Using Existing Platforms to Integrate and Coordinate Investments for Children: Summary of a Joint Workshop by the National Academies of Sciences, Engineering, and Medicine; Centre for Health Education and Health Promotion; and Wu Yee Sun College of the Chinese University of Hong Kong

DETAILS

126 pages | 6 x 9 | PAPERBACK

ISBN 978-0-309-37797-3 | DOI 10.17226/21799

AUTHORS

Steve Olson, Rapporteur; Forum on Investing in Young Children Globally; Board on Global Health; Board on Children, Youth, and Families; Institute of Medicine; Division of Behavioral and Social Sciences and Education; National Academies of Sciences, Engineering, and Medicine

Using Existing PLATFORMS to Integrate and Coordinate Investments for Children

Summary of a Joint Workshop
by the National Academies of Sciences, Engineering, and Medicine;
Centre for Health Education and Health Promotion;
and Wu Yee Sun College of the Chinese University of Hong Kong

Steve Olson, *Rapporteur*

Forum on Investing in Young Children Globally

Board on Global Health

Board on Children, Youth, and Families

Institute of Medicine

Division of Behavioral and Social Sciences and Education

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

THE NATIONAL ACADEMIES PRESS
Washington, DC
www.nap.edu

THE NATIONAL ACADEMIES PRESS 500 Fifth Street, NW Washington, DC 20001

This activity was supported by grants from the Accordia Global Health Foundation; Autism Speaks (unnumbered award); the Bernard van Leer Foundation (222-2012-043); The Bill & Melinda Gates Foundation (OPP1084405); the Doris Duke Charitable Foundation; the Fraser Mustard Institute for Human Development; Grand Challenges Canada (unnumbered); HighScope Educational Research Foundation (unnumbered); Fundação Maria Cecilia Souto Vidigal (unnumbered); the Inter-American Development Bank (unnumbered); the Jacobs Foundation (2013-1079); Lumos; the National Institutes of Health–Fogarty International Center, the National Institute of Child Health and Human Development, and the National Institute of Mental Health; Nestlé Nutrition Institute (unnumbered); Office of the Assistant Secretary for Planning and Evaluation (ASPE); the Open Society Institute–Budapest Foundation (OR2013-10010); ReadyNation (unnumbered); the Robert Wood Johnson Foundation; the Society for Research in Child Development (unnumbered); UNICEF (unnumbered); the U.S. Agency for International Development; the U.S. Centers for Disease Control and Prevention; the William and Flora Hewlett Foundation (2013-9204); and the World Bank (unnumbered). Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project.

International Standard Book Number-13: 978-0-309-37797-3
International Standard Book Number-10: 0-309-37797-8

Additional copies of this workshop summary are available for sale from the National Academies Press, 500 Fifth Street, NW, Keck 360, Washington, DC 20001; (800) 624-6242 or (202) 334-3313; http://www.nap.edu.

Printed in the United States of America

Suggested citation: National Academies of Sciences, Engineering, and Medicine. 2015. *Using existing platforms to integrate and coordinate investments for children: Summary of a joint workshop.* Washington, DC: The National Academies Press.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

The **National Academy of Sciences** was established in 1863 by an Act of Congress, signed by President Lincoln, as a private, nongovernmental institution to advise the nation on issues related to science and technology. Members are elected by their peers for outstanding contributions to research. Dr. Ralph J. Cicerone is president.

The **National Academy of Engineering** was established in 1964 under the charter of the National Academy of Sciences to bring the practices of engineering to advising the nation. Members are elected by their peers for extraordinary contributions to engineering. Dr. C. D. Mote, Jr., is president.

The **National Academy of Medicine** (formerly the Institute of Medicine) was established in 1970 under the charter of the National Academy of Sciences to advise the nation on medical and health issues. Members are elected by their peers for distinguished contributions to medicine and health. Dr. Victor J. Dzau is president.

The three Academies work together as the **National Academies of Sciences, Engineering, and Medicine** to provide independent, objective analysis and advice to the nation and conduct other activities to solve complex problems and inform public policy decisions. The Academies also encourage education and research, recognize outstanding contributions to knowledge, and increase public understanding in matters of science, engineering, and medicine.

Learn more about the National Academies of Sciences, Engineering, and Medicine at **www.national-academies.org**.

PLANNING COMMITTEE ON USING EXISTING PLATFORMS TO INTEGRATE AND COORDINATE INVESTMENTS FOR CHILDREN[1]

PAMELA COLLINS, Director, Office for Research on Disparities and Director, Global Mental Health and Office of Rural Mental Health Research, National Institute of Mental Health

DIVYA LATA, Early Learning & Education Advisor, Plan International–Asia Regional Office

ALBERT LEE, Professor (Clinical), Jockey Club School of Public Health and Primary Care, and Director, Centre for Health Education and Health Promotion, Chinese University of Hong Kong

CHEMBA RAGHAVAN, Education Specialist–Gender and Early Childhood Development, UNICEF–East Asia Pacific Regional Office

NIRMALA RAO, Serena H. C. Yang Professor in Early Childhood Development and Education and Dean, Graduate School, University of Hong Kong

LORRAINE SHERR, Professor of Clinical and Health Psychology, University College, London

ANDY SHIH, Senior Vice President, Scientific Affairs, Autism Speaks

HIROKAZU YOSHIKAWA, Courtney Sale Ross University Professor of Globalization and Education, New York University

[1] Institute of Medicine planning committees are solely responsible for organizing the workshop, identifying topics, and choosing speakers. The responsibility for the published workshop summary rests with the workshop rapporteur and the institution.

FORUM ON INVESTING IN YOUNG CHILDREN GLOBALLY[1]

ZULFIQAR A. BHUTTA (*Co-Chair*), Co-director, SickKids Centre for Global Child Health, Toronto, and Founding Director, Center of Excellence for Women and Child Health, Aga Khan University

ANN MASTEN (*Co-Chair*), Distinguished McKnight University Professor, Institute of Child Development, University of Minnesota, Minneapolis

J. LAWRENCE ABER, Willner Family Professor of Psychology and Public Policy, Steinhardt School of Culture, Education, and Human Development, and University Professor, New York University

AMINA ABUBAKAR, Centre for Geographic Medicine Research—Kenya Medical Research Institute/Wellcome Trust Research Programme

LOLA ADEDOKUN, Program Director, Child Well-being and Director, African Health Initiative, Doris Duke Charitable Foundation

CONSTANZA ALARCÓN, Colombian National Coordinator of the Intersectoral Commission for Early Childhood, Presidency of the Republic, Colombia

RAQUEL BERNAL, Professor and Director of the Center for Research on Economic Development, Universidad de los Andes

FLORENCIA LOPEZ BOO, Senior Social Protection Economist, Inter-American Development Bank

PIA REBELLO BRITTO, Senior Advisor, Early Childhood Development Unit, UNICEF

HELENA CHOI, Program Officer, Global Development and Population Program, William and Flora Hewlett Foundation

PAMELA Y. COLLINS, Director, Office for Research on Disparities and Director, Global Mental Health and Office of Rural Mental Health Research, National Institute of Mental Health

TRACY COSTIGAN, Senior Program Officer, Research Evaluation Learning Unit, Robert Wood Johnson Foundation

GARY DARMSTADT, Associate Dean for Maternal and Child Health and Professor in the Division of Neonatal and Developmental Pediatrics, Stanford University School of Medicine

ANGELA DIAZ, Jean C. and James W. Crystal Professor, Departments of Pediatrics and Preventive Medicine, Icahn School of Medicine at Mount Sinai, and Director, Mount Sinai Adolescent Health Center

[1] Institute of Medicine forums and roundtables do not issue, review, or approve individual documents. The responsibility for the published workshop summary rests with the workshop rapporteur and the institution.

RANA HAJJEH, Director, Division of Bacterial Diseases, National Center for Immunization and Respiratory Diseases, U.S. Centers for Disease Control and Prevention

JODY HEYMANN, Dean, Fielding School of Public Health, University of California, Los Angeles

GILLIAN HUEBNER, Policy and Advocacy Director, Lumos

VENITA KAUL, Director, School of Education Studies and Director, Center for Early Childhood Education and Development, Ambedkar University, Delhi

SARAH KLAUS, Director, Early Childhood Program, London, Open Society Foundation

VESNA KUTLESIC, Director, Office of Global Health, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health

ALBERT LEE, Professor (Clinical), Jockey Club School of Public Health and Primary Care, and Director, Centre for Health Education and Health Promotion, Chinese University of Hong Kong

JOAN LOMBARDI, Senior Advisor, Bernard van Leer Foundation

STEPHEN LYE, Executive Director, Fraser Mustard Institute of Human Development, University of Toronto

ROBERT MALLETT, President and CEO, Accordia Global Health Foundation

KOFI MARFO, Professor and Foundation Director, Institute for Human Development, Aga Khan University (South-Central Asia, East Africa, United Kingdom)

MARK MILLER, Director, Division of International and Population Studies, Fogarty International Center, National Institutes of Health

HELIA MOLINA MILMAN, Vice Dean, Research and Development, Faculty of Medical Sciences, University de Santiago de Chile and Former Minister of Health, Chile

ARIEL PABLOS-MENDÉZ, Assistant Administrator for Global Health, U.S. Agency for International Development

JANNA PATTERSON, Senior Program Officer, Maternal, Newborn and Child Health, The Bill & Melinda Gates Foundation

ALAN PENCE, UNESCO Chair, Early Childhood, Education, Care and Development and Professor, School of Child and Youth Care, University of Victoria

RUTH PEROU, Lead Behavioral Scientist, Office of the Director, National Center on Birth Defects and Developmental Disabilities, U.S. Centers for Disease Control and Prevention

CHERYL POLK, President, HighScope Educational Research Foundation

EDUARDO QUEIROZ, Executive Director, Fundação Maria Cecilia Souto Vidigal
JOSE SAAVEDRA, Global Chief Medical Officer, Nestlé Nutrition
LORRAINE SHERR, Professor of Clinical and Health Psychology, University College, London
ANDY SHIH, Senior Vice President, Scientific Affairs, Autism Speaks
KARLEE SILVER, President of Targeted Challenges, Grand Challenges Canada
SIMON SOMMER, Head of Research, Jacobs Foundation
TAHA E. TAHA, Professor, Epidemiology and Population, Family and Reproductive Health Sciences, Bloomberg School of Public Health, Johns Hopkins University
PAMALA TRIVEDI, SRCD/AAAS Policy Fellow, Office of the Assistant Secretary for Planning and Evaluation
SUSAN WALKER, Professor of Nutrition and Director, Tropical Medicine Research Institute, Epidemiology Research Unit, University of the West Indies
SARA WATSON, National Director, ReadyNation, Council for a Strong America
AMALIA WAXMAN, Consultant
QUENTIN WODON, Advisor, Human Development Network, World Bank
HIROKAZU YOSHIKAWA, Courtney Sale Ross University Professor of Globalization and Education, New York University

Forum Staff

KIMBER BOGARD, Director, Forum on Investing in Young Children Globally
CHARLEE M. ALEXANDER, Research Associate
CARRIE VERGEL de DIOS, Program Assistant
PAMELLA ATAYI, Administrative Assistant
FAYE HILLMAN, Financial Associate
MAYA RAMACHANDRAN, Massachusetts Institute of Technology Intern
MARIANA ZINDEL, Duke University Intern
PATRICK W. KELLEY, Director, Board on Global Health

Consultant

JOCELYN WIDMER, University of Florida

BOARD ON GLOBAL HEALTH[1]

[1] Institute of Medicine boards do not review or approve individual products. The responsibility for the content of the workshop summary rests with the workshop rapporteur and the institution.

BOARD ON CHILDREN, YOUTH, AND FAMILIES[1]

[1] Institute of Medicine and National Research Council boards do not review or approve individual products. The responsibility for the content of the workshop summary rests with the workshop rapporteur and the institution.

Reviewers

This workshop summary has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published workshop summary as sound as possible and to ensure that the workshop summary meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We wish to thank the following individuals for their review of this workshop summary:

Albert Lee, Chinese University of Hong Kong
Ghazala Rafique, Aka Khan University
Nirmala Rao, University of Hong Kong
Damilola Walker, U.S. Agency for International Development

Although the reviewers listed above have provided many constructive comments and suggestions, they did not see the final draft of the workshop summary before its release. The review of this workshop summary was overseen by **David Challoner,** University of Florida. He was responsible for making certain that an independent examination of this workshop summary was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this workshop summary rests entirely with the rapporteur and the institution.

Acknowledgments

The planning committee and project staff deeply appreciate the many valuable contributions from individuals who assisted us with this project. First, we offer our profound thanks to all of the presenters and discussants at the workshop who gave so generously of their time and expertise. These individuals are listed in full in the workshop agenda in Appendix B. We are also grateful to the many participants who attended the workshop both in person and via the live webcast. The engagement of all those in attendance was robust and vital to the success of the event.

In addition, the forum wishes to recognize the sponsors that supported this activity. Financial support for this project was provided by the Accordia Global Health Foundation; Autism Speaks; the Bernard van Leer Foundation; The Bill & Melinda Gates Foundation; the Doris Duke Charitable Foundation; the Fraser Mustard Institute for Human Development; Grand Challenges Canada; HighScope Educational Research Foundation; Fundação Maria Cecilia Souto Vidigal; the Inter-American Development Bank; the Jacobs Foundation; Lumos; the National Institutes of Health–Fogarty International Center, the National Institute of Child Health and Human Development, and the National Institute of Mental Health; Nestlé Nutrition Institute; Office of the Assistant Secretary for Planning and Evaluation; the Open Society Institute–Budapest Foundation; ReadyNation; the Robert Wood Johnson Foundation; the Society for Research in Child Development; UNICEF; the U.S. Agency for International Development; the U.S. Centers for Disease Control and Prevention; the William and Flora Hewlett Foundation; and the World Bank.

A NOTE ABOUT THE COVER ART

The Forum on Investing in Young Children Globally is committed to confronting the challenges and harnessing the opportunities surrounding the global nature of integrating the science of health, education, nutrition, and social protection. One of the ways the forum has committed itself to being global in scope is through the workshops that occur in different regions throughout the world. The cover design is intended to embrace the diversity in place, culture, challenges, and opportunities associated with forum activities at each of the workshops, but this global trajectory is done keeping in mind the momentum that comes in connecting these diverse locales to one another through the work of the forum. The bright orange dot represents the location of the workshop this report summarizes, and the lighter orange dots represent workshop locations across the first 3 years of the forum. The dotted orange line suggests that the forum will link what was gleaned from the convening activities from this workshop to the next. We would like to thank Jocelyn Widmer for her contributions to the cover design.

Contents

1

Introduction and Overview[1]

The integration and coordination of health, education, nutrition, social protection, and other services have the potential to improve the lives of children and their caregivers around the world. However, integration and coordination of policies and programs affecting early childhood development can create both risks and benefits. In different localities, these services are more or less effective in achieving their objectives. They also are more or less coordinated in delivering services to the same recipients, and in some cases services are delivered by integrated multisectoral organizations. The result is a rich arena for policy analysis and change and a complex challenge for public- and private-sector organizations that are seeking to improve the lives of children.

To examine the science and policy issues involved in coordinating investments in children and their caregivers, the Forum on Investing in Young Children Globally held a workshop in Hong Kong on March 14–15, 2015, titled "Using Existing Platforms to Integrate and Coordinate Invest-

[1] The planning committee's role was limited to planning the workshop. The workshop summary has been prepared by the rapporteur (with the assistance of Charlee Alexander, Kimber Bogard, Maya Ramachandran, Carrie Vergel de Dios, and Mariana Zindel) as a factual account of what occurred at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants and are not necessarily endorsed or verified by the Institute of Medicine. They should not be construed as reflecting any group consensus.

BOX 1-1
Workshop Statement of Task

An ad hoc committee will plan and conduct an interactive public workshop featuring presentations and discussions that highlight the science and economics of coordinating investments in children and their caregivers using existing platforms across areas of health, education, nutrition, and social protection. Platforms will be broadly conceived to include settings, such as schools and community-based centers, as well as other types of platforms such as community outreach, child rights, and funding streams. Public- and private-sector efforts will be included as well as data on costing and financing service integration within existing platforms. The results of the workshop will inform research, policy, and practice regionally as well as globally.

Speakers will explore questions about what it takes to set up, implement, and scale integrated or coordinated services within existing platforms. Examples will be drawn from low-, middle-, and high-income countries and focus on vulnerable populations, such as children who are indigenous, migrating, or with disabilities. Special attention will be paid to diverse cultural contexts within which children and families access and receive services. In addition, systems and governance issues that facilitate or create barriers to coordinating investments and service delivery will be explored.

The committee will identify specific topics to be addressed, develop the agenda, select and invite speakers and other participants, and moderate the discussions. An individually authored summary of the presentations and discussions at the workshop will be prepared by a designated rapporteur in accordance with institutional guidelines.

ments for Children."[2] Box 1-1 provides the full statement of task for the workshop and Box 1-2 describes the forum and its objectives. Appendix A provides a list of acronyms used in this report, and Appendix B contains the workshop agenda. Held in partnership with the Centre for Health Education and Health Promotion and Wu Yee Sun College of the Chinese University of Hong Kong, the workshop brought together researchers, policy makers, program practitioners, and other experts from 22 countries for a day and a half of presentations and discussions. In his introductory remarks at the forum, the founding master of Wu Yee Sun College,

[2] Forum activities highlight the science and economics of integrated investments in young children living in low-resourced regions of the world across the areas of health, nutrition, education, and social protection. Moreover, given that caregivers of young children are key to children's access to health, education, nutrition, and social protection, the forum takes a life course approach and addresses issues related to reproductive health, economic opportunity, and access to quality child care and education programs for caregivers.

BOX 1-2
The Forum on Investing in Young Children Globally

Launched in January 2014 after 1 year of planning, the Forum on Investing in Young Children Globally is a collaborative community of experts working to ensure that investments in children and their caregivers around the world are a top priority informed by science. The forum is seeking to create and sustain, over 3 years, a community of stakeholders across northern and southern countries who are seeking to explore existing, new, and innovative science and research from around the world and translate this evidence into sound and strategic investments in policies and practices that will make a difference in the lives of children. It is using a variety of methods to pursue this objective, including dialogue, workshops, tool development, and multimedia communications, including reports, news, videos, a website, and infographics. Sponsored by more than 20 organizations, the forum is a unique learning community that is evidence driven, international, collaborative, visionary, and practical.

Three previous workshops have focused on the cost of inaction, financing investments in young children, and scaling up those investments. Brief summaries of the workshops are available at the forum's website, http://iom.nationalacademies.org/activities/children/investingyoungchildrenglobally.aspx, and full summaries are available from the National Academies Press (http://www.nap.edu).

Rance Lee, pointed to the parallels between the workshop objectives and the mission of the college, which is to combine "entrepreneurial spirit with social responsibility." Said Lee: "This forum will no doubt inspire innovative ideas about how we should and could invest in our younger generations strategically."

OVERVIEW AND PROMINENT TOPICS OF THE WORKSHOP

Physical, cognitive, social, and emotional skills are intertwined across the life course, especially during the first years of life. This creates a complicated policy challenge for governments in supporting the multiple domains of early childhood development, said Hiro Yoshikawa, Courtney Sale Ross University Professor of Globalization and Education at New York University. Typically, the services associated with these domains of development have their own disciplinary perspectives, their own organizational and institutional structures, and often their own ministries within government. Ministries of health, education, social protection, women and children's issues, child protection, and economic issues can be arranged quite differently among nations and even among the national, subnational, and local levels.

The workshop in Hong Kong was an opportunity for the forum to explore how these sectors work together and how their activities, separately and together, could be optimized. "For all of us in the early childhood field, the words *coordination* and *integration* come up very often," said Yoshikawa. For example, coordination and integration provide key rationales and motivations for planning across sectors and for legislation. "This is not an easy topic," he said.

Over the course of the workshop, workshop participants called attention to several prominent topics that arose in the presentations and discussions. These topics, which have been identified by the rapporteur based on the remarks of workshop participants, are listed here not as the conclusions of the workshop or of the sponsoring organizations, but as an introduction to the variety of issues covered at the workshop:

- Coordination and integration of early childhood development programs can create both benefits and risks. Coordinated or integrated programs can result in synergy if children served by one program can also receive other kinds of services, or if such programs attract households that would not have sought out a single kind of service. But these advantages can fail to materialize in practice because of the difficulties of planning, funding, and implementing multisectoral activities.
- Coordination and integration are more common at the local than at the national level, and local experiences can provide guidance for national policies and programs. At the same time, flexibility in national policies can facilitate adaptation of programs to local conditions.
- Population-level assessment and screening can provide a basis for both coordination and integration by establishing a baseline and measures of improvement. For example, results-based budgeting, in which financing depends on improved outcomes, can spur cohesion among programs and agencies.
- The capabilities of a workforce can either limit or enhance coordination and integration. These capabilities, which include being able to communicate and work across sectors, can be enhanced through education and training with appropriate curricula and content.
- Nongovernmental organizations face many of the same challenges as governments around coordination and integration.
- Targeted programs can help reach vulnerable populations but generally involve trade-offs between equity and efficiency.
- The importance of a child's early years for individual and population health and human development emphasizes the importance of equity.

ORGANIZATION OF THE SUMMARY

Following this introduction to the workshop, Chapter 2 summarizes the presentations of two speakers who provided broad overviews of the issues involved in coordinating and integrating early childhood development policies and programs. Chapter 3 then uses the two keynote presentations at the workshop—on coordinated and integrated approaches in Hong Kong and Chile—to examine some of these issues in specific contexts.

Chapter 4 examines governance, finance, and accountability issues that can facilitate or impede coordinated or integrated services for children and their caregivers at the national, subnational, or local levels. Chapter 5 looks at examples of how existing platforms can be used to set up, implement, and scale integrated or coordinated services.

Chapter 6 discusses how these platforms can be used to reach and invest in vulnerable populations, again by looking at specific examples of how best to reach these populations and what kinds of services they need. Chapter 7 examines how the factors involved in developing, implementing, and sustaining programs can differ across locales, with a focus on how programs geared for local needs can be extended to serve more broadly based populations.

Finally, Chapter 8 summarizes the major points made by three breakout groups at the workshop, which discussed financing, children with disabilities, and early childhood development scales, along with the concluding remarks of the several workshop participants.

2

Coordinated and Integrated Approaches to Investing in Young Children

In the first panel of the workshop, two speakers provided broad overviews of the issues involved in coordinating and integrating early childhood development policies and programs. While coordination and integration can confer advantages to children and their caregivers, they also can pose risks to the delivery of needed services. These potential advantages and disadvantages vary from one place to another, but their existence points to broader principles that extend across locales.

SCRUTINIZING ARGUMENTS FOR COORDINATION AND INTEGRATION

The consensus among early childhood development experts is that children develop holistically, observed Jan van Ravens, a senior policy maker and consultant affiliated with the Child Study Center at Yale University. This requires services or interventions from multiple disciplines located in multiple sectors. Typically these services or interventions are administered by multiple ministries of government, which raises the following question: What are the implications of the consensus regarding holistic childhood development for the organization, management, and governance of early childhood development programs and policies?

One argument is that synergy exists among such services and interventions. This argument hypothesizes, for example, that if nutrition services are integrated into a preschool program, a child will learn more and benefit more from that program. Evidence for such a conclusion typically

emerges from study designs that consider four groups of children: children who have access only to a nutrition program, children who have access only to a preschool program, a control group of children who do not have access to either intervention, and children who receive the integrated program. If the last group has the best outcomes, this is seen as evidence in favor of integrated programs.

However, this argument is not logically sound, observed van Ravens, unless a fifth group of children is considered: children with access to a preschool program from one provider and nutrition services from another. Children in such "combined" programs have access to multiple but not integrated services and interventions. "There is no evidence, to the best of my knowledge, that children in combined programs fare less well than children in integrated programs, because they are never compared in a research setting," said van Ravens. Researchers have found synergy in integrated programs because that is where they have looked for it, not necessarily because it does not exist in combined programs. "It is a classic example of research bias."

Combined programs are very common. Many children receive early childhood education, medical care, nutrition services, social support, and other services from multiple providers that are not integrated or necessarily even coordinated. Admittedly, a wide range of services is found most often in richer countries, said van Ravens. "But by the year 2030, or the end of the Sustainable Development Goals, I think there is a very good chance that many children, even in developing countries, will have access [to] combined programs if we work on that."

Another argument for integration could be referred to as the attraction argument. It posits that the integration of two interventions in one program will attract families and children more than will single interventions. For example, conditional cash transfers or the provision of school meals could attract families and children to medical, parental education, or other programs, van Ravens observed.

However, the attraction argument often fails in practice, he continued. For example, a preexisting program may reach most or all of a target population, but when it is integrated with another program it reaches only part of the population. For example, a nutrition program, a parental education program, and a preschool program may each reach separate populations, but the populations may not overlap extensively, so an integrated program ends up serving fewer people. It also may be difficult or costly to integrate existing programs. And human resources can be a serious bottleneck in integrated programs. A relatively untrained person may be able to deliver some services but would be stymied in trying to deliver integrated services, and this problem is often worst in places with the greatest needs.

THE COSTS OF INTEGRATION

The number of countries with integrated early childhood development policies has grown rapidly in recent years, but results on the ground have often failed to materialize, van Ravens said (van Ravens, 2015). One reason is that the development and implementation of policies often suffer from delays and drawbacks even in single settings, and this problem is exacerbated in multisectoral settings. For example, one group may be opposed to some of the provisions of an integrated policy, which delays the entire policy. In addition, each ministry tends to have its own mechanisms for policy development, and these mechanisms can differ among agencies.

Another problem is that multisectoral policy development often does not fit into regular planning and budget cycles, van Ravens noted. As a result, it tends to take place in a political vacuum, which can frustrate endorsement and implementation. A multisectoral policy also can conflict with the policies of the line agencies, such as the education or health ministries, he added.

Finally, quantitative and financial analyses usually come after the finalization of the integrated policy, which can lead to funding gaps. To avoid such gaps, the costs and available funding must be considered from the start of policy development, van Ravens said.

The line ministries are often seen as the stakeholders who resist integration. But these ministries often have large budgets and a need to keep tight control over their operations. If things go wrong with the distribution of resources, the agency will be held responsible. If the streams of money are intertwined at various levels of the system, the tools for controlling those resources may be insufficient.

The ministries also need to maintain internal consistency, observed van Ravens. For example, health systems need to be able to refer patients from primary to secondary or tertiary health care, and school systems need to transition students from one level to the next. If these processes become subject to an external policy, the ministries may not be able to fulfill their responsibilities.

Finally, investing in children is not the only "horizontal constituency" that claims territory and budgets from the line ministries; others include poverty reduction, urban development, environmental protection, youth criminality, and older adults. Few policy issues exist entirely within single sectors today. Line ministries would disintegrate if they ceded power to all these other constituencies, van Ravens said. Instead, early childhood development needs to learn from other horizontal constituencies about the best ways of getting things done, he observed.

REALIZING THE BENEFITS OF COORDINATION

Van Ravens concluded with five recommendations that reflect the realities of policies and programs.

The first recommendation he made is to universalize essential child services. As the coverage of these services increases, they will increasingly overlap, and more and more children will have access to more and more services, which will increase synergy. However, the services should remain in the sectors, van Ravens said, to ensure progress. What matters is that the services come together in the child.

His second recommendation was to tie services together at the local level but only as needed. Sensible people, operating within a culture of cooperation, do not need a lot of formal coordination mechanisms, he said. Whenever spontaneous coordination appears to be insufficient, more formal coordination could be provided through local coordination bodies, sensitization, training, and perhaps an early childhood development coordinator. Traditional structures and local leadership should be used as much as possible, he added.

His third recommendation was to treat home-visiting programs that lie within the health sector as an exception. Early stimulation and psychosocial development need to be integrated in such programs, he said, but these programs should remain in the health sector.

His fourth recommendation was that services be "linkable" at the local level. Therefore, services designed at the national level must be flexible enough for local adaptation and for linking them with other services as needed, he said. Vertical coordination can ensure that central authorities design policies and programs in this manner. This will often mean funding on the basis of results (for example, the numbers of children reached), setting some general quality standards, and ensuring room to maneuver at the local level.

His fifth recommendation was that coordination at the central level should be "light." Two or three interministerial meetings could be held to decide which child services are essential (this will not vary greatly between countries) and to agree on a roadmap for their universalization. Targets can be used to monitor progress through existing sectoral systems of monitoring and evaluation, while existing sectoral councils can also be used for stakeholder consultation.

COORDINATION AND INTEGRATION AT THE NATIONAL LEVEL

At the national level, early childhood development policies, service programs, strategic plans, and laws are usually multisectoral, observed Emily Vargas-Barón, director of the RISE (Reconstruction and International Security through Education) Institute. However, very few of these

early childhood development programs are integrated at the national level. Rather, services are sometimes integrated around children at the local level to ensure holistic child development.

To ensure effective early childhood development policy implementation, multisectoral coordination structures are usually developed, with the participation of governmental agencies at all levels, nongovernmental organizations, and other civil society and private-sector organizations. Coordination also occurs within sectors, which are often multidisciplinary in structure. Examples of multisectoral programs include parent education and support programs, early childhood intervention services, health and nutrition, and social protection. Even preschool programs tend to be multisectoral, Vargas-Barón observed, because a preschool program may draw on health services, nutrition services, social protection services, and so on, whereas establishing these services within an education system can be very expensive. "The better approach," she said, "is to have a good collaboration between the ministry of education and the health and nutrition areas of a health ministry."

The ministries usually involved in early childhood development policy planning include education, health, nutrition, sanitation, protection, justice, planning, finance, gender, rural development, and interior, although these ministries may combine or overlap in different ways according to the institutional cultures of countries. Sectoral ministries usually maintain the managerial and fiscal control of their programs, although they may coordinate their services, sometimes closely, with other ministries. For example, they often have formal or informal interagency agreements; they may conduct mutual referrals and create a common database and tracking system using existing databases to the extent possible; and they may conduct joint planning, monitoring, and evaluation, though this is usually the weakest area of program implementation in most countries.

Few intersectoral ministries are found, however. The few that exist are mainly health and protection ministries, such as those in Georgia and Lesotho. Very few health and education ministries exist. One exists today in Bhutan, and Brazil created a health and education ministry in 1943, but it lasted for less than 4 years before splitting. "They really are very separate sectors," said Vargas-Barón.

In general, "integrated" child development ministries that bring together multiple sectors have been few and short lived and have tended to lack power. For example, Venezuela established a Ministerio de la Inteligencia in 1979 that lasted for only a few years, Sri Lanka established a Ministry of Child Development and Women's Affairs, and Tanzania established a Ministry of Community Development, Gender, and Children. However, integrated ministries tend not to have served as good

platforms for early child development policies, said Vargas-Barón. "What some people have dreamed of and continue to dream of—an early child development ministry in each country—is just not going to happen, and when people have attempted to create such a ministry, it has tended to fail."

The lead early childhood development ministries tend to be education, health, or protection. To ensure good intersectoral policy coordination and implementation, the lead ministry needs a multisectoral body plus a coordinating unit, said Vargas-Barón. This multisectoral body can be at the high level of ministers or deputy ministers, it can be a technical body, or both may be created. "It is essential to create some form of multisectoral body for collaboration and coordination with regular meetings." Similarly, the coordinating unit can consist of a separate institute, as in Colombia, an office in the presidency or prime minister's office, or be part of a particular ministry, as in Ghana.

Early childhood development policies need to specify the structure, roles, and responsibilities of entities for policy implementation and coordination at all levels, according to Vargas-Barón. However, decentralization issues abound. National roles and responsibilities often are not retained as funds are decentralized; funds for children's programs may be lost if investment targets for early childhood are not specified for local governments; and the lack of normative regulations and of systems to ensure quality, equity, and accountability usually established at national levels can undermine children's programs.

Vargas-Barón presented findings from a study on the evolution of early childhood development policies since 2000 that included five country case studies regarding short-term results from policy planning processes (Vargas-Barón, 2015a). She noted that participatory and comprehensive planning approaches, when used, have been successful in achieving many expected and unexpected results to expand and improve services for young children and their families.

COORDINATION AND INTEGRATION AT THE REGIONAL AND LOCAL LEVELS

At regional and local levels, the situation is somewhat different. At those levels, early childhood development structures, agencies, services, and activities may be sectoral, multisectoral, or integrated. At the local level, services tend to occur in a continuum from integrated to multisectoral to sectoral (see Figure 2-1). The points on this continuum vary, especially in terms of administration, fiscal support, supervision, monitoring and evaluation, and referral procedures.

Local entities and activities tend to be developed before regional

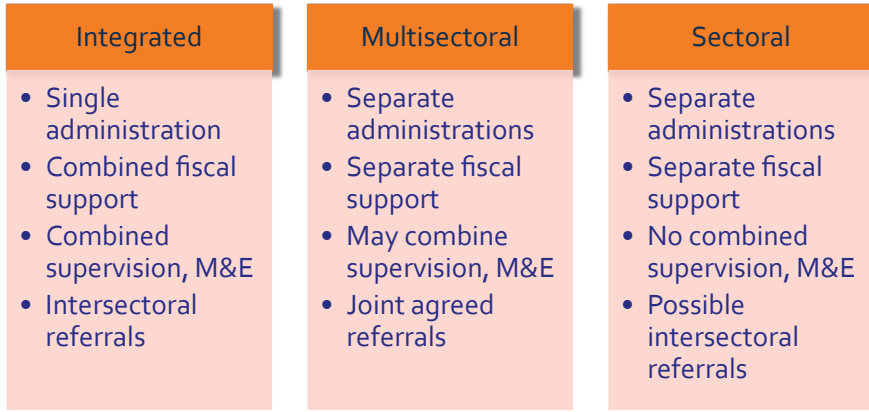

FIGURE 2-1 Early childhood development services at the local level occur along a continuum from integrated to sectoral.
NOTE: M&E = monitoring and evaluation.
SOURCE: Vargas-Barón, 2015b.

structures and entities are established, Vargas-Barón noted. By anticipating the development of regional offices for multisectoral coordination, collaboration, supervision, and support, nations can avoid having later problems at the regional level.

In Latin America and elsewhere, a number of countries have been able to take integrated and multisectoral programs that have been evaluated to be successful and scale them up to the national level. One study showed that, to be replicated on a larger scale, integrated programs require national legal recognition, financial support, and assistance with planning, coordination, supervision, and monitoring and evaluation (Vargas-Barón, 2009). Examples include the Colombian Institute for Family Welfare, the Integrated Early Childhood Development centers in Bosnia (see Table 2-1), and early childhood intervention systems in Australia, China, Europe, New Zealand, and the United States.

Formal agreements for multisectoral early childhood development activities help to ensure that roles and responsibilities are clearly defined and energetically pursued at each level. In contrast, informal agreements tend to fall apart as leadership changes and interpersonal work relations evolve over time. Job descriptions with multisectoral coordination roles, rewards, and other incentives for personnel who engage in these activities can be very helpful. The institutional culture can promote and reward multisectoral coordination and partnerships with civil society and private-sector entities, Vargas-Barón said.

TABLE 2-1 Early Childhood Development (ECD) Centers in Bosnia Extend from Preconception Services to Preschool and Family Support Services

			Preschool Play Groups and Support to Preschools	Family Support and Case Management	Monitoring and Evaluation
Preconception and Prenatal Education	Parent Education and Support	Early Childhood Intervention			
Home and center-based	Home and center visits and toy and book libraries	Home visits with center support services	Play groups with parents and children together	Center-based social work services and referrals	Monitoring and evaluation for all ECD services
Complements health services	Fills gaps in 0 to 3 services	Children from 0 to 3+ with delays, malnutrition disabilities	Fills gaps in preschool education	Ensures support for vulnerable children	Assesses inputs, outputs, and outcomes

SOURCE: Vargas-Barón, 2015b.

An example of multisectoral early childhood development services is the Convergence Zones that have been set up in Cameroon. This system offers separate but fully coordinated services for education, nutrition, health care, sanitation, and child protection. "If a family walks in to one of these service providers, they are automatically referred to all the others," said Vargas-Barón. "Community members conducted an analysis of their own needs and service structures and identified what other services they wanted to develop. . . . This system, although it was multisectoral and not integrated, functioned as well as an integrated system in many respects." However, she noted, having multiple sectors also means paying for multiple administrative structures, and this may not be cost-effective over time.

THE STATUS OF NATIONAL POLICIES AND PROGRAMS

Vargas-Barón briefly described a study that was released shortly after the workshop on the main drivers and challenges facing nations and regional governments as they develop early childhood development policy and instruments (Vargas-Barón, 2015a). The study describes the evolution and status of policy planning for early childhood development from before the year 2000 to 2014 and includes five country case studies on initial policy impacts.

Before 1999, only five countries had adopted early childhood development policies, with Colombia being a leader, beginning in 1968. By 2014, a total of 68 countries had done so, with another 10 countries reliably reported to have developed policies and 23 more reliably reported to be in progress. As a result, more than 100 countries will soon have early childhood development policies. The policy documents have "different quality and content, but the policies do exist." Southern Asia and Southeast Asia have the highest percentage of countries with early childhood development policies, while Western Europe and North America have the lowest (see Table 2-2). The latter countries have tended to adopt a sectoral approach, including early childhood within education, health, nutrition, and protection policy instruments. This sectoral approach has its strengths, according to Vargas-Barón, "but there are always going to be problems in the so-called safety net. There will be some gap areas . . . where inadequate attention is given to young children and their needs."

Among the challenges to policy planning for early childhood development, the study lists the following:

- Authoritarian regimes
- Lack of political will
- Rapid governmental leadership turnover

- Poor decentralization systems
- Extreme sectorality
- Inadequate attention to one or more of the key elements for developing comprehensive, scalable, and sustainable early childhood development systems
- Poor policy implementation structures and processes

In the five case study countries—Bosnia, Brazil, Colombia, Myanmar, and Rwanda—policy planning for early childhood development has led to a greater focus on improving and expanding services. "In these countries, they are already achieving more than they would have, most likely, without a policy." The case studies indicate that, where highly participatory early childhood development policy planning methods were used, implementation often begins before policies are adopted, greater national ownership is achieved, and policies are being successfully implemented. Furthermore, if a strategic plan or an action plan is developed in addition to an early childhood development policy, the policy is more likely to be well implemented. Relevant laws and bylaws also can reinforce key policy dimensions. In addition, appropriate organizational structures at all levels are required to ensure good multisectoral coordination and implementation, Vargas-Barón said. Indicators, targets, cost studies, and budget projections and simulations also are essential, she added.

TABLE 2-2 Adoption of Early Childhood Development (ECD) Policy Instruments by Region

Region	# of Countries	# of ECD Policies	% with Policies
South Asia	6	5	83
Southeast Asia	11	7	64
Sub-Saharan Africa	49	29	59
South and Central America	20	9	45
South Pacific	14	6	43
Caribbean	28	5	18
Central and Eastern Europe and the Commonwealth of Independent States	29	4	10
Central and Eastern Asia	14	1	7
Middle East and North Africa	19	1	5
Western Europe	23	1	4
North America	3	0	0
Totals	216	68	—

SOURCE: Vargas-Barón, 2015a.

Participatory processes in planning policies can make the difference between success and failure. These processes need to involve people from all levels of society, said Vargas-Barón, including ethnic and linguistic minorities and people living in urban and rural areas. "Tons of policies [are] gathering dust in ministries all over the world. These sectoral policies went nowhere because people sat in an office and wrote them. Participatory approaches . . . are ones where you involve all of the critical governmental, civil society, and private sectors that need to contribute to policy planning."

Vargas-Barón drew attention to several issues involving equity that arose in the case studies. When and where high-risk, impoverished families were officially targeted, they were served more fully. It may be concluded that ethnic and linguistic minority groups must be explicitly identified as requiring special attention or they tend to be forgotten, she said. Mother tongues will be included in early childhood development services if the country officially and unequivocally states they will be used. If children with developmental delays, disabilities, malnutrition, and chronic illnesses are prioritized, it is more likely they will receive screenings, early childhood intervention services, and inclusive preschool education. Children living in remote rural areas, violence zones, and areas prone to natural disasters also need to be explicitly targeted if they are to be reached, Vargas-Barón said.

FUTURE INITIATIVES

Vargas-Barón concluded with several suggestions for future initiatives. One is to expand research on policy planning and implementation for early childhood development. In addition, more well-trained and experienced early childhood development policy advisors and policy analysts are urgently needed, she said, along with at least one graduate university program for training early childhood development policy planners and analysts from all world regions.

Vargas-Barón also called attention to the importance of nongovernmental organizations, which often become the purveyors of pre- and in-service monitoring, quality assurance, supervision, training, standards setting, and planning. "Nongovernmental organizations can help ensure that quality is adequate to enable effective service growth and improvement."

Issues of national investment in early childhood development need to be emphasized more pointedly, Vargas-Barón said. "There has been too much reliance on international flows of funds to support early childhood development work. The percentages of line ministries' budgets for early childhood development programs need to be greatly expanded. Funda-

mentally, it is up to country leaders to have the political will to ensure their children develop well."

Finally, Vargas-Barón emphasized that national leaders must perceive that improved child development and well-coordinated early childhood development services are truly in the national interest.

SUMMARY OF THE PRESENTATIONS

Panel moderator Hiro Yoshikawa briefly summarized the main points of the presentations on "Coordinated and Integrated Approaches to Investing in Young Children" by van Ravens and Vargas-Barón. He pointed to six concepts that cut across both presentations:

1. The issue of population level assessment and screening such as universal assessment of children at birth with periodical needs assessment
2. The idea of task-shifting—that a workforce can have duties that cut across sectors
3. The idea of interdisciplinary teams or communication and training across workforces
4. Topics that are represented in specific curricula in early childhood development, such as single programs that can encompass expertise and topics in particular areas
5. The need for better coordination when financing from different sectors
6. The ways in which local governance can include budgets that cover multiple sectors of services

THE ROLE OF PARENTS

In response to a question about the role of parents in promoting the integration of services, Vargas-Barón observed that parents must always be included in participatory policy planning processes. In addition, the parental role in early childhood intervention services or the transition from preschool to primary school is extremely important. "Empowerment of the parent is at the core of what we are trying to do to help them improve their lives and develop their children well."

Van Ravens agreed, adding that parents have a double role. They influence their own children's lives and have an impact on the local community—for example, by building support for preschool, health programs, and so on. "So many community-based early childhood development centers would not be able to function without the direct support of parents. I'm talking about very simple things, like building the structure, or

building a playground, or cleaning." Also, integration is unavoidable with programs involving parents, whether home visitation or group sessions.

The involvement of parents points to a bottleneck in workforce issues, van Ravens observed. For example, parent programs are most effective with leaders from local communities, but the levels of education and training in some communities may be low, making it difficult to find enough leaders.

COORDINATION AND INTEGRATION FROM A BROADER PERSPECTIVE

The presentations of van Ravens and Vargas-Barón led to a more general discussion of coordination and integration that threaded through the entire workshop. Kofi Marfo, founding director of the Institute of Human Development at Aga Khan University, pointed out that coordination and integration are not either/or issues, because they occur on a continuum and can exist simultaneously. Similarly, replacing coordinated structure with integrated ones will not necessarily yield improvements. If existing structures are torn down in favor of integration, the services provided by those structures can be lost.

Vargas-Barón agreed in the need for flexibility and local adaptations, adding "The capacity of cultures to organize themselves must be recognized as the starting point." Leadership and decision making are provided by the people of those cultures. "The tendency to want to bring evidence-based approaches and 'cookie cutter' approaches from one culture and impose them on others—which has been done by a lot of people—is really wrong." For example, new capacity is emerging in parts of the world, such as Africa and Asia, and this capacity can be a strength for each region and also a benefit to the rest of the world as other regions learn from what is going on in those regions.

As Yoshikawa pointed out, the challenge of establishing a continuum of care across health, education, social protection, and child protection is such a large task that continual change and flexibility are essential. But once a comprehensive set of standards and a framework are in place, implementation can proceed bit by bit in different areas.

Pia Britto, senior advisor to the Early Childhood Development Unit of UNICEF, pointed to two forces that are mobilizing investment in young children by government: one is a political process, and the other is technical. Sometimes one leads the other or the other way around. In the past, the field of early childhood development has largely focused on the technical process and has not sufficiently addressed the political process. "Both those levels of decision making are required to increase investments and bring the type of capital we need for sustainability," Britto

said. "Part of our thinking has to be what is it that we are discussing here that makes it compelling for the political-level decision makers to look at this as something they can gravitate to." In some countries, such as Chile or Colombia, political leaders have been champions of the field, but elsewhere the argument has not been well enough articulated. "We have not taken our technical knowledge that we are sharing here to that level of political prioritization. As a forum, we have to bring that now into our conversation."

Sara Watson, national director of ReadyNation, a business membership organization that advocates for early childhood, observed that in the United States, business leaders have been a major political factor to win investments and, in particular, to push for the multisectoral approach. In the states of California and Massachusetts, for example, the state early childhood advisory body is chaired by a business person, not by someone from the early childhood world. Because business leaders do not come from a particular early childhood sector, they can push for all different sectors. "That has been very effective in the United States."

Howard Sobel, a representative of the Western Pacific regional office of the World Health Organization (WHO), asked for examples of success with concrete outcomes in low- and low-middle-income countries in intervention efforts for early childhood development. As a brief response, Vargas-Barón mentioned Brazil's success in bringing the private sector into leadership roles for effective implementation of integrated early childhood development interventions.

DATA AND POLITICS IN POLICIES

Discussion of integration and coordination also led to a more extended discussion of the roles that data and politics play in establishing and implementing policies and programs. Constanza Alarcón, the Colombian National Coordinator of the Intersectoral Committee for Early Childhood, noted that the data on which policies should be based can sometimes be "quite distant from day-to-day affairs." Policy makers are faced by economic pressures, political pressures, historical factors, and financial issues, all of which can make it difficult to generate and use data to render decisions.

To ensure that decisions are based on evidence, policy makers need to be better prepared and have greater capacity to do their jobs, she said. Governments and teams change, and new teams tend to change existing approaches. "If we do not affect those who make decisions on a day-to-day basis that affect the lives of women and children, pregnant women, and so on, we cannot create a process of transformation or impact on the public policy-making process."

Vargas-Barón advocated setting up a multisectoral coordination unit, such as the one in Colombia, that is subject to the political realities of a country and is receiving constant feedback on what is happening at all levels—local, regional, and national. The challenge is to work in the "wisest manner possible with the greatest input."

Van Ravens observed that providing access to data can nevertheless be of great assistance in influencing policy. "In so many countries, it is a big challenge simply to find out how many children are being vaccinated, how many children are birth registered, how many teachers there are, how many nurses are there." Sometimes data are manipulated because of perverse incentives—for example, to report more children in preschool to acquire additional funding—but in many countries great progress is being made. Peru, for example, has a child-by-child system of monitoring that is integrated across sectors. Similarly, data on returns on investments in children that are specific to a program and a country can help convince policy makers to support those investments.

Zulfiqar Bhutta, Robert Harding Inaugural Chair in Global Child Health at the Hospital for Sick Children in Toronto and founding director of the Centre of Excellence in Women and Child Health at Aga Khan University, pointed out that one of the biggest gains in the past decade has been the increase in quantitative data around health, and particularly around survival rates. Similarly, quantitative data on the impact of integrated, partially integrated, or nonintegrated programs could help support the momentum for change.

Along those lines, van Ravens noted that another way to gauge the effect of integration would be to compare integrated and nonintegrated programs to determine if integrated systems provide greater benefits than combined programs.

Regarding the political factors in policy development and implementation, he said that early childhood development experts need to understand the political landscape and how it works so they are able to make the right moves. "We need more Machiavelli in our work."

3

Integrated and Coordinated Programs in Hong Kong and Chile

In the opening session of the forum, two keynote speakers looked at the issues of coordination and integration of existing platforms by examining experiences within Hong Kong and Chile. Together, their presentations demonstrated a key observation made in the previous chapter: approaches to early childhood development can differ from place to place, but similar issues arise in different contexts.

A COLLABORATIVE MULTIPLIER APPROACH TO EARLY CHILDHOOD DEVELOPMENT

In the first keynote address, Chow Chun Bong, honorary clinical professor in the Department of Pediatrics and the Department of Community Medicine at the University of Hong Kong, emphasized the importance of taking a "collaborative multiplier approach" to early childhood development, while discussant Sophia Chan, Undersecretary for Food and Health of the government of Hong Kong Special Administrative Region, outlined the need for a comprehensive strategy for childhood development and resource allocation.

Hong Kong is densely populated, noted Bong, but building is restricted in the "countrified" areas that constitute 75 percent of the region. Another characterizing feature is that 50 percent of Hong Kong's 7.2 million people live in public housing, with the figure projected eventually to reach 60 percent. Thus, Hong Kong has small areas of high population density, marked by numerous high-rise residences, while the rest of the region

remains relatively rural. As Chan noted, it is a fast-paced urban region, with many working women and Filipino maids who look after children.

The infant mortality rate in Hong Kong is 1.6 per 1,000 live births, and the under-5 mortality rate is 2.3 per 1,000 live births, which are some of the best figures in the world, said Bong. Life expectancy in Hong Kong is among the longest in the world—80.9 for males and 86.6 for females. The unintentional injury mortality rate in Hong Kong is lowest in the world, at 1.68 deaths per 100,000 people, but the intentional injury mortality rate, at 2.68 per 100,000 people, is closer to the world average.

According to the *Economist,* Hong Kong ranks 19th in the world in early childhood education, which is the best in Asia, Bong said. On various measures of international educational achievement, Hong Kong students typically rank among the top three in the world, although students in other parts of Asia, such as the city of Shanghai and South Korea, have been catching up in recent years.

As with other countries, Hong Kong has been experiencing an increasing divide between the rich and the poor economic classes. Gross domestic product (GDP) per capita is US$40,000, which is 14th in the world. But the Gini coefficient measuring income inequality is high—the 12th worst out of 141 countries. The child poverty rate in 2013 was 18.6 percent, reflecting a government intervention that reduced the rate from 23.7 percent, and 30.5 percent among people ages 65 and up.

The under-5 child mortality rate is correlated with the economic status of the places where people live. In the most deprived quintile, the rate is almost twice what it is in the other 80 percent of populated areas. Disparities also exist between working-class and middle-class children and encompass other areas of life, including education, injury, and child development, said Bong. There is a particularly large drop in preacademic learning between middle-class and working-class families (Rao et al., 2013).

The fertility rate in Hong Kong is low, which is causing the average age of the population to increase. In 2014 about 15.5 percent of the population was age 65 or above, while by 2041 this number is projected to be 32 percent. "We don't have enough children," said Bong. "That is why we need to invest in children."

SERVICES AFFECTING EARLY CHILDHOOD DEVELOPMENT

Access to services is "quite comprehensive," said Bong, but the question remains whether it is "equitable in terms of access to quality service." Hospital services are virtually free and provide more than 90 percent coverage. In social welfare, a good safety net exists through statutory services provided by government and other services provided by nongovernmen-

tal organizations. Education, which is mostly provided by independent schools, is free for 12 years.

However, information and services are seldom linked for planning, service provision, or evaluation at the territorial or local levels, which makes it difficult to assess their combined effect. Services tend to be laissez faire rather than policy directed and welfare based versus rights based. Greater equity requires more access to high-quality services and a switch from a welfare-based approach to an interventionist, policy-driven, rights-based approach, said Bong.

In her remarks, Chan, too, noted that Hong Kong does not have a fully integrated policy for early childhood development. However, various governmental bureaus are focused on children, including the bureaus of education, health and food safety, and labor and welfare. The government also has a commission on poverty, which has found that most poor families have children. "The quickest way to help these vulnerable people is to provide financial resources," said Chan. In addition, the government has organized commissions and councils on youth, women, the elderly, and families, which are high-level committees above the bureaus. However, no commission on child development exists, though the Family Council looks at issues affecting childhood development.

The emphasis of the forum on coordination and integration is especially relevant in Hong Kong, Bong noted. Hong Kong has access to evidence-based effective interventions, but the problem is providing infrastructure support for the implementers of these interventions. This support would include studies on implementation, dissemination, and quality improvement and the development of the necessary technological and statistical infrastructure. Building a strong implementation strategy would provide needed support for evidence-based interventions by creating linkages across sectors, Bong said.

An example of an effective evidence-based intervention in Hong Kong is a community-based integrated service model to tackle poverty that was created in 2006. Called the Comprehensive Child Development Service (CCDS), it aims to integrate social welfare, early childhood education, and the health system, including maternal and childhood health centers. The integrated program has four major components. In the first component, mothers are screened 6 weeks after delivery in their homes to assess their well-being and provide assistance with postnatal depression. In the second component, children and families are identified and referred for social service interventions. In the third component, preschool children with physical, mental, behavioral, and family problems are identified and referred. In the fourth component, high-risk families, including those with parents suffering from mental problems and those headed by teenage mothers, are also identified and managed.

Bong cited two major challenges with the integrated program: linking the components of the program, and mobilizing communities. For instance, one way to increase linkage is to have a community pediatrician working inside a maternal and childhood health center, Bong said. Another is to have a clinical psychiatric service at health centers. By focusing many childhood development services in a single center, the system can link the district council, the commercial sectors, and also social welfare.

CCDS has operated in seven Hospital Authority clusters that have loose central coordination, allowing for local innovation and flexibility. Local communities have considerable initiative in identifying partners and creating new measures that suit their populations. For example, particular localities are working with new parents, nongovernmental organizations, and new immigrants to address learning problems in young children. New local initiatives focus on home visitation, disadvantaged families, mentally ill patients, and children with learning problems.

An evaluation of the program showed that equity, effectiveness, and efficiency had all improved (Family Health Service, 2007). CCDS allows for easier and timelier identification of risk factors for child development, including teenage mothers, impoverished mothers, and mothers suffering from postnatal depression or drug abuse. The evaluation also had instruments to examine parent satisfaction, knowledge of child development, parents' sense of competence, practices related to child safety, practices to promote child development, discipline beliefs and practices, maternal depression, injuries requiring medical attention, language development, and child behavior.

As another example of coordinated programs, Bong cited the combination of data from the Hospital Authority and from the Social Welfare Department to examine child abuse at a district level. Using a geospatial information system (GIS), Hong Kong can be mapped according to the incidence of child abuse, creating a map that central policy units can use to better serve the population (Ip et al., 2013). The incidence of suicide is another health risk that can be mapped geographically (Hsu et al., 2015). Young and middle-aged males living in deprived areas are found to be particularly at risk.

In her remarks, Chan pointed to the Department of Health and the Hospital Authority as an example of coordinated services in Hong Kong. Within maternal and child health clinics, children are assessed, both physically and psychologically, and provided not only with immunizations and vaccinations but with supports for growth and development. The government also has allocated resources to build the first children's hospital in Hong Kong, which should be completed within a few years.

Despite the existence of coordination, Chan pointed to the need for

a comprehensive strategy for early childhood development that would bring together the efforts of different bureaus. As an example of what could be done, she pointed to steps now being taken to improve the nutrition of young children in Hong Kong. In Hong Kong, 80 to 85 percent of mothers breastfeed after giving birth, but only 2 percent continue to breastfeed exclusively for 6 months, as is recommended by the WHO. To improve this statistic, the Food and Health Bureau has developed a voluntary code to regulate the aggressive marketing of milk formula and children's food and a framework to regulate nutrition and health claims on prepackaged foods. In addition, a law on the composition and labeling of milk formula has recently been passed, and a high-level committee to promote breastfeeding has been established.

Bong agreed that Hong Kong could be more integrative and interactive in all the services it provides. In addition, the engagement of parents and the public still needs to be improved, he said.

CHILD INJURIES IN HONG KONG

Bong also described some of the work that he has done on childhood injuries in Hong Kong. He and his colleagues have developed a GIS that maps injury data in Hong Kong, identifying areas with a high incidence of falls, playground injuries, and traffic injuries (Chow et al., 2012). For example, after identifying the areas with the highest incidence of traffic injuries, a road engineer examined each of the areas and identified such features as pedestrian crossings and traffic lights that could be changed (Loo et al., 2013). This information was presented to district councils and other government agencies to foster change.

The same system also has identified high-risk playgrounds for injuries. This led to a focus not on rebuilding playgrounds, which in general are very safe, but on risky behaviors in playgrounds, with an emphasis on teaching community workers, children, and others how to use playgrounds safely. Ten risk behaviors were identified, including

- improper dressing,
- improper ways of playing,
- improper supervision,
- access to nearby car parks,
- improper equipment for elderly, and
- improper age.

A program known as Safe Community and Healthy City hopes to establish purposeful community engagement with community safety as a platform. By integrating, collaborating, and coordinating different aspects

of a community, the well-being of residents can improve, Bong said. In addition, by assessing regional data at both an individual and a community level, problems can be identified and addressed. This is especially important in GIS-identified hot spots or high-risk zones, where what Bong called "place-based collaborative multipliers" can create a decision support system based on integrated locational data.

Bong then described other platforms for decreasing child injuries in Hong Kong. These included health-promoting schools and kindergartens, safe schools, and school-based programs for high-risk students in community settings.

An old Chinese saying is that the first 3 years of life determine the course of a person's entire life, Bong noted. Knowledge synthesis and translation along with communication to policy makers and the public can improve early childhood development. In addition, Bong cited the relationship between capacity and practice as a critical element of success. All workers must be capable of doing their jobs, and an infrastructure must be developed to help implement evidence-based programs with community engagement, he said. The big question, in Hong Kong and elsewhere, remains how to integrate and translate the data that are available into meaningful information for decisions and actions at national, subnational, and local levels. Many good service models exist, Bong said, but they need to be suited to the local situation. A focus on equity and on coordinated approaches offer the most promise, he concluded.

CREATION AND IMPLEMENTATION OF AN INTEGRATED POLICY IN CHILE

The second keynote speaker, Helia Molina, who recently completed her term as Minister of Health in Chile, described a more integrated system in her country to support early childhood development. Since 2007, Chile has been working to implement an intersectoral public policy on childhood and social protection. This policy has been based on two important elements. The first is making use of the available resources in the country (including a health system that has good primary health care) along with health teams that include general practitioners and other professionals. The second is approaching the issue holistically.

Chile is a small country, with a population of 17 million people, Molina noted. Although it is divided into 15 regions and has decentralized administration, Chile operates as a single country rather than as a federation of states. It is still a developing country, with a per capita GDP of about US$22,500. While the poverty index has declined over the past several decades to 14.4 percent, "There is still a major gap between the highest incomes and the lowest incomes," Molina said. Chile's 0.5 Gini

index has been improving but too slowly in relation to the economic growth of the country, she added.

Child mortality rates are higher than in Hong Kong but are among the lowest rates in Latin America and the Caribbean. A 20-year-old complementary food program has helped eliminate malnutrition from the country, and secondary malnutrition from chronic disease is less than 1 percent. In contrast, the overweight and obesity epidemic has been rising. Birth rates are currently dropping, which is a problem for the development of the country.

In 2006, Michelle Bachelet, a former pediatrician with a firm understanding of childhood health and development, became the President of Chile. Molina was a member of the Presidential Advisory Council on Early Childhood Policy Reform created by Bachelet, and she helped to create a document titled *The Future of Children Is Always Today*. This conceptual framework for a new national policy then was further developed by a group of representatives from 10 different ministries to articulate how to implement the policy.

The resulting policy was known as *Chile Crece Contigo*, or Chile Grows with You. Implemented in 2007, the policy took a multidisciplinary approach and was planned across sectors by multiple ministries. A common problem in previous initiatives had been a "duplication of efforts, and repetition of initiatives, without integrating what has already been done," said Molina. Chile Grows with You was a comprehensive protection system for early childhood that adopted a child-centered and rights-based framework (see Figure 3-1). The Ministry of Social Development has been the leader of the effort and the overseer of the program's budget.

Chile Grows with You began in a hundred municipalities and was scaled up in 2008 to incorporate the whole country. In 2009, a law unanimously passed by the Chilean congress highlighted an institutionalized system that gave priority to childhood, Molina said. In this system, the conceptual framework is based on an ecological model that recognizes both the psychosocial and environmental determinants of health. The framework also incorporates a life-cycle approach (see Figure 3-2), ranging from prenatal health to aging.

Initially, Chile Grows with You focused on children ages 0 to 4, with plans to extend its scope to 8 years in 2016. Chile Grows with You is not only about childhood but also about the linkages between different life stages, said Molina. When she became minister of health, the childhood program, women's program, adolescent program, and chronic age program were all combined under a life-cycle department because of their intrinsic dependence. The goal was to "achieve optimum development" leading to a "healthy and happy life."

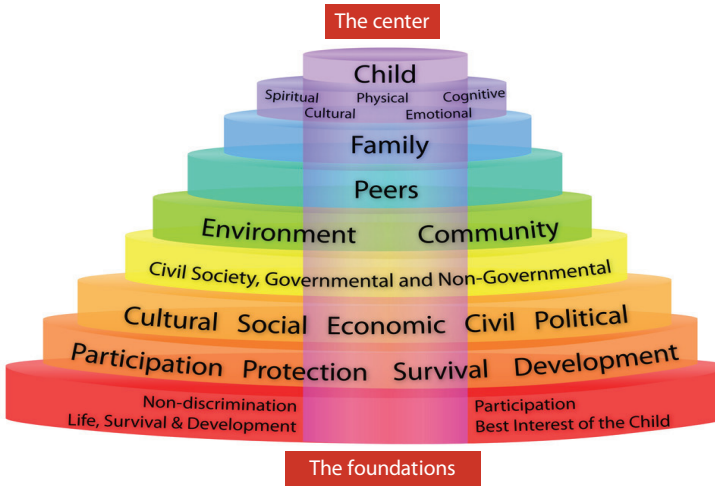

FIGURE 3-1 Chile has adopted a child-centered and rights-based framework for early childhood development.
SOURCE: Molina, 2015.

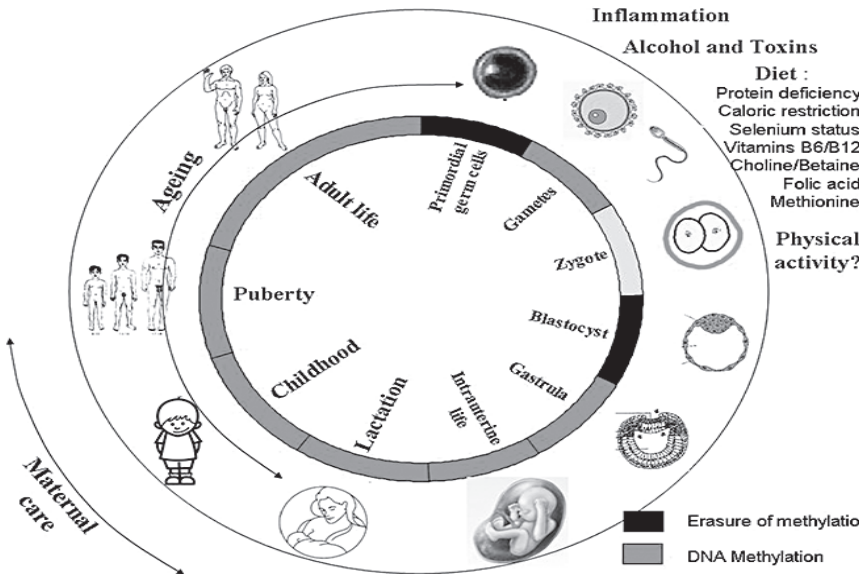

FIGURE 3-2 A life-cycle approach to child development extends from conception to adulthood.
SOURCE: Campión et al., 2009.

GOVERNANCE SYSTEM

Accompanying the development of the policy, Chile has taken some fundamental steps to reform the taxation system and the education system to give priority to breaking the intergenerational aspect of poverty. In impoverished children, around 30 percent have some sort of delay in their development. In contrast, not even 15 percent of children from wealthier families suffer from any kind of developmental delay. The only way to reduce this huge inequality is through a sound policy that allocates more resources to those in need, said Molina.

Chile Grows with You is part of an overall public policy of social protection for workers and those in poverty, but with a focus on mothers, children, and family. When the overall policy was first implemented, it was found that many of the projects, programs, and initiatives fell on the same people, Molina said. To reduce this repetition, a model was created to integrate previously dispersed activities to meet the needs of children and families. The resulting program includes all sectors—family, health, education, public health, culture, housing, and other areas of government—because children are affected by all aspects of policy. It is an "up-down policy," as Molina called it, that is implemented and evaluated at a local level but overseen on a larger scale. The Social Development Ministry coordinates the program, with a ministerial committee setting strategies, plans, and evaluation models. The program has a single budget, but several ministries are involved in the execution of sectoral activities.

Health services occur largely on the regional level. About 80 percent of Chileans are under the public health system, and mothers and children have especially high contact with that system, said Molina. After 2 years of age, the focus shifts to the educational sector, though with a continued integration of services. As in Hong Kong, Chile is working toward finding support at a local level to better implement public policies.

All children in Chile have access to health care. Molina noted that intervention packages target particularly vulnerable children with good-quality free nursery school and kindergarten, home visits by health teams, family subsidies, comprehensive care for children with developmental difficulties, technical help for disabled children, and preferential access to the social protection system. In addition, laws have been adopted to extend the postnatal paid leave for mothers to up to 6 months.

For all children in the public health sector, the Biopsychosocial Development Support Program and Newborn Support Program provide services to meet their needs, Molina noted. These programs include home visits by a health team that assesses risk factors in the most vulnerable populations, including the health of the mother before birth. Vulnerable children are immediately registered to various social systems for housing,

economic support, health, and mental health. Postnatal depression is a focus, as are children with special needs, access to technical support, and educational inclusion. Financial support is provided not only at a regional level but also at a local level so social organizations, nongovernmental organizations, and local actors have the resources to develop their own strategies.

Chile Grows with You incorporates evidence-based interventions derived from the research literature, Molina said. For example, taking a page from the Canadian program Nobody Is Perfect, Chile has adopted a strategy to accompany mothers during the prepartum and postpartum periods. Molina also emphasized, in response to a question, the need to involve fathers and other family members in the psychosocial development of children. For example, health centers remain open after normal working hours so workshops, trainings, and materials are provided to caregivers from the start of the pregnancy. "We try to include in these working groups all those who, in some way, participate in the parenting."

LESSONS LEARNED AND CHALLENGES OF SCALING UP

After Chile Grows with You was introduced, an evaluation of the program brought about several changes based on feedback from stakeholders. This process sought to strengthen effective actions, focus efforts, evaluate budget and resource allocations, and begin to build a new structure that supports children through an 8-year time frame. During this revision stage, major activities included developing training plans for deficient teams, technical assistance plans for regional teams, performance profiles for technical implementers, new technical guidelines, virtual communities for teams, and improvements in the monitoring and feedback system.

When a policy is rapidly scaled up, as was done with Chile Grows with You, some things do not turn out as well as planned, Molina admitted. But evaluation allows for changes. For example, by evaluating the effects, processes, and satisfaction levels of users, Chile has found that quality differs in different parts of the country, which has led to efforts to correct the problem.

Molina cited several lessons learned from the creation and development of Chile Grows with You. The first is the importance of political will combined with a plan of action. Together, this leads to an awareness among politicians, professionals, and nonprofessionals of how important a child's early years are as a key stage for individual and population health and human development. As Molina pointed out, "Children don't vote, children don't speak before they're 2 or 3 years old, so we who are part of this movement need to be activists."

Another lesson is that early childhood development affects not only

the rest of a person's life but society as a whole. Social equity therefore needs to be a priority from the start, which can be accomplished through an intersectoral approach within a shared conceptual framework, according to Molina. "We all want to win," Molina said, "so if I win, you win." By sharing a budget and having national-level management, everyone can be on the same team and have the same overall goal.

One major problem in implementing interventions was that the intensity and duration of the programs were not sufficient. For instance, home visits were not as frequent as intended by the policy because of a lack of resources. Molina urged that there is a greater need for more dosage of the intervention in order to achieve effectiveness as "it is not enough to just have one home visit or two."

On a larger scale, feedback to stakeholders needs to be improved, said Molina, so evaluation is conducted on an intersectoral level and allows for an overall joint perspective. A collaborative approach to improvement can allow for heightened sustainability, community empowerment, and increased equity.

The leaders of some countries might say they need to focus on more basic needs, such as reducing infant mortality, rather than early childhood development. But Molina insisted that the best policies for survival and early childhood development are similar. She closed with the words of Chilean Nobel Prize winner Gabriela Mistral:

> Many of the things we need can wait. The child cannot. Right now is the time his bones are being formed, his blood is being made, and his senses are being developed. To him, we cannot answer "Tomorrow," his name is today.

TOWARD GREATER COORDINATION AND INTEGRATION

During the discussion following the keynote addresses, several forum participants pointed to options for increasing coordination and integration in Hong Kong, Chile, and other countries as well. Lillian Wong, a pediatrician and president of the Hong Kong Pediatric Society, lauded Hong Kong's construction of a children's hospital but pointed to the continuing needs for a child health policy in Hong Kong and for a children's commission. "We need a child policy to unite all the actions."

Bong and Chan discussed what can be done even in the absence of a unified policy. Bong emphasized providing policy makers with information that will lead to constructive action. He has worked to generate "data that will support the government and also the local people, who should work together and have a common goal." Building capacity is also critical, Bong observed, so that an infrastructure for change exists and professionals have the ability and training to work together.

Chan added that more unified policies require not only political will but political wisdom, to know how to bring the work of different bureaus together. "We should think about what are some of the things that the different bureaus can do and work with our partners collaboratively."

4

Coordinating Investments in Children from a Policy Perspective

Many governance, finance, and accountability issues can facilitate or impede coordinated or integrated services for children and their caregivers at the national, subnational, or local levels. In a session on these issues, three speakers provided examples of programs and initiatives that have confronted these issues in productive and informative ways. The China Women's Development Foundation has demonstrated how a single organization can provide a wide range of coordinated and integrated services for children and their mothers. In Southeast Asia, national policies to include children with special needs in mainstream schools vary from country to country, but progress is widespread. And in the Western Pacific region, the Action Plan for Healthy Newborns is reforming and coordinating policies and practices not only among—but within—countries. All of these examples demonstrate the progress that can be made through the use of early childhood development as a driver of greater cohesion in policies and programs.

THE CHINA WOMEN'S DEVELOPMENT FOUNDATION

The China Women's Development Foundation (CWDF) was established in 1988 as a national nonprofit social welfare organization registered with the Ministry of Civil Affairs. The CWDF is dedicated to protecting women's legal rights and is focused on the practical problems of women, including issues of children, family, health, development, education, and entrepreneurship. As foundation administrative director HaiLiang Guo

said in describing CWDF, it has received a number of awards and recognitions for its projects and for the transparency of its public reporting.

In its most recent operating year, CWDF expended about ¥900 million on public welfare, with most of those funds coming from the government, and its projects benefited more than 27 million people in need, said Guo. Its child education programs focused on the southwestern and northwestern parts of China, its disaster relief support focused on the southwestern region, and its women entrepreneurship support project has been active predominantly in the eastern and northeastern regions.

Among its projects are a poverty alleviation fund for mothers and scholarships for female students. It also provides water services for mothers and children and supports safe drinking water projects because they lack safe drinking water in many Chinese regions, Guo observed. A project known as Mother's Health Express provides targeted medical care in poor areas. For example, in rural and remote areas, mothers receive care from pregnancy to childbirth through mobile medical units.

Because the education of children is closely linked with the financial prospects of families, CWDF has supported a business entrepreneurship project to provide mothers with training so they can gain economic independence and contribute to their children's education. The foundation also provides postdisaster relief through reconstruction and resettlement projects, noted Guo. In disaster-struck areas, for example, it helps to arrange for volunteer teachers so children can continue to be educated.

In September 2013, CWDF and several partners launched the Guardian Childhood Program to promote a better social environment for child development and to improve children's health. The program serves children ages 0 to 16 and provides assistance in hygiene, health, family relationships, and school conditions. This project has been integrated with the Mother's Health Express to provide medical services wherever children live. As Guo noted, "Many children are named after this express."

Another initiative he described is known as the Spring Buds Project, which is targeted at girls in remote and poor areas. Its goal is to help girls who have dropped out of school or are on the verge of dropping out to continue their education. Poor families tend to devote their resources to educating boys rather than girls, so financial difficulties can spell educational difficulties for girls. By the end of December 2014, the Spring Buds Project, over its 25 years in existence, had supported more than 2.5 million girls and had established 1,154 Spring Buds schools. As Guo noted, "Today's girls are going to be mothers; therefore, we need to attach great importance to the education of girls."

Finally, Guo briefly described a pilot project focused on children with autism between the ages of 6 and 16. The project has recruited and trained teachers with professional backgrounds in music, painting, and psychol-

ogy to work with the families of children with autism. The program integrates school resources and develops the strengths of these children to provide them with opportunities to show their talent and experience positive emotions. As Guo said in response to a question, mothers with a child who is disabled often quit their jobs to take care of the child, which has major implications for the family's finances. Also, the All China Women's Federation, which is one of CWDF's partners in the project, has a representative in every village, which makes the identification of children with autism straightforward.

The foundation's plans for the future are to continue providing family education and training for females while directing attention to the education of children. It also plans to continue its entrepreneurship training, support for families with special needs, integrated education programs for children with autism, and postdisaster reconstruction projects.

INCLUSIVE EDUCATION IN SOUTHEAST ASIA

Yasmin Hussain, director of the Regional Center for Special Education for the Southeast Asian Ministers of Education Organization, discussed inclusive education in 10 countries of Southeast Asia from Myanmar to Indonesia. Policies in these countries have been influenced by a wide variety of policy conferences and documents calling for greater inclusion of children with special needs in regular classrooms, including the Salamanca Statement, the Dakar World Education Forum, the Convention on the Rights of Persons with Disabilities, the Declaration of the Rights of Disabled Persons, the Convention on the Rights of the Child, the World Conference on Education for All, the Year of Special Needs in the Classroom, and the World Conference on Special Needs Education.

In Malaysia, the Ministry of Education has recognized the need to increase the enrollment of children with special needs into inclusive education and has made this goal a component of the Malaysia Education Blueprint 2013–2025. By 2015, Hussain said, Malaysia plans to have 30 percent of children in an inclusive setting (Bahagian Pendidikan Khas Kementerian Pendidikan Malaysia, 2014).

In Brunei, the Special Education Unit was formed in 1994 by the Ministry of Education, after which students with partial or mild to moderate disabilities started being included in ordinary schools. Brunei has succeeded in placing 70 percent of its special needs children in the schools (Special Education Unit, Ministry of Education, Negara Brunei Darussalam, 2014).

In Cambodia, Hussain continued, inclusive education is being carried out through three main strategies: equal access to education, improving educational quality and relevance (including teacher training and dropout

reduction programs), and institutional capacity development (including high-quality leadership, management, and administration) (Ministry of Education, Youth, and Sports, Cambodia, 2014a). A master plan on education for children with disabilities developed in 2008 seeks to ensure that all children with disabilities have access to schools (Ministry of Education, Youth, and Sports, Cambodia, 2014b).

In Indonesia, the government has reformed its education system to accommodate children with disabilities, said Hussain. Currently, education for children with disabilities is moving from special education toward inclusive education, with awareness that special schools for the disabled reinforce segregation and marginalization (Tsaputra, 2012). The top officials in some districts, including the governor himself, have proposed inclusive education for their school districts, making it an incentive for others to follow suit as well, Hussain stated.

In Laos, an inclusive education project started in 1993 included initiatives such as establishing inclusive kindergartens and capacity building for teachers and other educational personnel (UNICEF, 2003). Laos adopted a National Policy on Inclusive Education in 2010 and a National Strategy on Inclusive Education in 2012.

In Myanmar, only 800 students of 318,000 children with disabilities go to government schools, and 1,450 children attend special schools, Hussain reported. Half of all students with disabilities, including physical and intellectual disabilities, are not enrolled in the government's mainstreamed schools. However, Myanmar passed a national education law in October 2014 that included a provision for education of people with disabilities, and the national education sector plan that is currently being developed will include the needs and rights of people with disabilities.

In the Philippines, the ongoing Decade of Persons with Disabilities declared by the government is orchestrating the effort to implement plans, programs, and activities for people with disabilities. The Ministry of Education in the Philippines plays a prominent role in ensuring that inclusive education takes place in mainstreamed schools and provides support systems for schools.

In Singapore, the education system embraces the concept of inclusion for students with special education needs, and the Ministry of Education of Singapore has successfully placed the majority of students with such needs in inclusive schools, said Hussain. Students with mild to moderate disabilities are supported in mainstream schools with initiatives focused on the training and deployment of special needs officers, additional funding for resourced schools, training mainstream teachers to teach students with special needs, and the provision of providers for early intervention in primary schools (Cohen, 2009).

In Thailand, inclusive education must be reflected in the national

curriculum, in expanded core curriculum activities, and in nonacademic activities that exist within a least restrictive environment. According to the country's legislative and policy frameworks, people with disabilities must be accorded the same educational opportunities as are others.

Finally, in Vietnam, laws passed in recent years have aimed at increasing the enrollment of children with disabilities up to 70 percent in schools by 2020.

Summing up, Hussain said that every country has its own policies and its own approach to inclusive education. In addition, each leader has a particular vision and mission, which can have a powerful effect on inclusive education. However, she continued, the most important forms of support extend across countries:

- Children supporting children
- Teachers supporting teachers
- Parents becoming partners in education
- Communities supporting their local school

"An effective model of inclusive education not only benefits students with disabilities," Hussain concluded, "it also creates an environment in which every learner has the opportunity to become a successful student."

THE ACTION PLAN FOR HEALTHY NEWBORNS IN THE WESTERN PACIFIC REGION

The WHO recommends more than 50 "essential" interventions that cover the reproductive life course (see Figure 4-1), noted Howard Sobel, the regional coordinator for reproductive, maternal, newborn, child, and adolescent health programs in the Western Pacific Regional Office of the WHO. When Sobel asked four colleagues in the regional office, which has responsibility for 27 countries in the Western Pacific region, to come up with their one highest priority activity, they listed 42 activities spanning the life course. To prioritize, Sobel negotiated evidence-based actions capable of reducing mortality or serious morbidity at a population level.

A major product of this priority-setting process was the Action Plan for Healthy Newborns, which Sobel described at the forum. "Newborns fall into the gap between moms and children. They are often forgotten, and many harmful or unnecessary practices are still observed," he said. Such practices include failing to check fetal heart rates, not using partographs, unnecessary induction of delivery, unnecessary cesarean deliveries, immediate cord clamping, separation from the mother, and not initiating early exclusive breastfeeding. A clinical protocol review in seven Western Pacific countries revealed that the newborn care compo-

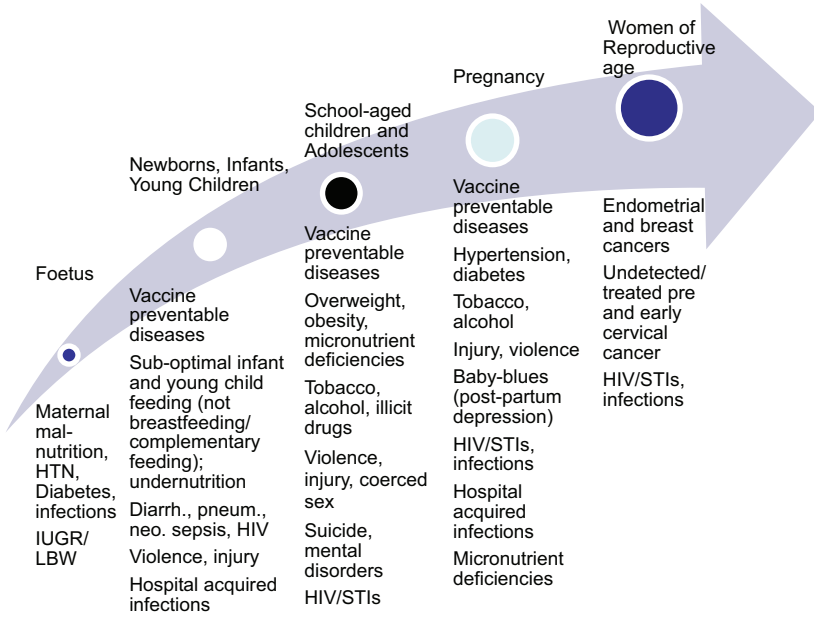

FIGURE 4-1 Interventions target illnesses and risk across the reproductive life course.
NOTE: HIV = human immunodeficiency virus; HTN = hypertension; IUGR/ LBW = intrauterine growth restriction/low birth weight; STI = sexually transmitted infection.
SOURCE: Sobel, 2015. © WHO 2015. All rights reserved.

nent was often insufficient and outdated. As Sobel noted, "People have practices that they have been doing for 30 years." As a result, they can resist changes in procedures. "There is a lot of work that we can do at the health facility level." For example, in response to a question, Sobel highlighted the important link between poor intrauterine growth and disabilities. He explained that this link is often a challenging one to make clear as "most people intuitively know that the risk of death and the risk of bad outcomes with low birthweight babies is very high as compared to those who have normal weight," but they do not understand the technical ways in which these two health markers are connected.

The action plan includes the development of supportive tools, support for countries to localize the plan, an evaluation of country progress, including steps to protect, promote, and support breastfeeding, and a

communication strategy called the First Embrace.[1] Each country performed a newborn situation analysis to review the presence or absence of key policies. The regional office then worked with countries to develop and estimate the cost of localized action plans. Technical working groups or coordination groups were formed and met approximately quarterly in most countries, with a full-time person coordinating the effort. "We need to have someone paying attention to the things that are going on," said Sobel.

Stakeholder groups engaged political leaders and champions. National workshops with all the major stakeholders represented were organized in each country to build consensus. A clinical practice protocol pocket guide was developed and widely distributed. "That is one of the biggest things that we did in countries all over the region," said Sobel. "Many countries have adapted it into their local language and into local situations." Mechanisms were also established to ensure that professional associations would help implement early essential newborn care, and national planning tools were developed based on a situation analysis in each country. A Health Facility Strengthening Guide and a Coaching Session Facilitator Guide provided support for training and information dissemination. A pilot monitoring and evaluation framework for the action plan is under way in the Philippines and Mongolia, along with other evaluations that will lead to modifications in the plan.

Sobel closed by citing a quotation from Margaret Chan, director-general of the WHO, who said that the development of the Action Plan for Healthy Newborns represents

> a trend I wholeheartedly support, that is, the use of very simple, cost-effective interventions to save lives. It draws attention to a number of common but inappropriate and unnecessary practices, and aims to correct them. It introduces the importance of the First Embrace and shows how simply changing the sequence of steps in newborn care can save lives.

[1] More information is available at http://www.thefirstembrace.org (accessed April 20, 2015).

5

Using Existing Platforms to Integrate Services on the Ground

One of the sessions of the workshop looked at how to use existing platforms to set up, implement, and scale integrated or coordinated services in the areas of health, education, nutrition, and social protection. In Bangladesh, for example, the nongovernmental organization BRAC (formerly the Bangladesh Rural Advancement Committee) has developed an integrated childhood development intervention through its Maternal, Neonatal, and Child Health Program that delivers a wide range of services in a very cost-effective way. In Pakistan, the Lady Health Workers Program has combined a nutrition intervention with an early childhood development intervention that has been studied as a model of integrated programs. In New York City, the Mount Sinai Adolescent Health Center provides cost-effective integrated services to a vulnerable population. (Addressing inequality with vulnerable populations is also discussed in Chapter 7.) All of these examples of integrated services coming together on the ground provide lessons for coordinated and integrated approaches elsewhere.

HOLISTIC DEVELOPMENT AND LEARNING IN EARLY CHILDHOOD: INITIAL EXPERIENCES FROM BRAC

BRAC is a very large nongovernmental organization that, through its Maternal, Neonatal, and Child Health Program, serves a population of 25 million rural residents and 7 million urban residents of Bangladesh. As described by Mushtaque Chowdhury, vice chair of BRAC and professor

of population and family health at Columbia University's Mailman School of Public Health, the program has a five-pronged operational strategy:

- Health workforce development
- Community empowerment
- Service delivery at the community level
- Timely referral of emergency cases
- Linkage with public and private health facilities

BRAC has introduced an integrated early childhood development intervention, based on earlier activities it has undertaken, with the goal of fostering "children's holistic development by creating a joyful and child-friendly learning environment at home, center, school, and community," said Chowdhury. Developed in collaboration with Columbia University and BRAC University, the program includes a wide variety of home-based and center-based care and learning (see Figure 5-1). Before age 3, early childhood development is integrated with nutrition and health. After age 3, the intervention is coordinated with the education program. The target population is pregnant women and lactating mothers, children up to 8

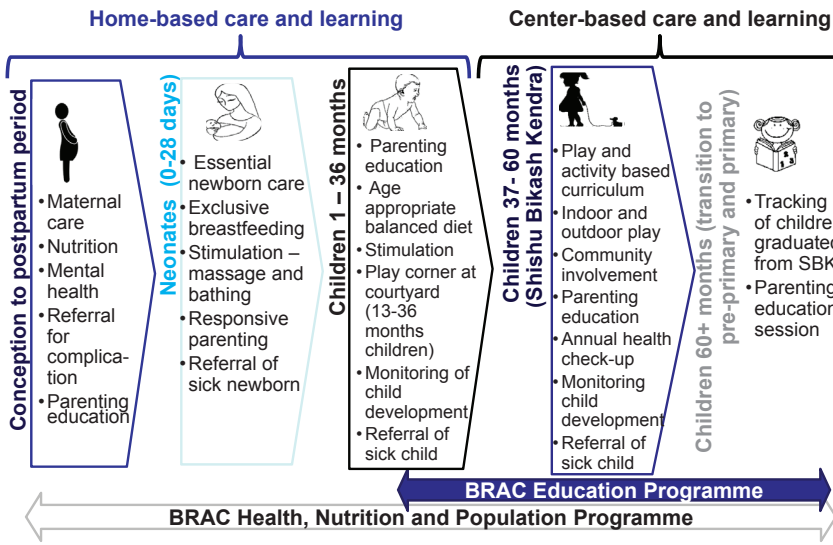

FIGURE 5-1 BRAC has adopted an integrated early childhood development model that includes both health and education in homes and centers.
NOTE: SBK = Shishu Bikash Kendro (child development center in Bangladesh).
SOURCE: Chowdhury, 2015.

years of age, and parents and other caregivers. In a pilot phase from 2013 through 2015, the intervention reached about 45,000 people, with a recent expansion projected to reach nearly 200,000 people by the end of 2016.

From January through December 2014, more than 2,000 pregnant women and lactating mothers were counseled on maternal health, nutrition, early childhood development, newborn care, breastfeeding, and massage and bathing technique. About 90 percent of the children in the program have achieved age-appropriate gross motor development, Chowdhury reported. More than 75 percent of the children in the program achieved age-appropriate cognitive development, along with reported findings of increased confidence, play, and handwashing.

The annual costs in the pilot program, including BRAC's contribution and a community contribution, have been about $40 for children through age 3 and US$120 for children ages 3 to 5. Furthermore, these costs have decreased—to US$30 and US$102, respectively—in the expanded program due to economies of scale.

Historically, BRAC has emphasized integrated approaches to early childhood development, Chowdhury observed. But he noted that scaling up integrated programs can be difficult when financing comes from individual sectors; doing so requires planning in terms of logistics, training, and evaluation. Another complication is coordinating between an early childhood health program and the education system as children get older, because these programs are typically separate.

Chowdhury drew several conclusions from BRAC's experiences. First, stakeholders need to be more aware of the importance of early childhood development, he said. Starting more experiments in different settings could help build this awareness. Early experience with the pilot program has indicated that the program should be scaled up to reach as many children as possible, he observed. In addition, monitoring tools with easily tractable indicators and research methods to measure the effects of interventions would help make the case for much wider application of these approaches.

In response to a question about whether specially trained members of the community could be used to provide the services that community health workers provide, Chowdhury pointed out that efforts to use community members have a tendency to fade. Community members need an incentive to continue to provide services. Linkages to the health system also are important, he said. "What has happened in the past is that the nongovernmental organizations have trained community health workers, but they have been left on their own without really connecting with anything." The close relationship between BRAC and health workers who are part of the government health system has helped build the program.

INTEGRATION OF EARLY CHILDHOOD DEVELOPMENT AND NUTRITION THROUGH COMMUNITY HEALTH WORKERS IN PAKISTAN

Pakistan is an extremely diverse country, which can complicate the delivery of services to families and children. As Zulfiqar Bhutta, Robert Harding Inaugural Chair in Global Child Health at the Hospital for Sick Children in Toronto and founding director of the Centre of Excellence in Women and Child Health at Aga Khan University, noted, "There are parts of the country where living standards may be comparable to what you have in the West, and there are others where conditions are comparable to sub-Saharan Africa." The distribution of resources is correlated with health services availability and access. In some parts of the country, only 10 to 20 percent of the population has a skilled attendant present for births; in areas with higher human development indices, access to appropriate care for children with respiratory infections, particularly pneumonia, is greater than elsewhere.

The Lady Health Workers Program was begun by the public sector in 1994 and now supports more than 100,000 lady health workers, distributed largely in rural populations. (Physicians in Pakistan, in contrast, are concentrated in urban populations.) Lady health workers have a largely preventive, promotive, and supportive role, explained Bhutta. They serve primarily to promote family planning, provide antenatal care provision and some commodities, conduct health education, and make referrals for very ill children and women. They do not, in general, provide curative services beyond oral rehydration and simplified antibiotic therapy for respiratory infections.

The Lady Health Workers Program was designed to enhance the quality of the nutrition services provided by the public sector. The program also has been used to strengthen the provision of commodities and education, particularly in the early part of infancy. In addition, the program has incorporated an adaptation of the Care for Child Development Package developed by UNICEF and the WHO. With support from early childhood development facilitators, lady health workers provide mothers with education about such factors as interaction, responsiveness, nutrition, parenting, and the reduction of stress, both through individual counseling and monthly group meetings.

In a randomized trial, Bhutta and Aisha Yousafzai, the director of research in the Department of Pediatrics and Child Health at Aga Khan University, along with a group of colleagues, studied the effects of the program on about 1,200 children through 24 months of age. Four separate groups received the early childhood development intervention, the enhanced nutrition intervention, both interventions, or neither intervention. The key finding of the study, said Bhutta, was a "significant and

TABLE 5-1 Effect Sizes of Interventions on Development

	ECD and Enhanced Nutrition Group	ECD Group	Enhanced Nutrition Group
Cognition	0.5	0.6	0.2
Language	0.6	0.7	0.4
Motor	0.4	0.5	0.2

No additive benefit of combining interventions on the development outcomes.

NOTE: ECD = early childhood development.
SOURCE: Yousafzai et al., 2014.

notable impact on development." The children whose mothers received the early childhood development intervention scored significantly higher on measures of cognition, language, and motor behavior, though there was no effect on social and emotional measures (see Table 5-1). These children also scored better than those who only received enhanced exposure to information on nutrition. However, adding education in early childhood development to enhanced nutrition information did not produce an additional benefit in terms of developmental outcomes. "That was a bit of a surprise," said Bhutta, "because we expected intuitively that that group would do the best, but it did not in terms of its overall impact." Also, integrated delivery of particular services proved more effective than the enhanced nutrition intervention but no more effective than the early childhood development intervention, although all three groups did much better than the control cluster.

The families were very enthusiastic about the program, Bhutta reported. They liked their interactions with the lady health workers, particularly with the combined interventions and the early childhood development intervention. The interventions did not have a clear impact on dietary diversity, though diets did improve over time. But the groups receiving the interventions did improve compared with the controls, largely, said Bhutta, "because this was a rural and relatively food-insecure population where no additional food supplements were provided." In addition, the interventions did not have an impact on stunting of growth in children.

Bhutta drew several lessons from the study. First, supervision from the facilitators and experiential learning made a difference for the lady health workers. Introducing new practices into an existing system "is not a simple thing of just walking through the door to say 'Do this.' You have to negotiate with both the program people and also the health worker supervisors."

Any new program needs to acknowledge what health workers know,

and facilitate an understanding of linkages between new and existing messages, said Bhutta. In addition, some factors negatively influenced the performance of the health workers, such as the number of households they were serving and the number of tasks they had to perform.

Sometimes the availability of community health workers serves as an excuse for not doing things in the rest of the health system. But they have specific responsibilities, and if something is added to their responsibilities, something else needs to be removed. "When the government pulls health workers off and puts them in the polio program for 30 percent of their time, that is when things go south."

Another lesson is that quality matters. On-the-job coaching, supportive supervision, and master trainers were among the factors that improved quality over time.

Mixed methods of delivery were important, Bhutta said. Lady health workers normally do one-on-one counseling, but the group counseling undertaken as part of the project also was popular and effective in terms of reaching people. Effective group meetings were marked by caregivers and children attending together, a participatory approach to information sharing, opportunities to practice activities and receive feedback, a diversity of topics with repetition of selected core messages, and smaller groups. Home visits also were effective in terms of both problem solving and observation of behavior.

Integrated counseling could be promoted through curriculum development and training that highlights the links between new and existing messages; the ability of lady health workers to answer questions on health, feeding, and care; and the promotion of responsive care using play, communication, feeding, and teachable moments. The augmented program involved not just health but input from such areas as promoting food security, gender empowerment, issues related to education, and environmental issues. "The project is a huge success in underscoring the feasibility of doing this and now needs to move from a proof of principle of actually doing this at this level to the next level of trying an approach that brings in those additional sectors." That could lead to practical implementation at the district level, Bhutta said. "Whether that is done in an integrated framework or in a combined framework is completely open to question. At a district level, it could probably have more than one model of operation."

Bhutta raised the issue of counterfactuals: Are lady health workers an appropriate way to deliver an early childhood development intervention? The first issue to examine involves time commitments. Lady health workers are public-sector primary care providers whose principal charge is to reduce mortality and provide child survival interventions. Additional interventions inevitably have an effect on the time attributed to their prin-

cipal tasks. In some cases, lady health workers objected to the increased levels of supervision and responsibilities, and some left the program, but this problem was not severe.

The interventions delivered in the study did not reduce mortality. "If anything, there were some counterintuitive trends which suggest that as we scale up these programs we have to make sure that the core functions of these public-sector workers, which are largely in high-mortality areas to make sure that life-saving interventions are delivered, are not compromised," Bhutta said. "I am pretty confident they would not be, but we need to prove that and show that to the program people as these programs are scaled up." Costs are another issue, because the program required extra people and support.

To address some of these issues, Bhutta emphasized the need to "think out of the box and out of the health sector." For example, the interventions did not have an effect on nutrition because the health workers had no link with nutrition-sensitive sectors, he said. "They could not do anything for food insecurity; they could not do anything for agriculture or social protection, because they are not linked to those programs." One option would be for health workers and nonhealth workers to work in tandem. Another option would be to find a way to bring multisectoral or intersectoral workers together at the district level.

Bhutta also pointed out that global reviews have been conducted showing that community health worker programs generally have not been able to integrate early child development interventions at scale. The health sector always has limitations, including lack of contact between health workers and people in other sectors. But early childhood development goes beyond health and has to involve these other sectors. "We need to be a lot more imaginative in terms of how to use these community workers—and, increasingly, a wide range of players, not just health workers—and link them with some of the objective outcomes that donors, funders, and policy makers are interested in. That means that we have to go outside of the health worker platform."

In response to several questions about the intervention, Bhutta pointed to some of the other limitations on scaling up. For the facilitators to be included in the Lady Health Workers Program, they would need to be created from the existing staff or be added from outside the program. Another issue raised in the discussion was the value that future evaluations could provide if they determined whether the program increases school readiness, school involvement, and educational performance.

THE MOUNT SINAI ADOLESCENT HEALTH CENTER

The Mount Sinai Adolescent Health Center serves vulnerable populations, is integrated at many levels, and is a relatively low-cost program by U.S. standards. It is the kind of program whose principles could be widely replicated, said the director of the program, Angela Diaz, who is the Jean C. and James W. Crystal Professor in Adolescent Health and professor of pediatrics and preventive medicine at the Icahn School of Medicine.

The center annually serves more than 11,000 young people ages 10 to 24, 70 percent of whom do not have health insurance. Of this population, 98 percent are poor, and 92 percent are youth of color—mostly African American and Latino. But they have a tremendous diversity of backgrounds, with some from loving homes and others homeless, Diaz said.

The center provides adolescent-friendly services, which Diaz described as "taking the adolescent perspective. . . . What is it that they want, what is it that they need, what is going to help them come and avail themselves of the services?" To reduce stigma, it is called a teen center rather than a family planning clinic, HIV clinic, or substance abuse clinic. The program is accessible geographically and financially so it is easy for teenagers to use. The staff try to build relationships with the adolescents who come to the program so they feel loved, respected, and connected. "Some youth say this is the first time that they feel safe."

At the programmatic level, the program is integrated with clinical services, training, research, advocacy, and policy. At the health level, it is part of a continuum of wellness promotion, health promotion, prevention, and risk reduction. It provides primary health care, sexual and reproductive health care, mental health care and psychosocial support, dental care, optical care, special services (including services for the lesbian, gay, bisexual, transgender, and questioning community, HIV, substance abuse, victims of interpersonal violence, and teen parents), and medical-legal services (see Figure 5-2). "It is taking care of the entire person, not just pieces of the person."

Some young people need additional support, including those who are gay, lesbian, and transgender; who abuse substances; who are HIV positive; who are victims of violence, incest, sexual abuse, rape, or domestic violence; or who are parents. For teen parents, the center sees the parents and their children on the same day and provides services to prevent another pregnancy and ensure that the child is developing properly. It works with schools, parks, arcades, nightclubs, and other community institutions to engage young people and provide support to them. It also trains young people to be leaders and work with other youth both in the adolescent health center and through New York City schools.

A number of research projects have focused on the center, including projects on abuse disclosure in primary care settings, contraception, and

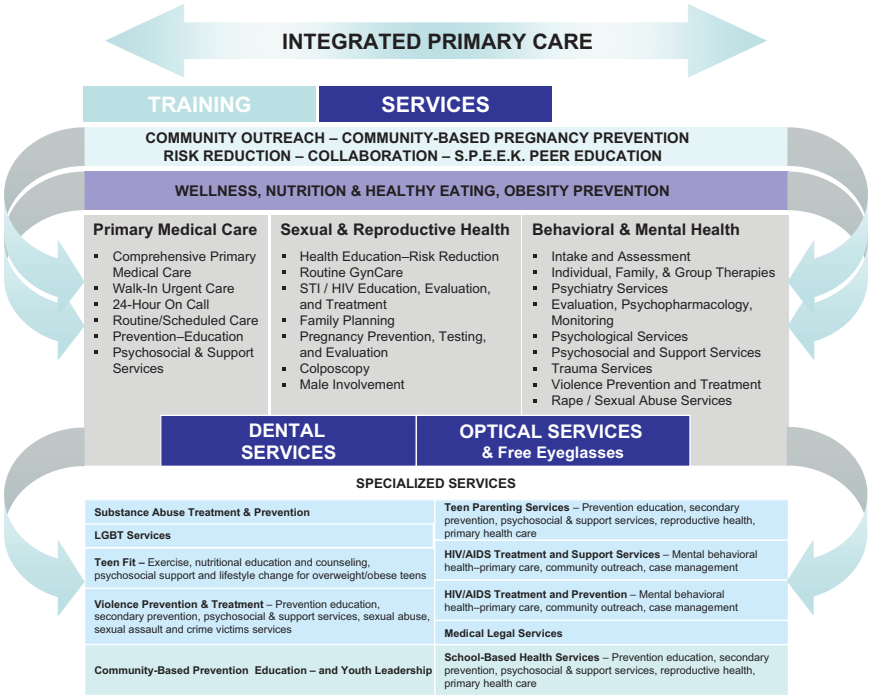

FIGURE 5-2 The integrated program at the Mount Sinai Adolescent Health Center encompasses a wide variety of services.
NOTE: AIDS = acquired immunodeficiency syndrome; HIV = human immunodeficiency virus; LGBT = lesbian, gay, bisexual, and transgender; STI = sexually transmitted infection.
SOURCE: Diaz, 2015.

sexually transmitted diseases. A third-party evaluation of the center's work was ongoing at the time of the workshop.

The program is very cost-effective, according to Diaz, spending less than $1,000 per youth per year, which is less than the cost of a typical emergency room visit. Participants in the program have a much lower teen pregnancy rate than other youth in New York City, and sexually transmitted infections like chlamydia receive treatment to prevent their spread. Participants in the program have fewer emergency room visits, and 90 percent stay in school, which is a much higher percentage than for African-American and Latino youths in general.

The program is very interdisciplinary, involving health educators, social workers, psychologists, nutritionists, and physicians all working together. Furthermore, a new initiative is bringing together health,

education, jobs, and housing by training and placing community health workers in public housing and training youth also to become community workers. "We are just at the beginning of that, but we think it is very important." The idea is to follow children as they age and interact with different systems to ensure they receive the services they need.

A recurrent issue with the program has been financing. "We don't have a sustainable financing mechanism right now," Diaz said. The program needs to raise $10 million each year, "and we begin at zero every year. We do it, and we raise the money. We don't charge the youth; everything is free. We don't exchange money at all. We buy their medication, we give them transportation. But it takes a lot of work. Basically, I am trained as a physician, but I spend my time raising money to be able to see these youth." The evaluation now being done is expected to produce data that could help show policy makers how cost-effective the program is, not just in terms of human lives saved but money saved on health care, education, and jobs "because these young people stay in school and can be trained instead of putting them in prisons." Research results have shown that the program is effective, "but people are not going to be able to do it unless they know how to sustain it."

Diaz closed with several recommendations drawn from her experiences at the center. It is important to integrate as many elements as possible within one clinical service, including primary health care, sexual and reproductive health care, and behavioral and mental health care. Adolescents cannot be expected to understand how to navigate health care silos, which requires removing barriers between different aspects of services. She also said that research is needed on the best ways to get adolescents to initiate and continue care, the comparative effectiveness of these approaches, successful ways of integrating public health and primary care interventions, and the most effective division of responsibility between public health and primary care to reduce significant risks among adolescents. Finally, she called for a national policy on youth that includes the development and financing of services tailored to meet the needs of young people.

6

Using Existing Platforms to Reach and Invest in Vulnerable Populations

Vulnerable populations are especially likely to have children and caregivers with needs that early childhood development services can help meet. The question then becomes how best to reach these populations and what kinds of services they need.

Three speakers at the workshop examined this question, first by looking at the advantages and disadvantages of targeted programs and then by discussing specific programs targeted at vulnerable populations.

TARGETED VERSUS UNIVERSAL PROGRAMS

Many studies and observations have shown that those most likely to benefit from early childhood programs are also the least likely to be participating in them, observed Nicholas Burnett, managing director at Results for Development. In addition, governments either cannot afford, or at least believe they cannot afford, early childhood development for everyone.

One way to get around these barriers is to target resources at the most vulnerable and disadvantaged, as opposed to making a program universally available. However, targeting is more or less politically acceptable in different places, Burnett said. Questions also surround how to include poor households and exclude nonpoor households. Successful targeting builds on robust data concerning households' characteristics and on transparency and accountability throughout the targeting process. It

also requires local validation to include eligible households and resolve disputed cases.

The decision of whether to target a program at particular groups or make it universal requires making trade-offs between equity and efficiency, Burnett noted. The decision also can involve quality issues. Universal programs tend to be more structured, have more formally qualified teachers, provide more established hours, and offer other benefits, Burnett said—an overall finding that "surprised me." However, universal programs may not be cost-effective, because the better-off portions of a community generally can afford to purchase their own services. Targeted programs tend to be looser than universal programs, though they also tend to have higher-quality interactions among the children and between the children and the caregivers.

Despite these differences, comparisons between targeted and universal programs generally show no significant differences in achievement by children, Burnett said, though this observation raises questions about how achievement is defined and measured.

Targeting can be done in many ways. The simplest is to use some criterion that already exists in a given context, such as geographic targeting, income targeting, or ethnic targeting. For early childhood development services, targeting may consist of putting money, or at least purchasing power, into the hands of poor families so they can access such services. Conditional cash transfers, family allowances, or voucher systems are all ways of doing this kind of targeting.

The other main type of targeting is actual delivery of services to children. This may take the form of in-kind transfers, bundled services delivered through centers or home-based services, or community-based interventions. As with money transfers, many ways exist of doing this that have been "reasonably successful in different contexts," according to Burnett.

A major problem with targeting, he continued, is achieving a societal consensus that it should be done. Whether the data are available for targeting is another issue. Finally, inconsistent targeting within programs that are not integrated, so that vulnerable families receive some services but not others, can pose problems for the acceptability of targeting.

In the discussion period, Burnett recommended a systematic review of targeting to pull together the research that has been done on its benefits and disadvantages. He also urged that attention be given to low-data situations. "We can go around saying we need more data, fine. But we have to deal with the situations we are actually in."

In addition, as one forum participant pointed out, a targeted program can be added on top of a universal program, to provide additional ser-

vices to those who need them most, and this approach would also be a valuable subject for additional research.

IMPLEMENTATION OF THE AUSTRALIAN NURSE–FAMILY PARTNERSHIP PROGRAM

An example of a targeted program is the Australian Nurse–Family Partnership Program. The parent program, which has been developed for more than 3 decades by David Olds at the University of Colorado on the basis of strong theoretical platforms and randomized controlled trials, consists of home visits by nurses over the course of 30 months (Stavrakos et al., 2009). The Australian program is targeted to women who are pregnant with an Aboriginal or islander child in the particular site where the program is being conducted, explained Claire Runciman, a consultant to the program. The program is run out of community-controlled Aboriginal health service organizations, which means that the program is run by organizations that are trusted by the community and have very strong links with the community. Guidelines for the visiting nurses outline what they are to do on those visits, with the nurses using their clinical judgment to adapt the guidelines to their clients' unique situations. The nurses also collect data on program implementation data and demographic, health, risk factor, developmental, and life-course data relating to clients and their children during their visits, which has enabled strong program evaluations. To achieve a license to deliver the program, an organization needs to make a commitment to 18 elements developed for the program.

The three tiers of government in Australia have made rolling out the program difficult, Runciman explained, because of cost shifting that goes on among the levels of government. For example, the community-controlled health services are funded by the national government, but other health services are funded by state governments. As a result, the community-controlled health services may not have strong links to state-run programs, which may be required for some referrals. However, the program also can help these community-controlled health service organizations forge links with state-run programs.

Two key adaptations have been made to the program in the Australian context. First, the community-controlled organizations that were approached about investing in the program insisted that indigenous people be involved in the program. However, the program is a nurse-run program, and there are not many indigenous nurses in Australia. Involvement has been enhanced through the use of family partnership workers who introduce the nurses to clients and ensure that the relationship is strong.

Maintaining the integrity of the model while adapting to local cir-

cumstances is also a factor in scalability (Hill and Olds, 2013). Runciman emphasized that scaling up needs to be methodical, intentional, and iterative. "We need to keep going back and looking at it and working out what is working and what is not." Scaling up also needs to be informed by data, though as Runciman acknowledged, there are never enough data, and the data that do exist need to be treated with caution.

Securing a trained workforce is a challenge with the program. Australia has not had a strong home-visiting program in the past, so many nurses in the program are relatively unfamiliar with the process. "They have to unlearn a lot of their skills and relearn relationship-based skills." Nurses also undergo training in what Runciman called micro-communication skills, so they can avoid saying things that are culturally inappropriate to clients.

The funding of the program is based on both evidence and politics, Runciman observed. Australia has a bipartisan commitment to close the gap in maternal and child health indicators between indigenous and non-indigenous people. The level of commitment varies depending on which party is in power, but it nevertheless "provides a very strong foundation for the program's survival," said Runciman. One exciting development is that the community-controlled health service organizations are starting to work with their funders to argue for evidence-based programs. "The demand is coming from the bottom for evidence-based programs, and that is really exciting."

An unexpected advantage of the program is that it has slowed down the implementation process. The need to comply with the requirements of the program has "been quite helpful for us in terms of negotiating with government demands or imperatives to achieve outcomes quickly," Runciman said. Slowing down the process also creates time to innovate. With the Nurse–Family Partnership Program, innovation requires sending data to the international group, developing new tools, and incorporating new evidence into the program. "The program is always changing, dynamic, and moving forward," Runciman concluded. "That is something that sometimes is not easy to sell to governments who want to buy a solution that will be the solution forever."

A COMMUNITY-BASED HEALTH PROMOTION PROGRAM IN SRI LANKA

Kalana Peiris, public health advisor at Plan International, described a program targeted at 77 communities that have bordered areas of armed conflict in Sri Lanka. Traditional health indicators, including maternal mortality, infant mortality, facility delivery, skilled birth attendance, and immunization, tend to be better in Sri Lanka than in the rest of South Asia.

But these communities were subject to a variety of disruptions, including night-time displacements, sporadic terrorist attacks on civilians, and disruption of livelihoods. The intervention began about a year after the conflict in a setting where community cohesion and spirit had not fully recovered.

About 4,000 children under the age of 5 lived in these 77 communities. Interestingly, said Peiris, basic health services continued even during the conflict, so the traditional health indicators stayed high in these villages. But among the children, 64 percent of those between the ages of 2 and 5 were underweight, with boys and girls equally affected. Furthermore, the population of underweight children was dynamic because new children were constantly being added to the group that was undernourished.

In these villages, 70 percent of livelihoods were from day-wage labor in paddy fields, and 23 percent were from slash-and-burn agriculture. Men had an average education level of grade seven, and women of grade nine. Exclusive breastfeeding rates for the first 6 months were above 90 percent, but diets were undiversified, and maternal and child care practices were in general poor. However, health seeking was prompt and effective, and access to health care was good. Every village had a community midwife, and 90 percent of the communities were within 5 kilometers of a free government health care facility.

In this situation, what to do seemed obvious, said Peiris: educate about nutrition, promote exclusive breastfeeding, encourage parental stimulation, reduce stressful experiences, and so on. As Peiris said, "Education and supplementation were the panacea."

But there was a glass wall that prevented education and improved knowledge from translating into action, he continued. For one thing, women were overburdened. They had an economic role, household work, and child care responsibilities. They were subject to domestic violence, limited recreation, malnutrition (both over and under), and poor mental well-being. Even though food security was not an issue, values, the media, myths, and misconceptions led to inappropriate food selection. Good and diverse foods were available, said Peiris, "but people were selling it to the shops and buying commercial products, which indicated a social value toward commercially available, processed, advertised food." Men often controlled the finances of homes, and they spent a lot of money on alcohol and smoking. Due in part to the long period of conflict, parents lacked aspirations for their children and themselves.

No vaccine exists for these conditions, Peiris observed. The only solution was social transformation.

A change in household practices required change in unhealthy social norms, cultural practices, and gender norms, said Peiris. These were collective communities where others have a great influence on what hap-

pens in a given household. Community-led collective action for change therefore became the theory of change for the program.

Plan Sri Lanka, the Foundation for Health Promotion, and the Ministry of Health implemented a program to catalyze collective community action. The main objective was to improve the healthy growth and development of children under 5 years of age. The program was "entirely owned by the communities," Peiris explained. "The action was not prescribed. They owned it. And these were not outside events. They were embedded in their daily routines." For example, one approach was to work with community midwives to make them more skillful and give them more favorable attitudes toward enabling people to come up with actions to address their own problems.

Another major change is that many fathers became more involved in household work and child care. An innovation known as the Happiness Calendar helped them realize that they were happier when they were contributing to rather than detracting from their family's security. They were more willing to ignore comments that contributing to their households was women's work. That "self-realization . . . made them advocate with other fathers to get involved in such things, and also to stick to it."

Because the activities promoted by the program were interesting, easy to do, and productive, they were contagious. Communities collectively monitored their own progress, and the process was treated as equally or more important than the result. As an example of these activities, Peiris cited the creation of baby corners for "feeding the five senses." "Five families would start it, and when you go 1 month later you see the whole community is doing it. When you are walking on the road, you will see every household that has a child under 5 years has a play house dangling little things."

Another solution was group play houses, which helped to alleviate the workload issue. Families and neighborhoods gathered to give their children a chance to play and eat together. "They soon realized that when the children are together, they eat more. Even the things that they never eat at home, they were eating."

These and other simple interventions helped reduce the percentage of underweight children from 64 percent to 28 percent, Peiris said (see Figure 6-1).

Comparable reductions occurred in areas both more affected and less affected by the conflict. Dietary diversity increased, as did the amount of stimuli children received and the time parents spent with children. Low birthweight and underweight in preschoolers decreased substantially, and growth failure in the first 2 years went from 18 percent to virtually nothing.

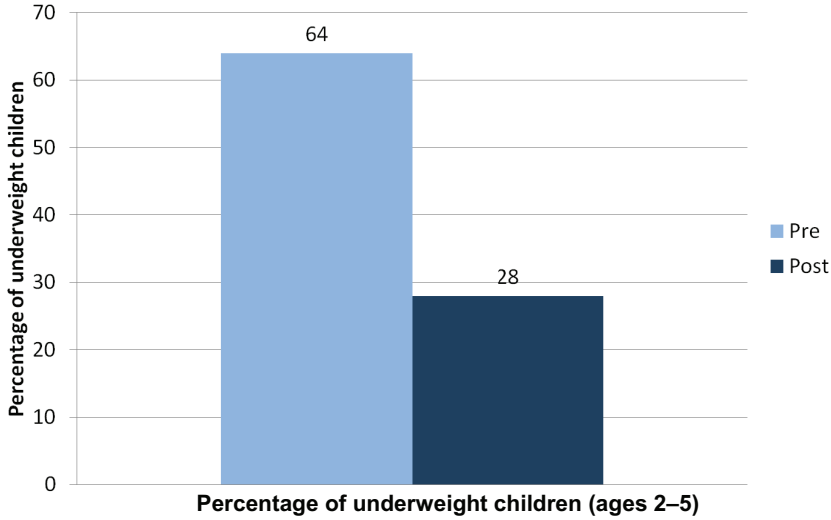

FIGURE 6-1 Early childhood interventions in communities affected by violence in Sri Lanka have substantially reduced the percentage of underweight children. SOURCE: Plan Sri Lanka, 2013.

The program did face challenges, Peiris said. At first communities did not believe that they had the potential to transform their own environments, "so we had to do some convincing." Replication was a challenge, because every community and household is different, which requires that the approach be customized for different places.

UNICEF and the government of Sri Lanka partnered with Plan Sri Lanka to expand the program into 9,000 communities, though the government has changed since the program was initiated. But more research is still needed, Peiris said, to determine the elements of success, which bottom-up approaches work best, and how to take "soft elements" into account, such as how communities can best be engaged.

7

Issues in Program Development, Implementation, and Sustainability

The development, implementation, and sustainability of programs depend on many factors, including their costs, financing, political support, and effects. Furthermore, these factors differ from place to place, so interventions need to be adapted to different circumstances.

One session at the workshop explored these factors and their differences across locales, with a particular focus on how programs geared for local needs can be extended to serve more broadly based populations. In the Southeast Asia and Pacific region, programs developed to meet local needs have implications for regional, national, and global initiatives (as described in the first section below). In Los Angeles's Chinatown and Koreatown, small businesses that provide supplementary education could be expanded to serve groups beyond those that are currently served (in the second section). And in South Africa, the nongovernmental organization Kheth'Impilo provides care and support to individuals in communities where the government's infrastructure, staffing, and delivery of services are inadequate, with the services transitioning back to the state as governmental capabilities increase (in the third section).

STRENGTHENING PLATFORMS FROM THE GROUND UP IN THE SOUTHEAST ASIA AND PACIFIC REGION

The targets established as part of the Millennium Development Goals and the Education for All movement have led to major advances in early childhood care and education in the Southeast Asia and Pacific region,

said Emma Pearson, senior lecturer in the Department of Psychological and Human Development Studies at the University of Brunei, Darussalam, but much remains to be done.[1] Persistent gaps among groups pose a major challenge to equity, and many of the early childhood care and education programs in the region are still heavily dependent on funding from nongovernmental organizations, which poses issues of sustainability. In addition, the quantitative and globalized nature of the Millennium Development Goal targets has, to some extent, diverted attention away from the complex localized issues of providing early childhood care and education, which is a point that also has been made in the broader human development literature. Finally, the proposed post-2015 Sustainable Development Goals for early childhood care and education pose a challenge, said Pearson. The United Nations (UN) Secretary-General's recent report, *The Road to Dignity*, calls for a transformative agenda that is both universal and adaptable to the conditions of each country. This agenda also needs to be adaptable to the conditions of diverse communities within countries and needs to be reflected in post-2015 goals, said Pearson.

Increased investments in young children's development have decreased infant and maternal mortality and boosted preprimary enrollments in the Southeast Asia and Pacific region. The prevalence of malnutrition and stunting also has dropped. The establishment and development of important regional bodies have increased the knowledge of early childhood care and education and the dissemination of that knowledge. Yet in some areas malnutrition remains high, often because of the difficulties of providing services for children in non-mainstream communities that are hard to access because of their geographic location or marginalization. "We are beginning to focus much more on what is happening at a community level in terms of what works, why, and how, and feeding that information up to the national and regional levels and subsequently to the global level," said Pearson.

As a concrete example of a localized program with national and international implications, Pearson described a program in Vietnam called Mother Tongue-based Education.[2] The program serves children from ethnic minority groups who have been struggling in the mainstream education system because they do not speak the national language. During the preschool years and for the first 3 years of primary school, they use their

[1] More information about the Millennium Development Goals and Education for All is available at http://www.un.org/millenniumgoals and http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all (accessed April 15, 2015).

[2] More information about the program is available at http://vovworld.vn/en-US/News/Mother-tongue-key-role-in-Vietnams-educational-development/313338.vov (accessed April 15, 2015).

mother tongue to learn in the traditional academic areas and also learn the national language as a second language. Then they transition into the mainstream curriculum. This program is now being used at the national level and is "a really nice example of how a successful program that has been very well documented is now informing policy at the national level and above."

Pearson also cited a program in Vanuatu, which had been hit by a severe hurricane just a few days before the workshop, of early childhood teacher training. With little funding available, the program provides teachers with basic theoretical and pedagogical foundational knowledge over an initial 6-week period. Teachers also learn how to build preschool structures within the community working with community members and how to make their own learning resources out of natural materials.

Finally, Pearson mentioned a program from the Philippines that is informally called ECCD on Horse, in which child care workers travel to remote communities, set up in a community space, and provide a playgroup program. In some locations, community members have become involved in developing learning materials that reflect indigenous values, including songs and stories. In some of the more successful communities, these preschool programs have become entry points for health, welfare, and other services.

Assessing these important programs using currently accepted international standards of quality raises "some real issues," according to Pearson. For example, the teacher training program in Vanuatu is very brief, though there is follow-up. In the Philippines, the child care workers cannot visit the communities very regularly, so children do not receive a high dose of the intervention. Pearson referred to the proposed Sustainable Development Goal: "All girls and boys to have access to at least 1 year of a high-quality preschool program." She argued that to ensure the "universality and adaptability" outlined in *The Road to Dignity* in shaping and determining post-2015 Sustainable Development Goals for early childhood care and education, "what we mean by *high quality* needs to be very carefully defined."

Pearson has done a thematic analysis of documents presented at a recent childhood policy forum, and many of the issues she identified were also prominent topics of the workshop. Policy concerns include dealing with diversity, engaging stakeholder groups, education and training, strengthening the evidence base, formalization of early childhood networks, and ensuring the clarity of messages from the national level to the district and local levels. "We have to do more in terms of addressing those issues," Pearson said, quoting Navi Pilay, the UN High Commissioner for Human Rights: "We have tended to treasure what we measure. It's time now to measure what we treasure."

CHALLENGES AND OPPORTUNITIES FOR EDUCATING IMMIGRANT CHILDREN

Education is a critical part of the integration project of any country receiving migrants, said Min Zhou, Tan Lark Sye Chair Professor of Sociology at the Nanyang Technological University in Singapore. Furthermore, the education of immigrant children from poor families poses many challenges, including cultural and language barriers and poverty, economic disinvestment, the social disorganization and isolation of neighborhoods, and high dropout and failure rates of local schools. Zhou, who has been studying the integration and adaptation of immigrant children in the United States, described ways to promote immigrant children's educational achievement, using Chinatown and Koreatown in Los Angeles to illustrate the role of the community.

Both Chinatown and Koreatown are populated disproportionately by racial and ethnic minorities (see Figure 7-1). These neighborhoods consist largely of immigrants, and the high school dropout rate among residents in these neighborhoods is high—59 percent in Chinatown and 43 percent in Koreatown. The poverty rate is 27 percent in Chinatown

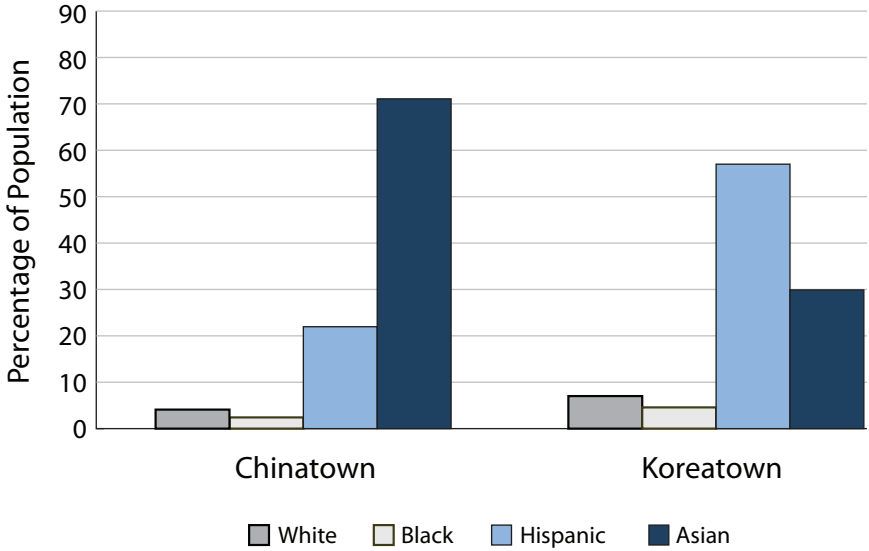

FIGURE 7-1 Racial composition in Chinatown and Koreatown in Los Angeles.
NOTE: Chinatown and Koreatown in Los Angeles have multiple ethnic communities.
SOURCE: U.S. Census Bureau, 2010.

and 31 percent in Koreatown, compared with 12.4 percent for the United States as a whole.

The infrastructure of a given ethnic community within an immigrant neighborhood can be measured by its "institutional completeness," said Zhou. This completeness is determined by a set of neighborhood-based formal and informal institutions that can satisfy the needs of members of an ethnic community, with the degree of social and economic organization in an ethnic community measured on a continuum. The local infrastructure depends on such neighborhood-based establishments as public facilities, nonprofit organizations, local businesses, ethnic organizations, and religious organizations. Even though the members of a group live in a poor neighborhood, the group itself may have resources to build a community that benefits low-income members of that group.

Zhou highlighted the importance of ethnic businesses in immigrant neighborhoods. Chinese and Korean immigrant communities have a high density and diversity of ethnic businesses, including professional services geared specifically toward children. In addition, nonprofit organizations provide children's services, such as after-school programs.

In particular, Chinese and Korean immigrants tend to have ethnic systems of supplementary education, Zhou noted. Children are pushed to achieve and have institutions to support them, even in poor working-class communities. After-school tutoring, preview or review of school curricula, college preparatory services, and academic enrichment programs all promote academic achievement. "Some people think that Asians are bookworms," said Zhou. "They are not. They know that in getting into good universities, you have to look good on your application. To look good on your application, you have to be provided with opportunities to do things beyond books."

The private educational services available in the neighborhood depend partly on the demand from the immigrant community, but Zhou argued that supply also can stimulate demand. For example, if bridges could be built between the Asian and Latino communities in neighborhoods, Latino families could tap into Asian community resources and supplemental education services owned and run by Asians.

Local businesses can be important sites for interpersonal interactions and also can be sources of entrepreneurship in supplementary education, Zhou observed. These businesses could partner with nonprofit organizations and help break ethnic boundaries by opening up existing local resources to out-group members.

Local businesses are often not taken into account in early childhood development policies, but some of these businesses respond to specific community needs, Zhou observed. Education "is an urgent need in immigrant families regardless of ethnicity."

Immigrant neighborhoods are not necessarily single ethnic communities, Zhou noted. As previously mentioned, bridges between different ethnic communities can make cultural and educational institutions available to multiple ethnic groups. Opportunities within neighborhoods exist, but a major problem is finding ways to help different ethnic groups tap into each other's resources. Zhou said the current conceptual model for understanding contextual factors influencing immigrant education uses educational achievement to measure integration. The promotion of children's education occurs in three contexts: family, school, and community. The middle class uses all three of these contexts to promote educational achievement, but working-class communities need to focus more on the development of the community context, according to Zhou.

In response to a question, Zhou acknowledged that ethnic resources can be exclusive, but nonprofit community-based organizations can help break down ethnic barriers. For example, churches are nonexclusive, and business owners are both members of churches and can work with those churches to deliver services to the members of multiple groups.

A COMMUNITY-BASED EARLY CHILDHOOD DEVELOPMENT PROGRAM IN SOUTH AFRICA

Of the 19 million children who live in South Africa, 60 percent live below the poverty line, and more than 70 percent of children under the age of 4 do not have access to center-based early childhood development services (Giese et al., 2011). The South African government, since the end of *apartheid,* has recognized the importance of such programs and has consequently developed an integrated early childhood development policy combined with increased funding of these services through earmarked subsidies, observed epidemiologist Najma Shaikh and public health doctor Ashraf Grimwood of Kheth'Impilo (National Planning Commission, 2011). However, these subsidies have failed to optimally target marginalized children living in poverty, young children under the age of 2 years, children in rural areas, and those living with a disability (UNICEF, 2011). The percentage of poor children covered by the state subsidies remains low, with a national average of 16 percent that ranges from 8 percent to 40 percent at the provincial level, and the average subsidy offered by the state is equivalent to about US$1.50 per child per day, Shaikh noted.

A key research and policy question is to understand what factors may be driving this inequitable distribution of early childhood development services, which in turn generates poor delivery. Although the subsidy is meant to be pro-poor, the current fiscal streams do not lead to equitable distribution given that there is no obligation on the state to establish facilities in poor and underresourced communities. State subsidies are

only granted to early childhood development facilities that are registered, and these facilities overwhelmingly are privately owned in communities that can afford to establish such services and bear the cost of the physical infrastructure, human resources, and operational expenses required. Only through a complex bureaucratic process of submitting an application and review by the local municipality can a service be registered and access to the subsidy provided. Furthermore, early childhood development services are of low standards or are absent in the poorest and remote communities in South Africa. National funding for early childhood development is channeled through the provincial governments, and because the funding is not ring-fenced by the Department of Social Development the provincial or district departments are not obligated to channel the funding for these services but often allocate the funds to other statutory requirements, such as domestic violence or child safety, Shaikh observed. Government is also largely ineffective in the delivery of such services, Shaikh added, despite a progressive policy and accompanying regulatory and constitutional provisions. Ultimately, the levels of financing are simply not sufficient to respond to the national and early childhood development policy goals, Shaikh and Grimwood have argued. Current funding is at about ZAR 1.6 billion, but an estimated ZAR 5.2 billion would be needed to cover all children who need care (Viviers et al., 2013).

Kheth'Impilo, which means "Choose Life," is a nongovernmental organization that supports the South African government in the provision of HIV treatment, care, and support where government is unable to meet the needs of HIV and tuberculosis health care. Kheth'Impilo has been providing support for more than a decade and over this period has developed innovative models of delivering these services in a manner that links health services, individuals, and their households. Over time, these services are transitioned to the state, with Kheth'Impilo providing technical support, Shaikh said.

To date Kheth'Impilo has provided large-scale HIV and tuberculosis treatment, care, and support to more than 250,000 patients, which represents 10 percent of the cohort receiving antiretroviral therapy in South Africa. One such innovative program evolved when Kheth'Impilo realized that the children from HIV-affected households were not able to access early childhood development services easily, Shaikh reported. In response, Kheth'Impilo initiated a home-based program to provide services to children under age 5 in such households to improve health, educational, and psychosocial outcomes. Children and their caregivers are recruited through referrals from clinics and community workers, including Kheth'Impilo patient advocates who provide adherence counseling and support to those on HIV treatment.

A major feature of Kheth'Impilo's approach is the use of trained and

paid community workers (see Figure 7-2). This cadre of workers who were former Kheth'Impilo patient advocates acquired accredited level-4 training to become social auxiliary workers, with further training in early childhood development for 1 year. The community-based model is built around pods in which a social auxiliary worker interacts with the caregivers and their children through circles of support, social workers, and the relevant health and social welfare services. The program has four key components: training of caregivers, facilitation of playgroups and circles of support, home visits, and community mobilization and advocacy. Each circle comprises five caregivers and their children within a neighborhood who meet weekly in the home of one of the members of the circle of support on a rotational basis. These meetings and playgroups are facilitated by the social auxiliary worker, and the caregivers are trained in parenting skills, nutrition, health and safety, and early childhood development activities, including toy making. The social auxiliary workers also form a connection with households so they can address a range of socioeconomic issues. The model dovetails with other service providers, Shaikh noted, with the social worker acting as a point person to refer household members for other needed services.

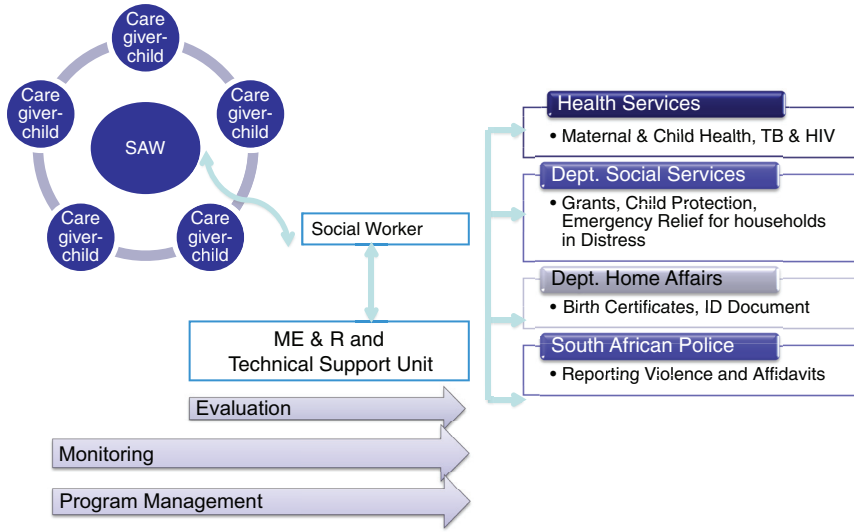

FIGURE 7-2 The community-based model used by Kheth'Impilo is built around pods in which a social auxiliary worker (SAW) interacts with social workers and social services.
NOTE: HIV = human immunodeficiency virus; ID = identification; ME & R = monitoring, evaluation, and reporting; TB = tuberculosis.
SOURCE: Shaikh et al., 2014.

The evaluation of the program has revealed significant improvements in mother–child interaction through language skills, cognitive elements, and engagement with their children in terms of stimulation, nurturing, and responsivity. For example, children were physically punished fewer times, were held closely more often, and were pedagogically stimulated through learning to count and identifying colors and animal names. Caregivers reported that they felt more empowered in terms of receiving emotional support from others, taking action to better their situation, while also developing their own self-improvement strategies. In addition, household hygiene and safety improved markedly, despite the improvisation that is often required in households without adequate water and sanitation. More mothers learned their HIV and tuberculosis status, which Shaikh and Grimwood highlighted as indicative of the fact that they were accessing particular services for the first time.

Shaikh and Grimwood pointed to several innovations that have emerged from the program. One was to bring multiple sector services of government on site over 2 days in the form of "roving jamborees." Community members could receive health screenings and tests, immunizations, registration documents, emergency poverty relief, and other social welfare services in one place.

One adaptation of the program to the local context was using indigenous child-rearing practices to inform the program design. For example, an opportunity arose for fathers to be involved in making toys for children using recyclable items. Another was to develop a pathway for mothers and caregivers to become community caregivers.

A key metric that emerged from the program was the importance of tracking anthropometric measures of children given that many resided in HIV-affected and malnourished households and this information was not well recorded otherwise. The program also developed an identification system to track children and families who were accessing intersectoral services.

Continued challenges include a lack of intersectoral coordination in planning, delivering, monitoring, budgeting, and evaluating services. As Shaikh and Grimwood pointed out, no policies, norms, or standards for community-based early childhood development services exist. Moving from innovation to scale-up is challenging because dedicated funds for non-center-based early childhood development services are not funded by the state. The nongovernmental sector has stepped in by providing these services through donor funding. However, the funding cycles in the international nongovernmental sector are short, thus leading to challenges in sustaining, scaling-up, and measuring the long-term effect of these programs,

Providing home-based early childhood development services is pos-

sible and provides many benefits, Shaikh and Grimwood concluded. In particular, benefits to the most marginalized can be maximized through the delivery of a creative, intersectoral, home-based early childhood development model. However, it cannot be a permanent solution with an absent state. As Shaikh and Grimwood observed,

> We do not see this as a permanent solution. It is not within our agenda to scale-up without transitioning it to the state. The Kheth'Impilo approach is to find solutions . . . and we thus believe that the state needs to provide a conditional grant so that NGOs can assist the state in transitioning the service from an NGO-level delivery model to a state-led delivery model.

In the short term, home-based services can be supported through such mechanisms as ring-fenced conditional grants, in which governmental funds are specified for a specific purpose. But in the long term, all layers of government are needed to deliver early childhood development services cooperatively within a mandatory framework and set of guidelines, Shaikh and Grimwood observed. The key is providing the funds in a structured manner so they are not used for other needs. Government will need to hold provincial and local authority offices accountable for how funds are spent. This approach has been followed with other interventions in South Africa. The challenge is now to translate the integrated early childhood development policy into action.

8

Breakout Group Reports and Closing Remarks

In addition to the panel presentations, the workshop featured a session in which the participants separated into groups to discuss three key issues: financing early childhood development programs, children with disabilities, and the development of scales to monitor early childhood development. The reports of the breakout group leaders and the final remarks of workshop participants are summarized here, in this final chapter of the workshop summary, as a way of revisiting several key concepts and looking toward the future.

FINANCING EARLY CHILDHOOD DEVELOPMENT

Even if the case is made successfully that investments in early childhood development are cost-effective, the financing of such services can remain uncertain. Four major challenges exist in funding and financing early childhood development, observed several participants in the breakout session. The first is the fragmentation of public responsibility for these services. The second is inadequate public subsidies for privately provided services; public services are not considered a major source of financing for early childhood development. The third is the diversity and lack of coordination among stakeholders in both the public and private sectors, including the ministry of finance, the line ministries, the private sector, parents, donors, and foundations. The fourth is what one participant called the introversion of the early childhood development community,

or the tendency of stakeholders not to reach out to other groups that are experimenting with innovative financing mechanisms.

Approaches to financing that were discussed during the breakout group included earmarked taxes or dedicated funds reserved for early childhood development, regulatory reform to allow more public–private partnerships, results-based financing tied to beneficial outcomes, social impact bonds, and affinity credit cards, where the credit card bonuses go to early childhood development projects. Earmarked taxes were used in the Philippines, but they are not very common, said Burnett, who led the breakout session on financing. More often, different kinds of taxes are used, such as sin taxes and payroll taxes in Colombia. Each of these approaches has both potential and problems, several breakout group participants observed. For example, with results-based financing, different levels of consensus exist on the proper sets of both inputs and outcomes. Nutritional outcomes may be easy to establish, but outcomes related to cognitive skills or learning would be more difficult, they pointed out. Similarly, social impact bonds—where a third party pays back investors with interest once results are achieved—could be expected to raise questions about defining outcomes.

Dedicated funds have been successful in more targeted areas, such as vaccinations or disease, participants in the breakout group said. Such funds have not yet been established for broad service domains such as early childhood development. Funds distributed through such education mechanisms might tend to flow to particular needs and not others. Even within a particular domain, such as education, particular areas may receive disproportionate attention and funding. For example, the use of education mechanisms risks the movement of funds to preprimary education, one participant observed, while failing to fund different early childhood development programs like health and nutrition. Broader mechanisms are preferable, the participant continued, but a general program may be difficult to implement.

Breakout group participants also discussed how to respond to policy makers who ask why additional funding for early childhood development is needed when a portion of public funding is already going to poverty reduction. Additional funding is necessary if young children are viewed as a specific segment of the poor population, but participants also discussed the proper allocation of existing funds. The needs of poor children and the importance of their health and well-being for the future of society are often overlooked, several participants pointed out. Better measures of their status and the convergence of innovative finance mechanisms from different fields would help make the case for early childhood development.

CHILDREN WITH DISABILITIES

The Universal Declaration of Human Rights and other international agreements enshrine the concepts of equality and dignity for all. In addition, the Convention on the Rights of Children and the Convention on the Rights of People with Disabilities both address the rights of children with disabilities. Governments are aware of their responsibilities and obligations to the Convention on the Rights of Children, but not as much to the Convention on the Rights of People with Disabilities, stated breakout participants. This convention advances the level of discourse surrounding people with disabilities, viewing children as "subjects of human rights rather than burdens to be fixed." However, as several breakout participants observed, children with disabilities are often neglected and are overrepresented among the poorest sections of society, which makes this group a particular concern in considerations of early childhood development.

A breakout group participant noted that disabilities are not fixed and that a biopsychosocial approach can greatly enhance capabilities. The group discussed the definition of disability, contrasting constraints with substantive freedoms. Rather than looking at difficulties in functioning, the group emphasized disabilities as a general continuum of experience. The paradigm of capability, rather than disability, has especially strong connections to early childhood development, several participants observed. When children have low birthweight, are malnourished, lack stimulation, or are institutionalized, their functioning is affected. Stunting, diseases, and delayed development are all related to the conditions of early life. As one breakout group participant pointed out, surveys indicate that 23 percent of 2- to 9-year-olds in developing countries have disabilities. A focus on early childhood development could serve as a powerful platform to address this issue.

The discussion centered on three approaches. One, discussed by several participants, is to reduce disparities to lower the risks to children. Another is to enhance capabilities—for example, by empowering children and their families to chart their own pathways through school, which would reduce the emphasis on special education. A third mentioned by a few participants is to embrace diversity by framing the issue around a range of abilities rather than mean performance, which could further recent movements toward greater inclusion.

Research was presented on transformative powers worldwide, including the immediate benefits of cognitive measures, the likelihood for special education to be reduced later, and the movement of children out of risk statuses so that transitioning to mainstream can be supported. This can build momentum to create communities of inclusion over time, noted one participant.

Two additional concepts that could make a difference to children with disabilities, a breakout participant said, are the principles of universal design, where environments are designed to accommodate people with a range of abilities, and the principle of reasonable accommodations, which individualizes environments for people with particular needs.

Finally, the breakout group participants discussed the intertwined concepts of reversibility, plasticity, and resilience. Several observed that an emphasis on irreversibility can increase the danger that governments and communities will absolve themselves of responsibility for children with disabilities by claiming that early investments in those children have fixed their problems. Children are resilient, but not all needs can be addressed permanently through early interventions.

EARLY CHILDHOOD DEVELOPMENT SCALES

As presented by Nirmala Rao of the University of Hong Kong, the Southeast Asia and Pacific region has been working on a set of early childhood development scales to monitor child development in the context of poor school readiness and learning outcomes, track the development of vulnerable and at-risk children, and analyze the effect of early childhood policies and programs on children. In deliberations involving eight countries, more than 1,700 different items were boiled down to 85 that have been in a pilot phase of testing, she said. The items are focused on the 3- through 5-year-old age range.

Initial analyses have shown strong validity and sensitivity with such measures as maternal education, early childhood education, exposure to home assets, and gender. The data collected during the pilot testing suggest that such measures could be linked with outcomes such as academic achievement. The data show signs of being used to correlate queries such as dissenting versus academic achievement or the influence of quality early childhood education with these scales, noted one participant.

Even 85 items will be challenging to implement in many cases, so work is ongoing to reduce the number to about 30. The challenge also exists to get the number down to about 10, which would make the measures easier to use in global frameworks. Reducing the number down to 10 is associated with other challenges, including the definition of the degree of effort needed to keep the quality and scalability of the scale moving forward.

Breakout group participants discussed ways to motivate children to participate in the measuring process—for example, through game-based applications or play. They also discussed the reliability of the data and the resistance some governments exhibit to adopting and using such measures. A bottom-up approach, where individual countries demonstrate

the value of early childhood development scales, can help overcome this resistance, one participant observed.

Some of the participants talked about extending the measures to young children below age 3. Some countries, including China, have been advocating for such an extension, and measures of younger children would have many applications on a global scale.

CLOSING REMARKS

At the conclusion of the workshop, Albert Lee, clinical professor in public health and primary care at the Chinese University of Hong Kong, remarked that the workshop represented "the beginning rather than the end" of the forum's discussion of how existing platforms can be used to invest in children and their caregivers. The workshop provided many excellent examples of coordination and integration, with speakers sharing the "wonderful work they've done in different parts of the world," Lee said. But he also pointed out that an emphasis on coordination and integration should not detract from the responsibility of each sector for early childhood development. "We need to be cautious in integrating different sectors so we don't make one sector disintegrate."

Lee also emphasized the importance of leadership, education, and training in early childhood development. How to build the necessary workforce is an emerging issue at all levels of organization, he said. In terms of engagement apart from the workforce, Lee mentioned the importance of the engagement of civic societies, including the family, the parents, the private sector, large businesses, small business, and nongovernmental organizations. He also emphasized the importance of considering the multiple roles of young girls and women, including their role as future caretakers of children. The multiple roles of women play an important role in early childhood development for many reasons, not just because of their vulnerability or the income status of their country. Lee underlined the concept of universal equity and described how targeting populations with certain risk factors, including populations with disabilities, immigrant, and nonmainstream families, is a separate approach from the concept of universal health coverage. Lee ended his remarks with a comment on the importance of establishing a committee of incentivized health workers with some form of recognition, either formal or legal.

Andy Shih, senior vice president for scientific affairs at Autism Speaks, also pointed to the importance of leadership. He mentioned that the main challenges, from an advocacy perspective, were questions like, "Who are these leaders, and how do you identify and support them so they can move the agenda forward? There may be opportunities beyond the traditional platforms of health, education, and social protection to

meet the needs of children," he said. "That's an opportunity for us—to look for nontraditional channels to advocate and help build a better agenda for children."

Finally, Ann Masten, Distinguished McKnight University Professor in the Institute of Child Development at the University of Minnesota, pointed to a convergence in the thinking of those involved in the health and well-being of children and their caregivers. At the same time, exciting new science on how early childhood is linked to lifelong positive outcomes can channel this growing consensus into more effective programs and policies.

"It's time to raise the bar for global child well-being," Masten said. "Children need more than being able to survive. They need to thrive."

References

Bahagian Pendidikan Khas Kementerian Pendidikan Malaysia. 2014. *Dasar-Dasar dan Pelaksanaan Pendidikan Inklusif di Malaysia*. Report presented in the International Seminar on Special Education for Southeast Asian Region, January 25-28, 2014, at the Faculty of Education, National University of Malaysia.

Bhutta, Z. 2015. Integration of ECD and nutrition through community health workers in Pakistan: Challenges and learnings from the PEDS trial. Presentation to the Forum on Investing in Young Children Globally, Hong Kong, China.

Campión, J., Milagro, F. I. and Martínez, J. A. 2009. Individuality and epigenetics in obesity. *Obesity Reviews* 10:383-392. doi: 10.1111/j.1467-789X.2009.00595.x.

Chow, C. B., M. Leung, A. Lai, Y. H. Chow, J. Chung, K. M. Tong, and A. Lit. 2012. Development of an electronic emergency department-based geo-information injury surveillance system in Hong Kong. *Injury* 43(6):739-748.

Chowdhury, M. 2015. Holistic development and learning in early childhood: Initial experiences from BRAC. Presentation to the Forum on Investing in Young Children Globally, Hong Kong, China.

Cohen, L. 2009. Educational equity for individuals with disabilities. *Commonwealth education partnerships.* http://www.cedol.org/wp-content/uploads/2012/02/59-61-2009.pdf (accessed July 28, 2015).

Diaz, A. 2015. Presentation to the Forum on Investing in Young Children Globally, Hong Kong, China.

Family Health Service, Department of Health. 2007. *Evaluation report: Comprehensive childhood development service*. Hong Kong: Department of Health.

Giese, S., D. Budlender, L. Berry, S. Motlatla, and H. Zide. 2011. *Government funding for early childhood development: Can those who need it get it?* Ilifa Lbantwana. http://www.ilifalabantwana.co.za/wp-content/themes/ilifalabantwana/uploads/Government-Funding-for-ECD-can-those-who-need-it-get-it.pdf (accessed August 2012).

Hill, P., and D. Olds. 2013. Improving implementation of the Nurse–Family Partnership in the process of going to scale. In *Applying implementation science in early childhood programs and systems*, edited by T. Halle, A. Metz, and I. Martinez-Beck. Baltimore, MD: Paul H. Brookes Publishing. Pp. 193-207.

Hsu, C. Y., S. S. Chang, E. S. Lee, and P. S. Yip. 2015. Geography of suicide in Hong Kong: Spatial patterning, and socioeconomic correlates and inequalities. *Social Science and Medicine* 130:190-203.

Ip, P., E. K. L. Chan, C. B. Chow, and W. H. S. Wong. 2013. *Epidemiology of child abuse and its geographic distribution in Hong Kong: An important social indicator of different districts and communities*. A Central Policy Unit commissioned report: Executive summary. Hong Kong: Central Policy Unit, The Government of Hong Kong SAR.

Loo, B. P., C. B. Chow, M. Leung, T. H. Kwong, S. F. Lai, and Y. H. Chau. 2013. Multidisciplinary efforts toward sustained road safety benefits: Integrating place-based and people-based safety analyses. *Injury Prevention* 19(1):58-63.

Ministry of Education, Youth, and Sports, Cambodia. 2014a. *Inclusive education in Cambodia*. Presented in the International Seminar on Special Education for Southeast Asian Region, January 25-28, 2014, at the Faculty of Education, National University of Malaysia.

Ministry of Education, Youth, and Sports, Cambodia. 2014b. Brief overview of special education in Cambodia for SEAMEO SEN Workshop, April 17-19, 2014.

Molina, H. 2015. Main challenges to implement and scaling up comprehensive policies in child health and development: The Chilean experience. Presentation to the Forum on Investing in Young Children Globally, Hong Kong, China.

National Planning Commission. 2011. Diagnostic overview. Pretoria: The Presidency. Departments of Education, Social Development, and Health and UNICEF. 2005. *National Integrated Plan for ECD in South Africa 2005-2010*. Pretoria, South Africa: Department of Education, Department of Health, Division for Sustainable Development, UNICEF.

Plan Sri Lanka. 2013. Children's Health Country Programme: First Phase Programme Review 2010-2012. Plan Sri Lanka, Rajarata University of Sri Lanka; Health Promotion Advocacy Network.

Rao, N., J. Sun, S. S. Ng, K. Ma, Y. Becher, D. Lee, C. Lau, L. Zhang, C. B. Chow, and P. Ip. 2013. The Hong Kong early child development scale: A validation study. *Child Indicators Research* 6(1):115-135.

Shaikh, N., G. Grimwood, K. Ngonzo, E. Mothibi, and G. Fatti. 2014. *Early childhood development outcomes in a community-based program for HIV-affected households in South Africa*. Children and HIV: Start Early, Start Now Symposium, July 18-19, 2014, in Melbourne, Australia.

Sobel, H. 2015. Presentation to the Forum on Investing in Young Children Globally, Hong Kong, China.

Special Education Unit, Ministry of Education, Negara Brunei Darussalam. 2014. *Current issues on inclusive education in Negara Brunei Darussalam*. Report presented in the International Seminar on Special Education for Southeast Asian Region, January 25-28, 2014, at the Faculty of Education, National University of Malaysia.

Stavrakos, J. C., G. Summerville, and L. E. Johnson. 2009. Growing what works: Lessons learned from Pennsylvania's Nurse–Family Partnership Initiative. Philadelphia: Public/Private Ventures.

Tsaputra, A. 2012. Inclusive education for children with disabilities in Indonesia: Dilemma and suitable framework for Indonesian context. Australia Awards Indonesia enewsletter. http://www.australiaawardsindo.or.id/files/arg/ARTICLE%20FOR%20ARG%20BULLETIN-ANTONI.pdf (accessed July 28, 2015).

UNICEF. 2003. *Inclusive education initiatives for children with disabilities: Lessons from the East Asia and Pacific region*. Thailand: UNICEF.

UNICEF. 2011. *South Africa's children: A review of equity and child rights*. UNICEF South Africa. http://www.unicef.org/southafrica/resources_8101.html (accessed September 25, 2015).

U.S. Census Bureau. 2010. Washington, DC: Government Printing Office.

Van Ravens, J. 2015. Child policy in young nation states: An essay about integrated programs and policies for early childhood development, their problems, and their alternative. Presentation to the Forum on Investing in Young Children Globally, Hong Kong.

Vargas-Barón, E. 2009. *Going to scale: Early childhood development in Latin America*. Washington, DC: The RISE Institute.

Vargas-Barón, E. 2015a. *Policies on early childhood care and education: Their evolution and some impacts. Background study for Education for All Global Monitoring Report, 2015*. Paris: UNESCO.

Vargas-Barón, E. 2015b. Perspectives on integration and coordination of investments in young children. Presentation to the Forum on Investing in Young Children Globally, Hong Kong, China.

Viviers, A., L. Biersteker, and S. Moruane. 2013. Strengthening ECD service delivery: Addressing systemic challenges. *Child Health Gauge* 34-43.

Yousafzai, A. K., M. A. Rasheed, A. Rizvi, R. Armstrong, and Z. A. Bhutta. 2014. Effect of integrated responsive stimulation and nutrition interventions in the Lady Health Worker programme in Pakistan on child development, growth, and health outcomes: A cluster-randomised factorial effectiveness trial. *Lancet* 384(9950):1282-1293.

Appendix A

Acronyms

BRAC	formerly the Bangladesh Rural Advancement Committee
CCDS	Comprehensive Child Development Service
CWDF	China Women's Development Foundation
GIS	geospatial information system
NGO	nongovernmental organization
RISE	Reconstruction and International Security through Education
WHO	World Health Organization

Appendix B

Workshop Agenda

Forum on Investing in Young Children Globally (iYCG)
Workshop 4: Using Existing Platforms to Integrate and Coordinate Investments for Children

Held in partnership with the
Centre for Health Education and Health Promotion and
Wu Yee Sun College of the Chinese University of Hong Kong

Lecture Theater
Wu Yee Sun College
Chinese University of Hong Kong
March 14 and 15, 2015

Workshop Objectives

Discuss the science and economics of coordinating investments in children and their caregivers using existing platforms across areas of health, education, nutrition, and social protection.

1. Identify and define a set of platforms that include settings, such as schools and community-based centers as well as other types of platforms such as community outreach, child rights, and funding streams.
   a. Examples will be drawn from low, middle, and high income countries and focus on vulnerable populations, such as children who are indigenous, migrating, or with disabilities.
2. Highlight public and private sector efforts in financing, governance, and accountability.
   a. Uncover systems and governance issues that facilitate or create barriers to coordinating investments and service delivery.
   b. Present data on costing and financing service integration within existing platforms.

3. Explore questions about what it takes to set up, implement, and scale integrated or coordinated services within existing platforms.
   a. Special attention will be paid to diverse cultural contexts within which children and families access and receive services.

Planning Committee

Pamela Collins, U.S. National Institute of Mental Health
Divya Lata, Plan International
Albert Lee, Chinese University of Hong Kong
Chemba Raghavan, UNICEF
Nirmala Rao, University of Hong Kong
Lorraine Sherr, University College, London
Andy Shih, Autism Speaks
Hiro Yoshikawa, New York University

Saturday, March 14, 2015

5:30 pm **Welcome**
Rance Lee, Master of Wu Yee Sun College, Chinese University of Hong Kong

5:35 pm **Keynote Talks**
Chow Chun Bong, University of Hong Kong
Helia Molina, Past Minister of Health, Chile, and Consultant

Discussant
Sophia Chan, Food and Health Bureau, Government of Hong Kong

7:00 pm **Adjourn**

Sunday, March 15, 2015

8:00 am **Networking Breakfast**

8:30 am **Welcome**
Kimber Bogard, Director, Forum on Investing in Young Children Globally

8:45 am **Forum on Investing in Young Children Globally (iYCG) Overview**
Zulfiqar Bhutta, SickKids Toronto and the Aga Khan University, iYCG Co-Chair
Ann Masten, University of Minnesota, iYCG Co-Chair

9:00 am **Workshop Goals and Objectives**
Albert Lee, Chinese University of Hong Kong, Workshop Co-Chair
Andy Shih, Autism Speaks, Workshop Co-Chair

9.15 am **SESSION 1: Perspectives on Coordination and Integration of Early Childhood Development Programs and Policies**
Objective: Discuss coordination and integration of services, programs, policies, systems, and investments across sectors, particularly using existing platforms.

- Jan van Ravens, Affiliated with Yale School of Medicine
- Emily Vargas-Barón, The RISE Institute

Moderated by Hiro Yoshikawa, New York University

10:30 am **Break**

10:45 am **BREAKOUT SESSIONS**

1. **Barriers to financing investments across sectors**
   - Nicholas Burnett, Results for Development
   - Hiro Yoshikawa, New York University (moderator)

2. **Harnessing the transformative power of Early Childhood Care and Education (ECCE) to advance disability rights**
   - Divya Lata, Plan International
   - Chemba Raghavan, UNICEF (moderator)

3. **Preliminary findings from the East Asia-Pacific Early Child Development Scales (EAP-ECDS)**
   - Nirmala Rao, University of Hong Kong
   - Karlee Silver, Grand Challenges Canada (moderator)

11:40 am **Report Out**

12:00 pm **Lunch**

1:00 pm **SESSION 2: Coordinating Investment in Children Across Sectors from a Policy Perspective**
Objective: Identify governance, financing (both public and private), and accountability issues that facilitate or create barriers to providing a set of coordinated/integrated services for children at the subnational and local levels.

- Hailiang Guo, China Women's Development Foundation
- Yasmin Hussain, Southeast Asian Ministers of Education Organization
- Howard Sobel, World Health Organization

Moderated by Andy Shih, Autism Speaks

2:00 pm **SESSION 3: Integrated Services Come Together on the Ground: Examples of Platforms and Their Unique Contexts**
Objective: Discuss how to set up, implement, and scale integrated/coordinated services in the areas of health, education, nutrition, social protection within existing platforms.

- Ahmed Mushtaque Raza Chowdhury, BRAC
- Zulfiqar Bhutta, SickKids Toronto and the Aga Khan University
- Angela Diaz, Mount Sinai Hospital

Moderated by Pamela Collins, U.S. National Institute of Mental Health

3:00 pm **Break**

3:30 pm **SESSION 4: Issues in Program Development, Implementation, and Sustainability**
Objective: Identify methods, measures, and outcomes of costing and financing service integration within existing platforms.

- Emma Pearson, University of Brunei
- Min Zhou, Nanyang Technological University
- Najma Shaikh, Kheth'Impilo

Moderated by Nirmala Rao, University of Hong Kong

4:30 pm **SESSION 5: Addressing Inequality with Vulnerable Populations**
Objective: Examine integration for vulnerable children in existing platforms.

- Claire Diana Runciman, Australian Nurse–Family Partnership Program
- Nicholas Burnett, Results for Development
- Kalana Peiris, Plan International

Moderated by Amina Abubakar, Centre for Geographic Medicine (Coast), KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya

5:30 pm **Closing Remarks**
Albert Lee, Chinese University of Hong Kong, Workshop Co-Chair
Andy Shih, Autism Speaks, Workshop Co-Chair

6:00 pm **Adjourn**

Appendix C

Biographical Sketches of Workshop Speakers

Amina Abubakar, Ph.D., is a Research Fellow at Lancaster University. She studied Educational psychology at Kenyatta University in Kenya before proceeding to study Developmental Cross-Cultural Psychology at Tilburg University where she obtained her Ph.D. in 2008. She previously worked at the Kenya Medical Research Institute/Wellcome Trust Research Program in Kenya. She was also a visiting academic at Tilburg University, the Netherland and University of Oxford, United Kingdom. Her research concerns three broad areas: examining the sequelae of various childhood diseases, neurodevelopmental disorders, specifically Autism Spectrum Disorders (ASD), and contextual predictors of mental health among adolescents across cultural contexts. Her main interests are in the study of developmental delays and impairments among children exposed to various health problems such as HIV, malnutrition, and malaria. Her main focus in this regard is on developing culturally appropriate strategies for identifying, monitoring and rehabilitating at-risk children. Alongside her colleagues, Dr. Abubakar has been instrumental in developing various culturally appropriate measures of child development currently in use in almost 10 African countries. She has also been involved in various projects aimed at examining the psychosocial risk factors (i.e., maternal depression, quality of home environment, and parental socioeconomic status) predictive of poor developmental outcome among vertically infected HIV positive children and adolescents. In addition, she is also interested in examining the prevalence of and risk factors for neuro-

developmental disorders, specifically ASD, within the African context. As part of her postdoctoral work in cross-cultural psychology, she has recently completed a study involving more than 7,000 adolescents and emerging adults from 24 countries, where she investigates how various contextual factors (familial, school, peer, and cultural) affect well-being (mental health, and life satisfaction identity formation). Dr. Abubakar has given guest lectures and workshops largely focusing on cross-cultural research methods in various countries, including Cameroon, Germany, Indonesia, Kenya, the Netherlands, New Zealand, South Africa, and Spain. She has (co)-authored several peer-reviewed journal articles and book chapters.

Zulfiqar A. Bhutta, MBBS, FRCPCH, FAAP, Ph.D. (*iYCG Co-Chair*), is the Robert Harding Inaugural Chair in Global Child Health at The Hospital for Sick Children (SickKids), Toronto, the co-Director of the SickKids Centre for Global Child Health and Founding Director of the Centre of Excellence in Women and Child Health, at the Aga Khan University, unique joint appointments. He also holds adjunct professorships at the Schools of Public Health at Johns Hopkins University (Baltimore), Tufts University (Boston), University of Alberta, and the London School of Hygiene and Tropical Medicine. He is a designated Distinguished National Professor of the Government of Pakistan and was the Founding Chairman of the National Research Ethics Committee of the Government of Pakistan from 2002–2014. Dr. Bhutta's research interests include newborn and child survival, maternal and child undernutrition, and micronutrient deficiencies. Dr. Bhutta is one of the seven-member Independent Expert Review Group (iERG) established by the UN Secretary General in September 2011 for monitoring global progress in maternal and child health Millennium Development Goals. He represents the global academic and research organizations on the Global Alliance for Vaccines and Immunizations (GAVI) Board, is the co-chair of the Maternal and Child Health oversight committee of the WHO EMRO as well as the Global Countdown for 2015 Steering Group. He has served as a member of the Global Advisory Committee for Health Research for the WHO, the Board of Child & Health and Nutrition Initiative of Global Forum for Health Research, and was a founding Board member of the Global Partnership for Maternal, Newborn, and Child Health (PMNCH). He serves on several international editorial boards. Dr. Bhutta is currently a member of the WHO Strategic Advisory Committee for Vaccines (SAGE), the Expert Advisory Group for Vaccine Research, the Advisory Committee for Health Research of the WHO EMRO, and a co-chair of its apex Regional Committee for Maternal and Child Health. He has won sev-

eral awards, including the Aga Khan University Awards for Research (2005), Distinguished Faculty (2012), and the WHO Ihsan Dogramaci Family Health Award (2014). Professor Bhutta received his Ph.D. from the Karolinska Institute, Sweden, and is a Fellow of the Royal College of Pediatrics & Child Health, American Academy of Pediatrics, and the Pakistan Academy of Sciences.

Chow Chun Bong, B.B.S., J.P. 周鎮邦, is the Honorary Clinical Professor of the Department of Pediatrics and the Department of Community Medicine, University of Hong Kong; and an Adjunct Associate Professor of the Department of Pediatrics, Chinese University of Hong Kong. He is also an Honorary Consultant of the Hospital Authority Infectious Disease Centre (HAIDC) at Princess Margaret Hospital, and Honorary Consultant Pediatrician at Princess Margaret Hospital. He is the Founding President of the Hong Kong Society of Neonatal Medicine and Inborn Error of Metabolism. He serves on various boards in the community, including Chairman of the Scientific Committee on Vaccine Preventable Diseases and Working Group on Injury Prevention, the task force of the code on breast milk substitute, Department of Health. Dr. Chow is also Chairman of the Hong Kong Committee on Children's Rights, Playright Children's Play Association, Hong Kong Childhood Injury Prevention and Research, Hong Kong Early Childhood Development Foundation. He has been a board member for Against Child Abuse and Baby Friendly Hospital Initiative Hong Kong Association for more than 10 years. He has been a strong advocate for children's rights in Hong Kong for decades, especially rights for protection and safety, the right to play, and the right for quality and integrated education. He is also Director of Kwai Tsing and Tsuen Wan Safe Community and Healthy City Associations and has been involved in community safety and health promotion at the community level. He also pioneered the Comprehensive Child Development Service for high-risk pregnancies in Kowloon West Cluster and started a QK Blog project for high-risk secondary school students in Kwai Tsing District.

Dr. Chow has authored more than 150 original articles, abstracts, and chapters in books on pediatrics and infectious diseases. He has actively promoted various research works, including childhood injury surveillance and intervention, adolescent health, early child development and child abuse, obesity and physical activity; intrauterine growth in Chinese infants, physical health status of new immigrant children from mainland China, growth parameters in Down Syndrome children; and safe community and healthy city, child policy and play.

Nicholas Burnett, Ph.D., is the Managing Director of Results for Development. Since 2010, he has led the organization's global education program

that centers on addressing tough challenges that are often neglected, especially using combinations of analysis, financing, model identification, and connecting key stakeholders. Current areas of activity include early childhood education (in collaboration with the Lego Foundation and the Children's Investment Fund Foundation), innovations in education (through the Center for Education Innovations), financing and innovative financing, the linkage between secondary education, and skills for employment and out-of-school children. Dr, Burnett was previously UNESCO's Assistant Director-General for Education, Director of the Education for All Global Monitoring Report (GMR), and Human Development Sector Manager for West and Central Africa at the World Bank. He was responsible for the landmark GMR 2007 report *Strong Foundations* on early childhood. Educated in Economics at Oxford, Harvard, and Johns Hopkins Universities, Dr. Burnett is currently also a visiting special professor of international education policy at Nottingham University in the United Kingdom and was from October 2014 to January 2015 Visiting Professor at the Center for International Cooperation in Education at Hiroshima University in Japan.

Sophia Chan, Ph.D., is the Under Secretary for Food and Health of the Government of Hong Kong Special Administrative Region. Dr. Chan holds a Master of Education degree from the University of Manchester, a master's degree in Public Health from Harvard University, and a Doctor of Philosophy degree from the University of Hong Kong (HKU). Before joining the government, Dr. Chan was Professor in Nursing and Director of Research in HKU's School of Nursing. She was also an Assistant Dean of the Li Ka Shing Faculty of Medicine of HKU. Dr. Chan's research achievements include tobacco control and smoking cessation promotion. She pioneered the first smoking cessation counselling training program locally and has been a consultant to the WHO on training health care professionals in tobacco dependency treatment interventions through advocacy and education.

Ahmed Mushtaque Raza Chowdhury, Ph.D., is the Vice Chair of BRAC, the world's largest nongovernmental organization. Previously, he was its Deputy Executive Director, founding Director of the Research and Evaluation Division, and founding Dean of the James P. Grant School of Public Health.

Dr. Chowdhury is also a Professor of Population and Family Health at the Mailman School of Public Health of Columbia University in New York. During 2009–2012, he worked as the Senior Adviser to the Rockefeller Foundation, based in Bangkok, Thailand. He also served as a MacArthur Fellow at Harvard University. Dr. Chowdhury holds a Ph.D.

from the London School of Hygiene and Tropical Medicine, an M.Sc. from the London School of Economics, and a B.A. (Hon's.) from the University of Dhaka.

Dr. Chowdhury was a coordinator of the UN Millennium Task Force on Child Health and Maternal Health, set up by the former Secretary General Kofi Annan. He is a co-recipient of the Innovator of the Year 2006 award from the Marriott Business School of Brigham Young University in the United States, and in 2008 he received the PESON oration medal from the Perinatal Society of Nepal. He has wide interest in development, particularly in the areas of education, public health, poverty eradication, and the environment. Dr. Chowdhury has published more than 150 articles in peer-reviewed international journals including the *International Journal on Education*, *Lancet*, *Social Science & Medicine*, *Scientific American*, and the *New England Journal of Medicine*. One of his recent books is *From One to Many: Scaling Up Health Programs in Low Income Countries* (co-edited with Richard Cash et al.), published in 2011. He coordinated the recently launched Lancet Series on Bangladesh (http://www.thelancet.com/series/bangladesh). The *Lancet* also published a profile celebrating his contributions to global health.

Dr. Chowdhury is a founder of the *Bangladesh Education Watch* and *Bangladesh Health Watch,* two civil society watchdogs on education and health respectively. He is on the board and committees of several organizations and initiatives, including the Board of Trustees of BRAC University in Bangladesh, and International Advisory Board of the Centre for Sustainable International Development at the University of Aberdeen in the United Kingdom.

Pamela Y. Collins, M.D., M.P.H., is Associate Director for Special Populations and director of the Office for Research on Disparities & Global Mental Health and the Office of Rural Mental Health Research at the U.S. National Institute of Mental Health (NIMH). Prior to her arrival at NIMH 5 years ago, while a faculty member at Columbia University, Dr. Collins's research focused on the intersections of mental health and HIV prevention, care, and treatment in the United States, Latin America, and sub-Saharan Africa. Dr. Collins currently oversees NIMH's research efforts to increase mental health equity locally and globally. She was one of the editors of the 2011 Lancet series on global mental health, she is a leader of the Grand Challenges in Global Mental Health initiative, and recently led the development of the 2013 PLoS Medicine Policy Forum series on global perspectives for integrating mental health. Dr. Collins obtained her M.D. from Cornell University Medical College and a Master of Public Health from Columbia University's Mailman School of Public Health. She trained in psychiatry and

completed an NIMH postdoctoral fellowship at Columbia University/New York State Psychiatric Institute. Dr. Collins studied cultural psychiatry and applied medical anthropology as a research fellow in the Department of Social Medicine at Harvard Medical School.

Angela Diaz, M.D., M.P.H., is the Jean C. and James W. Crystal Professor of Pediatrics and Preventive Medicine at Mount Sinai School of Medicine. After earning her medical degree in 1981 at Columbia University College of Physicians and Surgeons, she completed her postdoctoral training at the Mount Sinai School of Medicine in 1985 and subsequently received a Master's in Public Health from Harvard University.

Dr. Diaz is the Director of the Mount Sinai Adolescent Health Center, a unique program that provides comprehensive, integrated, interdisciplinary primary care, sexual and reproductive health, mental health, dental services, and health education services to teens—all for free. The Center has an emphasis on wellness and prevention. Under her leadership the Center has become the largest adolescent specific health center in the United States, serving each year more than 12,000 vulnerable and disadvantaged youth, including those who are sexually exploited and trafficked. She has been a member of the Board of Directors of the New York City Department of Health and Mental Hygiene and President and Chair of the Board of Trustees of the Children's Aid Society of New York. Dr. Diaz has been a White House Fellow, a member of the Food and Drug Administration Pediatric Advisory Committee, and a member of the National Institutes of Health State-of-the-Science Conference on Preventing Violence and Related Health Risk Social Behaviors in Adolescents. In 2003, Dr. Diaz chaired the National Advisory Committee on Children and Terrorism for the Department of Health and Human Services. She was elected in 2008 as a member of the Institute of Medicine of the National Academies of Sciences, Engineering, and Medicine. In 2009, Dr. Diaz was appointed by Mayor M. Bloomberg to the New York City Commission for Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) Runaway and Homeless Youth Taskforce. Dr. Diaz is active in public policy and advocacy in the United States and has conducted many international health projects in Asia, Central and South America, Europe, and Africa. She is a frequent speaker at conferences throughout the country and around the world.

HaiLiang Guo is Foundation Administrative Director of the China Women's Development Foundation.

Yasmin Hussain, Ph.D., is the first Director for Southeast Asian Ministers of Education Organization (SEAMEO) Regional Center for Special Educa-

tion. She was previously attached to the Malay Women Teachers Training Institute in Melaka as a specialist lecturer in the Special Education Department. She completed her Bachelor of Science majoring in Special Education and Masters in Special Education at University of Western Michigan, in 1991 and in 1992, respectively. She then completed her Ph.D. in Management specializing in Special Education from the University of Manchester, United Kingdom, in 2000. Since then she has been lecturing and sharing her expertise with preservice and in-service teachers through workshops and hands-on learning in special education. As a specialist in the field of special education needs, Dr. Yasmin has published papers, journals, and books that become focal resources for teachers of special education in Malaysia. Among her papers are *The Use of ICT Among Special Education Teachers in Melaka* (2004), *A Survey on Primary Mastery of KIA2M Among Year One Pupils in Melaka* (2007), *Classroom Management for Beginning Teachers* (2009), *Behaviour Management for Children of Special Needs for Beginning Teachers of Special Education* (2010), and *The Development of Special Education in Teachers' Training Institutes in Malaysia* (2010).

Divya Lata is the Early Learning and Education Advisor at Plan International Asia Regional Office. She specializes in Disability Rights, Education and Early Childhood Development and has been working in Asia, Africa, the Middle East, and countries of the former Soviet Union (CEE/CIS region) with well-known international organizations, notably the Aga Khan Foundation, the Save the Children Fund, the Open Society Foundation currently Plan International. Advancing child-focused programs in diverse long-term as well as fragile contexts, Ms. Lata currently serves as the Vice-chair of the Consultative Group for Early Childhood Development and as a member on the Executive Committee of the Asia Pacific Regional Network for Early Childhood, Singapore.

Albert Lee, MBBS, M.D., M.P.H., FRCP (*Workshop Co-Chair*), is Clinical Professor in Public Health and Primary Care and Founding Director of Centre for Health Education and Health Promotion of the Chinese University of Hong Kong, and Editor of *Lancet*-HK Edition and Cogent Education. He holds Honorary Professorship at Faculty of Education of University of Hong Kong and adjunct professorship at Indiana University School of Public Health (Bloomington) in the United States; and Brighton University Centre for Health Research, United Kingdom.

Dr. Lee is well known as an academic clinician, educational innovator, and research leader in Family Medicine, Health Promotion, and Disease Prevention and has particular focus on promotion of child and adolescent health through school settings linking to community and primary health care contributing models of care for school health applicable internation-

ally. His innovation in education includes pioneering professional training in primary health care and school health in countries without related academic and professional institutions. His strategic research focus is on child health policy linking health, education, and social sectors. He has been appointed as the WHO Temporary Advisor on many occasions, and was commissioned to conduct international workshops for Asian and Pacific countries on health promotion. He has published more than 180 papers in peer-reviewed journals and over 100 invited presentations globally. Dr. Lee is the founding Steering Committee Member of Alliance for Healthy Cities (AFHC) (2003–2010) (established after the WHO Regional Consultation meeting). He is Chairman of Scientific Committee of AFHC 2014 Global Conference. He is President of Hong Kong Health Education and Promotion Foundation. His contribution to community services was recognized by award of the Chief Executive Commendation for Community Services in 2004 Honors list of Hong Kong Government, inclusion in *World's Who's Who*, and Most Outstanding Capacity Building Award in advancing health promotion through funded projects by Food and Health Bureau (de facto Ministry of Health for Hong Kong) in 2011. Dr. Lee received his medical degree from the University of London (University College London-Middlesex), his higher academic qualifications at the doctoral and master level, and professional qualifications at Fellowship level in Family Medicine and Public Health awarded by Royal Colleges in Australia, Ireland, and the United Kingdom.

Rance P. L. Lee, Ph.D., became Founding Master of Wu Yee Sun College on August 1, 2011. Professor Lee graduated from the Department of Sociology at the Chinese University of Hong Kong (Chung Chi College) in 1965. After obtaining his Ph.D. from the University of Pittsburgh in 1968, he immediately returned to Hong Kong to teach sociology at his Alma Mater. He became Chair Professor of Sociology in 1984. During his long service as a faculty member, he took on many administrative duties on top of teaching and research responsibilities at the university: he served variously as Director of the Social Research Centre, Dean of Social Science, Chairman of the Department of Sociology, Chairman of the Advisory Board of Continuing and Professional Studies, Chairman of the Senate Committee on Physical Education, Chairman of the Management Committee of the Hong Kong Institute of Asia-Pacific Studies. The highlight of his services, however, was his tenure as Head of Chung Chi College from 1994 to 2004, in which he contributed much not only to Chung Chi College, but to the overall development of the university's college system.

Dr. Lee was a pioneer in medical and health sociology in Hong Kong, and led many surveys on social issues and medical problems in both Hong Kong and China. As an academic, his services to the community

included advising government bodies as well as other community organizations, including the Central Policy Unit, the Social Welfare Advisory Committee, the Research Grants Council, the Advisory Committee on Social Work Training and Manpower Planning, the Council on Human Reproductive Technology, the Health Services Research Committee, the Police Education and Welfare Trust Management Committee, the Hong Kong Federation of Youth Groups, the Society of Rehabilitation and Crime Prevention, the Release Under Supervision Board, the Sir Edward Youde Memorial Fund Council, and the Solicitors Disciplinary Tribunal Panel. In 1992, Dr. Lee was appointed as Non-official Justice of the Peace, was made an Officer of the Most Excellent Order of the British Empire (OBE) by Queen Elizabeth II in 1997. He was conferred Honorary Fellowship by Chinese University of Hong Kong in 2010.

Ann S. Masten, Ph.D., LP (*iYCG Co-Chair*), is Regents Professor, Irving B. Harris Professor of Child Development and Distinguished McKnight University Professor in the Institute of Child Development at the University of Minnesota. She completed her doctoral training at the University of Minnesota in clinical psychology and her internship at the University of California, Los Angeles. In 1986, she joined the faculty in the Institute of Child Development at the University of Minnesota, serving as chair of the department from 1999 to 2005. Dr. Masten's research focuses on understanding processes that promote competence and prevent problems in human development, with a focus on adaptive processes and pathways, developmental tasks and cascades, and resilience in the context of high cumulative risk, adversity, and trauma. She directs the Project Competence studies of risk and resilience, including studies of normative populations and high-risk young people exposed to war, natural disasters, poverty, homelessness, and migration. The ultimate objective of her research is to inform sciences, practices, and policies that aim to promote positive development and a better future for children and families whose lives are threatened by adversity. Dr. Masten currently serves on the Board on Children, Youth, and Families (BCYF) and the U.S. National Committee of Psychology for the Institute of Medicine/National Academies. She formerly served on the BCYF Committee on the Impact of Mobility and Change on the Lives of Young Children, Schools, and Neighborhoods and the planning committee on Investing in Young Children Globally. She also has served as President of the Society for Research in Child Development and President of Division 7 (Developmental) of the American Psychological Association (APA). She is a 2014 recipient of the Urie Bronfenbrenner Award for Lifetime Contributions to Developmental Psychology in the Service of Science and Society from the APA. Dr. Masten has published and presented

extensively on the themes of risk and resilience in human development. Her book, *Ordinary Magic: Resilience in Children*, has been published by Guilford Press, and she taught a free MOOC (mass open online course) on the same theme in 2014 on Coursera.

Helia Molina, M.D., M.P.H., is a Consultant working with the Forum on Investing in Young Children Globally and recently completed her term as Minister of Health in Chile. Dr. Molina is a pediatrician and professor in public health at the Pontificia Universidad Católica de Chile. She is the Past National Executive Director (at the Ministry of Health) of Chile Crece Contigo, the Chilean Social Protection System for early infancy. Previously, she was Chief of the Healthy Public Division at the Ministry of Health from 2006 to 2010. From 2005 to 2008, Helia was a member of the Knowledge Network in Early Childhood Development WHO Social Determinants of Health Commission. She served as Regional Advisor in Child Health and Development to the Pan-American Health Organization in Washington, DC, and was previously the Director of the Chilean Epidemiology Society from 2000 to 2004, and the Past President of The Chilean Pediatric Society (1987). She holds the degrees of M.D. from the University of Chile, where she specialized in pediatrics, and M.P.H. from the University of Chile (1990). She has many technical publications about early child development and infant public policies.

Emma Pearson, Ph.D., is Senior Lecturer in the Department of Psychological and Human Development Studies, Universiti Brunei Darussalam. Her research and consultancy work across Asia and the Pacific has included national evaluations of early childhood programs; establishment of country-specific Early Learning and Development Standards; advising on the scale-up of community-based early childhood education, and service on regional and national advisory boards. She facilitated the creation of the Pacific Regional Council for Early Childhood Care and Education (PRC4ECCE) and developed the first working draft of the recently approved regional Pacific Guidelines for the Development of National Quality Frameworks for ECCE.

As a result of varied work with colleagues across the region, she strongly believes that solutions for current challenges in the measurement, design, and financing of early childhood programs should be sought through equal and seamless engagement between stakeholders at all levels of provision, from children and families to national ministries, regional bodies, and international organizations. This interest is reflected in her current research activities, which include leadership of a mixed-method, nationwide investigation of Bruneian priorities for young

children, to culminate in the drafting of a Brunei-specific curriculum for children ages 3 to 5 years.

Kalana Peiris holds bachelor degrees in Medicine and Surgery from the University of Colombo Sri Lanka and has 17 years of experience in development work in conflict, postconflict, remote rural, and multicultural environments in Sri Lanka. He has also contributed in the development of the maternal, newborn, and child health program for Plan International in Timore Leste and is currently the Public Health Advisor in Plan International in Lao PDR. He led a team of professionals from Plan International, Foundation for Health Promotion and Rajarata University of Sri Lanka, that developed, implemented, and documented a unique integrated methodology in improving parental ownership of early stimulation and responsive care. This methodology showed potency to achieve far-reaching outcomes of child development, early and foundations of life-long learning, reducing domestic violence, and improving nutrition and well-being of children in early childhood. This has made significant impact and is being replicated in seven Asian countries by the Plan International Asia Regional Office. He has a particular interest and has demonstrated capability in gender transformative program design, implementation, and monitoring; community mobilization and empowerment, prevention of gender-based violence; child protection; and prevention of alcohol and substance use.

Chemba Raghavan, Ph.D., works at the UNICEF East Asia Pacific Regional Office as an Education Specialist. She serves as the Regional Focal Point for the United Nations Girls' Education Initiative (UNGEI) as well as for Early Childhood Development (ECD) and the Out of School Children initiative (OOSCi). As the Focal Point, Dr. Chemba provides leadership and coordination of knowledge generation and management, evidence-based advocacy, and technical support for initiating and sustaining national partnerships to promote ECD and advance gender equality. Prior to her current role in UNICEF, she had several years of experience in teaching and research (in the fields of Gender and Child Development) in the United States. Dr. Chemba obtained her Ph.D. in Human Development and Family Studies from the Pennsylvania State University in 1993.

Nirmala Rao, M.S., Ph.D., C Psychol, FHKPS, is the Serena H. C. Yang Professor in Early Childhood Development and Education, Professor, Faculty of Education and Dean, Graduate School, University of Hong Kong. A Developmental and Chartered (Educational) Psychologist by training, she has been recognized internationally for her research on early childhood development and education in Asian cultural contexts. Her research has

focused on the development, evaluation, and dissemination of evidence-based programs directed at children in the early childhood stage of development with the objective of finding out why they have the effects that they do. Dr. Rao has published widely on early childhood development and education, child development and educational policy, and educational psychology. She has been the recipient of numerous research grants from governments and international nongovernmental organizations. She has participated in international meetings as an expert/specialist and undertaken consultancies for UNICEF, UNESCO, and the World Bank. Dr. Rao serves on the editorial board for several journals, is the Associate Editor of *Child Development* and a member of the Steering Committee for the upcoming Lancet Series on Early Child Development. Dr. Rao is also actively involved in professional organizations that aim to promote the well-being of children through research and advocacy efforts.

Claire Runciman is a Sociologist with a doctorate in employment relations, spending the first part of her career as an academic at the Australian National University. Runciman then worked in government in areas of epidemiology, development of health policy, and child safety prior to establishing and running the Support Service of the Nurse–Family Partnership Program in Australia between 2008 and 2014. Runciman now works with Dr. David Olds on the Leadership Group for the Australian Nurse–Family Partnership Program (ANFPP) and also as an independent consultant. The AANFPP has now been in existence for 6 years and is about to undergo a major expansion. A theme of Runciman's career has been promotion of social inclusion. The ANFPP is largely targeted at vulnerable Aboriginal and Torres Islander families, and Runciman is particularly interested in implementation of evidence-based programs as it relates to vulnerable families.

Najma Shaikh, Ph.D., works as the epidemiologist at Kheth'Impilo, a nongovernmental organization that provides HIV treatment care and support in South Africa (SA). Trained as an infectious disease epidemiologist, she has worked as the Senior Specialist in the HIV/AIDS Directorate and prior to that, headed the Epidemiology Unit of the Western Cape Department of Health in SA. Dr. Shaikh has worked as an academic, researcher and health manager during the course of her career. Her main research areas include the epidemiology of HIV, tuberculosis, and sexually transmitted infections, mortality surveillance, monitoring, and evaluation of programs in the public health sector.

She conceptualized and implemented the district-level HIV surveillance system for the Western Cape, which has been rolled out nationally. She was part of the team that implemented the Prevention and Mother-

to-Child Transmission (PMTCT) program, antiretroviral therapy (ART) program, and the prevention strategy in the Western Cape province.

Other areas of research in collaboration with the Medical Research Council, Human Science Research Council, and the National Department of Health include HIV Epidemiology, with particular focus on programs and interventions. She has published papers and reports and has served on several advisory committees in the health research arena at the national, provincial, and international level. She was awarded a Fogarty Postdoctoral Scholarship at Columbia University New York, a Medical Research Council postintern Research scholarship, and the Oliver Tambo Fellowship for Public Health Leadership in SA.

Andy Shih, Ph.D. (*Workshop Co-Chair*), is Senior Vice President of Scientific Affairs at Autism Speaks. He works closely with members of Autism Speaks' Board, Scientific Advisory Committee, senior staff, and volunteer leadership to develop and implement the organization's research program. He oversees the etiology portfolio, which includes genetics, environmental sciences, and epidemiology, as well as the Innovative Technology for Autism program, which supports the research and development of novel assistive technologies. Dr. Shih also leads Autism Speaks' international scientific development efforts, including the Global Autism Public Health Initiative, an international advocacy effort currently active in more than 45 countries around the world that integrates awareness, research, and service development. His team serves as facilitators and technical advisors to community stakeholders, including government ministries, professional societies, and advocacy organizations. Dr. Shih joined the National Alliance for Autism Research (NAAR) in 2002, an autism science organization that merged with Autism Speaks in 2006. Prior to joining NAAR, he served as an industry consultant and was a member of the faculty at Yeshiva University and New York University Medical Center. Dr. Shih's research background includes published studies in gene identification and characterization, virus-cell interaction, and cell-cycle regulation. He earned his Ph.D. in cellular and molecular biology from New York University Medical Center.

Karlee Silver, Ph.D., is the VP of Targeted Challenges for Grand Challenges Canada. Dr. Silver leads the Saving Lives at Birth, Saving Brains and Global Mental Health programs. She is a member of the Knowledge Exchange Working Group for the Canadian Network for Maternal, Newborn and Child Health.

Prior to joining Grand Challenges Canada, Dr. Silver trained in the laboratory of Dr. Kevin Kain at the Sandra Rotman Centre for Global

Health in Toronto, first as a Canadian Institutes of Health Research postdoctoral fellow, then as a MITACS Elevate postdoctoral fellow, where she helped to identify host responses of malaria infection in pregnant women to harness for diagnostic and therapeutic purposes.

Dr. Silver received her doctorate in 2006 from the University of Oxford, where she attended as a Rhodes Scholar and trained in genetics and immunology under the supervision of Professor Richard Cornall and Professor Sir John Bell. An accumulation of inspirations, including traveling through southern Africa after Oxford, led to a refocus toward global health. Witnessing both the strength of women to sustain their families and communities, and the vulnerability of these same women to the consequences of poverty inspired Dr. Silver to apply herself to health issues of women in developing countries.

Howard Sobel, M.D., M.P.H., has been with the WHO since 1999. He has worked in the area of expanded immunization program, maternal and child health at the WHO headquarters, and at country offices in Cambodia, Guyana, and the Philippines. He is now working in the Western Pacific Regional Office as Regional Coordinator, Reproductive, Maternal, Newborn, Child and Adolescent Health Programs. His field of expertise includes public health, clinical, and preventive medicine.

Jan van Ravens is a senior policy maker and consultant, affiliated to the Child Study Center at Yale University. In recent years he supported early childhood policy development in Albania, Armenia, Azerbaijan, Bangladesh, Bosnia and Herzegovina, Ethiopia, Georgia, Indonesia, Jordan, Kosovo, Kyrgyzstan, Laos, Macedonia, Montenegro, Nepal, Nigeria, Pakistan, Panamá, Romania, Serbia, Sierra Leone, Tanzania, Uganda, and Uzbekistan. As member of a research team from Yale and Harvard he studied the governance of child policy in Colombia, Kenya, Perú, and Uganda. Former positions include Senior Policy Analyst in a UN-team that issues the annual Education for All Global Monitoring Reports; Head of International Affairs in the Dutch Ministry of Education, Culture and Science; and coordinator of Higher Education and Lifelong Learning in the Dutch Ministry of Economic Affairs. Having participated in international networks (UNICEF, World Bank, Organisation for Economic Co-operation and Development [OECD], European Union [EU], UNESCO) he values international comparison as an important means to better understand and improve the functioning of national systems for education, health care, and social protection. Graduated at Leiden University, he has published about 75 titles—partly academic, partly more journalistic—on early childhood policy and on education.

Emily Vargas-Barón, Ph.D., directs The RISE Institute, a global authority on policy development in early childhood development (ECD) and early childhood intervention (ECI). She also conducts advisory services and research projects on ECD policy planning and implementation. She has helped more than 20 countries develop their national policies and strategic plans for ECD, and she has helped 4 countries design their national ECI systems and program policies and procedures. Previously she was a Deputy Assistant Administrator for U.S. Agency for International Development, directing the Center for Human Capacity Development that provided global support for education, training, and telecommunication programs in 80 nations. In the State of Texas she founded and led for 15 years an ECD/ECI institute (Center for Development, Education and Nutrition [CEDEN] now called ABC Child and Family Resource Center). She was an Education Advisor for the Ford Foundation in the Andean Region of Latin America, based in Colombia for 6 years. She also served as a policy and program specialist in UNESCO for 4 years. She has published several books and many journal articles, principally on ECD, ECI, and educational development. She has a Ph.D. in Anthropology from Stanford University, with a specialization in international educational planning.

Hirokazu Yoshikawa, Ph.D., is the Courtney Sale Ross University Professor of Globalization and Education at New York University's Steinhardt School of Culture, Education and Human Development. He is also the cochair of the UN Sustainable Development Solutions Network (SDSN) Workgroup on Early Childhood Development, Education, and the Transition to Work, and serves on the Network's Leadership Council. He is a community and developmental psychologist who studies the effects of public policies and programs related to immigration, early childhood, and poverty reduction on children's development. He conducts research in the United States and in low- and middle-income countries, including studies on early childhood development and policy in Cambodia, Chile, Colombia, and other countries. His recent books include *Immigrants Raising Citizens: Undocumented Parents and Their Young Children* (2011, Russell Sage). He has served on the BCYF of the National Academies of Sciences, Engineering, and Medicine, the Early Childhood Advisory Committee of the Inter-American Development Bank, and the U.S. Department of Health and Human Services Advisory Committee on Head Start Research and Evaluation for the Clinton and Obama Administrations. In 2011 he was nominated by President Obama and confirmed by the Senate as a member of the U.S. National Board for Education Sciences. In 2013 he was elected to the National Academy of Education. He obtained his Ph.D. in clinical psychology from New York University.

Min Zhou, Ph.D., is currently Tan Lark Sye Chair Professor of Sociology, Head of the Division of Sociology, School of Humanities and Social Sciences, and Director of the Chinese Heritage Centre, Nanyang Technological University, Singapore. She is also Professor of Sociology & Asian American Studies and Walter and Shirley Wang Endowed Chair in U.S.-China Relations & Communications, University of California, Los Angeles (on leave). Dr. Zhou's main areas of research include international migration, immigrant integration, the new second generation, ethnic/racial relations, immigrant communities, Chinese Diaspora, Asia and Asian America, and urban sociology, and she has published widely in these areas, including 14 books and more than 160 journal articles and book chapters. She is the author or co-author of *Chinatown* (1992), *Growing Up American* (1998), *Contemporary Chinese America* (2009), *The Accidental Sociologist in Asian American Studies* (2011), and *The Asian American Achievement Paradox* (2015). Currently, Dr. Zhou is working on three projects: Inter-Group Relations and Racial Attitudes Among Chinese Locals and African Merchants in Guangzhou, China; Chinese Immigrant Transnationalism; and Highly Skilled Chinese Immigrants in Los Angeles and Singapore."