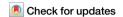


https://doi.org/10.1038/s41746-024-01228-z

# Health equity through CMS collaboration with startups and digital health innovations



There is a need for digital health innovation focused on bettering the health of marginalized populations. These communities, often insured by Medicaid and Medicare, face complex healthcare barriers that technology can address - emphasizing the role of the Center for Medicaid and Medicare Services (CMS) in fostering innovation. Dasari et al. identify four areas of CMS collaboration with startups: enhancing consumer awareness, leveraging telehealth, streamlining cross-state licensing and billing, and adopting technologyenabled tools.

s investment in digital health companies has slowed following unparalleled financing during the Covid-19 pandemic, the pressure on existing health technology companies to acquire customers and prove value has grown1. Given the predominance of employer-sponsored health insurance in the U.S., many health technology companies have focused their efforts on business-to-business (B2B) models in order to expand their services quickly rather than sticking to direct-to-consumer (D2C) models. However, many Americans are not insured by their employers-18.8% are insured by Medicaid, and 18.7% are covered by Medicare2. With a population of 92 million Medicaid and 65 million Medicare patients, the Medicaid and Medicare market has an annual market spend of \$728B and \$829B, respectively3. These patients typically have various complex healthcare barriers, such as lack of access to medications, challenges with health literacy, and difficulty with transportation. The myriad of inequities that these patients experience are areas that are often overlooked and, as such, are desperate for innovation.

As a result of the above factors, vulnerable populations are falling behind in receiving equitable healthcare. Few companies, such as Cityblock, Unite Us, and Nuna, recognize the holistic approach necessary to provide healthcare for

populations whose health is disproportionately impacted by social factors. As the public provider of care for these individuals, the Center for Medicaid and Medicare Services (CMS) is responsible for cultivating an innovation economy that encourages startups to create and collaborate. Compiling the insights from 15 digital health and health equity experts, Dasari et al. suggest four pivotal areas of partnership with health technology startups to enhance the work of CMS<sup>4</sup>.

# The four pivotal areas of opportunity

Enhancing consumer awareness. The first area of opportunity Dasari et al. highlight involves enhancing consumer awareness about CMS programs. There are multiple barriers that hinder access to CMS programs and benefits, such as lack of a regular primary care provider and knowledge of programs. Startups that focus on creating a centralized repository of benefits would improve both coverage and awareness, especially if the platform is personalized to individual patients' health plan reimbursements, state programs, and tax credits. This could look similar to an application created by Propel, which helps low-income Americans manage their electronic benefit transfer (EBT) balance and understand their supplemental nutrition assistance program (SNAP) benefits. A similar healthcare financing application would help patients navigate their healthcare benefits and spending; however, innovation in this space would require thoughtful strategies regarding scale as several existing patient navigator resources are location-specific.

Leveraging telehealth. The second area of opportunity is to mitigate access gaps through virtual care programs. During the pandemic, CMS allowed reimbursement of telehealth services to be on par with in-person care. Since many low-income patients struggle with transportation, a continuation of these reimbursement incentives is essential to enable patients to receive care in various settings. The digital divide persists despite efforts to address access to broadband services through initiatives such as the Affordable Connectivity Program<sup>5</sup>. However, continuing these coverage policies is

important since having the option of telehealth is transformative in increasing healthcare access.

Streamline cross-state licensing, billing, credentialing. Even with the reimbursement incentives for telemedicine, challenges with billing and obtaining cross-state licenses further inhibit the distribution of healthcare providers in communities that need them most, such as rural areas. The third area of need highlighted by Dasari et al. is to streamline the complexity of licensing, billing, and credentialling across states. Recognizing that physicians will need to practice in multiple states with the rise of telemedicine, US state medical boards created the Interstate Medical Licensure Compact (IMLCC) to help streamline medical license application processes. An area of opportunity exists to support and conjoin efforts with CMS to balance safety and accessibility with cross-state medical practice.

Adopting technology-enabled tools. The fourth area of opportunity is using technologyenabled services to address social risk factors without imposing additional burdens on providers. The article by Dasari et al. recommends reimbursements for social services and provider time to address social determinants of health (SDOH). Arguably instead of reimbursing physicians, increasing the quantity and reimbursement of care provided by social workers, peer advocates, and patient liaisons-in addition to Dasari et al.'s suggestion to leverage networks of remote community health workers-will be critical to ensure that providers are not overburdened. Furthermore, expanding funding streams to these care providers will also attract the creation of technology-enabled tools that are unique and specific to the tasks of social workers and patient advocates.

# An untapped market opportunity

While Dasari et al. clearly highlight the need for innovation and partnership with CMS, a looming question remains. Why should these profit-driven startups and companies enter the Medicaid and Medicare market? Because community health organizations and federally qualified health centers (FQHC) are willing to pay for the right technology-enabled tools. Although these

organizations may have a tighter budget, creative business models do exist, such as obtaining additional funding from Section 115 of the Social Security Act. This gives organizations the flexibility to create experimental, pilot projects that promote the objectives of each state's Medicaid program<sup>6</sup>. Furthermore, on a market level, the Medicaid and Medicare market still remains largely unpenetrated. To be successful, startups must obtain immediate increased profits or costsavings for the hospital since FQHCs have less tolerance for longer-term financial outcomes. Startups must also achieve scale. As seen in many other consumer industries, even though the individual consumer has financial constraints, a company can still be profitable if it can serve a niche and aggregate customers quickly. There is no time better than now to recognize the opportunity in the Medicaid and Medicare market—creating technology-enabled solutions that tackle the health inequities leaving communities behind during this digital health boom.

Serena C. Y. Wang <sup>1</sup> ⊠, Grace Nickel<sup>1</sup>, Jethro C. C. Kwong <sup>2</sup> & Joseph C. Kvedar<sup>1</sup> Harvard Medical School, Boston, MA, USA. Division of Urology, Department of Surgery, University of Toronto, Toronto, ON, Canada. —e-mail: serenawang@hms.harvard.edu

Received: 9 July 2024; Accepted: 14 August 2024

Published online: 24 August 2024

### References

- Gunasekeran, D. V., Tseng, R. M. W. W., Tham, Y.-C. & Wong, T. Y. Applications of digital health for public health responses to COVID-19: a systematic scoping review of artificial intelligence, telehealth and related technologies. npj Diat. Med. 4, 40 (2021).
- Keisler-Starkey, K., Bunch, L. & Lindstrom, R. Health Insurance Coverage in the United States: 2022. United States Census Bureau: Health Insurance Coverage in the United States https://www.census.gov/library/publications/ 2023/demo/p60-281.html#:-:text=Of%20the%20subtypes %20of%20health.percent)%2C%20and%20VA%20and% 20CHAMPVA (2023)
- Williams, E., Rudowitz, R. & Burns, A. Medicaid Financing: The Basics. https://www.kff.org/medicaid/issue-brief/ medicaid-financing-the-basics/ (2023).
- Dasari, S., Mehreen, R., Baker Spohn, K. & Ostrovsky, A. Opportunities for CMS to improve healthcare access and equity through advancing technology-enabled startups and digital health innovations. npj Digit. Med. 7, 23 (2024).
- Affordable Connectivity Program. Federal Communications Commission: Affordable Connectivity Program https://www. fcc.gov/acp (2024).
- Section 1115 Demonstrations. Center for Medicare and Medicaid Services https://www.medicaid.gov/medicaid/

section-1115-demonstrations/about-section-1115-demonstrations/index.html.

### **Author contributions**

First draft was written by S.C.Y.W. The remaining authors, including G.N., J.C.C.K, and J.C.K provided critical revisions and approved the final draft.

## Competing interests

J.C.K. is the Editor-in-Chief of npj Digital medicine. The remaining authors declare no competing interests.

Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/ bv-nc-nd/4.0/.

© The Author(s) 2024