AN INTERNATIONAL COMPARISON OF EARLY CHILDHOOD INITIATIVES: FROM SERVICES TO SYSTEMS

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ABSTRACT: It can be argued that much of the evidence generated in the United States on the importance of early childhood to future health and attainment has had a greater effect on the national policies of other countries than it has in the U.S., which lacks a national policy agenda for young children. However, the U.S. is not the only country to struggle with the direction early childhood policy should take: England, Canada, and Australia all started with similarly fragmented early childhood services, and have tended to favor market-based solutions with limited reliance on the welfare state. This report describes some of the components of all four countries' efforts to develop policies that produce lasting gains for their youngest citizens. The authors also consider the implications of experiences in England, Canada, and Australia for the development of early childhood policy in the U.S.

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EXECUTIVE SUMMARY

Events and experiences in the first months and years of a child's life can set a foundation for lifelong well-being or leave a legacy of poor physical and emotional health and developmental challenges. Children from more-affluent families show marked advantages in both knowledge and skills that are evident long before school entry. Compared with children from impoverished backgrounds, they have better health status, are less likely to require hospitalization in the first five years of life, and are at less risk for future learning difficulties once they enter school. Recent studies document the impact of early adversity on adulthood, measured in higher levels of cardiovascular risk, alcoholism, drug use, and mental disorders.

Despite evidence of how much the early years contribute to later health and educational attainment; there is, as yet, no clearly articulated U.S. policy on this most important period of life. There are a number of possible explanations, all of which conspire to limit progress on early childhood policy in the United States:

- Much of children's well-being depends on circumstances within the home, and typically, these have not been an incitement to government intervention.
- Existing government programs that serve young children utilize a deficit model, are marginally funded, and operate in a maze of local, state, and national funding streams, with little communication or coordination across health, education, and social services sectors.
- Measures of what constitutes high-quality care for young children are insufficient and require further development. The least tangible aspects of caregiving that are most difficult to measure—mutual trust, positive affect, nurturance, responsiveness—are likely to be most important for the child's long-term well-being.

The U.S. is not the only country to struggle with early childhood policy directions. England, Canada, and Australia all started with similarly fragmented early childhood services, a penchant for market-based solutions, and a desire to limit reliance on the welfare state. Families in each of these countries are facing similar pressures resulting from long hours at work, irregular work schedules, and limited child care options. This report describes components of each country's efforts to respond to the importance of the early years and to develop policies that they hope will produce lasting gains for their youngest citizens. It also considers the implications of their experiences for the development of early childhood policy in the U.S.

England

The British government's desire to eradicate child poverty by 2020 and to reduce social inequality has driven recent development of its early childhood policy. Over the past decade the Labor Government of Tony Blair and Gordon Brown has instituted a range of child and family policies that are transforming the odds for young children. In 1998, the government launched Sure Start, which eventually established more than 500 local programs in some of England's poorest areas to deliver integrated family support, early learning, and play experiences for children under the age of four years. In 2004 the government published the National Service Framework for child health and maternity services, setting standards for care in the health sector designed to integrate health with wider system reforms to overcome service fragmentation, inadequate communication, and lack of accountability for outcomes and to expand preventive and early intervention services.

The Childcare Act of 2006 committed to a national network of children's centers, modeled after what is believed to be the best of the Sure Start practices. The centers are also expected to link with Jobcentre Plus, to give parents training and education opportunities, and with health services such as antenatal and postnatal support, smoking cessation support, and speech and language therapy. By 2009, some 3000 Sure Start Children's Centers, providing services for 2.3 million children were in operation.

Canada

The landmark Early Years Study (McCain & Mustard, 1999) provided a framework of understanding for early child development that continues to influence policy directions towards a more integrated approach to early childhood programs. In 2000 Canada announced the federal/provincial/territorial Early Childhood Development Agreement which funded four key areas for action: pregnancy, birth, and infancy; parenting and family supports; early child development, learning, and care; and wider community supports. Although intended primarily to expand child care and add "leverage" by integrating services, in practice much of the federal funding was used by the provinces and territories for expansion of a plethora of lower cost programs. Also in 2000, the federal government expanded maternity and parental leave benefits to one year for eligible new parents. In 2003 the federal government introduced funding specifically for child care programs and in 2005 announced a bold plan for the expansion of early learning and child care. A change of the federal government in 2006 terminated the new funding plans and agreements and the federal government has retreated from the early childhood arena.

Provincial and territorial governments are responsible for early childhood and education programs and innovative system changes continue to emerge. For example, in Ontario and New Brunswick, provincial policies are responding to Toronto's First Duty program that demonstrates the benefits of early childhood program integration. Quebec's family policy launched in 1997 expands parental leave benefits, increased income benefits and launched a network of low-cost child care programs, now accommodating over 60% of all preschool children. In Manitoba, the Healthy Child Manitoba Committee of Cabinet is a legislated structure that is dedicated to the health and well-being of children and youth. In Alberta, five innovative approaches to preschool developmental screening and follow-up services are under way. These projects integrate developmental screening into community settings, such as Parent Link family resource centres, and improve links with health providers. Special attention to the family and cultural background of the children is a key focus of several of the projects. These projects are currently undergoing evaluation and health economic assessments. In British Columbia, local intersectoral community coalitions analyze local needs and plan for the re-allocation and coordination of resources for early childhood programs.

Canada has placed more emphasis than other countries on measuring children's healthy development and "readiness for school" at entry into kindergarten. The Early Development Instrument (EDI), a questionnaire completed by kindergarten teachers shortly after school entry, assesses the physical health and well-being, social competency, emotional maturity, language and thinking skills, and general knowledge of individual children. The results are aggregated and reported for all children in a given school or geographic community. EDI data is now routinely collected in several provinces, and used by local communities to plan and monitor performance of their early childhood services.

Australia

Australia's Stronger Families and Communities Strategy, developed in 2003, funded non-governmental organizations (NGO's) in 45 communities across Australia establishing programs designed to improve developmental outcomes in young children. The election of the Rudd Labor government at the end of 2007 has led to stronger and more strategic support for the early childhood agenda. Early childhood development is now seen as an essential strategy of the new government's reform agenda in the areas of education, social inclusion and enhanced productivity. The Rudd government has also extended funding for the national expansion of the Australian Early Development Index (AEDI), making data on child health and school readiness available for every Australian community by the end of 2009.

There have been developments at the state level, as well. For example, several years ago, the state of Victoria launched Best Start, a partnership between government and local communities designed, to improve service delivery and coordination across health, education, family support services, and community organizations for children from birth to age 8. Best Start has defined links to the health sector through the state's extensive network of maternal and child health nurses, which delivers free community-based well-child care services. Each municipality in Victoria has developed its own early years plan, and many have mapped community resources, and begun to develop frameworks for measuring progress. Many other innovative program and service delivery models that were incubated in different cities and regions over the past decade are now being spread as the Rudd government begins to implement its early childhood strategy. South Australia has made early childhood development a priority and has included early childhood goals in its State Strategic Plan. South Australia has developed a "whole of government" approach to policy and program governance for early childhood, and is committed to creating over 20 one-stop-shop integrated Children's Centres to support early childhood development and parenting across the state. In addition, a multitiered Home Visiting program supports parents of newborns and provides links to other needed services.

United States

While the new Obama administration has indicated that early childhood health and education will be a major priority, as of 2009, a clearly articulated, comprehensive national policy on early childhood is lacking in the U.S. It can be argued that much of the evidence generated in the U.S. on the importance of the early years has had a greater effect on the national policies of other countries. One notable exception, however, is the Early Childhood Comprehensive Services Initiative, launched in 2003 by the Maternal and Child Health Bureau. It offers small grants to each state to bring together Maternal and Child Health programs with partners from early care and education, family education and support, mental health, developmental disabilities, and other public and private agencies to create a strategic plan for coordinated services for children under age 5. Nearly all states (49), the District of Columbia, and a number of territories participate. The initiative aims to support child development and school readiness through a focus on health insurance and provision of a medical home for children, early care and education, mental health and social-emotional development, parenting education, and family support.

Even in the absence of a strong federal framework, many states, in keeping with their historic role in driving policy innovations, have embarked on a variety of early childhood initiatives. In California, a tax on tobacco products funds an integrated system

of early childhood development services. Each of the 58 counties has a “First Five” Commission that distributes revenues to fund a range of early childhood programs. North Carolina’s Smart Start is a public–private initiative that provides early education funding to counties, with the funding administered through local partnerships with nonprofit organizations. Connecticut’s Help Me Grow program provides access, outreach, coordination, and developmental screening services to families and communities through the state. In addition to the work in states, many communities and local early childhood entrepreneurs have been developing a range of innovative programs and initiatives.

Conclusions

A number of conclusions can be drawn from this analysis.

1. It is clear that without long-term evaluation of both effectiveness and cost-effectiveness, the true impact of the programs that are being implemented in each of the four countries will never be known.
2. The U.S. and Canada currently have the least well-developed early childhood policies at the national level. The major re-evaluation of economic, labor, and tax policy that the national financial crisis has precipitated is an opportunity to evaluate how the early childhood service market can be restructured and enhanced.
3. The place of the health care and public health sector in early childhood systems development deserves to be reconsidered. A more central role for health care, working in collaboration with education and welfare, could create new models for health promotion, illness prevention, and developmental surveillance.
4. In addition to service delivery innovations, financial innovations are needed to create more flexible funding streams to support the creation of cross-sector programs on the ground. Public–private partnerships that, for example, combine quality child care with education and workforce training for parents could pay double dividends. Philanthropic funding can support early leaders to test-drive public policy changes.

The building blocks for the early childhood system of the future are already emerging in each of the comparison countries. New political entities such as Children’s Cabinets, Commissions and Trusts are being created to fill a policy, planning and accountability void. Approaches that align strategies across multiple levels of government (local, state and national) and that integrate services from different sectors (health, education, family support) are proving most successful. Adoption of a common outcomes framework is an effective tool to get stakeholders on the same page, and accountable to each other. Service delivery hubs such as Sure Start Children’s Centers in

England and EDUCARE in the U.S. are providing the foundation for place-based strategies that support children's healthy development. As child care, pediatric care, home visiting and other essential services work to improve their quality, and respond to new knowledge about early childhood development, they are also developing new linkages and points of connectivity so that they become part of a functional network that meets children's needs. New population-based measurement tools such as the EDI are helping communities to identify these needs and to work with families to address them.

Early childhood systems of the future need to be responsive to all families—those in which both parents work, and those in which parents look after their own children at home. Both groups would benefit from the translation of research findings on early childhood well-being into effective policies and programs. As the Obama administration considers the direction of its national early childhood policy, these early experiences in each of the four countries with translating evidence into practical programs for young children may be of interest. Continued cross-country comparisons will inform each country's system-building efforts, allowing for early adoption of successful programs and shared evaluation experience.

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INTRODUCTION

Scientists have produced convincing evidence that all children are born "wired" to form relationships and to learn.[1] Events and experiences in the first months and years of a child's life can set a foundation for lifelong well-being or leave a legacy of poor physical and emotional health and developmental challenges.[2-4] Nurturing relationships are particularly important, especially the bond between mother and child. Social circumstances also exert a powerful influence.[5-7] Children from more-affluent families show marked advantages in both knowledge and skills that are evident long before school entry. By age three, there are already measurable differences in the language exposure and vocabularies of children from high- and low-income families.[8] Children from impoverished backgrounds have worse reported global health status,[9] are more likely to require hospitalization in the first five years of life, and are at greater risk for future learning difficulties once they enter school.[10] The roots of later life inequalities in health and educational attainment are already apparent and actively at play in early childhood. Several recently available longitudinal cohort studies document the impact of early adversity on adulthood, measured in higher levels of cardiovascular risk,[5] alcoholism, drug use,[11] and mental disorders.[5]

While the relative risk for poor development is concentrated in low-income communities, even the most materially advantaged American families are not exempt from family conflict,[12] maternal mental illness,[13] and depression—all of which can adversely affect a child's development. Risks to children's well-being also arise from conditions in the broader community, such as unsafe environments, exposure to violence,[14] absence of outdoor play areas, and a lack of social cohesion or "neighborliness."

Two paychecks are often needed to stay out of poverty, yet children in two-wage-earner families make up 46 percent of young children living below 200 percent of the federal poverty level.[15] New parents discover that the joys and rewards of raising young children are tempered by confusing lifestyle decisions and trade-offs. Should mothers take minimal or extended maternity leave, even if it is unpaid? What effect will her decision have on her ability to breastfeed, and on her relationship with her baby? Should fathers step in and take paternity leave, even if it means losing their place on the career ladder? What should a single parent do when there is no-one to help look after her

children? More mothers of young children now work outside the home than ever before. Those mothers may raise the family out of poverty, or allow the family to move to a safer neighborhood, but the price is less time and availability for her to nurture her young children. Choosing between work and family is more difficult when health insurance is tied to a mother's employment. Most parents must seek employment, but frequently find that affordable child care is not available locally, or is of uncertain quality. Even parents that are able to stay home full-time with their young children can find themselves socially isolated, and uncertain how best to support their children's early development. Parents who themselves experienced difficult childhoods face added challenges.

Given the strength of the scientific evidence, the recognized needs of parents, and the powerful economic arguments for investments in the early years, it is perhaps surprising that early childhood has not moved to the center of national policy debate. Children's health policy discussions continue to center on the important goal of obtaining universal health insurance, improving quality of health care, and assuring that all children have a medical home. In the educational arena, reform strategies focus on enhanced accountability, standardized testing, and the chances for college entry. Despite evidence of how much the early years contribute to later health and educational attainment, there is, as yet, no clearly articulated U.S. policy on this most important period of life.

There are a number of possible explanations for this seeming paradox. First, much of children's well-being depends on circumstances within the home, and typically, these have not been an incitement to government intervention other than in more extreme situations, when a child is disabled at birth, or a victim of child abuse and neglect. As such, the overarching policy frame is primarily focused on providing second chance programs for children with deficits who are disabled, or in danger, rather than prospective prevention oriented policies focused on assuring the successful development of all children.

Second, although there is general agreement on the need to support children's early development, the way to achieve this remains unclear. Evidence from a handful of studies, including the Perry Preschool project,[16] the Abecedarian study,[17] and the Chicago Preschool project,[18] suggests that quality day care and preschool coupled with wider family supports can produce measurable improvements in school performance for children from the most impoverished backgrounds. These studies also demonstrate such long-lasting benefits as reduced likelihood of dropping out of high school or entering prison. There is a growing "preschool for all" movement advocating full-day preschool for all children; however, there is, as yet, little hard evidence to suggest that universal day care or preschool programs will necessarily produce developmental and educational gains

for all children, including those less disadvantaged, particularly if these services are not accompanied by broader family supports.

Third, existing government programs that serve young children are inadequately funded and operate in a maze of local, state, and national funding streams, across health, education, and social services sectors, with little coordination between the different initiatives. In 2007 Head Start reached 51% of eligible four year olds and Early Head Start reached less than 5% of eligible infants and toddlers. Expanding the existing fragmented system to provide more intensive services to a greater number of families would be challenging at best.

Fourth, the need for a comprehensive approach requires communication that cuts across services that touch the lives of young children. The sharing of information that can enhance quality of care must be balanced against the privacy needs of families, and the need to determine what information should be shared between, for example, a doctor and a child's day care provider.

Fifth, measures of what constitutes high-quality child care need further development. While the safety, cleanliness, resources in, and organization of the child's environment are relatively easy to assess, evaluating the quality of the relationship between child and caregiver, or the amount of cognitive stimulation being offered, is more challenging. Yet it is precisely the least tangible aspects of caregiving that are most difficult to measure—mutual trust, positive affect, nurturance, responsiveness— that are likely to be most important for the child's long-term well-being.

Sixth, the development of a comprehensive approach to meeting the health and developmental needs of children zero to three in all settings- in the home, in child care, and in the broader community is particularly challenging. Many early childhood initiatives, focusing on improving child care and expanding preschool to younger and younger children, do not address the social, emotional and health needs of young children, and the levels of support that families with infants and toddlers need. The impact of common health risks, like maternal depression, and the role that the health care system can and should play in the lives of the youngest children remains unresolved. All these factors conspire to limit progress on early childhood policy in the United States.

The Obama administration has made a major commitment to early childhood development and illness prevention as part of broader health and education reform efforts. The challenge will be to determine which policies to adopt. The U.S. is not the

only country to struggle with early childhood policy directions. England, Canada, and Australia all start with similarly fragmented early childhood services, a penchant for market-based solutions, and a desire to limit reliance on the welfare state. Families in each of these countries are facing similar pressures resulting from long hours at work, irregular work schedules, and limited child care options. This report describes components of each country's efforts to respond to the importance of the early years and to develop policies that they hope will produce lasting gains for their youngest citizens, and also considers the implications of their experiences for the development of early childhood policy in the U.S.

Authors' Note: The information presented in this report reflects activity in England, Australia, Canada and the United States through the first quarter of 2009. Early childhood systems development in each country continues to evolve rapidly. Future updates will appear on The Commonwealth Fund's Web site at www.commonwealthfund.org.

ENGLAND

The British government's desire to eradicate child poverty by 2020[19] and reduce social inequality has driven recent development of its early childhood policy. Almost three decades ago, the government commissioned an inquiry led by Sir Douglas Black to determine why health inequalities persisted despite the country's 30-year-old National Health Service.[20] That report concluded that efforts to promote heath and improve population health trends should focus on improving the material living conditions of the poorest groups, especially children. Released just prior to commencement of Margaret Thatcher's appointment as prime minister in 1979, the report received mixed reviews and gained little political traction.

In 1997, the new Labor government commissioned a second report on the health of the nation under the leadership of Sir Donald Acheson.[21] This new report was able to draw on a rich body of new research, including over three decades of British birth cohort studies, principally the 1958 National Child Development Study.[22] These longitudinal studies provided a much stronger base of evidence for the early-childhood origins of adult disease and social conditions. The Acheson Report advanced a social determinants model of health and the origins of health inequalities that emphasized the need to prioritize interventions that focused on the "upstream determinants" of health including a range of social factors, which impact parents and young children.

Every Child Matters

At about the time Acheson released his report, media attention to unacceptably high mortality rates after children's heart surgery in Bristol,[23,24] and the failure of social services to prevent the tragic death of Victoria Climbie from abuse,[25,26] led to widespread calls for reform in the way children's health and welfare services were organized and delivered. In autumn 2003, the government published Every Child Matters,[27] calling for radical system-wide reforms to overcome service fragmentation, inadequate communication, and lack of accountability for outcomes. The report also called for wider provision of preventive and early intervention services and suggested a series of outcome measures that could be monitored to gauge progress.

In 2004, the Blair government passed the Children's Act[28] creating Children's Trusts to bring together all services for young people in each local area. Each of England's 150 local authorities appointed a director of Children's Services responsible for both education and children's social care. The Trusts were designed to improve cooperation and information-sharing across health, education, social care, and the voluntary (what is referred to in the U.S. as the nonprofit) sector. In 2004 the government

also published the National Service Framework[29] for child health and maternity services, setting standards for care in the health sector designed to integrate health with the wider system reforms envisaged in Every Child Matters. In 2005 England appointed its first Children's Commissioner, to act as a voice for young people.

Sure Start

In 1999, the Blair government also launched its best-known early childhood initiative, Sure Start.[30] By 2004 more than 500 local programs had been established in some of England's poorest areas to deliver integrated family support, early learning, and play experiences for children under the age of four years. Free nursery education is available for all children at age 4, leading into the elementary school system. Sure Start Local Program leaders initially had considerable flexibility in the design of their programs, which ranged from relatively informal "drop-in" neighborhood centers to more formal curriculum-driven early childhood education programs.

Initial evaluations of Sure Start were mixed. Some families showed modest improvements in parenting, but the most challenged families actually had worse functioning after participation in the Sure Start program compared with controls.[31,32] However, later evaluations have shown more substantive gains in children's behavior and sociability coupled with improved parenting styles of adults and better home learning environments.[33] These improved findings may indicate increased exposure to Sure Start Local Programs that have become more effective over time. A key feature of the Sure Start program approach was that it was a place-based initiative. That is, all families with young children in a specific geographic area were targeted for the service, and the areas were chosen based on very high poverty levels. The outcome evaluation was conducted with a random sample of families in each of the areas, setting a high bar for demonstrating impacts.

The Childcare Act

In 2004, the British government published *Choice for Parents: The Best Start for Children,* presenting plans for universal early years and child care services. The Childcare Act of 2006 committed to a national network of children's centers, modeled after what is believed to be the best of the Sure Start practices. The centers are also expected to link with Jobcentre Plus, to give parents training and education opportunities, childcare for those wanting to work, and links with health services such as antenatal and postnatal support, smoking cessation support, and speech and language therapy. By 2009 there were 3000 Sure Start Children's Centers operating across England and by 2010 there will be 3,500—one for every community.[30] In response to the early evaluation of

Sure Start Local Programs, the centers, have now been given specific funding for outreach, to ensure that the most disadvantaged and hardest to reach families are benefiting from the services.

All child care services are expected to deliver a "national curriculum for the early years," as set out in the Early Years Foundation Stage, covering development from infancy to age 5. The curriculum couples a play-based framework with core standards for child care and development in the years before school entry. Free entitlement to early education has been increased to 15 hours, 38 weeks a year, while schools are required to offer extended services, including child care for working parents, by 2010. In 2006, the government enhanced maternity and paternity leave to 9 months guaranteed paid leave, with a future commitment to 12 months. The Childcare Act makes it the duty of local authorities to provide sufficient child care through a mix of voluntary and private sectors, and to improve outcomes. The government has also made a commitment to increasing the number of college graduates in leadership positions in the early-childhood field, and to improving dissemination of information on child care, parenting classes, and voluntary organizations that support children with special needs through Children's Information Services. All of these steps together aim to improve both the quality and availability of affordable child care. Spending in the United Kingdom on children in the preschool years is estimated to have quadrupled in the decade from 1997 to 2007.[34]

In 2007, the government piloted the Family Nurse Partnership, an intensive home-visiting program during pregnancy and the first two years of life for vulnerable families that was developed and tested in the U.S. In 2008, responding to calls to move beyond health surveillance and illness prevention to focus on achieving positive health, a new national child health promotion program was launched. This program emphasizes a holistic, systematic process to assessing child and family needs, with an emphasis on early intervention and response to parent concerns. The program acknowledges the need to support parenting, with an emphasis on activities that are evidence-based.[35]

In 2009 the Government published Nest Steps for Early Learning and childcare. Building on the 2004 Ten Year Strategy, this publication emphasizes the need for further investment in the early year's workforce, and proposes enhanced rights for parents to request flexible working along with increased flexibility in the delivery of the free childcare offer. This means parents would not be restricted to five half days of care, but could use their 'free offer' (voucher) to subsidize day care hours needed to support employment.

The British government's vigorous family policy agenda over the last decade indicates that it accepts the evidence on the importance of the early years for future health and prosperity. Table 1 summarizes major policy initiatives. This portfolio of policies aims to create a universal integrated early childhood system with Sure Start early childhood centers as a key component, one that will become a permanent part of the social contract. The strength of Britain's commitment to this route is evidenced by the considerable budget provisions for Sure Start, and the fact that even the Conservative opposition party has pledged to continue Sure Start if elected, albeit with reduced core funding and a greater emphasis on home visiting by health visitors in the early years. However, there are tensions between those who view the program as primarily about improving the development of young children, those who see it primarily as part of a wider anti-poverty strategy, and those who see it as primarily a universal child care service designed to allow mothers to return to the workforce. The balancing of all these requirements has been essential in the development of early childhood policy in Britain.

Table 1. A Decade of Policy Change: Child and Family Policies in the U.K.

- 1998 Supporting Families Green Paper
- 1999 Sure Start
- 1999 NFPI established
- 2002 Integration of all early years and childcare services
- 2003 Every Child Matters
- 2004 Choice for Parents, the best start for Children
- 2006 Schools White Paper
- 2007Aiming high for children: supporting families
- 2007 Every Parent Matters
- 2007 Reaching Out, Think Family
- 2007 Children's Plan
- 2008 21st Century Schools
- 2008 Families in Britain: an evidence paper
- 2009 Next Steps for Early Learning and Childcare

CANADA

During the 1990s, the federal government of Canada, together with its provincial and territorial governments, recognized the need to invest in early child development, and to move from a focus on discrete programs to an integrated early childhood system. In 1997, the government launched the National Children's Agenda, with the goal of ensuring that Canada's children were physically and emotionally healthy, safe, and secure; successful at learning; and socially engaged and responsible.[36] That same year, Quebec revised its family policy, replacing payment to parents on the birth of a child with a more multifaceted

approach, incorporating maternity/paternity leave at 70 percent of salary, a progressive child allowance, and low-cost, educational child care.

In 1999, the release of the widely influential Early Years Study[37] provided a new framework for understanding early child development. Drawing upon revolutions in neurobiology, and converging research in developmental psychology, the Early Years Study suggested that a new approach to addressing the developmental health needs of young children was necessary if public policies were going to be responsive to the emerging science of early child development. This report stimulated multiple groups and agencies across Canada to move the early childhood agenda to the center of public policy debate. The study also influenced the 2000 federal/provincial/territorial Early Childhood Development Agreement, intended to improve coordination and expansion of existing services and supports. The agreement targeted four key areas for action: pregnancy, birth, and infancy, including prenatal programs and infant screening programs; parenting and family supports, including family resource centers, parent information, and home visiting; early child development, learning, and care, including preschools, childcare, and targeted developmental programs for young children; and wider community supports, including planning and service integration. Although intended primarily to add "leverage" by integrating services and expanding access to child care, in practice much of the funding was used for the introduction and expansion of a variety of programs, including home-visiting, family support programs, public awareness initiatives and better, earlier identification of children with developmental disabilities.

In 2000, the federal government expanded maternity and parental leave benefits from 27 to 52 weeks through Employment Insurance. Eligibility criteria are based on working a minimum of 600 hours in the previous 52 weeks which limits access to about 60 percent of new parents. In 2003, the ministers responsible for social services adopted a Multilateral Agreement on Early Learning and Child Care, designed to improve access to affordable, quality early learning and child care programs.

A Canada Fit for Children Flounders

In 2004, following participation in the United Nations General Assembly Special Session on Children, the government released *A Canada Fit for Children,*[38] which set out a vision and action plan for supporting families and strengthening communities, promoting healthy lives, protecting children from harm, and promoting education and learning.

Plans to move toward a Canada-wide early childhood system, ceased in 2006 with the change in government. Federal funding for programs was converted to a taxable

universal family allowance paying $100 a month for each child under six years. At the federal level, debate continues as to whether young children are primarily the responsibility of families, or whether it is the responsibility of society to provide a system that can support families to assure that all children develop optimally.

The Organization for Economic Co-operation and Development (OECD) thematic review of Canadian early childhood education and care in 2004 emphasized the need for closer collaboration between child care and kindergarten programs,[39] and its 2006 report shows that Canadian public expenditures on early childhood programs are the lowest among the twenty OECD countries taking party in the review. The 2008 UNICEF *Report Card* [40] discusses the opportunities and risks involved in the child care transition, and proposes internationally applicable benchmarks for early childhood care and education – a set of minimum standards for protecting the rights of children in their most vulnerable and formative years. Canada tied with Ireland for the lowest score, meeting only one of the benchmarks.

Provincial and Territorial Innovation

While the federal government has retreated from a leadership and funding role in shaping an early childhood system, provincial and territorial governments are left to take on the challenge. Pockets of system policy innovation are emerging. It is a large-scale natural field experiment in system-building among the thirteen jurisdictions. Examples from Ontario, Manitoba, Quebec, British Columbia, and New Brunswick illustrate recent developments.

In the province of Ontario, policy is moving towards collaboration and integration of child care, family support, public health and education programs for young children and their families. Toronto's First Duty,[41] first initiated in 1999, is a school-based demonstration project that merges kindergarten, child care, public health and family support programs. Evaluation indicates that integration improves program quality, benefiting both parents and children. The practice of integration demonstrated by First Duty has carried forward into system-wide changes in Ontario and elsewhere. In 2004 Ontario launched Best Start,[42] a plan to build a system for ages zero to six based on existing programs through local networks that include child care, public health and education decision-makers and neighborhood hubs located in, or nearby, schools. The Premier of Ontario has appointed an Early Learning Advisor to prepare a report on the implementation of full day learning for four- and five- year-old children within the context of a coherent child and family system.

Healthy Child Manitoba[43] established a cabinet committee bringing together all ministries and decisions related to children and youth. It has established a budget process designed to allocate funding and is now a legislated committee that entrenches the 'whole of government' approach to policy-making within government and the community.

Quebec's family policy launched in 1997 expanded parental leave benefits, increased income benefits and launched a network of low-cost, educational child care programs.[44] Under Quebec's parental leave plan, eligibility is based on a minimum gross annual earnings of $2000, allowing self-employed and part-time workers to participate. Quebec has a publicly funded network of over 900 child care programs, with free enrollment for parents on social assistance, and with a nominal fee for all other families regardless of income status. Over 60 percent of young children now attend regulated child care programs. Ongoing challenges with keeping fees affordable for parents while maintaining program quality continue but a provincial curriculum framework and increased numbers of qualified staff are making a difference. The new child care centers shift the delivery of child care from a market service designed to support parent's labor force participation to a public service that is designed to support children's early learning and development with options that support parents' work schedules. The overall impact on key indicators is promising. Quebec's birth rate is rising and now at 1.6 percent, is higher than the Canadian average. Child poverty rates have fallen, maternal labor participation has risen and academic achievement rates as children move through the education system are increasing.

In Alberta, five innovative approaches to preschool developmental screening and follow-up services are under way. These projects integrate developmental screening into community settings, such as Parent Link family resource centres, and improve links with health providers.[45] Special attention to the family and cultural background of the children is a key focus of several of the projects. These projects are currently undergoing evaluation and health economic assessments.

In British Columbia, local intersectoral community coalitions analyze local needs, and local data about how children are doing to plan for the re-allocation and coordination of resources for early childhood programs.[46] Recent provincial policies have given the mandate for early learning to the education sector. Local schools are often active participants in the coalitions and working in collaboration with community partners in planning and resourcing new school-based early childhood initiatives. In some communities the coalitions are moving beyond coordination based on good relationships to more sustainable collaborations that are transforming local policies and infrastructure.[47]

In spring 2009 the province of New Brunswick launched demonstration sites in four communities that are modeled on Toronto First Duty and the U.K.'s Sure Start Children's Centers.[48] The lessons learned from the demonstration sites will inform provincial policy in transforming existing resources and practices into a more coherent, integrated early childhood system.

The Early Development Instrument (EDI)

Canada has placed more emphasis than other countries on measuring children's healthy development and "readiness for school" at entry into kindergarten. The Early Development Instrument (EDI)[49] is a questionnaire completed by kindergarten teachers shortly after school entry. The teacher rates each child across several developmental areas: physical health and well-being, social competency, emotional maturity, language and thinking skills, and general knowledge.[50] The teachers' ratings are subjective, based on a four-point scale. The EDI is not designed to be used as an evaluation of each child, but rather results are aggregated for all children in a given school or geographic community. Communities can use the results to determine, in general, where young children have strengths and weaknesses, and can use this knowledge to guide local program development.

In British Columbia, the Human Early Learning Partnership (HELP)[51] has implemented the EDI in every school district in the province, incorporating the results into an Atlas of Child Development. Colored maps depict information about median family income, ethnic diversity, available child care spaces, hospital utilization rates, and other variables relevant to young children's environments. Preliminary findings reveal strong correlations between median family incomes and population EDI scores across communities.[52] The EDI holds promise as a community mobilization and engagement tool, and as a common outcome measure that can be understood by families, service providers, and policymakers and used to drive system change at the neighborhood level.

AUSTRALIA

In 2003, the Australian Government Task Force on Child Development, Health, and Wellbeing released a consultation paper, *Towards the Development of a National Agenda for Early Childhood*, designed to stimulate debate and inform a National Early Childhood Agenda. The task force identified four action areas: healthy families with young children, early learning and care, supporting families and parenting, and child-friendly communities. The government developed a draft framework for the agenda, and subsequently, through the Stronger Families and Communities Strategy, provided funding to a number of communities throughout Australia to develop innovative

strategies to improve outcomes for young children and their families, focusing especially on improved service delivery for young children, and stronger links between services through 2009.[53]

The first part of the strategy, Communities for Children, encouraged the development of tailored and flexible approaches to the local needs of early childhood populations. Nongovernmental organizations (NGOs) were funded as facilitating partners in 45 communities around Australia. The NGOs engaged communities through the establishment of local committees (coalitions) and the creation of strategic and service delivery plans. These included a series of strategies and programs that supported early learning and literacy, social and communication skills, and enhanced parenting and family functioning.

Early Childhood—Invest To Grow

The second stream of the Stronger Families and Communities Strategy was designated as Invest To Grow. This was designed to provide flexible funding for a range of initiatives, from evaluation of existing programs through to the development of new promising intervention strategies. It also provided funding for the establishment of a parenting website *(www.raisingchildren.net.au)*the Raising Children Network,[54] created and managed by a consortium comprising the Centre for Community Child Health and the Parenting Research Centre in Melbourne, and the Smart Populations Foundation in Sydney. The comprehensive web site offers practical advice on a wide range of health and development topics including parenting advice and information about nutrition, and is becoming an authoritative, useful and popular source of information.

Invest to Grow also funded an Australian adaptation of the Canadian EDI—(the Australian Early Development Index—AEDI) which has now been used in over 60 communities around Australia.[55] After this successful pilot, the new Rudd government committed funding to roll out the AEDI throughout Australia. By the end of 2009 population data about children at school entry will be available for every community in Australia. This AEDI initiative has provided a boost to the early year's agenda at both the state and national levels. It is anticipated that when the detailed maps of children's developmental vulnerability are made available to each community, local communities will be motivated to pursue more ways of improving children's outcomes, by expanding services to young children and their families.

Local Answers

The third stream, Local Answers, funds small-scale local projects that help disadvantaged communities find their own solutions to problems. There have been a wide range of

projects, from building parenting and relationship skills, to assisting community members to volunteer or mentor others. Finally, a program called Choice and Flexibility in Child Care provides Australian parents with a number of innovative child care solutions, including in-home care and long day care schemes.

The election of the Rudd labor federal government at the end of 2007 has led to stronger and more strategic support for the early childhood agenda. Because the Rudd government has extended funding for the national expansion of the AEDI, data on child health and school readiness will now be available for every Australian community with a population over 600 by the end of 2009. Early childhood development is now seen as essential strategy of the new government's reform agenda in the areas of education, social inclusion and enhanced productivity. The federal government has also made a commitment to fund a year of preschool for all children, and there are plans to fund additional preschool for children at risk.

One of the persistent barriers to advancing an early childhood agenda has been the division of funding and responsibilities between the federal and state government that is compounded by the division of funding between relevant health, education and social welfare portfolios. The new federal government has committed to working more closely with the states to align policies and funding and to remove other obstacles to reform. Formal meetings between federal and state governments under the aegis of the Council of Australian Governments (COAG) have included a focus on integrating early-years strategies and aligning national and state investments in this area. Federal and state governments are negotiating, for example, a common set of regulations for child care, with a view to aligning them with national accreditation standards. A national early year's learning framework has been drafted, and will inform the training of early year's professionals as well as support the development of enhanced early learning environments for children in child care and other early years' settings. The government's commitment to raising the quality of child care is exemplified in its expansion of early childhood training courses at colleges, improving qualifications for caregivers, and reducing child-to-caregiver ratios. The collapse of the country's largest private child care operator has intensified debate about how best to provide high quality and accessible child care, as well as remove the distinction between child care and early learning. As the early year's reform agenda continues to evolve in coming years, it is anticipated there will be further increases in resources allocated to early childhood.

Best Start Victoria

At the state level, early years policies and plans are in varying stages of development, though all states have developed an early year's strategy of some kind. For example Victoria launched Best Start[56] a number of years ago as a partnership between state government and local communities. Targeting children from birth to eight years of age, Best Start aims to improve service delivery and coordination across health, education, and family support services, particularly for vulnerable families. With an initial 14 sites, Best Start is a model of how communities can improve service coordination and enhance family support through extensive local community consultation to better understand local needs, and then to customize local approaches, that are responsive to the specific need of each community. An important success factor in Best Start is the involvement of the health sector through the state's extensive network of maternal and child health nurses, who deliver free universal community-based well-child care services.

Best Start has developed in the context of a series of supportive state policies extending back almost a decade. Growing Victoria Together[57] (2001, 2004) articulated the government's commitment to building cohesive communities and delivering high-quality health and community services; Children First (2004) highlighted the need to link early childhood services to improve early identification of children at risk. A Fairer Victoria (2004) strengthened assistance for disadvantaged groups, and acknowledged the importance of giving children the best start in life. Further evidence of Victoria's commitment to early childhood came in 2005 with the appointment of a Minister for Children, and an Office for Children with an Early Years Branch.

More recently, Victoria's commitment to integrating early childhood services across sectors has been demonstrated with the movement of the Office for Children to the Department of Education, now renamed the Department of Education and Early Child Development, and the Minister for Children now the Minister for Children and Early Childhood Development. Each municipality in Victoria has developed its own early years plan. Many of these outline, in considerable detail, a strategic approach to early childhood, having mapped community resources, and developed outcomes frameworks, so that they can measure progress toward improving children's well-being.

The Platforms Strategy[58] has been designed by the Centre for Community Child Health in Melbourne as a practical framework to support community efforts at refocusing and coordinating services for young children and their families. Acknowledging that children in the first years of life already have multiple contacts with a variety of professionals, the strategy reconceptualizes these contacts as potential "platforms" where professionals systematically elicit and respond to parental concerns and emerging

problems. A series of resources has been developed to support communities' activities. These include tools for engaging all stakeholders, mapping community services and assets, undertaking a needs survey, systematically collecting appropriate data, developing a child and family service plan, selecting appropriate and evidence based interventions, and monitoring progress and evaluating outcomes. The federal government has provided funding to trial the *Platforms Strategy* in 10 diverse communities throughout Australia. Communities are being prepared to operate these service delivery platforms through a community engagement and capacity building process. A basic premise of the Platforms Strategy is that prepared communities can offer rich and supportive social environments for children and families.

Other Australian states are trialing a number of alternative early childhood initiatives. South Australia has made early childhood development a priority and has included early childhood goals in its State Strategic Plan. South Australia has developed a "whole of government" approach to policy and program governance for early childhood, and is committed to creating over 20 one-stop-shop integrated Children's Centres to support early childhood development and parenting across the state.[59] In addition, a multitiered Home Visiting program supports parents of newborns and provides links to other needed services.[60] At both national and state levels there is growing interest in this concept of integrated children's centers that bring together a range of child and family services into single hubs, in much the same way that Sure Start Children Centers are functioning in the U.K. The federal government has recently committed funding to support a more extensive rollout of these child and family service hubs throughout the country.

Despite these commitments to the early years at national, state, and local levels, Australia recognizes the need to develop a stronger evidence base about which strategies work at the community level, and how best to translate evidence-based interventions into effective programs across whole communities. Despite these significant policy advances, the financing of existing programs through discrete funding streams from different federal, state, and local government departments results in continued fragmentation of early childhood services. At the same time certain communities, such as the Aboriginal population, remain hard to reach, and a considerable sustained effort will be required to improve outcomes in these high risk populations.

UNITED STATES

It appears that the United States is about to experience a major shift in early childhood policy as the new Obama administration prepares to realize president Obama's claim that the "first pillar in reforming our schools-(is) investing in early childhood initiatives." The president has already made a down payment on this new strategy by allocating $5 billion of the American Recovery and Reinvestment Act (ARRA-2009) to the childcare and child development block grants, Head Start and Early Head Start, early interventions through Part C of the Individual With Disabilities Education Act (IDEA), and expansion of the Nurse Family Partnership programs that are currently operating in several states. In his March 10, 2009 education reform speech he discussed how early childhood initiatives yield results in terms of higher reading and math scores, educational attainment and workplace productivity, stating that "for every dollar we invest in these programs, we get nearly 10 dollars back in reduced welfare rolls, fewer health costs, and less crime." In that speech he stated that he was committed to helping states develop comprehensive, coordinated zero to five systems to improve developmental outcomes, that he would provide Early Learning Challenge Grants to states to "reward quality, incentivize excellence, and make a down payment on the success of the next generation", and incentive grants to support state data collection and development of uniform quality standards. But beyond his stated position on the pivotal role of early childhood and this short term augmentation to existing programs, a new national early childhood policy is yet to emerge.

America's oldest and best-known early childhood program is Head Start.[61] Launched in 1965 as an eight-week summer program designed to help communities meet the emotional, social, health, psychological, and nutritional needs of disadvantaged preschoolers between the ages of three years and school entry, the program now serves about 60 percent of eligible four-year-olds in the U.S. Budget shortfalls prevent the program from reaching the remaining eligible children. Enrolled children also receive health services, including immunizations, dental checks, and physical examinations. Evidence suggests that the program confers developmental benefits, demonstrated by reductions in grade retention and special education placement.

In 2002, after a decade of successful pilot efforts, a new Early Head Start program was established targeting low-income infants and toddlers; it has been demonstrated to be of substantial benefit.[62] The growth of this program has been slow, however, such that by 2007 less than 5 percent of eligible children were served. The number of children that could benefit from Head Start is rising. Almost 20 percent of young children in America are growing up in poverty, 60 percent of families have both parents in the workforce, and

60 percent of children spend some time in non-parental child care. Demand for early childhood programs and child care services in the U.S. generally outstrip supply, with the Child Care and Development Fund serving only one of seven eligible children nationwide.

From Neurons to Neighborhoods

In 2000 the Institute of Medicine's landmark report *From Neurons to Neighborhoods*, reviewed the existing literature on the science of early child development and concluded unequivocally that suboptimal experiences in the first years of life can have lifelong effects on well-being.[1] A series of 11 recommendations for supporting the development of young children, with major implications for future early childhood policy, concluded the report. Despite this background, in 2009 a clearly articulated, comprehensive national policy on early childhood is noticeably lacking in the U.S. There has been no national agenda set for early childhood comparable to efforts in England, Canada, and Australia, and it can be argued that much of the evidence generated in the U.S. on the importance of the early years has had a greater effect on the national policies of other countries. In particular, the current principal child policy vehicle, No Child Left Behind, lacks an early childhood component. For the most part, the recommendations of *From Neurons to Neighborhoods* have gained little national political traction, and remain as relevant today as they were in 2000.

Early Childhood Comprehensive Services (ECCS) Initiative

One notable exception to the national dearth of early childhood systems-building efforts is the Early Childhood Comprehensive Services (ECCS) Initiative launched in 2003 by the Maternal and Child Health Bureau. This program offers small grants to each state to bring together Maternal and Child Health (MCH) programs with partners from early care and education, family education and support, mental health, developmental disabilities, and other public and private agencies to create a strategic plan for coordinated services for children under the age of five years. Nearly all states (49), the District of Columbia, and a number of territories are participating. ECCS aims to support child development and school readiness through a focus on health insurance and provision of a medical home for children, early care and education, mental health and social-emotional development, parenting education, and family support.[63] The ECCS initiative emphasizes a multidisciplinary approach, with wide involvement of stakeholders.

States are now moving to the implementation and evaluation phase, and have focused on a variety of initiatives. Vermont, for example, is building on an existing initiative to link all children with medical homes, while Louisiana has trained home

visitors in early childhood mental health. The state of Michigan has linked its ECCS program to its new Early Childhood Investment Corporation, which is also sponsoring 14 community-based early childhood collaboratives. However, the scale of ECCS is limited, with modest funding committed across all the states.[64]

State Early Childhood Initiatives

Even in the absence of a strong federal framework, many states, in keeping with their historic role in driving policy innovations, have embarked on a variety of early childhood initiatives. In California, film producer/director Rob Reiner successfully campaigned for a tax on tobacco products to fund an integrated system of early childhood development services. Each of the 58 counties has a "First Five" Commission that distributes revenues to fund a range of early childhood programs. A single state commission also funds programs such as the School Readiness Initiative,[65] which promotes school success and successful transitions between early child care and elementary school settings and the Special Needs project, which promotes access to developmental screenings and inclusion of children with special needs into typical child care and preschool settings. These statewide and county specific programs have yet to be comprehensively evaluated.

Other examples of promising state programs include Vermont's Success by Six,[66] which spans traditional organizational boundaries to promote better outcomes for all Vermont children, and North Carolina's Smart Start.[67] Smart Start is a public–private initiative that provides early education funding to counties, with the funding administered through local partnerships with nonprofit organizations. Smart Start invested in child care quality improvement, developmental services from pediatric providers, and the training and compensation of caregivers, resulting in some evidence to suggest improved early academic skills and behavior of children served.

California First 5 revenues in Orange County are also being used to build a model system of developmental services. Pathways to Developmental Health consists of a four-tier strategy comprising universal developmental surveillance and supports, secondary screening and surveillance, regionalized midlevel developmental assessments, and further assessments and interventions by state funded centers for children with more severe problems.[68] An integrated center has been established to serve children with a range of developmental needs, and Orange County is adapting the Canadian EDI for the local population.

Local Innovations

Irrespective of the lack of a national early childhood strategy, many communities and local early childhood entrepreneurs have been developing a range of innovative programs and initiatives. The Hartford Foundation for Public Giving launched the Brighter Futures Initiative (BFI) in Hartford, in 1992, to address the dearth of early childhood services and supports in one of the most impoverished cities in the U.S. The BFI helped to establish Help Me Grow, a program that has now expanded to the entire state of Connecticut with access, outreach, coordination, and developmental screening services to families and communities through the state.[69] The BFI also lead to the development of a Mayor's Blue Print for young children.

Similar blue prints are being used in cities across the U.S. to repurpose resources and re-engineer and upgrade existing services. In Cincinnati, for example, Every Child Succeeds[70] provides health education during pregnancy and comprehensive home visiting and support services for first-time mothers. Infant mortality rates for participants have fallen to one-third of local rates. In Chicago, EDUCARE,[71] and in Los Angeles the Hope Street Family Center,[72] provide a comprehensive range of early childhood education and family support services similar to Sure Start Early Childhood Programs in England and First Duty in Toronto. With help from Buffett Early Childhood Fund, EDUCARE has begun to franchise its model of early childhood development and community partnership to 10-12 states, with each EDCUARE center serving between 140-200 of those communities' most vulnerable children and families.

Place-based initiatives that resemble the Sure Start Local Programs are also sprouting up in different parts of the U.S. Harlem Children's Zone is an ambitious initiative, aimed at breaking the inter-generational cycle of poverty in a 97-block area of Harlem through a comprehensive approach that includes Baby College—an intensive parenting curriculum for new parents—and pre-kindergarten for all children living in the Zone.[73] First 5 Los Angeles is launching Best Start, a placed based initiative to improve the organization and delivery of services for children zero to three in specific neighborhoods.[74]

Private foundations have taken a leadership role in early childhood systems building, encouraging cross-state collaborations. One example, the Build Initiative, was created by a consortium of national and local foundations and is supporting five state initiatives to construct coordinated early childhood service delivery approaches.[75] In 2003 the WK Kellogg Foundation initiated SPARK (Supporting Partnerships to Assure Ready Kids) to create seamless transitions into elementary school for children 3 to 6 years of

age. Seven states and the District of Columbia are using SPARK as the center piece of their school readiness efforts.

Early childhood policy consortia and state level coordinating councils are also attempting to create cross cutting, cross sector policies that can begin to align different programs, practices and funding streams. The Birth to Five Policy Alliance was established in 2005 to promote innovative and successful policy ideas that ensure positive early childhood development and learning opportunities for at-risk infants, toddlers, preschoolers and their families.[76] The Alliance supports state-level policy development through knowledge development including research and policy analysis; outreach and support for state policymakers; and building champions among key stakeholders. The Alliance supports the work of many other state level and national organizations including the National Governors Association, the Build Initiative and the policy work of organizations like Zero to Three. At least 24 states have established governor's cabinets or councils on early childhood,[77] but these cabinets largely serve an advisory role and have no direct impact on policy or practice.

While the list of innovative programs and initiatives is substantial, at this point most of these innovations represent isolated programs that have yet to be evaluated, scaled, and spread in any systematic fashion.

Innovations in Pediatric Care

There has also been a great deal of interest in the U.S. in innovative delivery of pediatric health services. Much of this work has focused on better defining the role of preventive and developmental services in pediatric practices, and redefining and reengineering the existing well-child care paradigm to better fit with the emerging data on health needs of young children.[78] The Commonwealth Fund's Assuring Better Child Health and Development (ABCD)[79] Initiative to enhance the capacity of state Medicaid programs to finance developmental health services, as well as other projects to improve health care quality measures focused on the delivery of developmental health services, are examples of a portfolio of projects focused on upgrading the delivery of pediatric care.

The substantial focus on pediatric care in the U.S., when compared to the other nations, is partially attributable to how early childhood health services are provided in the U.S. as well as to the fact that children there do not enjoy universal coverage and guaranteed access to health care. Well-child care is delivered largely through pediatricians, as opposed to maternal and child health nurses in other countries.[80] However, lack of universal health insurance and limited attendance for well-child visits in some groups limits the effectiveness of this approach at the population level.

CROSS-COUNTRY COMPARISON

In Table 2 (below), we compare, contrast, and summarize the early childhood initiatives and early childhood policy landscape in each of the four countries. Table 2 also includes several measures of child well being. While there are a number of cross county similarities, the United States has much higher rates of childhood poverty, and higher levels of income inequality as measured by the Gini Coefficients. England has made dramatic increases in the percent of children in preschool increasing from 50.2 percent in 2000, to 90 percent in 2008. On the UNICEF Child Well Being Index, comparing 21 wealthy nations, the U.S. and England ranked 20 and 21 respectively. This index is a composite of 40 different indicators in 6 dimensions (material well being, health and safety, educational well being, family and peer relationships, behavior and risks, and subjective well being), and the U.S. and U.K. were in the bottom third of rankings in five of the six dimensions.

Table 2. Cross-Country Comparison of Early Childhood Initiatives and Policies

	England	Canada	Australia	United States
Principal Aim	Eradicate child poverty, reduce inequality.	Improve school readiness.	Improve school readiness, community development.	Meet needs of low-income children.
Main Drivers	National government	Some federal, states/territories.	National and state government.	Limited national; states; private foundations; advocacy groups and private citizens.
Theory	Life course: early social determinants of future health and development.	Quality child care improves school readiness.	Communities find local solutions to support child development.	Varied: quality child care improves school readiness, later adult functioning.
Main Programs	Sure Start	Toronto First Duty, Ontario Best Start.	Strong Families and Communities, Victoria Best Start.	Head Start, Early Head Start
Funding	Public, some private child care.	Largely public; public/private child care	Largely public; public/private for child care	Public/private mix for health, education, and child care.
Evaluation	Beneficial effects on 5/14 outcomes including social behavior, independence, less negative parenting, and better home-learning environment.	Improved program quality —Toronto First Duty.	No published evaluations.	Head Start: improved school performance, less special education needs. Limited evaluation of other programs.
Health Policy	Universal free health care (National Health Service)	Universal free health care.	Universal free health care.	Medicaid safety net for low income. SCHIP; 10% uninsured.
Education Policy	Free education from age 4.	Territories vary age of compulsory education 4 to 7.	Varies by state. Public education age 5 in largest states.	Public education age 5.
Family Leave	9 months paid leave.	35 weeks benefits. 1 year if >600 hrs work in prior year.	No paid leave.	No paid leave. 12 weeks unpaid leave.
Percent of Children in Households <50% Median income[81]	16.2	13.6	11.6	21.7
Health Spending as % GDP (2005)[82]	8.1	9.8	9.5	15.2
Percent of 3-Year-Olds in Preschool[83]	90	—	55.0	41.8
Family Spending in Cash, Services, and Tax Measures as % GDP[84]	3.3	1.2	3.4	1.4
Gini Coefficient[85]	36	32.6	35.2	41.8
Ranking (out of 21 countries) on Child Well-Being Index (UNICEF)[86]	21	12	—	20

Of the four countries studied, England has made the most visible national early childhood policy change over the last decade. Through its extensive national network of Sure Start and Early Childhood Centers, England seeks to eradicate child poverty by allowing mothers of young children to return to the workforce, and to improve the life chances of all children by supporting their early development. The approach is one of national policy, implemented locally through place-based initiatives. This impressive commitment of resources has been generally well received by the population, and a growing body of evaluation data suggests that the program is producing desired results. It will be some years, however, before the program's true impact on child poverty can be evaluated, and it must be noted that the poverty levels quoted in the table were measured prior to the impact of Sure Start.

Although there has been emphasis on serving the most disadvantaged children, England has made a commitment to Sure Start services in all communities.[30] In doing so, it is offering support to all parents regardless of income, and attempting to avoid the stigma that can sometimes be attached to programs that only serve those less advantaged. England has also taken the first steps toward development of an integrated early childhood system, utilizing a national outcomes framework, and focusing on improving communication locally across different service sectors.

In Canada and Australia, national early childhood policy is less well developed than in England, with a greater focus on school readiness than on poverty eradication and lifelong health. However, both countries have articulated the link between support for early childhood and national economic well-being to a much greater degree than the U.S. Like its English counterpart, the new Rudd labor government in Australia has indicated that early childhood development will be used as an essential strategy to achieve policy objective in education, social inclusion and enhanced productivity. Smaller-scale programs such as Ontario's Canada First Duty[42] and Victoria's Best Start[56] in Australia are now being expanded.

In the U.S., the Child Care and Development Block Grants, Head Start and Early Head Start remain the principal early childhood policy vehicles, with Head Start and Early Head Start being smaller in scope than Sure Start and serving only the most disadvantaged. Evaluations have shown gains in school readiness, reductions in need for special education, and even some long-term advantages such as increased rates of college entry. But even supporters of both programs acknowledge that much could be done to improve the performance of both. In addition to the bolus of stimulus funding, the Obama administration is proposing further increased funding for these programs and has suggested that much needed upgrades and improvements will also be considered.

The Brown government in Britain, like its predecessor, has taken a strong national leadership position in early childhood systems development. The new Rudd government in Australia is now articulating many of those same long-term goals. Both countries are demonstrating, through policy, that children are the country's future, that their healthy development is central to economic growth, and that investments in the early years stand to yield big dividends over the life course. In the U.S., by contrast, national leadership, at least over the last decade, has been limited, with change being spearheaded to a greater degree by state-level initiatives like California's First 5 and North Carolina's Smart Start, by private philanthropy, by advocacy groups such as Zero To Three, and by committed individuals. The U.S. government's main child policy vehicle, No Child Left Behind, has been generally under funded and has lacked a focus on the early childhood years.

Like Australia, both Canada and the U.S. have benefited from state-level leadership and from trying different models of early childhood initiatives in different states. While this flexibility has distinct advantages for testing innovations, ultimately, lack of national policy in both the U.S. and Canada inhibits the scaling up of any of these programs, and the advantage of trialing multiple approaches will be lost unless evaluation and improvement strategies can result in the scaling and spreading of those programs and strategies that work. The experience of all four countries studied here indicates a need for both short- and long-term evaluations, and especially evaluation designed to improve how existing programs and systems are performing. In the U.S., many small, targeted early childhood demonstration projects, like the Nurse Family Partnership and the Perry Preschool Project,[16] were found to be cost-effective only after sometimes lengthy periods of follow-up. In England, current Sure Start evaluations are giving more positive results than those conducted just after program implementation. Ongoing evaluation and better metrics will be necessary to capture both short- and long-term impact of these new system-wide interventions.

Cross-sector integration is a challenge for all four countries. Education and child care have shown the greatest degree of collaboration, while the health care sector's contribution has been variable, and frequently peripheral. The child health sector has not been the main driver behind reform in England, Canada, or Australia. In the U.S., however, there have been important yet modest innovations focused on "re-inventing well-child care," expanding medical homes, and improving the delivery of developmental services. Links with health care are probably strongest in traditional Head Start programs, while in England Sure Start has included some links with local health visitors.

The pressing need for high quality child care, coupled with a focus on supporting early education, have usually been the main drivers of early childhood system change. The health sectors have largely retained separate responsibility for monitoring physical health and growth and for developmental surveillance. This lack of integration may prove to be short-sighted, and evaluation of models that have closer integration with health may be particularly useful for future policy planning. As the Obama administration considers its early childhood policy direction, it would be well advised to consider the role that health services can play. Primary care providers already deliver preventive health services to the early childhood population, yet their efforts in screening and surveillance, especially for developmental and behavioral problems, are frequently hampered by limitations in information systems and weak or nonexistent links with education, early intervention, and child care services in their local communities.[87] Owing to these system limitations, and to competing time demands, the full potential for pediatric primary health care providers to promote optimal early childhood development is seldom realized.[88,89] These problems would likely be readily solvable with additional investments in information technology and with appropriate reimbursements to primary care providers for preventive and developmental services.

The diverse array of local early childhood innovations already under way in individual states creates, with a commitment of relatively modest funding, an opportunity to test different models of health services integration. An expansion of Early Head Start, for example, to serve more of America's most disadvantaged children, could be accompanied by funding to trial new models of links with health care and child development services. It could include offering Early Head Start enrollees comprehensive on-site health and developmental surveillance, family-based early language stimulation programs, and family nutrition planning. Similarly, in several states new programs are providing mental health services to young children in child care centers and preschools, partially in response to growing number of young children being expelled from preschool due to behavioral problems. Utilizing preschools and child care settings as partners in the provision of a range of early childhood behavioral and mental health services is another approach that would benefit from additional exploration, experimentation and evaluation.

Many other innovative approaches to connecting early childhood health, education, child care, and family support services into high-performing early childhood systems are currently ongoing throughout the U.S. Most of these innovations are conducted on a small scale, with inherent limitations and constraints, so even the most successful are unlikely to spread or scale up to the state or national level. Harvesting the lessons, and evaluating the scalability, of these different innovative approaches to early

childhood system building could go a long way toward spreading strategies and programs that are already working.

Workforce training in all countries has lagged behind the pace of systems change. The introduction of more stringent educational requirements and training in child development for caregivers has been tempered by concerns about affordability, and the risk of excluding effective, nurturing caregivers because they lack paper qualifications. The absence of a career structure and low prospects for promotion deter recruiting early childhood educators. As other countries have taken steps to increase the number of college graduates entering the early education workforce, the United States should consider how to both expand and improve the skills of the early childhood workforce, by providing incentives to college graduates to make a commitment to entering the early childhood field. Linking early childhood workforce development to local community economic development and poverty elimination is also a strategy that bares further exploration. A strong argument can be made for funding the health, education, and child care sectors to work together to provide early child health and development training to existing child care providers that lack qualifications, and to families and new parents that want to learn more about how to provide the best care to their young children. The Harlem Children's Zone Baby College program is a good example of a program targeting new parents.

Each of the four countries' early childhood system-building efforts has to be considered in the context of broader policies that affect child and family well-being. Each country has utilized the new science of early child development to provide a rationale for a major policy shift either locally or nationally. Rather than wait for children to fail or be at serious risk, which is the legacy of the Elizabethan Poor Laws, each of the countries is attempting to put in place more universal supports for families with young children that can assure that all young children have the opportunity to enter to school healthy and ready to learn. Each county has developed, trialed, and incubated new prototype programs, measurement tools, and strategies. This has proceeded in fits and starts, with the national governments level of commitment dictating the scale and scope of reform and system building efforts. In the U.K. where 12 years of Labor Party governance has allowed for a chain of linked policies to be implemented, and more than 3000 Sure Start Children's Centers to be built, it safe to assume that England's new early childhood system is likely to persist even with the next government change. When the national government has not been supportive as is currently the case in Canada, and historically the case in the U.S. and Australia, these innovations have taken place at the state and local level. With nearly a decade of innovation at the state and local level in the U.S., there are a number of programs and strategies that are now ripe for further scaling and spreading, a route that could be of interest to the Obama administration.

It is important to recognize that none of the English-speaking countries compares well with, for example, Scandinavian countries such as Denmark and Sweden on indicators of child health. These latter countries have generous family leave and welfare policies that lift children out of poverty. Whether England's Sure Start approach will prove a more effective way to improve young children's well-being compared with more direct wealth transfer policies of the Scandinavian countries remains an important question.

With nearly one of 10 young children uninsured, the U.S. stands alone in not offering universal free health care coverage in the early years. The U.S. also provides the least publicly funded early education and child care. With low minimum wage and family leave benefits, low-income families that are above the income thresholds for Medicaid and Head Start are particularly challenged to provide quality early care experiences for their children. Even families that have insurance coverage for their children may find that some important services are not covered, for example, mental health, dental services, and developmental services for those children not eligible for formal intervention programs.

Recognition of all of these difficulties has, to date, been insufficient to open a policy window for comprehensive system change; instead, reform has been focused on discrete programs at state and local levels. The U.S. spends less than England or Australia on families in cash, services, and tax assistance, and has the highest rates of child poverty and income inequality of the four countries studied (Table 2). This analysis highlights the need for a comprehensive national child and family policy strategy that incorporates health, education, and economic policy initiatives while carefully considering the effects of these policies on the well-being of young children. This is the challenge that the Obama administration is preparing itself to address.

CONCLUSIONS

While it is premature to judge the success or failure of any of the countries' early childhood initiatives, their experiences can help inform the ongoing early childhood policy debate. This analysis may be timely, given the Obama administration's commitment to early childhood, overwhelming support for the need for health sector reform, and an economic crisis driving the creation of a substantial stimulus package and a re-conceptualization of the foundations of the U.S. economy. This unique set of circumstances could move early childhood to the center of emerging policy debates, and open a policy window for transformative system change.[90,91]

First, it is clear that without long-term evaluation of both effectiveness and cost-effectiveness, the true impact of the programs that are being implemented in each of the

four countries will never be known. Each country, including the U.S., needs to devote resources to evaluate their effectiveness and to determine what it will take to improve, spread and scale them in a cost effective manor. This will require innovation in data collection, better outcome measures, and greater ability to capture the impact of population and system-level intervention on population outcomes. It will also require the use of collaborative learning and evaluation models, as well as simpler processes and outcome evaluations. Measures like the EDI are a step in the right direction, and when linked with other measures hold promise for the development of a set of valid, relevant indicators that can be monitored over time to assess progress. A U.S. version of the EDI has now been tested in Orange County, California and several cities and states will be trialing the EDI in the next few years.

Second, the U.S. and Canada currently have the least well-developed early childhood policy at the national level. The evidence base on the importance of the early years for later longevity, academic achievement, health, and productivity has had limited impact on national policy in these countries. The Obama administration has signaled that it plans to make prevention and early childhood education a priority. President Obama's campaign platform and his recent speeches suggest his interest in making new investments in preschool as well as in more comprehensive early childhood services for children age zero to five.[92] While the continuing demise of the national economy has necessitated reevaluation of pre-election commitments, investment in early childhood could be used as an economic stimulus, an investment in the human capital infrastructure, and a source of job creation for preschool teachers, child care providers, home visitors, and the skilled workforce that is necessary for the U.S. to move its early childhood system into the 21st century. The major reevaluation of economic, labor, and tax policy that the national financial crisis has precipitated is an opportunity to evaluate how the early childhood service market can be restructured and enhanced. A transformed early childhood system could act as a catalyst for more widespread community development.

Third, the place of the health care sector in early childhood systems development deserves to be reconsidered. A more central role for health care and public health, working in collaboration with education and welfare, could create new models for health promotion, illness prevention, and developmental surveillance. Innovative demonstration projects that link health, early care and education, along with family support deserve funding priority. Scaling and spreading the strategies and approaches that work, would be best served if demonstrations were designed to facilitate the collaboration of multiple sites. The health component of early childhood systems should be part of the national health care reform debate in the United States

Fourth, not only are service delivery innovations needed to speed the development of high performing early childhood systems, but financial innovations are necessary to create more flexible funding streams, to support the creation of cross-sector programs on the ground. Public–private partnerships that, for example, combine quality child care with education and workforce training for parents could pay double dividends, and be attractive investments for business and government.

The building blocks for the early childhood system of the future are emerging in each of the comparison countries. Children' cabinets, First 5 Commissions, and Children's Trusts are new political forms that are being created to fill a policy, planning and accountability void, by instituting new mechanism to share responsibility for young children, across disciplines and sectors. Multilevel approaches (local, state, national) that link cross sector (health, education, family support) strategies are important if different levels of government are to be aligned and services from different sectors integrated. An outcomes framework with agreed upon goals, measures and improvement strategies provides a way of getting stakeholders from all levels of government and from different sectors on the same page, and accountable to each other. Comprehensive service delivery hubs, like Sure Start Children's Centers in England, and EDUCARE in the U.S., provide a foundation for place based strategies that can use these hubs as the connecting point for a more functional local network of services and providers.

Measurement tools, like the EDI that can be used to assess school readiness at kindergarten entry at a population level are providing a population- based measure that can be linked to curve shifting strategies that help communities determine how best to target the needs of whole populations. Child care, pediatric care, home visiting and other essential services are also being upgraded and re-engineered so that they have more points of connectivity and are more amenable to being linked together to enhance functionality and performance. Community-wide strategies for coordinating efforts of multiple providers and government agencies are developing as place based strategies like the Sure Start Local Programs in England, First Duty in Canada, Platforms in Australia and various early childhood "zones" in the U.S.

Our review of the development of the early childhood systems in these four English- speaking countries affirms one maxim of the internet age "the future is here, it is just not equally distributed." The building blocks are being created, innovation is ongoing, and each of the countries is in the process of assembling prototypes systems that, depending on national policy, are likely to evolve and improve over varying time frames.

The early childhood systems of the future need to be responsive to all families—those in which both parents work, and those in which parents look after their own children at home. Both groups would benefit from the translation of research findings on early childhood well-being into policies and programs that positively impact children's experiences both in child care and in the home. It is this translation step that is most lacking, and most urgently needed. Modern media—TV, newspapers, local radio, Internet—offer new platforms for communicating important health and education messages. Health care and education providers could partner with professionals from less traditional fields, such as marketing and communication, to form new strategies to bring developmental health promotion into the home and child care settings. Finally, continued cross-country comparisons will inform each country's system-building efforts, allowing for early adoption of successful programs and shared evaluation experience.

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