

# **A FAMILY POLICY ASSESSMENT TOOL FOR THE CANADIAN CONTEXT**

**LONG REPORT | JULY 2012**



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**SUBMITTED FOR PUBLICATION**

March 2011

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**ACKNOWLEDGEMENTS**

Production of this document has been made possible through a financial contribution from the Public Health Agency of Canada through funding for the National Collaborating Centre for Healthy Public Policy (NCCHPP). The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada or the views of the NCCHPP.

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# 1 INTRODUCTION

Discussion of children's early developmental health has increased considerably in the past decade, especially in relation to public policy implications. Research shows that public investment in the policies and programs that promote early developmental health not only helps children and families directly, but ultimately provides benefits for society as a whole. However, Canada has fallen behind other industrialized countries when it comes to public policies and investments that support young children and their families.

The United Nations Children's Fund (UNICEF) developed a report card based on a series of ten benchmarks that assess how well countries are doing when it comes to supporting early childhood developmental health. Canada met the conditions for only one of the ten benchmarks and, in fact, finished in last place (relative to 24 of the wealthiest countries in the world). When we consider our country's commitment to other areas of social wellbeing, such as health care, old age security and public education generally starting at age five, we must accept the fact that we need to be doing much more for children in their earliest years, as well as for their families.

To assist Canada in improving its support for early childhood developmental health, this report proposes a Canadian Family Policy Assessment Tool, based on international models like UNICEF's, which we have adapted for Canada based on available data. We propose intermediate achievement indicators that are generally lower than the UNICEF benchmarks, to provide near-term, achievable goals for Canada.

## Canadian Family Policy Assessment Tool

INDICATOR	DEFINITION	PROGRESS ON INDICATOR	EVIDENCE*
<b>Family time and resources</b>			
<b>1. Family Leave</b>	50 weeks of parental leave after child's birth (37 weeks for adoption), at 70% of average earnings (subject to upper and lower limits). Two weeks reserved for fathers. 10 days unpaid family leave.	<i>Province meeting/closest to meeting</i> Quebec: 50 weeks for birth/37 weeks for adoption, 75% of wages up to \$62,000 for those with \$2000 income previous year (more for low income earners). 5 weeks for fathers. 10 days family leave.	None mtg parental leave BC: 5 days family leave AB: no days specified SK: 12days illness/injury MB: 3 days family leave
<b>2. Child Poverty</b>	Provincial child poverty rate of less than 10% measured in LICO before taxes	<i>Province meeting/closest to meeting</i> PEI: 10.2%*, Canada 14.8% (2008) (*Statistics Canada advises use with caution due to small numbers)	BC 14.5% AB 10.5% SK 15.6% MB 17.0%
<b>Health, education and care services and supports in the community</b>			
<b>3. Universal Outreach for Essential Health Services</b>	Meet at least two of these three indicators:  *Infant mortality less than 4 per 1000 live births (deaths at age less than 12 months per 1000 live births):  *Proportion of low birth weight babies less than 6 per 100 births (below 2500 grams/ 5.5 pounds)  *MMR immunization rate for two year olds more than 95% (1 or 2 doses based on province's immunization schedule at 24 months)	<i>Province meeting/closest to meeting</i>  Infant Mortality (2007): Nova Scotia 3.3 Canada: 5.1  Low birth weight (2007): New Brunswick: 4.9 Canada: 6  MMR Immunization rate: Alberta : 91% (highest in 4 Western provinces, but based on 1 dose as per their immunization schedule)	Rate of infant mortality (2007) BC 4.0 AB 6.0 SK 5.8 MB 7.3  Low birth weight (2007): BC 5.8 AB 6.6 SK 5.5 MB 5.6  MMR Immunization rate: BC : 73.7% (2 doses, 2007) AB: 91% (1 dose, 2004) SK : 72.3% (SHR only; 2 doses; 1 dose 90%, 2004) MB : 89.22% (1 dose, 2004)
<b>4. Access to ECEC services</b>	40% of children 0-5 have access	<i>Province meeting/closest to meeting</i>  PEI at 41% , Quebec at 25%	BC: 18.3% AB: 17.4% SK: 9.1% MB: 20.6%
<b>5. Staff Education and Training</b>	Minimum of 50% of staff have a minimum of 3 years post-secondary education in ECE.	<i>Province meeting/closest to meeting</i> MB requires directors to have an ECE diploma, post-diploma continuing education certificate and 1 year experience; two thirds of staff working with 0-6 year olds must have ECE diploma	BC: 100% staff have 1 year of ECE training; additional training required depending on staff: child ratios, children's ages AB: 25% 1 year ECE diploma; director 2 year diploma SK: 30%: 1 year/ director 2 yrs MB: 66%: 2 yr/ director more
<b>6. Staff to Child ratios in ECEC</b>	Minimum of 1 staff member per 10 children ages 3-5 (36 to 60 months)	<i>Province meeting/closest to meeting</i>  At 36 months all provinces except PEI and SK are 1:8 or lower. At 60 months NL and BC ratios are 1:8	36 months: BC 1:8 AB 1:8 SK 1:10 MB 1:8  60 months: BC 1:8 AB 1:10
<b>Public planning and monitoring (supports other two parts of framework)</b>			
<b>7. Public Planning and Monitoring</b>	Province has developed a public plan to provide families with time, resources and access to high-quality community services, focus on vulnerable children; with targets, timelines, reporting	<i>Province meeting/closest to meeting</i> Quebec has a comprehensive plan. Manitoba: coordinated approach, 5-year planning cycle, focuses on vulnerability but no long-term comprehensive public plan.	None meeting
<b>8. Public Funding</b>	0.6% of provincial GDP spent on Investment in ECEC for children less than 6	Quebec at 0.61% followed by MB and ON at 0.36%; overall Canada outside Quebec spends 0.28% of GDP	BC 0.22% AB 0.10% SK 0.18% MB 0.36%

\* See Appendix 2 for all sources

## 2 BACKGROUND TO THE DEVELOPMENT OF A CANADIAN FAMILY POLICY ASSESSMENT TOOL

The convergence of international evidence, particularly as summarized by UNICEF, provides a well-established set of benchmarks to use globally in assessing school readiness or early developmental health. However, to make the approach meaningful in the Canadian context, our proposed assessment tool incorporates three important considerations:

1. **Assessment at the sub-national (provincial/territorial) level** – While recognizing the national role in enhancing developmental health, the assessment tool also recognizes the key contributions and responsibilities of provincial and territorial governments.
2. **Positive motivation for stakeholders** – Despite recent announcements by several provinces to reduce poverty and expand access to early childhood education and care services, the size of the family policy gap between Canada and other post-industrialized countries is discouraging for many stakeholders. The assessment tool therefore focuses on monitoring progress against intermediate benchmarks that should be achievable in the near term, based on the fact that they have already been achieved by at least one other province.
3. **Accessible data** – The assessment tool modifies the international benchmarks to accommodate data that are publicly available in Canada, at the provincial level.

Thus, we propose an assessment tool that incorporates what we refer to as eight achievement indicators (to differentiate them from the UNICEF benchmarks) within the categories:

- family time and resources;
- health, education, and care services and supports in the community; and
- public planning, funding and monitoring. The next section of this report will explain this choice of categories.

The next section of this report will explain this choice of categories.

In many cases, the proposed achievement indicator reflects an interim step along the way towards achieving the longer-term desired benchmark. The selected indicators are adapted from key policy recommendations, program standards and related indicators and benchmarks used to track and compare progress on developmental health including early childhood education and care (ECEC),<sup>1</sup> primarily from consideration of the following information sources:

1. The Organisation for Economic Co-operation and Development (OECD) *Starting Strong* reports issued in 2001 and 2006, providing recommendations to governments based on a 20-country review of early childhood education and care (OECD, 2001; OECD, 2006).

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<sup>1</sup> Again, this is the general term used in this document to refer to state regulated programs which provide non-parental learning and care for young children. Such programs may also be referred to as child care, early learning and child care (ELCC), daycare, preschool, pre-kindergarten, kindergarten, etc. Programs may also include parenting resources, information and support.

2. Federal/provincial/territorial (FPT) public reporting on early childhood development (including early learning and child care) funding and indicators, arising from post-2000 federal transfers to provinces and territories.<sup>2</sup>
3. US National Institute for Early Education Research (NIEER) annual state-by-state analysis of pre-kindergarten program quality, access and public investment. Quality assessed against 10 program standards and benchmarks (Barnett et al., 2010).
4. UNICEF Family Policy Benchmarks arising from the UN Convention on the Rights of the Child (2006), *Starting Strong*, and the OECD's family policy indicators. The 2008 Report Card established and assessed 25 post-industrialized countries on 10 benchmarks for early childhood education and care and related family policies (UNICEF, 2008; Bennett, 2008).
5. Human Early Learning Partnership (HELP) policy recommendations to reduce early child vulnerability by 50% (from 29% to 15%) by 2015 (and further, to 10% by 2020), based on research showing families need time, resources and supports to help them balance caring and earning (Kershaw et al., 2009).

As noted in these reports, the selection of achievement indicators is not without challenges. They do not stand alone; they are most meaningful when considered within a larger context. Extensive literature on the quality (effectiveness) of programs for young children has repeatedly identified complex sets of interdependent indicators (see for example Muhajarine et al., 2009; Canadian Institute of Child Health, 2000; Muhajarine et al., 2010).

Therefore, better performance under a particular indicator may have implications for other dimensions. For example, a comprehensive and adequately funded parental leave program may reduce the demand for spaces for infant and toddler care, as parents are more likely to be in a position to care for young children themselves during that supported leave period. In that case, however, other services like developmental screening and coordination of services that support parents in providing high quality developmental care for their very young children become even more important.

Enhancing developmental health in Canada inevitably raises questions about the policy and funding roles of various levels of government. The last few years of the 20th century saw increasing levels of cooperation between federal and provincial/territorial governments to address services for young children, which resulted in a number of FPT agreements.<sup>3</sup> However, recent developments in Canada suggest a trend away from FPT agreements. For example, the 2005 bilateral agreements on early learning and child care services were cancelled and replaced with increased resources paid directly to parents with young children (Universal Child Care Benefit), along with a smaller transfer to provinces and territories for

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<sup>2</sup> For details on the Canadian Early Childhood Development (ECD) program and related FPT agreements since 2000, see [www.ecd-elcc.ca/](http://www.ecd-elcc.ca/).

<sup>3</sup> Early Childhood Development Agreement (2000); Multilateral Framework for Early Learning and Care (2003); Bilateral Child Care Agreements (2005). See Child Care in Canada: The Federal Role, parliamentary brief available at: [www2.parl.gc.ca/content/LOP/ResearchPublications/prb0420-e.htm](http://www2.parl.gc.ca/content/LOP/ResearchPublications/prb0420-e.htm).

child care spaces.<sup>4</sup> To a great extent, the proposed assessment tool sidesteps these changes in FPT relations. The tool focuses on the actual policy outcomes and the variations in family supports experienced by Canadian families in various provinces, rather than an analysis of which level of government is providing the policy direction and related public investment.

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<sup>4</sup> Under the bilateral agreements, \$650 million was to be transferred to provinces and territories in 2006/07. Under the federal child care spaces initiative, \$250 million was transferred in 2007 (Government of Canada, Department of Finance, 2007).



### 3 A FAMILY POLICY FRAMEWORK TO FOSTER DEVELOPMENTAL HEALTH

Based on the concepts and research evidence presented so far, we have developed a Family Policy Framework, as shown in Figure 1 below, which captures these essential enabling conditions and building blocks for developmental health in young children. The policy framework illustrates, in principle, the relationship between children's developmental health, the social determinants of developmental health, and the social and institutional contexts (i.e., family, social networks, and health, education and care services in communities) that underpin developmental health. It presents the three building blocks of developmental health, and the general implications for a policy framework. It summarizes the key points provided in our briefing note on developmental health and family policies<sup>5</sup>:

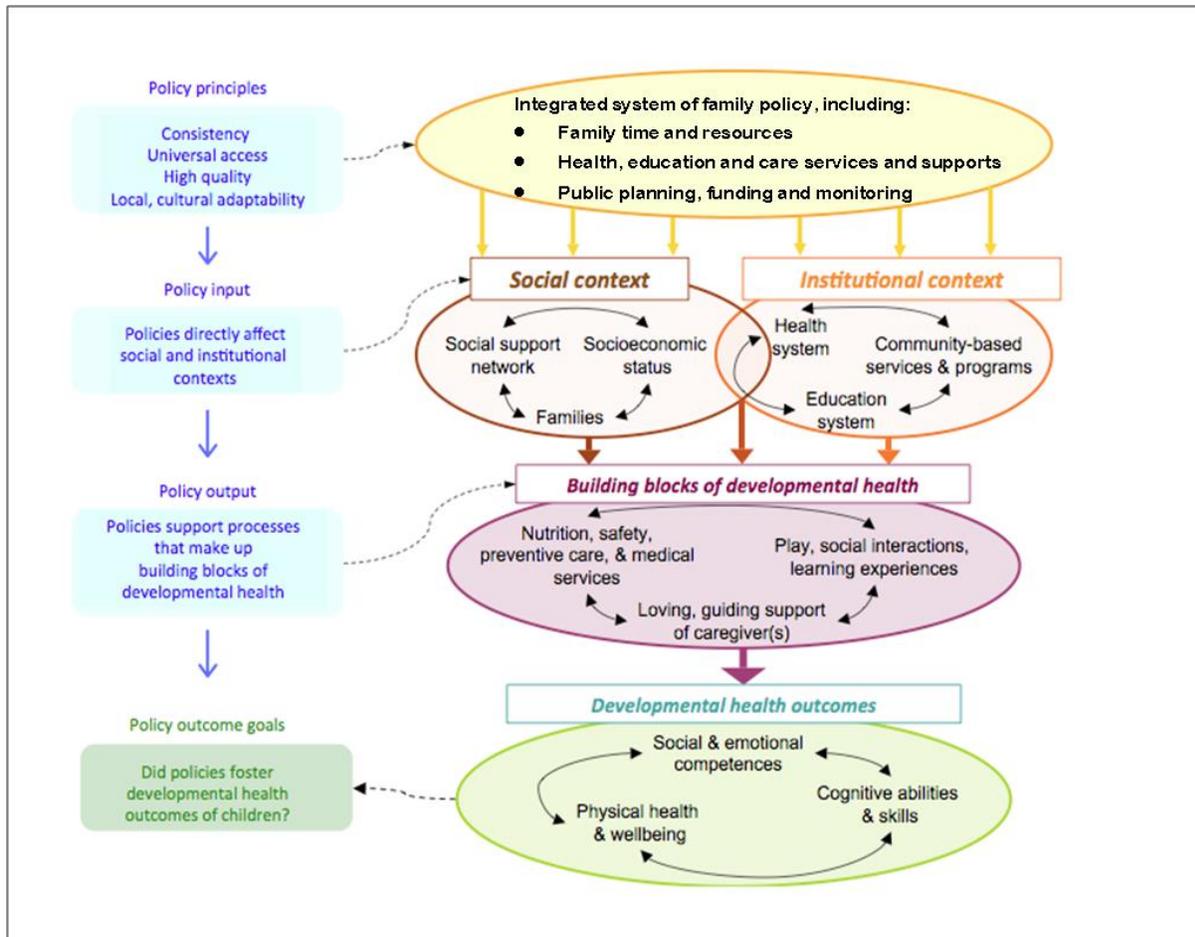
1. **Developmental health outcomes** are defined as age-appropriate skills, abilities and competences acquired in early years that are closely associated with future success; these different developmental domains are inherently interconnected and develop interdependently.
2. The three **building blocks** of developmental health—consistent loving *support* by caregivers (emotional care); healthy nutrition, physical safety, and preventive medical *care* and services (physical care); regular *opportunities* for socially embedded play and learning experiences (social care)—need to be jointly and consistently present during the developmentally sensitive first years of life.
3. The building blocks of optimal developmental health are primarily provided in (i) the **social context** of families and their social support networks, and (ii) the **institutional context** of complementary and supportive community health, care and education services. **Government policies** have the capacity to directly influence both the institutional and social contexts for optimal child development. When families are supported with the enabling conditions to thrive—meaning they have the time, resources and access to services they need to balance their caring and earning responsibilities—children are more likely to thrive.

In addition, the Family Policy Framework **introduces four guiding policy principles**: (1) consistency, (2) universal access, (3) quality, and (4) adaptability to local context and culture.

#### 3.1 CONSISTENCY

The principle of consistency is based on research that demonstrates that human development is contingent on the degree to which children's first environments are predictable and the conditions can be anticipated. Therefore, families and communities, in their efforts to raise developmentally healthy children, must be able to rely on the availability of certain supports over time and place and across various local contexts (Bronfenbrenner, 1979, 1992; Bronfenbrenner & Morris, 2006).

<sup>5</sup> You can consult *Developmental Health Knowledge as a Catalyst for Healthy Family Policies in Canada* on the NCCHPP website at: [www.ncchpp.ca/141/publications.ccnpps?id\\_article=742](http://www.ncchpp.ca/141/publications.ccnpps?id_article=742).



**Figure 1 Family Policy Framework for Developmental Health**

### 3.2 UNIVERSAL ACCESS

Within Canadian society, in which we value interdependence, ingenuity, and social justice and equity for all, the implementation of the recommended policies should be guided by the principle of universal access, which is in keeping with approaches that aim to ensure full physical, social and cultural inclusion.

### 3.3 HIGH QUALITY

Policies and programs must promote consistently effective nurturing and stimulating environments for all young children, generally referred to as quality in programs and services.

### 3.4 ADAPTABILITY TO LOCAL CONTEXT AND CULTURE

We recommend that the policy implementation process be informed by the principle of sensitivity and adaptability to local and cultural contexts, specifically to communities' competences, resources and needs (Domitrovich & Greenberg, 2000; Elias, Zins & Graczyk, 2003). The principle of sensitivity and adaptability to local and cultural contexts is closely tied

to the principle of universal access. It has been shown that policies and programs which are mandated to be implemented in a universally consistent fashion, but which, at the same time, disregard or ignore differences in cultural and local contextual factors, commonly fail, are typically unsustainable, and frequently even lead to counterproductive results (Rogers, 1995; Smith, Pepler & Rigby, 2004).

We would like to emphasize a point that is quite critical to the framework: a common misconception is that “universal” means “mandatory”, and that the existence of “quality” criteria for programs and services implies the “sameness” of those programs and services. Also, it is often erroneously assumed that the availability of universal access to programs and services is in conflict with (that is, in financial competition with and/or conceptual contradiction to) the provision of programs and services that target groups of children and families with specific, narrowly-defined needs.

The framework presented has therefore deliberately been constructed and worded to avert these misconceptions. In fact, the framework aims to convincingly demonstrate that a comprehensive family policy needs to have the resources and the flexibility to provide a combination of universal and targeted programs. For far too long, programs have been provided in a manner that trades off universal accessibility against addressing special needs or special populations. This is counter to the evidence accumulated over the last several decades, which shows that vulnerable children live in families with specific socio-economic needs as well as in families across the socio-economic spectrum.



## 4 DATA CHOICES AND LIMITATIONS

The purpose of the UNICEF benchmarks was to establish comparable international standards, despite the tremendous differences between countries' systems and data. This project attempts to do the same for Canada, despite similar challenges with Canadian data, recognizing different provincial jurisdictional systems and data. As noted by Cleveland et al. (2008): "Despite all of this public interest, the Canadian-generated knowledge base on child care has been modest. Surprisingly, for instance, Canada has no statistical surveys dedicated to collecting information on the use patterns, prices and expenditures, costs, and quality of child care. Our information on child care comes from surveys designed for other purposes but containing a few questions on child care, or from one-off surveys by academics or advocacy organizations, or from administrative data collected by municipal, provincial or territorial governments.

The Childcare Resource and Research Unit (CRRU) in Toronto biennially publishes the most reliable data on regulated child care spaces, with additional data on pre-kindergarten, kindergarten and certain other programs in *Early Childhood Education and Care in Canada* (Beach, J., Friendly, M., Ferns, C., Prabhu, N. & Forer, B., 2009). The report is a collaborative effort through consultation with provincial officials who provide the data. To the extent possible, the resulting data are organized to be comprehensive, comparable and meaningful despite different forms of source data.

While the CRRU reports track and compare access rates for regulated early childhood education and care across the country, comparative data on important access-related questions such as program inclusion, affordability and hours of operation are not available and are therefore not included in the assessment tool.

There are other data missing from our assessment tool—for example, an achievement indicator covering other early childhood services, such as early intervention services and those that focus on providing parenting resources and supports. For the latter programs, it is difficult to establish comparable achievement indicators because of variations in program goals and approaches, including staffing and access characteristics. Provincial public reports may contain some information on these programs, but they are marked by a lack of consistent definitions and comparable data on quality and access.

As well, the proposed assessment tool includes only regulated early childhood education and care services, primarily for reasons related to data availability. However, the reality for existing early childhood education and care services in many provinces is that there are a large number of unregulated care settings, such as family child care homes, playschools or preschools. Given the importance of quality environments for young children's healthy development, and the questions about quality particular to unregulated settings, it will be important to find ways to monitor this large, but largely unknown, sector.

Our proposed assessment tool recognizes both the strengths and limitations of current Canadian data and suggests achievement indicators that may be slightly different from those outlined in the UNICEF report card. For example, the UNICEF benchmarks for access to early childhood education and care are divided between four-year-olds (targeted access rate

of 80%) and children under three (25%). However, Canadian data do not easily distinguish between these age groups, so we propose a Canadian benchmark that merges these two age-specific benchmarks into one achievement indicator for children under six years of age, outside of kindergarten.<sup>6</sup> Table 1, below, shows the proposed indicators; the next sections describe the rationale for these achievement indicators.

Table 1 **The Canadian Family Policy Assessment Tool: Proposed Achievement Indicators in the near term**

<b>Family time and resources</b>	
<b>1) Family leave</b>	<p>Parental leave of 50 weeks following the birth of a baby, and adoption leave of 37 weeks, for employed parents (including self-employed), at 70% of average insured earnings, to a maximum weekly wage replacement level of \$835, with additional benefits for low-income earners (under \$26,000). At least two of these weeks should be reserved for fathers. Additionally, employees should be able to access 10 days of unpaid family-related leave per year.</p> <p><b>Provinces meeting / closest to meeting indicator: Québec:</b> 50 weeks for birth / 37 weeks for adoption, 75% of wages (75% of up to \$62,000) for those with \$2,000 income previous year (more for low-income earners). Five weeks for fathers. Ten days family leave.</p>
<b>2) Child poverty</b>	<p>A provincial child poverty rate of less than 10% measured in LICO before taxes.</p> <p><b>Provinces meeting / closest to meeting indicator:</b> Prince Edward Island: 10.2 %*, Canada 14.8% (2008).</p> <p>* <i>Statistics Canada advises use with caution due to small numbers.</i></p>
<b>Health, education, and care services and supports</b>	
<b>3) Universal outreach for essential health services*</b>	<ul style="list-style-type: none"> <li>- Infant mortality rate of less than 4 per 1,000 live births.</li> <li>- Proportion of babies born with low birth weight (below 2,500 grams) less than 6 births per 100.</li> <li>- Immunization rate for 12- to 23-month-olds (measles, mumps and rubella [MMR]) exceeds 95% (number of doses based on province's immunization schedule at 24 months).</li> </ul> <p>* At least two of the three requirements must be met to achieve this indicator.</p> <p><b>Provinces meeting / closest to meeting indicator:</b> Infant mortality (2007): Nova Scotia 3.3; Canada 5.1. Low birth weight (2007): New Brunswick: 4.9, Canada: 6. MMR immunization rate: Alberta: 91% (based on one dose as per provincial immunization schedule).</p>
<b>4) Early Childhood Education and Care Access</b>	<p>A minimum of 40% of all children under six (outside of kindergarten) have access to regulated and subsidized services.</p> <p><b>Provinces meeting / closest to meeting indicator:</b> Prince Edward Island: 41%, Quebec: 25%.</p>
<b>5) Early childhood education and care staff education and training</b>	<p>A minimum of 50% of staff in accredited services have minimum of three years' post-secondary education with a recognized qualification in early childhood studies.</p>

<sup>6</sup> Virtually all five-year-olds in Canada have access to at least part-school-day kindergarten. Data on kindergarten are typically tracked separately from child care services.

<p><b>Provinces meeting / closest to meeting indicator:</b> Manitoba requires directors to have an Early Childhood Education (ECE) diploma, post-diploma continuing education certificate and one year of experience; two thirds of staff working with children up to six years of age must have ECE diploma.</p>
<p><b>6) Early childhood education and care staff-to-child ratios</b>                  A minimum one staff member per ten children in programs for three- to five-year-olds.</p> <p><b>Provinces meeting / closest to meeting indicator:</b> At 36 months all provinces except Prince Edward Island and Saskatchewan are 1:8 or lower. At 60 months, Newfoundland and Labrador and British Columbia ratios are 1:8.</p>
<p><b>Public planning, funding and monitoring</b></p>
<p><b>7) Public planning and monitoring</b>                  Province has developed a public plan to provide families with time, resources and access to high-quality community services required to promote young children’s developmental health, specifically addressing the needs of vulnerable children. This plan should include targets and timelines to meet these targets, with monitoring and public reporting on progress.</p> <p><b>Provinces meeting / closest to meeting indicator:</b> Quebec has a comprehensive plan. Manitoba: coordinated approach, 5-year planning cycle, focuses on vulnerability but no long-term comprehensive public plan.</p>
<p><b>8) Public funding of early childhood education and care services</b>                  A minimum of 0.6% of provincial gross domestic product (GDP) spent on all early childhood education and care services, including kindergarten.</p> <p><b>Provinces meeting / closest to meeting indicator:</b> Quebec: 0.61%; Manitoba and Ontario: 0.36%; Canada outside Quebec: 0.28%.</p>

Note: All data sources are found in the Appendix 2.



## 5 RATIONALE FOR EACH ACHIEVEMENT INDICATOR

### 5.1 FAMILY TIME AND RESOURCES

#### 5.1.1 Family leave

##### 5.1.1.1 UNICEF indicators and findings

Maternity and parental leave are critical parenting supports that promote the relationship-building so essential to early human development. The UNICEF Innocenti Report card notes that “[i]n light of both neuroscientific advances and recent experience, it would therefore seem that the interests of the very young are best served by policies that make it easier for at least one parent to care for the child during the first 12 months of life” (p. 15). This led UNICEF to establish the following policy benchmark:

- *UNICEF benchmark recommendation: Build on maternity and parental leave to provide at least one year of coverage at 50% of average salary, with time reserved for fathers.*

These recommendations are guided by the notion of “not too long, not too short and not too maternal,” when it comes to parental leave that promotes both healthy child development and gender equality, so that both mothers and fathers share the joys and responsibilities of caring for infants (Kershaw et al., 2009). Extended leaves may negatively impact women’s labour force participation, particularly for mothers with the least education, which may not be in the long-term interests of their young children or families (Bennett, 2008).

Canada’s current parental leave policy results in a mid-ranking assessment by UNICEF (2008). While the combined 50 weeks of maternity and parental leave benefits available in Canada suggest that we are satisfying one of the UNICEF criteria, the eligibility requirements of this Employment-Insurance-operated program and the benefit levels it provides limit participation for many families and/or result in payments that may be less than 50% of average earnings. Moreover, Canada’s leave system does not reserve any time exclusively for fathers, the exception being Quebec, where five weeks of benefits are reserved for fathers. Yet international comparisons make it clear that gender-neutral parental leave does not adequately promote father involvement in caring for an infant. Only 15% of leave-takers for parental care in Canada are men, whereas nearly 70% of Norwegian men access the leave reserved for fathers (Marshall, 2003, p. 10).

##### 5.1.1.2 Canadian Achievement Indicator 1: Family leave

*Parental leave of 50 weeks following the birth of a baby, and adoption leave of 37 weeks, for employed parents (including self-employed), at 70% of average insured earnings, to a maximum weekly wage replacement level of \$835, with additional benefits for low-income earners (under \$26,000). At least two of these weeks should be reserved for fathers. Additionally, employees should be able to access 10 days of unpaid family-related leave per year.*

Outside of Quebec, parental leave is largely driven by federal policy. Specifically, the eligibility for and amount of financial benefits is determined by the Employment Insurance program, while the mandated length of maternity and parental leave is determined provincially. As federal eligibility for Employment Insurance has changed, provinces have historically amended their labour legislation to better synchronize the length of the leave with the period of eligibility for benefits.

Currently, in Canada outside of Quebec, employees with 600 hours of insured earnings in the previous 52 weeks are eligible for 50 weeks of maternity/parental benefits from the Employment Insurance program, which provides up to 55% of average insured earnings, to a yearly maximum insurable amount of \$43,200 (\$457 a week). This income is taxable. These eligibility requirements and benefit levels result in payments that may be less than 50% of average earnings for many workers. In 2007, 64% of births resulted in maternity benefit payments (Beach et. al, 2009). Moreover, outside of Quebec, Canada's leave system does not reserve any time exclusively for fathers.

In 2006, Quebec developed its own Parental Leave Insurance Program. Families enjoy improved coverage, because eligibility extends to anyone with \$2,000 in earned income over the previous 52 weeks, including the self-employed. The maximum benefit level has been raised to 70%-75% of \$62,000 (\$835-\$894 weekly), which is almost double the amount in the rest of Canada. Quebec also provides additional benefits to low-income earners (under \$25,921). The Quebec system further reserves five weeks of benefits exclusively for fathers.

Quebec also provides employees with 10 days of unpaid family-related leave, in order for parents to take care of specific family responsibilities and/or emergencies. Elsewhere in Canada, Ontario provides 10 days of emergency leave for those employees who work for companies of more than 50 people, British Columbia provides five days of leave, and New Brunswick and Manitoba three days. Saskatchewan workers are entitled to 12 days of unpaid leave to deal with their own injury or illness or that of an immediate family member, provided that they do not have a record of chronic absenteeism. In Alberta, there are no specific leave days designated. While employers are required to provide accommodations to employees, "[t]his requirement is limited to situations where the employee's family responsibilities exceed the ordinary level. For example, an employer normally is not required to accommodate the request by an employee to simply stay home with an ill child, but would be required to accommodate an employee's search for alternative childcare" (Alberta Human Rights Commission, 2010).

UNICEF's analysis shows that there is room for improvement in Canada, and that Quebec's approach points the way forward. Therefore, this achievement indicator was based on the parental and other family leave provisions in Quebec, with the exception of family time for fathers, which we have set at two weeks, the measure UNICEF uses, in the belief that this is a more achievable target in the short term.

The fact that, to date, progress on parental leave policy outside of Quebec has been driven by changes at the federal level may raise questions about the practicality of this achievement indicator. Yet, Quebec's program demonstrates that provinces could consider implementing a similarly independent approach, or inviting the federal government to participate in further

enhancements to parental leave provisions in Canada. Indeed, the federal government has already expanded parental leave benefits to cover self-employed parents effective January 2011 (Service Canada, 2010).

## 5.1.2 Child poverty

### 5.1.2.1 UNICEF indicators and findings

Moving from time to resources, research conducted for UNICEF to prepare the report card confirms the previously-noted findings that children living in low-income families are more likely to be developmentally vulnerable. While early childhood programs targeting children from low-income and vulnerable families may ameliorate the effects of poverty, Bennett notes that “a continuing high level of child and family poverty in a country undermines these efforts and greatly impedes the task of raising educational levels” (2008, p. 18). This research, a review and analysis of early childhood services, was published in the Working Paper “Benchmarks for Early Childhood Services in OECD Countries” (Bennett, 2008). Specifically, he notes:

Poverty is statistically linked with a variety of poor outcomes for children, from low birth weight and poor nutrition in infancy to increased chances of academic failure, emotional distress, and unwed childbirth in adolescence (Brooks, Gunn and Duncan, 1997)....

Large-scale country evaluations ... confirm the link between low socio-economic status (SES) and low educational achievement in school.... Poor parents also tend to rely on home-based childcare, where the quality and amount of attention children receive can be significantly inferior to that of professional facilities. (p. 23)

In response, UNICEF recommends that low-income families “receive employment, income and social supports to help them to maintain their children above the poverty line, and to ensure their equitable access to early development and education services” (Bennett, 2008, p. 9) with the establishment of this benchmark:

- *UNICEF Benchmark recommendation: Build on income support policies to reduce child and family poverty to less than 10%.*

Because the specific mix of strategies in poverty reduction initiatives may vary between jurisdictions, UNICEF established a minimum standard or outcome-based benchmark. This benchmark incorporates the OECD definition of child poverty (i.e. the percentage of families with children whose income, adjusted for family size, is less than 50 per cent of median income).

Based on the OECD definition and available data, Canada did not achieve UNICEF’s minimum standard for child poverty, which is 10%.

The challenge of addressing poverty in part reflects the current family and socioeconomic context. In order to achieve similar levels of economic wellbeing and security as those typically experienced by one-earner families thirty years ago, parents today must participate in more paid employment, typically by a second adult (Sauve, 2009). The National Council of Welfare reports that the percentage of Canadian two-parent households with children under

six considered “poor” would triple in the absence of maternal earnings (National Council of Welfare, 2002, Table 8.3).

Given the strong association between inequality and developmental health outcomes, growing income inequality in Canada is linked to ongoing concerns about child and family poverty. The OECD notes that in Canada, “after 20 years of continuous decline, both inequality and poverty rates have increased rapidly since the mid-1990s,” and that “Canada spends less on cash benefits such as unemployment benefits and family benefits than most OECD countries. Partly as a result, taxes and transfers do not reduce inequality as much as they do in many other countries. Furthermore, their effect on inequality has been declining over time” (OECD, 2008, p. 1).

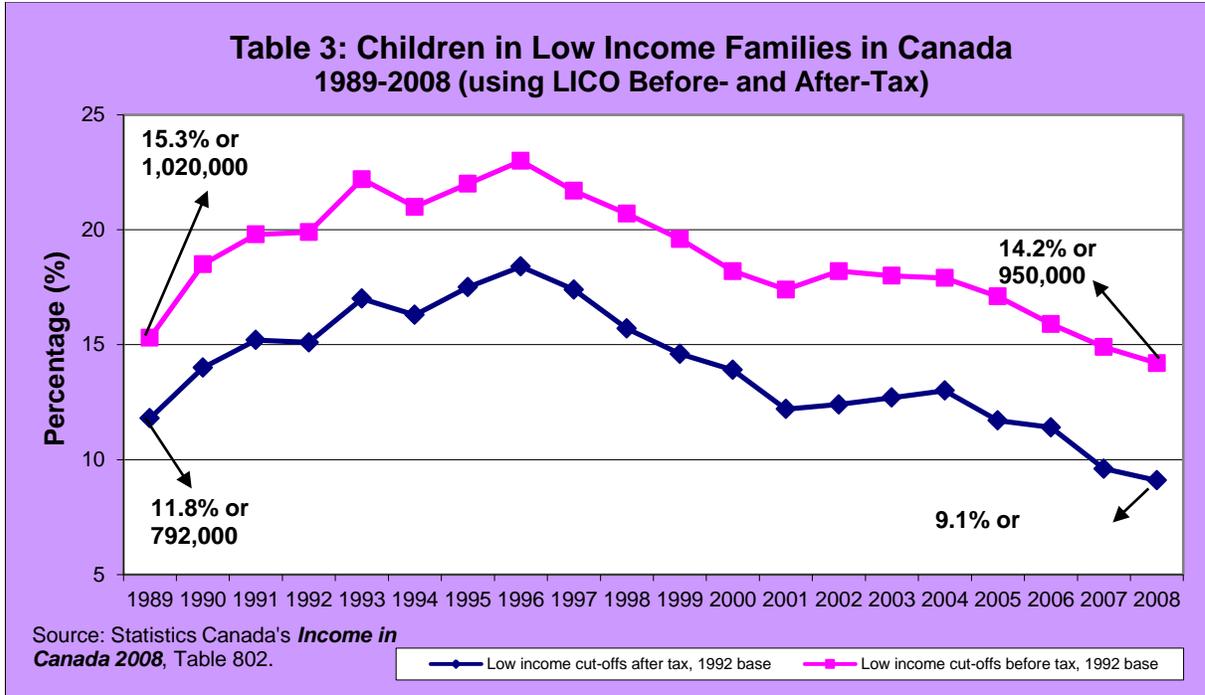
#### 5.1.2.2 Canadian Achievement Indicator 2: Child poverty

*A provincial child poverty rate of less than 10% measured in LICO before taxes.*

In December 2009, the Standing Senate Committee on Social Affairs, Science and Technology tabled a report entitled *In From the Margins: A Call to Action on Poverty, Housing, and Homelessness*, which concluded: “We believe that eradicating poverty and homelessness is not only the humane and decent priority of a civilized democracy, but absolutely essential to a productive and expanding economy benefitting from the strengths and abilities of all its people” (Standing Senate Committee on Social Affairs, Science and Technology, 2009, p. 3).

Canada does not have an official poverty line; however, Statistics Canada produces several poverty measures, including two measures of Low-Income Cut Off (LICO). The first is based on before-tax income including transfers, and the second is based on after-tax income. These differ from the OECD definition of child poverty utilized in the UNICEF report card, as previously noted. Our assessment tool proposes an achievement indicator based on Statistics Canada’s before-tax LICO. Campaign 2000 notes there is about a five percent difference in child poverty rates between these two measures. The before-tax measure might be considered an indicator of the adequacy of income flowing into the family and the after-tax measure an indicator of the adequacy of disposable income. The 2008 after-tax LICO for one parent with one child in a large urban centre is \$22,361. It is important to note that the LICO is currently based on 1992 spending patterns and has not been adjusted since then. A recent analysis maintains that it is very likely that poverty rates would be higher under a re-based LICO that reflected current consumption patterns (Campaign 2000, 2010).

Despite Canada’s ranking as one of the world’s wealthiest nations, poverty rates have remained stubbornly high in most provinces over the last two decades—even during periods of substantial economic growth and government budgetary surpluses year after year. The following figure *Table 3 from the Campaign 2000 Report Card 2010* (p. 2) shows that regardless of the measure used, the trend is similar for poverty rates in Canada.



**Figure 2 Percentage of Children in Low-income Families in Canada from 1989 to 2008**

Using LICO before- and after-tax (from Campaign 2000, 2010, Chart 1, p. 2). Used with permission.

For the purposes of our assessment tool, the achievement indicator chosen is the one used by UNICEF, which is 10%, as it is very close to the lowest level of poverty seen among the provinces in Canada. Campaign 2000 (2010) reports that Prince Edward Island has the lowest child poverty rate in the country at just under 10.2%, although some caution is suggested in using this figure since the population (sample size) is small. At the opposite end, at approximately 17%, Manitoba has the highest rate of child poverty in Canada, followed by Saskatchewan at 15.6%.

Increasing parental employment has also increased concerns about work/life balance. The Vanier Institute of the Family reports that the “average time spent with family on a typical work day has shrunk by about three-quarters of an hour, from 250 minutes per day in 1986 to 206 minutes in 2005—a drop of 18%” (Sauve, 2009, p. 7). When juggling work and family, however, women are much more likely to reduce their paid work hours and/or shoulder the majority of the caregiving workload on top of employment.

The dilemma facing many families today is clear, as are the stresses associated with their choices. Families that limit paid work hours risk economic insecurity, while families that increase paid work hours for either personal reasons or to decrease the chances of falling into poverty have less time for caring (Kershaw et al., 2009). Lone-parent families, particularly in the case of mothers, are especially susceptible to the stresses associated with lack of family time and resources. While the expanded parental leave and increased income supports recommended by UNICEF will help to address work/life balance concerns, the evidence also suggests Canada needs to move from discussion to action on family-friendly

labour standards and workplace supports. This leads into the second of the three sets of benchmarks.

## **5.2 HEALTH, EDUCATION, AND CARE SERVICES AND SUPPORTS**

Four framework elements are grouped within this category: (1) universal outreach for essential health services, (2) early childhood education and care access, (3) early childhood education and care staff education and training, and (4) early childhood education and care staff-to-child ratios. Together, these elements provide an indication of the quality, availability and accessibility of significant services that support developmental health.

### **5.2.1 Universal outreach for essential health services**

#### *5.2.1.1 UNICEF indicators and findings*

The UNICEF Innocenti report card acknowledges that extraordinary progress has been made in most Western industrialized countries in providing preventive care, information and support for mothers during pregnancy and afterwards for mothers and young children. Yet, there remains a particular need to assess the extent to which young children in marginalized families are benefitting. While acknowledging the difficulty of establishing an appropriate measure for this goal, UNICEF proposed the following proxy measures for “universal outreach for health”:

- *UNICEF Benchmark recommendation: Build on universal health services to achieve benchmark numbers, by achieving at least two of the following three measures:*
  - *Infant mortality rate of less than 4 per 1,000 live births.*
  - *Proportion of babies born with low birth weight (below 2,500 grams/5.5 pounds) less than 6 per 100.*
  - *Immunization rate for 12- to 23-month-olds (average of measles, polio, and diphtheria, pertussis and tetanus [DPT3] vaccinations) exceeds 95 per cent.*

In order to meet this composite benchmark, UNICEF noted that “setting the bar deliberately high [...] reveals those OECD countries that are succeeding in reaching even the families who are hardest-to-reach by virtue of poverty, cultural isolation and social exclusion” (UNICEF, 2008, p. 29). The report card notes that Canada achieved one of the three measures, specifically, 5.9% of babies are born with low birth weights. Canada was close to achieving another of the three measures, with 92.3% of young children immunized. The infant mortality rate in Canada was 5.3 per 1,000 live births at the time the UNICEF report card was developed, using data from 2004, and was 5.1 per 1,000 using 2007 data.

What is particularly interesting about the infant mortality rates for Canada is their trend over time, in comparison to other countries. In the 1960s, Canada’s infant mortality rate was over 25 per 1,000. At that time, the internationally lowest infant mortality rates were recorded in the Nordic countries (Sweden, Norway, Finland), at below 20 per 1,000. Through the 1980s and 1990s, Canada’s infant mortality rate was improving but not as dramatically as that of Nordic countries. Since 1990, however, the infant mortality rate in Canada has remained fairly steady at 5 per 1,000, whereas rates have continued to improve in other countries. For

example, the Nordic countries currently report rates of about 3 per 1,000 (Conference Board of Canada, 2010).

It is striking that significant improvements in infant mortality rates in Canada during the 1960s, 1970s and 1980s coincided with the implementation of comprehensive social programs, while the beginning of the stagnation of the rate coincides with reduced public funding for those programs (Clyde Hertzman, personal communication, 2010). Although the UNICEF benchmark is not prescriptive about how universal health and preventive services should be delivered, the Bennett working paper (2008) does briefly discuss the potential for mounting these services through a:

... comprehensive network of health and family support services ... to assist families with information and primary health care, in particular, when families are rearing young children ... supported financially by public funds, and accessible to all families needing advice, health care, information or assistance. The network should maintain a strong focus on child and family health (e.g. pre- and postnatal health care), child development, parenting, and provide home-visiting and other outreach services to families with young children. In particular, families from disadvantaged backgrounds will receive first call on services.... Families with disabilities or having a child with disabilities are also a priority for support. (Bennett, 2008, p. 19)

These remarks are consistent with the concept of building an integrated platform for the delivery of preventive health, developmental monitoring and parenting supports, linked to other services such as early childhood education and care services and early intervention.

A body of evidence from research conducted in the United States (Coalition for Evidence-Based Policy, 2010; Gomby, 2005; Zigler et al., 2008) provides important policy implications for the parenting support programs envisioned in these approaches. In summary, home visiting and other parent-focused programs are more successful in promoting positive parenting practices, while child-focused programs are more successful in promoting child outcomes. Thus, in order to advance developmental health, it is particularly important to ensure that children in high-needs families participate in high quality early childhood education and care programs (often abbreviated as ECEC)<sup>7</sup>. In addition, as the UNICEF report card illustrates, concomitant poverty reduction programs are essential<sup>8</sup>. Research on home visiting programs in particular also reinforces the importance of addressing the quality of and access to services for families (Gates et al., 2010; Coalition for Evidence-Based Policy, 2010; Doherty, 2007; Gomby, 2005; Zigler et al., 2008).

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<sup>7</sup> This is the general term used in this document to refer to state regulated programs which provide non-parental learning and care for young children. Such programs may also be called child care, early learning and child care (ELCC), daycare, preschool, pre-kindergarten, kindergarten, etc. Programs may also include parenting resources, information and support.

<sup>8</sup> These findings were recently demonstrated by Zigler in his review of the Parents as Teachers (PAT) program. The study found that poor children who received both PAT and quality education and care services had school readiness scores similar to more advantaged children. However, by third grade, more affluent children had higher achievement scores than poor children. Zigler concludes that the “benefits accruing from a five-year intervention (three years of home visiting and two years of preschool) cannot totally offset the negative consequences of growing up in poverty (p. 117).”

### 5.2.1.2 *Canadian Achievement Indicator 3: Universal outreach for essential health services\**

- a. *Infant mortality of less than 4 per 1,000 live births;*
- b. *Proportion of babies born with low birth weight (below 2,500 grams) less than 6 per 100 live births;*
- c. *Immunization rate for 12- to 23-month-olds (measles, mumps and rubella) exceeds 95% (number of doses based on province's immunization schedule at 24 months).*

*\* At least two of the three requirements must be met to achieve this indicator.*

UNICEF uses these three proxies as a measure of universal and preventive health care for very young children. We have accepted these as the achievement indicators in our assessment tool because they are generally well accepted and provincial data are routinely available. For example, we are using measles, mumps and rubella (MMR) immunization rates, based on the province's immunization schedule at 24 months, as they are the most readily accessible.

However, it is important to note that two indicators, infant mortality and low birth weight, are influenced by a range of factors that include, but are not limited to, universal access to and effectiveness of health services during pregnancy. For example, behavioural factors during pregnancy (such as smoking, alcohol use, and nutrition) and broader social and economic factors (such as healthy relationships, supportive families and adequate resources) are all determinants of infant mortality and low birth weight. On the other hand, immunization rates (particularly MMR rates at 24 months) are a good indicator of access to and effectiveness of preventive health services in the early years.

Another indicator of preventive routine health services is in the area of oral/dental health indicators, such as the percentage of children with cavities. Despite the importance of early oral/dental health, this indicator is not well utilized in the early years. Furthermore, no Canadian jurisdictions currently have universal access to dental care, so access is dependent on private family resources and arrangements, generally with some provincial support for families with very low incomes.

According to Statistics Canada, infant mortality rates recently increased slightly for the first time in Canada since 1982, moving from 5.0 per 1,000 live births in 2006 to 5.1 in 2007. Provincial rates (2007) vary from a low of 3.3 in Nova Scotia to a high of 7.5 in Newfoundland and Labrador (Statistics Canada, 2010).

## **5.2.2 Early childhood education and care access**

The UNICEF report card placed significant emphasis on monitoring progress towards universal access to consistent, high quality, culturally relevant early childhood education and care services in communities. Five of the ten benchmark recommendations addressed this topic:

- *UNICEF Benchmark recommendations: Build on early childhood education and care to achieve a minimum of the following:*

- *Subsidized and regulated<sup>9</sup> services are available for 25% of children under age three;*
- *Subsidized and accredited services are available for 80% of four-year-olds for a minimum of 15 hours per week;*
- *80% of staff working with children, including those in family child care, have relevant training (minimum of an introductory course), with the goal of moving towards pay and working conditions in line with wider teaching or social care professions;*
- *50% of staff in publicly supported and accredited centres have a minimum of three years' tertiary (post-secondary) education with recognized qualifications in early childhood studies or a related field;*
- *Ratio of pre-school children to trained staff does not exceed 15:1 and group size does not exceed 24 children.*

Overall, Canada's ranking on the five early childhood education and care measures reflects that there are generally three types of early childhood education and care programs for children under six:

- a) *Kindergarten* – Provincial education systems generally entitle all five-year-old children to at least part-day, free programs taught by educators with university degrees. In addition, some four-year-olds access pre-kindergarten programs or junior kindergarten programs, and some five-year-olds access full-day programming. However, part-day, school-year programming does not address the full-day needs of many parents. In 2007, the workforce participation rate of mothers of children aged three to five was 77%; aged zero to two, 69% (Beach et al., 2009). In addition, kindergarten educators do not generally have specialized training in early child development and child-to-staff ratios usually exceed 15:1 (CRRU, 2010).
- b) *Licensed child care* – This includes non-parental, state-regulated programs provided in both centres and private homes, and may be part-day (often called preschool or nursery school) or full-working-day (often called child care or daycare). There is no entitlement to services, which are generally privately planned and delivered by both not-for-profit and (in most provinces) commercial operators. Approximately 20% of children aged zero to five had access to a regulated space in Canada in 2008. It is likely that proportionately fewer of these spaces are available for children under three; however, data are not available to distinguish between access rates for children under and over age three. While child-to-staff ratios and group size are generally consistent with UNICEF-recommended levels, training requirements do not consistently meet both related benchmarks. Furthermore, outside of Quebec and Manitoba, fees are market-determined. Relative to other developed countries, public funding is weak, parent fees are relatively high, staff compensation is low, and quality is inconsistent.

<sup>9</sup> "Regulated" is the general term used in this document to refer to state regulated programs which provide non-parental learning and care for young children. "Accredited" (Bennett, 2008) refers to early education services corresponding to International Standard Classification of Education requirements: regular attendance in centre- or school-based programs designed to meet educational and developmental needs and with properly trained staff to provide education or pedagogical programming for children.

- c) *Unregulated care* – Generally this involves in-home family care, but may also involve informal preschool programs. Aside from differentiating between illegal and unregulated care, there are minimal or no requirements (i.e. oversight, regulation, training, reporting, etc.) that permit public monitoring. Little public information exists regarding availability, affordability and quality. However, international evidence suggests that unregulated care is generally of lower quality (OECD, 2001; OECD, 2006, as cited in Bennett, 2008).

#### 5.2.2.1 UNICEF indicators and findings

The first two recommendations relate to access, based on evidence indicating that early childhood education and care services should be organized locally to equitably include all children “regardless of capacity, origin or background” (Bennett, 2008, p. 41). UNICEF proposes that vulnerable children (generally interpreted as those at risk for or experiencing social, physical or cultural exclusion) have first call on accessing early childhood resources and services. Consideration should also be given to the needs of parents (e.g. providing a choice of services with quality programming that are consistently available, affordable, socially and culturally inclusive, and conveniently located).

For children under three, the recommendation of a 25% minimum coverage rate for child care balances several realities. There is a need to support mothers’ labour force participation, as the majority of mothers of young children are working at least part-time. The European Union has already established a target of 33% for this age group. Also, several countries currently have unregulated child care services of poor quality. Therefore, the benchmark establishes a lower target than the European Union, but requires spaces to be subsidized and regulated by government in order to promote quality. Publicly-subsidized parental leave of up to 18 months after the birth of a child reduces demand for child care services for this age group. Finally, some parents will choose to care for their children primarily at home.

For children aged four, the recommendation of 80% coverage establishes a minimum target on the path towards universal access to and regular attendance in centre- or school-based programs designed to meet children’s developmental needs. The recommendation reflects research suggesting that young children benefit greatly from conditions leading to readiness for school at least two years before compulsory schooling begins (Lee & Burkham, 2002), and that high quality child care for preschool-aged children has broad benefits for children’s developmental health (Goelman et al., 2008). Bennett reports that there is also widespread parental acceptance of and expectation that their children will participate in early childhood education and care programs. These programs are valued both for the socializing and education they provide for children, and for the opportunities they provide to parents, especially mothers. Most European countries provide free or highly subsidized half- or full-day early education programs for all young children from the age of three years (Bennett, 2008).

UNICEF acknowledges that there are challenges with this access benchmark. For example, 15 hours of programming weekly may be too short to support parental labour force

participation. It is also important to note that UNICEF does not count children in unlicensed family child care or non-subsidized private services, explaining that:

The requirement [for both regulated and subsidized services] is introduced to measure the commitment of government to supporting childcare that is both affordable and of quality. Despite good intentions, local family day care and private services may not be able to provide either quality or affordability. Without government subsidies, they may be obliged either to accept only families that can pay well or to cut back on staff training and wages. In addition, the practice of tolerating unlicensed childcare leads to significant under-reporting of the use of childcare. (Bennett, 2008, p. 44)

#### 5.2.2.2 *Canadian Achievement Indicator 4: Early childhood education and care access*

*A minimum of 40% of all children under six (outside of kindergarten) have access to regulated and subsidized services.*

Canadian data do not tend to distinguish between different age categories, so our proposed assessment tool considers the percentage of children under six with access to an early childhood education and care space other than kindergarten<sup>10</sup>. The Childcare Resource and Research Unit reports that Prince Edward Island has the highest access rate for this age group, at 41%, so the proposed target considered achievable for this indicator in the near term is 40% (Beach et al., 2009, Table 9).

Although this achievement indicator is still less than the average of the two UNICEF benchmarks and less than the current average OECD access levels, we acknowledge that achieving this figure will require significant growth in some provinces. Even Quebec does not yet achieve this figure, and Saskatchewan has regulated child care spaces for only 9.1% of its young children. The public planning and resources required to move towards the proposed achievement indicator are discussed in the next and final section of the proposed assessment tool.

### 5.2.3 **Early childhood education and care staff education and training**

#### 5.2.3.1 *UNICEF indicators and findings*

Even with the caveat of publicly subsidized and regulated child care, however, the access benchmarks do not substantially address quality considerations. Regarding the quality benchmark, UNICEF acknowledges that it would be preferable to require all staff working with young children to have the equivalent of one year of relevant post-secondary education. However, so few countries are near this standard that a lesser benchmark was used.

Regarding the inclusion of family child care in this benchmark, UNICEF indicated that:

<sup>10</sup> It is already understood that kindergarten for five-year-olds (and some four-year-olds in certain provinces) is available to all families in Canada, at no cost. However, despite the fact that most parents participate in the paid labour force, kindergarten generally provides only part-day services, such that many families require additional ECEC services. Some provinces are moving towards full-school-day services for four- and five-year-olds, which may reduce the demand for additional ECEC services in the future.

In general, family day-carers work as independents, setting a mutually agreed fee with parents, but they can also be members of a municipal or association network. The latter arrangement is generally preferable as reasonable fees can be set and respected, training made available, and back-up provided in case of illness or other lack of presence. In addition, recognition of the profession can carry with it the provision of social insurance, paid holidays and pensions. (Bennett, 2008, p. 54)

The *Starting Strong* reports (OECD 2001, 2006), among many others, document the research that supports the benchmarks regarding staff training in the UNICEF report card, showing that staff working with children in early childhood programs have a major impact on children's early development and learning:

Research shows the links between strong training and support of staff—including appropriate pay and conditions—and the quality of early childhood education and care services (Bowman et al., 2000; CQCO Study Team, 1995; EC Childcare Network, 1996; Whitebook et al., 1990). In particular, staff who have more formal education and more specialized early childhood training provide more stimulating, warm, and supportive interactions with children (CQCO Study Team, 1995; NICHD, 1997; Phillipson et al., 1997; Barnett 2003; EPPE Project, 2004). (OECD *Starting Strong reports*, 2001, 2006, as cited in Bennett, 2008, p. 55)

The need for appropriately trained early childhood education and care staff has two key policy implications. First, given the low remuneration for child care staff in many countries, recruitment and retention of skilled staff require improved qualifications, working conditions and salaries. Second, in countries where primary teachers without early childhood training are providing early childhood education and care services, programs tend towards “schoolification” with whole group teaching, large groups and weak attention to the natural learning strategies of young children.

#### *5.2.3.2 Canadian Achievement Indicator 5: Early childhood education and care staff education and training*

*A minimum of 50% of staff in accredited ECEC services have a minimum of three years' post-secondary education with a recognized qualification in early childhood studies.*

Recognizing the importance of staff training in achieving quality in early childhood education and care programming, the UNICEF benchmark proposed that “at least 50 per cent of staff in early education centers supported and accredited by governmental agencies should have a minimum of three years post-secondary education with a recognised qualification in early childhood studies or a related field” (Bennett, 2008, p. 61). The NIEER has established higher staff training requirements in its national quality standards for preschool programs, assessing state regulations for the inclusion of: lead teacher – bachelor's degree, specialized training in child development; assistant teacher – child development diploma; all staff – 15 hours of professional development annually (Barnett et al., 2010).

Current provincial standards for kindergarten teachers in Canada generally include a university degree, but do not require specialized training in child development. Regarding child care, training requirements vary widely across provinces. At the higher end, Quebec recently introduced a requirement for two-thirds of centre-based staff to be graduates of

university/college ECE programs. Similarly, Manitoba requires two-thirds of staff working with young children to have a two-year ECE college diploma (Beach et al., 2009).

Thus, our proposed assessment tool provides an indicator on staff training that is evidence-based (significant, accredited post-secondary education that includes early childhood specialization) and achievable in the near term (Quebec and Manitoba are already at or near the indicator). Nonetheless, it is important to note that:

1. The literature documents significant challenges for provinces to meet the educational requirements outlined in current provincial regulations because of the lack of available early childhood educators. Inadequate compensation is consistently identified as a key recruitment and retention issue in the child care sector (Child Care Human Resources Sector Council, 2009).
2. The training standards for licensed family child care in Canada also vary between provinces but are consistently lower than for centre-based care (ranging from no requirement to about 60 hours of training). If provinces and families continue to include family child care as part of the early childhood education and care service landscape, this is a serious issue that should be addressed in the planning process.

## 5.2.4 Early childhood education and care staff-to-child ratios

### 5.2.4.1 UNICEF indicators and findings

The final benchmark regarding quality relates to the combination of child-to-staff ratios and overall group size. UNICEF indicates the benchmark envisions a lead educator for each group of 24 children, supported by at least one trained assistant. Effectively, the maximum child-to-staff ratio is therefore 12:1. However, the report card also acknowledges there are a range of perspectives on the appropriateness of this benchmark. UNICEF notes the research indicating that “child:staff ratios should vary with group size and the age of the child, becoming higher (more children per adult) as children become older and more autonomous” (Bennett, 2008, p. 57).

UNICEF suggests that “a range of structural characteristics (adult:child ratios, educator qualifications and work conditions, pedagogical expertise, group process and practice, cultural expectations) determine quality, and that no one structural characteristic can uniquely predict process quality” (Cryer, D., Tietze, W., Burchinal, M.R., Leal, T. & Palacios, J., 1999, as cited in Bennett, 2008, p. 58). However, UNICEF also acknowledges that “[t]he tendency in the last decade in almost all countries has been to reduce group sizes, in particular when disadvantaged children or children with special needs are present. The majority of American states have now achieved ratios of 10:1 for pre-kindergarten children (3-5 years), while the Nordic countries practice even lower ratios” (Bennett, 2008, p. 59).

### 5.2.4.2 Canadian Achievement Indicator 6: Early childhood education and care staff-to-child ratios

*A minimum of one staff member per ten children in programs for three- to five-year-olds.*

UNICEF acknowledges the research rationale in support of the more stringent benchmark established by the NIEER (Barnett et al., 2010), which is a staff-to-child ratio of 1:10 for three- and four-year-olds. Similarly, the regulations describing early childhood education and care staff-to-child ratios across Canada show that these ratios tend to decrease as children age. Specifically regarding licensed child care, at age three most provinces already meet or improve upon the 1:10 staff-to-child ratio. By age five, child care programs in most provinces meet or improve upon the UNICEF benchmark (Beach et al., 2009).

However, kindergarten classes do not generally meet the UNICEF benchmark. In the past, the rationale for accepting more children per staff in kindergarten may have been based on the part-day, part-year nature of the programs for the oldest children in the UNICEF range, and the fact that staffing qualifications are higher for kindergarten educators than for those in licensed child care. However, as more provinces are moving towards full-school-day kindergarten and the incorporation of younger children into school-based programs, provision for adequate staff-to-child ratios increases in importance. Therefore, our proposed assessment tool adopts the NIEER standard already generally modeled by regulated child care programs for three- to five-year-olds in Canada (Barnett et al., 2010).

It is important to note that the proposed achievement indicators reflect *minimum* benchmarks; an improvement on these benchmarks, as is the case for many current provincial child care staff-to-child ratios, suggests a policy strength to be commended and protected.

## **5.3 PUBLIC PLANNING, FUNDING AND MONITORING**

### **5.3.1 Public planning and monitoring**

#### *5.3.1.1 UNICEF indicators and findings*

Early childhood governance has received significant attention in UNICEF benchmark discussions. In particular, UNICEF stressed the importance of overcoming the frequent division between relatively well-funded, universal public early education services and relatively poorly funded, poorly regulated privatized child care services. UNICEF defines governance and explains its importance in early child development as follows:

Governance relates to the allocation of responsibility for policy-making and to the values, structures and instruments that sustain policy in a given field. In the early childhood field, the exercise of governance includes a wide range of functions; e.g., to ensure access on an equitable basis to all children; to enhance quality through attention to staffing and quality initiatives; to foster research and data collection; to monitor and evaluate the goals and outcomes set for the system. (Bennett, 2008, p. 28)

UNICEF highlighted the importance of research and consultation with parents in developing early childhood policy as well as the need for a strong regulatory framework for both public and private settings. UNICEF's deliberations led to the recommendation that policy, funding and regulatory responsibility for young children be assigned to one government ministry.

In the end, one benchmark was chosen essentially as a proxy for these issues:

- *UNICEF Benchmark recommendation: Develop a national plan for the organization and financing of early childhood services, with priority for disadvantaged children.*

The synthesis of a range of issues into the singular planning benchmark reflects the objective of ensuring that the benchmarks are practically measurable and meaningful to a broad range of stakeholders. It also reflects the importance of comprehensive planning and monitoring of actual results when compared with plans. Public performance management literature and guidelines in Canada confirm that comprehensive plans include timelines, targets, indicators of success, benchmarks and outcome measures—all of which are supported by comprehensive and high-quality data collection systems and program evaluation activities (Anderson & Findlay, 2007).

Canada did not achieve this benchmark, as it does not have a national strategy for promoting and measuring progress towards established benchmarks for early developmental health<sup>11</sup>. One rationale frequently provided for the lack of such a strategy is that early developmental health is a provincial responsibility. However, even with that rationale, a document such as *The Well-Being of Canada's Young Children* (Government of Canada, 2008) does not provide a consolidation of provincial strategies.

#### 5.3.1.2 Canadian Achievement Indicator 7: Public planning and monitoring

*Provinces have developed public plans to provide families with the time, resources and access to high-quality community services required to promote young children's developmental health, specifically addressing the needs of vulnerable children. Plans should include targets and timelines to meet these targets, with monitoring and public reporting on progress.*

Federal, provincial and territorial governments in Canada have various plan *elements* in place for enhancing early developmental health. Some are advancing poverty reduction strategies (family resources), while others are incrementally striving to increase the number of child care spaces (access to quality community services). Some are trying to recruit and retain more qualified early childhood educators (quality community services), while others are strengthening parenting programs (access to quality community services). Several provinces are considering ways to better coordinate and/or integrate the “care” and “learning” components of early childhood education and care (access to quality community services), and the federal government has expanded maternity and parental leave to accommodate self-employed parents (family time).

In addition, several of the previously-mentioned FPT agreements and federal transfers related to early childhood continue to this day, and they outline the shared understanding

<sup>11</sup> For example, the 2008 report of the Government of Canada on the well-being of young children (Government of Canada, 2008) provides comprehensive information on a range of measures. Some of these measures, such as those describing child poverty (after-tax LICO) and health outcomes (e.g. mortality rates) are consistent with the measures suggested by UNICEF. However, this periodic reporting does not provide actual results in relation to a public plan, nor does it establish performance targets and benchmarks. Finally, the report does not include indicators related to the quality of, access to and investment in ECEC services as suggested by both the OECD and UNICEF.

between the two levels of government regarding principles, areas of investment and public reporting commitments.

However, planning in most provinces has not yet incorporated *all* of the policy elements that are essential for early developmental health. Furthermore, existing plan elements tend to be aspirational and general<sup>12</sup>, whereas public performance management approaches recommend the establishment and public reporting of: (1) clear goals and objectives (2) timelines and targets and (3) key indicators of success<sup>13</sup>.

There are two noteworthy, although incomplete, exceptions to these generalized observations. First, in 1997 Quebec introduced a comprehensive family policy that substantially addressed time, resources and community services. However, progress towards universal access to quality services has slowed in recent years. More recently, the Ontario government's acceptance of the 2009 report *With Our Best Future in Mind* (Pascal, 2009) along with its earlier adoption of a poverty reduction strategy, suggests that this province may have a comprehensive plan for enhancing developmental health in Canada. Taken together, these Ontario strategies propose a comprehensive set of public policies and investments that can expand parental leave and reduce work/life conflict (family time), reduce poverty (family resources) and move towards universal access to quality, publicly funded early childhood education and care and other family support services (access to quality community services). However, both the Quebec and the Ontario plans are incomplete in that they do not have clear timelines and targets for full implementation.

### **5.3.2 Public funding of early childhood education and care services**

#### *5.3.2.1 UNICEF indicators and findings*

The most recent OECD data referenced in the UNICEF report card indicated that, on average, developed countries invest about 0.7% of GDP in early childhood education and care services. However, UNICEF suggested that this investment level is too low because "early childhood services in countries at this level of spending are of observably poor quality. This is particularly so in the childcare sector, but low quality can be observed also in early education" (Bennett, 2008, p. 38).

Based on consultations with countries, UNICEF adopted the recommendation of the former European Commission Network for Childcare, urging governments as follows:

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<sup>12</sup> For example, the BC Government envisions: "all members of the community and all levels of government sharing a commitment to the early years that promotes healthy children and responsible families living in safe, caring and inclusive communities." Manitoba, through the Healthy Child Manitoba initiative, has implemented a cross-ministerial planning council to coordinate early childhood services. While there is no long-term plan, the province has implemented five-year planning cycles.

<sup>13</sup> A 2007 review of public reporting under the FPT agreements confirmed these challenges, noting that "few governments have clear public reporting that allows the public to easily track progress.... None meet all of the performance and reporting requirements outlined in the FPT agreements. This central finding is highlighted by the fact that of the 13 jurisdictions reviewed, eight are missing reports for one or more of the required years so the public cannot track all of the federal transfers and total investments in child care services." *Making the Connections: Using Public Reporting to Track the Progress on Child Care Services in Canada*, Executive Summary, p.1 [www.ccaac.ca/mtc/en/pdf/mtc\\_execsumm\\_en.pdf](http://www.ccaac.ca/mtc/en/pdf/mtc_execsumm_en.pdf).

- *UNICEF Benchmark recommendation: Build on current public investment in early childhood education and care services for children aged 0-6 years to reach at least 1% of GDP.*

Currently, Canada's total public investment in both regulated and unregulated early childhood education and care is approximately 0.33 per cent of GDP, or about half the OECD average. It is important to note that the Canadian total is influenced by expenditures in Quebec, where public investment in early childhood education and care is close to the OECD average (0.61%). Outside of Quebec, Canada invests only about one-quarter of the UNICEF benchmark (0.26%) and less than 40% of the OECD average. Appendix 1 gives a detailed description of how these estimated figures were calculated, for all provinces and the country as a whole.

When considering public investment on a per child basis, UNICEF refers to expert estimates that indicate "costs per child in a high quality early education service, with child: staff ratios equal to or less than 10 children per trained adult, range from US\$8,000 to US\$14,000 dollars annually per child 1-3 years, and between US\$6,000 to US\$10,000 per child 3-6 years" (Bennett, 2008, pp. 38-39). These figures<sup>14</sup> suggest public investment that may exceed funding for primary education, which UNICEF suggests should not be surprising given the need for lower child-to-staff ratios, longer hours of service, etc. in early childhood education and care programs.

The research suggests that, when it comes to public funding for early childhood education and care, providing direct payments to services is preferred over substantial reliance on fee subsidies or vouchers because the former approach can be structured to better respond to the measures for governance, funding and monitoring required to achieve quality and access standards (Goelman et al., 2008).

#### *5.3.2.2 Achievement Indicator 8: Public funding of early childhood education and care services*

*A minimum of 0.6% of provincial GDP spent on all early childhood education and care services, including kindergarten.*

Quebec currently invests about 0.61% of GDP in early childhood education and care services, including kindergarten, and the average investment in other provinces is about 0.28%. While our proposed achievement indicator represents substantial growth in most provinces, the evidence summarized earlier in this report confirms that this is an intermediate target on the path to achieving the UNICEF minimum benchmark of 1% of GDP invested in early childhood education and care services.

<sup>14</sup> The UNICEF report card and Bennett working paper reinforce the generally accepted expectations regarding which expenditures should be included or excluded in calculating public investment in ECEC. Specifically, for public funding provided directly to services, all direct annual operating costs should be included (e.g. staff salaries, supplies, facilities, etc.) as well as additional programming supports (e.g. parenting education, nutrition, etc.) and costs related to monitoring and evaluation. Public funding provided to families (or direct transfers to families) to support their access to services is also included, provided it is specifically designated for ECEC purposes. This funding may be in the form of cash, vouchers, fee subsidies and/or tax credits. However, general family allowances and child benefits are not to be included.

We acknowledge that assessing public investment in early childhood education and care services based on a percentage of GDP has limitations. For example, due to the oil and gas industry, Alberta's GDP is disproportionately high relative to other provinces: the highest among the provinces, and 70% higher than the Canadian average (Government of Alberta, 2010, p. 9). This may help to explain why its early childhood education and care public investment results are the lowest overall. Therefore, we have considered augmenting the GDP calculation with other measures, such as public funding in early childhood education and care services per space and per child. If we assume that investments in kindergarten are comparable across the country, given similarities in approaches, then the Childcare Research and Resource Unit's (CRRU) compilation of child care funding provides helpful additional information (Beach et al., 2009, Table 12). However, CRRU data do not isolate investments for children under six so we are not able to compare the figures internationally. Nonetheless, the additional CRRU data do reinforce the GDP calculation findings regarding the relatively low public investment in early childhood education and care in Alberta. According to CRRU data, annual child care funding per child under 12 in Canada overall is \$663, ranging from \$195 in Alberta to \$1,694 in Quebec. Annual child care funding per regulated space (to age 12) in Canada overall is \$3,560, ranging from \$1,407 and \$1,429 in Prince Edward Island and Alberta respectively to \$4,691 and \$5,079 in Quebec and Yukon Territories respectively.

## 6 CONCLUSIONS AND NEXT STEPS

Canadians take justifiable pride in creating a society that is inclusive, is open to change and accords fair opportunity for all to succeed. The values of interdependence, equity and justice, and ingenuity are steeped in a society that drives policy and institutions towards innovation, fairness and good stewardship. These qualities of Canadian life are reflected in Canada being consistently ranked at or near the top of world rankings in such areas as human development, good governance, stability and, recently, in financial governance and accountability. One area in which Canada is not a world leader but rather a distant laggard is in the care of the youngest of our society, our children. In rankings of early childhood development, Canada has consistently lagged far behind a majority of OECD nations. This has to change. Canada needs to do much better in taking care of its children, not because moving up a league table has any inherent value, but because failing our children means failing ourselves as a society now and in the future. Without healthy children today we simply will not have a healthy and prosperous Canada tomorrow.

The case for supporting children in their earliest years has been made repeatedly—by scientists, economists, teachers and caregivers, organizations dedicated to the wellbeing of children, and parents. Some research based on neuroscience and early childhood development is highlighted in this report. We present the economic argument, or the business case, that asserts that the best investment we can make today is in children, enhancing the support and policies that would give them the best start in life. It is now time for politicians and policy makers to act on this knowledge. In so doing, we need to know where we stand in relation to well-accepted early childhood development targets and this report contributes to this endeavour.

We start with the best evidence available internationally that recommends what we should achieve in early childhood development. We have taken a series of recommendations and targets that UNICEF has established in recent years and adapted them to the Canadian context. Each recommendation is evaluated on its merits and assessed as to why its adoption may be necessary to enhance the lives of Canadian children. The Canadian Family Policy Assessment Tool proposes a series of eight indicators to track provincial progress in providing families with time, resources and community services to enhance children's lives. Intermediate targets for each indicator generally reflect the highest current level of achievement in a Canadian province. This approach suggests that, if one province is able to meet this standard, the target should be achievable for all. We have used the four Western provinces as a sample to test this tool.

The targets in this tool are ones we believe can be achieved in the near term. They are meant as a starting point, not an end point. Ultimately, early childhood developmental health promotion in Canada requires coordinated public policy that integrates direct support of families with community services, informed by a robust program of research and evaluation.

This project provides a unique contribution to policy monitoring in Canada through the development of a proposed “made-in-Canada” assessment tool. The assessment tool addresses the Canadian context, acknowledging the realities of federal/provincial/territorial

relations, the need for near-term achievement indicators that positively motivate progress towards the UNICEF benchmarks and the availability of Canadian data.

Our goal is to put a tool in policy makers' hands to enable them to judge where we are now and where we need to be in relation to eight important developmental measures that matter to children. It ultimately is a tool for the Canadian public as well, which in their hands would enable them to hold their political representatives accountable in the matter of why we are or are not meeting the internationally accepted standards that would benefit all children in our society.

## REFERENCES

- Alberta Human Rights Commission. Government of Alberta. (2010). *Family Leave*. Retrieved from: [http://www.albertahumanrights.ab.ca/employment/employee\\_info/accommodation/family\\_leave.asp](http://www.albertahumanrights.ab.ca/employment/employee_info/accommodation/family_leave.asp).
- Anderson, L. & Findlay, T. (2007). *Making the Connections: Using public reporting to track the progress on child care services in Canada: Executive summary*. Retrieved from Child Care Advocacy Association of Canada website: [http://www.ccaac.ca/mtc/en/pdf/mtc\\_execsumm\\_en.pdf](http://www.ccaac.ca/mtc/en/pdf/mtc_execsumm_en.pdf).
- Barnett, W.S., Epstein, D.J., Friedman, A., Sansanelli, M.A. & Hustedt, J. (2010). *The State of Preschool 2009*. Retrieved from National Institute for Early Education Research website: <http://nieer.org/yearbook/>.
- Beach, J., Friendly, M., Ferns, C., Prabhu, N. & Forer, B. (2009). *Early Childhood Education and Care in Canada 2008* (6th ed.). Toronto, ON: Childcare Resource and Research Unit, University of Toronto. Retrieved from Childcare Resource and Research Unit website: <http://www.childcarecanada.org/ECEC2008/index.html>.
- Beach, J., Friendly, M., Ferns, C., Prabhu, N. & Forer, B. (2009). The big picture: Table 6. In *Early childhood education and care in Canada 2008*. Retrieved from Childcare Resource and Research Unit website: <http://www.childcarecanada.org/ECEC2008/index.html>.
- Beach, J., Friendly, M., Ferns, C., Prabhu, N. & Forer, B. (2009). The big picture: Table 9. In *Early childhood education and care in Canada 2008*. Retrieved from Childcare Resource and Research Unit website: <http://www.childcarecanada.org/ECEC2008/index.html>.
- Beach, J., Friendly, M., Ferns, C., Prabhu, N. & Forer, B. (2009). The big picture: Table 14. In *Early childhood education and care in Canada 2008*. Retrieved from: Childcare Resource and Research Unit: <http://www.childcarecanada.org/ECEC2008/index.html>.
- Beach, J., Friendly, M., Ferns, C., Prabhu, N. & Forer, B. (2009). The big picture: Table 15. In *Early childhood education and care in Canada 2008*. Retrieved from: Childcare Resource and Research Unit: <http://www.childcarecanada.org/ECEC2008/index.html>.
- Bennett, J. (2008). *Benchmarks for Early Childhood Services in OECD Countries*, Innocenti Working Paper 2008-02. Florence, UNICEF Innocenti Research Centre.
- Bowman, B., Donovan, M.S. & Burns, S. (2000). *Eager to Learn: Educating our Preschoolers*. Washington, DC: National Research Council. Retrieved from <http://books.nap.edu/openbook.php?isbn=0309068363&page=261>.

- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six Theories of Child Development: Revised formulations and current issues*. (pp. 187–249). London: Jessica Kingsley Publishing.
- Bronfenbrenner, U. & Morris, P. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of Child Development, Volume 1, Theoretical Models of Human Development*. (6th ed.). (pp. 793–828). Hoboken: Wiley.
- Campaign 2000. (2010). *2010 Report Card on Child and Family Poverty in Canada: 1989 – 2010*. Retrieved from Campaign 2000 website: <http://www.campaign2000.ca/reportCards/national/2010EnglishC2000NationalReportCard.pdf>.
- Campaign 2000. (2009). *Poverty reduction key to Canada's economic recovery*. News release. Retrieved from Campaign 2000 website: <http://www.campaign2000.ca/whatsnew/releases/2009ReportCardRelease.html>.
- Canadian Institute of Child Health. (2000). *The Health of Canada's Children: A CICH Profile - 3rd Edition*. Retrieved from: [http://www.cich.ca/Publications\\_monitoring.html#Profile3](http://www.cich.ca/Publications_monitoring.html#Profile3).
- Child Care Human Resources Sector Council. (2009). *Literature Review of ECEC Labour Market*. Retrieved from: [http://www.ccsc-cssqe.ca/sites/default/files/uploads/Projects-Pubs-Docs/2.10-WFS\\_LitLabourMain\\_Eng.pdf](http://www.ccsc-cssqe.ca/sites/default/files/uploads/Projects-Pubs-Docs/2.10-WFS_LitLabourMain_Eng.pdf).
- Childcare Resource and Research Unit. (2010). *Ratios for four and five year olds: What does the research say? What else is important?* Briefing Note. Retrieved from: [http://www.childcarecanada.org/pubs/pdf/BN\\_ratios.pdf](http://www.childcarecanada.org/pubs/pdf/BN_ratios.pdf).
- Cleveland, G., Forer, B., Hyatt, D., Japel, C. & Krashinsky, M. (2008). New Evidence About Child Care in Canada: Use Patterns, Affordability and Quality. *IRPP Choices*, 14(12), 2-42. Retrieved from Institute for Research on Public Policy website: <http://www.irpp.org/choices/archive/vol14no12.pdf>.
- Coalition for Evidence Based Policy. (2010). *Evidence-Based Summary for the Nurse-Family Partnership*. Retrieved from: <http://evidencebasedprograms.org/wordpress/wp-content/uploads/NFP-updated-summary-for-release-Jan2010.pdf>.
- Conference Board of Canada. (2010). *Health: Infant mortality*. Retrieved from Conference Board of Canada website: <http://www.conferenceboard.ca/hcp/details/health/infant-mortality-rate.aspx>.

- CQCO Study Team. (1995). *Cost, Quality and Child Outcomes in Child Care Centers*, Denver, CO: Department of Economics University of Colorado at Denver.
- Cryer, D., Tietze, W., Burchinal, M.R., Leal, T. & Palacios, J. (1999). Predicting process quality from structural quality in preschool programs: A cross-country comparison. *Early Childhood Research Quarterly*, 14(3), 339-361.
- Doherty, G. (2007). Ensuring the Best Start in Life: Targeting versus Universality in Early Childhood Development. *IRPP Choices*, 13 (8), 3-50. Retrieved from Institute for Research on Public Policy website: <http://www.irpp.org/choices/archive/vol13no8.pdf>.
- Domitrovich, C. E. & Greenberg, M. T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation*, 11, 193-221.
- Early Childhood Development Agreement. (2000). Multilateral Framework for Early Learning and Care (2003); Bilateral Child Care Agreements (2005). See *Child Care in Canada: The Federal Role*, parliamentary brief available at <http://www.parl.gc.ca/content/LOP/ResearchPublications/prb0420-e.htm>.
- EC Childcare Network. (1996). *Quality Targets in Services for Young Children*. Brussels: European Commission Equal Opportunities Unit.
- Elias, M. J., Zins, J. E. & Graczyk, P. A. (2003). Implementation, sustainability, and scaling-up of social-emotional and academic innovations in public schools. *School Psychology Review*, 32, 303–319.
- EPPE Project. (2004). *Effective Pre-School Education*, London: University of London, Institute of Education. Retrieved from <http://www.education.gov.uk/childrenandyoungpeople/earlylearningandchildcare/evidence/a0068162/effective-provision-of-pre-school-education-eppe>.
- Gates R, Nickel D, Muhajarine N (and the KidsFirst Evaluation Research Team). (2010). *The Effectiveness of Home Visitation Interventions Similar to KidsFirst, Saskatchewan: A Focused Literature Review*. Saskatchewan Population Health Evaluation Research Unit, Saskatoon, Canada. Retrieved from: <http://kidskan.ca/node/197>.
- Goelman, H., Anderson, L., Kershaw, P. & Mort, J. (2008). *Expanding early childhood education and care programming: Highlights of a literature review, and public policy implications for British Columbia*. Human Early Learning Partnership. Retrieved from Childcare Resource and Research Unit website: <http://earlylearning.ubc.ca/media/uploads/publications/lit-review-highlights-nov-08.pdf>.

- Gomby, D. S. (2005). *Home Visitation in 2005: Outcomes for Children and Parents, Invest in Kids Working Paper No. 7*. Committee for Economic Development, Invest in Kids Working Group. Retrieved January 13, 2012 from: <http://legis.wisconsin.gov/lc/committees/study/2008/SFAM08/files/GombyHVoutcomes2005.pdf>.
- Government of Alberta. (2010). *Energizing Investment*. Retrieved from: <http://www.energy.alberta.ca/Org/pdfs/EnergizingInvestment.pdf>.
- Government of Canada. (2008). *The Well-Being of Canada's Young Children*. Retrieved from: [http://publications.gc.ca/collections/collection\\_2009/rhdcc-hrsdc/HS1-7-2008E.pdf](http://publications.gc.ca/collections/collection_2009/rhdcc-hrsdc/HS1-7-2008E.pdf).
- Government of Canada. Department of Finance. (2007). *Federal Support for Children Investments over Time*. Retrieved from: <http://www.fin.gc.ca/fedprov/fsc-eng.asp>.
- Government of Quebec. (2010). *Québec Parental Insurance Plan – Brochure A-766 (2010-01)*. Retrieved from the Quebec Parental Insurance Plan website at: [http://www.rgap.gouv.qc.ca/a\\_propos\\_regime/documentation\\_en.asp?categorie=0300203](http://www.rgap.gouv.qc.ca/a_propos_regime/documentation_en.asp?categorie=0300203).
- Kershaw, P., Anderson, L., Warburton, B. & Hertzman, C. (2009). *15 by 15: A comprehensive policy framework for early human capital investment in BC*. Vancouver, BC: Human Early Learning Partnership, University of British Columbia.
- Lee, V.E. & Burkam, D.T. (2002). *Inequality at the Starting Gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute.
- Marshall, K. (2003). *Benefitting from Extended Leave*. Perspectives on Labour and Income (Statistics Canada Catalogue no. 75-001-XIE), 4(3), 5-11. Retrieved from: <http://www.statcan.gc.ca/pub/75-001-x/75-001-x2003103-eng.pdf>.
- Martens, P., Fransoo, R., The Need to Know Team, Burland, E., Prior, H., Burchill, C., Ouelette, C. (2008). *What works? A First Look at Evaluating Manitoba's Regional Health Programs and Policies at the Population Level*. Manitoba Centre for Health Policy. Department of Community Health Sciences, Faculty of Medicine, University of Manitoba. p. 172, 182. Retrieved from: <http://mchp-appserv.cpe.umanitoba.ca/reference/fullwwreport.pdf>.
- Muhajarine, N., Ng, J., Green, K., Bowen, A., Johnson S., Cushon J. & Macqueen Smith F. (2009). *Understanding the Impact of the Canada Prenatal Nutrition Program. A Quantitative Evaluation*. Submitted to Public Health Agency of Canada. Saskatchewan Population Health Evaluation Research Unit, Saskatoon, Canada.

- Muhajarine, N., Nickel, D., Hongxia, S. & KidsFirst Evaluation Research Team. (2010). *Summary of Findings and Recommendations*. Submitted to Government of Saskatchewan. Saskatchewan Population Health Evaluation Research Unit, Saskatoon, Canada. Retrieved from: <http://kidskan.ca/node/281>.
- National Council of Welfare. (2002). *Poverty Profile 1999*. Ottawa . Retrieved from: <http://www.ncw.gc.ca/l.3bd.2t.1ils@-eng.jsp?lid=31>.
- NICHD Early Child Care Research Network. (1997). Child care in the first year of life. *Merrill-Palmer Quarterly*, 43(3), 340-360.
- Organisation for Economic Co-operation and Development (OECD). (2001). *Starting Strong: Early childhood education and care*. OECD Online Bookshop: <http://www.oecdbookshop.org/oecd/display.asp?K=5LMQCR2K9TTJ&DS=Starting-Strong>.
- Organisation for Economic Co-operation and Development (OECD). (2006). *Starting Strong II: Early childhood education and care*. OECD Online Bookshop: <http://www.oecdbookshop.org/oecd/display.asp?lang=EN&sf1=identifiers&st1=912006031p1>.
- Organisation for Economic Co-operation and Development (OECD). (2008). *Growing Unequal? Income distribution and poverty in OECD countries. Country note: Canada*. Retrieved from OECD website: <http://www.oecd.org/dataoecd/44/48/41525292.pdf>.
- Pascal, C.E. (2009). *With Our Best Future in Mind: Implementing early learning in Ontario*. Retrieved from the Government of Ontario website: [http://www.ontario.ca/en/initiatives/early\\_learning/ONT06\\_018865](http://www.ontario.ca/en/initiatives/early_learning/ONT06_018865).
- Phillipsen, L. C., Burchinal, M. R., Howes, C., & Cryer, D. (1997). The prediction of process quality from structural features of child care. *Early Childhood Research Quarterly*, 12(3), 281-303. Retrieved from: [www.childcareresearch.org/location/ccrca489](http://www.childcareresearch.org/location/ccrca489).
- Rogers, E. M. (1995). *Diffusion of Innovations* (4th ed.). New York, NY: The Free Press.
- Sauve, R. (2009). *Family Life and Work Life: An Uneasy Balance*. Vanier Institute of the Family Occasional Paper Series. Retrieved from: [http://www.vifamily.ca/sites/default/files/worklife\\_0.pdf](http://www.vifamily.ca/sites/default/files/worklife_0.pdf).
- Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). *Significant Benefits: The High/Slope Perry Preschool Study through age 27*. Monographs of the High-Slope Educational Research Foundation, No. 10. Ypsilanti, MI: High/Slope Press.

- Service Canada. (2010). *Employment Insurance Special Benefits for Self-Employed People*. Retrieved from: [http://www.servicecanada.gc.ca/eng/ei/publications/sew\\_publication.shtml](http://www.servicecanada.gc.ca/eng/ei/publications/sew_publication.shtml).
- Smith, P. K., Pepler, D. & Rigby, K. (Eds.) (2004). *Bullying in schools: How successful can interventions be?* New York, NY: Cambridge University Press.
- Standing Senate Committee on Social Affairs, Science and Technology. (2009). *In from the Margins: A call to action on poverty, housing, and homelessness*. Retrieved from Parliament of Canada website: <http://www.parl.gc.ca/40/2/parlbus/commbus/senate/com-e/citi-e/rep-e/rep02dec09-e.pdf>.
- Statistics Canada. (2010). *Infant mortality rates by province and territory*. CANSIM, Table 102-0504 and Catalogue no. 84F0211X, 2010. Retrieved from: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/health21a-eng.htm>.
- UNICEF Innocenti Research Centre. (2008). *The Child Care Transition: A league table of early childhood education and care in economically advanced countries*. Retrieved from: [http://www.unicef.ca/sites/default/files/imce\\_uploads/DISCOVER/OUR%20WORK/ADVOCACY/DOMESTIC/POLICY%20ADVOCACY/IMAGES/rc8.pdf](http://www.unicef.ca/sites/default/files/imce_uploads/DISCOVER/OUR%20WORK/ADVOCACY/DOMESTIC/POLICY%20ADVOCACY/IMAGES/rc8.pdf).
- Whitebook, M., Howes, C. & Phillips, D.A. (1990). *Who cares ? Child Care Teachers and the Quality of Care in America*, Final Report of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.
- Zigler, E., Pfannenstiel, J. C. & Seitz, V. (2008). The Parents as Teachers Program and School Success: A Replication and Extension. *J Primary Prevent*, 29, 103–120.

## **APPENDIX 1**



## Detailed calculations of Public Investment in ECEC, children under 6

Appendix A: Detailed calculations of Public Investment in ECEC, children under 6, estimated

Jurisdiction	ECEC Investment Calculation						GDP (2008) (see note 2)	Current ECEC Investment as % of GDP
	Regulated CC <sup>(ages 0-12, ECEC 2008, table 12, 2007/08)</sup>	Less: estimated school age, ranging from 5% - 20% (calc. from ECEC 2008, table 9)	Add: Unregulated Investment (see note 1)	Add: Kindergarten (estimated from ECEC 2008)	Total current ECEC Investment (under 6, estimated)	\$ millions		
Nfld/Lab	20	1	10	27	56	31,671	0.18%	
PEI	6	1	3	3	11	4,650	0.25%	
NS	37	4	18	52	104	34,041	0.30%	
NB	26	5	14	56	91	27,376	0.33%	
Ontario	780	78	258	1,162	2,122	584,460	0.36%	
Manitoba	106	11	23	64	183	51,048	0.36%	
Sask	47	2	20	52	117	65,425	0.18%	
Alberta	106	11	70	128	293	291,577	0.10%	
BC	217	33	131	118	433	197,728	0.22%	
Federal	0	0	168	0	168	1,599,608	0.01%	
Yukon/NWT/Nunavut	11	1	2	17	30	8,452	0.35%	
Total outside Quebec	1,356	147	717	1,679	3,607	1,296,860	0.28%	
Quebec	1,731	346	150	313	1,848	302,748	0.61%	
Total	3,087	493	867	1,992	5,455	1,599,608	0.34%	

Notes:

- Unregulated investment includes: Child Care Expense Deduction (CCED) of \$646 million (source: 2009 federal tax expenditures report, adjusted for estimated deduction related to children under six years; unregulated child care subsidies in BC (\$46 million) and Ontario (\$7 million) (source: ECEC in Canada 2008); most recent information available (2006/07) on direct federal funding of early learning and child care-related programs, such as Aboriginal Head Start and First Nations and Inuit Child Care Initiative, and Military Family Resource Programs. Regulatory status for some programs is not clear, so all are recorded as unregulated. Source: Government of Canada, Early Childhood Development and Early Learning and Child Care Activities and Expenditures Annual Report, 2006/07, downloaded November 29, 2010 from <http://www.faecy-adfje.gc.ca/menucdn-eng.jsp>
- GDP for 2008 chosen to correspond closely to most recent ECEC public investment information available. Retrieved December 24, 2010 from <http://www40.statcan.ca/l01/cst01/econ15-eng.htm>
- These columns are not a total of the provincial numbers, as the previous ones are. Instead, totals here are for the percentage of GDP outside Quebec, percentage of GDP in Quebec, and percentage of GDP for all of Canada, which is the same number and percentage as shown in the Federal row above.



## **APPENDIX 2**



## Canadian Family Policy Assessment Tool

INDICATOR	DEFINITION	PROGRESS ON INDICATOR	EVIDENCE*
<b>Family time and resources</b>			
<b>1. Family Leave</b>	50 weeks of parental leave after child's birth (37 weeks for adoption), at 70% of average earnings (subject to upper and lower limits). Two weeks reserved for fathers. 10 days unpaid family leave.	<i>Province meeting/closest to meeting</i> Quebec: 50 weeks for birth/37 weeks for adoption, 75% of wages up to \$62,000 for those with \$2000 income previous year (more for low income earners). 5 weeks for fathers. 10 days family leave.	None mtg parental leave BC: 5 days family leave AB: no days specified SK: 12 days illness/injury MB: 3 days family leave
<b>2. Child Poverty</b>	Provincial child poverty rate of less than 10% measured in LICO before taxes	<i>Province meeting/closest to meeting</i> PEI: 10.2%*, Canada 14.8% (2008) (*Statistics Canada advises use with caution due to small numbers)	BC 14.5% AB 10.5% SK 15.6% MB 17.0%
<b>Health, education and care services and supports in the community</b>			
<b>3. Universal Outreach for Essential Health Services</b>	Meet at least two of these three indicators:  *Infant mortality less than 4 per 1000 live births (deaths at age less than 12 months per 1000 live births):  *Proportion of low birth weight babies less than 6 per 100 births (below 2500 grams/ 5.5 pounds)  *MMR immunization rate for two year olds more than 95% (1 or 2 doses based on province's immunization schedule at 24 months)	<i>Province meeting/closest to meeting</i>  Infant Mortality (2007): Nova Scotia 3.3 Canada: 5.1  Low birth weight (2007): New Brunswick: 4.9 Canada: 6  MMR Immunization rate: Alberta : 91% (highest in 4 Western provinces, but based on 1 dose as per their immunization schedule)	Rate of infant mortality (2007) BC 4.0 AB 6.0 SK 5.8 MB 7.3  Low birth weight (2007): BC 5.8 AB 6.6 SK 5.5 MB 5.6  MMR Immunization rate: BC : 73.7% (2 doses, 2007) AB: 91% (1 dose, 2004) SK : 72.3% (SHR only; 2 doses; 1 dose 90%, 2004) MB : 89.22% (1 dose, 2004)
<b>4. Access to ECEC services</b>	40% of children 0-5 have access	<i>Province meeting/closest to meeting</i>  PEI at 41% , Quebec at 25%	BC: 18.3% AB: 17.4% SK: 9.1% MB: 20.6%
<b>5. Staff Education and Training</b>	Minimum of 50% of staff have a minimum of 3 years post-secondary education in ECE.	<i>Province meeting/closest to meeting</i> MB requires directors to have an ECE diploma, post-diploma continuing education certificate and 1 year experience; two thirds of staff working with 0-6 year olds must have ECE diploma	BC: 100% staff have 1 year of ECE training; additional training required depending on staff: child ratios, children's ages AB: 25% 1 year ECE diploma; director 2 year diploma SK: 30%: 1 year/ director 2 yrs MB: 66%: 2 yr/ director more
<b>6. Staff to Child ratios in ECEC</b>	Minimum of 1 staff member per 10 children ages 3-5 (36 to 60 months)	<i>Province meeting/closest to meeting</i>  At 36 months all provinces except PEI and SK are 1:8 or lower. At 60 months NL and BC ratios are 1:8	36 months: BC 1:8 AB 1:8 SK 1:10 MB 1:8  60 months: BC 1:8 AB 1:10
<b>Public planning and monitoring (supports other two parts of framework)</b>			
<b>7. Public Planning and Monitoring</b>	Province has developed a public plan to provide families with time, resources and access to high-quality community services, focus on vulnerable children; with targets, timelines, reporting	<i>Province meeting/closest to meeting</i> Quebec has a comprehensive plan. Manitoba: coordinated approach, 5-year planning cycle, focuses on vulnerability but no long-term comprehensive public plan.	None meeting
<b>8. Public Funding</b>	0.6% of provincial GDP spent on Investment in ECEC for children less than 6	Quebec at 0.61% followed by MB and ON at 0.36%; overall Canada outside Quebec spends 0.28% of GDP	BC 0.22% AB 0.10% SK 0.18% MB 0.36%

\* See next page for all sources

## Data sources for the Canadian Family Policy Assessment Tool

### 1. Family leave

#### Parental leave:

Government of Quebec. (2010). Québec Parental Insurance Plan – Brochure A-766 (2010-01). Retrieved from the Quebec Parental Insurance Plan website at: [www.rqap.gouv.qc.ca/a\\_propos\\_regime/documentation\\_en.asp?categorie=0300203](http://www.rqap.gouv.qc.ca/a_propos_regime/documentation_en.asp?categorie=0300203). Additional information on [www.rqap.gouv.qc.ca/index\\_en.asp](http://www.rqap.gouv.qc.ca/index_en.asp).

#### Family-related leave days:

British Columbia:

Employment Standards Act [RSBC 1996] Chapter 113. Part 6:52 – Family Responsibility Leave. Retrieved from: [www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/00\\_96113\\_01#section52](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96113_01#section52).

Alberta:

Alberta Human Rights Commission. Government of Alberta. (2010) *Family Leave*. Retrieved from: [www.albertahumanrights.ab.ca/employment/employee\\_info/accommodation/family\\_leave.asp](http://www.albertahumanrights.ab.ca/employment/employee_info/accommodation/family_leave.asp).

Saskatchewan:

Government of Saskatchewan Labour Standards Act, 442.1. Retrieved from: [www.qp.gov.sk.ca/documents/PIT/Statutes/L/L1-2007-03-06.pdf](http://www.qp.gov.sk.ca/documents/PIT/Statutes/L/L1-2007-03-06.pdf).

Manitoba:

Government of Manitoba Employment Standards. Family Leave Fact Sheet. Retrieved from: [www.gov.mb.ca/labour/standards/doc,family-leave,factsheet.html](http://www.gov.mb.ca/labour/standards/doc,family-leave,factsheet.html).

### 2. Child poverty

2010 Report Card on Child and Family Poverty in Canada: 1989 – 2010 (2010). Campaign 2000. Uses data from Statistics Canada's *Income in Canada 2008*, Table 202-802. Retrieved from: [www.campaign2000.ca/reportCards/national/2010EnglishC2000NationalReportCard.pdf](http://www.campaign2000.ca/reportCards/national/2010EnglishC2000NationalReportCard.pdf).

### 3. Universal outreach for essential health services

#### Infant mortality:

Statistics Canada. Infant mortality rates by province and territory (2010). CANSIM, table 102-0504 and Catalogue no. 84F0211X, 2010. Retrieved from: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/health21a-eng.htm>.

#### Low birth weight:

Statistics Canada. Table 102-4005 – Low birth weight (less than 2,500 grams) and borderline viable birth weight-adjusted low birth weight (500 to less than 2,500 grams), by sex, Canada, provinces and territories, annual, CANSIM (database). [www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1024005&paSer=&pattern=&tByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=](http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1024005&paSer=&pattern=&tByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=)

### **Measles, mumps and rubella vaccination:**

The Public Health Agency of Canada reports that a second dose of MMR is recommended for children at least one month after the first dose for the purpose of better measles protection, and that for convenience, this second dose can be given at the next scheduled vaccination at 18 months of age, at school entry (4-6 years), or any intervening age that is practical. Public Health Agency of Canada. Canadian Immunization Guide, Seventh Edition, 2006, p. 93, 95. Retrieved from: [www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006-part-3\\_e.pdf](http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006-part-3_e.pdf).

British Columbia, Manitoba and Saskatchewan all use 12- and 18-month schedules for the two MMR vaccinations. Alberta's schedule is for the first dose at 12 months, and the second between ages 4 and 6, meaning that its MMR vaccination rate at 24 months may appear higher than other provinces, as it is based on a single vaccination visit.

Colombie-Britannique :

Reports only on two doses by 24 months (2007 data). Government of British Columbia. Immunization in British Columbia, 2006-2007. Retrieved from: "How are immunization rates measured?" at [www.immunizebc.ca/WhyImmunize/ImmunizationCoverage/default.htm](http://www.immunizebc.ca/WhyImmunize/ImmunizationCoverage/default.htm).

Alberta :

Reports on one dose by 24 months (2004 data). Government of Alberta (no date). Alberta Immunization Strategy, 2007-2017, p. 7. Retrieved from: [www.health.alberta.ca/documents/Immunization-Strategy-07.pdf](http://www.health.alberta.ca/documents/Immunization-Strategy-07.pdf).

Saskatchewan :

Data available for Saskatoon Health Region only (2004 data). Reports on one and two doses by 24 months. Saskatoon Health Region Immunization Report, 2006, page 15. Retrieved from: [http://www.saskatoonhealthregion.ca/your\\_health/documents/ImmunizationReport2005\\_001.pdf](http://www.saskatoonhealthregion.ca/your_health/documents/ImmunizationReport2005_001.pdf).

Manitoba :

While Manitoba recommends doses at 12 and 18 months, it considers two-year-olds fully immunized if they have received one MMR dose by 24 months, and only reports on rates of one dose by 24 months (2004 data). (Martens et al., 2008).

### **4. Access to early childhood education and care**

Beach, J., Friendly, M., Ferns, C., Prabhu, N., & Forer, B. (2009). The big picture: Table 9: Regulated child care spaces by province/territory and percentage of children (0-12 and 0-5) for whom there is a regulated child care space — 2008. In *Early childhood education and care in Canada 2008*. Retrieved from Childcare Resource and Research Unit website: [www.childcarecanada.org/ECCEC2008/index.html](http://www.childcarecanada.org/ECCEC2008/index.html).

### **5. Early childhood education and care staff education and training**

Beach, J., Friendly, M., Ferns, C., Prabhu, N., & Forer, B. (2009). The big picture: Table 14: Minimum early childhood requirements for centre-based staff by province/territory — 2008. In *Early childhood education and care in Canada 2008*. Retrieved from Childcare Resource and Research Unit website: [www.childcarecanada.org/ECCEC2008/index.html](http://www.childcarecanada.org/ECCEC2008/index.html). See individual province chapters for detailed descriptions of training requirements.

## **6. Early childhood education and care staff-to-child ratios**

Beach, J., Friendly, M., Ferns, C., Prabhu, N., & Forer, B. (2009). The big picture: Table 15: Maximum staff:child ratios in full-day centre-based child care by age and province/territory — 2008. In *Early childhood education and care in Canada 2008*. Retrieved from Childcare Resource and Research Unit website: [www.childcarecanada.org/ECEC2008/index.html](http://www.childcarecanada.org/ECEC2008/index.html).

## **7. Public planning and monitoring**

Beach, J., Friendly, M., Ferns, C., Prabhu, N., & Forer, B. (2009). The state of early childhood education and child care in 2009. In *Early childhood education and care in Canada 2008*. Retrieved from Childcare Resource and Research Unit website: [www.childcarecanada.org/ECEC2008/index.html](http://www.childcarecanada.org/ECEC2008/index.html).

## **8. Public funding**

These amounts are estimates. See Appendix 1 for how they were calculated.