

# Harness digital tech for inclusive healthcare

Especially useful in these Covid times, it involves identifying viable innovations and making them scalable and affordable

SHAMEEN PRASHANTHAM  
RISHIKESHA T KRISHNAN

The Covid-19 pandemic has prompted two noticeable healthcare narratives. First, healthcare provision in many countries, particularly in the developing world, has severe limitations. Second, technological innovation capabilities in healthcare are strong, with dozens of candidate drugs to cure the virus having been identified in weeks and more than 20 vaccine candidates already undergoing trials.

Juxtaposing these two observations leads to the question: How can innovation help to improve healthcare in resource-constrained developing countries?

Making innovation viable and inclusive in a large developing country, with limited affordability and access to healthcare services, is a major challenge — but one that a growing number of entrepreneurial firms are taking on.

For example, Bengaluru-based Cloudphysician is a start-up founded in 2017 by Dhruv Joshi and Dileep Raman, two returnee doctors who previously trained as intensivists at Cleveland Clinic. Cloudphysician uses tele-medicine and digital management of workflows to remotely manage ICU patients and provides advisory solutions to ICUs in hospitals. Over a three-year period they have been able to demonstrate that their solution can make a positive difference in hospitals in tier-2 and tier-3 cities, where ICU care is highly resource-constrained.

Three strategies can help increase the odds of harnessing healthcare innovations such as Cloudphysician's to provide socially inclusive solutions in developing countries, which the pandemic has made more urgent. This is particularly relevant in the broader context of the UN's Sustainable Development Goals (SDGs), especially SDG 3

which pertains to good health and well-being.

## Crafting innovation challenges

India has a large number of gifted entrepreneurs with great ideas, and grit and determination. But, it is important to align this entrepreneurial energy with the right problems and to gauge which innovative solutions have the most potential. One approach is to conduct innovation challenges, to identify the firms with the most appropriate solutions to solve critical problems.

For example, a global contest conducted by Ideas for Action, a joint initiative of the World Bank Group and Wharton School, identified CarNx, an Indian healthcare start-up offering a digital platform and testing service with portable medical kits for pregnant women in remote areas which won the first place in that global innovation challenge.

In January 2020, a three-day Youth Co:Lab national innovation challenge was organised by Atal Innovation Mission, NITI Aayog and United Nations Development Programme (UNDP). More recently, various innovation challenges targeting Covid-related innovations were launched. For example, SenseGiz, a company founded in Belgaum, came into prominence when it won the first prize in an innovation challenge organised by the Ministry of HRD. This start-up applied its expertise in monitoring home and office safety to create an effective Covid-19 patient-tracing application.

These examples reflect a growing trend towards the use of "open" innovation methodologies by companies, UN agencies, non-profits and the government to help achieve societal priorities like the SDGs. While the intent is laudable, the danger is that these events produce great presentations and fanfare but few tangible outcomes.

The key to the design of open in-



innovators should have genuine interest in serving the under-served ISTOCK

novation challenges, as emphasised by Harvard Business School Professor Sunil Gupta in *Driving Digital Strategy*, is to ensure (a) specificity of objectives based on a well-defined problem, (b) monitoring of outcomes using clear evaluation metrics, and (c) a carefully-designed challenge with clearly identified procedures, timelines and incentives (example, prize money). As ever, what is crucial is the commitment and follow-through of the people executing these innovation challenges to go beyond the act of awarding prizes.

## Legitimising solutions

It is also crucial to gain the support of relevant stakeholders at the frontline of healthcare provision, especially in relation to the under-served. Being taken seriously by this important stakeholder calls for at least two things.

First, innovators should be able to demonstrate that their technology works within a developing country's infrastructural, human capital and cost constraints. This calls for an appropriate balance between cost considerations and efficacious outcomes. And of course normal concerns of dealing with innovative firms — such as whether they will be around in a year's time — can be alle-

viated by the firm building a track record of proofs of concept and early wins.

Second, innovators should convey a genuine interest in making their solutions relevant to the under-served. Forging a link between innovative solutions from hotspots like Bengaluru and the actual caregivers in the hinterlands of India is vital if their potential is to be realised. There is an apparent philosophical divide between the dedicated professionals who serve the poor and a perceived get-rich-fast mindset of today's young technology entrepreneurs.

As noted by Dr Sunil Chandy, former Director of CMC Hospital in Vellore, in a chapter in "Healers or Predators", institutions like CMC are beacons of hope in the Indian healthcare landscape because of, *inter alia*, their community health outreach efforts and adherence to the austerity principle. Innovators who are serious about making their solutions socially inclusive will have to win the trust of the seasoned medical professionals serving poorer sections of society.

One approach that may help is finding common cause around preferential treatment for the poor through multi-stakeholder engagement. For instance, the Govern-

ment of India's CAWACH scheme for Covid-relevant start-ups provides grants to cover healthcare expenses of less privileged sections of society. With such a service mandate, medical community stakeholders serving the poor may be more inclined to work with innovative health-tech companies on related projects. Government procurement of products and services and funding through private organisations' CSR efforts can also help.

## Scaling solutions

Finally, if a viable healthcare innovation emerges, then a major challenge is how to make the solution available at scale in a manner that is socially inclusive and (relatively) affordable. An example is Forus Health whose affordable eye care equipment (3Nethra) — recognised with the 2011 Anjani Mashelkar Foundation Inclusive Innovation Award — has been sold extensively within India and across numerous international markets. Its digital capabilities are poised to be further enhanced through collaborating with Microsoft.

Indeed, partnering with large organisations that are well-placed to scale innovations can be useful. Many corporations have accelerator programmes, such as the Cisco Launchpad, which has supported start-ups like Cloudphysician and SenseGiz to increase their impact during the Covid pandemic. Recently, some corporate initiatives have specifically targeted social impact, such as Microsoft's partnership with Ashoka for social ventures piloted in India. Partnering between small and large organisations is not straightforward and success is not guaranteed, but is a way to address the scaling challenge.

Prashantham and Krishnan are Professors at CEIBS, Shanghai and IIM Bangalore, respectively. Views are personal. Rhea Li and Aniket Singh Tomar provided research assistance