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EARLY CHILD DEVELOPMENT – EARLY DEVELOPMENT INSTRUMENT

The Community Services and Housing Committee recommends receipt of the following report, September 17, 2003, from the Acting Commissioner of Health Services and the Commissioner of Community Services and Housing:

1. RECOMMENDATION

It is recommended that:

1. Health and Emergency Medical Services Committee and Regional Council receive for information the initial results of the Early Development Instrument (EDI) initiative, which surveyed senior kindergarten children in York Region in March 2003.

2. This report be submitted to Community Services and Housing Committee for information purposes.

2. PURPOSE

The purpose of this report is to provide information to Health and Emergency Medical Services Committee and Regional Council on the initial results of the EDI which was implemented in senior kindergarten classes in March of this year. The EDI provides information on the preschool development of children at the Regional level and identifies the areas of greatest strength and weakness in their development.

3. BACKGROUND

In February 2003, the Health Services Department submitted a report to Health and Emergency Medical Services Committee and Regional Council, outlining seven projects to be completed with 100% provincial dollars as part of the Early Child Development – Perinatal and Child Health Survey Strategies. The seven projects included:

- Access to Community Services
- Women Abuse, Asking the Question
- Surveillance of Smoking in Pregnancy
- Postpartum Infant Feeding Survey
- Injury Prevention
- Perinatal Database Project
- Early Development Instrument (EDI)

This report focuses on the data obtained using the EDI in a survey of more than 8,000 senior kindergarten children in York Region in March 2003. Health and Emergency Medical Services Committee and Regional Council will receive reports on the other projects in the coming months.

3.1 The Importance of the Early Years

In recent years there has been increased interest in supporting children and their families during their first five years of life. The Early Years Study (1999) describes the importance of early child development in light of the evidence from neuroscience which demonstrates that development from conception to age six, particularly in the first three years, sets the base for competence and coping skills that will affect learning, behaviour and health throughout life.

On September 11, 2000, the First Ministers of Canada announced a federal/ provincial/ territorial agreement for Early Child Development. In part the agreement states that "Canada's future social vitality and economic prosperity depend on the opportunities that are provided to children today."

As part of Ontario's Early Years Plan, the Ministry of Health and Long-Term Care and the Ministry of Community, Family and Children's Services have provided funding for a number of universal and targeted programs. These assist the existing traditional programs of York Region Health Services, Public Health and York Region Community Services and Housing, in supporting these young families.

In order to know the extent to which these initiatives are being successful, it is necessary to measure the outcome. The EDI is a monitoring tool that is being used in Canada to measure both the extent of healthy child development in the preschool period and the "readiness to learn" in grade one. In York Region, the EDI data can be used as a key performance indicator which over time can measure the success of our communities' initiatives in supporting preschool children and their families.

3.2 Early Development Instrument

The EDI was developed and is implemented by the Canadian Centre for Studies of Children at Risk, McMaster University. The EDI measures how ready children are to begin learning at school by asking questions about five different areas of their early development:

- Physical health and well-being
- Social competence
- Emotional maturity
- Language and cognitive development
- Communication skills and general knowledge

The EDI is completed by teachers for all children in kindergarten classes in selected communities. In the 2002/2003 school year it will be completed for over 60,000 children in various sites across Canada.

The EDI does not provide diagnostic information on individual children, nor is it designed to measure a school's performance. The data are analyzed on a macro level as opposed to an individual basis.

The results of the EDI are intended to provide feedback to the community on how their young children are doing. This feedback will assist the community in allocating resources to support children's development in their first five years of life.

3.3 EDI in York Region

In 2000/2001 the EDI was piloted in a number of Regional schools in Markham and Georgina as an initiative of the Community Services and Housing, Early Years demonstration project. The results demonstrated the value of completing the questionnaire across the Region.

This present initiative, co-ordinated by Health Services, Public Health required collaboration with the Community Services and Housing Department and both the York Region District School Board and the York Catholic District School Board. The Ontario Early Years Centres Data Analysis Co-ordinators also supported the project.

4. ANALYSIS AND OPTIONS

4.1 Preliminary Data

The initial reports from the EDI provide data at the York Region level and at the individual school level. York Region data for both public and separate school board students for 2003 (approximately 8,000 students) are compared to the EDI data of Canadian schools outside of York Region completed in 2002 (approximately 42,000 students). Later this fall we will receive the complete student data which will allow us to extract data at different neighbourhood levels, for example at municipal, postal code or census tract level. Generally, children in York Region are doing as well as or better than children of Canadian schools outside of York Region on all readiness levels. When the data are examined at or individual level, it is apparent that although many children are doing very well, there are others who are not doing well (Table 1).

Table 1
EDI Results 2002/2003 Canada and York Region

EDI Scale	Mean Score (out of 10) Canada 2002	Mean Score (out of 10) York Region 2003	Range Individual York Region Students 2003
Physical health and well-being	8.82	9.01	3.46-10
Social competence	8.35	8.35	0.29-10
Emotional maturity	8.10	8.18	1.00-10
Language and cognitive development	8.42	8.78	0.38-10
Communication and general knowledge	7.83	8.03	0.00-10

4.2 School Readiness

The report provides a detailed description of children who are ready for school and those who are not ready for school for each subscale of the five domains. The top 25th percentile of children is ready for school. The middle 50% should not have problems with being ready for school. The children in the lowest 25th percentile are not ready for school. This lowest quarter is split into two groups: those between the 25th and the 10th percentile and those in the lowest 10th percentile. Those in the lowest 10th percentile identify areas of greatest weakness in the population (Table 2).

Table 2
York Region EDI Results 2002/2003

EDI Scale	# of children in the top 25th percentile	# of children between 25th & 10th percentile	# of children in the lowest 10th percentile
Physical health and well-being	2,203	1,064	660
Social competence	2,016	316	789
Emotional maturity	1,967	1,018	778
Language and cognitive development	2,386	1,240	718
Communication and general knowledge	2,234	1,144	747

Out of the 189 schools in York Region, 79 have more than 30% of the children with increased needs (below the 10th percentile on more than one scale). Individual schools will be able to identify the domains in which their students are having increased difficulty and implement remedial programming.

4.3 Results of Additional Analysis

Several comparisons were carried out on the York Region data. The following are some of the results:

- Girls scored significantly higher than boys in all five readiness to learn domains. This is a consistent developmental phenomenon across all sites where the EDI has been implemented.
- Children whose first language was English scored significantly better than children whose first language was not English in all five readiness to learn domains.
- Children who attended organized preschool scored significantly better than children who did not in all readiness to lean domains.
- Children who attended childcare arrangements part-time scored significantly better than children who attended full-time in all readiness to learn domains.

4.4 Future Users of Data

The data provided from the EDI will be of value to many service providers, agencies and community organizations. It will be possible to provide the information in a format that will be meaningful to the requesting organizations in the future.

Health Services, Public Health will use the data at both the Regional and census tract levels to advocate for funding for targeted programs as well as for the distribution of mandated programs across the Region. Public Health will encourage communities to utilize the results to identify and respond to local community needs. Community Services and Housing will utilize the data to influence decision making concerning the nature and distribution of Early Intervention and childcare programs. The Human Services Planning Coalition will be able to use the data to advocate for funding priorities identified through the EDI. School Boards will use the data at the individual school level to assist teachers in developing curriculum in order to respond to the specific needs of children in their school. Municipalities can utilize data at either the municipal or census tract level to determine service priorities, for example, for library and recreation programming.

Data will be made available to other community partners either through the Data Project of the York Region Advisory Forum for Children, Youth and Families or through application to the Region.

4.5 Relationship to Vision 2026

The implementation of the EDI every two years will support the achievement of Vision 2026. It supports the Vision's goals in the following ways:

Responding to the Needs of Our Residents

- Enabling access to services that aid in early child development
- Promoting social and emotional well-being
- Partnering with community agencies to provide more and better services
- Building relationships with public-sector and private-sector partners to provide services
- Empowering our community to assume shared responsibility

Quality Communities for a Diverse Population

- Responding to our diversity with innovative service delivery options
- Responding to children in need
- Encouraging the development of a range of activities, recreational opportunities and exciting community places

5. FINANCIAL IMPLICATIONS

In 2003, the estimated cost of $110,000 for the EDI was shared by the Health Services and the Community Services and Housing Departments. The Health Services portion was 100% funded by the Ministry of Health and Long-Term Care through the Early Child Development initiatives. The Community Services and Housing Department's portion was 100% funded through the Ontario Works Performance Bonus. The EDI initiative will not be implemented again until 2005, at which time funding options will be assessed.

6. LOCAL MUNICIPAL IMPACT

Local municipalities will benefit from the information gathered through the EDI. By identifying the strengths and weaknesses of the children entering school, it can assist local councils, recreation departments, libraries and community groups in determining priorities of service for their communities.

7. CONCLUSION

The importance of the early years in the development of children is well established. In recent years, there has increased support for programming in the first five years of life. The EDI will provide a means to measure the effectiveness of our communities in identifying and responding to the needs of our youngest children. It will also guide the development of services and programs so that many more of our children will be able to participate fully in school by being ready to learn.

The Senior Management Group has reviewed this report.