3 GOOD HEALTH AND WELL-BEING

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17 ROOMS GLOBAL FLAGSHIP
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Building understanding, trust, and future ecosystems for the adoption of participatory digital tools in pandemic preparedness & response

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Room focus

Develop a global strategy to educate communities and investors on the value and impact of pandemic preparedness and response-related (“PPR”) participatory digital health and data collection tools (“PDTs”), enhance their utility, and encourage their broad uptake for outbreak mitigation and response.

Overview of digital health space and needs

The recent proliferation of participatory digital health tools (PDTs)² for pandemic preparedness and response has opened a path towards empowering communities to take a more active role in their health. However, policymakers, community and business leaders, and investors/donors often lack an understanding of the value proposition behind them, leading to underinvestment, as well as disjointed or unsustained efforts to support, promote, and/or use these tools. Low adoption rates, limited access to and/or understanding of digital technologies, mistrust, and concerns around data privacy further complicate their rollout, particularly within marginalized and vulnerable communities.

COVID-19 has forced policymakers to consider radical changes to the architecture for international cooperation. Although the next infectious disease outbreak cannot be prevented, the next pandemic can be—in part by educating key influencer audiences on the strategies and benefits of PDTs and participatory surveillance more broadly.³ With the right political and financial investments, aligned with the appropriate global policies and mechanisms, the digital health revolution can reduce economic fallout, generate better clinical outcomes, and facilitate earlier responses to outbreaks. As part of the 2021 17 Rooms process and Flagship Summit, Room 3 identified the broader goal of organizing and executing a multi-year, multi-faceted, and multi-audience campaign to enhance the understanding and utilization of PDTs. To start with feasible and properly-scoped initiatives, we propose two actionable initiatives. We believe these can address key needs within the participatory surveillance space, including bridging the gap between policymakers, investors, and developers to encourage buy-in and broadened support for PDTs on a global scale, and facilitating co-creation of tools built by and for communities acutely affected by infectious disease outbreaks. More broadly, we acknowledge that these goals can only be achieved as part of a comprehensive and sustained global agenda to build more trust in digital public infrastructure, decrease the digital divide, and encourage collaboration by all stakeholders toward effective and widespread participatory surveillance everywhere.

¹ Sara Davis, Skye Gilbert, Greg Kuzmak, and Leo Wolansky also contributed to the ideas presented in this document as members of Room 3.
² For the purposes of this report, the term PDT is used to refer to digital health tools used for reporting or accessing information on viral spread in near real time, including mobile contact tracing apps and proximity sensing tools, exposure alert systems, symptom reporting apps, national hotlines, virtual vaccine cards, etc.
³ Participatory surveillance is defined as the bi-directional process of receiving and transmitting data for action through engagement of the target population.
A demonstration to bridge digital technology to infrastructure development

**Aim 1:** Deploy an educational and simulation platform among audiences of political, corporate, public health, and community leaders to demonstrate the importance and utility of supporting PDT initiatives for outbreak preparedness and encourage increased investment for the future.

To broaden understanding and engagement with PDTs among world leaders, decisionmakers, and philanthropists, we propose the deployment of a Bluetooth-based simulation, modeling all aspects of a real-world infectious disease outbreak for policymakers, responders, and communities at high-level conferences or events, such as a World Economic Forum meeting, U.N. convening, or Global Health Security Meeting. Simulations can serve both educational purposes and become a mechanism to develop ground truth data to test how digital health tech should work, facilitate development of better tools, and allow people to see the utility of a product, which may, in turn, inspire more investment and engagement. By visualizing the transmission of a simulated pathogen, we hope to better prepare, inform, and educate global leaders, strategists, and policymakers to prevent and contain the world’s next major outbreak.

To ensure sustained engagement with outbreak preparedness even after COVID-19, we will connect with participants within 6 months through targeted outreach and surveys. This effort will help determine additional needs and areas of focus within the PDT space, identify new stakeholders and communities who might benefit from our educational simulation, and develop an action plan for supporting PDT initiatives more broadly. We also hope to generate increased momentum and support towards future deployment of the simulation within different high-level settings and in all communities across the globe.

**Aim 2:** Facilitate co-creation of PDTs by tech developers, content experts, humanitarian organizations, and community leaders through support for initiatives that foster collaboration to build a participatory surveillance system designed for the needs of underserved or vulnerable communities.

It is critical to build PDTs that serve at-risk communities, including women, migrant populations, and other marginalized groups. Under the guidance of leading humanitarian organizations, we aim to foster innovation in participatory surveillance to better serve the needs of at-risk communities. An EpiHack is a collaborative 3-6 day event that encourages public health professionals, animal health experts, and software developers to work together to co-create prototypes, designs, or tools that can integrate into national or regional participatory surveillance systems. By supporting EpiHack’s process to convene stakeholders intimately connected to the communities we are serving, we hope to enable the co-creation of open-source, sustainable, and relevant solutions for infectious disease surveillance. The EpiHack event is an opportune time to stimulate discussion on major needs, directly involve the communities that these tools will serve, and provide an opportunity to test the developed software and share insights.

**Looking ahead: Future areas for improvement**

As leaders, investors, regulators, and communities become more educated and engaged on the importance and utility of PDTs, it is critical to encourage and sustain momentum in this space in tandem with the two solutions proposed. We hope to see The Rockefeller Foundation, The Brookings Institution, and other partners engage in this broader campaign. The overall goal of educating and building a stronger ecosystem for outbreak-related PDTs will require a multidimensional effort over the coming years. Future initiatives may include additional research and analysis into the broader PDT landscape, including examples of successful implementation and failures, to better understand the opportunities and challenges associated with developing and deploying PDTs moving forward. Further, there is a need to both expand access to PDTs and deploy targeted educational outreach initiatives among those acutely affected by the digital divide, including women and girls, displaced persons, and other socioeconomically disadvantaged communities. A broader set of educational modules, whether standalone or integrated within other programs, can be used to support further education and understanding of PDTs moving forward, as well as plans for rolling out such an educational campaign.