

Enhancing Healthcare Access and Equity: The Role of Technology and Digital Solutions in CMSs Strategic Partnerships

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Abstract: *Throughout its history, the Centers for Medicare and Medicaid Services (CMS) have engaged in strategic alliances with specific entities in the private sector, encompassing expansive hospital and health system networks, nursing facilities, and groups responsible for payment. Nevertheless, companies specializing in services powered by technology and firms in the digital technology sector stand in a unique position to assist CMS in overcoming significant obstacles to fulfill its objective of enhancing healthcare accessibility and equity. There exist four critical areas of opportunity wherein collaboration with businesses in technology and utilization of digital tools could significantly bolster CMS's efforts: (1) enhancing public knowledge of CMS's programs, (2) bridging the gaps in access via online healthcare services, (3) simplifying the complexities inherent in various insurance plan structures, and (4) applying services enabled by technology to tackle social determinants of health without adding to the workload of healthcare providers. This document presents instances of digital and technology-driven solutions that better patient access to healthcare services and bridge disparities in equity, alongside specific suggestions for CMS to improve and broaden the effectiveness and outreach of these interventions. Specifically, these suggestions call for forming partnerships with companies in the private sector capable of informing and assisting consumers regarding their entitlements, maintaining parity in reimbursement for telehealth services to encourage virtual care, endorsing licensure across states within insurance plans, and compensating for services that facilitate care coordination. This relieves healthcare providers from the task of screening and addressing the social needs related to health. The argument put forth is that CMS plays a critical role in utilizing innovations from services powered by technology and digital health technologies to reduce barriers to healthcare access, lessen the load on providers, foster innovation, and bridge gaps in equity across the levels of patients, providers, and innovators.*

Keywords: Digital Technology, Healthcare Accessibility, Social Determinants of Health, Telehealth, Innovation, Equity

1. Introduction

In recent years, the Centers for Medicare and Medicaid Services (CMS) has dedicated significant effort to enhancing healthcare access and equity. These initiatives aim to mitigate health disparities in the United States, particularly among racial and ethnic minority groups, individuals eligible for both Medicare and Medicaid, and residents of rural and underserved communities. These populations often encounter difficulties in accessing healthcare services, receiving lower-quality care, and experiencing poorer health outcomes compared to the broader population[1].

Traditionally, CMS has formed partnerships with larger entities and conventional healthcare providers, including hospital networks, nursing facilities, and payer organizations involved in Medicare Advantage and Managed Medicaid programs[2]. It is our belief that the contributions of small private sector businesses and technology-driven startups are critically positioned to help CMS overcome significant obstacles in fulfilling its goal to enhance healthcare access and equity. Our perspectives are informed by collaborations with 15 experts in digital health and health equity, who have pinpointed major challenges related to burdensome policies and complexities affecting patients, healthcare providers, and innovators alike.

Discussions with these experts revealed three key themes. Firstly, a widespread lack of awareness among consumers about their eligibility for CMS programs and difficulties in navigating these programs were identified. We advocate for

intensified, centralized education and outreach efforts to boost consumer knowledge. Secondly, the potential for enhancing healthcare access through digital solutions was recognized. Thirdly, the disparity between various payer plan models was noted to limit provider availability, impose undue burdens, and contribute to provider burnout. Our suggestions include the standardization of credentialing and billing processes across different plans and the introduction of cross-state licensing to relieve provider shortages. Additionally, we propose that CMS should focus on identifying and assessing the impact of social risk factors without adding to the workload of providers, who already bear the brunt of increased medical and social complexities without adequate compensation or support.

The urgency for CMS to tap into the innovative capabilities of technology-enabled startups and small businesses to address the aforementioned barriers is highlighted. In the sections that follow, we discuss the role of small enterprises and digital technologies in reducing barriers to healthcare access, simplifying processes for patients and providers, fostering innovation, enhancing the healthcare experience, and promoting health equity.

2. Bridging access Gaps through Increased Awareness of CMS Benefits and Programs

There is a notable gap in consumer awareness regarding eligibility for CMS programs, alongside challenges in their navigation. Various factors contribute to these challenges, such as difficulties in accessing information from the

government about benefits, the absence of regular primary care providers, a lack of awareness among providers about benefit offerings, and a disjointed process for patient referrals to access services. These issues hinder patients from realizing the full extent of benefits and treatments available to them through their health plans [3].

The presentation of benefit information is often complicated, characterized by specific eligibility criteria, distinct application processes, and state-by-state variations. A centralized resource detailing all available benefits is rare, with information spread across various channels such as legislation, official guidance, bulletins, websites, and social media. This dispersion and complexity create barriers to understanding eligibility and taking necessary action [3].

A survey of caregivers in the United States revealed that 33% cited a lack of information as their primary barrier to understanding available benefits, while 29% struggled with enrollment or determining eligibility. The application process, requiring separate paperwork for each benefit, proves to be time-consuming [3]. Technology-based startups provide a solution by centralizing access to various benefits, including tax credits and state programs, thereby simplifying the enrollment process through a streamlined, user-friendly web application. To further facilitate consumer access to benefits, CMS could endorse the reimbursement for benefits navigators, establish centralized education and referral networks, and adopt digitized summaries of benefits. Moreover, the termination of the Public Health Emergency (PHE) has led to over 3.8 million individuals losing Medicaid coverage due to the cessation of enhanced federal funding [4,5]. A significant portion of those losing coverage are not informed of their changing eligibility status, with an estimated 7.9% (6.8 million) still eligible but disenrolled [6]. Digital health platforms can simplify the enrollment and re-certification process for Medicare members, potentially unlocking substantial savings for America's most vulnerable populations [7]. Collaborations with such platforms will enable CMS to effectively communicate eligibility, reduce insurance churn, and enhance the utilization of benefits. Partnering with companies like Google, which has made efforts to improve its search engine for users seeking Medicaid re-enrollment information, could further enhance awareness and simplify the enrollment process [8].

3. Reducing Access Barriers through Telehealth and Digital Health Solutions

Beyond the lack of awareness, significant access barriers persist for patients, including lengthy waitlists, travel requirements, provider shortages, and limited operational hours at healthcare facilities, making it difficult for those with employment or other commitments to seek or receive care. On average, patients in the U.S. face a two-hour wait and travel time for a mere 20-minute visit, with racial/ethnic minorities and unemployed individuals experiencing longer burdens, particularly when accessing services at community health centers [9]. For specialized services, waiting periods can extend over several months, leading to patient dropout and adverse outcomes [10]. Even with transportation benefits under Medicare Advantage, patients often struggle to receive care.

The COVID-19 pandemic showcased the potential of telehealth solutions in offering broader access to healthcare, especially for Medicare and Medicaid beneficiaries dealing with social complexities. CMS's temporary coverage of Category 3 Telehealth services, which are likely beneficial but lack the evidence for permanent coverage, is set to continue through the end of the calendar year [11]. Sustaining reimbursement parity for these telehealth services could foster innovations, such as telehealth alcohol treatment programs and virtual care for dementia, improving access in rural and underserved areas [12-14]. Models like virtual cardiac rehabilitation and text-based mental health care represent innovative approaches that provide high-value healthcare to those hindered by transportation and cost [15,16]. By expanding access and coverage for these virtual services, CMS has a significant opportunity to close the gaps in health equity and healthcare access for patients.

4. Easing Provider Workload Through Enhanced Credentialing and Licensing Processes

CMS has made significant strides in implementing value-based payment and service delivery models in recent years [17]. However, the processes for credentialing and billing, as well as the administrative requirements, vary widely across different states, payers, and health plans, leading to significant burdens on providers and contributing to burnout. These administrative inefficiencies also lead to substantial billing and insurance-related costs, which can represent a significant portion of professional revenue [18].

An example cited from our consultations highlights that providers managing care for complex patients under managed plans are required to navigate multiple portals for daily operations due to the lack of operational standardization. This scenario places an undue burden on smaller practices, especially those in rural and underserved areas, due to limited resources to manage these complexities. Consequently, there's a clear need for CMS to establish standardized credentialing and licensing processes across states and plans to alleviate these burdens.

Moreover, the U.S. faces a chronic shortage of clinicians, particularly in rural and underserved areas. Estimates indicate millions live in areas designated as Health Professional Shortage Areas (HPSAs) for primary care, dental, and mental health services [19]. The shortage is exacerbated by the lack of cross-state licensures, which restricts the capacity of providers to serve in high-demand areas. Expanding telehealth and cross-state licensures could significantly mitigate these shortages.

Health systems and providers aiming to offer care coordination services encounter operational challenges in managing the overhead of hiring and credentialing staff to assist patients with complex needs, especially across different payer plans. The variability in state licensing requirements and the prolonged processes for credentialing with each payer add to these challenges. Collaborating with technology-enabled virtual care coordination services can alleviate these

burdens by connecting patients to a network of already credentialed health professionals, thus minimizing the operational strain on clinics, particularly smaller ones [20]. MediCal and the CalAIM programs exemplify how reimbursement for integrated medical, behavioral, and social services can support the provision of care without placing additional burdens on staff [21].

5. Focusing on Social Risk Factors Without Increasing Provider Burden

With the release of the CMS Framework for Health Equity for 2022–2032, there's an emphasis on equipping the healthcare workforce to address health disparities [22]. Evidence suggests that social support services not only improve health outcomes but also reduce costs. However, the onus of screening for social determinants of health (SDoH) predominantly falls on healthcare providers, without adequate compensation or resources, leading to a gap between identifying needs and connecting patients to appropriate services [23].

Providers face challenges in integrating SDoH screenings into their workflows, citing a lack of infrastructure to address social needs and inadequate knowledge to utilize collected data effectively [24]. CMS has the opportunity to support healthcare professionals by providing resources for SDoH screenings and facilitating connections to community resources. Reimbursing providers for the time spent on care coordination related to SDoH can incentivize more comprehensive patient care without adding financial or operational strain.

Outsourcing care coordination for patients with complex needs to specialized services or technology-enabled platforms can further reduce provider workload, allowing them to concentrate on their primary responsibilities. These solutions offer a way to engage patients in addressing SDoH barriers, promoting healthier behaviors, and improving clinical outcomes. For example, technology-enabled interventions have shown significant reductions in HbA1c levels among diabetes patients, illustrating the impact of targeted support on health outcomes and cost savings [25, 26].

In addition to leveraging technology and specialized services, utilizing government data sources like SNAP participant and income data can enhance the identification and engagement of patients with significant SDoH needs, streamlining the process for providers and ensuring resources are directed efficiently. Encouraging health plans to adopt more comprehensive approaches to addressing social needs, supported by CMS policies that incentivize the inclusion of health-improving social services in plan offerings, can further promote equitable and effective care delivery [27].

6. Conclusion

In this discussion, we highlight four principal strategies to enhance healthcare accessibility, diminish disparities, and propel the initiatives of CMS forward. Firstly, we advocate for the adoption of improved digital communication tools to heighten consumer knowledge of benefit programs. Secondly, the implementation of virtual healthcare solutions is

recommended to bridge the accessibility chasm, particularly in overcoming obstacles related to costs and transportation. Moreover, we call for the normalization of credentialing and billing procedures, alongside the facilitation of cross-state licensing across various plans. Finally, we suggest the introduction of methodologies aimed at reducing the workload on providers related to the screening and management of patients' social risk factors.

We acknowledge the existence of the digital divide, which encompasses issues such as patient digital literacy and access to broadband, as potential hindrances to these technological solutions in achieving healthcare equity and access. Nonetheless, with augmented reimbursement schemes covering technological expenses and enhanced patient instruction by digital health entities, these tech-driven tools hold the promise of significantly benefiting patients by easing the burdens of cost and transportation to healthcare services.

By endorsing the role of technology startup ventures in refining the patient experience and diminishing administrative complexities, CMS has the opportunity to lower the barriers to healthcare access, fostering innovation and bridging the gaps in equity across the spectrum of patients, healthcare providers, and innovators

References

- [1] Centers for Medicare & Medicaid Services. "CMS Framework for Health Equity." [Online]. Available: <https://www.cms.gov/priorities/health-equity/minority-health/equity-programs/framework> (2023).
- [2] Centers for Medicare & Medicaid Services. "Partnership for Patients Initiative." [Online]. Available: <https://www.cms.gov/priorities/innovation/innovation-models/partnership-for-patients> (2023).
- [3] Givers. "Givers." [Online]. Available: <https://www.joingivers.com> (2022).
- [4] Srivastava, S. Optimization of Cloud-Based Applications using DevOps.
- [5] Coleman, "Almost 3.8 Million People Have Lost Their Medicaid Coverage Since the End of the COVID-19 Public Health Emergency," Commonwealth Fund. [Online]. Available: <https://www.commonwealthfund.org/blog/2023/almost-38-million-people-have-lost-their-medicaid-coverage-end-covid-19-public-health> (2023).
- [6] 87 Fed. Reg. 20973. [Online]. Available: <https://www.federalregister.gov/d/2022-20973>.
- [7] Srivastava, S. DevOps: A New Approach for Bridging the Gap between Development and Operations Teams.
- [8] Assistant Secretary for Planning and Evaluation Office of Health Policy, "Unwinding the Medicaid continuous enrollment provision: projected enrollment effects and policy approaches." [Online]. Available: https://aspe.hhs.gov/sites/default/files/documents/404a7572048090ec1259d216f3fd617e/aspe-end-mcaid-continuous-coverage_IB.pdf (2022).
- [9] Uno Health. "Uno Health." [Online]. Available: www.unohealth.com (2022).
- [10] Srivastava, S. Optimizing Automation and Specialized Testing Techniques in DevOps.

- [11] K. DeSalvo, "New Ways We're Helping People Live Healthier Lives," Google. [Online]. Available: <https://blog.google/technology/health/consumer-health-updates-thecheckup/> (2023).
- [12] K. N. Ray et al., "Disparities in Time Spent Seeking Medical Care in the United States," *JAMA Intern. Med.* [Online]. Available: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2451279> (2015).
- [13] Srivastava, S. Utilizing AI systems to automate DevOps processes within the field of Software Engineering.
- [14] D. Resurrección et al., "Reasons for dropout from cardiac rehabilitation programs in women: a qualitative study," *PLoS ONE*. [Online]. Available: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200636> (2018).
- [15] 87 Fed. Reg. 45942. [Online]. Available: <https://www.federalregister.gov/d/2022-14562>.
- [16] Monument. "Monument." [Online]. Available: <https://joinmonument.com/> (2022)
- [17] Srivastava, S. Semantic Knowledge Modeling in DevOps: An ontological Framework Aimed at Aiding the Comprehension of DevOps within Academia and the Software Business.
- [18] Remo Health. "Remo Health." [Online]. Available: <https://remo.health/> (2022).
- [19] Cochran et al., "Transportation barriers to care among frequent health care users during the COVID pandemic," *BMC Public Health*. [Online]. Available: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-14149-x> (2022).
- [20] Carda Health. "Carda Health." [Online]. Available: <https://www.cardahealth.com/> (2022).
- [21] MindRight Health. "MindRight Health." [Online]. Available: <https://www.mindright.io/> (2022).
- [22] B. Smith, "CMS innovation center at 10 years—progress and lessons learned," *N. Engl. J. Med.* [Online]. Available: <https://www.nejm.org/doi/10.1056/NEJMs2031138> (2021).
- [23] P. Tseng et al., "Administrative costs associated with physician billing and insurance-related activities at an academic health care system," *J. Am. Med. Assoc.* [Online]. Available: <https://jamanetwork.com/journals/jama/fullarticle/2673148> (2018).
- [24] Health Resources and Services Administration, "Health Workforce Shortage Areas." [Online]. Available: <https://data.hrsa.gov/topics/health-workforce/shortage-areas> (2022).
- [25] Pair Team. "Pair Team." [Online]. Available: <https://www.pairteam.com/> (2022).
- [26] California Health Care Foundation, "CalAIM Explained." [Online]. Available: <https://www.chcf.org/resource/calaim-in-focus/calaim-explained/> (2023).
- [27] L. McIver, "CMS Framework for Health Equity," Centers for Medicare & Medicaid Services. [Online]. Available: <https://www.cms.gov/files/document/cms-framework-health-equity.pdf> (2022).
- [28] Billioux A., et al. Standardized Screening for Health-Related Social Needs in Clinical Settings: The Accountable Health Communities Screening Tool. National Academy of Medicine. [Online] Available at: <https://nam.edu/wp-content/uploads/2017/05/Standardized-Screening-for-Health-Related-Social-Needs-in-Clinical-Settings.pdf> (2017).
- [29] Palacio A. et al. Provider Perspectives on the Collection of Social Determinants of Health. [Online] Available at: <https://www.liebertpub.com/doi/full/10.1089/pop.2017.0166> (2018).
- [30] Inquisit Health. [Online] Available at: <https://www.inquisithealth.com/> (2022).
- [31] Outcomes. Inquisit Health. [Online] Available at: <https://www.inquisithealth.com/payers-insurers/outcomes/> (2022).
- [32] Meyers D., Durfey S. N. M., Gadbois E. A., & Thomas K. S. Early Adoption of New Supplemental Benefits by Medicare Advantage Plans. *Journal of the American Medical Association*. [Online] Available at: <https://jamanetwork.com/journals/jama/fullarticle/2735487> (2019)

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