Scaling early child development: what are the barriers and enablers?

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ABSTRACT

The Sustainable Development Goals, *Global Strategy for Women's, Children's and Adolescents' Health* (2016–2030) and Nurturing Care Framework all include targets to ensure children *thrive*. However, many projects to support early childhood development (ECD) do not 'scale well' and leave large numbers of children unreached. This paper is the fifth in a series examining effective scaling of ECD programmes. This qualitative study explored experiences of scaling-up among purposively recruited implementers of ECD projects in low- and middle-income countries. Participants were sampled, by means of snowball sampling, from existing networks notably through Saving Brains®, Grand Challenges Canada®. Findings of a recent literature review on scaling-up frameworks, by the WHO, informed the development of a semistructured interview schedule. All interviews were conducted in English, via Skype, audio recorded and transcribed verbatim. Interviews were analysed using framework analysis. Framework analysis identified six major themes based on a standard programme cycle: planning and strategic choices, project design, human resources, financing and resource mobilisation, monitoring and evaluation, and leadership and partnerships. Key informants also identified an overarching theme regarding what scaling-up means. Stakeholders have not found existing literature and available frameworks helpful in guiding them to successful scale-up. Our research suggests that rather than proposing yet more theoretical guidelines or frameworks, it would be better to support stakeholders in developing organisational leadership capacity and partnership strategies to enable them to effectively apply a practical programme cycle or systematic process in their own contexts.

Key findings

1. **WHY?** *Situation analysis:* Contextual adaptation of ECD programmes is more complex than for most health programmes as the determinants of child development span multiple sectors; integrating relevant services to create a holistic package is desirable, but care must be taken not to overload delivery channels ('integration vs coordination').
2. **WHAT IS NEW?** *Programme design and implementation:* When engagement of community members is used as a means to address the lack of formally trained human resources, their motivation to improve their own children's well-being should be recognised as important to sustained, high-quality service, along with salaries, when affordable, or alternative non-monetary incentives, capacity building and opportunities for professional development and community recognition. Respondents saw such compensation as needed for both effectiveness and fairness.
3. **WHAT TO DO?** *Data to drive and monitor scale-up:* Moving to scale requires data to track coverage and to enable course correction; these data are often different from those needed for research studies. In addition, measuring and then tracking costs and expenditures is critical for accountability.
4. **KEY GAPS?** *Leadership and partnership:* Small projects often depend on individual leaders and their relationships. To transition to scale, programmes require deeper organisational capacity, more leaders and strategic partnerships with government and often also with civil society and private sector.

BACKGROUND

The Nurturing Care Framework (NCF), published by the WHO, UNICEF and the World Bank in consultation with numerous governments and other stakeholders, provides a road map built on state-of-the art evidence of how children develop and which policies and interventions improve early child development (ECD).[1] The NCF builds on the Sustainable Development Goals (SDGs). It embraces ambitious SDG targets and responds to the *Global Strategy for Women's, Children's and Adolescents' Health* (2016–2030), calling for deliberate efforts to ensure that different components that affect children's development are fully addressed.[2 3] In this context, it is essential to better understand scalable models for implementation at scale. There is increasing interest among governments, non-governmental organisations (NGO), technical and research institutions, in identifying key features of strategies for effective expansion to scale.

ECD research and projects which generate exciting evidence on impact at small scale do not always 'scale well'. Hence, approximately 250 million children under 5 years of age in low- and middle-income countries (LMIC) are at risk of not reaching their developmental potential, and also not receiving interventions that could be transformative.[4 5] Tightly controlled efficacy studies may

not translate well into the realities under which (usually) governments have to allocate scarce resources and build capacities for implementation at scale. ECD interventions require sustained, multifaceted and well-integrated services. This has proven to be a formidable challenge especially for reaching scale with a high level of coverage, equitably.[6]

Scaling-up has been defined as expanding coverage and quality of a specific service to larger populations or broader geographical areas.[2] Scaling can proceed in five directions: geographic coverage (extending to new locations), breadth of coverage (extending to more people in currently served categories and localities), depth of services (extending additional services to current clients), client type (extending to new categories of clients) and problem definition (extending current methods to new problems).[3] A consequence of this definitional complexity is a significant gap between theory and practice, and between researchers and advisors who define the scaling frameworks and policymakers and stakeholders who are responsible for implementing programmes at scale.[7] This problem of complexity is compounded for ECD interventions, which often cut across existing sector domains (eg, health and education) and require sustained, integrated service delivery.

Scaling-up requires deliberate effort that combines attention to both technical and political environment.[8] It may be unsuccessful because the requisite champions and investment commitments are not in place, or because operational plans are not sufficiently attuned to the need to build and sustain capacities, infrastructure and quality measures required for effective service delivery.[9 10]

Purpose, scope and structure of series

This paper is part of a series examining evidence to inform design and implementation of ECD interventions at national and subnational levels in LMIC. The series is structured around a programme cycle; key processes and decision points are outlined figure 1.

This paper is the fifth paper of the series and focuses on the overall process to scale-up; previous papers have reviewed partnerships and overall design,[11] monitoring and evaluation (M&E),[12 13] and financing.[14]

AIM

To identify barriers and facilitators for effective scaling-up of ECD projects, based on key informant (KI) interviews with relevant stakeholders.

METHODS

A qualitative research design including in-depth investigation into experiences of implementers of large-scale ECD projects.

Participants

KIs with experience in scaling-up ECD projects in LMIC were eligible to participate in the study. First, experts from academic institutions and NGOs were purposefully selected within existing networks known to the authors of the study. Grand Challenges Canada linked the authors to Saving Brains investigators. KIs were contacted through email with a short description of the study, before providing written informed consent to be interviewed. Once interviews had taken place, participants were asked to identify other experts.[15] Interviews were stopped at 32 KIs when data from all groups (NGOs, academic institutions and policymakers) were collated to triangulate information.

Data collection

Interviews were conducted between December 2015 and June 2016 by VC, and lasted 40–70 min. All interviews were conducted in English via Skype. Further, interviews were
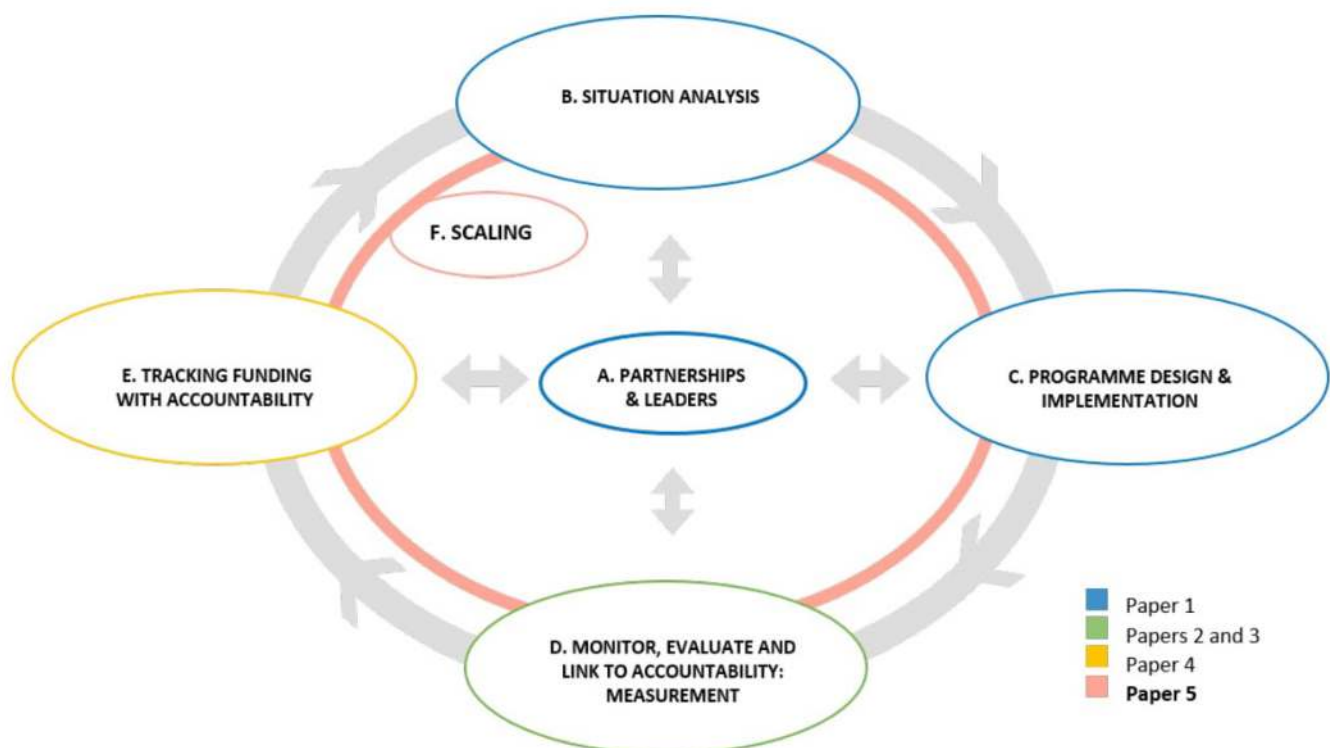
Figure 1 Programme cycle for design, implementation and scaling of early child development programmes.

Table 1 Summary of stakeholders interviewed

	NGO	Academic researcher	Private consulting firm	Policymaker
Gender	8 females; 5 males	15 females; 2 males	1 male	1 male
Region of work	Africa, Americas, Europe, Eastern Mediterranean, South-East Asia	Eastern Mediterranean, South-East Asia, Western Pacific	Africa, Americas, Europe, Eastern Mediterranean, South-East Asia, Western Pacific	Americas
Key informant	KI1–KI3, KI5–KI8, KI14–KI15, KI22–KI23, KI32	KI4, KI10–KI13, KI16–KI21, KI25–KI31	KI9	KI24

NGO, non-governmental organisation.

audio recorded, with permission and transcribed verbatim. The interview schedule was developed by three of the authors (VC, TD, MT) based on a recent review (supplementary web appendix 1) and following an iterative process. The interview schedule was pilot-tested during interviews with three academic or NGO-based respondents, and then further refined (supplementary web appendix 2). Questions prompted participants to report on their experiences and perceptions of the scale-up process, challenges and success factors. Where necessary, additional probes were used. Paraphrasing was used to check that the interviewer had understood and adequately interpreted participant responses.

Data analysis
Interviews were analysed using the five phases recommended in framework analysis (supplementary web appendix 3): (1) familiarisation; (2) framework identification; (3) indexing data; (4) charting; and (5) mapping and interpretation.[16 17]

RESULTS
The 32 KIs included nine males and 23 females with experience across different regions of the world (table 1): 13 were from NGOs, 17 from academic institutions, 1 independent consultant from the private sector and 1 policymaker.

We identified six themes and nine subthemes (table 2) that mapped naturally onto the process for programme design and large-scale implementation of ECD independently developed for this series of papers (figure 1). Stakeholders also identified one additional overarching theme related to terminology, definition and meaning of scaling-up.

Overarching theme: construct of 'scaling-up'
While definitions of scaling-up varied among respondents, most understood that scaling-up was more than expanding a project to larger populations or training larger numbers of providers to provide a particular service. Instead, scaling-up was

acknowledged as a complex process involving political engagement and institution building, not specific to any one discipline or field.

> [Scaling-up is] not narrowly associated with a technical area, it's really a managerial, political, policy-building, institution-building task, and so the principles span through whatever technical area you are working in. (KI5)

Respondents agreed that a clear implementation framework and strategic approach would be valuable for scaling, however the few who were familiar with some frameworks found them to be of little practical use.

> Frameworks? I have no idea! (KI20)

Planning and strategic choices
Scaling-up was acknowledged as a complex process requiring careful planning. Design should occur with scaling and available resources in mind and awareness that impact findings from small studies often do not directly translate in real-life conditions.

> Intentionality is the most important issue. You have to have the intention of going to scale, to go to scale. You have to plan for it. (KI8)

It was clear to participants that scale-up was not something that happens spontaneously, but requires a structured approach and rigorous decision-making process tailored to context. Respondents also agreed that implementation of any project requires pragmatism and flexibility to face unpredictable challenges that arise in new, expanding contexts. It cannot be done solely fixed by theoretical models but needs sufficient versatility so that both organisations and communities can change their approaches.

> When scaling-up in LMIC one needs to be more versatile, think on one's feet, be imaginative, be able to find solutions and to change mindsets of communities, and change cultures of organizations. (KI4)

Table 2 Themes and subthemes following data analysis

Process for programme design and large-scale implementation (figure 1)	Themes	Subthemes
	Overarching: construct of 'scaling-up'	
Situation analysis	1. Planning and strategic choices	1.1 Adaptation to context 1.2 Integration versus coordination 1.3. Equity considerations
Programme design	2. Programme design	2.1 Piloting: evidence versus field experience
Implementation	3. Human resources	3.1 Bridges and intermediary figures
Funding	4. Financing and resource mobilisation	4.1 Involvement of the private sector
Monitor, evaluate and link to accountability	5. Monitoring and evaluation	5.1 Quality assurance
Leadership and partnerships	6. Leadership and partnerships	6.1 Political support, enabling policy environment and constituencies 6.2 Communication approaches and advocacy

Adaptation to context

Respondents expressed ambivalence about whether successful scale-up is more easily reached through centralised or decentralised implementation. The latter was considered a facilitator in terms of local ownership and accountability. Still, they acknowledged that this may not be possible in all settings, and that decentralisation was strongly dependent on government structure. Additionally, respondents agreed that scaling-up was usually more effective when taken at a slow and steady pace. This allowed project leaders to better understand the context within for project delivery, and enabled people on the ground to build relationships with local stakeholders and staff, implement well-tailored strategies for supervision and monitoring, and make adjustments in scale-up strategy according to context keeping the quality of programmes in mind.

> Sometimes governments want to go too fast; they do a very quick scaling-up. So, reaching families is the main objective rather than reaching families with quality. So, I think that speed is what many times leads to failure. Because once you are already in the field, it's very difficult to step back. I would say that the ideal path for a successful scale-up would be to start small and get better, then get bigger. (KI7)

Integration versus coordination

Among strategic choices for successful implementation, a dominant theme concerned integration, identified by respondents as either integration of the project into existing systems, or integration of different components into one programme. To ensure longer term sustainability, integration of projects into existing systems was considered preferable. Nevertheless, respondents emphasised that often projects were implemented in countries with low-resource, fragile systems. Care needs to be taken to avoid overburdening systems and perhaps to strengthen them before implementation. The second concept of integration—combining complementary components into one programme—was seen as an effective and important strategy especially for ECD, which often involves education, and health and nutrition. However, respondents noted that when only one sector implements ECD programmes, it often only addresses its particular perspective.

> The problem with ECD is that it falls under too many hats, and it is very fragmented. So you have the education people approaching ECD from an education perspective and their primary efforts go into pre-school and 3–8 year-olds. People coming from a health perspective tend to look at it from 0 to 3 and tend to have, in some places, just the health perspective (nutrition, vaccination and health) leaving out stimulation. Pre-school education people are leaving out health, and everybody is leaving out protection. (KI1)

Some respondents saw a major problem with integrating different components into one project: diminished quality. They suggested that instead each sector should deliver the policies and interventions they have stronger technical skills in, with emphasis placed on coordination rather than integration. However, coordination also poses big challenges, particularly for ECD projects that are multisectoral in nature, requiring engagement of many stakeholders with different priorities and incentives.

> It's is very hard to find the right stakeholder or institutional home because there isn't one. (KI9)

Equity considerations

Interviewees stressed the importance of focusing on equity during scale-up. Here interviewees recommended designing needs-based projects clearly identifying the target population,

and explicitly addressing how to reach it, to inform planning and decision-making through the scaling process.

> [There are] so many children who have needs, right? (KI12)

Programme design

Despite an apparent lack of common terminology, respondents considered the definition of the programme's characteristics crucial. Piloting is key before any step towards scale-up takes place. Designing content for ECD projects was not considered straightforward. For example, participants explained that while many well-defined ECD curricula have proven efficacy, the life-cycle approach taken by ECD projects complicates design of a scalable project. Further, respondents stated that in order to retain impact, projects need to be standardised and implemented with fidelity. However, they also noted that ECD projects need to be flexible enough for successful implementation at scale, to serve different populations by adapting to the local culture and context and to adapt to progression of needs of each population.

> The most important thing is the design. You have to design your programme to go to scale, you have to put in the elements that will enable it to be replicable, and adapted and revised, and placed into development. (KI8)

Piloting: evidence versus field experience

Participants reported that once the project is clearly defined, piloting its implementation in different contexts is important to understand barriers and facilitators. Respondents highlighted a disconnect between what is designed at protocol level and what is feasible in reality, emphasising the need for better cohesion between the stakeholders involved in protocol design versus those with actual knowledge and expertise of the context where the project is intended to be implemented at scale (eg, national and subnational policymakers, programme implementers and community leaders). Participants reported that while strong and rigorous scientific evidence is considered an important basis for scaling-up, it was also important to go beyond that by considering scaling best practices supported by field experience.

> The second assumption which tends to be generally false, is that solid impact evidence, such as randomized controlled trials or quasi experimental trials is not only necessary, but sufficient for successful scaling-up. And in my experience that is not true. It's neither necessary nor sufficient. It's desirable, but that's a different question. (KI9)

Human resources

Human resources were seen as critical for successful design and implementation. Respondents agreed that human resources capacity for ECD greatly influences service quality at scale and outcomes for children.

> You have to have people who have the qualities, the personal qualities, the training and the creativity to be able to do the work. […] You have to find people who are utterly committed to the effort. […] That is how you define a person of high level of category and the person who sorts of just does the job. (KI8)

Social innovations that use family networks and champion family volunteers were seen as a means to address the lack of formally trained human resources in some settings, as people are eager to contribute to their community, and particularly to projects that target children's well-being. However, several interviewees stressed that volunteers should be used in a limited way, and instead people providing services should be rewarded.

We put lots of money into stuff (vehicles, schools, equipment), but we refuse to put money into salaries because it's not sustainable, and then we are surprised that programmes fail. (KI1)

Respondents agreed that building capacity among staff was key, and that alternative models for capacity building, for example, with cascaded training/training and/or technology supports should be considered. They saw robust training and sustained, regular supervision as important to preserving quality. Respondents also highlighted as vital, staff motivation to ensure both retention and quality; for frontline workers, the appeal of directly and visibly benefiting children's lives can play an important role here.

So why do people do things? Because you pay them, they do things because they get social status and prestige, they do things because of moral imperatives, or they do things because of a sense of self-actu-alization: they feel better about themselves for example when they see the impact on children. (KI9)

Bridges and intermediary figures

Respondents reported frustration with overlap and blurring of responsibilities between researchers and implementers, suggesting that intermediary figures were needed to ensure proper scale-up. Both implementers and researchers were often asked to do things outside their skill set.

The people who run research projects or field research projects are lacking the skills. They don't understand the politics, they don't think that way, they don't know who the players are, they don't have logistics and management capacity, they don't understand all the financial resource questions, the human resource questions, the institutional questions, they don't know how to do advocacy and marketing, they can't quickly translate from research language to policy language, to bureaucratic language, to language that speaks to beneficiaries, etc. (KI9)

Therefore, participants regarded intermediary figures as necessary bridges between researchers, implementers and other stakeholders, as valuable knowledge translators and leaders for scaling-up.

Financing and resource mobilisation

Cost considerations were considered essential for scaling-up. Respondents agreed that finances are often ignored and projects expanded too quickly without ensuring sufficient budget.

One of the major determinants [of failure] I believe that is not speaking about money. (KI14)

To secure financial resources for scaling, participants suggested social franchising models, social entrepreneurship, community fundraising, grants/donor agencies and government funding. Different financing mechanisms were suggested for securing sustainable resources, including changes in the way donors provide funding. Participants stated that there is a need for donors and funding agencies to commit long-term resources (at least 5 years) to ensure continuity of activities, and to enable higher impact with return of investments.

Involvement of the private sector

Respondents stated that there was a need for ECD projects to be delivered by governments. However, respondents also stated that this may not be possible as governments have competing priorities are often more focused on child survival, and may not be in a position to allocate resources to ECD. Therefore, the private sector was seen as a potential partner in scaling-up, with both financial and technical capacities, but differences in inter-ests between the public and private sectors must be taken into account.

What it takes to persuade politicians and bureaucrats to adopt something versus private sector companies are not the same. They are pretty different audiences. (KI9)

Monitoring and evaluation

Interviewees agreed that M&E was necessary to guide struc-tured data collection and ensure transparency. Yet interviewees reported that data collection in ECD projects was often seen as intended solely for scientific publications, and of little use for project improvement or addressing implementation challenges.

One of the other problems is that monitoring and evaluation for scaling are not for scaling, they are actually for publishing research papers. (KI9)

Respondents stressed that information collected and dissem-inated should include negative findings as well as positive ones so that errors are not replicated. Finally, evidence was described as a powerful tool to convince stakeholders of the value of any project, which should also be leveraged towards that objective.

If we can show that our programme is resulting in outcome then it is very hard not to advocate for scaling-up. (KI3)

Quality assurance

Maintaining project quality was seen as a priority.

Quality over quantity. If you do something really well, other people will want to copy it; if you do something broadly and badly it will fail and no one will copy it. And you will waste money. (KI1)

Leadership and partnerships

Strong leadership was deemed as key to scale-up, including 'champions' who are committed to the project, believe in it and can convince others to follow them. All interviewees viewed champions as important for successful scaling-up.

If you can find those strategic thinkers that have been waiting for something like this to empower them, then those are the best expe-riences we have had so far. (KI5)

Scaling-up was considered a multistakeholder process by all respondents. Investment of time and money to build a strong coalition was seen as key to building the necessary supportive environment among beneficiaries, implementers, potential partner organisations, academic institutions and policymakers. This support was thought to be ensured by building ownership of the project at every level, including the local community and end users. This is especially important, and challenging, in ECD because at the governmental level, multiple sectors are poten-tially involved, and at the community level, projects often engage with intimate topics in child-rearing.

We had people from the community and they carried us on their shoulders. They knew exactly what they wanted. They knew that what we were doing was what they needed. (KI8)

Political support, enabling policy environment and constituencies

Political support from governments and policymakers was viewed as essential as governments have reach and potential to sustain projects at scale.

When I look at things that have gone to scale, the ultimate scaling decision is in the hands of the governments. And I make no assumption there is any other way around, you know. (KI28)

Engaging governments was seen as a difficult and lengthy process that required significant effort to convince them of the relevance and value of ECD projects and building long-term relationships. One challenge is that while ECD investments often have short-term returns for communities and public systems, policymakers may require evidence of long-term, life-cycle benefits as well. Interviewees reported that sometimes formalising their role, or that of their organisation, was helpful in securing recognition by the government and ongoing collaboration with it.

We have worked really hard to gain a reputation of serious and rigorous researchers. So in a sense they have to listen, sometimes even if they do not want to. (KI16)

Lastly, participants agreed that both sensitisation of policymakers and politicians (a top-down approach) and a strong constituency to influence governments to support ECD (a bottom-up approach) are needed to impact laws and policies.

Communication approaches and advocacy

Participants were unanimous that clear marketing and communication approaches were needed, including framing messages in relevant ways for each of the many audiences that matter for scale-up.

Why should you invest in this? The first question is: why should I care about ECD at all? Why should I invest in this issue? And then, once you get them to agree to that, then the question is okay what is the best way to do it? (KI9)

Communities are usually considered easy targets for advocacy because they can see that ECD projects will benefit their own children.

Communities want something that will make their children brighter, healthier and smarter than the rest of the village. (KI4)

DISCUSSION

Stakeholders reported facing varied challenges to decision-making, with no straightforward answers, that are often particularly complex in ECD settings and not solved by existing frameworks. They reported a disconnect between existing scale-up frameworks and what implementers consider useful in practice. To further elaborate, we summarised our resulting recommendations in table 3 and structure the following discussion under a range of 'Cs' that cut across this series of papers.[11–14]

Context and content

ECD does not fit naturally into any one sector, as it involves all components of nurturing care (responsive caregiving, opportunities for early learning, health, nutrition, and security and safety) and also engages with family life, which falls outside any government sector.[1] A child's development is strongly influenced by the quality of human relationships in which s/he is nurtured over time, and projects with this focus also require high-quality provider–client relationships. Working across sectors and assuring high-quality relationships at scale is inherently complex, and it is difficult, if not impossible, to identify a standard method that would enable straightforward scaling independent of governmental (eg, sectoral capacity), social and cultural context. While effective curricula have been defined at

Table 3 Recommendations for scaling-up

Context and content	► Build in capacity to adapt project content and delivery strategy to context at every scaling phase.
Contact point	► Include service components that fit the capacities of the contact point selected for delivery, rather than attempt to 'include everything'. ► Coordinate across sectors and build approaches to 'holistic' solutions taking into account local implementation capacity.
Cadre	► Promote a sense of self-determination and professional development among front-line providers. ► Focus on motivation, including desire to serve the community and to see benefits for children.
Counting outcomes	► Recognise that M&E needs intentional design to serve needs of both project implementers, major stakeholder and researchers. ► Bring project leaders, researchers and implementers together early in design cycle to ensure alignment and to allocate roles.
Coverage and quality	► Adopt simple metrics to track coverage in an appropriate way for each phase of the scaling process, with an emphasis on defining and meeting quality and equity objectives—to effectively reach the underserved.
Course corrections	► Recognising that scaling is a non-linear, adaptive process, build in capacity for multiple course corrections at every phase, including an implementation culture that spots, reports and responds to problems ► Carefully document on-the-ground experiences, including negative ones, and make them available for learning within the project and more broadly.
Counting money	► Aim for long-term financial sustainability. ► Consider partnering with both public and private sectors for financial and technical support, recognising the differing requirements of each.
Community partnerships	► Phase implementation timing to leave room to build community buy-in and enable community engagement in quality control and adaptation. ► Develop communications materials and capacity tailored not just to central government, but also to intermediate jurisdictions and community members.

small scale, moving forward, research is needed to better define critical content of interventions required to maintain impact at scale. Further, standardisation of packages is important for quality control and replication of results, but a degree of flexibility is also required for scaling in a specific context. It is therefore recommended to design projects to allow learnings to be drawn regarding key aspects for project impact and for adjustment to avoid becoming barriers to scale. In sum, successful scaling requires ongoing adaptation of both project content and delivery strategy to context.

Contact point

Recommendations for programming contact points have historically promoted integration of different components into one programme, building on existing service delivery platforms. However, from available evidence, it is not clear whether integration is the best approach or whether coordination should be pursued. While a holistic approach to ECD is strongly supported by science, in the view of respondents, adding too many components can overwhelm staff and compromise quality of intervention delivery.[18] Therefore, it may be necessary to rethink what a holistic approach means, and what integration should look like through an implementation perspective, with answers differing based on context and content. The study highlighted how different components of programmes could and should

be delivered to the child and his/her family in a comprehensive manner, but each one should be provided by the sector with the most expertise. There is currently a strong push for better coordination, reflected in the recent *Lancet* series which emphasised the need for a coordinated approach to services across sectors, facilitated by unifying and synergic policies in favour of ECD.[19 20]

Cadre

There was clear agreement among respondents that strong leadership and a skilled and motivated workforce are key components of scaling. Literature shows how successfully scaled projects are led by outstanding leaders who are persistent, well connected, credible, able to mobilise resources and can articulate a clear vision.[10 21] Human resourcing should be strategic and policies should support retention of qualified staff. A relevant finding of the study, stressed by many respondents, was for governments and organisations to consider alternative human resource policies beyond salaries in the form, for example, of non-monetary incentives, capacity building and professional development.

Counting outcomes

Respondent views were consistent with our research showing that stakeholder and donor engagement is influenced by rigorous scientific evidence.[21] This requires M&E plans that enable (1) stakeholders to learn about project impact and relevance for potential beneficiaries; (2) implementers to make decisions about the most important project components for the context; and (3) overall quality control. Rigorous scientific evidence should be collected where possible alongside documentation of best practices and real-life experiences that are emerging as important for informing the scale-up process.[18 22] However, as has been highlighted earlier in this series, processes for collecting these data are not straightforward.[12 13] Researchers, programme implementers and other stakeholders often have differing priorities for M&E, so needs of each should be considered in developing a plan. Knowledge generated by researchers is not always easily translated into practice; on the other hand, implementers are asked to collect data for research purposes that are not a priority to them. The results of this practice are frustrating and far from ideal. Intermediary figures to translate language and skills between them are increasingly recognised as a potential solution to this misalignment.

Coverage and quality

Tracking coverage is another way data collection can support scaling, whenever the project stakeholders have responsibility for outcomes for a specific population. Coverage identifies either the per cent of the target population reached and the percent achieving the measurable intended outcome, or the goal for universal access to care.[12 23] Consistent assessment of coverage through simple metrics, without excluding other data vital for assessment and course correction as reviewed above, provides implementers a way to target interventions and measure quality, effectiveness and equity of reach to the target population.[24]

Course corrections

Programmes need data to support ongoing course corrections throughout scaling. Process indicators and early outcome data are both vital in this regard because they can be used to improve the project content and to identify and address challenges during implementation. Similarly, an organisational culture able to detect difficulties and negative processes and adjust accordingly during implementation can foster an environment where

negative findings can be made widely available for corrections towards success and avoidance of errors by other stakeholders. To further enable course corrections, 'on the ground' experiences should be more meticulously documented and made available within the ECD community to guide planning choices that fit the specific project and context.

Counting money

Engagement of stakeholders early on is essential for gaining sustainable financial support. The viability and sustainability of scale-up depends on adequate financing and allocation of resources. Literature underscores the need to ensure stable, non-fungible financial support through diversification of funding, including (depending on the service) services for a fee, dedicated income taxes and franchising models.[25] An additional way to support financial sustainability with scaling, repeatedly mentioned during interviews, was involvement of the private sector to capitalise on private sector capacities and resources.[25 26] At the same time, as Arregoces *et al* have highlighted, improved tracking is needed to hold donor agencies and financing bodies accountable to commitments of long-term support of programmes, in line with SDG targets.[14] A closer look is needed to understand underlying reasons why this does not happen consistently, so that compelling arguments could be better directed to persuading donors.

Community engagement

In addition to a valid workforce, planning for scale requires engagement of stakeholders early on to ensure the political and community support required to create strong partnerships to support scaling. Although efforts have traditionally concentrated on high-level policymakers and leaders in the communities, this research shows that this is insufficient. Creation of local demand, constituencies and resources to support implementation and scaling are crucial. Mid-level officials and community members that are not part of the leadership are the ones most likely to be directly involved in programme implementation, and their buy-in needs to be secured. To this end, both impersonal (eg, academic publications, policy briefs) and personal (eg, site visits, conferences, workshops) communication strategies are required to gain community support and promote scale-up of projects.[27]

Strengths and limitations of this study

This study has included a large and diverse range of stakeholders, which has allowed us to develop a robust multidimensional understanding of challenges and success factors for scaling-up ECD projects in different contexts. The wide variety of intervention programming reflected in the sample provided a welcome diversity of perspectives, but also posed challenges for synthesising results. Moreover, since we focused on NGOs and researchers directly involved in scaling, relevant stakeholders at the policy, funding and community levels were not interviewed and their perspective has not been represented. Therefore, there is a risk that some particular viewpoints may have dominated and others may have been missed. Likewise, we only interviewed English speakers, and interviews could not be carried out in person.

CONCLUSION

This series has highlighted numerous challenges that stakeholders face as they make decisions on how to successfully scale ECD projects—ranging from navigating multiple service sectors through recruiting and managing cadre as well as assessing and

achieving quality. In general, stakeholders have not found the existing literature and available scaling-up frameworks helpful in guiding them to solutions. Our respondents noted specific aspects of ECD that pose particular challenges in scaling, for example, the combination of short-term and long-term impacts, difficulties in measurement outcomes, lack of a single sectoral home, and the need for sustained, high-quality service delivery in low-resource settings, and reaching the right balance between intersectoral coordination and integration of ECD services based on the NCF. Our research suggests that rather than proposing yet more theoretical guidelines in the face of such challenges, it would be better to support stakeholders in developing strong leadership, organisational and partnership strategies that could enable them to effectively apply a systematic process such as the programme cycle in the context they face (figure 1). Such strategies should include building capacity to effectively address context, content, contact, cadre, community, counting, course correction and coverage, as discussed here and throughout this series. This approach, which emphasises leadership, partnerships and problem-solving in context, could help national and local leaders move to larger scale, to measure change to drive account-ability. As national ECD scaling examples continue to emerge in different contexts it will be important for them to be shared in a timely way so that other countries can learn from them.[10]

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