 2) No 8) M/D 9) N/A	-- 27
172.	OT/PT referrals - sibling #4 [OTPTRES4]	1) Yes 2) No 8) M/D 9) N/A	-- 28
173.	Child Guidance Clinic referrals - sibling #4 [CHGUIDS4]	1) Yes 2) No 8) M/D 9) N/A	-- 29

			Column Number
174.	Society for Manitobans with Disabilities referrals - sibling #4 [SMDS4]	1) Yes 2) No 8) M/D 9) N/A	-- 30
175.	Has the child been apprehended? - sibling #4 [APPRES4]	1) Yes 2) No 8) M/D 9) N/A	-- 31
176.	If the answer to #175 is yes, # of apprehensions - sibling #4 [NOAPPRS4]	2 digit 88) M/D 99) N/A	-- -- 32

SIBLING #5

177.	Date of birth - sibling #5 [DOBSIB5]	Year 77) M/D 99) N/A	-- -- 34
		Month 77) M/D 99) N/A	-- -- 36
		Day 77) M/D 99) N/A	-- -- 38
178.	Chart number of sibling #5 [HONOSIB5]	9 digit	-- -- -- 40
			-- -- -- 43
			-- -- -- 46

			Column Number
179.	Child's sex - sibling #5 [SEXSIB5]	1) Male 2) Female	-- 49
180.	Date when sibling #5 last seen at Children's Hospital [DSIB5LSE]	Year 77) M/D 99) N/A	-- -- 50
		Month 77) M/D 99) N/A	-- -- 52
		Day 77) M/D 99) N/A	-- -- 54
181.	Birth weight - sibling #5 (in kg) [BWTSIB5]	4 digit 8888) M/D 9999) N/A	-- -- -- -- 56
	Percentile [BWTS5PCT]	2 digit 88) M/D 99) N/A	-- -- 60
182.	Birth height - sibling #5 (in cm) [BHTSIB5]	2 digit 88) M/D 99) N/A	-- -- 62
	Percentile [BHTS5PCT]	2 digit 88) M/D 99) N/A	-- -- 64
183.	Birth head circumference - sibling #5 (in cm) [BHCSIB5]	2 digit 88) M/D 99) N/A	-- -- 66
	Percentile [BHCS5PCT]	2 digit 88) M/D 99) N/A	-- -- 68

			Column Number
184.	Apgar 1 min. - sibling #5 [APG1SIB5]	2 digit 88) M/D 99) N/A	-- -- 70
	Apgar 5 min. - sibling #5 [APG5SIB5]	2 digit 88) M/D 99) N/A	-- -- 72
185.	Documented substance abuse during pregnancy - sibling #5 [SUBSALS5]	Alcohol 1) Yes 2) No 8) M/D 9) N/A	-- 74
	[SUBSOLS5]	Solvents 1) Yes 2) No 8) M/D 9) N/A	-- 75
	[SUBSSMS5]	Smoking 1) Yes 2) No 8) M/D 9) N/A	-- 76
	[SUBSOTS5]	Other drugs 1) Yes 2) No 8) M/D 9) N/A	-- 77
	Card		7 80
	P4 I.D. #	2 digit	-- -- 1

			Column Number
186.	Growth parameters when sibling #5 last seen Height (in cm) [HTS5WLS]	3 digit 888) M/D 999) N/A	-- -- -- 3
	Height percentile [HTPCTS5]	2 digit 88) M/D 99) N/A	-- -- 6
	Weight (in kg) - sibling #5 [WTS5WLS]	2 digit 88) M/D 99) N/A	-- -- 8
	Weight percentile [WTPCTS5]	2 digit 88) M/D 99) N/A	-- -- 10
187.	Immunization status up to date - sibling #5 [IMMSTS5]	1) Yes 2) No 8) M/D 9) N/A	-- 12
188.	# emergency visits illness-related - sibling #5 [NEMILS5]	2 digit 88) M/D 99) N/A	-- -- 13
	# emergency visits accidents/injuries - sibling #5 [NEMAIS5]	2 digit 88) M/D 99) N/A	-- -- 15
	# emergency visits - ingestions sibling #5 [NEMINGS5]	2 digit 88) M/D 99) N/A	-- -- 17
189.	Hospital admissions - sibling #5 [HOADMS5]	1) Yes 2) No 8) M/D 9) N/A	-- 19

			Column Number
190.	If answer to #189 is yes, # of admissions - sibling #5 [NHOADMS5]	2 digit 88) M/D 99) N/A	-- -- 20
191.	Failure-to-thrive - sibling #5 [FTTS5]	1) Yes 2) No 8) M/D 9) N/A	-- 22
192.	Nonaccidental trauma - sibling #5 [NATS5]	1) Yes 2) No 8) M/D 9) N/A	-- 23
193.	Sexual abuse allegations - sibling #5 [SEXABS5]	1) Yes 2) No 8) M/D 9) N/A	-- 24
	If yes, # of incidents - sibling #5 [NSEXABS5]	2 digit 88) M/D 99) N/A	-- -- 25
	Age at time of incident - sibling #5 [AGEINCS5]	2 digit 88) M/D 99) N/A	-- -- 27
	3rd party sexual assault - sibling #5 [3PSEASS5]	1) Yes 2) No 8) M/D 9) N/A	-- 29
	In-family sexual assault - sibling #5 [IFSEASS5]	1) Yes 2) No 7) M/D 9) N/A	-- 30

			Column Number
194.	Identified major health problem - sibling #5 [IDHEPRS5]	1) Yes 2) No 8) M/D 9) N/A	-- 31
195.	Developmental delay - sibling #5 [DEVDELS5]	1) Yes 2) No 8) M/D 9) N/A	-- 32
	Hearing impairment - sibling #5 [HEARIMS5]	1) Yes 2) No 8) M/D 9) N/A	-- 33
	Speech delay - sibling #5 [SPDELS5]	1) Yes 2) No 8) M/D 9) N/A	-- 34
	Visual impairment - sibling #5 [VISIMPS5]	1) Yes 2) No 8) M/D 9) N/A	-- 35
196.	School-related issues - sibling #5 [SCREISS5]	1) Yes 2) No 8) M/D 9) N/A	-- 36
197.	Identified family stressor substance abuse - sibling #5 [SUBSABS5]	1) Yes 2) No 8) M/D 9) N/A	-- 37
	Family violence - sibling #5 [FVIOLS5]	1) Yes 2) No 8) M/D 9) N/A	-- 38

			Column Number
198.	Identified behavior problems - sibling #5 [IDBEPRS5]	1) Yes 2) No 8) M/D 9) N/A	-- 39
199.	Child and Family Services referrals - sibling #5 [CHFSS5]	1) Yes 2) No 8) M/D 9) N/A	-- 40
200.	Children's Hospital Department of Social Work referrals - sibling #5 [CHHOSWS5]	1) Yes 2) No 8) M/D 9) N/A	-- 41
201.	OT/PT referrals - sibling #5 [OTPTRES5]	1) Yes 2) No 8) M/D 9) N/A	-- 42
202.	Child Guidance Clinic referrals - sibling #5 [CHGUIDS5]	1) Yes 2) No 8) M/D 9) N/A	-- 43
203.	Society for Manitobans with Disabilities referrals - sibling #5 [SMDS5]	1) Yes 2) No 8) M/D 9) N/A	-- 44
204.	Has the child been apprehended? - sibling #5 [APPRES5]	1) Yes 2) No 8) M/D 9) N/A	-- 45

			Column Number
205.	If the answer to #204 is yes, # of apprehensions - sibling #5 [NAPPRS5]	2 digit 88) M/D 99) N/A	-- -- 46

SIBLING #6

206.	Date of birth - sibling #6 [DOBSIB6]	Year 77) M/D 99) N/A	-- -- 48
		Month 77) M/D 99) N/A	-- -- 50
		Day 77) M/D 99) N/A	-- -- 52
207.	Chart number of sibling #6 [HONOSIB6]	9 digit	-- -- -- 54 -- -- -- 57 -- -- -- 60
208.	Child's sex - sibling #6 [SEXSIB6]	1) Male 2) Female	-- 63
209.	Date when sibling #6 last seen at Children's Hospital [SEXSIB6]	Year 77) M/D 99) N/A	-- -- 64

			Column Number
		Month 77) M/D 99) N/A	-- -- 66
		Day 77) M/D 99) N/A	-- -- 68
210.	Birth weight - sibling #6 (in kg) [BWTSIB6]	4 digit 8888) M/D 9999) N/A	-- -- -- -- 70
	Percentile [BWTS6PCT]	2 digit 88) M/D 99) N/A	-- -- 74
211.	Birth height - sibling #6 (in cm) [BHTSIB6]	2 digit 88) M/D 99) N/A	-- -- 76
	Percentile [BHTS6PCT]	2 digit 88) M/D 99) N/A	-- -- 78
	Card		8 80
	P4 I.D. #	2 digit	-- -- 1
212.	Birth head circumference - sibling #6 (in cm) [BHCSIB6]	2 digit 88) M/D 99) N/A	-- -- 3
	Percentile [BHCS6PCT]	2 digit 88) M/D 99) N/A	-- -- 5

			Column Number
213.	Apgar 1 min. - sibling #6 [APG1SIB6]	2 digit 88) M/D 99) N/A	-- -- 7
	Apgar 5 min. - sibling #6 [APG5SIB6]	2 digit 88) M/D 99) N/A	-- -- 9
214.	Documented substance abuse during pregnancy - sibling #6 [SUBSALS6]	Alcohol 1) Yes 2) No 8) M/D 9) N/A	-- 11
	[SUBSOLS6]	Solvents 1) Yes 2) No 8) M/D 9) N/A	-- 12
	[SUBSSMS6]	Smoking 1) Yes 2) No 8) M/D 9) N/A	-- 13
	[SUBSOTS6]	Other drugs 1) Yes 2) No 8) M/D 9) N/A	-- 14
215.	Growth parameters when sibling #6 last seen Height (in cm) [HTS6WLS]	3 digit 888) M/D 999) N/A	-- -- -- 15
	Height percentile [HTPCTS6]	2 digit 88) M/D 99) N/A	-- -- 18

			Column Number
	Weight (in kg) - sibling #6 [WTS6WLS]	2 digit 88) M/D 99) N/A	-- -- 20
	Weight percentile [WTPCTS6]	2 digit 88) M/D 99) N/A	-- -- 22
216.	Immunization status up to date - sibling #6 [IMMSTS6]	1) Yes 2) No 8) M/D 9) N/A	-- 24
217.	# emergency visits illness-related - sibling #6 [NEMILS6]	2 digit 88) M/D 99) N/A	-- -- 25
	# emergency visits accidents/injuries - sibling #6 [NEMAIS6]	2 digit 88) M/D 99) N/A	-- -- 27
	# emergency visits - ingestions sibling #6 [NEMINGS6]	2 digit 88) M/D 99) N/A	-- -- 29
218.	Hospital admissions - sibling #6 [HOADMS6]	1) Yes 2) No 8) M/D 9) N/A	-- 31
219.	If answer to #218 is yes, # of admissions - sibling #6 [NHOADMS6]	2 digit 88) M/D 99) N/A	-- -- 32

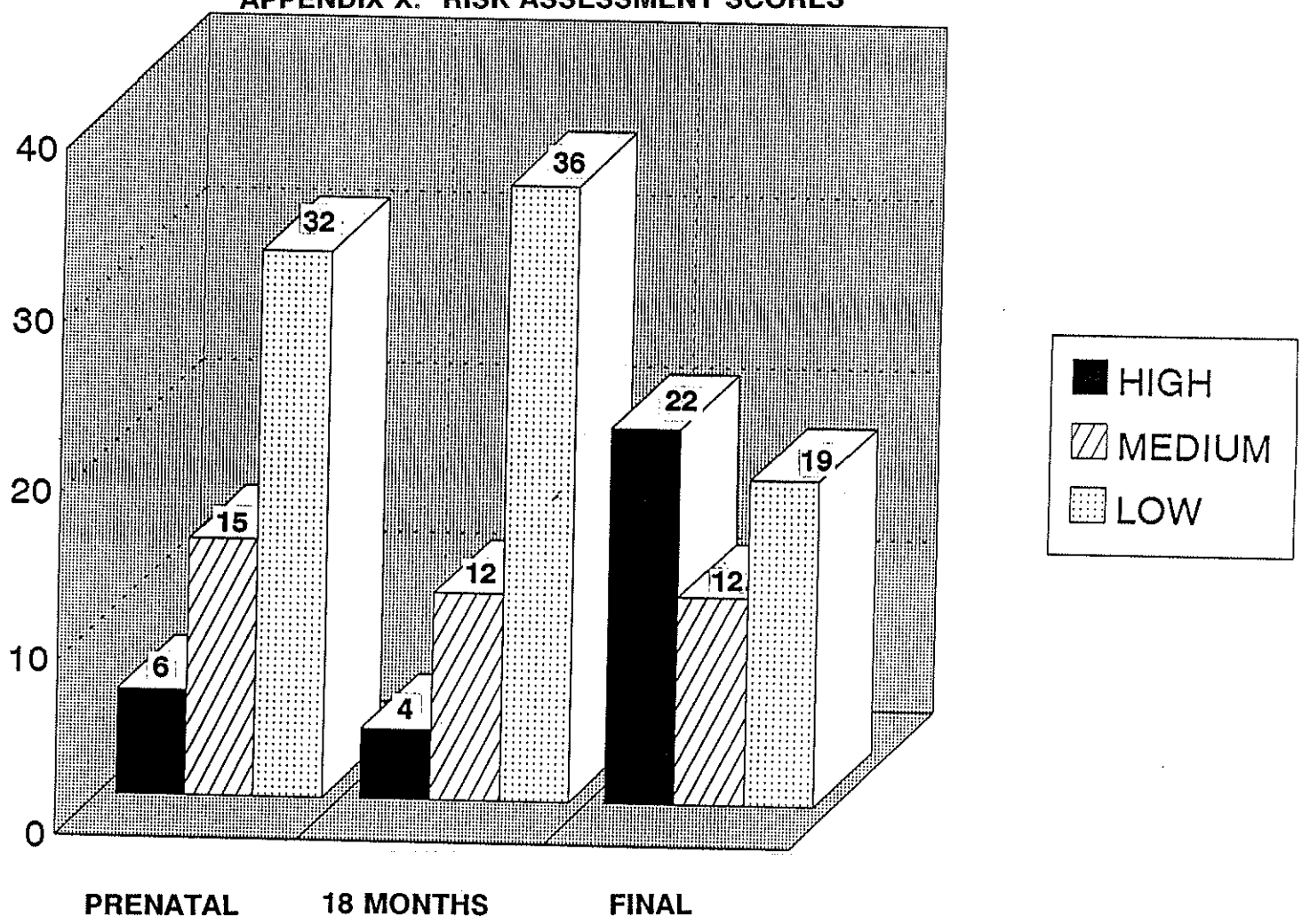
			Column Number
220.	Failure-to-thrive - sibling #6 [FTTS6]	1) Yes 2) No 8) M/D 9) N/A	-- 34
221.	Nonaccidental trauma - sibling #6 [NATS6]	1) Yes 2) No 8) M/D 9) N/A	-- 35
222.	Sexual abuse allegations - sibling #6 [SEXABS6]	1) Yes 2) No 8) M/D 9) N/A	-- 36
	If yes, # of incidents - sibling #6 [NSEXABS6]	2 digit 88) M/D 99) N/A	-- -- 37
	Age at time of incident - sibling #6 [AGEINCS6]	2 digit 88) M/D 99) N/A	-- -- 39
	3rd party sexual assault - sibling #6 [3PSEASS6]	1) Yes 2) No 8) M/D 9) N/A	-- 41
	In-family sexual assault - sibling #6 [IFSEASS6]	1) Yes 2) No 8) M/D 9) N/A	-- 42
223.	Identified major health problem - sibling #6 [IDHEPRS6]	1) Yes 2) No 8) M/D 9) N/A	-- 43

			Column Number
224.	Developmental delay - sibling #6 [DEVDELS6]	1) Yes 2) No 8) M/D 9) N/A	-- 44
	Hearing impairment - sibling #6 [HEARIMS6]	1) Yes 2) No 8) M/D 9) N/A	-- 45
	Speech delay - sibling #6 [SPDELS6]	1) Yes 2) No 8) M/D 9) N/A	-- 46
	Visual impairment - sibling #6 [VISIMPS6]	1) Yes 2) No 8) M/D 9) N/A	-- 47
225.	School-related issues - sibling #6 [SCREISS6]	1) Yes 2) No 8) M/D 9) N/A	-- 48
226.	Identified family stressor substance abuse - sibling #6 [SUBSABS6]	1) Yes 2) No 8) M/D 9) N/A	-- 49
	Family violence - sibling #6 [FVIOLS6]	1) Yes 2) No 8) M/D 9) N/A	-- 50
227.	Identified behavior problems - sibling #6 [IDBEPRS6]	1) Yes 2) No 8) M/D 9) N/A	-- 51

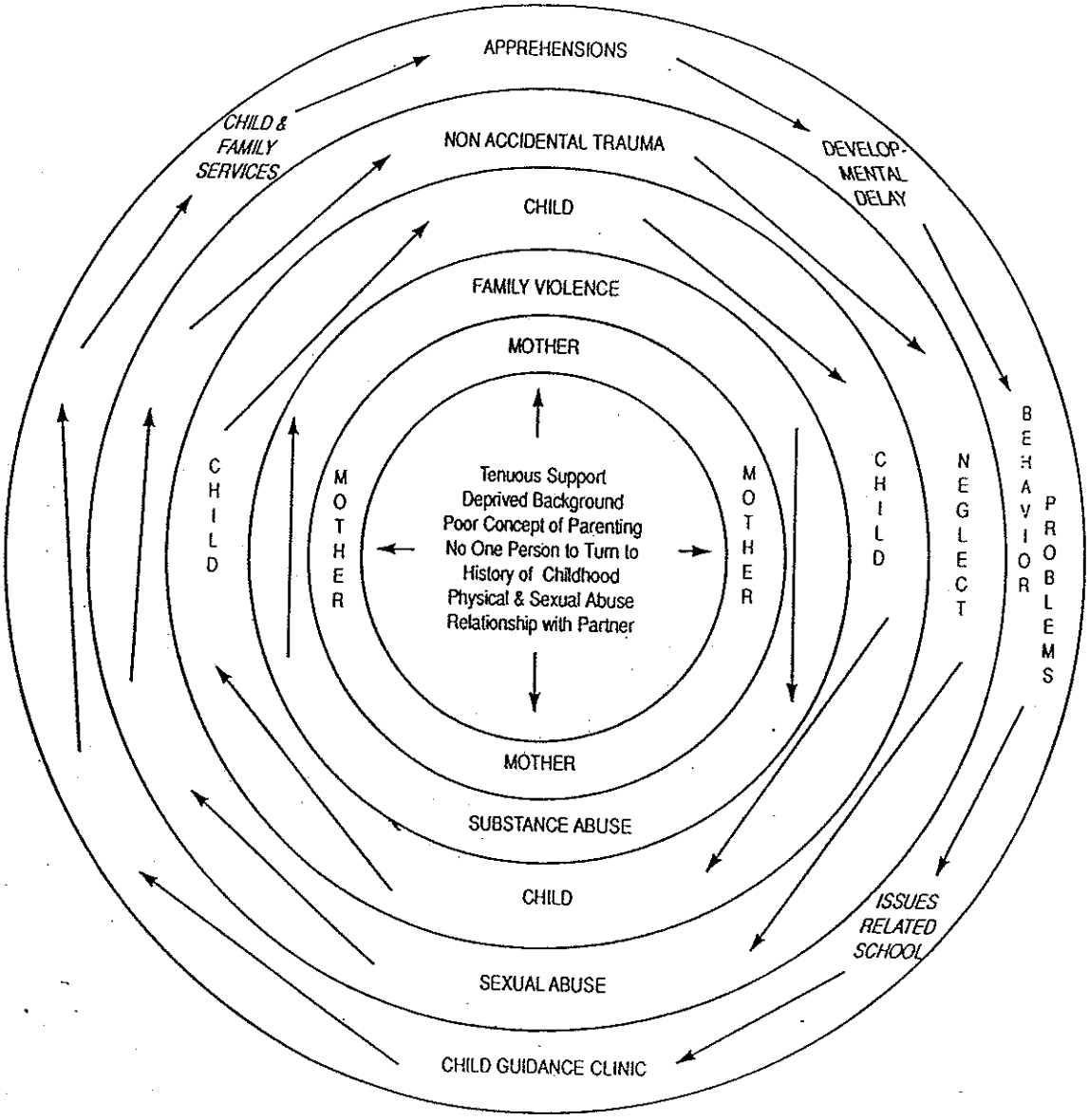
			Column Number
228.	Child and Family Services referrals - sibling #6 [CHFSS6]	1) Yes 2) No 8) M/D 9) N/A	-- 52
229.	Children's Hospital Department of Social Work referrals - sibling #6 [CHHOSWS6]	1) Yes 2) No 8) M/D 9) N/A	-- 53
230.	OT/PT referrals - sibling #6 [OTPTRES6]	1) Yes 2) No 8) M/D 9) N/A	-- 54
231.	Child Guidance Clinic referrals - sibling #6 [CHGUIDS6]	1) Yes 2) No 8) M/D 9) N/A	-- 55
232.	Society for Manitobans with Disabilities referrals - sibling #6 [SMDS6]	1) Yes 2) No 8) M/D 9) N/A	-- 56
233.	Has the child been apprehended? - sibling #6 [APPRES6]	1) Yes 2) No 8) M/D 9) N/A	-- 57
234.	If the answer to #233 is yes, # of apprehensions - sibling #6 [NAPPRS6]	2 digit 88) M/D 99) N/A	-- -- 58

	Column Number
Card	0 9 79 80

APPENDIX X: RISK ASSESSMENT SCORES



APPENDIX XI: RISK MODEL



APPENDIX XII: SUMMARY OF CASE STUDIES

RISK ASSESSMENT

FAMILY J.D.

	LOW	MEDIUM	HIGH
PRENATAL			- very insecure, confused, somewhat slow young girl in need of constant supports - feels being punished is 'okay' because she has it coming - feels children need discipline so they don't become robbers at 9 or 10 - has no concept of child rearing or parenthood
18 MONTHS		- same somewhat depressed affect - needs reassurance - has usual concerns as to J.D.'s decreased eating; mother appreciates advice to back off - continues to need moral support - seems weary with child care	
FINAL			<u>health outcomes</u> - no health outcomes were noted - J.D. had attended at a private MD's office for his primary care and had not attended the neonatal clinic - many emergency visits were documented <u>social outcomes</u> - hearing impairment identified after the 18-month assessment - school-related issues - a history of family violence noted in the time frame from 18 months until the final review - identified behavioral concerns noted in the time frame from 18 months until the final review

RISK ASSESSMENT

FAMILY J.D. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			community outcomes - involvement of the Children's Hospital Department of Social Work in the time frame from 18 months until the final review - involvement of the Child Guidance Clinic - involvement of Child & Family Services at the time of the final review **SIBLING #1** health outcomes - three documented incidents of sexual abuse - all third party; the first incident between ages 4-5 years, the second incident between 5-6 years, and the third incident at age 9 years 7 months

RISK ASSESSMENT

FAMILY J.D. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			social outcomes - speech delay - school-related issues - a history of family violence - identified behavioral problems community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - involvement of the Child Guidance Clinic

RISK ASSESSMENT

FAMILY J.W. (1)

	LOW	MEDIUM	HIGH
PRENATAL			- poor parenting skills - deprived family background - limited supports
18 MONTHS		- no 18-month assessment	
FINAL			- J.W. was apprehended and placed for adoption at birth **SIBLING #1** health outcomes - sexual abuse allegations in family social outcomes - a history of substance abuse - a history of family violence - school-related issues - identified behavioral problems community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - involvement of the Child Guidance Clinic - apprehension as noted in medical record file - sibling #1 ultimately became a permanent ward of Child & Family Services; recently sibling #1 has been in several foster homes following an adoption breakdown - J.W.'s and sibling #1's natural mother died several years ago following an overdose of drugs and alcohol

RISK ASSESSMENT

FAMILY C.Y.

	LOW	MEDIUM	HIGH
PRENATAL			- mother is presenting as being very unprepared for this pregnancy - she feels that she is too young to take on the responsibility and is very seriously considering relinquishing - immature; deprived background; poor self concept; poor choice of partner
18 MONTHS	- concern, anxiety, hard work and unsureness; many questions regarding tantrums, speech, discipline; often does the right thing and pleased with our praise		
FINAL	health outcomes - no health outcomes were identified social outcomes - speech delay noted at age 3 years community outcomes - a history of family violence in the first 18 months - involvement of Child & Family Services in the first 18 months - a referral to physiotherapy in the first 18 months - family last seen at Children's Hospital 1986 - would a longer follow-up have impacted on the outcomes identified?		

RISK ASSESSMENT

FAMILY C.Y. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL	**SIBLING #1** health outcomes - identified major health problem - asthma - no significant social or community outcomes documented		

RISK ASSESSMENT

FAMILY F.K.

	LOW	MEDIUM	HIGH
PRENATAL			- mother had a deprived and unstable childhood - inadequate parenting role models and tenuous support systems - mother sincerely appears enthused about her baby, however it may be that she sees it as possibly meeting current unmet needs of her own
18 MONTHS	- mother worried about child's speech and language - mother looked much more alert and happy today - good bond with F.K.		
FINAL	health outcomes - no health outcomes were identified social outcomes - a speech delay was noted initially in the first 18 months and in the final review it was noted that F.K. was receiving speech therapy at school community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Child Guidance Clinic regarding the speech therapy **SIBLING #1** - no health, social or community outcomes documented on the medical record file		

RISK ASSESSMENT

FAMILY D.S.

	LOW	MEDIUM	HIGH
PRENATAL			- mother presented as "high" during administration of the questionnaire - mother appears to lead a promiscuous lifestyle - history of solvent abuse - had been in numerous foster homes herself
18 MONTHS		18-month assessment not completed	
FINAL		health outcomes - diagnosis of fetal alcohol syndrome - minimal visual perception difficulty social outcomes - mother's history of substance and alcohol abuse during her pregnancy - apprehended at birth and placed in a foster home community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - involvement of the occupational therapy and physiotherapy department - involvement of the Child Guidance Clinic - D.S. has been made a permanent ward of Child & Family Services and is now in an adoptive home	

RISK ASSESSMENT

FAMILY D.B.

	LOW	MEDIUM	HIGH
PRENATAL		- mother describes herself as shy; doesn't fit in with anyone; feels sister gets all the attention - "this baby will be very special to me" - having problems coping with father's death	
18 MONTHS	- gives detailed description of child - still some concern over hearing yet child turns to voice - strong stranger reserve - good drive with interest		
FINAL		health outcomes - included three hospital admissions - a repair of a left inguinal hernia - closed reduction of a right humeral supracondylal fracture and another admission for a second closed reduction of the previously described fracture - one of the emergency visits occurred when D.B. was 6 months old - he had experienced a first degree burn to his right shoulder and anterior chest wall (a party was occurring in the home at the time of the incident) social outcomes - hearing impairment identified during the first 18 months - three appointments to the audiology department were not kept - speech delay identified in the time frame from 18 months until the final review	

RISK ASSESSMENT

FAMILY D.B. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL		community outcomes - involvement of Child & Family Services in the first 18 months **SIBLING #1** health outcomes - identified major health problem - anemia - no social or community outcomes identified **SIBLING #2** health outcomes - identified major health problem - asthma - two hospital admissions - asthma and eczema social outcomes - a history of family violence community outcomes - involvement of the Children's Hospital Department of Social Work	

RISK ASSESSMENT

FAMILY J.G.

	LOW	MEDIUM	HIGH
PRENATAL		- deprived family background - ambivalent regarding feelings about pregnancy - limited supports	
18 MONTHS		- limited supports - mother appears interested - no evidence of stranger anxiety - transient	
FINAL		health outcomes - identification of major health problems - neurologic abnormalities and monoparesis of the right arm social outcomes - identification of a developmental delay and speech delay in the first 18 months and in the time frame from 18 months until the final review - school-related issues community outcomes - involvement of Child & Family Services in the first 18 months - involvement of occupational therapy and physiotherapy in the first 18 months - Child Guidance Clinic - no siblings were identified	

RISK ASSESSMENT

FAMILY P.G.

	LOW	MEDIUM	HIGH
PRENATAL		- resentful because mother neglected and rejected her - feels lonely and mad because "my brothers and sisters don't want me, only my aunt cares" - extremely deprived background - resentful because can't communicate with mother	
18 MONTHS	- mother very involved with child - rather controlling - child very much attached to mother		
FINAL		health outcomes - included multiple visits to children's clinic - a total of 82 up to the time of the final review - an incident of sexual molestation at age 11 years 9 months by a maternal uncle - identified major health problems - urinary tract infections and P.G. was treated as a contact of tuberculosis social outcomes - visual impairment - identified behavioral problems community outcomes - involvement of Child & Family Services related to the disclosure of sexual molestation and involvement of the Children's Hospital Department of Social Work	

RISK ASSESSMENT

FAMILY P.G. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL		**SIBLING #1** - identified major health problem - asthma community outcomes - involvement of the Children's Hospital Department of Social Work	

RISK ASSESSMENT

FAMILY D.T.

	LOW	MEDIUM	HIGH
PRENATAL		- transient lifestyle - deprived family background - history of family violence prenatally - history of substance abuse prenatally - happy about pregnancy - wants to be a good mother - concern regarding mother's expectations	
18 MONTHS		- high expectations of her child - still some spanking - "not much turning to mother" - mother limited insight	
FINAL	**The family moved to British Columbia after 3 years of follow-up**	health outcomes - included three hospital admissions: bronchitis, bronchiolitis, and left otitis media and social admission social outcomes - included a history of substance abuse in the first 18 months - a description of D.T.'s mother's history of psychiatric problems and a notation that his mother at one point was attending court in British Columbia and that her common-law husband was in jail community outcomes - involvement of the Children's Hospital Department of Social Work	

RISK ASSESSMENT

FAMILY A.J.

	LOW	MEDIUM	HIGH
PRENATAL		- mother has a very deprived background; object of emotional, physical and sexual abuse - appears to be receiving adequate supports at this home - extended family history of alcoholism	
18 MONTHS	- fairly quiet mother with perhaps not a lot of intuition about child's behavior; interacts well with child with quiet but smiling interest		

RISK ASSESSMENT

FAMILY A.J. (Cont.)

FINAL			**The family has relocated out of province** health outcomes - included treatment for being a contact of tuberculosis social outcomes - speech delay identified in the time frame from 18 months until the final review **SIBLING #1** - there was one admission where concern was expressed about the mechanism of sibling #1's injuries social outcomes - included a history of substance abuse and a history of family violence - A.J.'s mother has a history of multiple visits to the emergency department related to injuries as a result of spousal violence community outcomes - involvement of Child & Family Services and the Children's Hospital Department of Social Work - a medical record file could not be located on the second sibling

RISK ASSESSMENT

FAMILY W.S.

	LOW	MEDIUM	HIGH
PRENATAL		- presents as being quite slow - appears to have few supports and sees herself as being alone a lot with the baby - appears somewhat depressed regarding pregnancy - hated foster homes - always ran away - "deserved to be hit most of the time"	
18 MONTHS		- is concerned but as usual rejects any attempt at home intervention aimed at stimulation - selects mom as special person but minimal affect response on mom's part - risk for neglect and understimulation	
FINAL			health outcomes - incident of nonaccidental trauma in the first 18 months - W.S. had been hit twice on the head by his mother's boyfriend when he had been trying to hit W.S.'s mother - this incident occurred when W.S. was 9 months of age social outcomes - speech delay identified in the first 18 months - a history of family violence in the first 18 months - behavioral problems identified between 18 months and the final assessment community outcomes - included involvement of Child & Family Services in the first 18 months and in the time frame from 18 months until the final assessment - involvement of the Children's Hospital Department of Social Work in the first 18 months

RISK ASSESSMENT

FAMILY W.S. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #1** health outcomes - allegations of sexual molestation in family at age 2 years 10 months social outcomes - developmental delay - speech delay - a history of family violence - identified behavioral problems community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work **SIBLING #2** health outcomes - identified major health problem - hypertonia social outcomes - developmental delay - a history of family violence community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work

RISK ASSESSMENT

FAMILY T.N.

	LOW	MEDIUM	HIGH
PRENATAL		- remembers no one person about whom she has good memories - initially considered relinquishing T.N. - common-law refused to plan for the newborn - few preparations	
18 MONTHS		- mother remains passive during exam - child continually preoccupied with trying to reach mom - she attempts to turn him back to the task; no affect changes throughout - mom remains isolated; complains about child's demands on her physical presence - T.N. has a bond with mom	
FINAL	**Only seen seven times since initial 18-month time frame** - no health outcomes of concern social outcomes - speech delay identified in the first 18 months community outcomes Children's Hospital Department of Social Work referral **SIBLING #1** - no health or community outcomes of concern social outcomes - visual impairment noted		

RISK ASSESSMENT

FAMILY T.Z.

	LOW	MEDIUM	HIGH
PRENATAL		- felt that she had no one whom she could call for help - stated "my mom was always hard on me and I got blamed for everything" - pleased about pregnancy - common-law pleased	
18 MONTHS		- quiet, placid lady - responds only to direct questions - baby sensitive to strangers and cried - mother made no moves but said why he was crying - mother now at home - quit job to care for him	
FINAL	- no health or social outcomes of concern community outcomes - a referral to the Children's Hospital Department of Social Work in the first 18 months **SIBLING #1** - no health, social or community outcomes of concern **SIBLING #2** - no health or social outcomes of concern community outcomes - referral to the Children's Hospital Department of Social Work **Length of follow-up may have impacted on outcomes identified**		

RISK ASSESSMENT

FAMILY T.M.

	LOW	MEDIUM	HIGH
PRENATAL		- deprived family background - history of alcohol and drug abuse - history of promiscuity - partner not supportive - history of spousal abuse prenatally	
18 MONTHS			- now in the care of maternal grandmother - mother in the home but takes no responsibility for T.M.'s care
FINAL			health outcomes - included a visit to the emergency department following an ingestion of dimetane social outcomes - a history of substance abuse in the first 18 months - a change of guardianship from the mother to the maternal grandmother - this occurred on several occasions - it is believed that T.M. lives in another province with her maternal grandmother community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work **SIBLING #1** health outcomes - admission to hospital at age 6 months following an incident where sibling #1 allegedly rolled off a mattress onto a heat register, sustaining a burn to her right hand

RISK ASSESSMENT

FAMILY T.M. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			social outcomes - a history of substance abuse - a history of family violence - a developmental assessment describes sibling #1 as indiscriminant community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - involvement of occupational therapy and physiotherapy - sibling #1 has been apprehended and has been in three different foster homes since her apprehension **SIBLING #2** - no health outcomes identified social outcomes - a history of substance abuse community outcomes - apprehended at birth and placed in a foster home - T.M. has four other siblings living in another province who have been involved with Child & Family Services and all of whom are no longer in their mother's care

RISK ASSESSMENT

FAMILY A.S.

	LOW	MEDIUM	HIGH
PRENATAL		- deprived family background - history of psychiatric problems - depression - limited supports - history of family violence prenatally - spousal abuse	
18 MONTHS	- good attachment with mother - many helpful caregivers		
FINAL			health outcomes - allegations of sexual abuse at age 7 - paternal uncle social outcomes - a history of substance abuse related to mother's alcohol abuse - school-related issues - change of guardianship - A.S. is now living with maternal grandmother community outcomes - involvement of Child & Family Services **SIBLING #1** health outcomes - nonaccidental trauma - stated that her mother hit her with a broom - sexual abuse allegations age 6 1/2 years social outcomes - substance abuse - a history of family violence - change of guardianship - now living with her maternal grandmother

RISK ASSESSMENT

FAMILY A.S. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - apprehended once according to the medical record file **SIBLING #2** - no health outcomes documented social outcomes - a history of substance abuse community outcomes - involvement of Child & Family Services - apprehended once according to the medical record file **SIBLING #3** health outcomes - allegations of nonaccidental trauma - states was hit with a broom by her mother - allegations of sexual abuse, age 4 years 8 months - paternal uncle - identified major health problem - cardiac defect social outcomes - a history of substance abuse - a history of family violence community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - apprehended once according to the medical record file

RISK ASSESSMENT

FAMILY M.B.

	LOW	MEDIUM	HIGH
PRENATAL		- history of family violence prenatally - intellectual limitations - poor parenting skills - limited supports - unstable partner relationship	
18 MONTHS			- unstable partner relationship - good bonding noted - limited support - poor parenting skills
FINAL			health outcomes - investigation regarding burn to hand and feet - incident occurred at age 22 months social outcomes - developmental delay - a history of substance abuse noted in the first 18 months and in the time frame from 18 months until the final review - a history of family violence in the first 18 months and in the time frame from 18 months until the final review community outcomes - involvement of Child & Family Services in the first 18 months and in the time frame from 18 months until the final review - involvement of the Children's Hospital Department of Social Work in the first 18 months and in the time frame from 18 months until the final review - a referral to occupational therapy/physiotherapy in the first 18 months

RISK ASSESSMENT

FAMILY M.B. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #1** health outcomes - one of the visits to casualty occurred after sibling #1 fell against his bed - his mother was intoxicated - identified major health problem - anemia social outcomes - developmental delay - speech delay - refused speech and language assessment - a history of substance abuse community outcomes - involvement of Child & Family Services

RISK ASSESSMENT

FAMILY T.G.

	LOW	MEDIUM	HIGH
PRENATAL		- deprived family background - mother, history of alcoholism - poor parenting skills - intellectual limitations - prior to becoming pregnant, wanted to be a male	
18 MONTHS			- change of guardianship - in the care of maternal grandparents
FINAL			health outcomes - no specific health outcomes social outcomes - mother has a history of extensive psychiatric problems - developmental delay noted in the first 18 months - a history of substance abuse - change of guardianship to maternal grandparents in the first 18 months community outcomes - involvement of Child & Family Services in the first 18 months and in the time frame from 18 months until the final review

RISK ASSESSMENT

FAMILY M.G.

	LOW	MEDIUM	HIGH
PRENATAL		- unstable partner relationship - had initially considered relinquishing M.G. - ambivalent regarding childhood memories	
18 MONTHS	- good attachment between child, mother, and aunt described - has a number of involved caretakers - good development		
FINAL	health outcomes - identified major health problem - asthma - no social outcomes of concern community outcomes - a referral to Child & Family Services in the first 18 months - a referral to the Children's Hospital Department of Social Work in the first 18 months **SIBLING #1** - no health, social or community outcomes of concern		

RISK ASSESSMENT

FAMILY J.W. (2)

	LOW	MEDIUM	HIGH
PRENATAL		- partner not supportive - ambivalent about pregnancy - history of family violence by partner prenatally - emotional isolation from her family - appears motivated and mature	
18 MONTHS	- good contact - mother sensitive to needs - reaches for mom - strong stranger anxiety		
FINAL	- no health outcomes of concern social outcomes - speech delay identified in the first 18 months - visual impairment noted at the time of the final assessment community outcomes - a referral to Child & Family Services in the first 18 months - no known siblings		

RISK ASSESSMENT

FAMILY M.G.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - positive about pregnancy - can hardly wait to be a mother		
18 MONTHS	- good attachment noted between mother and child - stranger anxiety		
FINAL			health outcomes - identified major health problems - atopic dermatitis, asthma, urinary tract infections social outcomes - school-related issues - family history of substance abuse in the first 18 months and in the time frame from 18 months until final review - identified behavior problems identified at the time of the final review community outcomes - included involvement of Child & Family Services and three apprehensions **SIBLING #1** - no health outcomes of concern social outcomes - identified school-related issues - identified history of substance abuse and family violence community outcomes - involvement of Children's Hospital Department of Social Work - involvement of the Child Guidance Clinic

RISK ASSESSMENT

FAMILY M.G. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #2** - no health outcomes of concern social outcomes - identified history of family substance abuse - identified history of family violence community outcomes - involvement of Child & Family Services - apprehended once **SIBLING #3** - no health outcomes of concern social outcomes - identified history of substance abuse community outcomes - involvement of the Children's Hospital Department of Social Work **SIBLING #4** - no identified health, social outcomes of concern community outcomes - involvement of Child & Family Services - apprehended once

RISK ASSESSMENT

FAMILY A.G.

	LOW	MEDIUM	HIGH
PRENATAL	- unstable partner relationship - family supportive		
18 MONTHS	- good bonding described between mother and child - turns to mom for comfort - enjoys A.G.		
FINAL			- no major health outcomes social outcomes - school-related issues - identified history of family violence in the time frame from 18 months until the final review - identified behavior problems community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Child Guidance Clinic at the time of the final review

RISK ASSESSMENT

FAMILY V.C.

	LOW	MEDIUM	HIGH
PRENATAL	- unstable partner relationship - deprived family background - described as not truthful with questionnaire - "everything is fine"		
18 MONTHS			- one apprehension - higher expectations of children described - there are a number of inconsistent caregivers - in "big trouble" with negative behavior
FINAL			health outcomes - many clinic visits (112 visits up to the time of the final review) - identified major health problems - chronic urinary tract problems, primary pulmonary tuberculosis and anemia social outcomes - visual impairment noted in the first 18 months - school-related issues - a history of substance abuse in the first 18 months and at the time of the final review - identified history of family violence at 18 months and at the time of the final review - identified behavior problems community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work in the first 18 months and in the time frame from 18 months until the final review - involvement of the Child Guidance Clinic - apprehension once in the first 18 months

RISK ASSESSMENT

FAMILY V.C. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #1** health outcomes - contact of her mother who had primary tuberculosis, sibling #1 was a tuberculin reactor and was treated with INH social outcomes - no social outcomes community outcomes - involvement of the Children's Hospital Department of Social Work **SIBLING #2** health outcomes - history of urinary tract infections, chronic otitis media social outcomes - no social outcomes of concern community outcomes - involvement of the Children's Hospital Department of Social Work - involvement of the occupational therapy/physiotherapy department - involvement of the Child Guidance Clinic

RISK ASSESSMENT

FAMILY V.C. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #3** health outcomes - no health outcomes of concern social outcomes - identified speech delay, school-related issues and identified behavioral problems community outcomes - involvement of the Children's Hospital Department of Social Work **SIBLING #4** - no health, social or community issues **SIBLING #5** - no health or social outcomes community outcomes - involvement of the Children's Hospital Department of Social Work - involvement of the occupational therapy/physiotherapy - involvement of the Child Guidance Clinic

RISK ASSESSMENT

FAMILY A.S.

	LOW	MEDIUM	HIGH
PRENATAL	- intellectual limitations - deprived family background - limited supports - poor parenting skills - resentful of mother neglecting and deserting her as a baby		
18 MONTHS		- attachment issues described - mother distant with child - unstable partner relationship	
FINAL			health outcomes - identified major health problem - a history of urinary tract infections - allegations of sexual abuse - third party - at age 10 years 10 months by the cousin's stepfather social outcomes - school-related issues - a family history of substance abuse in the first 18 months and from 18 months until the final assessment - a history of family violence in the first 18 months and from 18 months until the final assessment - a history of behavior problems community outcomes - involvement of Child & Family Services in the first 18 months and from 18 months until the final assessment - involvement of the Children's Hospital Department of Social Work in the first 18 months and from 18 months until the final assessment - involvement of the Child Guidance Clinic - a history of two apprehensions

RISK ASSESSMENT

FAMILY A.S. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #1** health outcomes - a history of nonaccidental trauma at age 19 months social outcomes - an identified speech delay - school-related issues - a history of family violence - identified behavior problems community outcomes - involvement of Child & Family Services - Children's Hospital Department of Social Work - involvement of the Child Guidance Clinic - two apprehensions noted in the medical record file **SIBLING #2** health outcomes - no specific health outcomes social outcomes - a history of family violence community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - a history of two apprehensions noted in the medical record file

RISK ASSESSMENT

FAMILY E.L.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - intellectual limitations - concern regarding drinking problem - strict but happy childhood		
18 MONTHS		- substance abuse by mother - two apprehensions - regarded mother as special	
FINAL			health outcomes - included frequent visits to Children's Clinic until the time of the final chart review - E.L. has lived in homes other than that of the legal guardian - allegations of sexual abuse at age 11 years - third party - identified major health problem - fetal alcohol effect social outcomes - developmental delay noted in the first 18 months and in the time period from 18 months until the final assessment - identified speech delay in the first 18 months and in the time frame from 18 months until the final assessment - identified school-related issues - a family history of substance abuse in the first 18 months and in the time period from 18 months until the final review - identified behavior problems in the first 18 months and in the time period from 18 months until the final review

RISK ASSESSMENT

FAMILY E.L. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			community outcomes - involvement of Child & Family Services in the first 18 months and in the time period from 18 months until the final review - involvement of the Children's Hospital Department of Social Work in the first 18 months - involvement of occupational therapy/ physiotherapy in the first 18 months - involvement of the Child Guidance Clinic - two apprehensions as noted in the medical record file

RISK ASSESSMENT

FAMILY S.D.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive		
18 MONTHS		- attachment issues described	
FINAL			health outcomes - a history of nonaccidental trauma (was hit with a shoe) bruises on back and buttocks at age 6 - a history of S.D. not living with his original guardian social outcomes - a family history of substance abuse in the first 18 months and from 18 months until the time of the final review community outcomes - involvement of Child & Family Services at the time of the final chart review - involvement of the Children's Hospital Department of Social Work in the first 18 months - five apprehensions documented in the medical record file **SIBLING #1** health outcomes - identified major health problem at birth - withdrawal from glue - treated with phenobarbital social outcomes - developmental delay - a family history of substance abuse - a history of family violence community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work - occupational therapy/physiotherapy - sibling #1 was apprehended at birth

RISK ASSESSMENT

FAMILY D.K.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - history of family violence prenatally - spousal abuse - family supports		
18 MONTHS	- good attachment mother and child described - mom relaxed and comfortable with child		
FINAL			health outcomes - sexual abuse allegations - by natural father on two occasions at age 4 years 6 months and at 5 years social outcomes - a history of family violence in the time frame from 18 months until the final review community outcomes - involvement of Child & Family Services in the first 18 months and in the time frame from 18 months until the final review - involvement of the Children's Hospital Department of Social Work in the first 18 months - involvement of a psychologist from the Child Development Clinic

RISK ASSESSMENT

FAMILY D.K. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #1** - no health, social or community issues of concern **SIBLING #2** - no health, social or community issues of concern **- neither sibling #1 nor sibling #2 received their primary care at Children's Hospital, impacting on our ability to track outcomes**

RISK ASSESSMENT

FAMILY M.K.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - institutional involvement when mother was a child - displays fairly positive parenting abilities		
18 MONTHS	- good attachment between mother and child described		
FINAL			health outcomes - identified major health problems - polymorphous light eruption, urinary tract infections - has lived in homes other than her legal guardian social outcomes - speech delay noted in the first 18 months and in the time frame from 18 months until the final review - a history of substance abuse in the first 18 months and from 18 months until the time of the final review - identified behavior problems at the time of the final review community outcomes - included involvement of Child & Family Services in the first 18 months and in the time frame from 18 months until the final review - involvement of the Children's Hospital Department of Social Work in the first 18 months - two apprehensions documented in the medical record file

RISK ASSESSMENT

FAMILY M.K. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #1** - no health or social outcomes of concern community outcomes - mother had placed sibling #2 in care at the age of 3 months and signed a voluntary surrender of guardianship and then changed her mind - in care of Child & Family Services in Regina in October/85 - in care of Child & Family Services in Winnipeg in January/88 - has also lived with father and an aunt **SIBLING #2** - no health or social outcomes of concern community outcomes - involvement of Child & Family Services - lived with grandfather for a period of time

RISK ASSESSMENT

FAMILY A.N.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - lack of reliable family supports		
18 MONTHS	- good attachment between mother and child described - baby relates well to mother		
FINAL			health outcomes - one admission to hospital age 10 months - malnourished, anemic - a history of nonaccidental trauma in the first 18 months - linear mark circumferential on her left leg - noted at age 10 months and in the time frame from 18 months until final review at age 22 months - the parents' idea of punishment was to have her stand in the corner until she could behave social outcomes - developmental delay - a history of family violence in the first 18 months community outcomes - involvement of Child & Family Services in the first 18 months and in the time frame from 18 months until the final review - involvement of the Children's Hospital Department of Social Work - involvement of occupational and physiotherapy - one apprehension noted in the medical record file - the length of follow-up was 34 months, likely impacting on the outcomes identified

RISK ASSESSMENT

FAMILY J.O. (1)

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - good memories of childhood		
18 MONTHS	- good attachment between mother, father and child described - good interest and drive - stranger reserve		
FINAL			- no health or social outcomes of concern community outcomes - involvement of Child & Family Services from 18 months until the time of the final review - involvement of the Children's Hospital Department of Social Work in the first 18 months - one apprehension noted in the medical record file - it is noted in the medical record file that the mother left - now living with grandparents **SIBLING #1** - no health outcomes of concern social outcomes - identified speech delay - school-related issues - involvement of Child & Family Services and Child Guidance Clinic - apprehended once - noted in the medical record file - now living with grandparents

RISK ASSESSMENT

FAMILY J.O. (1) (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			**SIBLING #2** - no health or social outcomes of concern community outcomes - involvement of Child & Family Services - apprehended once according to the medical record file - now living with the grandparents, who are the legal guardians

RISK ASSESSMENT

FAMILY J.O. (2)

	LOW	MEDIUM	HIGH
PRENATAL	- pleased about pregnancy; common-law supportive - appears to have fairly good memories of her mother but not of her father; high self-esteem		
18 MONTHS	- mother smiling - responds positively to "how's everything?" - J.O. is very sensitive to strangers, mother moves in spontaneously to support - obviously positive interchange and supports - "model mother-child relationship"		
FINAL			health outcomes - concern regarding nonaccidental trauma age 4 years; noted to have a week-old bruise on left nipple, two other bruises under right collar bone - during an admission to hospital - 1992 - states was hit by mother with shoes and a hanger on her back and is hit on the head with her hand - allegations of sexual abuse age 8 years 7 months by her mother's previous common-law husband - multiple incidents - in hospital, age 11 years - diagnosis - adjustment disorder with mixed disturbance of emotional conduct - parent-child problem - current depression and visual hallucinations likely represent dissociative phenomena and are related to previous abuse

RISK ASSESSMENT

FAMILY J.O. (2) (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL			social outcomes - a history of substance abuse in the first 18 months and in the time frame from 18 months until the time of the final review - a history of family violence - noted in the time period from 18 months until the final review - identified behavior problems - in the care of grandmother now community outcomes - involvement of Child & Family Services in the time frame from 18 months until the final review - involvement of the Children's Hospital Department of Social Work - occupational therapy/physiotherapy referral in the time frame from 18 months until the final review **SIBLING #1** health outcomes - major health problem - patent ductusarteriosur repaired, eczema social outcomes - a history of substance abuse community outcomes - a referral to the Children's Hospital Department of Social Work - occupational/physiotherapy referral

RISK ASSESSMENT

FAMILY T.C.

	LOW	MEDIUM	HIGH
PRENATAL	- unstable partner relationship - family supportive - ambivalent re pregnancy		
18 MONTHS	- good attachment between mother and child described		
FINAL			health outcomes - sexual abuse allegations age 8½ years - history of vaginal bleeding incidents, positive physical findings - no disclosure social outcomes - a history of substance abuse in the first 18 months - a history of family violence in the first 18 months community outcomes - involvement of Child & Family Services in the time frame from 18 months until the final review - a majority of T.C.'s care occurred at another hospital where she had numerous admissions - T.C.'s primary care was not at Children's Hospital, which might have impacted on the outcomes documented

RISK ASSESSMENT

FAMILY N.W.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - pleased about pregnancy - positive childhood experience		
18 MONTHS		- good attachment described between mother and child - history of mother's spouse drinking - home situation poor	
FINAL		health outcomes - identified major health problem - anemia social outcomes - N.W. and siblings are now living with their natural father - their natural mother relinquished the children to her ex-husband - a history of substance abuse in the time frame from 18 months until the final review community outcomes - involvement of Child & Family Services - involvement of the Children's Hospital Department of Social Work	

RISK ASSESSMENT

FAMILY N.W. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL		**SIBLING #1** - no health outcomes of concern social outcomes - living with natural father since June/91 - had previously been with mother in Calgary for 5 years community outcomes - involvement of the Children's Hospital Department of Social Work - a referral to occupational/physiotherapy **SIBLING #2** health outcomes - a history of nonaccidental trauma - age 8 years - hit by mother social outcomes - now living with natural father since 1991	

RISK ASSESSMENT

FAMILY L.G.

	LOW	MEDIUM	HIGH
PRENATAL	- intellectual limitations - family supportive - happy regarding pregnancy - partner not supportive		
18 MONTHS	- some attachment described between mother and child - development is good - "bland" mother - no spontaneous comments		
FINAL		health outcomes - admission, age 27 months - fell from a third storey window - # distal left tibial metaphysis # left fibular shaft # left talus - noted on admission to have a burn on his left elbow from a stove element - incident was investigated - felt to be an accident - no social outcomes of concern community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Children's Hospital Department of Social Work in the first 18 months	

RISK ASSESSMENT

FAMILY L.G. (Cont.)

	LOW	MEDIUM	HIGH
PRENATAL			
18 MONTHS			
FINAL		**SIBLING #1** - no health, social or community issues noted in the medical record file **- neither child received their primary care at Children's Hospital, possibly impacting on the outcomes identified**	

RISK ASSESSMENT

FAMILY D.S.

	LOW	MEDIUM	HIGH
PRENATAL	- institutional involvement - partner supportive - deprived family background - history of psychiatric problems - pregnancy unplanned - denies memories of parents		
18 MONTHS	- good attachment between mother and child described - always positive when questioned about D.S. - frequently turns to mother		
FINAL		- no health outcomes of concern <u>social outcomes</u> - family history of substance abuse in the first 18 months - school-related issues identified <u>community outcomes</u> - involvement of Child & Family Services in the first 18 months - referral to occupational therapy/physiotherapy - involvement of the Child Guidance Clinic **SIBLING #1** - no health, social or community outcomes noted - sibling #1 has not been seen at Children's Hospital for 8 years	

RISK ASSESSMENT

FAMILY C.A.

	LOW	MEDIUM	HIGH
PRENATAL	- happy about pregnancy - support from common-law and family support - all plans are made for after birth of baby - stable family history and background		
18 MONTHS	- fairly consistent mother, bonding good - stranger anxiety - some behavioral management issues		
FINAL		health outcomes - frequent visits to children's clinics - 92 from birth until the time of the final review - major health problem - streptococcal gomerular nephritis - visual impairment social outcomes - a family history of substance abuse identified in the first 18 months - a history of family violence identified in the first 18 months - school-related issues - behavior problems identified in the first 18 months and in the time frame from 18 months until the time of the final review community outcomes - involvement of the Children's Hospital Department of Social Work - involvement of the Child Guidance Clinic **SIBLING #1** - no health, social or community outcomes of concern	

RISK ASSESSMENT

FAMILY T.G.

	LOW	MEDIUM	HIGH
PRENATAL	- family supportive - partner supportive - intellectual limitations		
18 MONTHS		- attachment issues - high expectations of children described - mother observed to handle child roughly - minimal stranger reserve	
FINAL		health outcomes - identified major health problem - seizure disorder - partial complex epilepsy social outcomes - developmental delay documented in the time frame from 18 months until the final review - speech delay - receptive and expressive - school-related problems - in a specialized program community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Children's Hospital Department of Social Work in the first 18 months - involvement of the Child Guidance Clinic **SIBLING #1** - no health outcomes of concern social outcomes - developmental delay - speech delay - school-related issues - identified behavior problems - fighting at school community outcomes - involvement of the Child Guidance Clinic	

RISK ASSESSMENT

FAMILY K.P.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - no preparations for the baby		
18 MONTHS	- good attachment described between grandparent and child - good stranger discrimination - change of guardianship		
FINAL		health outcomes - identified major health problem - iron deficiency - anemia social outcomes - living with maternal grandmother, who is now the legal guardian community outcomes - involvement of the Children's Hospital Department of Social Work in the first 18 months **- limited follow-up may have impacted on the outcomes identified**	

RISK ASSESSMENT

FAMILY W.E.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - ambivalent initially regarding pregnancy		
18 MONTHS		- change of guardianship - mother abandoned family - attachment issues - described as indiscriminate - development - OK	
FINAL		health outcomes - no specific health outcomes social outcomes - a history of substance abuse in the first 18 months - W.E. had been abandoned by mother and W.E. was being cared for by his father community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Children's Hospital Department of Social Work in the first 18 months **SIBLING #1** - only birth data available - mother now married to a different partner **- limited follow-up may have impacted on the outcomes identified**	

RISK ASSESSMENT

FAMILY M.S.

	LOW	MEDIUM	HIGH
PRENATAL	- mature, responsible, caring person - positive support from her husband		
18 MONTHS	- states M.S. is determined but seems to accept and appreciate this - good easy-flowing relationship		
FINAL	health outcomes - no specific health outcomes identified social outcomes - identified speech delay in the first 18 months and in the time frame from 18 months until the final review - no community outcomes of note **SIBLING #1** health outcomes - identified major health problems - pyelonephritis - no specific social or community outcomes		

RISK ASSESSMENT

FAMILY D.D.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - concerns regarding mother not viewing home problems or parenting in a realistic manner		
18 MONTHS	- good attachment described between parent and child - appropriate stranger reserve noted		
FINAL	health outcomes - at 11 months a spiral fracture of the left tibia was identified - incident or etiology of the injury was never clarified - no social outcomes of note community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Children's Hospital Department of Social Work in the first 18 months SIBLING #1 - no health, social or community outcomes of concern **- limited follow-up may have impacted on the identification of outcomes**		

RISK ASSESSMENT

FAMILY C.H.

	LOW	MEDIUM	HIGH
PRENATAL	- institutional involvement in foster care - partner supportive - deprived family background - abused by father, neglected by mother		
18 MONTHS	- good attachment between mother and child described - obvious pleasure with baby		
FINAL	- no health outcomes of concern social outcomes - living with maternal grandmother in October/86 - mother described as travelling a lot - noted to be with mother in November/90		

RISK ASSESSMENT

FAMILY K.J.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - did not want to talk about her past		
18 MONTHS	- good attachment between parent and child described - looks towards mom		
FINAL	- no health or social outcomes of concern community outcomes - involvement of Child & Family Services in the first 18 months **SIBLING #1** - no health, social or community outcomes documented **- limited follow-up may have impacted on the outcomes identified**		

RISK ASSESSMENT

FAMILY A.S.

	LOW	MEDIUM	HIGH
PRENATAL	- family supportive - happy about pregnancy - partner not supportive		
18 MONTHS	- good attachment described between parent and child		
FINAL	- no health, social or community outcomes documented		

RISK ASSESSMENT

FAMILY M.S.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - realistic plans		
18 MONTHS	- family supportive - good attachment described between parent and child		
FINAL	health outcomes - identified major health problem - anemia febrele seizures social outcomes - speech delay identified in the first 18 months community outcomes - involvement of the Children's Hospital Department of Social Work in the first 18 months **SIBLING #1** health outcomes - admission age 11 months regarding buccal cellulitis - noted to have burn on her left arm - no social outcomes of concern community outcomes - involvement of the Children's Hospital Department of Social Work **SIBLING #2** - no health, social or community outcomes documented		

RISK ASSESSMENT

FAMILY J.M.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - happy about the pregnancy - positive childhood memories		
18 MONTHS	- good attachment described between parent and child - warm, accepting parents		
FINAL	health outcomes - identified major health problem - asthma - no social or community outcomes documented		

RISK ASSESSMENT

FAMILY K.C.

	LOW	MEDIUM	HIGH
PRENATAL	- family supportive - partner not supportive		
18 MONTHS	- good attachment described between parent and child		
FINAL	- no health or social outcomes documented community outcomes - involvement of Child & Family Services in the first 18 months - involvement of the Children's Hospital Department of Social Work in the first 18 months **- no follow-up for 5 years at Children's Hospital, which may have impacted on the outcomes documented**		

RISK ASSESSMENT

FAMILY E.T.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - good extended family supports		
18 MONTHS	- good attachment described between parent and child - turns frequently to mother		
FINAL	- no health, social or community outcomes documented **- limited follow-up may have impacted on the outcomes documented**		

RISK ASSESSMENT

FAMILY C.B.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - ambivalent initially regarding pregnancy - past history of childhood sexual abuse		
18 MONTHS	- good attachment described between parent and child - father in primary role		
FINAL	- no health or social outcomes documented community outcomes - involvement of the Children's Hospital Department of Social Work in the first 18 months **SIBLING #1** health outcomes - identified major health problem - atopic dermatitis - no social or community outcomes documented **- limited follow-up may have impacted on the outcomes identified**		

RISK ASSESSMENT

FAMILY R.S.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive - family supportive - planned pregnancy		
18 MONTHS	- good attachment described between parent and child		
FINAL	- no health, social or community outcomes documented **SIBLING #1** - no health, social or community outcomes identified **SIBLING #2** - no health or social outcomes documented community outcomes - referral to occupational therapy/ physiotherapy - due to issue of prematurity **SIBLING #3** - no health or social outcomes documented community outcomes - referral to occupational therapy/ physiotherapy related to the issue of prematurity		

RISK ASSESSMENT

FAMILY D.H.

	LOW	MEDIUM	HIGH
PRENATAL	- enthusiastic and interested in pregnancy - supportive common-law - D.H.'s mother's good memories appear contrary to stories of relative neglect in childhood - was in foster care for 6 months - positive experience		
18 MONTHS	- child into very difficult negative behavior, mother has a reasonable understanding of this - strong bonding and need for mom		
FINAL	health outcomes - one investigation regarding nonaccidental trauma - felt to be an accident - identified major health problem - anemia social outcomes - speech delay identified in the first 18 months - a history of substance abuse in the first 18 months community outcomes - involvement of the Children's Hospital Department of Social Work **SIBLING #1** health outcomes - identified major health problem - anemia - no social or community outcomes identified **SIBLING #2** - no health, social or community outcomes identified - **family moved in 1986, limiting follow-up and identification of outcomes**		

RISK ASSESSMENT

FAMILY S.G.

	LOW	MEDIUM	HIGH
PRENATAL	- partner supportive		
18 MONTHS	- **no data available after 18 months** - **final assessment was coded as missing data** - **mother had moved out of province**		
FINAL			

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