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Opportunities and Challenges in Evidence-based Social Policy

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Abstract

Despite a robust body of evidence of effectiveness of social programs, few evidence-based programs have been scaled for population-level improvement in social problems. Since 2010 the federal government has invested in evidence-based social policy by supporting a number of new evidence-based programs and grant initiatives. These initiatives prioritize federal funding for intervention or prevention programs that have evidence of effectiveness in impact research. The increased attention to evidence in funding decision making is promising; however, to maximize the potential for positive outcomes for children and families, communities need to select programs that fit their needs and resources, the programs need to be implemented with quality, and communities need ongoing support. Drawing on experiences scaling evidence-based programs nationally, the authors raise a number of challenges faced by the field to ensure high-quality implementation and discuss specific proposals, particularly for the research and university communities, for moving the field forward. Recommendations include designing and testing intervention and prevention programs with an eye towards scaling from the start, increased documentation related to implementation of the programs, and working toward an infrastructure to support high-quality, effective dissemination of evidence-based prevention and intervention programs.

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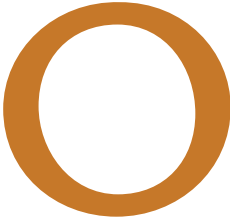
As rigorous evidence grows for various interventions, programs, and initiatives to address social problems across various areas, such as family support, education, health, and employment, there is a continual need to scale up these programs to reach individuals, families, and communities most in need of the services. However, there are challenges in the scaling of many evidence-based interventions, programs, and initiatives to attain the expected results. In this Social Policy Report (SPR), Supplee and Metz raise a number of issues, particularly for the research community to support the scale up of evidence-based programs (EBPs). In particular they highlight the need for infrastructure, including information-rich documentation, to support effective dissemination and utility of EBPs.

Four commentaries expand on the issues raised in the Supplee and Metz paper. First, Bumbarger acknowledges the struggle of scaling innovation and evidence-based programming, especially in the midst of technology while also providing optimism about its potential role in advancing EBPs. Second, Domotrovich and Durlak emphasize the importance of infrastructure to support new researchers and practitioners focused on scaling of evidence-based programming. In the third commentary, Bogard, Karoly, and Brooks-Gunn bring to bear the value of considering the cost-benefit as part of the equation in determining which EBPs to scale up. Finally, Lopez Boo brings an international perspective by highlighting that while Latin American countries understand the importance of EBPs, expected effects are limited due to the lack of quality improvement data and challenges in maintaining fidelity at scale.

Considering the growing field of scaling evidence-based interventions, programs, and initiatives, within the U.S. and internationally, the SPR authors and commentators, together, emphasize the need for intentionality and proactiveness in considering scaling at all levels from the developer, purveyor, practitioner, to the community, as well as addressing the fit and economics of EBPs, especially for communities and countries with limited resources and trained staff.

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Opportunities and Challenges in Evidence-based Social Policy



Over the past thirty years an explosion of research has looked at the impact of social programs designed to improve outcomes for children and families. However, few evidence-based programs have been truly scaled for population-level impact on social problems (IOM and NRC, 2014; Rhoades Cooper, Bumbarger, & Moore, 2013; Rotheram-Borus, Swedenman, & Chorpita, 2012). There has been a growing movement toward the use of evidence-based policy, or public policy that directs funding toward programs or practices that have evidence of achieving outcomes. Evidence-based policy, a concept borrowed from the health sciences, involves integrating the best scientific knowledge, clinical experience, and input from clients in order to choose the best course of action for addressing a problem (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The interest in applying these concepts to social policy comes, in part, from increasing pressure from federal, state, and local funders to demonstrate improved outcomes for children and families from social expenditures (Haskins & Baron, 2011).

Since 2010 the federal government has invested in evidence-based social policy through a number of new evidence-based programs and grant initiatives (see Table 1, Haskins & Margolis, 2014; for background on the initiatives see Haskins & Baron, 2011). Each of these initiatives prioritizes funding for intervention or prevention programs that demonstrate evidence of effectiveness in impact research. For example, as directed in the authorizing legislation, the majority of the \$1.5 billion dollars over 5 years of the Maternal, Infant and Early Childhood Home Visiting Program must be spent on early childhood home visiting models that have demonstrated evidence of effectiveness. A benefit of this increased emphasis on evidence-based policy is the integration of research evidence in program funding and implementation, but one challenge for the field will be

delivering on the anticipated improved outcomes through the use of evidence-based programs. The execution of the evidence-based initiatives has highlighted some critical gaps that must be filled to successfully support the further expansion of evidence-based policy. One critical element of evidence-based policy is having programs that have rigorous evidence of effectiveness. However, if evidence-based programs are not designed for scaling, disseminated effectively, or supported for quality implementation, we run the risk of not being able to deliver on promised outcomes for children and families (Haskins & Baron, 2011; IOM and NRC, 2014).

The purpose of the current Social Policy Report is to highlight what we have learned about implementing and scaling up evidence-based programs. The literature has noted a complex set of stakeholders are necessary to scale-up evidence-based programs including researchers, funders, communities, practitioners, trainers, professional associations, private industry and more. While this article cannot address the roles of all of these stakeholders, this Social Policy Report will focus on the role of the child development research community in helping to address this challenge and move the field forward.

Using Evidence to Inform Decision Making

In discussions related to decision making in policy with the scientific community, often there is a belief that the research to policy connection is linear—research moves from a researcher to policymaker to be applied to a specific decision (Nutley, Walter, & Davies, 2007). Without being able to point to a specific study (or set of studies) that influenced a policy decision, often there is a naïve belief that evidence is not informing policy. There is a growing acknowledgement in the policy community that evidence from research is not the only factor in decision making in social policy and education and the application of evidence to decision making is very non-

linear and complex (Haskins & Baron, 2011; Nutley et al., 2007; Tseng & Nutley, 2014). In practice, there are many different kinds of data people use as evidence in decision making and policy (e.g., administrative data, experience, stakeholder input, research; Nutley et al., 2007). For practitioners deciding whether to adopt an evidence-based program, variables such as the acceptability of the program to staff or clients, the readiness of the program to be implemented in the communities, and the resources necessary to implement are all factors that play in addition to the research that shows the program is effective (Dworkin, Pinto, Hunter, Rapkin, & Remien, 2008). Providing decision makers with a broad synthesis of evidence as well as information about implementation, acceptability, and feasibility are important to the evidence-based policy movement.

There has been a rapid increase in federally-sponsored systematic reviews that support states' and communities' selection of programs or practices with evidence of effectiveness (see Table 2). Behind most systematic reviews are the goals of: 1) consolidating the available evidence on a particular topic; 2) assessing the quality of the available impact evidence; and 3) making determinations about the state of evidence for specific programs or practices. Some aim to contribute knowledge about evidence to policy and practice broadly (e.g., U.S. Department of Education's What Works Clearinghouse), while others have the more high-stakes purpose of determining which programs are eligible for funding in an evidence-based initiative (e.g., U.S. Department of Health and Human Services teen pregnancy prevention review). While many systematic reviews focus primarily on the impacts of the program, some systematic reviews provide implementation information without an assessment of a program's readiness to scale up (e.g., Home Visiting Evidence of Effectiveness), while others also provide assessments of implementation readiness (e.g., National Registry of Evidence-Based Programs and Practices). However, for both information on impacts and implementation, systematic reviews are only as good as

Providing decision makers with a broad synthesis of evidence as well as information about implementation, acceptability, and feasibility are important to the evidence-based policy movement.

the information available to review, and there remain large gaps in available information on implementation (e.g., Paulsell, DelGrosso, & Supplee, 2014).

Systematic reviews of evidence provide a valuable service by summarizing and assessing the quality of the full body of available research. They can highlight that our knowledge remains limited in many areas (Avellar & Paulsell, 2011). For instance, most evidence is from small-scale, tightly controlled efficacy trials with limited information regarding external validity (Bonell, Oakley, Hargreaves, Strange, & Rees, 2006; Green & Glasgow, 2006). Most fields of interest also have limited available replication trials, further restricting the external validity of the available evidence (Goesling, Lee, Lugo-Gil, & Novak, 2014; Valentine et al., 2011).

In addition, there is a gap in our knowledge on why and how impacts vary by specific population groups, settings, and other factors, making it hard to know with whom to implement a program and how to obtain the impacts found in efficacy trials (Avellar & Paulsell, 2011; Green & Mercer, 2001). When scaling up evidence-based programs, implementing agencies often want to make changes or adaptations to fit their populations or settings. However, there is little to no empirical or theoretical identification of the core components of evidence-based programs to guide these decisions, leaving implementing agencies unsure if changes may attenuate impacts (Blase & Fixsen, 2013). There is often little information available about implementation during the impact trials and the features necessary to replicate the program tested (Milat, King, Bauman, & Redman, 2011; Paulsell et al., 2014; Spoth et al., 2013).

Though these gaps exist, social policy must move ahead implementing programs and serving children and families and cannot wait for the perfect complement of empirical evidence prior to advancing. Program administrators lack information to decide if an evidence-based program fits their needs, population, or resources. Evidence-based policy emphasizes programs and policy that use the best available evidence to support decision making while continuing to advance the science. In our

experience in scaling evidence-based programs, without much of the information discussed above, decision makers and implementing agencies are making do with what information is available and hoping the promise of better outcomes for children and families via an evidence-based program will still be attained.

What We Have Learned About Implementing and Scaling Up Evidence-based Programs

Researchers have identified several key functions and structures that need to be developed and installed to support the use of evidence in practice (Damschroder et al., 2009; Graham et al., 2006; Livet, Courser, & Wandersman, 2008; Nutley & Homel, 2006; Rycroft-Malone, 2004). However, real world challenges to successful implementation still exist. Our experience points to some potential strategies to address the challenges of scaling up evidence-based programs, including: 1) fitting evidence to local context; 2) ensuring communication and feedback loops among research, policy, and practice; 3) supporting data-driven continuous quality improvement; 4) developing organizational environments; and 5) clarifying stakeholder roles and functions.

Fitting Evidence to Local Context

Despite increasing emphasis on the importance of translating, adapting, and optimizing evidence-based programs in local contexts, it is not always clear how to do this. For example, in a study examining sustainability of evidence-based programs after initial implementation, a challenge noted by communities is a lack of fit between the program and their population, setting, and needs (Rhoades Cooper et al., 2013). When many changes were needed to shoe-horn a program into a community setting, sustainability suffered (Rhoades Cooper et al., 2013). Similarly, challenges implementing a teen pregnancy prevention program were related, in part, to a lack of understanding at the outset of requirements to implement the program. For example, organizations lacked consistent classroom space or health educators had challenges carving out the required number of classroom sessions. Both of these are examples of disconnects between the needed and available infrastructure and resources to implement a program (Demby et al., 2014).

The interplay between the service delivery organization, providers, and clients calls for early and ongoing assessments of these multi-level characteristics

to determine whether a good enough fit exists between an evidence-based program and local context (Aarons et al., 2012). A good fit may require alignment of service system-level characteristics including funding, policy, and regulations and alignment of organizational characteristics that support successful implementation including leadership, culture, and climate (Panzano, Sweeney, Seffrin, Massatti, & Knudsen, 2012). At the provider level, key factors for successful use of evidence-based programs include staff attitudes towards evidence and the supervision to support implementation for staff (Dymnicki, Wandersman, Osher, Grigorescu, & Huang, 2014). At the client level, characteristics that influence successful implementation of evidence-based programs include alignment of cultural background of clients and program, and client motivation for participation (Dariotis, Bumbarger, Duncan, & Greenberg, 2008). Jurisdictions seeking to implement evidence-based programs need guidance on how to assess these key factors to inform decisions to adopt an evidence-based program and/or tailor aspects of the system or the intervention.

Comprehensive needs assessments can support the assessment of fit by determining the alignment between the needs of the community, the outcomes targeted by the evidence-based program, and the resources available to support implementation. A needs assessment helps communities identify local risk factors that may be better addressed by one evidence-based program over another. A thorough needs assessment may determine if the implementing agency has the resources necessary, such as the ability to find and hire health educators for a pregnancy prevention program. Key aspects of a robust needs assessment to support program selection include: selecting and refining the characteristics and needs of the target population(s); identifying and confirming barriers to care; assessing the level of risk and protective factors; establishing a theory of change; examining the evidence base; and engaging opinion leaders (Bryson, Akin, Blase, McDonald, & Walker, 2014). Our experience related to scaling up evidence-based programs has highlighted the need for states and communities to get support and guidance from the scientific community on conducting comprehensive needs assessments using multi-method, multi-source iterative methods. Frameworks such as Communities that Care (Hawkins et al., 2012) and PROSPER (Spoth & Greenberg, 2011) support communities to assess fit of evidence-based programs. Rigorous research shows impacts from both of these frameworks on outcomes for children and families and

long-term sustainability (Feinberg, Jones, Greenberg, Osgood, & Bontempo, 2010; Hawkins et al., 2012; Spoth & Greenberg, 2011). Unfortunately, frameworks such as these are not widely scaled themselves.

Ensuring Communication and Feedback Loops Between Research, Policy, and Practice.

Frequent and inclusive communication between key stakeholders has been established as a factor of successful implementation (Hurlburt et al., 2014). Studies have found that stakeholders are more likely to persevere in the face of implementation challenges when early implementation successes are shared between developers and implementing agencies, making communication regarding the achievement of implementation milestones especially important (Aarons et al., 2014; Rhoades Cooper et al., 2013). In examining the sustainability of quality implementation of evidence-based programs over time, in juvenile delinquency programs in Pennsylvania (Rhodes Cooper et al., 2013) and mental health programs in Ohio (Panzano, Sweeney, Seffrin, Massatti, & Knudsen, 2012), a key variable was the quality of the relationship between the implementing agencies and the evidence-based program. Therefore, the practitioner-to-developer communication loop seems to be a key aspect of successful efforts to implement evidence-based programs. Ongoing communication between developers and implementing agencies is particularly critical during the early phases of implementation when frequent troubleshooting to address challenges is needed. As implementation stabilizes, the accountability of key functions necessary for effective implementation is often shifted to intermediary organizations and local implementation teams.

Supporting Data-driven Continuous Quality Improvement.

There is increasing emphasis on the role of continuous quality improvement (CQI)—the use of administrative data to monitor the quality of implementation and outcomes and then strategically modify systems or services to optimize processes, procedures, and outcomes (Kritchevsky & Simmons, 1991). CQI has been highlighted as a core element of effective implementation because it enables ongoing learning among practitioners, program administrators, and developers. This dialogue tying data monitoring and quality implementation can improve the sustainability of evidence in practice settings (Chambers, Glasgow, & Stange, 2013).

CQI has implications for practitioners, program administrators, and developers. For practitioners, CQI creates feedback loops among clients, practitioners, and administrators that can be used to continually assess and improve practice (Chambers, Glasgow, & Stange, 2013). For program administrators, CQI provides leadership teams with frequent information about what is helping or hindering efforts to make full and effective use of evidence at the practice level, which can result in successful systems change (Khatri & Frieden, 2002). The information may consist of descriptions of practitioner experiences, administrative data, fidelity monitoring data, or survey or focus group data. Leadership can use information from practitioners to reduce systems barriers to implementation (Fixsen, Blase, Metz, & Van Dyke, 2013). Similarly, developers can use the feedback loops of information produced through CQI efforts to continuously improve their program and share improvements with other implementing agencies. Developers can also use evaluation methods such as rapid cycle evaluation or clinical trials using administrative data to support improvements in the program (e.g., Ammerman et al., 2007).

The Importance of Organizations.

The capacity of the organization or system may be as necessary as the specific evidence-based program (Glisson et al., 2012). When there is not a good fit between an evidence-based program and an implementing agency, too often the programs are modified to accommodate current systems structures rather than vice versa. Implementing agencies may not understand what is needed to create an organizational context that can support evidence-based programs. Research has identified several characteristics at organizational and systems levels that can make or break the successful implementation of evidence-based programs: networks and communication within an organization; the culture and climate of the organization; and the organization's readiness for implementation (i.e., leadership engagement, access to information and knowledge) (Damschroder et al., 2009; Dariotis et al., 2008). Developers need to clearly articulate up front the technical and organizational resources needed to deliver an evidence-based program (Milat, King, Bauman, & Redman, 2012). Ideally developers would both design programs with organizational limitations and challenges in mind, as well as come to understand the aspects of organizations that are necessary to effectively implement the evidence-based program.

Agencies need to be aware that changes to the status quo may be needed within a system to support the evidence-based program. Unfortunately, there is a small base of empirical information to draw on related to how to change organizations and build their capacity to implement an evidence-based program. More research is needed to help fill this gap in knowledge.

Clarifying Stakeholder Roles and Functions.

Successful uptake of evidence requires deep interaction among researchers, service providers, policy makers, and other key stakeholders (Flaspohler, Meehan, Maras, & Keller, 2012; Palinkas et al., 2011; Wandersman et al., 2008). However, key stakeholders (e.g., service providers, policy makers, funders, program experts, technical assistance providers) are often unclear about their specific roles in supporting implementation. This confusion can increase as implementation moves from early stages of exploration to initial implementation stages (Aarons et al., 2014; Hurlburt et al., 2014). However, there are multiple ways program implementers can clarify the roles and functions of key stakeholders, including: get buy in for the implementation of a specific evidence-based program across all stakeholder groups; ensure that all stakeholders have a broad understanding of the underlying program logic; collaborate and communicate frequently with stakeholders throughout all stages of implementation; explicitly negotiate stakeholder roles and responsibilities; and share data used for continuous quality improvement (Metz, Albers, & Mildon, 2015). Developers can help by providing clear, codified, and coherent logic models for their programs that agencies can use to guide implementation activities. In addition, developers need to decide how much control over implementation they want to have as their program is scaled up to new sites, as well as an explicit vision for how quality implementation will be sustained.

To date, developers of evidence-based programs typically find they are tasked with providing the invisible infrastructure, in addition to all of the support needed for scaling their program, including consulting with sites about program selection, fit, adaptation, requirements for implementation, providing initial and ongoing training and technical assistance, and support for maintaining fidelity to the program (Margolis & Roper, 2014).

What Facilitates or Impedes Effective Scaling of Evidence-based Programs?

What makes an evidence-based program ready to scale? What kinds of information are necessary to scale up evidence-based programs? In this section we highlight a few critical elements. The first element includes designing intervention and prevention programs with the end user and context in mind. The second element is creating a marketing and distribution system to facilitate dissemination of evidence-based social programs.

Designing Evidence-based Programs With the End User and Context in Mind

Often when federal, state, or local entities have tried to scale evidence-based programs, they discover an invisible infrastructure is needed to support high-quality implementation. To date, developers of evidence-based programs typically find they are tasked with providing the invisible infrastructure, in addition to all of the support needed for scaling their program, including consulting with sites about program selection, fit, adaptation, requirements for implementation, providing initial and ongoing training and technical assistance, and support for maintaining fidelity to the program (Margolis & Roper, 2014). Unfortunately, currently there are few support systems other than developers to provide these services (Fixsen, Blase, Naoom, & Wallace, 2005; IOM and NRC, 2014; Sandler et al., 2005).

Through informal discussions with developers of evidence-based programs who have scaled or are currently attempting to scale their program, a number of pathways to provide this invisible infrastructure emerged. Some developers create a business or non-profit to provide support services (some leaving academic positions to do so), while others try to do two jobs, conducting research and supporting implementation. Some developers are more interested in research and

development of the program and not as interested in supporting implementation, leaving the implementation to others who may be more or less familiar with the core elements of the program. They may let implementing agencies conduct training and oversight themselves, develop an organization to fill that role (e.g., Nurse-Family Partnership's National Service Office or the Multisystemic Therapy Services office), or leave the responsibility to one of the few organizations whose role is to support implementation across evidence-based programs (e.g., Evidenced-based Prevention and Intervention Support Center, <http://www.episcenter.psu.edu/> or Connecticut Center for Effective Practice, <http://www.chdi.org/ccep-initiatives.php>). Some developers prefer a large role in ensuring their program is disseminated with fidelity, while others have sold the copyright to a company such as a publishing company to disseminate on their behalf. These discussions illuminate the challenges for developers in understanding issues of copyright and ownership, business planning and marketing, adult learning for training and technical assistance, supporting organizational capacity and funding, and many others.

Many evidence-based programs were designed and tested in ideal circumstances. This can create challenges related to staffing, engaging and retaining participants, as well as other issues. First, challenges arise related to staffing, for example, in the ability of the implementers (e.g., facilitators, clinicians, teachers) to effectively implement the material or challenges in recruiting and retaining staff with the required characteristics for the program (e.g., Boller et al., 2014). Second, challenges emerge related to constraints of the settings, including policies that limit or prohibit aspects of the programs (e.g., state policies that prohibit condom demonstrations when that is a core component of a teen pregnancy prevention program), limitations on time (e.g., only having 12 weeks for a school-based program instead of the 14 specified in the program), limitations on material resources (e.g., not having enough books at an early childhood center to do a literacy activity) (Margolis & Roper, 2014; Mattera, Lloyd, Fishman, & Bangser, 2013). Finally, there may be challenges engaging and retaining participants in the real world (Boller et al., 2014; Lundquist et al., 2014; Wood, Moore, Clarkwest, & Killewald, 2014). The disconnect between the program as designed and the actual implementation calls for rethinking the way programs are designed and tested, and designing them for the circumstances on the ground from the start.

Marketing Distribution System

In private industry new product development begins with a research and development phase. That phase includes testing prototypes but also gathering user feedback about functionality and appeal. Once the company has a product they believe is ready to disseminate, individuals who have expertise in marketing and communication oversee the product's distribution. When the product is available for purchase, companies employ specialized sales staff to make contact with potential users. Finally, the company likely has a specialized unit to provide ongoing help to users with activities such as installing the product or trouble-shooting.

Currently, in most instances, the development, dissemination, and implementation at scale of evidence-based programs aimed at improving outcomes for children and families is executed quite differently. Often, drawing from past research and theory, a researcher develops a program and secures funding to test the program in a small-scale efficacy trial. This trial often, though not always, accesses university support such as graduate students or may use a local school district that has a relationship with the university. The results of the trial are disseminated through peer-reviewed journals that only provide enough space for authors to report a few analyses of impacts. If successful, the developer may engage in a few more impact trials before deciding to disseminate the now evidence-based program more widely. Alternatively, community agencies may hear about the evidence-based program and approach the developer about implementing it. The developer at this point is faced with creating training manuals and documentation, fidelity tools and credential standards for implementing staff, answering questions from the implementing sites about fit and adaptation, and providing ongoing support. In our conversations over the last few years, some developers of evidence-based programs mentioned a deep desire for more support and guidance in the process of dissemination and scale-up. However, others have argued that because of the distinct skill set required to market and distribute an evidence-based program, the developers of evidence-based programs cannot and should not be asked to play all of these roles (IOM and NRC, 2014). Individuals and organizations with expertise in marketing and business should step in to execute the dissemination and support of the evidence-based program (Kreuter & Bernhardt, 2009).

Addressing this contrast between the dissemination of evidence-based programs and the marketing and

distribution system in private industry, Kreuter and Bernhardt (2009) call for creating a marketing and distribution system for public health. Recently, Kreuter (2014) has elaborated by calling for a more business-like model to disseminate evidence-based programs. He asserts the process of developing the program, engaging in user feedback, research on market potential and feasibility, advertising, and the other steps modeled on the private sector approach to scaling innovation would lead to a “menu of evidence-based, high-demand, practice-ready interventions.” Others have also noted this gap in the field and have called for elements including feasibility analysis, consumer input, and market analysis into production and dissemination of evidence-based programs and practices (Rotheram-Borus & Duan, 2003; Sandler et al., 2005; Spoth et al., 2013).

An alternate framework for dissemination of evidence-based practices comes from the work of Rotheram-Borus and Chorpita (Chorpita, Bernstein, & Daleiden, 2011; Chorpita & Weisz, 2009; Rotheram-Borus, Flannery, Rice, & Lester, 2005; Rotheram-Borus et al., 2012). Rather than solely focusing on packaged evidence-based programs, Chorpita and colleagues argue the intervention should be looked at in a new frame. Specifically, Chorpita and colleagues have empirically identified the core elements or components of mental health treatments across evidence-based programs. Using these elements, they have created a system to allow empirically-driven guidance for clinicians to serve the children who don’t neatly fit into the narrow criteria of many evidence-based treatments (Chorpita et al., 2011). Separately, Rotheram-Borus has put forward the idea of addressing many of the public’s needs for support in easy-to-access formats (e.g., social media, using paraprofessionals, placing services in public spaces like malls) that can reach the majority of the population that may not need a specific targeted program but could benefit from just-in-time support (Rotheram-Borus et al., 2005; Rotheram-Borus et al., 2012). To accomplish this aim, Rotheram-Borus and colleagues emphasize that the characteristics that attract customers and brand loyalty

such as attractiveness, accessibility, utilization, and demand are requirements for evidence-based programs. However, at this time there is little empirical support for this concept; more research is necessary to know if this is a fruitful avenue to pursue.

Conclusion

The investment in evidence-based policy is an exciting trajectory for social policy, full of potential for improving outcomes for children and families. If we want to see this investment pay off, though, we need to make sure to put in the hard work it takes to implement and scale up evidence-based programs. Our work on current evidence-based initiatives has highlighted what this entails. First, intervention or prevention programs must be designed from the start to be implemented at scale, requiring more regular feedback between developers, program administrators, and potential future clients of the program. Second, both reporting more detailed information on implementation during the trial and documenting necessary elements for implementation when replicating the program are essential. Finally, the field, including research, policy, and practice, needs to think critically about the roles and responsibilities of all of the stakeholders in the system and what supports or infrastructure are necessary for scaling and dissemination.

If we want to see this investment pay off, though, we need to make sure to put in the hard work it takes to implement and scale up evidence-based programs.

What is the Role for the Research Community and Universities to Address This Challenge?

The process of scaling up evidence-based programs involves multiple stakeholders (e.g., funders, communities, researchers, purveyors) with multiple roles in the dissemination system, all critical to the success of evidence-based social policy. Though only two stakeholders of a much larger system, the article concludes with some specific recommendations for child development researchers and the university system to play in this process.

The role of child development researchers.

Building partnerships with the practice community, including government, communities, schools, or non-profits is an important role for researchers. This interaction is not always easy but the payoff can be great. Effective partnerships can help the issues of fit of evidence to local context, communication and feedback loops between stakeholders, and the use of data to support quality implementation. Models like the practice-based research networks (Green & Mercer, 2001; Westfall, Mold, & Fanagan, 2007) have been fruitful in building research agendas that are responsive to both practice and research. Research is more likely to be used by the practice community because of this engagement (Mold & Peterson, 2005). In addition, there is a clear need for the practice community to collect meaningful data to monitor the needs of children and families, to help identify evidence-based programs that will address those needs, and to monitor the quality of implementation and outcomes over time. Many in the practice community need support from researchers to choose measures, develop measureable goals, build data systems to collect and analyze the data, and apply the data to decision making and needs assessments. If scaled more broadly, systems like Communities that Care, PROSPER, and Getting to Outcomes can support this process.

To support assessing fit of evidence to a context, researchers and developers need to think about scalability at the design phase (Milat et al., 2012). In addition, researchers/developers must consider the elements necessary along the lifecycle of implementation. A prerequisite to scaling is having a program that is standardized and can be replicated with fidelity (Carttar, 2014); therefore, it is critical that developers document procedures and activities from design through execution and revision. One possibility is to begin maximizing the more flexible space with online appendices to address space limitations in printed manuscripts. It is important for researchers to pair with the probable users of this program from the start. This means conducting user-input and market analysis along with understanding the resources and constraints of the setting for which the program is designed. Finally, empirically identifying and testing core components of the evidence-based program are essential to supporting quality implementation as states or communities make decisions about appropriate adaptations (Blase & Fixsen, 2013). This may mean considering a Multiphase Optimization Strategy (MOST) framework (Collins,

Murphy, & Stretcher, 2007) or, at a minimum, testing mediators and moderators, dropping elements not strongly tied to impacts.

The field of implementation science has been rapidly expanding and building knowledge. At this point, however, more questions than answers remain. Data on implementation is critical for understanding and supporting the potential for scaling. The research and practice community need to jointly develop a better understanding of implementation support systems. Support systems can help with fit, communication and feedback loops, and clarifying roles and function of stakeholders. Building organizational or system capacity to adopt and sustain evidence-based programs continues to be necessary. We have promising evidence of the ability to support practitioners to choose an evidence-based program and effectively sustain it from the frameworks cited throughout this article. More research related to building the capacity of the practice community to have the resources and infrastructure necessary to implement an evidence-based are particularly needed, for example, effective training and coaching models for staff development.

The role of universities

We see three roles for universities specifically. First, the students served by universities are the future program administrators who will be selecting and implementing evidence-based programs. These future staff need the skills to understand emerging evidence, how and why evidence-based programs should be implemented in certain ways (i.e., assessing fit), and how to interpret data used in needs assessments and implementation monitoring (i.e., CQI). Universities touch bachelors, masters, and doctoral level students, all of whom will likely have a role in this larger service system. Innovative ideas such as universities that are exploring the option of offering a set of courses specifically related to evidence-based social policy are emerging but at this point remain unique in the larger university system [e.g., The Pennsylvania State University is working on creating such a program (Small, 2014) and University of Washington School of Social Work's certificate in prevention science (<http://socialwork.uw.edu>)].

A second role for universities is providing the infrastructure and support for academic researchers to market and disseminate evidence-based programs they develop. A promising approach may be partnerships between developers, often social science or public health

faculty, and business and marketing faculty (Rotheram-Borus et al., 2012). Specifically, business colleagues may provide expertise on negotiating business agreements, obtaining copyright, negotiating conflicts of interest, and small business development. Another approach is a technology transfer office such as one at the University of Illinois that provides intensive supports for faculty in the distribution of education programs (see <http://otm.illinois.edu/>).

Finally, universities could provide the infrastructure for university-based implementation support centers that simultaneously empirically study implementation and support quality implementation and sustainability. Centers like the Evidence-based Prevention and Intervention Support Center at The Pennsylvania State University (EPIS Center) or The Center for Communities That Care at the University of Washington are uniquely situated both to provide elements of the invisible infrastructure and to empirically study dissemination and scale-up to contribute to the larger knowledge base. As research in the field of implementation and dissemination frequently requires close collaboration between research and practice communities, support from universities for these partnerships and the empirical study of these domains is critical to advance the field.

For a more in-depth discussion of some of these topics see Spoth et al. (2013), Haskins and Margolis (2015), and IOM and NRC (2014). ■

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Table 1 (Haskins & Margolis, 2014, p. 135)

Tiered Evidence Initiatives

	Administering Agency	Funding
Maternal, Infant and Early Childhood Home Visiting	Department of Health and Human Services	\$1.5 billion in Patient Protection and Affordable Care Act of 2010
Teen Pregnancy Prevention	Department of Health and Human Services	\$110 million in Consolidated Appropriations Act of 2010
Social Innovation Fund	Corporation for National and Community Service	\$50 million in the Consolidated Appropriations Act of 2010
Investing in Innovation	Department of Education	\$650 million in the American Recovery and Reinvestment Act of 2009
Workforce Innovation Fund	Department of Labor	\$125 million in the Department of Defense and Full-Year Continuing Appropriations Act of 2011

Table 2

Federally Sponsored Evidence Reviews

Name of the Review	Review Topic	Agency	Website
Evidence-Based Prevention Program	Health programs in chronic disease self-management, physical activity, diabetes, nutrition, smoking cessation, fall prevention, and medication management	Administration on Aging (HHS)	http://www.healthyagingprograms.org
Evidence-Based Practice Centers	All relevant scientific literature on a wide spectrum of clinical and health services topics	Agency on Healthcare Research and Quality (HHS)	http://www.ahrq.gov/research/findings/evidence-based-reports/overview/index.html
Learning about Infant and Toddler Early Education Services	Out-of-home early care and education models for infants and toddlers (from birth to age 3)	The Office of the Assistant Secretary for Planning and Evaluation (HHS)	No website yet
Community Guide	Population-level health interventions	Centers for Disease Control and Prevention (HHS)	http://www.thecommunityguide.org/
Teen Pregnancy Prevention Evidence Review	Programs aimed to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviors.	The Office of the Assistant Secretary for Planning and Evaluation (HHS)	http://tppevidencereview.aspe.hhs.gov/
Prevention Research Synthesis	HIV prevention	Centers for Disease Control and Prevention (HHS)	http://www.cdc.gov/hiv/dhap/prb/prs/index.html
What Works in Reentry Clearinghouse	Reentry programs and practices	National Institute of Justice (DoJ)	http://whatworks.csgjusticecenter.org/
Clearinghouse for Labor Evaluation and Research	Research on labor topics	Chief Evaluation Office (DoL)	http://clear.dol.gov/
What Works Clearinghouse	Programs, practices and policies in education	Institute of Education Sciences (ED)	http://ies.ed.gov/ncee/wwc/
Employment Strategies for Low-Income Adults Review	Employment and training programs and strategies for low-income individuals	Administration for Children and Families (HHS)	http://www.acf.hhs.gov/programs/opre/research/project/employment-and-training-evidence-review
Home Visiting Evidence of Effectiveness	Home visiting program models that target families with pregnant women and children from birth to age 5	Administration for Children and Families (HHS)	http://homvee.acf.hhs.gov/
Strengthening Families Evidence Review	Strategies to strengthen families, including those that encourage fathers' involvement in their children's lives and support couples' relationships	Administration for Children and Families (HHS)	http://familyreview.acf.hhs.gov/
Crime Solutions	Criminal justice, juvenile justice, and crime victim services	Office of Justice Programs (DoJ)	http://www.crimesolutions.gov/
National Registry of Evidence-Based Programs and Practices	Substance abuse and mental health interventions	Substance Abuse and Mental Health Agency (HHS)	http://www.nrepp.samhsa.gov/

The opinions expressed in this paper are those of the authors alone and do not represent those of the Administration for Children and Families or Department of Health and Human Services. Correspondence should be directed to: Lauren H. Supplee, Office of Planning, Research and Evaluation, Administration for Children and Families, 370 L'Enfant Promenade SW 7th Fl West, Washington DC 20447; lauren.supplee@acf.hhs.gov

Commentary

Moving Research Evidence from the Fringe to the Mainstream in Social Policy

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Suplee and Metz describe both challenges and opportunities for advancing the use of research evidence in social policy, and I will expand here briefly on three aspects: collaboration, infrastructure, and technology for big data.

The concept of evidence-based social policy seems so obvious and intuitive as to be inarguable, and the logical end-point of child development research. The mission of SRCD is to “achieve a comprehensive understanding of human development and to foster the effective application of that understanding to improve human well-being”¹. In other words, the Society seeks to continually increase our knowledge of child development (through rigorous research) and to encourage the application of this research-informed knowledge base to improve child, family, and community well-being across diverse contexts.

Presented in the form of a one-sentence mission statement, this research-to-policy framework sounds rather simple. But we only need to look at a typical etiological regression model, or to Bronfenbrenner’s developmental-ecological model, to remind ourselves how complex human development can be—and subsequently how challenging it might then be to craft effective social policy, even with the aid of strong science. Although it is reinforcing (and perhaps comforting) to think our 21st-century research juggernaut can generate sound scientific breakthrough discoveries that can readily translate to important changes in social policy, we know that this isn’t typically the default. There is plenty of good science that doesn’t make the policy/practice leap; there is plenty of social policy that isn’t grounded in any science whatsoever; and just as importantly, there are plenty of timely and important social policy questions for which there is no informative science.

One important factor in this recalcitrant research-policy gap is the disconnect between

stakeholder groups. Beyond the children and families whose lives we seek to improve, the other major stakeholder groups involved in this enterprise include researchers, practitioners, and policymakers. Researchers, practitioners, and policymakers are in the same arena, but not often on the same team. Although one could argue these groups are all seeking to improve the human condition, they each clearly have different goals, priorities and perspectives, and reward structures; and true collaboration between the three is rare enough to be exemplified when it occurs (Bumbarger & Campbell, 2012). To address this challenge, there is a growing call for the development of intermediaries (Franks, 2010; Pew-MacArthur Results First Initiative, 2014; Rhoades, Bumbarger, & Moore, 2012) and backbone organizations (Turner, Merchant, Kania, & Martin, 2012) to serve as the “infrastructure” for moving science to practice, bridging across systems and silos for collective impact.

Intermediaries and backbone organizations are just one aspect of an infrastructure necessary for moving important research to policy

¹SRCD draft strategic plan, retrieved December 19, 2014 from <http://www.srcd.org/about-us/strategic-plan>.

at scale (IOM and NRC, 2014). Every new discovery in our understanding of child/human development or demonstration of the efficacy of an intervention can be viewed as an innovation. But not every important innovation achieves scale. Consider for example why smart phones are nearly universal, while alternative-fuel cars are still far from mainstream. While each innovation may represent an intellectual or technological milestone, there is often some further product refinement and significant supporting infrastructure or capacity required for the new “technology” to become practically useful or scalable. Presently there is no de-facto system or structure for moving innovations in social/developmental science to scale. Federal agencies fund research projects that may result in new understanding of an important etiological mechanism or demonstrate the effectiveness of a program, but there is no formal subsequent mechanism for ensuring that the best scientific discoveries are then optimized through further product development, packaged, and distributed through efficient and cost-effective channels.

Finally, we must consider the impact of technological advances on the entire endeavor of child development research and social policy. Good science is characteristically slow and incremental. And perhaps more so than at any point in human history, the slow methodical pace of rigorous science is at odds with our rapidly changing world. This is not simply a cultural incongruence, but a fundamental challenge to the validity and practical usefulness of our science. Advances in technology have impacted every aspect of

human development, from neurons to neighborhoods, cellular to societal; and the pace of that change is increasing exponentially. Consider for example, that through advances in nanotechnology more data has been created in the past three years than the previous 40,000 years (Kim, Trimi, & Chung, 2014). To what extent has technology changed the human experience so dramatically that the most fundamental tenets of our understanding of child development, family dynamics, or social determinants of health must be re-examined? What impact might these changes then have on the efficacy of our best interventions? While acknowledging this reality might seem disheartening or overwhelming, it is a valid and logical question, and speaks to the need for continued investment in basic etiological research even while we turn our attention and resources to translation and dissemination research. There is also equal cause for optimism about the impact of technological advances on child development research and the social policy. With an emerging focus on the use of “big data” to inform solutions to wicked social problems (Margolis et al., 2014), conduct real-time data collection (Stone, Shiffman, Atienza, & Nebeling, 2007), and data analytics to more quickly and effectively identify emerging trends and monitor the impact and cost-effectiveness of social programs and policy (Mrazek, Biglan, & Hawkins, 2007), the same technological advances that raise new questions for child development might also provide breakthrough solutions.

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Commentary

The Importance of Quality Implementation in the Wide-scale Use of Evidence Based Programs

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Supplee and Metz (2015) raise many excellent and thought-provoking points in their SRCD report on evidence-based social policy. In our commentary, we focus primarily on the implementation of evidence-based programs (EBPs). In our opinion, the most important factor that will ultimately influence the wide scale use of EBPs is not how many EBPs are developed or how strong the research evidence is for these programs but whether high quality and efficiently delivered professional development services are available to help local practitioners implement programs effectively.

By professional development services we mean training of implementers that takes place before the program is started and on-going technical assistance (e.g., coaching, consultation) once the program begins. There is considerable evidence that these services are essential for successful program implementation when they are provided by individuals with the necessary theoretical knowledge

and practical experience (Durlak & DuPre, 2008; Pas & Newman, 2013). Unfortunately, Supplee and Metz are correct when they point out that a sufficient infrastructure offering such services does not currently exist. So, the critical question for the field is how can we ensure that sufficient resources are available to bridge the gap between evidence-based research and everyday practice?

Because the wide-scale use of EBPs is an interdisciplinary undertaking, we believe two things must eventually happen. One is that there must be consistent and sufficient financial support from federal and state agencies in such disciplines as public health, mental health, and education, to name the major settings where EBPs are conducted. These agencies should fund the infrastructure (let's call them Research and Practice Centers, RPCs) devoted to research and practice in scaling up and implementing EBPs. The second thing that needs to occur is the development of a trained workforce committed to EBPs and their effective implementation to staff these centers. In effect, we are arguing for a system that supports

new careers devoted to the wide scale use of EBPs. In our opinion, unless these two things occur, the wide scale application of EBPs will continue to occur in a piecemeal and limited fashion.

There are models of this concept in the literature. For example, an Implementation Research Institute began operating at Washington University in St. Louis in 2009 and has been training up to 30 professional staff a year drawn from around the country in implementation science (Proctor et al., 2013). The graduates of this institute have been very active in securing grant funding and initiating implementation projects. Unfortunately, the funding for this institute, which came from the National Institute of Mental Health and Veteran Affairs, has ended. This is why we emphasize that stable and continual funding must be available if the spread of EBPs is going to be taken seriously.

A good example of a national effort comes from the United Kingdom. In 2008 this country funded centers to translate effective research into practice (Baker et al., 2009). Supported by the National

Institute of Health Research, nine centers were established throughout the UK. These centers are based at universities and create working relationships with local health care agencies. This UK example aligns with Supplee and Metz's suggestion that university-centered work would be an excellent option for scaling up EBPs.

We certainly agree with Supplee and Metz that high quality implementation is one of several essential ingredients for successful evidence-based social policy and we focus our remaining comments on this issue. The authors note that only 2 of the 14 websites they examined provided information about implementation. Such information should be a routine part of the criteria for any program being listed on a site. As Supplee and Metz indicate, potential program adopters need practical information on what resources are needed to conduct a program successfully. The Collaborative for Social and Emotional learning (CASEL) went one step further when it conducted its review of evidence-based social and emotional learning programs (CASEL, 2013). CASEL only listed programs for which professional development services were available (www.casel.org). This was done based on the belief that it was not helpful to tell potential adopters that some programs were effective unless the necessary resources were available to help them implement the program effectively. The provision of professional development services is so essential to implementation that we would argue federally-sponsored clearinghouses or websites should not include any programs that do not have the capacity to provide this service.

In the context of discussing fitting evidence to local contexts, Supplee and Metz point out that there are factors at multiple levels that influence the implementation process that need to be taken into account. Several conceptual models have been developed to describe these factors (Berkel, Mauricio, Schoenfelder, & Sandler, 2011; Domitrovich et al., 2008; Durlak & DuPre, 2008) and research empirically linking these factors to implementation outcomes has expanded significantly in the last 10 years (O'Donnell, 2008). If federal agencies sponsoring implementation adopted a common framework to guide their measurement requirements for programs, then the number of studies with comparable measures of implementation predictors (e.g., individual and organizational factors) and outcomes would increase. This would create an opportunity for meta-analyses examining implementation in a more sophisticated way than has been possible to date.

When it comes to studying the implementation process, we would focus on four critical components: fidelity (adherence to the original program), dosage (how much of the program is delivered), quality of delivery (how well different program features are conducted), and adaptation (what changes are made to the original program). As noted by the authors in this report, adaptations frequently occur when programs are introduced into new settings, and we need careful documentation of what exactly has been changed and how any changes affect program outcomes.

By giving due attention to implementation federal agencies can play an active role in addressing

another issue that serves as a potential barrier to the success of evidence-based social policy. One way to do this is to make sure that grants include resources for implementation support. This includes the time it takes to achieve high levels of implementation, the cost of providing training and ongoing support to providers and for communication between providers and program developers, and the time for providers to participate in professional development. Additional grant funding is also needed for randomized trials of interventions designed to create implementation readiness and capacity in individuals and organizations, and trials that compare different models of implementation support. Supplee and Metz point out the need for empirical research on training and coaching. This type of research is a precursor for going to scale given the fact that the time and money typically available in community settings for professional development rarely equals what is devoted to it in research studies. We need to know how training and support for implementation can be delivered most efficiently and effectively. The use of technological resources (e.g., web-based systems, virtual reality simulations) for training, feedback, and collaborative problem-solving might eventually become an important feature of future professional development services.

In conclusion, we are optimistic about the potential power of evidence-based social policy, but believe that the success of this approach is dependent on a collaboration among federal agencies, researchers, and practitioners that recognizes the

fundamental importance of not only quality implementation, but also of what is needed to achieve such implementation. With adequate and stable financial support that creates a viable infrastructure and a dedicated workforce, we can learn more about how best to go to scale with EBPs. As this information is generated, federal agencies can leverage the systems they have already created to disseminate new findings and influence future research and practice.

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Commentary

Benefit—Cost Analyses of Child and Family Preventive Interventions

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It is a pleasure to write a commentary based on the comprehensive policy article on evidence-based policy programs for children, youth, and families. Supplee and Metz make a strong case for using research evidence for program decisions at the local, state, and federal levels. The emphasis on using social science evidence for choosing programs to implement has gained momentum over the past two decades. Examples include the sets of randomized control trials conducted by the Institute of Educational Sciences in the past several administrations as well as the reliance on evidence in the Office of Management and Budget deliberations during the Obama administration (the new book by Haskins and Margolis published by The Brookings Institution entitled *Show me the evidence: Obama's fight for rigor and evidence in social policy* is a fascinating read of this history). The Coalition of Evidence-Based Policy, directed by Jon Baron, and the Washington State Institute for Public Policy (WSIPP), directed by Steve Aos, are examples of efforts being made to summarize the extant

evidence on a variety of programs in the hope that their syntheses will be used in decisions about funding (or defunding) programs.

We would like to add that in thinking about scaling programs and services for children, youth, and families the research community should also consider economic evidence as part of their research programs in order to inform funding decisions. The Board on Children, Youth and Families of the Institute of Medicine and National Research Council (IOM/NRC) assembled a planning committee of experts to design a workshop on the use of benefit-cost analyses as part of the evaluation of prevention programs. The workshop was held in late 2013, and a summary has been published (IOM and NRC, 2014).

Workshops of the IOM/NRC do not result in specific recommendations, unlike consensus studies. Rather the purpose is to highlight issues that might be important to consider on the specific topic under discussion. The first author of this commentary is the director of the IOM/NRC Board on Children, Youth, and Families; the second author was a member of the

workshop planning committee; and the third author was the chair of the workshop planning committee.

Some of the issues considered in the workshop included:

- What level of research rigor should be met before results from an evaluation are used to estimate or predict outcomes in a cost-benefit analyses?
- What are best practices and methodologies for costing prevention interventions, including the assessment of full economic/opportunity costs?
- What processes and methodologies should be used when theoretically and empirically linking prevention outcomes to avoided costs or increased revenues?
- Over what time period should the economic benefits of prevention interventions be projected?
- What issues arise when the results of benefit-cost analyses are applied to prevention efforts at scale?
- Do benefit-cost results from efficacy trials need to be adjusted when prevention is taken to scale?
- Can we define standards that all studies should meet before they

can be used to inform policy and budget decisions?

- How could research be used to create policy models that can help inform policy and budget decisions, analogous to the benefit-cost model developed by the Washington State Institute of Public Policy?

According to Supplee and Metz, the research community should include at least three specific elements in designing programs that can be scaled: interaction among multiple stakeholders, reporting detailed information on how the programs are implemented so that they can be replicated and scaled, and the need for understanding the results of the studies. Speakers at the IOM/NRC workshop also identified building political will, assessing and documenting costs and benefits of programs, and reporting results in a way that decision makers and implementers can understand and take action. In essence, the workshop brought together researchers and decision makers to highlight issues to be considered in scaling preventive interventions for children, youth, and families.

Two specific approaches, Communities that Care (CtC) and WSIPP, were presented at the workshop to address the call for including multiple stakeholders in designing and reporting on outcomes of programs designed to benefit children, youth, and families. In CtC, Margaret Kuklinski described their approach to including multiple stakeholders in designing studies and evaluations and reporting on outcomes of programs designed to benefit youth and families. CtC is a coalition-driven approach to preventive intervention that involves mayors, teachers, and parents. The

coalition of members uses survey data from the community to make decisions about program selection. The coalition then monitors and evaluates outcomes to determine impact and guide any necessary course corrections in programming. Having decision makers at the table in the design phase is an important component of this approach.

Steve Aos described WSIPP as a model that presents policy options to legislators in a standardized way which allows them to compare apples to apples of program benefits and costs with follow-up discussions to translate some of the more difficult concepts such as risk and uncertainty. This is another example of a process whereby community or state level data on program implementation—both impacts and costs—are used to inform decisions about program funding and implementation. Aos indicated that it is very important to use local data that represent local conditions and to update reports to decision makers with new data annually. Both speakers indicated that building a coalition or engaging policymakers in discussions about design and reporting builds political will to scale and sustain programs.

Workshop participants called out the importance of collecting more information about the key elements of program design and implementation and linking the science on effectiveness with funding decisions for programs and services. Panelists noted that even though cost analyses are necessary to identify the resources needed to implement programs at scale, this type of information typically takes a back seat to effectiveness and benefit analyses. An ingredients-based approach

to the collection of detailed information on the resources used for program implementation serves to both document the costs of program delivery (including required infrastructure) and to provide the information needed for taking programs to scale in a sustainable way. In this way, speakers made a call to the research community to provide rigorous cost analyses, in addition to benefit and effectiveness analyses, in order to provide a full and rigorous assessment of the costs to adopt, implement, and sustain programs that can in turn inform policy decisions.

In addition, panelists discussed how to translate results to inform policy and practice. Several types of decision makers were identified who need information on benefit-cost and evidence-based approaches, including program specialists who write regulations, implement programs, and monitor progress within the executive branch of government. In communicating with decision makers, simple, evidence-based presentations are needed which can convey the strength of the available evidence while also acknowledging areas of uncertainty. Another point raised among panelists was the importance of having evaluation and implementation program staff spend more time discussing the program and how it is delivered with decision makers.

Miscommunication between researchers and research consumers can stall or divert efforts to drive funding decisions. To address this situation, Jens Ludwig suggested that the research community set a bar on quality standards that all evaluations would meet in order to inform policy. Also, identifying mistakes made by research

consumers in interpreting the science can inform how to better communicate research findings. Engaging research consumers in this process would be welcome.

In sum, the IOM/NRC workshop highlighted the powerful potential that using economic evidence to inform investments in children, youth, and families could have on improving well-being. However, all of these efforts must meet standards developed by the research community.

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Commentary

The Challenges of Scaling Up Early Childhood Development Programs in Latin America

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Despite years of advocacy for evidence-based early childhood development (ECD) programs in Latin-America (LAC), such programs are still not achieving meaningful impacts on children and families in many countries. The two main reasons are lack of data due to the slow progress in information systems for monitoring and evaluation, and challenges in maintaining fidelity and quality at scale. These issues are well aligned with those presented in this important report.

Latin-American countries have implemented two types of programs for very young children at scale: childcare services and, more recently, home visits. For such programs to be successful a continuous quality improvement system has to be in place. But such system ought to be “nourished” by frequent data which is sometimes nonexistent in LAC. The data should, in turn, be used to improve different operational aspects of the programs that I discuss below.

There is very little data on meaningful measures of quality of childcare services that could help

set and monitor quality standards. However, two recent efforts of data collection illuminate the debate on the impact of daycares on child development and show a rather poor overall quality of the service provided. Bernal and Fernández (2013) used the FDCRS (Family Day Care Rating Scale) that uses values from 1 (minimum quality) to 7 (optimal quality) to assess the quality of the public community-based daycares Hogares Comunitarios de Bienestar (HC) in Colombia. They found very unsatisfactory quality scores (average score of 2.3, with a 2.1 in the process quality sub-scale) of this program that serves about 800,000 children¹. Similarly, Araujo, Lopez Boo, Novella, Schodt, and Romina Tomé (2013) applied the ITERS-R (Infant/Toddler Environment Rating Scale, Revised edition) and Toddler CLASS (Toddler Classroom Observation Scoring System) in the Ecuadorian public daycares Centros Infantiles del Buen Vivir. Both instruments presented low average scores. For instance, the CLASS that focuses on measuring process quality presented a score of about 2 in the instructional support domain

and 4 in the emotional support and classroom organization domains out of a total of 7 points.

The ITERS and ECERS have also been applied in Brazil, Peru and Chile and the CLASS has been applied in Chile and Peru. While the results vary across countries, and across sites within countries, evidence points to two key facts: (1) quality is often very low, especially the quality of care received by the most vulnerable children, and (2) when there is any measurement of quality by the programs themselves, it generally focuses on easily measurable inputs and infrastructure, rather than on processes (in particular, the quality of the interactions between caregivers and children). On the other hand, data on the quality of home visits has not been collected yet in at scale programs, but some efforts are underway.

What are the challenges of implementation behind these numbers? Recurring themes in terms of quality of childcare are: deficiencies in the curriculum, insufficient initial training and on-the-job coaching, poor supervision and professional development

practices, and almost nonexistent data monitoring systems to provide child-level information. On the other hand, for home visiting programs, supervision and monitoring, and the lack of data (e.g., inputs, products, outcomes) to monitor progress are major impediments to fidelity of implementation. Fitting evidence to the local context is very difficult when there is no skilled human capital to implement or supervise the home visits. There are also important challenges in recruitment and retention of staff with the required characteristics for the program.

Overall, the challenges of going to scale in LAC are associated with: the complex and expensive task of monitoring and appropriate supervision and coaching of personnel, regional heterogeneity, scarce human resources, and insufficient investment in pertinent training. Scalability with quality in ECD seems to be facilitated by using existing services and staff (i.e., using health staff, teachers) and adding key factors such as training and coaching, while not requiring too much time from the parents to avoid drop out. If meaningful impacts on children and families are to be achieved in Latin-American countries, evidence-based programs will need to be strongly supported for quality implementation. As the report rightly states “the dialogue tying data monitoring and quality implementation can improve the sustainability of evidence in practice settings”.

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¹Some attempts have been made to improving quality in childcare in Colombia. A vocational education program for facilitators in HC (community mothers) was implemented and quality measured by FDCRS improved by 0.3 SD in

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Lynn Karoly is a senior economist at the RAND Corporation and a professor at the Pardee RAND Graduate School. She has conducted national and international research on human capital investments, social welfare policy, child and family well-being, and U.S. labor markets. In the area of child policy, much of her research has focused on early childhood programs with studies on the use and quality of early care and education (ECE) programs, the system of publicly subsidized ECE programs, professional development for the ECE workforce, and ECE quality rating and improvement systems. In related work, she has examined the costs, benefits, and economic returns of early childhood interventions and has employed benefit-cost analysis more generally to evaluate social programs. Karoly received her Ph.D. in economics from Yale University.

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Social Policy Report (ISSN 1075-7031) is published four times a year by the Society for Research in Child Development. Its purpose is twofold: (1) to provide policymakers with objective reviews of research findings on topics of current national interest, and (2) to inform the SRCD membership about current policy issues relating to children and about the state of relevant research.

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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