

Child Health in the 21st Century The Role of the Paediatrician in an Inter-Professional Environment

Invitational Workshop & Symposium

November 17–18, 2006 • Toronto Ontario

Proceedings and Recommendations



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Executive Summary & Reflections on the Symposium

Jonathan B. Kronick, Dalhousie University/IWK Health Centre, Halifax, NS

Canada's infants, children and youth must receive the very best health care possible and, therefore, it is essential that their care providers have the appropriate education and training to meet future needs. While many providers are involved in the delivery of health care, pediatricians have played and will continue to play a significant and essential role in the provision of health care services to infants, children and youth. It is critical that the skills, competencies and roles required by pediatricians to optimally deliver health care to Canada's infants, children and youth be well defined and needs-based especially as child health care and the health care system continues to evolve rapidly. These changes include inter-professional practice, collaborative care models, the increasing number of accredited subspecialties and their impact on the role of the pediatrician, hospitalists, more varied communities of practice, and so on. It is necessary to effectively determine the future health care service needs of Canada's infants, children and youth, and identify the competencies that pediatricians must have to play an appropriate role in the delivery of child health care. Therefore the symposium, *Child Health in the 21st Century: The Role of the Pediatrician in an Inter-Professional Environment* was convened on November 17, 18, 2006. This invitational multi-disciplinary symposium addressed and defined the attributes including the knowledge, skills, competencies and roles that Canada's pediatricians need to deliver health care to Canada's infants, children and youth in the future.

The Canadian Pediatric Society (CPS), the Paediatric Chairs of Canada (PCC), and the Canadian Association of Paediatric Health Centres (CAPHC) were the original sponsors of the symposium. Subsequently Health Canada, the Public Health Agency of Canada, and The Society of Obstetricians and Gynaecologists of Canada became official sponsors of the symposium.

Objectives

- The primary objective was to identify the future roles of the pediatrician in the delivery of health care to Canada's children and youth in the context of the evolving inter-professional environment. This includes identifying the knowledge, skills and competencies that pediatricians must have, and the roles that pediatricians must play as generalists, subspecialists, community-based practitioners, academic practitioners, investigators acquiring new knowledge pertinent to child and youth health, advocates, and partners with education and public health institutions.
- A secondary objective was to consider human resource needs, i.e. the number of pediatricians, as well as of other health professionals, who will be required for the various roles in the context of the evolving inter-professional health care system, while recognizing the necessity to optimize the use of all resources.

To address these objectives, input was required from many stakeholders who are directly or indirectly involved in child health. Symposium delegates came from coast to coast and represented a wide variety of communities and health professions, including the College of Family Physicians of Canada (CFPC), the Royal College of Physicians and Surgeons of Canada (RCPSC), educational institutions, medical educators, the Public Health Agency of Canada, the Health Council of Canada, nursing organizations, psychiatrists, and psychologists, families, and governments. The symposium planning committee included representatives from the CPS, PCC, CAPHC, the Pediatric Undergraduate Program Directors, the Association of Canadian Pediatric Program Directors, the Chair of the RCPSC Pediatric Specialty Committee, CFPC, representatives from the Public Health Agency, Health Canada, the Canadian Family Advisory Network, and the Canadian Nurses Association (CNA).

Symposium Outline

The Keynote speaker was Dr. Brian Postl, CEO of the Winnipeg Health Authority and National Wait Time Advisor.

The symposium was organized into four themes:

- 1. Meeting the Needs of Diverse and/or Vulnerable Populations;**
- 2. Meeting the Needs of Infants, Children and Youth with Chronic Health Conditions;**
- 3. Infant, Child and Youth Health Human Resources;** and
- 4. Education and Training: Meeting the Needs of Infants, Children and Youth**

Each theme began with a plenary session delivered by experts from across the country and was followed by breakout groups which tackled challenging issues emerging from the plenary. Each breakout group summarized its deliberations and reported back to the entire conference. A multidisciplinary Panel Discussion addressed **Inter-Professional Care Models**.

The final afternoon of the symposium was devoted to developing recommendations and next steps. The symposium **Recommendations** are detailed in the final section of these proceedings and represent the most important outcome of the symposium. For the symposium to really be a success, however, the recommendations must lead to action and measurable outcomes. The recommendations addressed four broad areas:

- Promoting the best healthcare services for all Canadian infants, children and youth.
- Addressing the health needs of vulnerable populations including, but not limited to aboriginal, impoverished, immigrant, disabled, and maltreated infants children and youth.
- Improving access to mental healthcare services for infants, children and youth.
- Improving healthcare through interdisciplinary cooperation and collaboration.

Each of these areas included recommendations addressing advocacy, education, care delivery and research.

Reflections from the Symposium Chair

While the symposium dealt with many issues summarized in these proceedings, as symposium chair I would like to highlight the issues which resonated for me and stood out as especially noteworthy. While many aspects of the delivery of child health services and the care provided by paediatricians are effective and were cited during the symposium, the gaps and the unmet needs are the areas to which I draw the reader's attention:

- **Communication with parents:** Parents play an essential and too often underappreciated role in the organization, management and delivery of their child's care. In addition, and even more important, is the absolute necessity of providers to communicate effectively, openly, and repeatedly with parents to ensure that true collaboration and partnership with parents takes place in the care delivery for their children. We heard often, and with great eloquence, how parents of children with chronic illness too often feel marginalized and undervalued in the care of their children.
- **The problems with fee for service remuneration:** Fee for service remuneration was often cited as a barrier to providing optimal care to infants, children and youth, especially those with behavioural, mental health or chronic illnesses. Acute care appears to be better supported by current fee for service systems but for more chronic situations, both with medical and mental health challenges, alternate methods of remuneration are urgently needed to facilitate care of these patients and their families. Likewise, the repeatedly voiced importance of inter-professional care – which appears to be appropriate for these populations – is often undermined rather than supported by fee for service.
- **Improving medical education:** The child health-directed education of medical students, pediatric residents and family medicine residents clearly needs more focus on mental health, vulnerable populations, inter-professional models of care, public health, cultural diversity, social determinants of health, advocacy, and prevention.
- **Need for more inter-professional care delivery:** While paediatricians are and will remain an essential component of the care of infants, children and youth, other health care professionals will take on increasing importance in the provision of this care as the number of working paediatricians cannot now and will in the future be even less able to meet all the needs. This is yet another reason to foster more inter-professional models of care for infants, children and youth.

- **Unmet needs of vulnerable populations:** Sadly, many vulnerable populations of infants, children and youth either do not yet have appropriate access to care or are otherwise not receiving optimal care. These populations include many children and youth living in rural or remote locations, aboriginal and immigrant children, as well as those with many chronic disorders or mental illness. These unmet needs pose an important challenge that Canada's pediatricians and other health care providers must urgently address together. Having said that, governments, as well as many other institutions, will have to be part of the solutions to these pressing health care discrepancies.
- **The need for advocacy:** It was repeatedly stressed that pediatricians need to advocate not only on behalf of their own patients but on behalf of their communities and for system and societal improvements since many factors, directly and indirectly, affect children's health and well being. Indeed if there were to be only one recommendation from this symposium it might be to advocate, advocate and advocate.
- **The need for more child health care providers:** Finally, although not the primary focus of the symposium, there are clearly many unmet health needs of infants, children and youth which have led many to suggest that there are an insufficient number of pediatricians and other health care providers who care for infants, children and youth. It is expected that this problem will become more serious in the future. This will present an enormous challenge especially considering the primarily adult-focused Canadian health care system. In our child health advocacy roles, we must not forget the need for sufficient numbers of paediatricians and other health care providers who focus on child health and an appropriate distribution of these professionals. Careful planning, based on evidence, will be crucial to address these challenges.

Symposium Sponsors

The generous financial and in-kind support of the symposium sponsors is greatly appreciated. This symposium could not have taken place without the sponsors' support and of course the participation of the delegates, keynote speaker and the many expert presenters.



Note: French translations for this document are pending.

Introduction and Background

On November 17–18, 2006, the Canadian Paediatric Society, the Paediatric Chairs of Canada, the Canadian Association of Paediatric Health Centres, Health Canada, the Public Health Agency of Canada, and the Society of Obstetricians and Gynaecologists of Canada sponsored an invitational, multi-disciplinary symposium, *Child Health in the 21st Century: The Role of the Paediatrician in an Inter-Professional Environment*. A wide range of professionals representing many organizations from across Canada attended the symposium in Toronto including the sponsoring organisations, the College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, the Health Council of Canada, nursing organizations, educational institutions, government, paediatric surgeons, psychiatrists and psychologists, and others. A multi-disciplinary planning committee made up of representatives from the sponsoring organisations designed the two day event.

The symposium had two objectives:

- The primary objective was to identify the future roles of the paediatrician in the delivery of health care to Canada's children and youth in the context of the evolving inter-professional environment. This includes identifying the knowledge, skills and competencies that paediatricians must have, and the roles that paediatricians must play as generalists, sub-specialists, community-based practitioners, academic practitioners, investigators acquiring new knowledge pertinent to child and youth health, advocates, and partners with education and public health institutions.
- The secondary objective was to review human resource needs including the number of paediatricians and other health professionals who will be required for the various roles in the context of the evolving inter-professional health care system, while recognizing the need to optimize the use of all resources.

The symposium focused on four themes:

- 1. Meeting the needs of our diverse and/or vulnerable populations.**
- 2. Meeting the needs of infants, children and youth with chronic health conditions.**
- 3. Infant, child and youth health human resources.**
- 4. Education and training: Meeting the needs of infants, children and youth.**

Panels of expert speakers launched each of the four themes by presenting current research and information and raising key issues. In addition, a multidisciplinary panel of speakers explored inter-professional care models. Breakout groups examined challenging issues in greater depth, and focused on identifying tangible solutions and actionable recommendations.

The Proceedings

Welcome

Jonathan Kronick, Chair, Department of Paediatrics, Dalhousie University, IWK Health Centre, Halifax, Nova Scotia

It is both timely and critically important to examine the role of the paediatrician in the evolving inter-professional health care environment. Paediatricians in Canada play a wide range of roles that include generalists, sub-specialists, community-based practitioners, academic practitioners, investigators who acquire new knowledge, child and youth advocates, and partners in education and public health. Paediatricians work within an environment where the health issues of children and youth get less attention than those of adults. Children and youth make up a relatively small proportion of the Canadian population. Furthermore, since children and youth do not vote, they have little influence over government and public health care priorities.

Although children and youth tend to be healthy as a group, the challenge is to support those who are at risk and those who are not well served by the system. These include, but are not limited to, children with chronic health conditions, those who live in rural and remote regions of Canada, and those who belong to vulnerable populations such as Aboriginal children and youth, the 73,000 immigrant children and youth who arrive in Canada each year (2005), the 23% of children and youth who live in low income families, and others. The symposium will identify useful and doable recommendations that will enable paediatricians to improve child and youth health and health care in Canada.

Theme #1: Meeting the Needs of Our Diverse and/or Vulnerable Populations

1.1 Understanding the Needs of Our Children and Youth Living in Rural and Remote Regions

Robert Armstrong, Chair, Department of Paediatrics, University of British Columbia, British Columbia Children's Hospital, Vancouver, British Columbia

Rural and remote health is about place. The recent Canadian Institute for Health Information study of the health of rural Canadians noted that, "place . . . is a short hand way of describing a host of factors that may have consequences for communities, populations, families and individuals . . . place should have a special status in our thinking about the health of Canadians" (2006). Compared to urban areas, people living in rural areas tend to have lower socioeconomic status, fewer high school completions, higher rates of mortality,

morbidity, injuries and suicides, and greater public health issues. Accessing health care services and providing ongoing management of care for children and youth are not always easy or straightforward. This is especially true for children and youth with chronic health problems, and for those with developmental and behavioural mental health conditions. Children and youth in rural and remote regions have the right to live in communities that promote healthy development and provide a safe and protected environment; receive preventive health interventions and appropriate screening for disease, disorders and disabilities; access quality care that is sensitive to their and their family's needs; and enjoy the same outcomes as children and youth in urban areas. Roles that paediatricians can play in rural health care include: i) being regional consultants for child and youth populations in partnership with the public health system; ii) working actively with social and child protection services to support at-risk children and youth; iii) working with pre- and in-school services rather than just telling them what to do; iv) being involved in new models of child development, learning and mental health care; and v) strengthening models of chronic disease management. Paediatricians have the capacity to identify the health care needs of child and youth populations. Paediatricians need to change their training models, and increase their focus on public health, population health, chronic diseases, child development, mental health, alternate ways of funding, and new inter-disciplinary shared care models that involve a wider range of health care providers.

1.2 Our Urban Population

Fernando Alvarez, Professor of Paediatrics, University de Montreal, L'Hopital St. Justine, Montreal, Quebec

Canada's urban communities have a wide array of social and cultural dimensions that impact on health and health outcomes. The response of children and youth to medical treatment not only depends on biomedical and pharmacological case management but also on the social and cultural environments in which they live. The influence of the family on the sick child and his/her outcome cannot be ignored. Our research focuses on children and youth in Montreal. From 2001 to 2006, more than 600,000 immigrants moved to Quebec, more than 60,000 of these people spoke neither French nor English, and more than 50,000 of these new immigrants were children and youth. Montreal received the majority of Quebec's new immigrant population (77%). Paediatricians care for a very diverse population with diverse needs. Recognising the importance of paediatricians taking a cultural approach to care, our research developed associations between clinicians and anthropologists. The main objective was to create a therapeutic alliance between the care team and paediatric

patients and their families. Three approaches are being used to meet this objective: i) Conducting qualitative research on human social sciences in hospitals. This research includes examining home-hospital relationships especially since more care has shifted from in-hospital to ambulatory care. ii) Creating inter-disciplinary consulting teams that recognise the complexity of care. These teams include clinicians, paediatricians, physicians, psychiatrists, medical anthropologists, students, residents and others. Improved technology has resulted in new and complex medical conditions, and has raised many issues such as quality of life choices and new clinical practices. The situation of these children in their families and society will be evaluated. iii) Changing medical education. Currently, medical education emphasizes the biological aspects of care to the exclusion of social, cultural and humanistic aspects. The goal of our research is not to provide answers but to encourage physicians to raise pertinent issues for themselves. Over the next four years, a new conceptual framework will be developed to support our qualitative research on children and their families.

1.3 Our Aboriginal Population

Michael Young, Paediatrician, Stanton Territorial Health Authority, Yellowknife, North West Territories

Canada ranks 8th in the United Nations Human Development Index but Canada's First Nations community ranks 68th (equal to Venezuela). There are 1.3 million Aboriginal people in Canada (4.4% of the population) with about 5% of Canada's children are of Aboriginal descent. One in four First Nations children live in poverty. The social and economic status of the Aboriginal community is lower on every measure compared to the non-Aboriginal community. Canada's Aboriginal children and youth have higher rates of infant mortality, disability, tuberculosis, injury, suicide and addictions, and lower rates of immunization. Access to child health care is a problem. A National Aboriginal Health Organisation survey found that families identified paediatricians as the fourth most difficult health care professional to access. Caring for children and youth in remote communities is especially hard when the severely ill need to leave the community for longer-term care and ongoing follow up. The *Many Hands, One Dream Summit* – a gathering of 13 national Aboriginal and health care organisations held last year to further Aboriginal child health – highlighted the fact that health is not simply the absence of disease. Child health care providers including paediatricians need to understand, be educated about and respect the culture, approaches and realities of Aboriginal communities. Providers also need to respect Aboriginal decision-making, and work with communities to support their programs and ideas. Aboriginal child health is complicated; there is not a single problem nor is there a one

solution. The population is not uniform, with more than 600 First Nations communities comprising 50 linguistic groups, in addition to Inuit and Métis communities. Each community and group will identify its own challenges and solutions. Paediatric training needs to include Aboriginal-specific education content, paediatric training blocks in Aboriginal communities, and skills working with and advocating for communities. In addition, national organizations need to advocate for vulnerable groups and communities whose health is at risk and whose health needs are not being met. This includes understanding the significant impact that the social determinants of health (sufficient income, education, housing, safe water, etc.) have on health. Education must also strive to provide a better understanding of the impacts of history and culture in the provision of care.

1.4 Vulnerable Populations: The Family's Perspective

Frank Gavin, Co-chair, Canadian Family Advisory Network

Nearly fifty parents, most of whom are volunteer members of family advisory bodies at paediatric hospitals and rehab centres, and the members of two child and youth councils at paediatric hospitals, completed surveys or were interviewed to help prepare this presentation. From what they said and from observing what they and others do, it is very evident that families — including those most vulnerable and poorly resourced — while they are often talked of as “consumers” of healthcare, are in fact almost always the main providers of care to their children and the most valuable resource to professional care providers and “the system.” As well, nearly all families with children with life-altering conditions, unique as each is, share a great deal: the need and desire 1) to function as a family come what may and whatever the setting, 2) to inform and be informed, and 3) to do what they can and be helped to insure their children live full, even if relatively brief or circumscribed, lives. Families want all the physicians who care for their children to have excellent diagnostic skills, be familiar with current research and protocols, be aware of their limitations, and be ready and able to refer their child to someone more appropriate, when necessary. More particularly, they want physicians who 1) can engage them and their children and be engaged by them in the first crucial encounters, in the words they use, in their “relatability” to children and youth, etc. 2) can partner with children and families in leading and sometimes being led, in developing care plans with families and children, in demonstrating trust and transparency, in sharing information openly, in being open to complementary and alternative therapies, etc. and 3) show not just empathy (feeling with patients and families) but imagination (seeing the contours of the child's and the family's world from their perspective). Families want physicians who have an idea of what their lives and their children's lives are like.

1.5 Break-Out Groups

Breakout Group Report:

What is the role of the paediatrician in advocating for diverse and/or vulnerable populations?

- We need to recognise that there is big “A” advocacy and small “a” advocacy.
- Big “A” advocacy is not a major responsibility of paediatricians although there may be unique opportunities for paediatricians to influence larger issues. These high level efforts should be strategic and focused on particular areas.
- Paediatricians have an important role in small “a” advocacy which includes developing an awareness of vulnerable populations and what they need, identifying best practices in caring for diverse and/or vulnerable populations, building on best practices, and changing practices to meet changing needs. Small “a” advocacy efforts can be advanced through paediatric training: how do we increase awareness of the needs of diverse and/or vulnerable populations?
- Paediatricians need to identify and support strong role models. Role models for small “a” and big “A” advocacy could include other health care providers as well as members of vulnerable populations. This latter group would have a major impact on changing the attitudes of trainees and professionals.
- We should learn from those who are successfully advocating for diverse and/or vulnerable populations, and identify ways to build on best practices. It must be kept in mind that vulnerable populations differ by geography, not every group is the same, and different advocacy strategies are needed depending on the group.
- Paediatricians have a unique opportunity to add a credible voice and be strategic when advocating for vulnerable populations.

Breakout Group Report:

How do we educate paediatricians to be sensitive to cultural differences and avoid cultural stereotypes?

- Cultural sensitivity is needed at two levels. 1) The individual paediatrician should be trained to be more culturally sensitive and be supported over the course of his or her practice to be more culturally sensitive. Paediatricians need to be “culturally competent.” 2) The “system” needs to be more culturally sensitive.
- We need to examine who gets into medical school and who is trained to become a paediatrician. Members of rural, Aboriginal, ethno-racial and disadvantaged socio-economic groups should be encouraged and supported to become physicians and paediatricians. This may require examining high school training programs, entrance requirements, and the admission process into medical school.

- We need to examine the current formal paediatric curriculum and education objectives, and include social paediatrics, humanism and cultural competencies. As well, residents should have mandatory residency training spots in rural and remote areas and with vulnerable populations. Discriminatory attitudes that residents may display in interviews and during training should be addressed immediately. Final evaluations of students and residents should include an assessment of cultural sensitivity.
- Faculty who teach in medical school and residency programs need to be sensitive to cultural differences and cultural stereotypes. The hidden curriculum must be challenged especially when it promotes discriminatory cultural stereotypes.
- We need to foster leaders and champions that promote cultural sensitivity and take leadership roles in bodies such as the Royal College and the Canadian Paediatric Society.

Breakout Group Report:

To meet the needs of diverse and/or vulnerable populations, how should paediatricians go about creating community partnerships and with whom?

- There are too few paediatricians to meet all the needs of diverse and/or vulnerable populations. Furthermore, it is not the sole job of paediatricians to meet these needs. Paediatricians should work in partnership with primary care and community care providers and help build capacity in communities to address the needs of diverse and/or vulnerable populations. This includes enhancing the skills of other providers such as educators, nurse practitioners, family physicians, public health providers, and even the skills of children and youth and their families. All these individuals should be involved when health care needs are identified and when strategies are proposed to meet these needs. Indeed, children, youth and their families should be at the centre of all planning and care processes.
- Public and population health is a responsibility of paediatricians and should be included in paediatric training. To help create community partnerships, paediatric trainees should have mandatory training in rural and remote settings. “Medical tourism” should be avoided where residents and “experts” are parachuted into an area or community for a short period of time and then leave. Rather, true shared partnerships between the community and paediatricians, and networks of care between the community and all providers should be established.
- There are different roads to the same solution. There is a lot of power in our successes and in our failures. We should collect these stories and good models of partnerships and share them (knowledge translation).

- We are usually mentored by our own disciplines and instead, need inter-disciplinary education and mentoring systems.
- Fee-for-service payment does not provide appropriate incentives to physicians to take the time to build community partnerships.
- Paediatricians can be advocates for diverse and/or vulnerable populations but should not be responsible for leading the change. We can leverage associations and organisations at the national, provincial, regional and local levels. Paediatricians should also encourage networks of care that link communities and government/non-government organizations.

Breakout Group Report:

What kind of inter-professional care models would help address the needs of children and youth from diverse and/or vulnerable populations?

- Inter-professional care teams should be based on the principles of: i) team and individual member competency; ii) continuity of services; iii) care as close to home as possible; iv) communication and collaboration; v) community driven; and vi) Canadian models.
- We need to be aware of the unit of interest when developing teams: is it the child, the child within the family, or the child within the family within the community?
- Care models must be sensitive to the needs of the population, and will include a mix of different providers such as paediatricians, family physicians, social workers, nurses, physician assistants, interpreters, educators and others. Every team member has to add value and have a clear role. The centre of the team should be the family and child/youth (and not the paediatrician, family physician or care provider).
- Different models work well in different communities. For example, specialists can go out to smaller communities and learn about the people, the services that are available and the community, and focus on building two-way trust and communications.
- We have to showcase successful inter-professional care models and include them in the education curriculum.

Key Note Address:

Child Health in the Professional Environment

Brian Postl, President and CEO, Winnipeg Regional Health Authority, Winnipeg, Manitoba

Children and youth, up to 18 years of age, make up 25% of the Canadian population. Rarely do children and youth get on the political agenda when health policies are being

developed, health services planned and health data collected. Reasons include the fact that the proportion of children and youth is actually decreasing compared to the proportion of older persons, the younger population tends to be healthy, infant mortality rates are low and deaths rates have decreased, and children and youth do not vote and therefore their issues do not get as much political attention.

Serious health concerns exist in certain groups of youth. For example, Aboriginal children and youth have higher infant mortality rates and lower life expectancies compared to the non-Aboriginal population. Aboriginal children and youth also have higher levels of type 2 diabetes, obesity, suicide, injury, severe trauma, hospitalisation for most conditions, mental health problems, SIDS, respiratory infections and tuberculosis. The vast majority of these problems are due to the social determinants of health which include higher rates of poverty, lower education levels, higher school dropout and turnover rates, and poorer nutrition and sanitation. In addition to improving the care of Aboriginal children and youth, there is also a need to improve the care of children and youth with chronic conditions and behavioural disorders.

Although the number of paediatricians is remaining steady or increasing slightly, the role of paediatricians will change dramatically (as will the role of many health care providers). Increasingly, family physicians, nurse practitioners and others will be incorporated into paediatric care teams. This trend must be supported with training on how to work effectively in multi-disciplinary teams.

As a group, paediatricians have a remarkable potential to advocate for and improve the health and health care of children and youth. Paediatricians need to “put their elbows on the table” and use their influence to advocate for the needs of children and youth. This is especially important since those at highest risk for poor health tend to live in the most disenfranchised families that cannot effectively advocate for or support their children.

Paediatricians can play an influential role by developing a national vision and mission for children. This National Children’s Agenda should capture the imagination of politicians, have a clear focus, identify priorities for action using agreed-upon criteria, select quick wins and longer-term gains, and include a strategic approach for action. Priorities should focus on children who need help the most but at the same time, the priorities should have an impact on most children. Children need to be at the centre of what we do and why we do what we do.

2.1 Mental Health

Ian Manion, Executive Director, The Provincial Centre of Excellence for Mental Health at the Children's Hospital of Eastern Ontario, Ottawa

Psychiatric illness rates in children and youth range from 15–25% depending on the country. Child and youth mental health is increasingly being recognised as a national and provincial issue. One in six Ontario children and youth diagnosed with a mental illness get the services they need. Since there is no comprehensive health human resource plan, it is unknown how many mental health professionals there are and how many are needed. Although there are pockets of excellence and examples of effective mental health programs, most services tend to be fragmented, and there is a lack of standardization, best practices and integration across the continuum (prevention, promotion, early identification, intervention, rehabilitation, specialised care, chronic care). Our research has shown that when youth have mental health concerns they talk to their friends first. Youth are likely to seek help from the family's physician or paediatrician as often as from a psychologist, psychiatrist and social worker combined. Although family physicians and paediatricians are often the first point of contact, they have little formal training in child and youth mental health promotion, illness prevention, screening, early identification and intervention. Paediatricians need to understand that mental health is about health, illness and medicine. Paediatricians need to be trained to provide formative and ongoing mental health care, and be willing to use innovative ways to engage children and youth in maintaining their mental health. Generally, there needs to be a minimum basic standard level of knowledge about child and youth mental health that every health care professional should have. This training should include knowledge of how the system works, a common language and policies, mutual respect and an understanding of each other's role, and knowledge to get the child to the "right line" to get the services needed. Beyond the health care system, there needs to be broader inter-professional and cross-sectoral collaboration between mental health, physical health, education, youth justice, child welfare, developmental services, recreation, and the criminal justice systems.

2.2 Children, Youth and Families with Multiple Complex Needs

Peter Rosenbaum, Co-Founder, CanChild Centre for Childhood Disability Research, McMaster University, Hamilton

The *traditional model* of paediatric training and clinical exposure is hospital-based, focuses on the sickest and most complex children and youth, highlights the most interesting cases, and takes an acute approach that links diagnosis to treatment. The "expert doctor" gives the definitive answer about the child while the family listens and follows "orders." In the absence of a clear diagnosis, the physician is usually unclear about the treatment to provide. Children and youth with complex needs are usually regarded as hopeless because they cannot be cured. The lack of training in counselling and caring results in little secondary and tertiary prevention, episodic rather than ongoing care, and little involvement of families. The lack of training may also reinforce negative attitudes about disabilities that medical students may have. The traditional fee for service model exacerbates the situation since it pays physicians to perform units of work. Since chronic care is not made up of work units, fee for service is inappropriate to support this ongoing care. *Looking ahead, new ways of thinking about child health are evolving.* Four elements in particular are highlighted. 1) The World Health Organisation International Classification of Functioning Health and Disability Framework promotes a dynamic systemic model of health that has many points of entry and intervention for children and youth and their families. 2) Family-centred services expect that families will play increasingly active and complex roles in the lives of their children with chronic disabilities. 3) New funding models are paying providers differently to use their time better. 4) New research paradigms are focusing on qualitative research, listening to stories, and partnering with families and providers from other fields and internationally. Political will is needed to modify the way paediatricians and other providers are trained, to modify how child health services are funded, and to create collaborative models of team-based services. The role of paediatricians is to provide perspective, guidance, wisdom and advice in the context of a family-centred model, be responsive to the family's issues, be an important if not the leading player in meeting multiple complex needs, and go beyond diagnosis, fixing and discarding.

2.3 Children, Youth and Families with Multiple Complex Needs: The Family's Perspective

Frank Gavin, Co-Chair, Canadian Family Advisory Network

Many families, even several years after their child was first diagnosed with a chronic illness, identified the point of *diagnosis* or *disclosure* of the child's condition as a crucial time since the quality of this encounter affected the rest of the therapeutic relationship. Families highlighted the importance of physicians using accurate, clear language, having supportive attitudes, and offering "realistic hope" and opportunities for further discussion and planning soon after the diagnosis/disclosure. Families also provided several examples of the devastation they felt when physicians seemed to define their children in terms of their limitations or when physicians gradually but unmistakably showed less and less interest in their children over the course of time. Several parents said they want physicians who are both interested in and familiar with community resources and who might offer, if only once, to visit their homes. Many found paediatricians reluctant to help connect them — or unaware of the potential value of the connections — with other families and help connect newly diagnosed children and youth with older or more experienced children and youth who might serve as mentors or models. Families highlighted the importance of getting the "*full-meal deal*" for their children: a coordinated, multi-disciplinary team where all services are connected and co-ordinated, while a few identified some wonderful examples of such care. *Case management* was a common concern. Nearly all the parents who addressed the issue said that in reality the parent is, inevitably, the only case manager for a child with complex health needs and that what they want from paediatricians is medical expertise (of course), support, ready access to all information, and help with navigation. Finally, families said they want paediatricians who help them *see and prepare for the future*, for the long series of large and small transitions as the child moves through childhood and adolescence and into adulthood. Increasingly, families are looking to paediatricians and others for help in preparing for the time when parents are no longer able or alive to take care of their children.

2.4 Health Promotion and Prevention: Primary Prevention of Type 2 Diabetes: Kahnawake Schools Diabetes Prevention Project

Ann C. Macaulay, Professor, Family Medicine, McGill University, Montreal

Kahnawake is a Mohawk community of 7.5 thousand people, 15 kilometres from Montreal. The Kahnawake Schools Diabetes Prevention Project (www.ksdpp.org) is a case study of participatory research where the community and researchers combined their expertise and worked as a team. The community chose to address the high rate of type 2 diabetes in Kahnawake with a particular focus on children. Funded by the NHRDP in 1994, this project is overseen by a Community Advisory Board made up of community volunteers and organisations. The Board helped develop the research questions, advised on the data to be collected, helped interpret and disseminate the results locally, nationally and internationally, developed a code of research ethics, and identified short and long-term goals to help build capacity and sustainability. Teachers delivered a new health education program in Mohawk and English, the school system banned junk food in 1994, teachers acted as role models and encouraged children to engage in healthy behaviours, and the community partnered with organisations in activities such as community walks. In 1994, children in grades 1–6 weighed approximately the same as their North American counterparts and fat intake was good at 30%. Improvements in physical activity and decreased TV watching occurred in the first four years of the project but dropped to baseline levels in 1999. Results in 2002 indicated that children in grades 1–6 consumed significantly less sodas, French fries, chips and candy, and ate more whole wheat bread but they ate less fruits and vegetables. Positive process outcomes and ecological changes have included the development of a nutrition policy for the schools and the youth centre, the building of a recreation path, a training program in diabetes prevention for other Aboriginal communities, and community members enrolled in post-graduate health programs and engaged in knowledge translation nationally and internationally. The key lessons learned include the importance of responding to community priorities, building on community strengths, partnering with other organizations, identifying the areas on which to focus using the Ottawa Charter as a guide, building capacity by developing community and academic champions, and building in knowledge translation. Paediatricians need to think about what they can do to work with and improve the health of communities and schools.

2.5 Break-Out Groups

Breakout Group Report:

What kind of inter-professional care models would help address the needs of children and youth with chronic health conditions?

- Depending on the needs of the child, youth and their family, the model of care could include paediatricians, other physicians, pharmacists, dieticians, nurse practitioners, residents, social workers, mental health professionals and health promotion providers. Children and youth need to be in a model that is right for them. The optimal model for the child should be identified in early stages. Paediatricians are in an ideal position to promote the development of the optimal care model.
- Care models will vary and evolve depending on the level of care that is needed and the “life stage” of the child and the family. Primary care could be provided by primary health care providers and groups in the community (e.g., Ontario’s Family Health Teams). Secondary care requires consultation and care by a paediatrician. Tertiary and quaternary care requires paediatric specialty care. We need to describe the levels of care, the role of the provider within each level, and the communication strategies between the levels and providers. The providers in each level need to provide care as a team. Each individual child should have a care plan that identifies who is responsible for their care and services at each level.
- Elements of effective inter-professional care models should include electronic records, ongoing two-way communication with families, and parent-controlled records. Approaches such as mailing results to children and their families are not effective.
- The most appropriate model of care needs to be selected before remuneration is addressed. It is clear, however, that different types of remuneration – in addition to fee-for-service – are needed to support inter-professional and chronic care (e.g., capitation, salary, fee-for-service incentives, blended payments).

Breakout Group Report:

What paradigm shift is needed in the philosophy and education of health providers in order to provide the best care of children and youth with chronic health conditions?

- We know what needs to change but the solutions and getting there are not as easy. We need to clarify whether the paediatrician should provide primary care and/or be consultants to primary care providers. The answer will vary by province and even within each province.
- We need to get away from paediatricians being leaders of the team to adopting a true team approach. When there is a team approach for chronic conditions, physicians seldom lead the team. Rather, teams tend to be led by social

workers, child and youth workers, clinical nurse specialists and others. This is more likely to happen where there is a scarcity of paediatricians (e.g., rural areas).

- Paediatric training does not include a team approach to care. Paediatric residents need to be exposed to multi-disciplinary teams, outpatient settings, complex care clinics, and rural care centres. In addition, paediatricians and physicians who do not want to be board-certified paediatricians but who want to spend a year or two getting specialised training in a particular area need good ongoing training. The current call structure and fee-for-service reimbursement does not encourage flexible training. In addition, the traditional fee-for-service model limits what paediatricians (as consultants) can do to provide chronic health care services.
- It is hard to develop teams when there is turf protection. The health system needs to be structured differently so that turf issues become less important.
- Paediatricians (and physicians in general) underrate the importance of the family’s quality of life when the family is caring for a child with a chronic health condition(s). The family’s health must also be recognised.
- New models should be evaluated to see whether they result in good outcomes.

Breakout Group Report:

To meet the needs of children and youth with chronic health conditions, how should paediatricians go about creating community partnerships and with whom?

- Paediatricians need to focus efforts on building community partnerships especially since care needs are becoming more complex and more diseases are chronic. There are not enough paediatricians to do everything. Paediatricians need to adopt local models and build community capacity by working with families in their homes, in schools, day care centres, and with community care providers. If paediatricians work with a broad range of individuals, share knowledge and consult, communities will be better able to address the chronic health needs of children and youth (multiplier effect).
- It is necessary to clarify the role of the paediatrician compared to other physicians, psychiatrists, psychologists, and other providers who will be caring for the same children.
- At the local level, paediatricians need to recognise the importance of and work closely with family physicians especially when youth transition into adulthood. At the provincial level, innovative proposals to support children, youth and their families should be submitted to government for funding.

- The focus should be on children and youth and their families rather than the chronic health condition.
- Non-paediatricians in health care, schools and the community can be effective advocates for the importance of paediatric care.

Breakout Group Report:

What skills, expertise and information are required to be an effective case manager for children and youth with chronic health conditions? In which instances are paediatricians the ideal case managers?

- There are differences of opinion on what is meant by a case manager. Other terms that might be used include family care coordinator, case worker and navigator.
- The case manager does not need to be a paediatrician. Generally, parents could be case managers for their children depending on the situation. However, there needs to be fluidity since managing the care of the child will vary depending on the situation. At various times, the case manager could be the parent, family physician, paediatrician and/or specialist.
- The Royal College has well written training objectives but in actual practice, it is hard to teach residents how to be case managers. This skill is learned with practice and experience. Despite this, residents (and paediatricians) should be supportive and advocate for children and youth at all times but especially when accessing services and drugs that are hard to get.
- A good case manager needs to have a holistic perspective, know what services are available in the community and elsewhere, know how to get the services, and be able to communicate with different disciplines (e.g., residents, social workers, nurses, teachers, etc.). We need to teach our undergraduate, graduate and residents how to communicate and advocate.
- Fee-for-service is not an appropriate payment method to support a paediatrician taking on the role of case manager, advocate or provider of comprehensive chronic care. Alternate funding programs are more suitable.

Inter-Professional Care Models: Panel Presentation

Judith Ritchie, Associate Director for Nursing Research, McGill University Health Centre, Montreal, Quebec

Inter-professional care models need to include a wide range of providers including teachers, the family and patients who should help to direct their care, where possible. There are a wide range of tasks within the nursing scope of practice that paediatricians and family physicians currently do. Generally, nurses tend to “do more” if paediatricians and family physicians are in short supply. With the shortage of paediatricians – and given their their highly specialised training and skills – we need to question whether paediatricians should be involved in well-child care.

Francine Lemire, Associate Executive Director, Professional Affairs, College of Physicians and Surgeons of Canada

It is useful for various members of the inter-professional team to be “co-located” either physically or connected by phone (e.g., family physician and pharmacist team). Other providers should be integrated into the care team. Their roles should be negotiated rather than it being assumed that they will substitute for other providers. Fee-for-service is not the best payment method to support collaborative care. Ontario’s Family Health Teams – which include teams and a blended payment model of capitation and fee-for-service incentives for certain services – are a better model for collaborative care. Electronic information technology is essential for collaborative care.

Hugh O’Brodivich, Former Chair, Professor Department of Paediatrics, University of Toronto, The Hospital For Sick Children, Toronto, Ontario

All paediatricians should be exposed to research during their training as this will enhance their ability to evaluate published basic research and clinical research. This will directly impact on the quality of their care to patients and families throughout their career. A subset of paediatricians should undertake extensive research training so that they may directly contribute to the development of new cures and strategies to maintain health. Since research is becoming more complex and since we wish to move fundamental discovery to the bedside and backyard, research is increasingly being done by inter-disciplinary teams. Meritorious research in each of the four CIHR pillars is required to maintain health effectively, develop new cures and advocate for optimal health care policy.

Sue Tallett, Associate Chair of Paediatrics (Education); Professor, Department of Paediatrics, University of Toronto; Clinician-Educator, The Hospital for Sick Children, Toronto, Ontario

We all believe in inter-professional collaboration but it is unclear whether interprofessional education methods used to date are achieving the desired goals. We need good models of collaborative practice to help inform our education programs. This type of education is best done in smaller groups using problem-based learning and focusing on competencies. Paediatricians need to be educated about prevention and take a leading role advocating for prevention with government.

Theme #3: Child and Youth Health Human Resources

3.1 Canadian Paediatric Society Perspective

Ian Wilson, Chair, Health Human Resources Committee, Canadian Paediatric Society; Paediatrician, Grand River Hospital, Kitchener, Ontario

From 1995 to 2005, the Canadian Paediatric Society conducted three surveys. Paediatricians reported that they are working longer hours, about one third were planning to reduce their work hours in the future, and 11% planned to retire in the next five years. Fewer paediatricians are working in the community and fewer are working in areas with less than 100,000 people. Paediatricians reported conducting more research, and are engaged in more professional development and education activities. About half of paediatricians reported doing some primary care, almost two thirds did consultant care, one third did subspecialty care, and two thirds were involved in hospital services. Paediatricians reported difficulties accessing primary care physicians and allied professionals (e.g., social workers, psychologists, dieticians); 58% had difficulties getting access to paediatric subspecialists. The most recent survey – which focused on residents – found that 75% were female, two thirds reported that they planned to work in an academic centre, 10% planned to work in a community office and 11% wanted to work in smaller communities of less than 100,000 people. Slightly over a third (36%) wanted to do subspecialty care, 22% wanted to do consultant care and 5% wanted to do primary care. About one third of residents reported wanting to do international work. When asked about their priorities, 50% of residents rated location as their top priority followed by lifestyle at 49%. Remuneration was in the middle of the priority list. Currently, the Canadian Paediatric Society is seeking input on a draft model for paediatrics. The model considers improving access to paediatric care by better distributing properly-resourced community paediatricians who can provide speciality care, supporting family physicians to provide optimal paediatric

care, exploring a more appropriate distribution of sub-specialists, developing remuneration models that support different models of care (e.g., multi-disciplinary education and care models, schools, primary care groups, ongoing care), examining the role of paediatricians in navigating care, and ensuring that paediatricians meet their tertiary and secondary care commitments.

3.2 Federal, Provincial, Territorial Perspective

Nora Kelly, Deputy Minister, Department of Health, Province of New Brunswick

The Deputy Ministers of Health are very interested in health care services and the human resources that are required to provide these services (e.g., numbers, roles, scope, training, recruitment and retention). Health human resource planning efforts and methodologies vary across Canada. Planning for human resources is part of broader planning for health services which includes defining the health delivery model(s) that are appropriate to meet the needs of the population, and determining the number and type of providers needed to support these models. The four Atlantic provinces invested in a human resource forecasting methodology that can incorporate assumptions about different models of care. Working in collaboration with professional associations, the Atlantic provinces have compared the current human resource supply with forecasted demands, and are addressing gaps through education. As a result of the federal, provincial and territorial accords, there is funding and a commitment to work on a health human resource framework and forecasting model. Currently, input is being sought on a Canadian health human resource framework. There is definitely a role for paediatricians in inter-disciplinary teams (although it is suggested that the term “inter-disciplinary” be used rather than “inter-professional” since not all team members are regulated professionals). There is a need for paediatricians to work in the community and work with school systems. In addition, there is a need to address the fact that many paediatric residents want to work in urban centres and provide specialised tertiary care even though there are large unmet needs outside of major urban areas. How do these expectations get changed?

3.3 The College of Family Physicians of Canada Perspective

John Maxted, Associate Executive Director, Health and Public Policy, The College of Family Physicians of Canada

Studies from the Canadian Institute for Health Information reported that 85–90% of family physicians still had office-based practices and provided a range of services including mental health care and basic procedural services. Although fewer family physicians are doing surgical assists, surgery,

anaesthesia, obstetrics and advanced procedures, the physicians engaged in these activities are doing more of them. The National Physician Survey (NPS 2004) reported that 57% of family physicians less than 35 years of age were female with women preferring to train in family rather than specialty medicine. Younger females work fewer hours although the working hours for female and male family physicians peak at the same number of hours between (45–54 years of age). Many family physicians wanted to decrease their work hours; 14% planned to reduce their scope of practice within two years; and many preferred different payment methods to get a better work-life balance and work satisfaction (55% of family physicians were in group practices, only 51% received over 90% of their income from fee-for-service, and 48% of physicians preferred a blended payment model). The NPS 2004 found that the priorities of second year family medicine residents were establishing caring relationships with patients and practice flexibility. Intellectual stimulation, earning potential and prestige were a lesser priority for family medicine compared to specialty medicine residents. Depending on the data source, 41% to 80% of family physicians in Canada provide primary child and adolescent health care. Paediatricians are caring for more children with complex care needs and provide primary care especially in larger urban centres. There is a need to prioritise access to primary and specialised paediatric services, manage health care disparities in rural and vulnerable populations, promote primary and specialised shared care models, refocus family medicine education to deal with more complex chronic conditions, recruit and retain family physicians who want to work with children and youth, develop shared information systems and create stronger links with public health.

3.4 A Research Perspective

Astrid Guttmann, Institute for Clinical Evaluative Sciences, Assistant Professor of Pediatrics, University of Toronto, Divisions of Pediatric Medicine and Emergency Medicine, The Hospital for Sick Children, Toronto, Ontario

Research plays a critical role in health human resource planning. A large and sophisticated literature exists on the complex relationship between physician supply and health outcomes, and it is clear that more supply does not necessarily ensure better access or health outcomes and that defining “need” is crucial to health human resource planning. Although many provinces have linked datasets that can improve our understanding of how current child health service needs and use are related to health outcomes, there are relatively few researchers in this field in Canada. There has been little work done on paediatric health human resources and currently the data on paediatrician supply being reported at the national level is inconsistent and not

useful for planning purposes. Health services research has the potential to improve these data as well as articulate where the greatest gaps exist in child health care need and health provider supply. Research-related human resource issues fall into three broad categories. 1) Describe: Data are needed to answer questions such as what are current healthcare needs (what is the current burden of disease) what services are needed, and which ones do children and youth actually receive. (Needs-based analyses must include physical, mental and social needs of children and youth. It is insufficient to use just simple age adjustment, birth rates or measures like Resource Intensity Weights which do not accurately reflect overall resource needs.) 2) Evaluate: Evaluate whether the services that are received have an impact on health outcomes. 3) Improve: What can be done at the health system level to improve the balance between needs and services. Currently, researchers tend to focus their efforts on describing disparities and problems with less attention paid to identifying system-level interventions to improve access to care and health outcomes. We need to use the talents of clinicians, researchers and policy makers to make improvements in the care of children and youth. Finally there are national initiatives and reporting mechanisms to improve our understanding of physician supply in Canada (including improved methodologies for determining workload of salaried physicians such as paediatricians). It is entirely feasible to improve the current accuracy of data around both community paediatricians and subspecialists which would allow improved needs based human health resource planning.

Theme #4: Education and Training: Addressing the Future Needs of Child and Youth Health

4.1 Training Family Physicians to Care for Children and Youth

Elizabeth Shaw, Family Medicine Program Director, Department of Family Medicine; Faculty of Health Sciences, McMaster University. Hamilton, Ontario

The principles of family medicine training include: 1) The family physician is a skilled clinician. 2) The doctor-patient relationship is central to the role of the family physician. (In child and youth health, one cannot be patient-centred without being family-centred). 3) Family medicine is community-based. 4) The family physician is a resource to a defined practice population. Family medicine is a two year training program with an optional third year. Core paediatric training is two to four months with many residents practising in communities where the family physician admits and cares for their own paediatric patients. All residents do 10 months in family medicine where paediatrics is part of the patient population. Training challenges include: the tertiary ward experience is less relevant to family medicine; paediatric resources are scarce; the “death of the generalist community

paediatrician” impacts on family medicine training programs; the paediatric population is declining in some provinces; there are fewer children in family medicine practices in communities where paediatricians do primary care. Family physicians and paediatricians share the same broad goals for child health and can work well together as a team. Family medicine program directors work well with departments of paediatrics to develop family medicine training programs. Some innovative family medicine training initiatives in paediatrics include residents practising paediatrics in a range of settings, and residents taking third year paediatric training that includes mental health and disabilities. (Surveys have shown that family medicine faculty and residents are most uncomfortable caring for children and youth with disabilities and mental health conditions.) Opportunities for the future include: communities can intentionally recruit physicians to provide paediatric care (universities can make this part of the education experience); promote opportunities for collaborative paediatric education (paediatrics, family medicine, nursing, social work and psychiatry); and model and develop skills in inter-disciplinary team care using academic teaching centres. We cannot expect graduates who have no exposure to these models and have not been taught interdisciplinary team skills to embrace these when they graduate.

4.2 The Royal College of Physicians and Surgeons of Canada Perspective

Deborah Danoff, Director of Education, The Royal College of Physicians and Surgeons of Canada

The Royal College is actively aware of the future directions in health care and how the education environment can inform and assist these directions. Over the last few years, the College has focused on the CanMEDS Physician Framework (which evolved from the Educating Future Physicians for Ontario project that identified physician competencies). The seven components of medical education and the changes that are *anticipated* include the following.

1) *Process*: medical education will be more distributed, IT-mediated, and use more high and low-technology simulations to assess individual and inter-professional proficiencies. 2) *Content*: there will be a core content for all medical school graduates, a general content for all paediatricians that will be impacted by the inter-professional sharing of responsibilities, and a differentiated content based on the communities that are being served (e.g., patient age, condition and discipline). 3) *Location*: the location of medical education will be distributed, not all education will occur in bigger teaching hospitals, and preceptor models will be used more frequently where the preceptor will not always be a physician. 4) *Who are the teachers*: teachers will be identified and trained so they reflect the desired outcome, and all members of the team will be engaged. 5) *Who are the*

learners: Learners will represent the increasing diversity of Canada’s population, and will include individuals trained outside traditional Canadian training models, and individuals with different expectations and values than their teachers.

6) *Assessment methodologies*: the majority of assessments must occur during training (Royal College final exam is the small last step), and involve newer technologies. 7) *Outcomes*: Outcomes will be clearly defined and framed according to the seven CanMED roles (i.e., medical expert, communicator, collaborator, manager, health advocate, scholar, professional). For example, the collaborator role includes functioning in a team environment across and within disciplines, focusing on relationships with patients and families, and identifying conflicts early on and resolving them. It appears that we face the same key training issues in Canada as does the US despite the differences in our health care delivery systems.

4.3 Educator’s Perspective

Sue Tallett, Associate Chair of Paediatrics (Education); Professor, Department of Paediatrics, University of Toronto; Clinician-Educator, The Hospital For Sick Children, Toronto, Ontario

Paediatric education directors from across the country provided an educator’s perspective of paediatric training programs. *Evolving trends* include: changing demographics; trainees are taking longer before they come to medical school (e.g., many more have graduate degrees); International Medical Graduates are entering training or assessment programs in increasing numbers, students have more career choices; training flexibility is decreasing in some provinces that are forcing students, (through funding issues), to make decisions about specialisation sooner; fewer residents are entering community practice; the Royal College has higher standards, structures and requirements; there is growing attention to lifestyle choices and work hours; more thorough evaluations are required; and increasingly more content is required (e.g., new diseases, ethics, quality and safety, IT/IM, managing computers and data, communicating with information-savvy patients and families). *Current issues and tensions* include: tension between general and specialty practice; length of training is regarded as being both too long and too short by various interested parties; funding challenges to support residency training positions, need to engage more community paediatric faculty in teaching, and more training and evaluation activities; International Medical Graduates and upgrading their skills; training students to take on many different roles; demand for residents to achieve higher levels of education (e.g., MA and PhD). *Challenges and questions* include: Who will provide care to children? Who makes career decisions and determines where providers will work (the trainee or government)? What effective and efficient training models should be considered

(e.g., two year core with research training, changing four to five year core)? Where should residents be trained (hospitals provide comfort in dealing with complexity but there is a need to increase training in the community)? How does new content get integrated? (I think we have to teach people how to learn and we need to develop life-long learning principles, introduce concepts and promote communities of learners and practice to help people move forward with their own learning as it becomes relevant to them.) How do we educate the teachers of the future and enhance scholarship in education and research?

4.4 Specialty Committee Perspective

Robert Hilliard, Former Chair, Paediatric Specialty Committee, The Royal College of Physicians and Surgeons of Canada; Professor, Department of Paediatrics, University of Toronto, The Hospital For Sick Children, Toronto, Ontario

The Royal College has CanMEDS seven roles of a physician specialist in Canada (i.e., medical expert, communicator, collaborator, manager, health advocate, scholar, professional). These roles guide and direct training and evaluation activities. The purposes of evaluation are to: assess whether the student or resident has achieved expected goals and can be given the degree or certificate; guide and monitor the student's progress through training; and drive student learning. There are a variety of in-training evaluations. Every Canadian program has a series of rotation-specific, in-training evaluations based on the CanMEDS roles and final evaluations; all residents do the American Board of Paediatrics Practice exams; many centres have oral and clinical exams, mock orals and objective-structured clinical exams. Some centres evaluate research and quality assurance projects and develop learning profiles. Other evaluations – such as the 360 evaluation – are not widely used in Canada. The final Royal College exam in paediatrics includes a multiple choice exam, short answer questions and an objective structured clinical exam. The view is that these exams are valid, reliable and useful, and assess medical expertise and the seven CanMEDS roles. Competence is maintained through 80 hours of continuing education annually (accredited CME

based on adult learning principles). (The US is exploring recertification that includes evidence of professional standing, lifelong learning, cognitive expertise, satisfactory performance and patients' comments.) The Royal College system of evaluation and maintenance of competency is generally accepted by Canadian paediatricians (e.g., study showed that 96% of practising paediatricians were happy and satisfied with their training). The issue of physicians not trained in Canada needs to be addressed. What should be the standards of a practising paediatrician in Canada and how should these competencies be evaluated? If a competency is important, it needs to be in the evaluation and training process since students learn the things that will be evaluated. Furthermore, there should only be one standard for practising paediatricians.

Recommendations and Actions that Focus on the Role of the Paediatrician in an Inter-Professional Environment

Symposium participants identified recommendations/actions that focus on the role of the paediatrician in an inter-professional environment in the areas of education, advocacy, inter-professional models of care, and other areas. The criteria that were used to select recommendations/actions were specific initiatives that are achievable in the short term (12–24 months), and whose progress can be measured.

Next Steps

A working group made up of the symposium's Planning Committee and additional partners will review and prioritise the recommendations/actions. The working group is committed to reporting back to the symposium participants and providing regular updates. The working group will develop a two-year work plan that identifies actions, leaders/champions and measures of progress.

Summary of Recommendations

Goal 1: To promote the best healthcare services for all infants, children and youth in Canada.

Advocacy

Support the establishment of an infant, child and youth commissioner for Canada.

Advocate to provincial policy makers that child healthcare needs – especially those of medically vulnerable infants, children and youth – be included in needs-based methods of allocating health resources (financial and human).

Advocacy/Research

Support national (e.g., Canadian Institute for Health Information) and provincial health ministerial efforts to improve health human resource data and make them relevant to the healthcare of infants, children and youth.

Clinical

Develop an inventory of the best and most promising interdisciplinary, family-centred models for infant, child and youth healthcare. Distribute this inventory along with a template that interdisciplinary groups of providers can use to select the most suitable models to meet their community's needs.

Develop a handbook and/or website directory for paediatricians and family physicians that includes referral processes, potential contacts and tips to navigate the infant, child and youth health care system within each jurisdiction.

Education

Develop and implement flexible education curricula on infant, child and youth healthcare for undergraduate and paediatric and family medicine residents that include, but are not limited to, healthy active living; public health; community paediatrics; aboriginal health; early childhood development; prevention of injury and maltreatment; obesity; the impact of social determinants on physical, mental and emotional health (i.e., social paediatrics); and advocacy.

Research

Examine the impact on effective healthcare services for infants, children and youth (acute, chronic, mental health, behavioural, etc.) of: i) various physician funding models (alternate funding programs, fee-for-service, etc.); and ii) innovative ways to provide secondary paediatric care that leverages primary care reform initiatives.

Goal 2: To promote the improved health and healthcare of vulnerable infants, children and youth including, but not limited to, those of aboriginal descent, new immigrants, those living in poverty, those who are maltreated, and those living with chronic illnesses or disabilities.

Advocacy

Develop and implement collaborative paediatric education modules that involve infants, children, youth and their families, and that focus on advocating for vulnerable infants, children and youth (e.g., aboriginal mental health, early literacy, injury prevention).

Develop a high level Institute of Medicine-type report that highlights the disparities in child healthcare in Canada.

Clinical/Research

Validate existing health indicators for infants, children and youth, and develop new indicators that will help improve the delivery of healthcare services especially for vulnerable infants, children and youth.

Education

Incorporate new and emerging issues on a regular basis into the paediatric education curricula especially as they relate to the health and healthcare of vulnerable infants, children and youth.

Goal 3: To improve access to mental healthcare services for infants, children and youth.

Advocacy

Support the work of the Infant, Child and Youth Mental Health Consortium in developing a national mental health strategy.

Education

Assess the content of infant, child and youth mental health in paediatric residency education programs, identify areas for improvement, and advocate for content improvements.

Goal 4: To improve healthcare that is provided to infants, children and youth through interdisciplinary cooperation and collaboration.

Advocacy

Publish a theme issue in Paediatrics and Child Health dedicated to successful models of interdisciplinary infant, child and youth health teams.

Advocate for the development of interactive inter-professional workshops and seminars in infant, child and youth care that use case-based learning, are offered in academic and community settings, and are attended by infants, children, youth and their families, paediatricians, family physicians, nurses and other care providers such as pharmacists, social workers, etc.

The Canadian Paediatric Society, the Canadian Association of Paediatric Health Centres, the College of Family Physicians of Canada and others to host an annual session that addresses interdisciplinary best practices in infant, children and youth care.

Request a paediatric representative on the Royal College of Physicians and Surgeons and College of Family Physicians of Canada joint committee to help support interdisciplinary collaborative initiatives relevant to infant, child and youth health.

Education

Develop a model of interdisciplinary infant, youth and child care, encourage university health science programs to incorporate this model in their education curricula, and evaluate uptake of the model.

Research

The Canadian Institutes of Health Research and the National Child and Youth Health Coalition to develop a Request for Applications to evaluate inter-disciplinary models of infant, child and youth care.

Goals and Recommendations, Themes, Leaders/Champions and Measures of Progress

| Goal 1: To promote the best healthcare services for all infants, children and youth in Canada. | | | |
|---|-----------------------|--|---|
| Recommendations | Theme | Suggested Lead Organizations/ Champions | Measures of Progress |
| 1 Support the establishment of an infant, child and youth commissioner for Canada. | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society • National Child and Youth Health Coalition | <ul style="list-style-type: none"> • Establishment of a Commissioner. |
| 2 Advocate to provincial policy makers that child healthcare needs – especially those of medically vulnerable infants, children and youth – be included in needs-based methods of allocating health resources (financial and human). | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society • Paediatric Chairs of Canada • Canadian Association of Paediatric Health Centres • Provincial paediatric associations and organizations. | <ul style="list-style-type: none"> • Inclusion of child healthcare needs in needs-based allocation methodologies. |
| 3 Support national (e.g., Canadian Institute for Health Information) and provincial health ministerial efforts to improve health human resource data and make them relevant to the healthcare of infants, children and youth. | Advocacy/ Research | <ul style="list-style-type: none"> • Canadian Association of Paediatric Health Centres • Canadian Paediatric Society • Paediatric Chairs of Canada • Provincial paediatric associations/sections | <ul style="list-style-type: none"> • Improvements made to data so they are more relevant to the healthcare of infants, children and youth (e.g., reporting full-time equivalent physicians who are on alternate payment plans; identifying paediatric subspecialists as paediatricians rather than subspecialists; identifying other health care professionals who care for infants, children and youth in hospital and community settings; and using population denominators when reporting data on infants, children and youth). |
| 4 Develop an inventory of the best and most promising interdisciplinary, family-centred models for infant, child and youth healthcare. Distribute this inventory along with a template that interdisciplinary groups of providers can use to select the most suitable models to meet their community's needs. | Clinical | <ul style="list-style-type: none"> • Canadian Association of Paediatric Health Centres | <ul style="list-style-type: none"> • Development of an inventory and template. • Development of new knowledge and information. • Development of a national resource. |

¹ There are 9 Advocacy recommendations; 1 combined Advocacy/Research recommendation; 2 Clinical recommendations;

⁴ Education recommendations; 2 Research recommendations; and 1 combined Clinical/Research recommendation.

Goal 1: To promote the best healthcare services for all infants, children and youth in Canada.

| Recommendations | Theme | Suggested Lead Organizations/ Champions | Measures of Progress |
|---|-----------|---|--|
| <p>5 Develop a handbook and/or website directory for paediatricians and family physicians that includes referral processes, potential contacts and tips to navigate the infant, child and youth health care system within each jurisdiction.</p> | Clinical | <ul style="list-style-type: none"> • Provincial and regional associations and organisations, as appropriate • Provincial paediatric associations/sections | <ul style="list-style-type: none"> • Development of a handbook and/or website directory. |
| <p>6 Develop and implement flexible education curricula on infant, child and youth healthcare for undergraduate and paediatric and family medicine residents that include, but are not limited to, healthy active living; public health; community paediatrics; aboriginal health; early childhood development; prevention of injury and maltreatment; obesity; the impact of social determinants on physical, mental and emotional health (i.e., social paediatrics); and advocacy.</p> | Education | <ul style="list-style-type: none"> • Canadian Paediatric Society • Paediatric Chairs of Canada • Canadian Association of Paediatric Health Centres • Undergraduate Paediatric Program Directors • Paediatric Residency Training Directors • College of Family Physicians of Canada • Family Medicine Program Directors • First Nations and Inuit Child Health Many Hands, One Dream | <ul style="list-style-type: none"> • Development of modules in all programs (i.e., curricula). • Audit of undergraduate program directors within one year. • Development of a national scorecard. • Evaluation completed (pre and post). • Achievement of high satisfaction in residents and programs with the training opportunities provided. |
| <p>7 Examine the impact on effective healthcare services for infants, children and youth (acute, chronic, mental health, behavioural, etc.) of: i) various physician funding models (alternate funding programs, fee-for-service, etc.); and ii) innovative ways to provide secondary paediatric care that leverages primary care reform initiatives.</p> | Research | <ul style="list-style-type: none"> • Paediatric Chairs of Canada • Canadian Paediatric Society • Canadian Association of Paediatric Health Centres • Provincial paediatric associations/sections | <ul style="list-style-type: none"> • Completion of impact studies that incorporate well-defined recommendations. |

Goal 2: To promote the improved health and healthcare of vulnerable infants, children and youth including, but not limited to, those of aboriginal descent, new immigrants, those living in poverty, those who are maltreated, and those living with chronic illnesses or disabilities.

| Recommendations | Theme | Suggested Lead Organizations/ Champions | Measures of Progress |
|---|--------------------|--|--|
| <p>8 Develop and implement collaborative paediatric education modules that involve infants, children, youth and their families, and that focus on advocating for vulnerable infants, children and youth (e.g., aboriginal mental health, early literacy, injury prevention).</p> | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society • Paediatric Chairs of Canada • Paediatric Undergraduate and Postgraduate Directors | <ul style="list-style-type: none"> • Development of modules • Assessment of the extent to which the modules are being used in undergraduate and postgraduate education. |
| <p>9 Develop a high level Institute of Medicine-type report that highlights the disparities in child healthcare in Canada.</p> | Advocacy | <ul style="list-style-type: none"> • Federal and Provincial Health Quality Councils | <ul style="list-style-type: none"> • Completion of a report. |
| <p>10 Validate existing health indicators for infants, children and youth, and develop new indicators that will help improve the delivery of healthcare services especially for vulnerable infants, children and youth.</p> | Clinical/ Research | <ul style="list-style-type: none"> • Canadian Association of Paediatric Health Centres • National Child and Youth Health Coalition • Federal and Provincial Health Quality Councils | <ul style="list-style-type: none"> • Development of a comprehensive set of health indicators. • Validation of indicators • Assessment of whether the indicators are being used to improve the delivery of care. |
| <p>11 Incorporate new and emerging issues on a regular basis into the paediatric education curricula especially as they relate to the health and healthcare of vulnerable infants, children and youth.</p> | Education | <ul style="list-style-type: none"> • Paediatric Chairs of Canada • Undergraduate and Postgraduate Paediatric Program Directors • Specialty Program Directors | <ul style="list-style-type: none"> • Development and implementation of a mechanism to track and communicate new and emerging issues to paediatric educators. • Assessment of uptake of issues. |

Goal 3: To improve access to mental healthcare services for infants, children and youth.

| Recommendations | Theme | Suggested Lead Organizations/ Champions | Measures of Progress |
|---|-----------|---|--|
| <p>12 Support the work of the Infant, Child and Youth Mental Health Consortium in developing a national mental health strategy.</p> | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society • National Child and Youth Health Coalition | <ul style="list-style-type: none"> • Development of a strategy. |
| <p>13 Assess the content of infant, child and youth mental health in paediatric residency education programs, identify areas for improvement, and advocate for content improvements.</p> | Education | <ul style="list-style-type: none"> • Undergraduate and Postgraduate Paediatric Program Directors • Canadian Academy of Child and Adolescent Psychiatrists | <ul style="list-style-type: none"> • Assessment of content, identification of areas for improvement, and evaluation of improvements made. |

Goal 4: To improve healthcare that is provided to infants, children and youth through interdisciplinary cooperation and collaboration.

| Recommendations | Theme | Suggested Lead Organizations/ Champions | Measures of Progress |
|--|-----------|---|---|
| <p>14 Publish a theme issue in Paediatrics and Child Health dedicated to successful models of interdisciplinary infant, child and youth health teams.</p> | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society | <ul style="list-style-type: none"> • Publication of issue. |
| <p>15 Advocate for the development of interactive inter-professional workshops and seminars in infant, child and youth care that use case-based learning, are offered in academic and community settings, and are attended by infants, children, youth and their families, paediatricians, family physicians, nurses and other care providers such as pharmacists, social workers, etc.</p> | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society • Canadian Association of Paediatric Health Centres • Paediatric Chairs of Canada • College of Family Physicians of Canada • Educators. • In community hospitals, the chiefs of staff. | <ul style="list-style-type: none"> • Completion of progress report after one year. |
| <p>16 The Canadian Paediatric Society, the Canadian Association of Paediatric Health Centres, the College of Family Physicians of Canada and others to host an annual session that addresses interdisciplinary best practices in infant, children and youth care.</p> | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society • Canadian Association of Paediatric Health Centres • College of Family Physicians of Canada • Canadian Association of Paediatric Nurses | <ul style="list-style-type: none"> • Hosting of annual session. |
| <p>17 Request a paediatric representative on the Royal College of Physicians and Surgeons and College of Family Physicians of Canada joint committee to help support interdisciplinary collaborative initiatives relevant to infant, child and youth health.</p> | Advocacy | <ul style="list-style-type: none"> • Canadian Paediatric Society | <ul style="list-style-type: none"> • Request made for representative and accepted. |
| <p>18 Develop a model of interdisciplinary infant, youth and child care, encourage university health science programs to incorporate this model in their education curricula, and evaluate uptake of the model.</p> | Education | <ul style="list-style-type: none"> • Canadian Paediatric Society • National Child and Youth Health Coalition • Undergraduate Paediatric Program Directors • Paediatric Residency Training Directors • Nursing Training Directors | <ul style="list-style-type: none"> • Development and uptake of the model. |
| <p>19 The Canadian Institutes of Health Research and the National Child and Youth Health Coalition to develop a Request for Applications to evaluate inter-disciplinary models of infant, child and youth care.</p> | Research | <ul style="list-style-type: none"> • National Child and Youth Health Coalition | <ul style="list-style-type: none"> • Development of a Request for Applications. |

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