ACCELERATION TO IMPACT

The Role of the SL@B Program in Accelerating Market Entry for Maternal and Newborn Health Innovations

JULY 2020

EXECUTIVE SUMMARY

The Saving Lives at Birth (SL@B) program brings together USAID, the Norwegian Agency for Development Cooperation (NORAD), the Bill and Melinda Gates Foundation, Grand Challenges Canada (GCC), U.K. Department for International Development (DFID), and Korea International Cooperation Agency (KOICA), around a grand challenge to combat preventable maternal and newborn deaths and stillbirths on a global scale. Since its launch in 2011, SL@B has funded more than 100 innovations solving for critical issues in maternal and newborn health (MNH) in low-resource settings. To have a large and lasting impact, these new care models, devices, and drugs must reach and scale within their target markets.

The analytic sample includes eleven SL@B grantees operating or planning to operate in Kenya, Ethiopia, and India, three of the target markets for SL@B innovations.

Focusing on the experiences of a "key markets sample" of eleven SL@B grantees, this research brief explores the different pathways to market and scale pursued by these teams and which factors are most helpful. The brief is designed to illustrate the role that the SL@B program and other partners play in accelerating these trajectories. The brief also provides recommendations for how SL@B and similar programs can better support innovations on the path to market.

The analytic sample includes eleven SL@B grantees operating or planning to operate in Kenya, Ethiopia, and India, three of the target markets for SL@B innovations. Semi-structured interviews were conducted with this sample, purposively selected to include a representative range of funding rounds, types of innovation, types of organizations, and grant type.

Please see the report, "Evaluating Saving Lives at Birth: Evaluation Report, Rounds One to Eight (2011-2020)," published by Duke University, for the full comprehensive evaluation of the SL@B program. The full evaluation report draws on the analysis presented here as well as additional sources of qualitative and quantitative data to provide a robust evaluation of and recommendations for the SL@B program.

KEY FINDINGS

Scaling pathways. Innovations in the analytic sample cluster in three scaling strategies. **Multi-stakeholder partnerships** (45%), including local and national government partnerships, is the most commonly anticipated or chosen pathway among this sample. **Licensing out** (27%) is next, followed closely by **organic growth** (18%). One of the grantees was still undecided about scaling pathway. None of the SL@B innovations in the sample are pursuing open licensing or acquisition.[1]

Interviews with the key markets sample indicate that licensing out is chosen as the quickest way to reach impact and as a way to address lack of capacity and expertise in-house. Multi-sectoral partnership is chosen as the best way to reach the poorest populations (partnering with government) and to commercialize while retaining control (partnering with private sector). All practice/approach innovations in the sample are pursuing government partnerships.

Four of the eleven grantees in the key markets sample had significantly pivoted their scaling pathway at some stage. Reasons for changing scaling pathway included political and regulatory challenges, organization-level strategy changes, lack of funding, and feasibility challenges.

Preparation for scale. The SL@B program helped grantees prepare for scale in several specific ways. SL@B's application process initiated early thinking about scaling plans and partners. Accelerator support and mentorship increased grantees' understanding of and preparation for scaling pathways. DevX connections provided peer support, critical resources, and partnerships. Hands-on grants management provided important support and strategic connections.

In addition, other funders and partners provided important support for SL@B grantees as they prepared for market entry and scale. Funding from universities, consortium funders, investors, corporate, and non-SL@B GCC funding was helpful to grantees. Mentorship received through accelerators, advisory boards, and participating in innovation networks was also helpful. Commercialization and implementation partners, including public and private sector, provided important expertise and reach.

1: Scaling strategies taken from: USAID Center for Accelerating Innovation and Impact, "Pathways to Scale" (2016), https://www.usaid.gov/cii/pathways-scale.

Grantees also noted several areas where additional support during scale preparation would have been particularly helpful. Early training in commercialization, business planning, and market viability would help grantees assess their needs and be better prepared for partnerships. Market research and preparation to iterate locations if needed could have saved grantees critical time during the proof-of-concept phases. The focus on technology and products in the non-financial support provided by the SL@B program was not always applicable to practice/approach innovations. Finally, funding gaps between growth stages stalled projects.

Support in turning points. Support from both SL@B and other funders and partners helped grantees to navigate key turning points on the trajectory to market entry and scaling. A few ways that the SL@B program provided support with turning points includes validation of the idea through the selection process, focus on early preparation for scale, connections to partners and funders, peer networks, and mentorship.

Accelerating market entry and scale. All grantees asked by the research team stated that participation in SL@B had accelerated their timeline to market entry and scale. Several grantees credited the non-financial support, such as strategic connections with partners, peer networks, and the mentorship that they received through SL@B. For others, the most important factor in acceleration was receiving the SL@B funding at a critical point in time, particularly around establishing proof-of-concept and early adoption. While several grantees noted that they probably would have gotten to market eventually, SL@B funding sped up their trajectory. Two grantees noted that their project would not exist without SL@B funding.

STRENGTHS AND RECOMMENDATIONS

Grantees in the key markets sample identified strengths specific to the SL@B program, including:

- Open call that allows anyone with a good idea to apply, encouraging new entrants and small organizations as well as large ones;
- Funding through growth stages;
- Non-financial support, and mentoring innovators through the growth stages;
- Connections with peers and strategic partners; and
- On the whole, as a program, catalyzing new funding and new ideas, developing innovators in the field.

In addition, insights from grantee experiences provided a number of recommendations for how the SL@B program and other similar programs could better meet the needs of MNH innovation teams. These include:

- Make it easier for process/approach innovations to be considered in the selection process. While the language of the calls is broad, grantees noted that the program is actually very focused on new technology.
- Be realistic with grantees about the timeline, success rates, and potential for sustainability for innovations trying to scale in LMICs, especially for innovations that will embed within health systems.
- Consider a more intentional approach to multi-stage funding, perhaps setting success metrics for each stage, and moving successful innovations to scale.
- Provide grantees with a better understanding of the market entry process, manufacturer/distributer needs, commercialization, risk factors, and communication skills as early as possible.
- Help innovators fail fast (test market viability) and iterate as needed.
- Strengthen promotion of SL@B-funded innovations after the grant period, to potential next-stage funders or implementation partners.
- Provide more opportunities for peer connection, remotely or regionally. Grantees noted it can be difficult to travel for DevX. Smaller peer groups organized around growth stage or type of innovation could be helpful.
- Increase in-country support for target markets, to help grantees better understand the context and get real-time insights on the ecosystem.

INTRODUCTION

A GRAND CHALLENGE APPROACH FOR MATERNAL AND NEWBORN HEALTH

The Saving Lives at Birth (SL@B) program brings together USAID, the Norwegian Agency for Development Cooperation (NORAD), the Bill and Melinda Gates Foundation, Grand Challenges Canada (GCC), U.K. Department for International Development (DFID), and Korea International Cooperation Agency (KOICA), around a grand challenge to combat preventable maternal and newborn deaths and stillbirths on a global scale. By definition, grand challenge approaches source from a wide array of innovations, funders, researchers, and other vital players, in order to address critical problems, develop target programs, and implement sustainable solutions. These undertakings are typically global in scale and work toward identifying and addressing a specific critical gap. [2] SL@B's global partnership strives to reduce maternal and newborn mortality and stillbirths through innovative approaches addressing the top causes of mortality.

As defined by Grand Challenges Canada (GCC), the SL@B program employs an "integrated innovation" approach, further explained as the "coordinated application of scientific/ technological, social and business innovation to develop solutions to complex challenges."[2] The SL@B program emphasizes the importance of developing, validating, and scaling promising innovations, with a primary focus on science and technology, service delivery, and demand creation.

Since its launch in 2011, SL@B has funded more than 100 innovations solving for critical issues in maternal and newborn health (MNH) in low-resource settings. These projects, including diagnostics, drugs, care delivery models, and other types of innovations, tackle major causes of mortality in MNH. While the diverse portfolio includes innovations across growth stages and at various levels of scale, many are relatively early in development. Given this, the SL@B funding partners have designed the program to provide financial but also technical and strategic support for innovations on the path from idea to operating at scale.

GOAL OF THIS BRIEF

To have a large and lasting impact, these new care models, devices, and drugs must reach and scale within their target markets. The aim of this brief is to provide insight on the different pathways to market and scale pursued by SL@B grantees and which factors are most helpful in that process.

The brief is designed to illustrate the role that the SL@B program and other partners play in accelerating these trajectories. The brief also provides recommendations for how SL@B and similar programs can better support innovations on the path to market. This analysis focuses in particular on the experience of a sample of SL@B grantees operating or planning to operate in Kenya, Ethiopia, and India, three of the target markets for SL@B innovations.

The SL@B funding partnership commissioned this study, as part of a broader evaluation of the SL@B program. Please see the report, "Evaluating Saving Lives at Birth: Evaluation Report, Rounds One to Eight (2011-2020)," published by Duke University, for the comprehensive evaluation of the SL@B program overall. The full evaluation report draws on the analysis presented here as well as additional sources of qualitative and quantitative data to provide a robust evaluation of and recommendations for the SL@B program.

DATA AND METHODOLOGY

The research team collected qualitative data through eleven semi-structured interviews, conducted in April and May of 2019, with a "key markets sample" of SL@B awardees who launched or planned to launch their innovation in Kenya, Ethiopia, and/or India. This sample was purposively selected to include a representative range of funding rounds, types of innovation, types of organizations, and grant type.

The key markets sample includes four grantees based in LMICs and seven based in HICs. (Two of the grantees based in HICs also have teams based in LMICs specific to the funded innovation.) Three of the innovations are currently in market and scaling, while five more are preparing for market. The remaining three are inactive due to lack of funding to take the project forward.

2: Grand Challenges Canada/Grand Défis Canada, "The Grand Challenges Approach," (2011), https://www.grandchallenges.ca/wp-content/uploads/2017/11/thegrandchallengesapproach.pdf

The research team has categorized six of the innovations as being in the validation phase, two in early adoption phase, and three in the scaling phase. Six of these innovations are diagnostics or devices, one is a drug/vaccine, one is a nutrient, and three are classified as practice/approach innovations. Six of the grantees are based in universities or research institutions, four in non-profit organizations, and one in a for-profit organization. Eight of the grants are currently closed, while three are open. Three of the innovations received multiple rounds of SL@B funding.

The interviews with this sample were conducted following an interview guide, designed to answer the research questions explored in this brief. Interviews were recorded, transcribed, and coded for analysis. Thematic analysis of these data is supplemented with detailed program data on these projects, drawn from grantee reports. The Campus Institutional Review Board at Duke University reviewed and approved the study protocol. All interview participants gave written informed consent to participate.

SL@B's global partnership strives to reduce maternal and newborn mortality and stillbirths through innovative approaches addressing the top causes of mortality.

FINDINGS

PATHWAYS TO SCALE

Which pathways to scale do grantees in the analysis sample pursue?

KEY FINDINGS:
- Innovations in the key markets sample used for this analysis cluster in three of the five scaling pathways: licensing out, organic growth, and multi-stakeholder partnerships.
- Innovators may combine more than one scaling pathway (a hybrid approach).

Scaling strategies and frameworks can help innovators to think through key considerations involved in the complex pathway to scale. Although the notion of a pathway suggests a linear route, in reality, it is an iterative process that builds on lessons learned, challenges faced, and feedback received across different stages.

For this brief, the research team used the Pathways to Scale framework, developed by USAID. The Pathways to Scale framework lays out five potential models to scale, included in Table 1 below.[3]

The innovations in the key markets sample are clustered in three of these scaling strategies. Consisting of 11 current and former grantees targeting Kenya, Ethiopia, and India, innovations within this sample are clustered in multi-stakeholder partnership (5), licensing out (3), and organic growth (2). One of the grantees is early in validation stage and still undecided about pathway to scale. None of the grantees in the key markets sample were pursuing open licensing or acquisition. It is important to note that three of the innovations in the sample are currently inactive, due to lack of funding, and are not able to pursue market entry or scale until additional funding is identified.

TABLE 1: SCALING PATHWAYS CHOSEN BY INNOVATION TEAMS IN ANALYTIC SAMPLE

PATHWAY	KEY FEATURES	KEY MARKETS SAMPLE: % (N)
Organic growth with selective out-sourcing	Scale-up led and coordinated by the innovator. Some activities including regulatory approval, manufacturing, distribution, and sales may be outsourced.	18% (2)
Multi-stakeholder partnership	Multiple partners work together to drive scale-up. Innovator retains ownership.	45% (5)
Licensing out	Innovator licenses rights to another party to drive commercialization	27% (3)
Open licensing	Open license allows others to use the product and/or IP with few or no restrictions	N/A
Getting acquired	Innovation is sold to another party	N/A
Other/undecided		9% (1)

Source: SL@B program data and interviews conducted by the Duke research team

3: *USAID Center for Accelerating Innovation and Impact, "Pathways to Scale" (2016), https://www.usaid.gov/cii/pathways-scale.*

At least two of the grantees in the key markets sample are using a hybrid approach, combining more than one scaling pathway. One grantee is primarily scaling through organic growth but using multi-sectoral partnerships (with the public sector). Another grantee has licensed out the manufacturing and distribution functions but the licensing partnership is structured more like a multi-sectoral partnership in which both organizations co-designed elements of the innovation and maintain some ownership and branding recognition.

It is also important to note that in our research, we found that licensing out does not always include a return of revenue to the innovator organization. Non-profit and research-oriented organizations may choose to pursue licensing out as the fastest pathway to impact but develop a structure that returns any revenue generated to the distributor. This can create a more attractive and sustainable prospect for commercial distributers to engage with an impact-focused innovation targeting low-income populations.

How do grantees select and validate their scaling pathway?

KEY FINDINGS:
- Licensing out is chosen as the quickest way to reach impact and because of lack of capacity and expertise in-house.
- Multi-sectoral partnership is chosen as the best way to reach the poorest populations (partnering with government) and to commercialize while retaining control (partnering with private sector).
- All practice/approach innovations in the sample are pursuing government partnerships.

Interview data with the key markets sample yield several insights about how and why SL@B grantees choose and validate pathways to market and scale for their funded innovation.

Grantees who chose licensing out did so for two primary reasons: first, it was considered the quickest way to reach the desired impact, and second, in-house capacity and expertise constraints prevented grantees from choosing organic growth. For each of these grantees, licensing out was seen as the most realistic path to market.

Several grantees chose to pursue multi-sectoral partnerships with governments because this was seen as the best way to reach the poorest populations. Another grantee chose multi-sectoral partnerships with a corporate partner over licensing out, in order to retain ownership and the focus on LMICs throughout commercialization. The grantee believed that this path would most likely lead to the impact they desired and keep them in position of key decision maker.

All of the practice/approach innovations in the interview sample (3) were pursuing market entry and scale through partnerships with government health systems, including one grantee who is scaling through organic growth but in partnership with public health systems. This grantee noted that public partnerships may be particularly critical for practice/approach innovations and that these relationships require early buy-in from the government.

"Licensing was preferable because a large multinational like X has established distribution networks, and so we thought going the license way could actually make the innovation have the impact it is supposed to have sooner."

"Because we are an academic research organization, we have limited capacity and orientation to take the product to the market, handle the post-marketing issues and all those challenges. So, we thought of engaging a developer and a manufacturer from the beginning."

"We were very much determined to avoid the straight licensing out kind of approach... We saw that having a multi-stakeholder partnership was really necessary for a product like this, for the settings it's designed for, and so we didn't want to just sort of hand it off and lose a lot of the elements that having a non-commercial entity like a university associated with the product can gain."

"We are fairly agnostic about who uses it, but my colleagues' interest is in trying to make sure that poor people get access to things. We have a very strong focus on doing that through the public system because at the end of the day, they deal predominately with the poor."

In terms of choosing the right markets, the most important factors were existing relationships, finding willing partners, low barriers to entry (including regulatory), and partner or funder geographic priorities. **Several grantees noted that SL@B funding helped them to evaluate potential markets and/or identify partners who then determined the market.**

A number of grantees in the key markets sample appear to struggle with identifying the right time to transition from validation (proof-of-concept) to early adoption (market entry). Several noted they would prefer to continue testing and iterating their innovation to ensure that it works and were unclear about what burden of proof they need to meet before entering the market.

Why do innovators change their scaling pathway?

KEY FINDINGS:
- Common reasons for changing scaling pathway include political and regulatory challenges, organization-level strategy changes, lack of funding, and feasibility challenges.

Of the eleven grantees in the key markets sample, seven said that their planned pathway to scale had not changed significantly over time while the remaining four had pivoted their planned pathway to market and scale. The most commonly cited reason for pathway change was ecosystem-related issues, including political and regulatory challenges in the target market(s). These issues led to changes in planned markets and/or route to market. Other reasons for change in pathway included larger strategic pivots across the organization (e.g. changing target population), lack of funding to pursue the original pathway, and realizing that the planned pathway was not realistic.

Other grantees, who did not consider themselves to have significantly pivoted, did note that the route to scale was not as straightforward as anticipated. For some, finding the right partner changed their plans somewhat for market entry and scale. For others, particularly for practice/approach innovations, long-term funding support is needed even after market entry, limiting their ability to commercialize and scale. A few grantees noted that the need (expressed by uptake partners) to retest and demonstrate efficacy in each new market also slows down expansion.

"With SL@B innovations, there are kind of two plays. You get the ones where it is a private business type thing with a cool product and I'm making a case for it and then we sell it. The other play is one where ultimately the long game is having the government take it up as an intervention and that's especially important for the service delivery innovations. If your long game is to have the government pick up the tab, it's important to get them engaged and have a sense of ownership relatively early in the process."

"We considered a number of countries and chose X because the local Ministry of Health was the most enthusiastic of all the countries we talked to."

"We received funding from SL@B to... develop a tool that could help us assess a variety of different countries and across a set of metrics of interest and come up with an informed decision about which country or countries to go into first. And so, we've got a short list of about six countries, with a package of information that tells us: what are the strengths we get from one country, and what opportunities will we be able to link into in others."

"We have not gone to the market aggressively because we wanted to be very sure about the product and the use, user feedback from the different types of users at different levels and different expertise so that we can address and make it more robust before we pushed it to the market. Because once you put to the market, and if you are not able to sustain the so-called user-friendliness, then it may hit back to you. So, we don't want to push it too fast."

"Overall, we've stayed consistent as a start-up to basically say that we're going to sell the product to a distributor in-country, but the understanding of how much training is involved has changed and other market adoption things that we've learned."

"It's highly unlikely, like many things in the low-income world, that [the innovation] will be commercially viable and therefore it will need some kind of external support for some time, but that's challenging."

"Many of these countries want to establish their own efficacy data, which is a bit of a problem because every time a country starts an efficacy trial, it involves money and it takes time to do a full-fledged efficacy, if you're lucky, it takes 18 months."

PLANNING FOR SCALE

How did SL@B help innovations prepare for scale?

KEY FINDINGS:
- SL@B's application process initiated early thinking about scaling plans and partners.
- Accelerator support and mentorship increased grantees' understanding of and preparation for scaling pathways.
- DevX connections provided peer support, critical resources, and partnerships.
- Hands-on grants management provided important support and strategic connections.

The data from the key markets sample demonstrate that grantees feel that participation in the SL@B program helped them to think about and prepare for scale at early stages of their innovation, primarily in three ways. First, SL@B's grant application process was influential. Three grantees noted that to be competitive in the application process, early stage innovations are expected to describe their vision for market entry and scale up, while transition-to-scale applicants are expected to secure an implementation partner at the time of application. For innovators who had not yet thought in those terms, this process initiated their thinking about scaling and pathways to market.

"The way that the SL@B program does its call for grants even... a big part of it is that you can demonstrate that you have a vision for scale-up of your product... We had to sort of think about what our plans for scale up and introduction was, and so not only sort of highlighting the importance of that forward thinking, but really getting a bit of understanding of the other factors that we need to consider"

"I guess the initial SL@B application made us... well, we had to put something in the grant, so we had to formalize our thinking"

"The requirement for a commercial scaling partner as a prerequisite for the TTS funding from SL@B, I think, was a condition that was clearly felt. We knew if we needed to be competitive, we needed to take that seriously."

The second primary way that SL@B facilitated preparation for scale, mentioned by seven of the eleven grantees is through accelerator support. The Xcelerator programs hosted by VentureWell in Malawi and Rwanda, and hosted by Duke University and VentureWell in Nairobi were specifically mentioned as being helpful to innovators. These workshops and the subsequent follow up calls provided guidance and support in market research, scaling pathways, and business development.[4]

This support helped innovators who were focused on the technical development aspects of the innovation to also think about scaling. It also allowed for relationships to form between innovators, who learned from each other. **The accelerator support was of highest value to those with academic backgrounds and little knowledge of commercialization and scaling innovations.** It was not as valuable to innovators with extensive backgrounds in global health innovation or those with service-based approach, as it was more focused on scaling products.

Third, in addition to the accelerator program, the SL@B program provided non-financial support through the DevelopmentXChange (DevX), which was found to be very valuable to innovators' scaling preparation. In particular, DevX provided peer-to-peer learning exchange, community building, and connections with future scaling partners. Most of the grantees in this sample (8) found the community of innovators within SL@B to be an important resource for peer-to-peer support and market knowledge, as well as broadening their understanding of global health. DevX is also an important platform for innovators to create strategic partnerships. **Nearly half of the grantees in the key markets sample mentioned that they found their distribution or implementation partners through DevX.**

"Going through these Xcelerators helped us definitely start thinking about scale more seriously, and also starting to identify the major risks or pitfalls that could kind of prevent scaling from happening."

"I participated in two of the Xcelerators, and that was great, especially for somebody like me who you know... most of my experiences are sort of early in development. So, thinking about scaling early on in the accelerator programs really fostered that."

"I think the most important thing that I learned through my [experience with the SL@B accelerator] is thinking about scale early, and using that to direct what you do even at early stages – what data you gather, what information you gather, who you interact with."

"I think the tapping in or kind of joining the global health technology community has been probably the biggest thing because before, we were working on it within a little bit of a bubble, so it was really hard to see where we could find strategic partners or where we could find feedback from kind of large purchasers and things like that. Joining SL@B definitely allowed us to tap into kind of a whole new community where we could go for questions, answers and connections."

"There is something that happens with DevX other than the training and knowledge, but connecting innovators who are able to meet and share their challenges that has actually resulted in a lot of knowledge sharing and cross-pollination that accelerates the innovation process in many ways."

"The SL@B program itself, just the way the whole program is set up to be more than just a sort of source of funding has obviously been really helpful. The DevelopmentXChange, where you can get together and learn from other innovators, has obviously been invaluable not only sort of, learning from them and what has worked for them during the sessions, but it also helps with linking with partners... building the kind of networks that we need."

"The learnings through the DevelopmentXChange have been phenomenal in strengthening our approach, in terms of positioning ourselves for scale."

"[Our grant managers'] role in the project has grown over time, and that's kind of been one of the better things that has happened for the project as they have kind of reached out with respect to what our potential needs are and what our challenges are, and then having the clout or the connections to find the right people for us to talk to, so that's definitely been the biggest benefit of being part of the SL@B network."

"[Our grant managers], for example... have so many connections, they can find the right people to talk to. So, I think they have been the most valuable source... Our actual funders understanding our project fully, and also being able to recommend the type of people we should be talking to or potential partnerships."

"[SL@B] supported in a big way because they provided the flexibility and support to work as per the plan, and also providing all types of facilitation from the administrative, the grant management aspect and also engagement with the private developer and the agencies from the market side."

Hands-on support from the grants managers was the other non-financial component of SL@B's support for scale noted by grantees. Innovators appreciated grants managers reaching out to facilitate connections and provide support.

What other supports and/or partners were important in planning for scale?

KEY FINDINGS:
- Non-SL@B funding either before or after the SL@B program from different entities (universities, consortium funders, investors, corporate funders, philanthropic foundations, government funders, non-SL@B GCC funding) was helpful to grantees.
- Mentorship received through accelerators, advisory boards, and participating in innovation networks was also helpful.
- Commercialization and implementation partners, including public and private sector, provided important expertise and reach.

Grantees noted that many other partners, programs, and factors were important in helping them plan for market entry and scale. In particular, grantees mentioned the support of other funders, either before or after their SL@B funding, including funding from various universities, consortium funders such as CAMTech, investors, corporate funders like Johnson and Johnson, philanthropic foundations, including the Gates Foundation, Draper Richards Kaplan, and Tata Trusts, government funders like the International Development Research Centre in Canada, and funding from GCC outside of the SL@B consortium funding.

In addition to funding, grantees noted the importance of mentorship received through participation in accelerators (including VentureWell, GE's Healthymagination, and the USAID-funded Social Entrepreneurship Accelerator at Duke) and innovation networks, including Innovations in Healthcare and the Mulago Foundation fellows' network. Grantees also mentioned the support of advisory boards and informal mentorship through their own relationships with experts in groups like the World Health Organization (WHO). Similarly, several grantees noted that peer relationships in the global health and innovation community, often facilitated by the SL@B program, have been important to their preparation for market and scale.[5]

Other external partners and factors that emerged as important include implementation, licensing, and distribution partners. Several grantees noted that their partners brought needed skills and expertise to the venture and helped shape their plans for scale in critical ways. Grantees partnering with the public sector noted that it is important to get early buy-in from government partners but that once the innovation is proven and accepted, it can scale very quickly.

Grantees working with corporate and private-sector partners mentioned the external validation that their partnerships provided, in addition to more tactical support with regulatory approval, manufacturing and sales, and capital.

Internal resources were also mentioned, including technological expertise within their organizations and the sheer perseverance of a committed team.

What support or knowledge do grantees wish they had earlier?

KEY FINDINGS:
- Grantees noted that early training in commercialization, business planning, and market viability would be helpful.
- Better market research and preparation to iterate locations if needed could have saved grantees critical time during the proof-of-concept phases.
- Funding gaps between growth stages stalled projects.
- Much of the mentoring and non-financial support provided by the SL@B program was focused on technology and products, which was not always applicable to practice/approach innovations.

Grantees mentioned several areas where they wish they had received more support throughout the development and market launch of their innovation. **Several grantees noted that they came to the world of global health innovation with technological backgrounds but did not have the needed expertise in business or global health to know how to risk assess the commercialization process.** These innovators may struggle to understand market realities, the potential risks, and how to quickly test for market viability and iterate. They suggested that more knowledge and tools related to the pros and cons of different pathways to market, types of implementation partners, and how to approach those partners, would have been helpful.

"A lot of the other NGOs working in this space, and other innovators working in this space have been really, really bright sources of information and shared experiences."

"We rely on our investor community significantly to understand how does a business model work, what is an effective amount? What do we need to aim for sales? What sort of training is expected on the US side for a device like this? We also have a really great scientific advisory board... as well as a local advisory board that helps with our local office."

"We participated in the X accelerator, which was also helpful because it's a bit more of a long-term accelerator. It allowed us to do things like business model and development and financial development more thoroughly than we had before, and particularly trying our market research and really understanding the numbers within the market. It was something that we hadn't had a chance to do before."

"We've been co-designing this in part with some of our county partners but also sharing and getting feedback with the Ministry relatively early on, rather than trying to say – hey, we got 20 counties under our belts and now Ministry you should do that."

"[Our corporate partner] has the wherewithal, the resources, the expertise, the sort of capital that's required to bring this kind of product to market and maintain its life after that."

"I would say the most important things have been a sort of doggedness of the people involved... the team members who really tried to push this along, they've been very committed to try to do it."

"There's definitely a lot of potential pitfalls with respect to regulatory approval... that I don't think we fully considered when we were first starting off the project. We learned as we went forward. Getting in connection with these people who can point those things out or connect to other interested parties is definitely something that can't happen fast enough for any team because it's kind of invaluable information, and the earlier you get it, the more chance you have of pivoting and adjusting the development process to accommodate for those risk factors. So, I would say identifying the risks to commercialization is probably something that needs to be emphasized as soon as possible so that teams can really objectively determine – what is the true probability that this is going to work and what changes can we make to increase that probability?"

Two grantees noted that their imperfect information about target markets forced changes in their plans and delayed their timeline during their grants. In one case, it was only after operating in the target context that the grantee realized how national policies would have significantly slowed down the launch of the innovation. This innovator decided to launch the innovation in another market first. In the second case, it was an issue of political instability unfolding during the field testing that waylaid the original plan. In hindsight, the grantee realized that they could have prepared for such an event and perhaps had a backup plan that would allow them to gather the needed data in another location.

Several grantees also noted that they faced funding gaps in between growth stages, which put them into a holding pattern and they lost critical momentum. The SL@B funding got them through a milestone or set of milestones but then they struggled to identify funding to support their next phase and were not always ready for the next stage of SL@B funding.

A couple of grantees also noted that the non-financial support provided by SL@B focused more on products and devices than practice/approach innovations. They would have found additional support for the unique issues facing product/approach innovations on their pathway to market entry and scale to be helpful.

TURNING POINTS IN GETTING TO MARKET

■ *What were the most important turning points for SL@B awardees in this stage? How did the SL@B program and other partners support them in these turning points?*

Gaining entry and traction in any market is challenging, including identifying manufacturing and distribution channels, demand generation, and uptake partners in both public and private sectors. Innovators moving along the trajectory to market entry experience a variety of turning points that provide validation and momentum. The SL@B grantees in the key markets sample identified a range of turning points that were important to their traction and continued movement toward scale. These are provided in the table below, with information on where and how the SL@B program and other partners were particularly helpful in navigating each of these turning points.

KEY TURNING POINT	SL@B SUPPORT	OTHER SUPPORT
Receipt of SL@B award	Provided validation, both internally and externally, of the idea, often was the first funding received and launched the project. The call is open to any type of organization with a good idea, which allows smaller organizations a "way in."	Not applicable
Establishing proof-of-concept	Funding to test the innovation and build evidence that it works	Funding (from non-SL@B funders) to test the innovation and build evidence that it works, research partners, in-country field partners
Identifying target markets	Focus on early preparation for scale and understanding the target market and end user have helped grantees select markets and prepare for market entry.	Commercialization, distribution, and implementation partners, and other funders have also shaped the selection of target markets.
Finding external champions	Several grantees counted SL@B as an important champion that helped them get additional attention and support. They also found champions through the SL@B network.	Commercialization and distribution partners, other funders, and uptake partners (such as hospitals) have also played this role for innovators.
Identifying commercial, manufacturing, distribution, and implementation partners	Many grantees found commercialization and implementation partners through direct introductions from SL@B funders and through DevX.	Innovators have also found partners through other networks and funders.
Regulatory approval	Not mentioned by any interviewees	Grantees noted that their implementation or commercialization partners were most helpful in navigating the regulatory approval process for their target market(s).
Peer networks	Connections with peers is frequently mentioned as one of the most important benefits of participating in the SL@B program.	Innovators mentioned other peer networks and accelerator programs as being a helpful turning point (though for most, this was secondary to the peer networks developed through SL@B).
Iterations in model and target market(s)	Mentorship, from the funders, and also technical mentors associated with the SL@B program, was very helpful. Grantees appreciated that this mentorship often extended even after the grant period.	Innovators also received mentorship from investors, strategic partners, advisory boards, and other accelerator programs, which helped them iterate as they prepared for scale.
Follow-on funding	Three of the eleven grantees in this sample received follow-on SL@B funding, though several more applied for it and were not selected. Several innovators noted that having SL@B funding helped them to attract other funders, in part because the SL@B brand made them more attractive to development funders and in part because of the evidence they were able to build through their SL@B grant.	Innovators received funding after their SL@B grants from a variety of funders, including investors, philanthropic funders, development funders, and corporate funders. A few of the innovators in this sample struggled to identify post-SL@B funding and their projects are stalled.

On receipt of SL@B award:

"It was the first funding we received as a start-up, so I would say that it was immensely pivotal as far as being someone who's willing to take a chance on us and we've grown immensely. We're a company of about eight people now, we have two offices, and it was definitely one of the very first kind of acknowledgement of us as a solution that could actually help and impact immensely."

"It was really definitely very catalytic early on, when we got our first SL@B funding at DevX, it really was our sort of first foray into this whole global health community and getting a better understanding of who's working in the space and what they're trying to do, and what we need to be doing."

On identifying target markets and getting regulatory approval:

"You either need to have IRB approval for a study or regulatory approval and I think those are big huge points for any project. You need to get square with the authorities, whether that's just the hospital or the national level."

"They encouraged you to understand the target markets and understand the landscapes in the countries that you are targeting"

On proof-of-concept, identifying strategic partners and champions:

"A significant turning point in the project's history was signing the partnership with X. This really validated the feasibility of the project and gave us a real path to market. A big part of securing this partnership was that we had strong data demonstrating the proof of concept for the project... It was funding from SL@B that allowed us to generate this data... I think that's a great element of the seed grant model."

"I think that's definitely the first turning point is finding a reliable and credible distribution partner who's willing to 'take a chance' "

"I think another turning point is when, we've noticed obviously champions is a word that's thrown around, but when you get not just champions, but key hospitals using your product or someone who has notoriety using your product in the country."

On the importance of peer networks and mentorship, to making iterations to the model and target market:

"The critical thing the SL@B program provided was access to the technical mentors and the so-called guide teams at different time points during the SL@B meetings or during the accelerator program or later on."

"Not just the funding obviously, but being able to sort of bring us into a community of other innovators and implementers. I guess it's a community of all the groups that are working towards efficient and effective scale up, and being embedded within that sort of environment has been so essential."

■ *Does SL@B help to accelerate the process of market entry?*

All grantees asked by the research team stated that participation in SL@B had accelerated their timeline to market entry and scale. Several grantees credited the non-financial support, such as strategic connections with partners, peer networks, and the mentorship that they received through SL@B. For others, the most important factor in acceleration was receiving the SL@B funding at a critical point in time, particularly around establishing proof-of-concept and early adoption. While several grantees noted that they probably would have gotten to market eventually, SL@B funding sped up their trajectory. Two grantees noted that their project would not exist without SL@B funding.

"From when we started, this is about 5 to 6 years now, since the X prototype was hatched. And really knowing that now we have a manufacturing and distribution partner and very soon, could be a commercial product, it is a very short timeline compared to many medical devices. So, we really think participating in SL@B most likely has been a significant contributor to this accelerated progress."

"When we look at the more traditional routes for funding, and putting commercialization forward for a medical device like this, there really wasn't much of a pathway in the more traditional route. So, without SL@B's both funding and connections to people interested in this type of innovation, I'm not sure it would have gone very far."

"We would not have done this if it hadn't been for SL@B... This has become a foundational part of our strategy as we're working with the public sector. We wouldn't have gotten this kind evidence under our belt."

"[SL@B] really facilitated our partnership with X. If we had not done that, the [project] would be in a super different place right now. We might have identified a manufacturer/ distributor, but my guess is that it would be us trying to figure out now how to launch the product. Whereas, we were able to launch the product two years ago."

Another important component of the SL@B program that helped to accelerate grantees' progress to market entry and scale is the program's commitment to fund at early stages. Many innovators expressed the impact that SL@B's seed grant had on their pathway to scale, as it is a critical phase with limited funding available. SL@B grantees used their seed grant to generate evidence and prove that their innovation works. For some innovators, it serves as a sort of validation in a crowded market that SL@B took a chance on their innovation and promoted their growth.

"SL@B was the reason in getting us through this very key time – where there's really no other funding or no other expertise."

"We wouldn't have been able to do much of anything without it. So, it was a big piece of us getting it started and generating evidence...we've now got a really compelling set of preliminary data that we're using for a number of different grants"

"We had a few ideas for how or what the best route towards commercialization was, and basically through the SL@B funding, we worked to narrow down those options and explore them."

In addition to funding at the seed level, SL@B is also commended by grantees for its efforts to fund at different stages (validation and TTS), which is seen as a commitment to helping innovations get to market. For grantees in the portfolio that were able to get more than one or two rounds of SL@B funding, they believe that this continuity facilitated their pathway to scale.

"I think there is really one big thing that the SL@B team has done. The fact that the SL@B program was structured to support different stages of development, seed, validation, and TTS – it really gave us the platform to be able to accelerate progress. For example, if SL@B decided that they are only going to fund late-stage innovation (TTS), I bet you so many innovations would actually not realize their full potential because they will be struggling with the seed and validation funding."

■ *Who/what else was important in helping make this happen?*

Innovators note that many other partners and factors, described throughout this brief, were also important in accelerating their trajectory to market. In particular, other funders who supported the development, validation, and early adoption phases were noted as being critical. In addition, grantees mentioned the importance of their commercialization and implementation partners, particularly in the regulatory approval process. Two grantees also mentioned GCC's Transition to Scale program (which is separate from the SL@B program) as being an important support in accelerating their growth.

SUMMARY AND RECOMMENDATIONS

Synthesizing the analysis presented above, several aspects of the SL@B approach appear to provide significant support in accelerating the path to market entry and scale.

- **Open call** that allows anyone with a good idea to apply, encouraging new entrants and small organizations as well as large ones
- **Funding** through growth stages
- **Non-financial support**, hand-holding innovators through the growth stages
- **Connections** with peers and strategic partners
- On the whole, as a program, **catalyzing new funding and new ideas, developing innovators in the field**.

"The primary thing which I think was the turning point was the type of competition and funding because SL@B funding was quite open and was not only limited to the established developers or the technical expert, but also allowed new organizations like us because we were not the traditional developers or something. We had an idea and then we applied which was recognized by the funders."

"It took them a couple of years to figure it out, but it's not enough to just have an RFP for seed grants and then say: come back to us in a year from now with a bigger grant if you were successful. It requires some deliberation and more hand-holding through the process, but it seems like they've kind of learned that lesson, and that's sort of the purpose of the A-SL@B program – to guide people through scale. Whether it's them that are doing it or whether it's them through partnerships, finding a way to sort of handhold organizations through that process; that's important."

"The program seems very focused on supporting work that will ensure that you're developing and designing products that are very relevant to their end use context and not developed in isolation of this understanding of the end used setting. So, I think yeah, that ethos and that focus among SL@B has been really helpful to make sure we keep our focus on that end use environment."

"[SL@B grants] have catalyzed the investigators of the groups to [develop] different types of projects and different types of grants... People who have received SL@B grants have been also successful in taking up newer projects later on because they were initially granted the SL@B grant, and based on this experience, several of them have started working on different issues and many of the grantees have been coming back with new ideas and applications in the subsequent years, which have been quite encouraging."

RECOMMENDATIONS

Grantees were also able to identify gaps that remain in support for maternal and newborn health innovation that could potentially by addressed by SL@B or similar grand challenge programs to further accelerate market entry and scale. These are categorized here by recommendations pertaining to the program design (sourcing, structure) and financial support and those focused on non-financial support.

Program design and financial support

1.

Make it easier for process/approach innovations to be considered. While the language of the calls is broad, grantees noted that the program is actually very focused on new technology. (This recommendation came from all three of the grantees in the sample with practice/approach innovations, all pursuing multi-stakeholder partnerships either alone or in tandem with another scaling pathway.)

"The language used and the descriptions used were broad enough for innovations having to do with processes and organization. Make it easier for those to be considered. Some of the donors are notoriously focused on new technologies... I think the assumption is that any innovation is a gadget; that's not always the case."

2.

Be realistic with grantees about the timeline, success rates, and potential for sustainability for innovations trying to scale in LMICs, especially for innovations that will embed within health systems. (This recommendation came largely from grantees pursuing multi-sectoral partnerships and looking to scale through the public sector.)

"There are innovations, which I would say are more aimed at mainstream health systems, to try to improve those, which start off de facto with the problem of who is going to subsidize them. But, at the moment, you're often left in a position where you have to try and promise that yours will still be self-sustaining, and will somehow miraculously generate income in a very low resource country. And that doesn't seem appropriate as a starting point. So I think SL@B and many others give the impression that the market will solve the problem and maybe I'm just old-fashioned but in healthcare, I don't think that works very well."

3.

Consider a more intentional approach to multi-stage funding, perhaps setting success metrics for each stage, and bringing successful innovations all the way through. (This recommendation came from grantees across various scaling pathways.)

"We probably applied 10 times for SL@B and got one grant and so you're incentivized to just like throw a bunch of different things in the ring rather than double down, which serves the purpose for researchers who are piloting cool new things, which is why you see so many academics in the program or big organizations like Jhpiego that have a hundred things going on, rather than organizations that are deliberately trying to scale one particular thing. If there was a more sort of deliberate expectation, like – hey, it's not just 1% of our seed grants become scaling grants, but rather the funnel is less narrow and more deliberate; that would probably be a smart idea."

Recommendations for non-financial support

4. **Provide grantees with a better understanding** of the market entry process, manufacturer/ distributer needs, commercialization, risk factors, and communication skills as early as possible. (This recommendation came primarily from grantees pursuing licensing out but was also echoed by grantees pursuing multi-sectoral partnership and organic growth.)

"We would have loved to have connected with this distributor that we're working with now or talking with them three or four years ago even when the project didn't have any clinical data...We're talking a lot with end users and stakeholders in the field, but... there's a lot of other players that play bigger roles – people procuring the devices and the people, in the field getting them out, the distributors, and things like that. So, making those connections at the earliest stage possible I think would have been something we would have liked to do slightly differently."

"Communication –that's a big thing, it has been a big learning experience for me, the importance of communication, even when you're testing a product and especially when you're taking it to scale, the need for developing very strong and effective communication materials because ultimately, all the stakeholders involved and the consumer should be comfortable with what you're offering and should use it. That's one area that I would recommend, stronger communication support to make sure that products like these are scaled up and to help grantees develop skills."

5. **Help innovators fail fast (test market viability) and iterate as needed.** (This recommendation came from grantees pursuing licensing out and multi-sectoral partnerships.)

"Sometimes when you look at what SL@B is funding, they fund multiple products that all address the exact same need. There's going to be competition there and not all of those products are going to make it but yet what they're being told, or at least what I'm hearing people say, is like – yes, you got this great product and we're going to support you and you're going to launch it, market it, all this stuff... How is the global health community using the scarce resources that we have for product development in order to meet the needs that are out there? What do all these people think when they have worked for like ten years trying to get a product to market, you know, do they make decisions finally – like oh this isn't working, I need to do something else, or do they just keep having hope?"

6. **Strengthen promotion of SL@B-funded innovations after the grant period**, to potential next-stage funders or implementation partners. (This recommendation came from grantees in the early adoption and scaling stages, across scaling pathways.)

"One thing that SL@B could do... it would be great to bring together all the implementing agencies that do programming and say: hey, here are a number of innovations that could fit into the kind of programming that you do. It would be really nice because it would save time, instead of connecting one-to-one in terms of different programs and new products. I think a space that SL@B could step into would be to promote the products that have been commercialized or that are ready to launch with implementing agencies that are running programs that are appropriate for using those products; that would be really helpful."

7. **Provide more opportunities for peer connection, remotely or regionally**. Grantees noted it can be difficult to travel for DevX. Smaller peer groups organized around growth stage or type of innovation could be helpful. (This recommendation came from grantees in development and validation stages, across scaling pathways.)

"If there are maybe more opportunities for telecoms or webinars to allow maybe more targeted or more for focused sharing of experiences between innovators or between different types of agencies or partners, that might help I think. Sometimes the DevX is such a big event, it's kind of hard to do that sort of thing often and it's also hard to get into the details of some things that might help but yeah, maybe if there were more opportunities to support smaller scale versions of that that could be done more remotely."

8. **Increase in-country support for target markets, to help grantees better understand the context and get real-time insights on the ecosystem.** (This recommendation came from grantees across various growth stages and scaling pathways.)

"If SL@B could help with in-country expertise because each country is so different in terms of how you get things like this moving, in-country expertise to support them would be a useful thing to do. All the people here are great and nice from North America, but the condition on the ground is quite different, and any expertise to help at that end, whether it is in Africa in Asia would definitely be helpful... How I roll this out in Tanzania would be quite different from how I roll it out in Bangladesh, so somebody with the knowledge of local conditions – how do you get moving?"

Overall, the strongest themes emerging from this analysis are that the financial and non-financial support of the SL@B program play an important and positive role in the trajectory of the grantees, and that the grantees credit this support with accelerating their progress toward market entry, scale, and impact. Several grantees in the sample believe their projects never would have begun without the SL@B funding, two grantees noted that it was the catalyst to get them thinking about global health challenges, and nearly all grantees noted that the mix of financial, technical, and network support was what made the program so helpful.

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