It is time to rethink how we advance health equity



he private sector, including pharmaceutical companies like Takeda, can play a pivotal role in advancing health equity in the United States and around the world. Addressing health inequities will require taking a step back and broadening the lens through which we view and approach the problem of health inequities - as industry professionals and as fellow members of a global community that is united behind a set of shared goals for a sustainable future.

Imagine instructing a patient to follow strict dietary guidelines because their recovery depends on it but it's not clear how their preferred food fits the categories. Where does hummus fall on this food pyramid? What about cassava, edamame or refried beans? And what if their refrigerator is empty and their pantry is bare?

Imagine a patient whose emergency surgery kept her in hospital for days, who missed too many shifts at work and lost her job as a result. A patient who missed appointments because he had no one to look after his children, or someone who couldn't make it to the clinic because he lacks the cash to pay for parking or the bus or who has to choose between medicine and paying next month's rent. Imagine a patient who ends up in the emergency room - repeatedly because she's not able to get the routine care she needs.

These are examples of situations that lead to big differences in people's health in

the United States and globally, independent of whether they receive good (or bad) medical care. These are the realities that patients face and fight every day that healthcare providers may or may not realize are happening and that contribute to poor health outcomes.

"The pandemic was a stark reminder of just how much work there is still to be done — starting with how we tackle the social determinants of health."

The difficulties of COVID-19, its devastating and disproportionate impacts on communities of colour, on low-income families and on other disadvantaged groups, stoked new levels of frustration and fury with the lack of fairness that persists within health systems around the world. The pandemic was a stark reminder of just how much work there is still to be done, starting with how we tackle the social determinants of health.

ADDRESSING THE ROOT CAUSES OF HEALTH INEQUITIES

When there is health equity, every person has a fair and just opportunity to attain their full health potential, regardless

of social position or socially determined circumstances. This isn't always the case, and today's striking and persistent health inequities stem from the many ways those opportunities are compromised or crushed outright by factors and circumstances that have little or nothing to do with the physical body or genetic makeup. A person's health and life expectancy are heavily influenced by the social, environmental and financial conditions in which they are born, grow up, work, play and age1,2.

Working towards the health equity ideal will require addressing the social determinants of health, their effects and their underlying causes (**Fig. 1**). As Bishop Desmond Tutu said, "there comes a point where we need to stop just pulling people out of the river; we need to go upstream and find out why they're falling in."

We recognize that meaningful change can start at the corporate level and that we have more responsibility now than ever to create the world we want to leave for the generations to come.

Takeda is a healthcare company dedicated to building trust in the

"We need to make equity core to the entire business.

Health equity is not just an outcome, it is a process."

communities we serve, and we insist on maintaining a holistic view of people's lives as we make good on our commitment to bring better health and a brighter future to patients. These are the values that drive us to advance health equity.

We believe that companies like ours need to take a similarly holistic approach in how we interact within the global ecosystem. We need to make equity core to the entire business. Health equity is not just an outcome, it is a process – what Camara Jones called "an ongoing process of assurance". Advancing and improving the process to achieve health equity will involve many sectors – public, private and civil society – working together. The question is how.

GLOBAL PARTNERSHIPS THAT EMBOLDEN LOCAL LEADERSHIP

Through our own professional experiences as physicians, and through Takeda's collaborations, we have come to see that an important way forward is to encourage and support communities to lead the charge. We've learned that when communities themselves redesign or strengthen systems from the ground up, with our partnership, it can effectively and sustainably reduce the inequities they're facing.

Structured collaborations among corporations, government, nonprofit organizations or academia have been around for decades with mixed results. The most successful partnerships



Figure 1. The health equity challenge. Health equity is achieved when everyone has a fair and just opportunity to attain their full health potential regardless of social position or other socially determined circumstances, which means addressing social determinants of health, such as income and education levels, food insecurity, housing stability, racism and gender discrimination. Achieving health equity requires multi-sector collaborations between industry, health research and care delivery systems, government and community partners working together to address health disparities and inequities that disproportionately impact disadvantaged and underserved communities and patients. Source: The illustration above is based on the original 2017 Robert Wood Johnson Foundation's 'What is Health Equity' graphic.

are those that are structured and governed in ways that leverage each partner's particular resources and strengths. For collaborations seeking community-level impact, that means putting community leaders in the driver's seat, making decisions based on local needs and priorities. It means 'decolonizing' global health efforts and instead co-creating solutions that empower communities to meet their own immediate needs while also developing solutions that narrow existing inequities and prevent future ones over the long term.

Achieving community-level impact is what we've sought to do through our own health equity partnerships. Since 2016, Takeda has been teaming up with non-governmental organizations (NGOs) to help doctors and researchers in low- and middle-income countries to build their capacities to address health inequities in their communities.

"For collaborations seeking community-level impact, that means putting community leaders in the driver's seat, making decisions based on local needs and priorities. It means 'decolonizing' global health efforts."

Projects include helping to build cancer care programmes in Kenya and Tanzania and establishing a community-based mental health program in Haiti³. The projects in which Takeda partners with NGOs focus on sharing scientific

and technical knowledge that is critical to building health research and care delivery systems in underserved communities.

Takeda employees contribute their scientific and technical expertise virtually and on-site through project teams composed of NGOs, academic partners and local medics, scientists and healthcare workers. Hundreds of Takeda experts have participated in these knowledge sharing programmes and we currently have approximately 150 community partners in 30 countries.

We learn a lot from these partnerships. We gain valuable insights into what it takes to identify and address local health inequities and how the private sector can be most effective helping communities tackle local issues, empowering communities and improving patient health now and for the next generation. Takeda's employees bring back innovative

ideas, new energy and a sense of urgency to activate change, within Takeda and across the industry. These partnerships inform what we do as a company and help us integrate health equity principles and priorities into our business activities.

EMBRACE AND ENACT THE 'MEGACOMMUNITY'

Partnerships that leverage private sector resources, civil society and governmental expertise and deliver reciprocal impact are needed now more than ever. Health inequities are a multifactorial problem that can manifest in each and every part of a person's health journey, anywhere, and at any time. While we can understand the social determinants of health, addressing and even solving any of them singularly will not move the needle when it comes to enabling health equity across communities globally. No one entity can do this alone, and

Partnering to achieve community-level impact



Dominican Republic: Strengthening the local COVID-19 response and pandemic preparedness to protect public health.

Dr Robert Paulino-Ramirez in the Dominican Republic has been involved in the creation of a world-class research hub, the country's first and only such facility dedicated to the study of global health and infectious diseases. When the COVID-19 pandemic struck the country, Paulino-Ramirez and his team were able to accelerate testing thanks to the specialized equipment and training they had received from Takeda in partnership with the NGO Seeding Labs. As a result, the Institute of Global Medicine and Tropical Health at Universidad Iberoamericana is now able to process more than 1,000 COVID-19 tests daily. And once the acute phase of the health crisis passes, the Institute's expanded research capacity will set them up for success in mitigating the impact of future health emergencies and protecting public health.

everyone must do their part.

Progress towards many global health goals has been threatened, halted and, in some cases, even reversed by service disruptions and other pandemicrelated burdens on health systems. To get back on track, we need to increase investment in upstream programmes led by organizations that are already gaining traction on addressing

"We need to increase investment in upstream programmes led by organizations that are already gaining traction on addressing the social determinants of health and the root causes of health inequities. We can be catalytic."

the social determinants of health and the root causes of health inequities. We can be catalytic. We can be one of many doing their part for 'megacommunities', a problem-solving partnership dynamic that sheds what the authors of a book by the same name described as the traditional top-down, commandand-control, reductionist management methods in favour of innovative, integrative and holistic approaches. We can support partnerships that focus on understanding the complexities of an issue as much as on finding solutions⁴.

Building local capacities to meet local needs is the first part of the equation. Helping patients to achieve their best possible health can't be ensured without also clearing the deep-seated hurdles of poverty: food deserts, water scarcity, unstable housing and low education and employment levels. Whether you're a firstyear obstetrics and gynecology resident in Detroit, United States, or a practising cardiologist in Erlangen, Germany, as we were, the lesson is the same, and often learned the hard way: a positive patient outcome, today and in the future, depends on evaluating

and understanding the whole person, their life situation and life experience. We can't just think about the science and the medicine. We can help a clinic in an underserved community build capacity to treat more patients but those patients and their families still need food, transportation and jobs to survive and thrive past the initial treatment.

We are still learning how to address the social determinants of health but know that our partnerships to build local capacity within communities have put us on the right path towards health equity.

INCREASE DIVERSITY IN CLINICAL TRIALS

Takeda believes that diversity in clinical trials is critical. Trials should represent the patients who will ultimately benefit from using the product. With diverse trials, we gain the clinical knowledge to effectively reach broad patient populations and create shared learnings for everyone.

But how can we achieve a meaningful representation of diverse participants and providers as we strive to bring innovative new therapies to the world? To start, we can look at our researchers and where we conduct our research to create opportunities for providers and patients outside of the usual geographies. We can set up trial sites in more communities including those who are underserved. We can hire staff who are based in the same areas as the patients we want to recruit - strengthening local economies as an added benefit. We can provide training on how to engage more effectively with participants from different backgrounds. We can create mechanisms that enable patients from different communities to help define our research priorities. We need to ask ourselves: How are we engaging, empowering and elevating patients - from both underserved and more advantaged communities - to guide our work?

We also need to:

- Commit to continuously deepening our presence and understanding of global communities and our community-level engagement;
- Foster closer and longstanding relationships with community leaders and patient groups;
- Focus on improving patient outreach and communication to enhance awareness of trial opportunities;
- Take to heart the regulatory guidance on broadening eligibility criteria wherever possible to maximize inclusivity⁵;
- Remain aware of the many social and environmental barriers to trial participation and work proactively to clear those barriers; and
- Consider and address issues related to housing and transportation challenges and food insecurities, and revise scheduling to accommodate inflexible work schedules or issues with childcare.

Lessening a clinical trial's reliance on in-person visits may be improved with remote trial modalities, but these require access to technology that some patients may not have. Digital solutions are one possible approach to managing a trial, and during the COVID-19 pandemic, technology played a pivotal role in healthcare. But we also witnessed how that digital shift exacerbated inequities among those who lack Internet access at home, or a smartphone, or a good data plan. Technology has become a new determinant of health.

Takeda is committed to continuing to enhance the ability for patients and communities to inform clinical trials, their design and their execution. Patients and communities have the answers for how to overcome the burdens of participation, by meeting patients where they are in their lives and building trust. Building confidence is also key to recruiting a diverse cohort of patients for clinical trials and helping them stay committed for the duration of the trial.

Takeda's efforts to understand and engage patients don't stop when a trial is over. We have to be vigilant about looking at health outcomes and how pharmaceutical innovation is contributing to improving patients' health and quality of life. This type of assessment of medicines, diagnostics and devices is challenging, but even more so for underserved populations who are too often left out of the picture.

SHIFTING MINDSETS FOR AN INCLUSIVE WAY FORWARD

We know we are not the first or only company in our industry – or any industry – that is already hard at work thinking about how to achieve health equity. We believe that the solution is to take an inclusive approach, one that recognizes the expertise of each person, each community and each entity, incorporating

Partnering to address local inequities



Vietnam: Improving treatment for a rare disease that is prevalent in developing countries.

Dr Anh-Hoa Pham Nguyen in Vietnam was able to expand her work and career path as a principal research investigator through a programme established by Takeda and the NGO Cures Within Reach. She is now leading clinical trials at three hospitals studying the use of inexpensive and readily available cancer medicines to improve outcomes for children with biliary atresia (BA), a rare congenital liver disease that causes bile duct inflammation and destruction that has a high disease burden in developing countries.

expertise shaped by individual lives and personal experiences.

At Takeda we are learning to find our way towards tackling the issues surrounding healthcare equity and contributing to global health goals in meaningful ways. To help us achieve our aims and to build on our corporate philosophy which puts patients first followed by building trust within society, we created a centre of excellence called the Center for Health Equity and Patient Affairs. The centre is composed of a dedicated multidisciplinary team working internally and externally globally to address health inequities, and build structural and knowledge capacity in communities. The centre also provides eligible patients with early access to Takeda medicines, brings together stakeholders from multiple sectors to solve problems that are too large for one entity to solve, and which engages patients throughout the development process. One of our goals is to inspire and motivate others, mindful that we are still at a critical early stage of action. We know that achieving health equity

requires everyone from across our global organization to have an internalized health equity mindset. We know that this work should continue to 'live' inside the heart of our organization and be the driving force as both a business priority and a moral imperative.

We are clear-eyed about the role that we can play. By forging and nurturing partnerships that include the community, government and other businesses – within and outside of health – we can effect change that makes an impact and fortifies communities around the world today, tomorrow and for generations to come.

It's on all of us to close the gaps that persist, reduce disparities and provide equitable access to care. We invite you to join us on this collective journey to provide the best possible healthcare and to make the best possible health outcomes a reality for everyone.

ALITHODS

Charlotte Owens, MD, Vice President and Head of the Center for Health Equity and Patient Affairs, Takeda

Wolfram Nothaft, MD, Executive Vice President and Chief Medical Officer, Takeda

ADDRESS

Takeda, 500 Kendall Street, Cambridge, Massachusetts, 02142, United States.

REFERENCES

- 1. Bradley, E., Elkins, B. R., Herrin, J. & Elbel,
- B. BMJ Qual. Saf. **20**, 826-831 (2011).
- **2.** Hood, C., Gennuso, K. P., Swain, G. R. & Catlin, B. B. *Am. J. Prev. Med.* **50**, 129–135 (2016).
- **3.** Raviola, G. et al. Global Ment. Health, **7**, E6 (2020).
- **4.** Gerencser, M. et al. Megacommunities: How leaders of
- Megacommunities: How leaders of government, business and nonprofits can tackle today's global challenges together (Palgrave Macmillan, 2009).
- 5. U.S. Department of Health and Human Services Food and Drug Administration, Center for Drug Evaluation and Research, Center for Biologics Evaluation and Research (CBER) (2020). Enhancing the Diversity of Clinical Trial Populations Eligibility Criteria, Enrollment Practices, and Trial Designs Guidance for Industry.