


## Non-profits, governments, and businesses need to come together and use a data-driven approach to improve local basic healthcare access.

**by Edward Booty**

Fifty-two percent of the world's population do not have access to essential healthcare. That adds up to 3.7 billion people, more than the combined total populations of India and China, the world's most populous countries. The majority of these people reside in underserved rural communities, where there are huge infrastructural, technological, and other barriers, such as vested interests of different stakeholders, which prevent basic healthcare from reaching them. From a financing point of view, people from these regions survive on an average of US$2-10 a day and are unable to afford the most basic healthcare services, including maternal and child health, essential immunisation, and non-communicable disease (NCD) diagnosis and treatment. Besides, governments in these areas tend to have tight budgets and receive very limited global funding, especially for key new areas such as NCDs.

From a medical service provision perspective, there is a severe shortage of healthcare workers in most of these communities, some with a ratio of one doctor to 80,000 residents (the World Health Organization's recommended ratio is 1:1,000). This is coupled with poor public health facilities and infrastructure, as well as a lack of diagnostic equipment, medicines, and other consumables. In fact, according to a 2019 study by the Center for Global Development, some poor countries pay 20 to 30 times more for basic medicines than others, in part due to flawed procurement practices, broken generic medicines markets, and a lack of competitive supply to keep prices affordable.[1]

At reach52, a Singapore-based social enterprise that uses digital technology, community empowerment, and innovative public-private partnerships to deliver affordable healthcare to areas where access is poor or non-existent, I have also observed that besides healthcare services costing more in these communities, there are often (in fact over 30 percent of the time) less choice of products, counterfeits, and frequent stock-outs of essential health products. So with over half of the world's population without access to essential healthcare (and growing each year) and a widening financial gap, how do we find ways to do more with less?

### OBSTACLES TO UNIVERSAL HEALTHCARE

While there have been plenty of advancements in modern digital health services, the majority of these innovations simply do not work in regions which typically suffer from low Internet connectivity, a lack of digital payment infrastructure, and an overall lack of digital maturity. Typically, digital health services are not designed to function in these regions; instead, they focus on helping wealthier people and others living in urban regions access better healthcare, even though low-resource communities stand to benefit the most from such technology. Digitalisation often widens the health equity gap, rather than solving it.

Of course, there is also a plethora of overarching blockers–corruption, monopolies, and entrenched businesses–that want to perpetuate the status quo, such as distributors of medicines who want to keep prices high to maximise their commissions and margins. We also personally see a lot of 'greenwashing' happening within the industry where big-name corporates say the right things that are just rhetoric with no concrete commitment to making change happen. This is certainly disheartening and paints a false reality of what is happening on the ground, creating a damaging rippling effect that prevents more funding from being allocated to those who need it most.

The frustrating thing is that we actually do not need bleeding-edge innovation. According to our estimate, basic

medicines and services costing less than US$5 per resident would solve healthcare access issues for 80 percent of the people in need. The issue is that no one can or will pay for this–poorer people and governments do not have the money, and donors can only do so much. That said, there is clearly enough money in the world, so it feels like access is within reach, but it most probably comes down to financing, and perhaps a market of sufficient scale where a range of private sector organisations can come in to fill the gaps.

Beyond this, the efficacy of health literacy and the embedding of health-seeking solutions should not be underestimated. Many countries are moving towards prevention and self-management. It is therefore important that people in rural communities are educated and empowered to take care of their own health in the long run. As we have learnt, often even when you build a service (e.g., the supply of discounted diabetes medicines), it does not mean that people automatically become health-seeking, i.e., self-motivated to find solutions and treatment for their health problems.

In many of the underserved communities that we operate in, we find that disease awareness and the motivation to seek health solutions are often absent. Some of the reasons for this include a lack of education, and poor awareness of their own health status and common disease symptoms. Residents are also hesitant to visit healthcare facilities due to the distance from their homes and fear of diagnosis. One way that we overcome these barriers is to deploy a network of reach52 community healthcare agents who are often already trusted members of those communities (refer to box story). They go door to door to engage residents through educational and awareness health campaigns before referring at-risk residents to the nearest healthcare facilities for treatment.

In order to effect sustainable and scalable behavioural changes, intentional efforts need to be in place to ensure that there is an increase in both the supply and demand for healthcare–the former via the supply of affordable healthcare through innovative healthcare delivery models, and the latter in the form of education plus awareness and advocacy. Because having affordable products is only part of the solution; you need awareness, testing, and a prescription first. For example, you would not buy medication for diabetes if you did not know you were suffering from it.

## IMPROVING HEALTHCARE DELIVERY MODELS IN RURAL REGIONS

We must appreciate that many of the fundamental challenges such as a shortage of doctors and nurses in rural areas will not go away. So we need to embrace innovation, specifically more suitable models of lightweight or frugal innovation, to improve healthcare access in under-resourced regions. You may find yourself thinking, "How can you give prescriptions if there is no doctor in the area? Or dispense medicine if all the pharmacists have moved to higher-paying jobs in the city?" We do recognise that to be sustainable, we need to have a better topline–that is, more funding to build a bigger market that can finance and entice more players to enter the market. However, the truth of the matter is, despite all the pledges to close the health equity gap, there will be a US$176-billion health financing gap by 2030.[2] Historically, there has always been a dependence on donor capital, but global donors are only spending US$35 billion on global health, resulting in a fight over where and which disease area this pool of funding goes to. There is simply not enough to go around. At the end of the day, if the topline or total market is too small, we need to do more with less, bringing us back to the need for lowering operating costs through frugal innovation.

There is also a need for better relationships with businesses and governments, so that corruption is minimised, governments can better support businesses entering the community, and businesses can reinforce government health priorities and help strengthen local health systems. Incentives for market-based models to encourage private sector innovators to enter this challenging market and the raising of greater public awareness around the pressing health equity gap will go a long way to facilitate the congregating of people and businesses that are genuinely invested in finding a solution.

> According to our estimate, basic medicines and services costing less than US$5 per resident would solve healthcare access issues for 80 percent of the people in need.

## CONDUCTING LOW-RESOURCE, TECH-ENABLED FRUGAL INNOVATION

We need to scale solutions without adding cost and complexity, while also challenging the status quo and innovating low-resource, tech-enabled lightweight solutions that are sustainable for complex problems. To do so, frugal innovation is key to moving the needle in these communities.

### Build on, rather than break existing capabilities

An example of frugal innovation from the reach52 experience (refer to box story) is the healthcare delivery platform, which can be designed specifically to be lightweight and compatible with the most basic Android phones. It is 'offline-first', allowing the app to be used in areas with low or no Internet connectivity, and data can be synced later when there is an

## THE REACH52 MODEL: DATA-DRIVEN, BUT HUMAN-POWERED

Our mission is to re-design healthcare such that it can reach the 52 percent of the world's inhabitants who are without access to essential health services. We do this by building an end-to-end health access platform that connects global and regional businesses and partners to rural communities, thus creating access for all. We know that the only way this could work is to create a win-win-win solution for all–underserved populations, global businesses and funders, and local governments and health systems. We have made some progress over the years, working with some of the biggest global pharmaceutical health service providers, fast-moving consumer good manufacturers, and multilaterals to pave a new way for delivering our low-resource, tech-enabled model to increase healthcare access for 2,500 communities across six countries including Kenya, the Philippines, and Indonesia.

We equip a large network of rural community health agents (mostly government-linked community health workers) and local community partners (e.g., stores, pharmacies, and health centres) with our 'offline-first' tech, designed specifically for rural areas with low Internet connectivity. Our agents and community partners are paid per engagement to deliver healthcare engagements, education, and marketing and awareness campaigns to their community. By training and equipping individuals and small local businesses with the tools to manage the health of their own communities, we empower them to take ownership of their health, gain financial independence, and strengthen their communities from within. Through one-on-one engagements, our community health agents collect individual-level health data from residents, which are then aggregated to give us rich insights into the health needs of that community. This allows us to engage specific residents who are at risk, and implement hyper-targeted health campaigns that are cost-efficient and highly impactful.

We provide our ecosystem of partners insights into new emerging markets, thus helping them gain access to these markets by stocking their products at local community stores at affordable prices, and cutting out often expensive intermediaries and tedious processes. We build our platform to tear down barriers of entry, so that more players can enter these emerging markets and in turn, these communities can benefit by having a larger selection of affordable, quality health products and services, and access to jobs created through additional revenue-generating opportunities available on the app, whilst contributing to delivering healthcare services to their own communities.

Internet connection. This allows flexibility for the app to be used in many underserved regions, without the need to build additional infrastructure. It is also designed to be intuitive and simple to use, reducing the barrier to access.

We have found it important to work collaboratively with local governments, health officials, and community health workers and communities to find solutions that tap into existing capabilities and resources. Equally, we find it important to leverage strong community ties and interpersonal relationships to design our data collection and health campaign delivery. Rather than depending entirely on digital tools, we know that the human element is particularly crucial in these communities to gain trust and educate residents, while spreading awareness about the importance of health management, screening, treatments, and adherence.

Especially in communities where digital literacy is low, residents typically rely a lot on trusted 'frontliners' to educate them in order to embrace new systems and change. Hence, we find that the tech and our community agents work hand in hand to overcome existing barriers, and one will not work effectively without the other. This is why a lot of effort is put into training a strong and trusted network of reach52 community health agents across a range of topics including steps to use our app, information on diseases endemic in these areas, and soft skills needed when engaging residents.

This way, we are able to empower and complement the existing workforce, resources, and facilities, thus strengthening the healthcare system from within, rather than coming in and completely disrupting the existing local healthcare system.

## Work with governments first, then the private sector

We believe in working with governments first, then providing more resources with the help of private sector partners. Working with local governments to strengthen health systems is important for multiple reasons. To begin with, when working with lower income groups and supporting social development, it is necessary to do this with governments that can provide a social safety net. It is also the only way to get nationwide scale–the private sector can never serve all corners of a country, but governments can. Finally, it is increasingly a requirement of funding partners and donors to ensure buy-in, as well as the potential transition of the product or service, as no external partner can or will fund a project forever. The benefits of working with governments can be simplified into three core concepts: genuine scale, long-term sustainability and ownership, and strategic alignment to our mission.

We have a history of working closely with local governments, training their cadres of community health workers as our reach52 agents. As we progress, we have seen notable examples of governments supporting our services and working with private partners. This could include funding events, providing vaccines, and adding diagnostic testing equipment to their hospitals. Governments also shape policy and help inform decisions, such as which segments to prioritise for health interventions with their limited resources (an example was determining the focus on adolescent females for stunting campaigns in Kenya, as that was the main population cohort with pressing health issues).

Of course, some obstacles include the slow progress of our launch processes, the potential for corruption, and other operational challenges that come with fostering partnerships among diverse stakeholders and aligning strategic priorities.

## It is all about data, data, data

From our experience, the data-driven process is critical to cost-efficient hyper-targeted health engagements. We always start with collecting individual-level health data on each community, which would help us understand the pressing health needs of the community and drive efficient use of scarce resources. Using a standardised but customisable questionnaire in the reach52 access app, our agents create individual data profiles for each resident, collecting data across about 30 data points including height and weight, family history, existing medical conditions and medication, household income, alcohol consumption and smoking habits, accessibility to health amenities, vaccination status, and mental health status.

Especially in communities where digital literacy is low, residents typically rely a lot on trusted 'frontliners' to educate them in order to embrace new systems and change.

We then aggregate the data, which provides rich insights into the community's health needs. Having individual-level data allows agents to target specific residents who are at risk for a particular disease area by filtering the data using different criteria. By working closely with governments, we also ensure that they are fully involved and have access to the data for their decision-making too.

However, persuading stakeholders to move to digital platforms and adopt a data management system to facilitate the proper tracking of health records and better decision-making in communities where the norm for most health facilities is still pen and paper is no easy feat. On top of that, proper management, syncing and cleaning of data, and the training of our field agents on proper data collection procedures whilst ensuring data confidentiality and privacy are all common challenges that are crucial to the success of our model.

## CONCLUSION

Healthcare access in emerging markets should not just involve non-profit organisations (NGOs) and multinational pharmaceutical companies. There is increasing demand in emerging markets for health-related and consumer health products and services across multiple categories, ranging from health insurance and e-wallets to nutritional products and mental health and wellness services.

We need to change the narrative that working in underserved communities is only for those who want to 'do good'. From a business and strategic growth standpoint, emerging markets are the new drivers of growth. Middle-class expenditure is expected to grow to US$64 trillion by 2030, most of it driven by emerging economies.[3] Furthermore, 65 percent of employees now want to work for organisations with a strong social and environmental conscience.[4] Additionally, 77 percent of investors make their investment decisions based on ESG (environmental, social, and governance) impact.[5]

We envision a future where businesses can tap into the local workforce to market their products and services, as well as gain access to a new segment of customers, while generating revenue for community partners and strengthening the local economy and health system, thus creating a marketplace of service providers which offers affordable healthcare products and services. At the end of the day, it needs to be a win-win-win–for communities, local governments, and businesses–so as to be a sustainable and scalable model for the uplifting of these underserved communities.

Ultimately, closing the health equity gap should not just involve a few lone players, governments, NGOs, and global pharmaceutical companies. If anything, the COVID-19 pandemic has shown us that nobody is safe until everyone is safe. As we move towards becoming ever more interconnected, everyone, especially businesses, needs to play a bigger role to ensure that no one gets left behind, in order to create a more sustainable future for all. AMI

*Edward Booty*
*is founder and CEO of reach52*

**References**

1 Rachel Silverman, Janeen Madan Keller, Amanda Glassman, et al., "Tackling the Triple Transition in Global Health Procurement", Center for Global Development, June 17, 2019.

2 Edward Booty, "9 Reasons Universal Healthcare Will Fail–if We Don't Act Now", World Economic Forum, April 28, 2020.

3 Knowledge For Policy–Competence Centre on Foresight, "Developments and Forecasts of Growing Consumerism", September 27, 2018.

4 Mary Baker, "Why Engaging with Social and Political Issues is a Non-Negotiable for Your Employee Value Proposition", Gartner, February 23, 2022.

5 Dave Goodsell, "ESG Investing: Everyone's on the Bandwagon", Natixis Investment Managers, 2021.