INNOVATIONS IN HEALTHCARE™

Rapid Pivoting to Respond to the COVID-19 Pandemic

Case Studies of Health Innovators on the Ground

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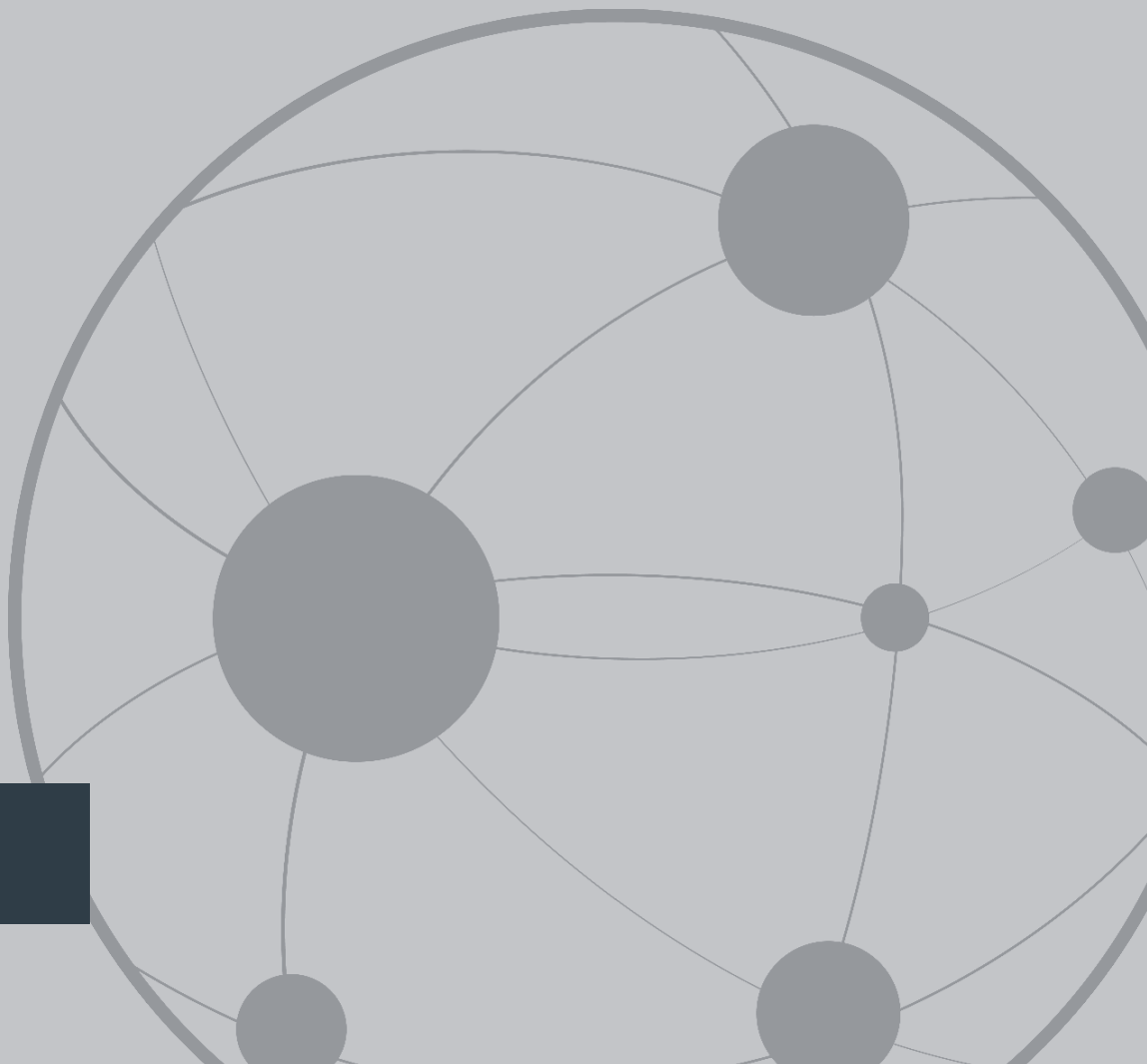

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ABOUT INNOVATIONS IN HEALTHCARE

Innovations in Healthcare is a nonprofit organization hosted by Duke University and founded in 2011 by Duke Health, McKinsey & Company, and the World Economic Forum. We aim to improve healthcare worldwide by supporting the scale and impact of promising innovations.

THE PFIZER FOUNDATION

The Pfizer Foundation is a charitable organization established by Pfizer Inc. It is a separate legal entity with distinct legal restrictions. The Foundation launched its Health Delivery and Social Innovation portfolio to broaden the use of its resources to increase the impact of its work in public health. The goal is to improve healthcare delivery and access for low-income populations by supporting healthcare entrepreneurs and enterprises and fostering local innovation. The Foundation implements this strategy with impact investing that seeks to generate social impact and catalytic grant making. The Foundation also funds the Global Health Innovation Grants program to support promising innovations with a mission to provide access to quality healthcare for underserved populations in Africa, Asia, and Latin America.

ACKNOWLEDGMENTS

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TABLE OF CONTENTS

The Pfizer Foundation

A charitable foundation established by Pfizer Inc

EXECUTIVE SUMMARY

The COVID-19 pandemic has disrupted traditional processes and approaches across sectors. The pandemic led health-focused social enterprises to quickly respond to new realities on the ground and induced rapid innovation on all levels, from shifting modes of patient engagement to developing entirely new programs. Drawing from their entrepreneurial roots, these innovators had embraced agile thinking even prior to the onset of the pandemic. As nimble organizations that have grown to serve as agents of change in the health sector, these enterprises were well positioned to quickly adapt and respond to this crisis.

Innovations in Healthcare, a nonprofit organization housed at Duke University, interviewed four health innovation leaders working in low- and middle-income countries to develop case studies of COVID-19 responses. We selected the innovators from a group of 20 organizations that received funding from The Pfizer Foundation's* Global Health Innovation Grants (GHIG) program. The GHIG program provides one-year grants to organizations to support projects that seek to improve prevention, diagnosis, and treatment of infectious diseases for underserved populations in low- and middle-income countries. Innovations in Healthcare is The Pfizer Foundation's independent monitoring and evaluation partner for the GHIG program.

These case studies provide in-depth accounts of innovators' on-the-ground experiences with developing and implementing new ideas in response to the pandemic, highlighting the ways that they shifted their work to best adapt to new circumstances.

CASE STUDY 1

2020 MicroClinic Initiative

2020 MicroClinic Initiative (2020 MCI) initially undertook a project focusing on hosting workplace wellness events to expand access to urinary tract infection (UTI) testing for low-wage workers in Kenya. However, most workplaces shifted to work-from-home models after the implementation of lockdown measures due to the pandemic. Accordingly, 2020 MCI developed a new door-to-door medication delivery program that leverages local motorbike riders to offer screenings, medication delivery, and connection to telemedicine services to these workers at their homes.

CASE STUDY 2

Fundación Vive Con Bienestar

Fundación Vive con Bienestar (Bive) was working to reduce the burden of cervical cancer in rural Colombia by offering early screening, diagnosis, and treatment for HPV along with education and vaccination campaigns. With the emergence of the pandemic, Bive shifted its work to focus on community education and outreach about COVID-19, providing rural farming communities with information, infection prevention kits, screening and risk assessments, and connection to local hospitals for further treatment.

CASE STUDY 3

THINKMD

THINKMD develops health technology platforms, such as clinical assessment tools, to help health workers make appropriate, evidence-based decisions that can improve the quality of health in low- and middle-income countries. In response to COVID-19, the THINKMD team leveraged its technical skills and expertise to develop a digital COVID-19 screening tool and worked with implementation partners on the ground to distribute the tool to vulnerable communities.

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CASE STUDY 4

The Society for Nutrition, Education, and Health Action

The Society for Nutrition, Education and Health Action (SNEHA) carries out door-to-door outreach in India to provide health education; screenings focusing on maternal, child, and newborn health; and referral to local medical facilities for treatment. As part of its original project, SNEHA also supported health systems strengthening through health worker training. To adapt to COVID-19, SNEHA shifted away from in-person communications for many of these activities, using telephone hotlines, television broadcasts, and loudspeaker announcements for community education and online training for health systems strengthening. SNEHA leveraged its close relationships within its target communities to adjust its activities to best meet specific community needs.

Key Recommendations

Based on what we learned about the experiences of these four innovators and of the larger 2019 cohort of GHIG innovators through regular monitoring and evaluation activities, we identified three key lessons for social enterprises that seek to adapt to unexpected crises like the COVID-19 pandemic.

1. Even in the face of uncertainty and change, it is important to stay true to the organization's core mission and values.

2. Flexibility in adapting and implementing new programs based on data and evidence is critical to meeting the changing needs of a target community and/or consumer base.

3. Partnerships grounded in mutual trust and clearly defined roles and expectations are key to reaching and engaging with target populations in times of uncertainty and crisis.

INTRODUCTION

The COVID-19 pandemic has disrupted traditional processes and approaches across sectors. The pandemic led health-focused social enterprises to quickly respond to new realities on the ground and induced rapid innovation on all levels, from shifting modes of patient engagement to developing entirely new programs. Drawing from their entrepreneurial roots, these innovators had embraced agile thinking even prior to the onset of the pandemic. As nimble organizations that have grown to serve as agents of change in the health sector, these enterprises were well positioned to quickly adapt and respond to this crisis.

Innovations in Healthcare, a nonprofit organization housed at Duke University, interviewed four health innovation leaders working in low- and middle-income countries across Africa, South America, and Asia to develop case studies of COVID-19 responses. We selected the innovators from a group of 20 organizations that received funding from The Pfizer Foundation's Global Health Innovation Grants (GHIG) program. The GHIG program provides one-year grants to organizations to support projects that seek to improve prevention, diagnosis, and treatment of infectious diseases for underserved populations in low- and middle-income countries. Innovations in Healthcare is The Pfizer Foundation's independent monitoring and evaluation partner for the GHIG program.

These case studies give in-depth insights into the experiences, processes, and challenges of health innovators as they rapidly pivoted to respond to the COVID-19 pandemic.

CASE STUDIES

CASE STUDY 1

Solving the Healthcare Puzzle
2020MicroClinic Initiative

ORGANIZATIONAL OVERVIEW

2020 MicroClinic Initiative (2020 MCI) aims to improve health in underserved communities in rural Kenya by providing primary healthcare services, including reproductive, maternal, and child health, that are underfunded by the public sector. 2020 MCI operates medical hubs that target these excluded populations by providing affordable, high-quality healthcare with a high-volume, low-margin pricing model that leverages clinical officers as the first point of contact for patients.

THE ORIGINAL PROJECT

2020 MCI's original GHIG project expanded upon a program to test women and girls for asymptomatic urinary tract infections (UTIs) through workplace-based screenings targeting low-wage workers in Kenya. Through this project, the organization planned to hold workplace wellness events and community outreach activities to reach pregnant women and girls and provide UTI testing. The project also aimed to monitor sensitivity to different antibiotics in detected cases of UTI and use this data to report on trends in infection and susceptibility to antibiotics in order to support improved antimicrobial stewardship.

THE PIVOT TO RESPOND TO COVID-19

When lockdown measures were implemented in Kenya as a result of the COVID-19 pandemic, 2020 MCI faced two challenges to its planned activities. First, many workers were no longer traveling to their workplaces, meaning that 2020 MCI could no longer rely on workplace-based interventions to reach its target population. Second, due to COVID-19, there was an interruption in claims processing and payments from insurance companies for services provided at 2020 MCI clinics. Moka Lantum, founder of 2020 MCI, found himself asking two questions: "What is an alternative method to reach the low-wage worker who is now working from home?" and "How can 2020 MCI move towards a more cash-based service model, since insurance companies are no longer processing claims?"

Photo credit: Sagitarix, Ltd./2020 MicroClinic Initiative

2020 MCI responded by developing a new program in partnership with freelance motorbike riders to deliver fee-based healthcare services to patients in their homes. Under normal circumstances, freelance motorbike riders in Kenya provide delivery services, transporting food and other goods from businesses to people's homes. Now, in partnership with Sagitarix and Checkups Medical, motorbike riders travel each day to residential areas throughout Nairobi offering medication delivery and connection to teleconsultation services.

Through this new riders program, 2020 MCI reaches vulnerable low-wage workers by going directly to their homes and creates a new revenue stream independent of workplace-based insurance claims, thus adapting to the new realities brought about by the COVID-19 pandemic.

DEVELOPING THE RIDERS PROGRAM

The 2020 MCI team recognized that the traditional, process-intensive approach to project implementation would not work here—the riders program required nimble adaptation in order to be implemented quickly with limited disruption to healthcare access. Thus, 2020 MCI leveraged an existing connection with the leader of the local motorbike rider community to propose this new program and focused on a rapid process of engagement with this new group of riders. Lantum worked with the leader of the community to gain the riders' buy-in for the program; developed training methods covering infectious disease protocols, personal protective equipment (PPE) usage, branding, teleconsultation processes, and products to offer; and created an incentive program for riders based on the services they provide each day. Motorbike riders maintain a high degree of familiarity and trust within their communities, the appropriate level of technical literacy to be able to support teleconsultations, and a willingness to take on new partnerships. As a result, the rider community emerged as an ideal partner to help 2020 MCI achieve its goal of providing care to low-wage workers. This union proved especially valuable as other partnerships became difficult to navigate due to the COVID-19 pandemic, which led many organizations to focus on internal sustainability and deprioritize external partnerships. Once the riders were recruited and trained, the program launched in Nairobi in May 2020.

CHALLENGES

A challenge inherent to the home visit model is the patients' level of comfort in engaging with motorbike riders for healthcare. 2020 MCI is working to address this by pairing motorbike riders with nurses who can assist with more in-depth medical questions and advocate more strongly for teleconsultations when necessary.

RESULTS SO FAR

Through its medication and home care services, 2020MCI has increased access to healthcare and has expanded the model to achieve the following impact, as of February 2021:

1. The program has reached 48,783 households in ten months of operation.
2. 2020MCI served 2,013 patients through medication orders and clinic visits.
3. 2020MCI provided 1,469 teleconsultations and 857 nurse visits.

CASE STUDY 2

ORGANIZATIONAL OVERVIEW

Fundación Vive con Bienestar (Bive) is a social enterprise in Colombia that increases access to high-quality, affordable healthcare by partnering with providers to offer healthcare packages to low- and middle-income groups and rural farming communities.

THE ORIGINAL PROJECT

Bive's original GHIG project, Protégete con Bive (PCB; Protect Yourself with Bive), focused on reducing the burden of cervical cancer in rural areas in central Colombia by providing early screening, diagnosis, and treatment for HPV. The project also encompassed the development and dissemination of educational resources through schools and the incorporation of routine HPV vaccinations for young women at primary care visits.

THE PIVOT TO RESPOND TO COVID-19

As local hospitals in Colombia shifted their focus to COVID-19 response, Bive's plans for partnerships with these hospitals came to a halt. School-based educational programs and health brigades in villages offering early detection services likewise paused as schools closed and people started limiting their physical interactions. Its planned modes of engagement with target populations no longer feasible, Bive needed to pivot its outreach methods. Bive's team decided to focus on the educational component of the project and develop new methods to reach people in rural communities while also shifting the thematic focus of the project to COVID-19 education and prevention. The organization named this new project Bive sin Coronavirus (Bive without Coronavirus).

DEVELOPING THE BIVE SIN CORONAVIRUS (BIVE WITHOUT CORONAVIRUS) PROGRAM

Bive's team members knew from their past work in rural communities that they would need to use more traditional channels to reach these communities. Rural populations in central Colombia rely more heavily on in-person communication, radio, and SMS for receiving information and less on social media due to the low penetration of reliable internet connection. Therefore, Bive leveraged its existing relationships with local community leaders and farmers' associations, whose members compose the majority of the target population, to gain access to communications channels with workers, their families, and the communities. These long-standing relationships also gave Bive legitimacy by providing institutional support from a group that was already trusted in the communities, which was particularly important in the context of mounting uncertainties and fear of the pandemic.

Photo credit: Bive

Working with these local leaders, Bive's team developed a multipronged education and information campaign to disseminate content about COVID-19 prevention measures and national guidelines through mass text messaging, a series of short educational videos to distribute through WhatsApp, and a series of radio messages on local radio stations. Bive also sent prevention kits including hand sanitizer, masks, and educational posters to farmers' gathering places. Additionally, Bive implemented a small pilot program of COVID-19 screening and referral in two departments, through which the team educated farmers about COVID-19 and prevention measures, provided risk assessments, and connected them with local hospitals if needed.

CHALLENGES

After establishing Bive sin Coronavirus in April 2020, an increase in cases in Colombia led to tightened restrictions in June 2020, and Bive paused the program to reassess conditions and design implementation of a second phase. In particular, Bive considered ways to strengthen its technical assistance, community training, and health education activities to further control the spread of infection during harvesting season, a heavy migratory period for farmers that spans August through December each year. Bive sin Coronavirus resumed in September and expanded to reach farmers in six departments in Colombia. Additionally, Bive planned to offer free COVID-19 polymerase chain reaction (PCR) testing to its beneficiaries but found that this service was not needed as the Colombian public health system was able to efficiently provide tests to rural areas. Looking to pivot once more, Bive now plans to develop a digital tool to classify community characteristics, use this information to identify priority groups for COVID-19 vaccination, and share generated data with public health systems in support of nationwide efforts toward vaccine preparedness.

RESULTS SO FAR

As of January 2021, Bive sin Coronavirus has accomplished the following:

1. Bive sin Coronavirus has been implemented in six coffee-growing departments in Colombia, reaching a total of 51,423 beneficiaries across nine coffee-growing cooperatives.
2. Bive aired 100 dedicated radio programs and 649 radio commercials on ten stations, held eight virtual training sessions covering COVID-19 safety protocols, and sent 275,540 SMS messages.
3. The team distributed 1,500 face masks, 513 containers of hand sanitizer, and 51,423 educational posters to coffee growers as part of Bive's pandemic healthcare kit program.

CASE STUDY 3

THINKMD™

ORGANIZATIONAL OVERVIEW

THINKMD develops health technology platforms with the goal of empowering health workers and enabling access to high-quality healthcare in low- and middle-income countries. This innovator currently offers clinical assessment tools that healthcare workers can use at the point of care to support appropriate screening, diagnosis, treatment, and follow-up. THINKMD also has a data and analytics platform to help build the capacity of health systems to use data strategically.

THE ORIGINAL PROJECT

THINKMD's original GHIG project aimed to decrease rates of antimicrobial resistance (AMR) by validating a malaria algorithm to incorporate into its clinical health assessment platform. This algorithm would improve diagnosis of malaria in an offline environment, thus decreasing rates of the overprescription of antibiotics for malaria and decreasing AMR. The project would also improve the validity of an algorithm to differentiate between malaria and other febrile disease.

THE PIVOT TO RESPOND TO COVID-19

As the COVID-19 pandemic emerged, THINKMD's team realized that they had the capacity to build a digital tool to screen for COVID-19. Barry Finette, cofounder of THINKMD, recognized in early January 2020 that a digital screening tool for COVID-19 fit exactly into the intersection of urgent needs in global health and THINKMD's expertise for identifying people at risk for COVID-19 and for syndromic surveillance. The THINKMD team began development in January and released the tool in mid-March.

DEVELOPING THE COVID-19 SCREENING TOOL

THINKMD relied on its existing expertise and experience to develop the digital screening tool. The release was slightly delayed as the team worked to build out their technology to handle the drastic increase in volume that they anticipated: increasing from thousands of encounters per day to potentially millions when the tool was distributed widely through local mobile networks across the globe. The THINKMD team proactively reached out to its network of connections to form partnerships through which they could distribute the COVID-19 screening tool. The team sought to find diverse partners across sectors, from health technology and global health implementation organizations to telecommunications companies that could help the tool reach communities where it was needed most. For example, THINKMD partnered with organizations such as Living Goods and Medic Mobile to expand community health workers' ability to screen patents in rural Kenya. The organization also partnered with Vodacom in South Africa to offer the tool to its mobile communications customers.

Photo credit: THINKMD

CHALLENGES

As THINKMD began dedicating its work to the development of the COVID-19 screening tool, the team grappled with how to deliver the most impact with limited human and financial resources. Development of the resource began as an unfunded project that the team tackled in addition to existing workstreams. The THINKMD team also faced challenges working with implementing partners, as in-person gatherings were limited and training on use of its technology shifted to a virtual format. THINKMD's team and partner organizations alike struggled to adjust to new working norms. The team noted that the pandemic takes a toll on everyone, including those working in the global health field to combat it, and that it is important to recognize the individual and organizational struggles of partners while working together to overcome new, unprecedented challenges.

RESULTS SO FAR

As of January 2021, THINKMD's COVID-19 screening tool has been used in more than 80 countries across the globe. Since March 2020, there have been 17,307 COVID-19 assessments using the tool.

THINKMD's work includes the following highlights:

1. THINKMD modified its clinical assessment tool used by school health workers in Zambia to assess a child or adolescent with appropriate distancing, enabling the resumption of health services in schools and a 75% increase in the number of users over the course of the pandemic.

2. In rural Nigeria, 3,069 children under five years of age were assessed using THINKMD's integrated management of childhood illness (IMCI)-compliant assessment tool with an integrated malaria rapid diagnostic test (mRDT) with the goal of reducing AMR.

3. Approximately 17,539 children under five years of age were assessed across ten clinics in Somalia and Somaliland with THINKMD's IMCI-compliant assessment tool over the course of the pandemic.

CASE STUDY 4

ORGANIZATIONAL OVERVIEW

The Society for Nutrition, Education and Health Action (SNEHA) is a nonprofit organization in India focusing on maternal, child, and adolescent health in densely populated urban areas. SNEHA partners with both communities and health systems with the goal of building sustainable solutions that empower women and their families.

THE ORIGINAL PROJECT

SNEHA's GHIG project centered around door-to-door outreach in target communities in Mumbai to improve awareness of available public health services; detect infectious diseases in women, newborns, and children; and refer these cases to local health facilities for treatment. Project goals also included health systems strengthening by training providers and improving health monitoring capacity.

THE PIVOT TO RESPOND TO COVID-19

The emergence of the COVID-19 pandemic added uncertainty to SNEHA's plans, as infection precautions limited the ability to conduct door-to-door outreach, and community needs shifted along with the changing COVID-19 landscape. To better understand the evolving situation, SNEHA conducted a needs assessment among local health systems and communities. Based on those results, SNEHA shifted its key activities to support the most urgent needs of communities and health systems.

DEVELOPING THE COVID-19 SCREENING TOOL

Through the assessment, SNEHA found that health systems urgently needed additional training and PPE, while communities' most pressing issues were unemployment, hunger, and domestic violence. To meet health system needs, SNEHA implemented virtual training sessions for health providers and outreach workers on COVID-19 and infection prevention behaviors. SNEHA also provided 10,000 masks to healthcare workers.

Photo credit: Suraj Katra for SNEHA

On the community side, SNEHA worked to address hunger and domestic violence, even though these are not SNEHA's usual focus areas. To address hunger, SNEHA identified vulnerable populations in the community and worked with two donors to support food distribution to these individuals. SNEHA also studied the government food distribution system and created a database of locations facing shortages in rations that helped the organization identify areas most in need and distribute resources to those areas. To address domestic violence, SNEHA partnered with the police system to create a crisis helpline and set up a crisis-focused medical center that offers support and medical services to victims of domestic violence. At the time of the interview, SNEHA was still working to develop ways to reduce the burden of unemployment.

Furthermore, SNEHA implemented creative messaging strategies to promote safe health behavior and empower communities to prevent infection spread. For example, community members reached through this project are largely Muslim, so SNEHA has been working with religious leaders to announce reminders about infection prevention through loudspeakers at mosques. Additionally, SNEHA found through survey results that community members rely on television broadcasts for information, so the team created short videos on COVID-19 prevention strategies and aired them on local cable networks. Finally, one unanticipated benefit of lockdown emerged: youth and male groups, with whom SNEHA formerly encountered challenges in building relationships and rapport, became more available for

collaboration once they were staying at home more often. SNEHA began holding sessions with these groups to educate members on infection prevention practices, and they in turn helped spread this information throughout the community.

SNEHA relied on existing relationships with community groups, community leadership, and key health system stakeholders to support implementation of COVID-19 response activities. These relationships proved crucial when SNEHA needed buy-in from local health systems to deliver training to health workers. At the community level, SNEHA partnered with local leaders, who are most familiar with community needs. Through collaboration with community groups, SNEHA also helped build community capacity to lead during future interventions.

CHALLENGES

SNEHA is working to overcome challenges in maintaining routine health services since the pandemic disrupted many of the processes that help maintain community members' access to primary and preventive healthcare.

RESULTS SO FAR

As of January 2021, SNEHA's COVID-19 response measures have achieved the following:

1. SNEHA's COVID-10 programs have reached approximately 300,000 women and children and have indirectly benefited more than one million people.
2. SNEHA has distributed 29,210 ration packs to families to alleviate hunger.
3. SNEHA has trained 456 facility-based health workers and 1,644 community frontline workers on COVID-19 infection prevention.

RECOMMENDATIONS FOR SOCIAL ENTERPRISES

2020 MCI, Bive, THINKMD, and SNEHA implemented COVID-19 response measures that incorporated distinct strategies designed to maximize impact in their respective settings, each innovator drawing upon its own unique expertise, capacity, and core mission to develop these responses. Despite the variation in approaches and geographies, these innovators' experiences share overarching themes from which we can draw key learnings and insights. From the experiences of these four innovators and of the other innovators in the 2019 GHIG cohort, we identified three takeaways for social enterprises to consider when quickly adapting to unforeseen crises such as the COVID-19 pandemic:

1

Even in the face of uncertainty and change, it is important to stay true to the organization's core mission and values.

Although developed for the purpose of responding to the pandemic, new programs drew from innovators' existing competencies, working relationships, and processes. Designing these programs around their core missions, rather than shifting focus based on the new circumstances, helped innovators adjust quickly and build upon previous work to increase the impact of their responses.

2

Flexibility in adapting and implementing new programs based on data and evidence is critical to meeting the changing needs of a target community and/or consumer base.

It is particularly important to embrace nimble, data-driven adaptation when operating in unexpected circumstances. Doing so enables an organization to pivot rapidly and better meet community and consumer needs as they arise and change over time.

3

Partnerships grounded in mutual trust and clearly defined roles and expectations are key to reaching and engaging with target populations in times of uncertainty and crisis.

Strong foundations of mutual trust and aligned expectations that underpin successful collaborations became even more important following the onset of the COVID-19 pandemic, when many communities and organizations focused on adjusting to uncertain and unprecedented conditions. In this time of crisis, strong partnerships with other organizations, from localized community groups to national governments, were essential for innovators to create impact in their target populations. Partnerships provided greater insights and connections into communities and patient groups while also creating opportunities to align complementary skill sets between teams to accelerate COVID-19 response implementation.

The COVID-19 pandemic has forced everyone to adjust to a new reality, including health innovators. Despite many challenges, these organizations have capitalized on their ability to build and maintain partnerships and used their inherent agility to find success in their pivots to respond to this crisis.

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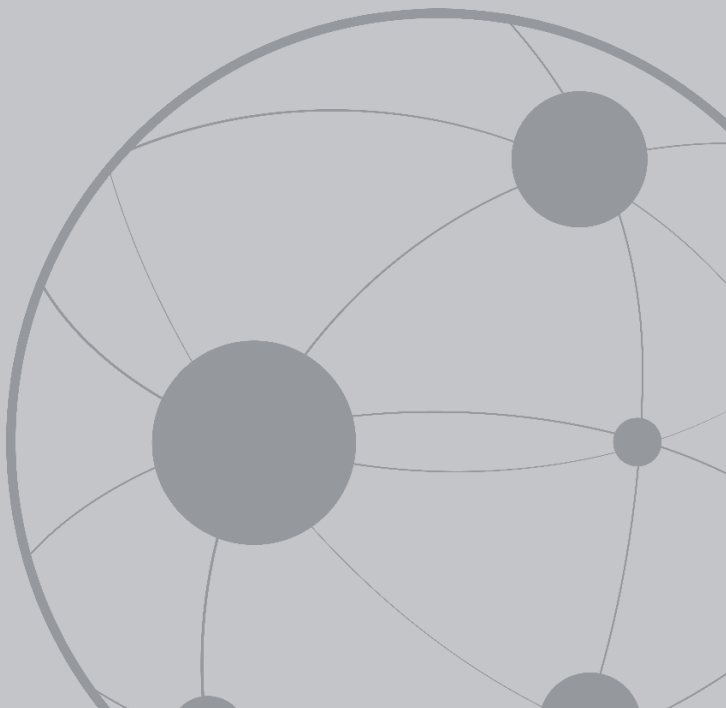

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