

Getting it right at 18 months: In support of an enhanced well-baby visit

R Williams, J Clinton; Canadian Paediatric Society
Early Years Task Force
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Abstract

Evolving neuroscience reveals an ever-strong relationship between children's earliest development/environment and later life experience, including physical and mental health, school performance and behaviour. Paediatricians, family physicians and other primary care providers need to make the most of well-baby visits—here a focus on an enhanced 18-month visit—to address a widening "opportunity gap" in Canada. An enhanced visit entails promoting healthier choices and positive parenting to families, using anticipatory guidance and physician-prompt tools, and connecting children and families with local community resources. This statement demonstrates the need for measuring/monitoring key indicators of early childhood health and well-being. It offers specific recommendations to physicians, governments and organizations for a universally established and supported assessment of every Canadian child's developmental health at 18 months.

Key Words: *Anticipatory guidance; Early child development; Population health measurement; Primary care; Well baby visit*

The 18-month well-baby visit

Neuroscience has dramatically increased our understanding of the importance of the quality of early child development and its inextricable link to children's behaviours, their capacity to learn and later health outcomes^{[1][4]}. This has increased attention on how the structure and process of well-baby visits can promote long-term health and well-being. There is tremendous potential for primary care providers to positively affect outcomes through regular contact with children and families in the early years. To fully realize this potential, paediatricians and family physicians must assess their current practice, updating where necessary with enhanced clinical practices and skills. Primary care providers—paediatricians,

family physicians and others—must also play a stronger role as advocates within the child health system.

No longer are well-baby visits limited to immunization and early identification of variance or abnormality. Increasingly, the primary care role is to proactively recognize and help enhance the unique assets of all children and their families. Primary care providers promote a wide variety of positive behaviours (such as breastfeeding, quality parenting, child management, injury prevention, and pro-literacy activities), using anticipatory guidance and connecting children and their families to local community resources. For these interventions to be effective, the literature supports using a physician-prompt health supervision guide, having found that clinical judgment alone is not enough^[5].

Although primary care providers have an opportunity to work with families and children to enhance early childhood development at each well-baby visit, some jurisdictions have selected a pivotal visit as a starting point for universal, system-focused improvements. The 18-month encounter offers many opportunities: Not only is it seen as a crucial time in children's development, but it is also a time when families face issues such as child care (especially centre-based care, which typically starts at this age), behaviour management, nutrition/eating and sleep. Screening for parental morbidities (mental health problems, abuse, substance misuse, physical illness) is an important task at all well-child visits, and particularly at this one.

The 18-month visit is often the final regularly scheduled visit (involving immunizations) with a primary care provider before school entry. Apart from illness-related visits, it may be the last time a child and family see their primary care provider until the child is four years of age or starts school. It is critical that families know how to promote healthy development during this important period of life and be alert to signs of difficulty, including problems with self-regulation, communication and language. They need to know when to consult their primary care provider, and how to connect with supportive community resources.

Primary care providers must be aware of available services and be involved in identifying barriers and facilitating access to assessment and care for their patients.

The opportunity gap

Measurement of the sensitive indices of early child development in senior kindergarten (age 5) across Canada, through the use and analysis of the Early Development Instrument (EDI), shows that significant numbers of children are not adequately prepared for their school experience. Approximately 27% of Canadian kindergarten children score as 'vulnerable' on the EDI, when vulnerability rates greater than 10% can be considered 'excessive'. In other words, approximately two-thirds of the developmental vulnerabilities (language/cognitive, physical or social-emotional) that children present with in school are preventable^[6]. The rates of vulnerability vary widely across Canadian neighbourhoods—from less than 5%, to nearly 70% of children—depending on socioeconomic, cultural, family and local governance factors.

When children fall behind, they tend to stay behind^{[7][8]}. Being a vulnerable child on the EDI negatively affects children's school performance, reduces their well-being and decreases their chances of getting a decent job later in life. Each 1% of excess vulnerability will reduce Canada's gross domestic product by 1% over the working lifetime of these children^[9]. Thus, if Canada fails to address developmental vulnerability in the early years, economic growth will likely be reduced by 15% to 20% over the next 60 years^[10].

Well-baby visits in other countries

Across the developed world, there are a wide variety of approaches to well-baby visits, and to the tools used to monitor and promote early child development. The Offord Centre for Child Studies (Hamilton, Ontario) recently completed a scan of developed countries to determine how well-baby/child visits are organized and which tools are used^[11]. The focus was on health and developmental surveillance and screening in children younger than six years of age in Canada, the United States, England, Ireland, Northern Ireland, Scotland, Australia, New Zealand, the Netherlands and Sweden. The number of surveillance visits for children younger than six years of age ranged from four in Scotland to 15 in Sweden, the Netherlands and the United States. The content of these visits ranged from immunization, growth monitoring and developmental screening to anticipatory guidance.

While developmental surveillance occurs in most countries, many do not recommend the use of standardized and validated development screening tools at well-baby/child visits, unless there is cause for concern. Scotland's Hall 4 guidelines^[12], along with the European Union's Child Health Indica-

tors of Life and Development (CHILD) project, have recommended that countries focus on child development surveillance and discourage general developmental screening. Most of these countries keep track of child development with the use of simple milestone checklists instead of a validated tool. In many countries (the United Kingdom, Ireland, Scotland, Australia, the Netherlands), using parent-held child health records has allowed families to play a larger role in child development monitoring. Parents can keep track of and record their child's development in a universally available book, which is then reviewed by a health professional. Tools such as the ASQ (Ages & Stages Questionnaire)^[13] and PEDS (Parents' Evaluation of Developmental Status)^[14] may also be used for parental input.

The 18-month visit in Canada

A scan of common practice in Canadian provinces at the 18-month visit^[15] shows that while this is a consistent point in time for immunization, there is great variety in how, where and in what context vaccines are given. Well-child visits, including immunizations, are performed by family physicians or paediatricians in New Brunswick, Nova Scotia and Ontario, though in areas with few physicians (eg, Northern Ontario), public health nurses administer vaccines. The physician visits typically include a physical health assessment, anticipatory guidance and immunizations.

Public health nurses administer vaccines in Prince Edward Island, Alberta and Newfoundland-Labrador, in addition to activities such as physical assessment and connecting families to community resources. Manitoba has a mixed model of public health nurses and physician strategies. Alberta has recently completed a pilot project in five communities using the ASQ at screening clinics. Saskatchewan, Nova Scotia and Manitoba have initiated pilot projects. Information for Quebec and the Yukon Territory was not available at time of writing, and the Northwest Territories and Nunavut were not surveyed.

The Ontario system

In October 2009, Ontario introduced an enhanced 18-month well-baby visit with a new physician fee code. This followed extensive work by an expert panel, including the Ontario College of Family Physicians and the Ministry of Children and Youth Services, which reviewed the evidence for such a visit and proposed a series of recommendations to government and the Ontario Medical Association^[16].

Recognizing that the 18-month visit is the last regularly scheduled primary care encounter (involving immunizations) before school entry, the panel recommended that the focus shift from a well-baby check-up to a pivotal assessment of developmental health. The panel also recommended introducing a

process using standardized tools—the Rourke Baby Record and the [Nipissing District Developmental Screen](#)—to facilitate a broader discussion between primary care providers and parents about:

- child development;
- parenting;
- access to local community programs and services that promote healthy child development and early learning; and
- promoting early literacy through book reading.

In a survey, Ontario physicians said that the time needed to complete an enhanced visit was the most significant barrier to implementing it. They also expressed concern that identifying children with developmental needs without having adequate community supports for referral and treatment created a moral dilemma for physicians ^[16].

To support planned system enhancement and change, a web portal (www.18monthvisit.ca) was created by the Offord Centre for Child Studies and MacHealth (Hamilton, Ontario) for educational purposes. Also, in collaboration with the Foundation for Medical Practice Education, a Practice-Based Small Group (PBSG) module was developed. The work has proceeded in partnership with Ontario’s Best Start strategy, which supports communities in developing early child development parenting and resource pathways and in actively addressing wait list issues.

Developing a population health measurement tool for 18 months

How are 18-month-olds in Canada doing? Unfortunately, we don’t know, since there is no common tool used to measure their developmental progress. However, in collaboration with the Offord Centre for Child Studies, a pan-Canadian group is exploring the development of a population health measurement tool for use at 18 months. Given that children in different parts of Canada are assessed using different tools (for example: in some provinces nurses administer the ASQ, while in Ontario, physicians use the Rourke Baby Record and [Nipissing District Developmental Screen](#)), creating a common platform for 18-month monitoring is a challenge. Efforts are currently underway to determine whether the ASQ could be shortened without loss of validity, such that it could be used by physicians in a fee-scheduled visit ^[17].

Recommendations

The Canadian Paediatric Society recommends strengthening the early childhood development system across Canada through a series of activities.

For primary care providers, in the clinical setting:

1. Every Canadian paediatrician and family physician caring for young children can help to improve their patients’ health and well-being through an enhanced 18-month well-baby visit (in jurisdictions where the 18-month visit is conducted by advanced practice nurses, there should be targeted training on this systematic approach). To do this, physicians must take a systematic approach to each 18-month visit, incorporating:
 - A physician-prompt health supervision guide with evidence-informed suggestions (such as the Rourke Baby Record).
 - A developmental screening tool (the most widely used are the [Nipissing District Developmental Screen](#), ASQ, and PEDS/PEDS:DM) to stimulate discussion with parents about their child’s development, both how they can support it as well as any concerns they may have.
 - Screening for parental morbidities (mental health problems, abuse, substance misuse, physical illness).
 - Promotion of early literacy activities (reading, speaking and singing to babies) for every family (18).
 - Information about community-based early childhood development resources for every family (parenting programs, parent and early learning resource centres, libraries, recreational and community centres, etc. See also www.18monthvisit.ca).
2. Paediatricians and family physicians must keep their professional skills current to ensure they can identify children who require further investigation, diagnosis and treatment. All children who are not meeting developmental milestones and expectations, including socio-emotional development, self-regulation and attachment, should be referred to both community-based early years resources as well as to more specialized, developmental assessments and interventions, as appropriate.

For primary care providers, in their communities:

Paediatricians and family physicians should:

1. Advocate locally for the development and enhancement of early years resources, including programs and policies that benefit young children.
2. Advocate for the implementation of an enhanced 18-month well-baby visit in all provinces and territories, supported by standard guidelines (see 1, above) and a special fee code.
3. Promote the implementation of an enhanced 18-month well-baby visit to their colleagues, including other health

care professionals, through informal and formal channels (continuing medical education opportunities, resident training and curriculum enhancement).

4. Support and participate in pilot programs and research initiatives to identify cost-effective and outcome-based interventions that contribute to closing the gap between children who do well and those who do poorly.

For governments and child-focused organizations:

Achieving system-wide change will require governments and organizations to:

1. Work toward the creation of and sustained funding for an early child development system, including an enhanced 18-month well-baby strategy for all Canadian children.
2. Ensure that provinces and territories support the standard guidelines and a special fee code.
3. Develop a comprehensive system of measurement and monitoring that collects appropriate data on the progress of Canada's young children and their families. Such a system would include regular cycles of the EDI in kindergarten and developing other measures (for use at 18 months, in the middle years and beyond) that can be linked, compared and regularly analyzed and reported on. These data would inform actions at the clinical practice, community and government levels.
4. Promote and support research initiatives to determine whether there is a need for a regularly scheduled well-child visit between the ages of 18 months and 4 years.

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EARLY YEARS TASK FORCE

Members: Robin Williams MD (Chair until June 30, 2011); Sue Bennett MD; Jean Clinton MD; Clyde Hertzman MD; Denis Leduc MD; Andrew Lynk MD

Principal authors: Robin Williams MD; Jean Clinton MD

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