



# EMERGING INSIGHTS

06

HEALTH

# Serving the underserved with technology innovations

## Global Issues

**Heart disease, stroke, chronic pulmonary disease, lung cancer and diabetes reign as leading causes of death globally,<sup>28</sup> and malnutrition is responsible for 45% of the deaths of children around the world.<sup>29</sup> 350 million people around the world have been diagnosed with depression, which was estimated to cost at least \$800 billion in lost economic output.<sup>30</sup> Half the world lacks access to essential health services, pushing 100 million people into extreme poverty because they must pay for health care out of pocket.<sup>31</sup>**

Despite these issues, there are reasons in 2018 to feel optimistic about the state of global health. Technological innovations, driven by the availability of artificial intelligence, have created unlikely scenarios where treatments are discovered and tested: a clinic in Uganda is teaching doctors from the United States a new technique to reduce brain swelling in babies<sup>32</sup> and a new instrument for vaginal delivery of babies was invented by an Argentinian car mechanic.<sup>33</sup> Greater interconnections and cross-border communication pathways are enabling real-time health solutions and enabling more people to take proactive control in their individual health outcomes.

28. World Health Organization (2018) The Top 10 Causes of Death. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>

29. World Health Organization (2018) Malnutrition Retrieved from <https://www.who.int/news-room/fact-sheets/detail/malnutrition>

30. Psychiatry & Neurology Resource Center (2017) Depression in Numbers. Retrieved from <https://progress.im/en/content/depression-numbers-1>

31. World Health Organization. (2017). Tracking Universal Health Coverage: 2017 Global Monitoring Report.

32. Doucleff, M. (2017) Surgery For Saving Babies From 'Water On The Brain' Developed in Uganda. Retrieved from <https://www.npr.org/sections/goatsandsoda/2017/12/20/571780235/surgery-for-saving-babies-from-water-on-the-brain-developed-in-uganda>

33. Clune, K., & M. Meriardi (2012) Meet the Innovator: Jorge Odon. Retrieved from <https://blog.usaid.gov/2012/01/meet-the-innovator-jorge-odon/>

## The Headlines

**Drug overdose deaths were so bad in 2017, they reduced overall life expectancy**

*Vox 11/29/2018*

**Why cancer strikes more women than men in India**

*BBC 3/28/2018*

**We can talk about self-care, but this mental health crisis is political**

*Guardian 11/26/2018*

## New Ideas

Many people do not understand the difficulties of navigating healthcare bureaucracies until they experience issues personally. **Prasanna Shirol** was working in sales and marketing in India when his first daughter was born with a rare disease, diagnosed at seven years of age and the first case to be diagnosed in the country. **Dorica Dan** was a student of economics in Romania when she gave birth to a daughter with Prader Willi syndrome which went undiagnosed for 18 years. Both Dorica and Prasanna have now dedicated their lives to help other families navigate and shift healthcare landscapes to advocate for holistic approaches to manage rare diseases.

In this year's cohort, we see that Fellows like Prasanna and Dorica can change healthcare systems by using new technologies that help to connect ideas and people

and put powerful solutions into the hands of afflicted individuals. Whether it is in enabling people to power their own healthcare through technologies that focus on preventative screenings or technology to improve financing, it is clear that the new resources and tools being developed by social entrepreneurs are improving health indicators worldwide.

## People powered healthcare

One of the major industries where models of beneficiary-centered interventions are making a difference is in healthcare screenings and prevention. As we have seen, the availability of mobile technology and continuing research and innovation has created an enabling environment for more and more people to access life-saving, preventative, and adaptive healthcare.

Take **Andrew Bastowrous**. Andrew knows all too well the power of sight. When he received his first pair of glasses at the age of 12 and was suddenly able to succeed in school, he realized just how important it was to be able to catch and treat preventable blindness. A doctor by training, Andrew conducted eye care research in rural Kenya and created over 100 eye clinics. He then developed smartphone technology that would enable lay people to diagnose vision issues. His organization, Peek Vision, develops innovative and accessible technology to screen and diagnose, which he then pairs with local community outreach programs. Andrew also partners globally with Ministries of Education to deliver school screening programs that teachers can lead. His whole-system approach is working to enable local systems to easily and efficiently upgrade how they manage eye health. Peek's technology is being used in 154 countries worldwide.

## Democratizing access with technology

As a volunteer with Doctors without Borders in Pakistan, South African **Mohammed Dalwai** witnessed the loss of a patient who had been incorrectly triaged and diagnosed. He realized there had to be a better way for doctors working in remote locations to be able to get regularly updated and locally appropriate standards and guidelines for treatments. Doctors often rely on outdated paper-based medical information or digital journals that have high fees to access. Mohammed's Open Medicine Project builds applications that help frontline medical workers gain access to the latest medical resources with locally appropriate data. Example projects include an HIV clinical guide, emergency medicine guide, and a mobile triage app. Based on the principles of open access, Open Medicine has empowered over 150,000 health care workers in over 200 countries. The apps give up-to-date medical information and tools so that healthcare providers in remote and underserved areas can make the best possible decisions for their patients.

From better diagnostic tools for healthcare workers to creating a culture of preventative healthcare through screenings and consultations, **Marcos Lacayo** is also

using technology to democratize access for improved health outcomes. Nicaragua is seeing a major crisis in chronic medical conditions – 10% of the adult population has diabetes with over 373,400 cases reported in 2017.<sup>34</sup> Particularly high levels of poverty and prohibitively long wait times in public health centers has resulted in citizens foregoing preventive care, leading to deteriorating health.<sup>35</sup> Marcos introduced Estación Vital to provide free health screenings in high traffic areas. These are kiosks that use iPads to guide users and help them measure blood pressure, temperature, vision, weight, or BMI. The services are free with an option to add a glucose test for 64 Cordoba (\$2). He has also introduced low-cost telemedicine services. Though still early-stage, Estación Vital has already shown that 40% of recurring users, about 7,500 people, have reported concrete improvements in health such as lower blood pressure or reduced weight.

## Innovative health financing

For many people in India, purchasing health insurance has not been a high priority, as there always seems to be more immediate basic needs. In light of this, **Kumar Shailabh** co-founded Uplift Mutuals, a mutual health insurance model built on the principles of solidarity and collective responsibility. His solution enables members to co-own insurance plans and take part in designing the product and processes. They are also empowered with decision making by having access to tools that Kumar's team developed after testing the methodology in nine locations for over a decade. In doing so, members are empowered to decide premiums and whether certain illnesses should be covered under the insurance. A technological infrastructure enables claims to be processed and reimbursed in as little as eight hours, ensuring that cash gets where it is most needed. Uplift Mutuals partners with organizations like microfinance institutions and taxi and labor unions to enroll individuals who would otherwise not be able to access insurance. In the next three years, Kumar aims to scale to 1,000,000 insured.

Financing for health is majorly affecting the hospitals of France. Similarly to Kumar, **Nolwenn Febvre** has found a solution to reduce costs while improving health care delivery. Her organization Les P'tits Doudous promotes innovations in care and created a free toolkit to establish sustainable revenue streams – like recycling non-contaminated hospital waste like copper scalpel cables. There are 40 chapters with 300 volunteering health professionals who are actively designing and implementing a range of projects. One of the most successful has been the design and use of an app that decreases patient's anxiety. The app has been adopted by every local team and is lowering the pre-surgery anxiety of 50,000 children a year.

34. International Diabetes Foundation, South and Central America (SACA) members. (n.d.). Retrieved from <https://www.idf.org/our-network/regions-members/south-and-central-america/members/86-nicaragua.html>

35. Institute of Health Metrics and Evaluation. (n.d.) Nicaragua. Retrieved from <http://www.healthdata.org/nicaragua>

## Spotlight on:

# Technological Innovations in Mental Health

One in four people will have a mental health issue during their lifetime.<sup>36</sup> Our work with social entrepreneurs over many years has shown that to address this pervasive challenge, we must make dedicated space to enable support for everyone's wellbeing, address the socio-economic factors that affect mental health, and focus on holistic approaches, empathetic discourse, and ability.<sup>37</sup> This year, two Fellows are leveraging technology to gather better data for decision making in mental health and design interventions that enable earlier stage interventions for mental health challenges.

In India, **Sachin Chaudhry** has developed a solution to track mental health indicators and enable mental health analytics powered by mobile and AI technology to help decision makers, research institutions, and healthcare providers gain access to population level health analytics and to identify high-risk communities. His organization TrustCircle partners with key players in the mental healthcare sector, like the Schizophrenia Research Foundation, The WHO

Collaborating Center for Mental Health Research, and the Dr. Reddy Foundation, to create tests that can be digitized and made available to the general population to help predict mental health issues earlier. TrustCircle is also creating a community where caregivers, social workers, and patients can sign up to connect with support groups. Sachin's work is currently being rolled out at youth centers across India and enabling individuals to take control of their own mental wellbeing.

**Oskar Blakstad** is focused on improving access to affordable treatments for patients with mild and moderate mental health challenges in Norway – like depression, anxiety, and sleeping disorders. He leverages the public healthcare system with assisted self-help tools, which are integrated into municipal systems. Web-based treatments provide professional support with evidence-based, informative, and easy-to-implement tools. Practitioners, overworked by the volume of patients, can instead become supervisors who help to guide patients and monitor weekly improvement. Oskar's platform is part of a larger push to bring new knowledge and methods to the field, specifically with a focus on prevention. 28 municipalities have adopted the self-help tools into their mental healthcare systems and he is already talking to universities outside Norway to research ways to spread the platform globally.

36. World Health Organization. (2001). Mental disorders affect one in four people. Retrieved from [https://www.who.int/whr/2001/media\\_centre/press\\_release/en/](https://www.who.int/whr/2001/media_centre/press_release/en/)

37. For more information our analysis of mental health actors in the Ashoka Fellowship, see our recent social innovation mapping "The Emerging Paradigm in Mental Health" <https://www.ashoka.org/en-US/file/emerging-paradigm-health-mental-health-mapping>

## The Opportunity:

### Collective health outcomes

#### *How can we enable effective co-creation in health innovations around the world?*

Physical and mental wellbeing is at the core of creating communities that thrive. And Ashoka will continue to seek out and support social entrepreneurs committed to changing healthcare systems in favor of ensuring everyone has the rights and access to improved health outcomes.

The nine Fellows elected this year in the physical and mental health sectors join 574 Fellows worldwide. Our work to support social innovation in this sector has been supported by a number of strategic partnerships. Since 2010, our partnership with pharmaceutical company Boehringer Ingelheim has supported the work of 81 Ashoka Fellows worldwide who are working in specialized care, sanitation, long-term care, disability, medicine, mental health, primary health care, nutrition and acute care. A partnership with Philips Foundation is supporting efforts to identify new solutions while accelerating co-creation between business and health innovators. There have also been regional collaborations like the 17 Fellows working in health and agriculture in West Africa who have joined forces to create the Innovative Cooperative for Optimal Nutrition (ICON) to challenge nutritional outcomes in their countries by combining their systems changing solutions.<sup>38</sup> More and more, we see opportunities for targeted problem solving through collaborative teams of social entrepreneurs.

38. For more on our long-term partnership with Boehringer Ingelheim, see <https://www.makingmorehealth.org/>, our partnership with Philips, see <https://aha.ashoka.org> and with ICON see, <https://www.cta.int/en/event/innovative-cooperative-for-optimal-nutrition-in-africa-icon-sid0f17cfbc7-1ae4-471d-9087-cf19918504ba>

## About Ashoka

Ashoka believes the most powerful force for change in the world is a new idea in the hands of the right person. With this conviction, we pioneered the field of social entrepreneurship 38 years ago. Ever since, we've bet on the optimists and the adventurous among us who see the world not as it is but as it should be. Year after year, they forge new pathways to get us there, growing unexpected ideas into transformative social progress.

Leading social entrepreneurs are not heroes working in isolation. Their success depends on creating roles for ordinary people — parents, refugees, computer scientists, farmers, and young people — to play an important part in the solution. With each new leading social entrepreneur we nurture, therefore, Ashoka is creating a different kind of future: one where each of us looks inside ourselves and sees a changemaker.



## Methods

### Ashoka's approach to supporting tomorrow's social innovations

After 38 years of electing the world's leading systems changing social entrepreneurs, Ashoka knows how to find new ideas. For this analysis of our 2018 Fellows we tapped into the resources of our Ashoka process to mine the reports, interview notes, reflections, and writings of our teams across the globe who are expert innovation spotters and who have deeply examined the work of potential Fellows. The learnings, patterns, and insights we cull during the rich Fellow selection process provided the baseline data for this report.

## Partner with us

We are always looking for new partners to help us find and support Ashoka Fellows around the world to advance systemic change in new and growing fields. please contact Maria Clara Pinheiro [mpinheiro@ashoka.org](mailto:mpinheiro@ashoka.org) for more information on how you or your organization can help us continue to grow the largest global network of social entrepreneurs.

## Donate to Ashoka's Global Venture Fund

Global Venture Fund is a pool of philanthropic funds dedicated to finding and electing new Ashoka Fellows. The Fund prioritizes supporting the search and selection of social entrepreneurs in emerging or underrepresented areas of innovation, and under-resourced geographies. Please visit [ashoka.org/donate](https://ashoka.org/donate) and indicate Global Venture Fund in your donation.

## Recommend a candidate

Do you know a systems-changing social entrepreneur who could benefit from the financial and network support of the Ashoka Fellowship? Nominate them at [ashoka.org/engage/recommend/fellow](https://ashoka.org/engage/recommend/fellow).



# Everyone a Changemaker



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