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Quality of Early Childhood Development Programs in Global Contexts Rationale for Investment, Conceptual Framework and Implications for Equity

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Abstract

Across nations, Early Childhood Development (ECD) programs are of great interest to policymakers, service providers, and families. ECD programs are cross-cutting, often involving the health, education, child welfare, and other sectors, and their emphases shift over the early childhood years. In this paper, the authors propose equity as the construct central to the provision of ECD programs in an international context. Equity can be conceptualized relative to two components, access and quality. In the past there has been greater focus on building access to ECD program services with less emphasis placed on quality, particularly when programs are taken to scale in low- and middle-income (LAMI) countries. Quality is a key feature because when programs of low quality are provided, they are unlikely to generate the child and family outcomes intended. Moreover, quality is a relevant feature across all levels of the ecological system. To effect sustainable and meaningful change in ECD programs in developing countries, features of access and quality, must be addressed at each level of the ecological system. The paper presents a conceptualization of quality across settings and systems and identifies implications for policymakers, practitioners, and researchers on how they can work together to measure, improve and sustain program quality.

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From the Editors

The international community, as reflected in the United Nations *Convention on the Rights of the Child*, advocates for the provision of programs and services that will foster the early development and well-being of children and their families. In this paper, Britto, Yoshikawa, and Boller provide important clarity about early child development (ECD) programs. They note the multidimensional features of ECD (i.e., health, protection, welfare, and education), and how these features change across the early childhood years. Although these program features at times occur independently, the authors note that a holistic approach would be more advantageous. For example, designing programs that emphasize health, nutrition, and early development across early childhood years, rather than the shift from health to education at age 3, would be advantageous.

Establishing “equity” as the primary theme that should guide ECD programs is an important contribution of this paper. Its importance lies in the delineation of equity as both access to ECD services and the quality of such programs. The authors note that access alone has often been the criterion guiding program development, but that access to a poor quality program is unlikely to produce the important outcomes for children and families. Britto and colleagues take the discussion of equity and particularly quality out of the local program context and up through the ecological system. This ecological systems conceptual framework is a very important contribution. While individual efforts by donor organizations, NGOs, or international foundations may have impacts in individual communities, questions exist about how sustainable such efforts may be. By expanding the conceptualization of equity, access, and quality to the broader regional and national context, the authors build on the wisdom of Bronfenbrenner’s ecological systems theory and the lessons that are beginning to be learned from implementation science (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

Three scholars commented on this paper and raised important points. Yousafzia noted the large variety of ECD programs that exist and the continuing gaps in the field’s knowledge of individual program features and their fit with cultural contexts of communities and children. Biersteker, in agreement with the authors, emphasized the importance of an integrated continuum of services, which will require a new set of quality indicators. Hardin noted the potential impact of technology on the provision of quality in ECD, the inequities in access to technology in developing countries, and the potentially changing world environment regarding access. Also and importantly, she discusses the importance of including the often “excluded” members of communities in ECD programs, such as children with disabilities and their families or children from cultural or linguistic minority groups.

In conclusion, Britto, Yoshikawa, and Boller challenge the field to view ECD programs in a new and broader perspective that includes but also looks beyond local program context to regional and national variables that will promote ECD equity. Their discussion of these issues is very aligned with SRCD’s strategic initiative addressing international issues and supports the use of developmental science in an international context.

— Samuel L. Odom (Issue Editor)
Donna Bryant (Editor)
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Quality of Early Childhood Development Programs in Global Contexts

Rationale for Investment, Conceptual Framework and Implications for Equity

Introduction

Fueled by neuroscience, economic data and program evaluation results, children's early years are emerging as a public policy focus around the world. Neurological and biological sciences have documented the malleability of early neuronal and biological development to environmental influence (Harvard Center on the Developing Child, 2010; Knudsen, Heckman, Cameron, & Shonkoff, 2006). Economic evidence highlights particularly high returns to early investment in human capital (Heckman & Krueger, 2003). Evaluation science underscores that quality early childhood programs impact both early and later human development, in cognitive, health and socio-emotional domains (Aboud, 2006; ACF, 2002; Pence, 2008; Woodhead & Oates, 2009; UNESCO, 2010). In short, early human development and services and programs for young children and families are being seen as one of the most promising approaches to alleviating poverty and achieving social and economic equity for the world community (Engle et al., 2007; Grantham-McGregor et al., 2007; Ulkuer, 2006).

A majority of the world's youngest children suffer one or more forms of severe deprivation and risk, such as poverty, disease and exposure to violence (UNICEF, 2009). As a result, they either fail to survive (infant and under-5 mortality rates, worldwide, are at 4.3% and 6.1%, respectively; World Bank, 2010) or fail to thrive. Over 200 million children under 5 years of age are not achieving their developmental potential, due to poverty, stunting and malnutrition (Engle et al., 2007). Many who could benefit the most from early childhood development programs cannot access them due to household risks or structural barriers to access (UNESCO, 2007). This is particularly relevant for children with disabilities who have minimal opportunities (Betts & Lata, 2009). These glaring disparities in outcomes and opportunities across countries, and in most cases within countries, are driving an international agenda to achieve equity.

In this article, we define early childhood development (ECD) to include the development of health, learning and behavior from the prenatal period through the transition to primary schooling. In addition, ECD services or programs refer to the broad range of supports for young children and families. These can cover areas of health, early learning and education, family support, and attention to social protection (e.g., poverty reduction) and child welfare.

We define equity for ECD with respect to equitable access and opportunity for quality programs and services. Access has been a primary thrust, guiding action towards reducing disparities. International policy guidelines, such as the *Millennium Development Goals* (MDG; UN, 2000) and the *Education for All* (EFA; UNESCO, 2000), tend to stress country-level enrollment as an indicator of progress, which could be considered a limited approach to improving equity in ECD. A sole focus on expansion and access to ECD can yield mixed results in the achievement of actual improvement in children's outcomes (UNESCO, 2006; Yoshikawa et al., 2007). This is because providing more access to ECD services is not always accompanied by improvement in quality of services. Research shows that the quality of programs, as indicated by multiple dimensions, such as cultural appropriateness, staff skills, intensity and duration, and features of the physical and social environment of programs, is key to improving health, cognitive and socio-emotional development (ACF, 2002; LaParo, Pianta, & Stuhlman, 2004; Paulsell, Boller, Hallgren, & Mraz-Esposito, 2010; Yoshikawa, 1994).

The focus of this report is to shed light on the conceptualization, current status, and future directions for quality of ECD programs globally. If we are to achieve equity in child outcomes within and across nations, the solution lies not just in increasing access, but in improving quality. In the first section, we provide some context for understanding issues of conceptualization and measurement of early childhood program quality in a global

context, including brief overviews of the international ECD program landscape; the international policy landscape; and a discussion of how equity in ECD is linked with access to and quality of programs. In the second section, we present a framework for conceptualizing and measuring quality in ECD programs in global contexts, and current gaps in design and implementation of quality measures. The framework proposed in this section focuses not only on improving, but also on sustaining program quality. In the third section, we discuss implications for the development of public policies and ECD services, for research on ECD quality, and for how policy makers, practitioners and researchers can work together to document, implement, improve and sustain quality.

Early Childhood Programs and Policies in the Global Context

Landscape of Early Childhood Programs

Historically, the genesis of ECD programs varies by regions of the world (Kamerman, 2006). We use the UNESCO regional division to provide a brief historical overview of ECD programs. During the 19TH century, publicly- and privately-funded programs for young children emerged to take care of the survival and health needs of sick and abandoned children in Europe and several newly industrialized countries. With respect to early education and care, around the 1960s, parents of primarily middle-income children in these countries increasingly sent them to programs for socialization and

Key Terms and Definitions

- **Access:** The availability and provision of programs and services for all children.
- **Child Protection:** Measures taken to protect children from violence, exploitation and abuse.
- **Early Childhood:** Conception through 8-years of age.
- **Early Childhood Development (ECD):** Refers to the early childhood period and the broad range of set developmental and integrated services for young children and families.
- **Early Childhood Care and Education (ECCE):** Focuses on one type of ECD service: child care and education of young children.
- **Equity:** Assurance that the greatest possible opportunities for quality early childhood programs are available for *all* children and families.
- **Holistic:** Multidimensional development that accords attention in an integrated manner to all domains of survival, growth, development and learning.
- **Human-Rights-Based Approach:** Recognizes that all persons, irrespective of race, color, gender, language, religion, opinions, origins, wealth, birth status, or ability need special care and have civil, cultural, economic, political and social rights.
- **IMCI:** Integrated Management of Childhood Illness
- **Integrated Services:** Where multi types of services are offered jointly, for example nutrition and early education programs. In such programs, children get food, physical health guidance and support and also learning instruction and education.
- **Intersectoral:** When one or more sectors come together to design, coordinate, facilitate, implement, monitor and/or fund a program.
- **Preprimary:** The 1 or 2 years of formal education prior to primary school, which begins in grade 1.
- **Quality:** The critical ingredient of programs linked with child outcomes; a dynamic, flexible and adaptable construct that contours itself across cultures, settings, time and types of intervention.
- **Sectoral:** A division of social programming, for example, health, or education.
- **Social Protection:** Measures taken to protect a community or society's members from economic and social distress.

education. Increases in women's labor force participation also raised demand for out-of-home care in the early years (Witte & Trowbridge, 2004). In Latin America and the Caribbean, ECD programs are documented on a national scale from the 1970s, with variations noted in program models and government sponsorship. In most Latin American countries, the basic health care of infants and toddlers is the responsibility of families and governments, and responsibility for access to educational opportunities for older preschool aged children is associated with private donors and foundations. However, recently, government investment in preschool has increased (Vegas & Santibañez, 2010). Historically, ECD programs in Africa have indigenous roots prior to documentation of programs and colonial influences (Prochner & Kabiru, 2008). In Africa today, kinship care is one the primary modes of care for children younger than 3 years of age with an emphasis on community-based delivery systems (Marfo, Biersteker, Sagnia, & Kabiru, 2008). For

older children, centers predominate, ranging from a room attached to a primary school to less formal settings. For example South Africa has introduced a *Reception Year* of compulsory schooling prior to 1ST grade, located in the primary school, and Zimbabwe has ECD centers that operate out of health, community, and church-based centers (Biersteker, Ngaruiya, Sebatane, & Gudyanga, 2008). Asia and the Pacific region are home to some of the largest ECD programs; [e.g., the Integrated Child Development Service (ICDS) program], the Indian government's major

ECD intervention strategy since 1974. However, poorer nations in the region have only recently begun investing in ECD programs at national scale (Britto, Cerezo, & Ogbunugafor, 2008; Yoshikawa, Oh & Seder, 2010).

Achieving the vision of global, regional and country-level equity for ECD requires attention to the child, family and broader contextual roots of positive health, learning and behavior in the first years of life. This perspective from developmental science has led to the consensus that integration of services across health, nutrition, education, child welfare, protection from violence, as well as attention to the economic well-being of parents and caregivers (often termed social protection) are required across the entire early childhood period (Aber, Yoshikawa, & Beardslee, 2011; Britto, Ulkuer & Meyers, 2010; Engle et al., 2007; National Forum on Early Childhood Programs and Evaluations, 2007). The diversity in ECD programs varies across several dimensions. In this paper we examine the following dimensions identified as critical for ECD (UNESCO, 2007): the target age of children served (e.g., infants, preschoolers), method of service delivery (e.g., home-based, center-based), focus of the program (e.g., health, education), and actors sponsoring and implementing the programs (e.g., state, private sector). It should be noted that these dimensions are not always discrete (e.g., home-based services could include home-visiting programs for mothers and non-formal child care operated from a home). Integrated programs, while being a goal, are not the most common approach.

In Figure 1, we use a developmental perspective to describe the types of services (individual items), sectors (row headings), actors (government; non-government; private for profit), and target populations (icons indicating child; parent and child; parent) under which the services are implemented. As illustrated in Figure 1, programs typically can be divided into three age groups, as delineated by the three columns. The age range is derived from the CRC and the age groupings from the development literature. The first column represents programs that serve children and families from the prenatal period to 3-years of age; the second column represents programs for children from 3- to 6-years; and the third column represents programs that serve children from 6- to 8-years. While we have used an internationally accepted age range for ECD, supported by the developmental literature, individual countries do not always adhere to this age range [e.g., age of school entry differs across countries (UNESCO, 2007)]. Approximately 50% of all countries report government or NGO-sponsored programs for children 3-years of

age and younger; 70% of countries report such programs for preprimary age children (UNESCO, 2010). If only low and middle-income (LAMI) countries were included, the percentages would be much lower.

A variety of actors provide ECD services. In most countries, for example, governments implement immunization programs and/or nutrition programs through national health systems. As stated previously, one of the largest government sponsored early childhood programs is ICDS in India.¹ However, in a majority of the world's countries, ECD programs are also and often predominantly supported by civil society organizations, including development agencies, international and national NGOs, and social foundations. The most prominent actors amongst the international NGOs, including *Save the Children*, *Plan International*, *Child Fund International*, and *World Vision*, are present in more than 100 countries. With respect to foundations, Aga Khan Foundation, Bernard van Leer Foundation and Open Society Institute are vibrant examples of international foundations supporting ECD programs. The private, for-profit sector is another emerging leader in provision of ECD services, particularly in supporting preprimary, classroom-based services but could potentially lead to inequity in opportunity and access to services (Woodhead, Ames, Vennam, Abebe, & Streuli, 2009). This growth has been supported in large part by parents who are electing to use private health facilities and send their children to programs implemented privately on a fee-for-service basis. In many LAMI countries some parent contribution (in the form of fees collected by the school/sponsoring organization, or food or staples provided to the teacher) is expected, regardless of the sponsorship of the program.

While one or more of these actors tends to take the lead in ECD programs in a given country, ECD programs tend to fall into a sector, for example, health and nutrition, education, child protection or social protection, depending on the focus of the program. The two dominant sectors for ECD programs are typically in the health and education sectors. For example, in some countries, programs for the youngest children (e.g., prenatal to 3-years of age) are primarily led by the health sector (e.g., Sri Lanka, Chile, Brazil). These programs often include immunization and/or nutrition programs implemented by the health ministry, a home-based program implemented by an NGO, and fee-based health clinics operated by the private sector. While health tends to be the lead sector during infancy and toddlerhood, the baton often transfers in the preschool years to the education sector (in

Figure 1: Categorization of ECD Program

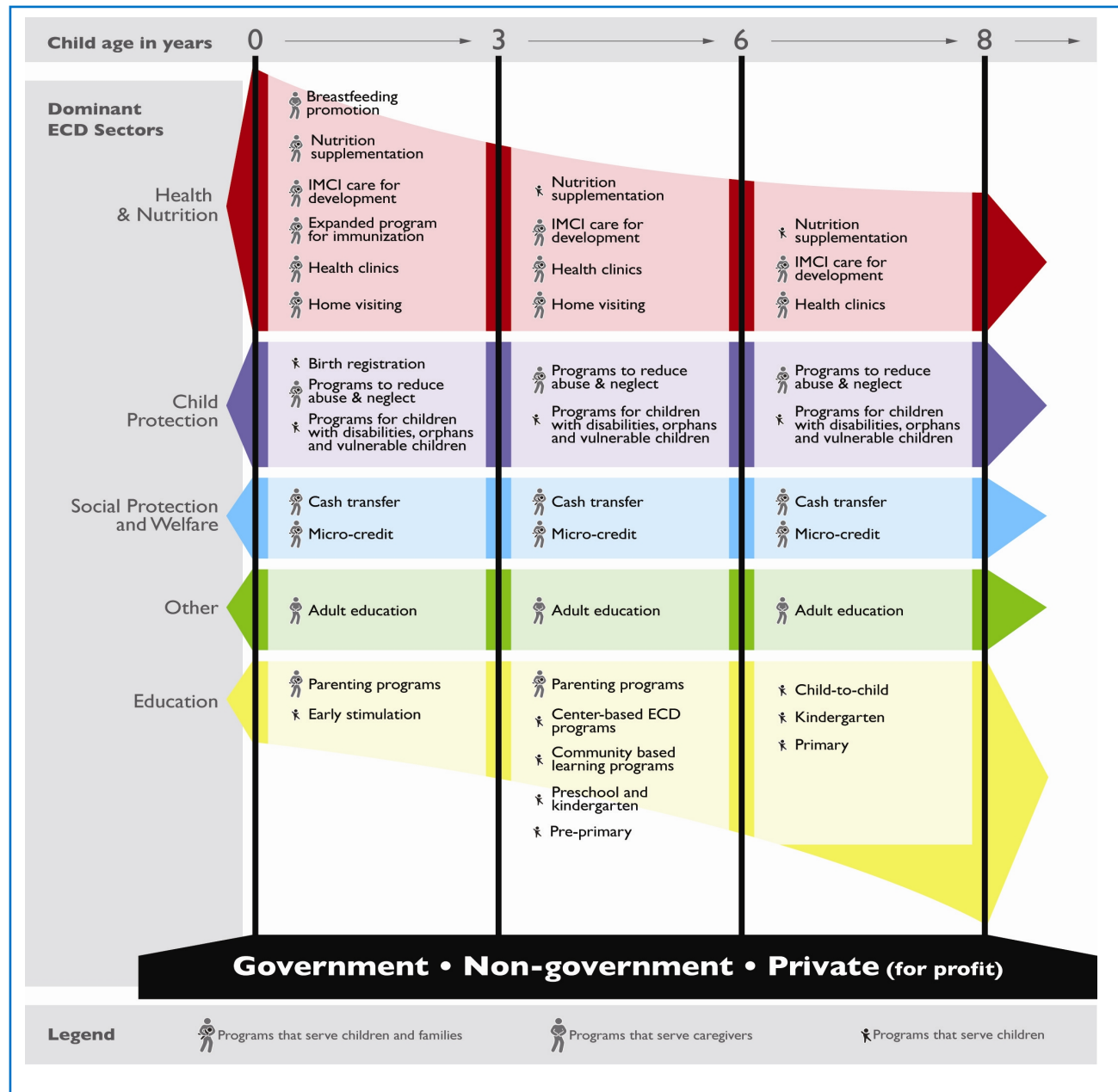


Figure 1, this is denoted by the increasing prominence of education, and decreasing prominence of health and nutrition, as one moves from the first to the third column). However, this transition is often not coordinated. In addition, most ECD health programs remain focused on child survival and physical health rather than holistic approaches including cognitive stimulation and support for socio-emotional development. This occurs despite in-

creasing evidence of the holistic approach having greater impacts on health and learning (Engle et al., 2007). Gaps in services and lack of alignment within and across programs and sectors thus have direct implications for children’s outcomes (UNESCO, 2007).

An array of settings and modes of service delivery characterize ECD programs: homes, centers, community settings and schools (UNESCO, 2007). As noted before, the

mode of service delivery is not linked with a sector or major actor. Many programs have multiple modes of service delivery (e.g., some home-based programs also offer center-based counseling for mothers). There are general patterns linked with child age—for example, home-based programs are rare for the 6- to 8-year group, because children by this age are more independent, mobile and often participating in formal schooling.

Finally, target populations differ across ECD programs, and can include groups of parents, children or providers. Parenting programs typically target caregivers and parents of young children (*Better Parenting Program*, Al-Hassan & Lansford, 2010). Some provide services to parents separately from children, while others provide services to parents and children together, and still others to entire households or communities of families. Center-based or other programs for children typically, but not always, target groups of children ranging from very small groups to larger classrooms (*Madrassa Early Childhood Program*, AKF, 2008). Providers can be the target of training and professional development programs. These can include health workers, teachers and caregivers (*Lady Health Workers Program*, Yousafzai, 2010). Programs that serve children and families from birth to 3-years of age tend to focus on parents and children as their target populations. Examples include the family-oriented ECD Programs in Colombia (Arango, Nimnicht, & Peñaranda, 2004), the *Educa a tu hijo* (*Educate Your Child program*) in Cuba (Tinajero, 2010) and the *Roving Caregivers Program* in the Caribbean (Powell, 2004). As noted in the last two columns, in the preprimary and early primary years, children are most commonly the principal recipients of ECD programs. Education predominates in these programs: kindergartens and nursery schools, early education and preschools adjunct to primary schools, child care programs such as playgroups, and community-based programs.

Service providers are the individuals who deliver the intervention, regardless of mode or setting across the range of programs. In LAMI nations, where the majority of the world's children reside, many ECD programs exist in which the role of the service provider is taken on not only by teachers, caregivers, or profession-

als and paraprofessionals as in much of the industrialized world, but also by parents, relatives, community members or even children themselves (e.g., older siblings in a child-to-child approach; Hawes, 1988; Hosain, 2010). In some instances, the boundary between “target population” and “service provider” is blurred, as in social network interventions harnessing mutual support among parents, caregivers or children.

Variation in ECD program types, sectors, actors, and target populations is much wider within and across dimensions when considered globally, rather than in only the rich nations. The mosaic of ECD programs depicted in Figure 1 thus makes for a rich, yet complex, set of settings within which quality needs to be understood and improved.

Landscape of International Policies Linked with ECD

Much of the world community is committed to moving towards eliminating disparities between and within countries in the achievement of human potential. In addition to the economic argument for ECD programs described at the very beginning of this report, two types of international tools initiated by the United

Nations and international development agencies are catalysts for equity: human rights conventions and economic and social development frameworks. By influencing national social policies, these tools have the potential to act as agents of change in reducing social and economic disparities. The tools for ECD programs and policies that dominate the world stage are the *Convention on the Rights of the Child* (CRC), the preeminent human rights framework, and the *Millennium Development Goals* (MDGs) and *Education for All* (ERA) frameworks for economic and social development.

The CRC has been the most powerful human rights tool for early childhood (Committee on the Rights of the Child, 2006). It focuses on the rights of a child from an ecological development perspective, where the most proximal contexts (e.g., family) to the most distal level

contexts (e.g., international policies) are discussed with respect to their impact on child development (Hodgkin & Newell, 2007). The CRC maintains that child survival, development, protection and participation are the result of

Variation in ECD program types, sectors, actors, and target populations is much wider within and across dimensions when considered globally, rather than in only the rich nations.

the combination of child and context, with context defined very broadly (i.e., including country; Britto, 2002). This rights-based approach is the basis for early childhood programming in many countries of the world (Britto & Gilliam, 2008). For example, in Jordan, one of the principles underlying the *Better Parenting Program* is child rights to protection and development (Al-Hassan & Lansford, 2010). The implementation guidance supplementing the CRC provides information on how to foster environments and contexts to promote the holistic development of all children (Britto & Ulkuer, in press). Equity is the foundation of the CRC—it clearly upholds the rights of *all* children regardless of gender, age, region within countries, ethnicity, or socioeconomic or ability status.

As economic and social development frameworks, the MDGs strive to end poverty and gender disparities and improve health and education for *all* of the world’s citizens, while the EFA guidelines strive to achieve similar goals through an emphasis on education. In 2000, 191 countries signed the MDGs with the goal of achieving social and economic development globally by 2015 (UN, 2000; see sidebar). The EFA is sponsored by major development agencies including UNESCO, United Nations Development Program (UNDP), United Nations Population Fund (UNFPA), UNICEF, World Bank, and other NGOs, and was officially endorsed by 160 countries in Jomtien, Thailand in 1990 (UNESCO, 1990).

The three declarations are strong motivators of national policies that directly and indirectly impact ECD services (UN, 2010). EFA is particularly important for ECD programs, not only because the first and second goals directly address enrollment and access to early childhood programs and primary education, but also because the EFA was one of the first international declarations to endorse the evidence that “learning begins at birth,”

a strong statement supporting programs for infants and toddlers advancing the idea that families and communities are important for early development (Kagan & Britto, in press). CRC, the most universally endorsed Human Rights treaty², is invoked in the planning and implementation of national policies and is; therefore, relevant to ensuring equity in ECD. The three declarations do not, however, speak more directly to holistic development and the integration of services that are required to achieve it. For example, a concern about MDGs is that their focus on child survival has reduced attention to more holistic approaches focused on quality of children’s early experiences.

Equity through Quality and Access

We posit that achieving equity in ECD rests on two inter-linked dimensions, access and quality—equity is assurance that the greatest possible opportunities

for quality early childhood programs are available for *all* children and families. Therefore, embedded in this conceptualization is access, the availability and provision of programs and services for all children, and quality, the critical ingredient linked to improved child well-being.

Estimates of program access have been typically difficult to obtain because of the limited availability of reliable data (Nonoyama, Loiaza, & Engle, 2006). For newborns and infants, the data usually correspond to access to health services, a domain where notable improvements have been recorded. In 2007, approximately 80% of children under 1-year of age had access to immunizations (UNDP, 2007). While this is an increase over previous years and is evidence of a strong, positive trend, it still falls below epidemiological goals of optimal immunization thresholds. For preschool-aged children, the number of children in preprimary education³ has tripled in the past 3 decades. In 1970 it was estimated that 44 million were

GOALS OF THE INTERNATIONAL DEVELOPMENT FRAMEWORKS

Eight Millennium Development Goals (MDGs)

- Goal 1: Eradication of extreme poverty and hunger;
- Goal 2: Achieving universal primary education;
- Goal 3: Promoting gender equality and empowerment of women;
- Goal 4: Reducing child mortality;
- Goal 5: Improving maternal health;
- Goal 6: Combating HIV/AIDS, malaria, and other diseases;
- Goal 7: Ensuring environmental sustainability;
- Goal 8: Developing a global partnership for development

Six Education for All (EFA) Goals

- Goal 1: Expanding and improving comprehensive early childhood care and education;
- Goal 2: Increasing access to universal primary education;
- Goal 3: Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs;
- Goal 4: Improving levels of adult literacy by 50% by 2015;
- Goal 5: Achieving gender equality in primary and secondary education by 2015;
- Goal 6: Improving the quality of education

enrolled. By 2006, the number had risen to 139 million (representing 48% of age-eligible children enrolled) globally, including developed countries (UNESCO, 2010). It is important to note that access to comprehensive, high-quality ECD services for children at risk for poor outcomes (those from low-income, single-parent families of diverse racial and ethnic backgrounds) remains an issue even in developed countries (Magnuson & Waldfogel, 2005). For example, disparities in government investment and access within and across nations show that Mexican American 4-year-olds in the U.S. have a lower probability of attending preschool than their counterparts in Mexico (Yoshikawa et al., 2007).

Focusing on LAMI countries, on average approximately 10% of preschool aged children have access to some type of ECD services (UNESCO, 2007). However, this average hides the tremendous disparities that exist in access around the globe, both from a human development and world region perspective. The lowest enrollment rates in early care and education (ECE)⁴ programs are found for the youngest children (i.e., under 3-years of age). For children 3-years of age, participation in ECE programs ranges from 5% to 20%; for 4-year-olds from 25% to 75%; and for 5-year-olds from 2% to 55% (UNESCO, 2007).

While this range in enrollment is closely linked with income diversity across and within countries, higher-income countries demonstrate substantially higher rates of enrollment in ECE programs compared to lower-income countries (UNESCO, 2007). There are also a myriad of additional factors linked with these low enrollment rates, including limited resources, access, and shifts in national monitoring data. While overall there has been an increase in recent years in access to ECE programs in developing countries, some have experienced declines (for example, in Central Europe and the Commonwealth of Independent States, due to post-Soviet Union economic and political transitions). Within-country comparisons reveal that on average, 10- to 30-percentage-point differences in access to ECD programs exist between rural and urban areas of a country, with greater disadvantage and less access in rural areas. Family income status is linked with enrollment in programs, with children residing in families within the highest income quintile group most likely to attend. With respect to family composition, children from larger households are less likely to have access to ECD programs compared to children from smaller families. Gender differences, however, are generally low—less than 10-percentage-point differences between boys and girls. This pattern can be explained

in part by recent global initiatives to increase gender equity in programs, including ECD programs (AED, 2009). Most recently due to increased attention to ECD, monitoring of national policies has become more precise, which has led to shifts indicating lower rates of enrollment (UNESCO, 2007).

With reference to quality, this rich tapestry of ECD programs creates complexities with respect to not only identifying dimensions of quality that would be important for the programs, but also for measurement. The measurement of quality is most likely going to vary, based on dimensions such as sponsorship of the program, interactions, settings and contexts. While access is very much an emphasis of international and national efforts in ECD programs and policies, quality, as an interlinked dimension, appears to be lagging. In sections 2 and 3 of this report we continue to build on this argument by presenting a broad conceptualization of quality, a concomitant measurement model and the implications of focusing on the quality dimension of equity for policy makers and researchers.

Conceptualization of Quality of ECD Programs and Policies at Setting and Systems Levels

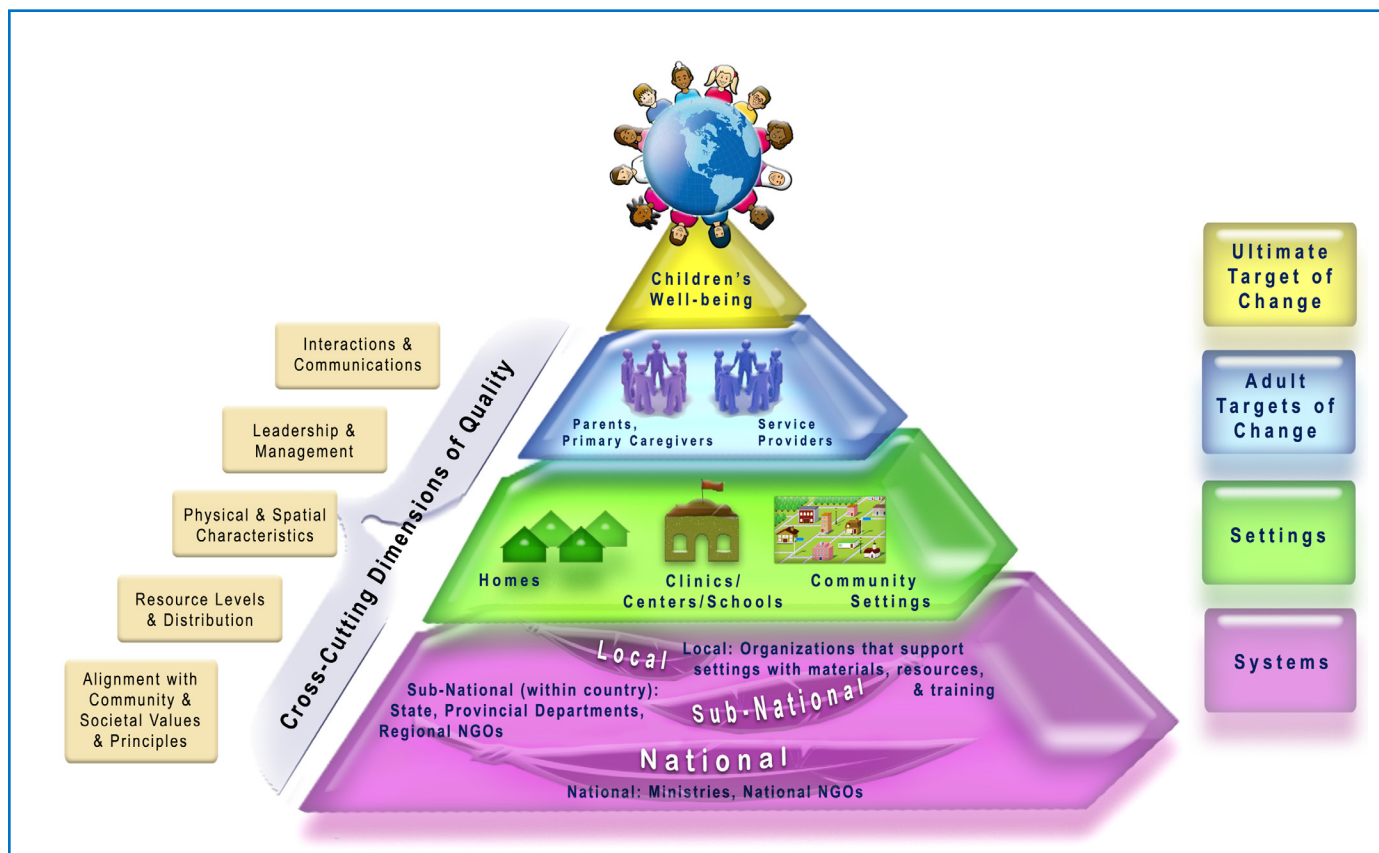
In this section, we describe a conceptualization of the quality of ECD programs and policies from an ecological systems perspective that encompasses settings that relay resources and services for young children and families (see Figure 2). Such a perspective allows for the measurement of quality not only in the proximal social settings of child development and interactions therein, but also across levels of systems that are important for program or policy implementation, [e.g., from the community or local to sub-national and national levels (Tseng & Seidman, 2007; Yoshikawa & Hsueh, 2001)]. The conceptualization is meant as a framework to guide choice of level and target for measurement of quality. Our central premise is that the existing literature on quality measurement of early childhood care and education, primarily from the high-income nations, must be broadened considerably to conceptualize quality in wider global contexts. In addition, a “one size fits all” approach to ECD services is not appropriate, in that quality measurement requires grounding in country and community context, values, and needs.

ECD programs and policies are not likely to positively affect children’s development and well-being un-

less they are implemented with adherence to standards of quality (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; National Forum on Early Childhood Program Evaluation, 2007). However, it should be noted that the quality dimensions considered important vary by setting of service provision and world regions. Dimensions of ECCE program quality typically studied in high-income countries include safety and adequacy of physical environments, the nature of teacher- or caregiver-child interactions, the pedagogical and content knowledge of staff, staff education and training, and a comprehensive approach that addresses multiple domains of family and child functioning (ACF, 2002; Boller et al., 2010; Boller, Strong & Daro, 2010; Halle, Vick Whittaker, & Anderson, 2010; Howes et al., 2008; LaParo et al., 2004; Love et al., 2003; Paulsell et al., 2010). Dimensions of quality ECD programs, beyond early learning programs, studied in LAMI countries include additional characteristics, such as attention to cultural feeding, caregiving practices and survival issues (both disaster and non-disaster situations), training of health service providers and combination of physical growth and psychosocial interventions (Richter, 2004).

The predominant approach to measuring the quality of ECD programs and policies in LAMI countries has been to conduct child assessments and report aggregated data at the program, local, regional or national levels (Brienbauer, 2008; Guhn, Janus, & Hertzman, 2007). In addition, measurement has focused on indicators of child development for national and international purposes, for example indicators of child health, growth and language development (UNICEF, 2008). Most of these efforts have been carried out for policy advocacy purposes, rather than program evaluation or quality improvement. While critical, this is a limited approach to examining quality. It does not provide information concerning the actual quality of services or resources provided, and thus the guidance that child indicators can provide for actual steps to improve quality at the local program or systems level is lacking. Also missing are efforts to identify local perspectives regarding the purposes, intents and desired outcomes of early childhood care provision and forms of care that would appropriately address such desires (i.e., the match between cultural needs, context, goals and services). In addition, most of the claims made about changes in children's outcomes

Figure 2: Ecological Setting and Systems Levels and Cross-Cutting Quality Dimensions



are based on pre-post data that cannot support causal inference. This growing attention to quality highlights the abyss in understanding and measuring the quality of early learning and development environments in developing countries that are moving towards equity by expanding and scaling up ECD programs and policies.

Efforts to assess quality in ECD programs require attention to how quality dimensions are developed and conceptualized (Moss & Dahlberg, 2008; Pence, 2008) and to ecological systems levels at which quality can be measured, incorporating structural and process quality (Corter, Janmohammed, Zhang & Bertrand, 2006; Loeb, Fuller, Kagan, & Carrol, 2004). Our conceptualization of the quality of ECD programs builds on these two aspects. The ecological systems levels of the framework are divided into 1) settings and systems, and 2) five sets of dimensions, which cut across and can be considered at any of the settings or systems levels.

Child and adult targets of change. Starting at the top of the pyramid, the effects of the quality of ECD programs on child well-being occur most proximally in the moment-to-moment interactions of children with adults and peers (i.e., across the top two levels of the pyramid). In most of the literature on program quality for groups of children (e.g., ECCE), this is a central dimension of process quality and is typically measured by caregiver characteristics such as affect, language, cognitive stimulation, responsiveness or behavior management approach.

We must also consider that some programs primarily target adults—parents/caregivers, child care providers, health and other service providers, and relatives/friends who care for children (the second level of the pyramid; Bekman, 2010). Children may be present in some of these programs, but not always. Quality in such programs can be measured through characteristics of adult-adult interactions, whether among, (e.g., parents who “receive” a program), between parents and their service providers (such as home visitor and parent) or among service providers (e.g., interactions among health educators, home visitors or preschool teachers). As mentioned previously, in many ECD programs the roles of “service providers” and “recipients” overlap, as in programs where mutual support is a key element in the theory of change. Nevertheless, in such cases, characteristics of adult-adult interactions may be central features of quality, which then in turn, are hypothesized to impact children’s health and development.

In our conceptualization of quality, from a developmental perspective, the focus is to some extent by

location and services, but largely by the target or recipient of EC services. Programs that directly intervene with parents and the home environment are often conceptualized separately from those targeting children and center-based care. This conceptualization of the adult or child target of intervention by type of service provider allows exploration of both the commonalities and differences among ECD program models and theories of action. Therefore, we use these categories as the guiding markers for discussing and conceptualizing program services and the resulting measurement framework. By using this conceptualization, we seek to be as comprehensive as possible in covering the targets and theories of action used in most programs and service delivery approaches supported by the majority of intervention developers and sponsoring agencies involved in ECD programs.

Settings and Systems. Quality is typically conceptualized at a local program or setting level. For example, the most widely validated measures of quality in ECD services are those that assess the quality of center-based programs, typically for preprimary-aged children. Quality is conceptualized as primarily referring to features of the classroom—either structural, such as staff-child ratio, qualifications and compensation of caregivers, and materials and physical features—or process, such as the quality of instruction and aspects of teacher-student and student-student interaction. A few measures tap the quality of dyadic interaction in parent-focused programs, such as home visiting.

We extend these two most commonly measured aspects of quality in center and home settings to include the broader range of social settings in which ECD programs are implemented in LAMI countries. Settings, building on conceptualizations by Barker, Bronfenbrenner, Seidman, Tseng, and others, are physical spaces within which ECD services are implemented (Barker, 1971; Bronfenbrenner, 1979; Shinn & Yoshikawa, 2008; Tseng & Seidman, 2007). They are physically and temporally bound spaces within which dyads or groups of people—in our case, members of target populations and/or interventionists—interact⁵. These may include health clinics, social networks, centers or community settings. Note that they may not always include the child, as is required in Bronfenbrenner’s conceptualization of microsystems. That is, some family support programs target parents alone; some professional development programs target providers alone, with their theories of change hypothesizing subsequent effects on children, but not through services provided directly to children. Our conceptualiza-

tion recognizes that early childhood programs may be implemented not only in centers or homes, but also in communal village spaces; in courtyards of buildings; or in workplaces of various kinds. The roles of “target population” and “service provider” are also more flexible, and often merged, in many ECD programs in the developing world. For example, the *Hogares Comunitarios* program in Colombia, the home-based preschool program in Cambodia, and other informal programs involve lead mothers who work with groups of mothers to model stimulating activities, provide information about health and nutrition, and facilitate mutual social support of various kinds (Bernal et al., 2009; Rao & Pearson, 2009).

A comprehensive view of quality in ECD programs and policies, particularly in the broader range of global contexts considered here, requires attention to ecological levels beyond the setting level, into the wider level of systems. Systems in our definition are the larger organizational and institutional structures within which ECD services are situated. We define systems at three levels—local support systems; sub-national systems; and national systems. Moving up from the setting level, we first define *local support systems* as those systems that provide direct support and training to local program sites—for example, to local health workers, care providers or lead parents in parent support programs. But local support may depend on a supervisory structure that is in fact national or sub-national. These can include local supply channels for material resources (e.g., cash, food), local delivery systems (such as local health centers that provide health services to ECD programs), and training and support structures (providing supervision and training for site-level service providers). The quality of these support systems is not often considered in conceptualizations of ECD program quality, but for many reasons, this level cannot be ignored. From a policy perspective, the most brilliantly conceptualized policy can fail if the local delivery channels (for example, providing cash transfers to households or food to local ECD programs) fail. A series of studies conducted on scaling up of ECD programs suggests that the quality of a local ECD program is critically dependent on the skills of the front-line service provider, whether that person is a home visitor working with par-

From a policy perspective, the most brilliantly conceptualized policy can fail if the local delivery channels ... fail.

ents, a preschool teacher working with groups of children and families, a lead parent working with other parents, or a health worker working with families or ECD caregivers (Young & Hommel, forthcoming). Support systems may be based in NGOs, provincial or district governance structures such as local health departments, or other organizations whose responsibilities often span multiple local program sites (e.g., the AKF early learning programs).

At the *sub-national systems* level (e.g., regions within countries, state, provincial, city or municipal levels), organizations or institutions may be responsible for administering local support systems or individual programs and providing support for coordination of the policy governance. For example, provincial departments of education, health or social protection may be responsible for coordinating systems that support local programs. They may also support local programs directly. These organizations or institutions may be private, public or a combination—NGOs, public governance structures or companies running networks of local programs. For example the district education board office in Lao PDR supports community-based efforts towards ECD (Britto, Dimaya, & Seder, 2010).

At the *national systems* level, countrywide institutions such as ministries of finance, education or health, national and international NGOs, or for-profit companies may administer particular aspects of ECD programs. Conceptualizing and measuring quality at these systems levels presents a challenge, in that ecological assessment of quality must occur at organizational and institutional levels and not all organizations are focused on ECD (Grover, 2010).

Dimensions of Quality Within and Across Settings and Systems. Within or across the three levels of systems and the level of settings, a variety of dimensions can be considered as aspects of quality. Our characterization encompasses dimensions that are not well captured by the structural versus process distinction that is most commonly used in the ECCE literature in the developed world. We propose five dimensions to quality that are applicable across ECD systems and settings.

First, an ECD program or policy’s *alignment with, and emergence from, the values and principles of a com-*

munity or society are basic to quality, but not easily characterized as either structural or process quality. In urban versus rural areas of a nation, for example, the “fit” of an early childhood learning program with local values and principles may be radically different (Dahlberg, Moss, & Pence, 2007). Establishing the meaning and understanding of quality is important and linked with values. In the global contexts of ECD, the values and principles that drive donor organizations may clash with local values and result in misguided implementations of ECD programs. The value of children changes across societies and in the process of industrialization. For example, children may be of instrumental (i.e., the work they can and will produce) rather than intrinsic value. It is the foundational principles that help to shape ECD policies and programs (Chen, Cen, Li, & He, 2005; Kagitcibasi & Ataca, 2005). At the setting and support systems levels, such societal values and principles might determine “child-centered” versus “adult-centered” emphasis (Britto & Kagan, 2010; Jukes, 2010). At the sub-national and national systems levels, there are many competing values at play, economic versus other rationales for investment in early childhood, and values concerning parental employment and public investment in out-of-home care; the prioritization of survival for children most vulnerable versus investments in aspects of children’s health, learning and behavior. Language disconnect between local and the more mainstream language used by the programs and service providers, in particular for ethnolinguistic minority populations, puts families and children at a disadvantage (UNESCO, 2003; 2005). These somewhat opposing perspectives can create paradoxes that different societies and governments resolve in different ways (Myers, 1992; Nsamenang, 2006).

Second, *resource levels and their distribution* within a setting or system are critical aspects of quality. We conceptualize resources, following Tseng and Seidman (2007), to encompass both material resources and human capital resources. At the setting level, levels of human capital and material resources can encompass the educational level of an early childhood caregiver or teacher, or the level of skills and training of a health worker. Disparities or differences in skills may become problematic when one considers the varying levels of human capital of workers in health, education, and nutrition in a particular setting. Material resources might include the existence of a water filter on site, the provision of nutritious meals or snacks, the quality of print materials or manipula-

tives and their accessibility, or the level of incentive in a conditional cash transfer program. At the systems levels, similarly, both human capital and material resources are important (Tseng & Seidman, 2007). The aggregate levels of human capital among trainers, for example, or the ratio of trainers to providers, which is contingent on financial resources provided to training and professional development, may be important at the systems level and affect quality at the lower setting level. The CONAFE preschool program in Mexico, for example, provides relatively intensive training at regional centers (2 to 3 days per month), which bolsters the skills of teachers who have relatively low educational qualifications. At yet higher levels, the resources devoted to ECD by private and public sources are important indicators of the quality of an ECD policy or program that go beyond the usual indicators of structural quality (Rafique, 2010; Raikes, 2010).

Third, the *physical and spatial characteristics* associated with an ECD program or policy are particularly critical in their responsiveness to basic needs and environmental dangers in the developing world. Reducing exposure to accidents and unanticipated threats is a key feature of quality in this sense. An adaptation of the *Early Childhood Environment Rating Scale* for preschools in rural and urban Cambodia, for example, incorporated an item regarding adequate boundaries in the space to prevent large animals from entering (Rao & Pearson, 2009). For children or parents with disabilities, accessibility issues may be important to consider—these are enormously varied in LAMI nations and contexts, and even more so than in the wealthier nations. On a more macro level and given the rise in natural disasters and young children’s exposure to armed conflict, the structural quality of environment needs to assess risks from ecological degradation and resulting shortages of basic resources (water, food, shelter, clean air) caused by these disasters (Britto, Vasquez, Barredo, Cerezo, & Rabino, 2010). Environmental sustainability is a key feature of structural quality for settings as environmental change is inevitable and natural resources are diminishing. Characteristics of this dimension of quality build on existing resources, avoid waste and increase children’s cognizance of the importance of the environment (Hart, 1997; Iltus & Hart, 1995). At the systems level, the adequacy of physical and spatial characteristics is not often considered. Examples might include the physical safety and security of a food warehouse serving a region within a country, or the spatial distribution of and materials available at early childhood training facilities, at local levels.

Fourth, the role of *leadership and management* in the quality of ECD programs is critical, and is again an aspect of quality that is not usually included in structural or process definitions (Myers, 2010; Talan & Bloom, 2004). Currently adapted measures of quality of leadership and management into multiple languages around the globe include the *Global Guidelines on Quality* (ACEI, 2006). At the setting level, the leadership and management of programs may encompass the prioritization of resources for ECD, relative to other urgent priorities, responsiveness to issues such as provider or teacher turnover. At the support systems level, characteristics of organizations—such as responsiveness to local staffing shortages, and capacity to grow the coverage and intensity of professional development opportunities and monitor local delivery channels for material resources—are important. At sub-national and national systems levels, intersectoral ECD policies require collaborative leadership and sharing of information across donor agencies, ministries and their associated sub-national organizations.

Finally, *interactions and communications* are a critical dimension of quality. The importance of supportive and reciprocal interaction between providers and parents, parents and children, and providers and children has been well-established across many countries (cf. Engle, 2010; Myers, 2010; Paulsell, et al., 2010; Roggman, Boyce & Innocenti, 2008; adaptation of the *Classroom Assessment Scoring Systems* (CLASS) measure in Chile; Rolla et al., 2010). In this dimension, we also include the nature of communications in recruitment of the target population and interventionists at the setting level, or trainers and administrators at the systems levels. Particularly in communities where participation in ECD services may not be a cultural norm, the recruitment language and mode of communication become important and are often the first experience of the quality of a program. Attention in recruitment to marginalized, vulnerable or excluded groups, such as immigrants without legal status, ethnic groups who experience discrimination, or children or parents with disabilities are important to consider as a dimension of quality. At all levels, from the setting to the national systems level, the role of communication and interaction across sectors of ECD services—health, nutrition, education, mental health, social and child protection—are critical. The purpose, content and frequency of such communication and interaction matters for a multi-sectoral ECD approach (Cappella, 2010; Stansbery, 2010; Yousafzai, 2010). Network characteristics such as density, multiplicity of modes of communication or resources of-

ferred, and contact across otherwise isolated networks are of relevance in the conceptualization of communication quality at the systems levels (Burt, 2001).

In summary, our conceptualization of quality is a dynamic, flexible and adaptable construct that contours itself across cultures, settings, time and types of intervention. While elements of quality might be universal, there are population-based specificities, for example with reference to cultural or world regional differences. Additionally, while defining quality, a wide range of perspectives should be taken into account, such as the client or family needs, program developer, program implementer, trainer, and broader private or public auspice, as these diverse perspectives influence the conceptualization. In practice, there is great diversity in the processes through which the conceptualization and measurement of quality occurs across global contexts. The development of a uniform definition of quality for an entire nation or population, moreover, may not be possible in all contexts. Finally, notions of quality can be understood and expressed in a variety of ways, and terminology matters (Frameworks Institute, 2007). The single term “quality” may suggest a uniform, measurable standard where none exists (Dahlberg et al., 2007). Suggested alternative terms include “effectiveness factors,” which are more specific and link program characteristics explicitly to improved child outcomes (National Forum on Early Childhood Programs and Evaluation, 2007). In some contexts, such terms may be more readily accepted and politically expedient in an era of evidence-based policy and programs.

Implications for Policy, Practice and Research

Despite recent impressive increases in investment in ECD globally, there is evidence that increasing access, rather than the quality of services and settings provided, has often been the focus of investments (UNESCO, 2007). As demonstrated by the literature, without a concurrent commitment to quality, intended gains for children’s prospects may be lost and disparities maintained. It is critical for nations to broaden their focus to include improved quality along with access as a way to achieve equity of outcomes for children. The improvement of quality in ECD programs is an urgent international issue, particularly as an increasing number of countries expand access to ECD. Yet tools for assessing ECD services and settings and the processes for embedding them in local, regional and national quality measurement systems are lacking. In this section of the report, we conclude with

Without attention to quality in programs we will not close the gap in child outcomes between the more and lesser advantaged.

implications of developing and using a program quality measurement framework for national policies and program practices. We also present implications for research and for how policymakers, practitioners and researchers can work together to improve ECD program quality.

Inclusion of Quality in Guiding Frameworks and Policy Development

Given the highlighted importance of equity in the *Convention on the Rights of the Child*, the development frameworks, such as the *Millennium Development Goals* and *Education for All* goals, and recent advancements in promoting an equity agenda by international agencies such as UNICEF, we argue that the conceptualization, measurement and improvement of quality for ECD programs, a key path to equity, must be on the agenda. We discuss implications for international and national levels of policy planning and programs.

As has been demonstrated in recent studies, albeit with a survival and health focus, and contrary to popular belief, reaching the most disadvantaged populations is cost effective. Recent cost benefit analyses demonstrated a greater return on investment to reduce infant and maternal mortality and under-nutrition for the poorest and most disadvantaged children and families (UNICEF, 2010). Given that the highest mortality and under-nutrition rates are in the most impoverished communities, provision of services has a greater impact than in communities with such existing access. Given that quality has been identified as the key in ECD programs, investment in quality should yield greater returns with respect to child outcomes and achievement of full potential, in the most impoverished settings (UNICEF, 2010), taking into consideration that traditionally health programs have documented a stronger impact on child outcomes compared to early learning programs. Quality becomes an equity issue because access to programs is insufficient in achieving potential outcomes.

As the international community moves towards articulating the next generation of social and economic targets (i.e., the current MDGs and EFA are to be achieved by 2015), policy makers and practitioners need to heed the call to quality. International frameworks that provide impetus for national level policies and are accompanied

by huge funding allotments would benefit from including indicators and targets for ECD program quality at the multiple ecological levels of systems and settings. This ecological framework is in keeping with international documents (e.g., CRC) and therefore applicable for the development of the new generation of targets. A global, overarching approach to measuring, ensuring, and sustaining quality based on the principles of the framework is a viable option. Without attention to quality in programs we will not close the gap in child outcomes between the more and lesser advantaged.

Strengthening National Systems to Support Quality Improvement

For national policies, the conceptualization and measurement of quality are as relevant as indicators of overall program access and provision. However, LAMI countries often have limited capacity to support quality improvement of ECD programs, and few resources to conduct program evaluation and measure program quality, equity in access to quality programs, and progress toward intermediate and long-term provider, family and child outcomes (Myers, 2006; Pence, 2008). Most programs also do not have the resources to conduct longitudinal evaluations of ECD programs and policies. Therefore, ECD programs seek viable short-term tools to assess program quality and impact on young children's holistic learning and development. Tools for assessing the full range of early childhood settings and systems, and the interactions among providers, parents, caregivers and children within them, are lacking.

As countries increasingly employ an evidence-based approach to program development and evaluation in ECD, there are existing country-level models to consider. Many countries have multiple sources of funding for ECD program implementation research, including investigator-initiated (a university or NGO-based researcher applies for government or foundation funds to test a theory, study a basic phenomenon, or assess an intervention), government-initiated (an agency or ministry contracts for a study to be conducted), or foundation-initiated (a foundation awards grants or contracts to support a study of investments they have made or to document progress in an area that is not being funded by government or

other sources). This “let a thousand flowers bloom” approach has strengths and weaknesses. A primary strength of this approach is the generation of knowledge that informs future research, primarily by communicating findings to other researchers through the peer review and publication process. In the case of many developing countries, there is little infrastructure to support reporting about findings in country-specific publications, and requirements for or bias towards reporting in English in international journals keeps critical information about what did not work in ECD research from informing subsequent policy and program efforts. Another drawback to this approach is that the research can be “donor-driven” or more focused on what donors want to know than what is important for the country or community that participated. In addition, donors themselves often use a sectoral (e.g., health, education) or theme-based funding approach, which makes it challenging for intersectoral, holistic ECD program quality initiatives to be funded. Some countries have requested that donors interested in different aspects of child development (for example, survival, orphans and vulnerable children, protection) come together to fund the intersectoral initiatives.

To address these issues, a more systematic approach to building capacity in data and research on ECD is required that meets accountability requirements while also addressing information and data gaps that may prevent clear assessment of equity in access to high quality programs. A strong commitment to dissemination is one way to support innovation and research. This can be challenging in the face of political unrest or concerns about a policy or government funding approach found to support an ineffective or low-quality ECD program or legislation not aligned with these goals. However, without such a commitment, governments lose credibility and the opportunity to engage in a “learning laboratory.”

Building Capacity for Research on Quality with Links to Policy and Practice

Despite more than 50 years of ECD quality research in high-income countries and more than 30 in LAMI countries, much remains to be done to bring data and rigorous evaluation findings to bear to improve ECD programs and policies, equity in access to quality programs, and ultimately children’s well-being. As described above, the push for assessing child outcomes as the sole criterion for evaluation is strong and often leaves out critical steps. Those steps include assessment (1) of whether the policy or program intervention has been implemented

as expected and (2) whether given what is known locally and from relevant research implementation at the levels observed could possibly affect children’s outcomes. There is a huge need for locally generated research, to accompany locally generated approaches to care provision. In the context of scarce resources and an urgent need to address glaring inequities in children’s well-being, the detached third party evaluator role is not what is needed at every stage of policy and program development and implementation. Countries could benefit from ongoing, formative evaluation information about how to build a quality framework; develop, adopt, or adapt measures of ECS quality; and create systems for gathering and using data to improve policy and program implementation. Researchers can also apply their knowledge about what is required to change child outcomes to help target an appropriate level of service intensity and quality against which countries can benchmark. Researchers knowledgeable about the country context as well as the broader range of interventions used in the world region by similar countries can help policymakers and practitioners be realistic about what can and cannot be achieved and what a reasonable time frame might be to support the targeted behavior changes in adults and children. Productive models for partnerships among researchers, policymakers and practitioners for these purposes do exist, such as the Early Childhood Development Virtual University (ECDVU), a Victoria University program that has been implemented in Sub-Saharan Africa and the Middle East and North Africa (Pence, 2004). Approaches like ECDVU and the building of within-country research capacity are ways to guard against the all too common occurrence of researchers and funders from other countries parachuting in, doing an intervention and study primarily driven by their own ideas and interests, and leaving nothing behind in the way of useful information to guide program improvement and development of local research capacity. In addition, within-country research builds local knowledge and literatures, which inform both developmental and intervention science (Nsamenang, 2006).

Collaborative Processes to Develop and Link Quality Assessment to Practice and Policy

The process for measuring quality in ECD and using data to drive its improvement benefits from a collaborative, co-constructed approach with multiple stakeholder groups. Such efforts require strong relationships built on trust and respect, willingness to change and to welcome outside approaches and opinions, and ongoing opportuni-

ties to assess the country's practice-informed research and research-informed practice. Trust and respect are particularly important when conducting evaluation work on service quality where assessments may include direct observations of service providers and supervisors. Stakeholders have to understand their roles. There must be clarity about how quality information will be used, who will have access to it and at what level of detail will it be reported (for example, at the individual classroom, home visitor or community level).

Several steps may be involved in the conceptualization and development of an approach to assessing or measuring quality. Initial work can help define the program or programs for which quality measurement is most urgent, and the ecological systems levels at which quality could potentially be explored. Ascertaining from program stakeholders the chief mechanisms of change (whether from a formal theory of change or directly from the experiences of providers, parents or children) can aid in the conceptualization of quality at settings or systems levels. Although in some cases, adaptation of an existing measure from the international literature may be the consensus of the group (cf. Rao & Pearson, 2009), in others, the development of a local measure may be the ultimate result (e.g., Myers, 2010). In either case, a diversity of data collection modes and analytic approaches can be brought to bear at levels of the adult-child dyad, group, setting or system (Doyle, 2010; Yoshikawa, Weisner, Kalil, & Way, 2008).

Ultimately, the integration of data on quality with the work of practitioners and providers vertically, across all levels of a program or policy's implementation, and horizontally, across instances of replication and scale is the goal of a quality improvement strategy in ECD (Yoshikawa, Rosman, & Hsueh, 2002). Without use of data to inform practice on the part of direct providers; those who provide them professional development, training and support; and those at sub-national and national levels, there will be no link from measurement of quality to quality improvement and ensuring the sustainability and continued enhancement of quality over time. Existing organizations and institutions (e.g., local governance structures; provincial departments of health, education, social protection, or child protection; ministries representing these sectors at the national level; training institutions) must use the data to foster high quality practices and implementation.

Conclusion

Globally, in the field of social policies and programming, ECD is a fairly new entrant, yet one that comes with much promise supported with compelling scientific evidence. While the acknowledgement of the importance of ECD, based on evidence, has been widespread, action has been slower to follow. The equity-based approach put forth in this report provides recommendations to ensure that all children have access to the quality of ECD programs and policies that will improve multiple domains of development. The conceptualization and improvement of quality in ECD is key to achieving equity of human potential for children, families and societies. ■

Endnotes

- 1 ICDS focuses on improving the health, nutrition and overall development of children through a combination of programs available through an ECD centre (usually a village courtyard). With over 35 years of implementation experience, ICDS serves approximately 34 million expectant and nursing mothers and children per year.
- 2 It has been signed or ratified by all countries except for the United States and Somalia.
- 3 (internationally defined as 2 year prior to school entry, e.g., 4- and 5-year olds where primary starts at age 6 (UNESCO, 2007).
- 4 ECCE programs focus specifically on early education and are a subset of the broader set of ECD programs found in Figure 1.
- 5 In so doing, they form a sub-system with its own characteristics which, although influenced by interaction with other systemic levels, have their own character. At every level, the interactions within that level are influenced by the broader dimensions of culture and organization and geography that influence what happens in the niche. For example, a national system is temporally and physically bounded as well so that geography and political secessions influence characteristics of quality.

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Commentary by Linda Biersteker

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Over the last twenty years the trend towards increased investment in ECD programs has accelerated in low- and middle-income countries. Persuasive evidence from neuroscience and of economic returns, efforts from international institutions, and international development frameworks such as Education for All have contributed to this shift. Alongside this, there has been significant broadening in the definition of ECD programs. Developmental science has made a convincing case for ECD services to be viewed holistically rather than from the early education perspective, which previously predominated. In addition, recognizing that favorable child outcomes will not be achieved without particular levels and types of input the focus on quality as well as access to ECD services has grown.

The different requirements of these shifts are evident in the Moscow Framework for Action and Cooperation adopted at the World Conference on Early Childhood Care and Education in September 2010. This commits nations to adopting a holistic approach including inputs to achieve good birth outcomes, health and nutritional well-being as well as care and education. There is a strong focus on the zero to three-year age group, which requires working with parents and families as well as other service providers. This adds to the continuing concern with curriculum and pedagogy, the human and material resources

needed for quality programs, and sustainability. Assessment, research, monitoring and evaluation are promoted to inform the design and implementation of quality programs adapted to local settings.

In the context of these developments the conceptual framework that Britto, Yoshikawa and Boller present is timely in several respects. While decisions about what constitutes quality are complex and contested, measurement requires a clear statement of the dimensions and underpinning values. The framework proposed by the authors includes the multiple dimensions of quality identified in the literature and takes account of different systemic layers that bear upon implementation. These range from distal quality influences such as the programming and policy system in which programs are located, to the actual program delivery interface affecting caregiver and/or child. Furthermore, the quality dimensions are cross cutting and equally applicable to any form of ECD program including those targeting primary caregivers as well as those offered directly to children. While the quality dimensions may have differing importance depending on the program, the broad common framework makes it possible to compare different approaches to ECD servicing. This is particularly welcome in contexts where there are attempts to provide an integrated continuum of services that require new kinds of quality indicators (Biersteker & Kvalsvig, 2007). In particular it could assist in think-

ing more deeply about the quality of programs aimed at the family now that these have become more prominent.

In a world where ECD service expansion is on the agenda, the framework could usefully serve as a mapping template when considering the scalability of particular programs for different settings. In this regard the highlighting of local values in the framework is both important and challenging. It challenges those who are uncomfortable with the way that quality definitions privilege 'expert', and largely western approaches to ECD to develop other indicators of quality inputs and outcomes. This may not be easy in the face of powerful international ECD agendas. The question of how to find a balance between generic and local quality measures needs to be tackled so that there can be a more nuanced yet systematic approach to tracking progress towards the realization of young children's developmental rights in different contexts.

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Commentary

Commentary by Belinda J. Hardin

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As Britto, Yoshikawa, and Boller point out, the quality of early childhood care and education has moved to the forefront of international initiatives and scholarly debates. Demographic and economic changes, studies demonstrating positive developmental outcomes for children attending quality ECD services, and the role of the environment on brain development are but a few of the contextual elements discussed by the authors as underlying factors impacting policy change within countries and across the globe. Another factor shaping this debate is technology. By the end of 2010, there were an estimated two billion Internet users and 5.3 billion cellular phone subscribers (International Telecommunication Union, 2011). Disparities among developed countries where 71% of the population is online and developing countries where only 21% is online remain a challenge. However, the upward trend of technological consumerism and its role in shaping policy and bringing groups of people together with common interests will undoubtedly be a key player in improving the quality of ECD services (e.g., online training, social networking, and access to information in multiple languages).

Defining quality ECD services with global applicability is complex given variations in cultures, language,

government policies, approaches to learning, geographic areas, and a myriad of other factors that justify the ecological approach taken by the authors. The impact of national ideologies on policy, for example, is huge. Family ideologies in some countries have stimulated policies that view child care as an extension of human rights, while others see it as a private matter (Lokteff & Piercy, 2011). As professionals, parents, and policy makers advocate for higher quality ECD services during the next decade, there is an urgent need to clearly delineate core principles that will bridge these differences. A number of international organizations and scholars are working toward this goal (Association for Childhood Education International & World Organization for Early Childhood Education, 1999; Meyers, 2006; UNESCO, 2006; UNICEF, 2000). The existence of these frameworks and the common elements contained in them—the role of the environment, curriculum content and pedagogy, learning and teaching interactions that produce positive child outcomes, meaningful family and community participation—suggest that progress toward identifying a viable set of global indicators of program quality has begun to take shape. Other important principles are still being debated. For example, fundamental to equity and basic human rights is a belief that all chil-

dren should be valued as individuals belonging to a family and community who are fully included in society—known as inclusion (DEC/NAEYC, 2009). The philosophy of inclusion is embedded in international initiatives mentioned by the authors and others, such as the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994) and the Convention on the Rights of Persons with Disabilities (United Nations, 2008), as a human right, and studies show that early intervention has long-term, positive outcomes for young children. Thus, access to quality ECD services for children with disabilities is a critical need.

As the authors suggest, even when there is agreement on what constitutes quality ECD services, measuring program quality from a global perspective requires caution. Care must be taken to create measures with cross cultural input from professionals, families, and policy makers. UNESCO (2006) cited several international assessment initiatives that are attempting to measure and improve program quality, including: the ACEI Global Guidelines Assessment developed with input from more than 80 professionals from 27 countries designed to assess and improve early childhood program quality, particularly in developing countries; the Evaluation of Educational Achievement (IEA) Pre-Primary Project sponsored by

High Scope, an observation system used in 15 countries in a longitudinal study designed to identify characteristics of pre-primary settings and how they impact child outcomes; and the International Step by Step Association (ISSA) pedagogical standards framework, designed to support teacher training and policy development for early childhood services. The results of these initiatives can help inform future plans to measure ECD quality worldwide.

Much work remains to be done to establish quality ECD services for children worldwide. This report endeavors to create greater awareness of the issues and provide conceptual models that help give meaningful structure to the discussion.

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Commentary by Aisha K. Yousafzai

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In 2008, the WHO's Commission on Social Determinants of Health published a groundbreaking report which recognized that unless the circumstances in which children and adults live, learn and work are addressed, then inequities in health will continue to persist within and between populations (WHO, 2008). One of the Commission's three key recommendations placed significant emphasis on early childhood development and education as a strategy to improve daily living conditions. Building on the powerful evidence from neuroscience and economics, the commission recognized that investment in early childhood development (ECD) programmes has great potential to reduce health inequity within a generation and concluded that all children and families should have access to a comprehensive package of quality ECD programmes and services, regardless of ability to pay.

Despite considerable advocacy for ECD programmes, progress on the ground in many developing countries remains slow. Often it is the most disadvantaged populations, who may yield the greatest benefits, with least access to programmes. The equity-based approach presented by Britto, Yoshikawa and Boller has positioned quality intrinsically linked with access; therefore, without addressing

both components ECD programmes will be unable to fulfill the promise of improved life-long opportunity for all. This important report provides a framework for the conceptualization of quality that can serve as a platform for researchers, service providers and policy makers to work together to develop, monitor and evaluate programmes from an enlightened perspective which can potentially drive programme improvement thus benefitting young children, their families and communities.

An important take-home message for the international research community is that unless the dimension of quality in programmatic research is included, we will not be able to answer questions raised by policy makers on how to translate the science into practice in real world systems. An ECD programme cannot be described as a discrete intervention, rather it is a package of interventions which are ideally comprehensive in nature, integrated and aligned with existing services in health, education and protection. Presently, there are many gaps in our knowledge that hinder progress in increasing coverage and replication of successful models in developing countries. For example; what are the best practices for combining interventions that we know work together to promote growth and development in young

children? How much focus in parenting programmes should be directed towards the well-being of caregivers and how much on interaction with the child? What would constitute an optimal package of early childhood interventions and how can these be effectively aligned with existing services making efficient use of limited resources? How do we engage more effectively with local communities to increase demand for ECD services? How can we support the training and supervision of health workers and teachers to take on new approaches?

By deepening our understanding of quality we can begin to address these knowledge gaps. Future research in early childhood cannot focus on development outcome indicators alone, but will need to incorporate best practices in materials development, community engagement, training, supervision, monitoring and evaluation. Data will need to be drawn eclectically from a range of approaches including qualitative methods, participatory action research cycles and grey literature to ensure local experience is captured. Trials should adequately assess process to inform evidence-based practice. The report authors rightly point out the dearth of locally generated research. Stakeholders must respond by fostering partnerships that work towards levelling the playing field

for research in developing countries by ensuring capacity development, access to current information and opportunities to develop local ECD leadership.

While many governments in developing countries may be convinced by the science of ECD,

persuading action will depend on the ability of stakeholders to work together and address questions related to quality that inform evidence based practice and guide the development of comprehensive strategies with the potential to go to scale.

Reference

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About the Authors

Linda Biersteker, MA is Research Director at the Early Learning Resource Unit (ELRU) in Cape Town, South Africa. Her work has included extensive research towards developing policy, programming and training strategies for the ECD sector, work on indicators and results based monitoring. She has been involved in the training of teachers, trainers and government officials including those in the ECD Virtual University course for Africa. Recent research has focused on scaling up of ECD access and quality for the Human Sciences Research Council, South Africa, and the Wolfensohn Center ECD project, The Brookings Institution. Current projects with a focus on quality include an audit of ECD centers in South Africa, a process and outcome evaluation of integrated ECD projects and work exploring a local and indigenous knowledge approach to ECD programming.

Kimberly Boller, Ph.D. is a Senior Research Psychologist at Mathematica Policy Research. She holds a Ph.D. in developmental and cognitive psychology from Rutgers University. Dr. Boller studies the effects of early childhood care and education, parenting programs, and policy on children and parents. Her expertise includes measurement of program fidelity, implementation, and quality; child outcomes from infancy through early elementary school; and parent well-being and self-sufficiency. Dr. Boller's interest in measuring ECD service quality is rooted in her experiences as an SRCD Executive Branch Public Policy Fellow at NICHD (1993-95) and early work at Mathematica on the national Early Head Start Research and Evaluation Project. Her current projects in the United States focus on Early Head Start; home visiting to prevent child maltreatment; and child care quality, rating, and improvement systems. She has conducted research on ECD services and systems in more than 10 countries.

Pia Rebello Britto, Ph.D., is an Associate Research Scientist at the Yale Child Study Center at Yale University. She is known internationally for her work in the areas of early childhood policy and program evaluation. She is presently working with over 40 countries on developing integrated systems for early childhood using a standards approach. She is also working with several countries on formulating national policies for the well-being of young children. She has been involved in several early intervention program evaluations in Africa and Asia and most recently working on a six-country evaluation of an innovative approach to improve school readiness. Dr. Britto is known nationally for her scientific work on young children's early literacy development and more recently on understanding issues of identity development of Muslim and Arab children growing up in the United States. She obtained her doctoral degree in developmental psychology from Teachers College, Columbia University.

Belinda J. Hardin, Ph.D., Assistant Professor in the Department of Specialized Education Services at the University of North Carolina at Greensboro, coordinates and teaches in the birth through kindergarten undergraduate and graduate programs. Her research includes cross-cultural studies investigating the effectiveness of services for young children with and without disabilities in the United States and other countries, particularly in Latin America. She is especially interested in measures of program quality with global applicability and how they are informed by sociocultural context. Dr. Hardin has worked with the Association of Childhood Education International on a number of global initiatives designed to improve the quality of services for young children and was recently elected to serve on the ACEI Executive Board.

Hirokazu Yoshikawa, Ph.D., is Professor of Education at the Graduate School of Education at Harvard University. He is a developmental and community psychologist who conducts research on the development of young children in immigrant families and the effects of public policies and early childhood intervention on children's development. His currently funded work examines how public policies, parental employment, and transnational contexts influence very young children's development in Chinese, Mexican, Dominican, and African American families. This work combines longitudinal survey, observational, and ethnographic methods. He is evaluating efforts to improve the quality of preschool education in Boston (with Christina Weiland, using regression discontinuity methods) and in Santiago, Chile (with Catherine Snow, using cluster-randomized methods). He has conducted extensive research on the effects on children of public policies related to welfare, employment, and early childhood intervention.

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Content

The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for policies affecting children. The Society recognizes that few policy issues are noncontroversial, that authors may well have a “point of view,” but the *Report* is not intended to be a vehicle for authors to advocate particular positions on issues. Presentations should be balanced, accurate, and inclusive. The publication nonetheless includes the disclaimer that the views expressed do not necessarily reflect those of the Society or the editors.

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