

## Digitally Enabled Medicaid Home and Community-Based Services\*

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### I INTRODUCTION

Older Americans are increasingly able to receive long-term care in the home through the emergence of digital health tools, including mobile health applications, remote monitors, and video calling software for medical appointments. These digital health tools can further support older adults' preference to age in place. The demand for this type of care in the home is exemplified by the over 820,000 Medicaid-eligible Americans who sit on waiting lists – many for years – hoping to receive long-term supports and services (LTSS) through state Medicaid home and community-based services (HCBS), rather than institutional care.<sup>1</sup>

Medicaid HCBS includes services delivered to persons who wish to remain in their homes by providing for the full spectrum of LTSS, such as bathing, feeding, personal care, medication administration and management, and more.<sup>2</sup> Under Medicaid, state programs must cover LTSS in institutional settings, but HCBS are provided under section 1915(c) of the Social Security Act as a waiver program,<sup>3</sup> which effectively leaves hundreds of thousands without care if they wish to remain in their homes.<sup>4</sup> Digitally enabled HCBS could expand LTSS in the home by utilizing the digital health tools described above combined with data-driven analytics

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<sup>1</sup> MaryBeth Musumeci et al., Key State Policy Choices about Medicaid Home and Community-Based Services, Kaiser Issue Brief (2020).

<sup>2</sup> Carli Friedman et al., Aging in Place: A National Analysis of Home and Community-Based Medicaid Services for Older Adults, 29 J. of Disability Pol'y Stud. 245 (2019).

<sup>3</sup> 42 USC § 1396n(c).

<sup>4</sup> Ryan Crowley et al., Long-Term Services and Supports for Older Adults: A Position Paper from the American College of Physicians, 175 Annals Internal Med. 1172–74 (2022). The movement toward HCBS is being driven by patient preferences and innovations in health care delivery, as well as the instrumental US Supreme Court decision in *Olmstead v. LC*, 527 U.S. 581 (1999), which held that the “unjustified institutional isolation of people with disabilities is a form of unlawful discrimination under the Americans with Disabilities Act.”

to reduce reliance on home health care aides, an already strained workforce, and unpaid caregivers.

To illustrate this escalating demand to receive LTSS in the home, meet Cora. Cora is a 92-year-old woman who sits in her hospital bed watching plants on her windowsill collect dust, wishing she were in her home. A recent stroke has left her with moderate cognitive impairment and reduced mobility. She has been hospitalized for months while staff and family members work to identify a safe discharge plan. The new cognitive and functional impairments place her at risk for medication adherence errors and falls, precluding her from caring for herself alone at home.

The discharge dilemma that Cora, her family, and the medical team face is common for older adults when greater care at home is needed but unavailable. These distressingly difficult scenarios have been exacerbated by the insufficient home health workforce, which was decimated by the COVID-19 pandemic and continues to shrink.<sup>5</sup> Home health care is the largest long-term care (LTC) modality for older adults, assisting with daily living, preventing falls, and administering medication.<sup>6</sup> Over 1.8 million older adults in the United States are partially or completely homebound,<sup>7</sup> a number that will likely continue to rise with an aging population. As the homebound population increases, the need for at-home services will follow suit.

A technological response through digital health tools could enable many older adults to be safely discharged home after a hospital stay or, ideally, avoid hospitalization in the first place.<sup>8</sup> Cora could possibly be discharged home with a variety of new in-home devices. For example, to reduce the risk of falls, a home health agency could fit her with wearable devices and install home motion sensors and remote monitoring bed alarms. This digitally enabled approach would allow the agency to centrally monitor a larger number of patients than they could if they solely relied on in-person visits.

This chapter delineates the ethical, social, legal, and regulatory issues of implementing digital home care for a Medicaid-eligible, older adult population. The second section of this chapter describes efforts to modernize and expand HCBS

<sup>5</sup> Judith Graham, Pandemic-Fueled Shortages of Home Health Workers Strand Patients without Necessary Care, *Kaiser Health News* (2022), <https://khn.org/news/article/pandemic-fueled-home-health-care-shortages-strand-patients/amp/>.

<sup>6</sup> Lauren Harris-Kojetin et al., Long-Term Care Providers and Services Users in the United States: Data from the National Study of Long-Term Care Providers, 2013–14, 3 *Vital & Health Stat.* 38 (February 2016).

<sup>7</sup> Katherine A. Ornstein et al., Epidemiology of the Homebound Population in the United States, 175 *JAMA Internal Med.* 1180 (2015).

<sup>8</sup> Katie Adams, 5 Health Systems Recently Launched “Hospital-At-Home” Programs, *Becker’s Hosp. Rev.* (January 31, 2022) (reporting a rise in the number of hospital-at-home programs), [www.beckershospitalreview.com/telehealth/5-health-systems-that-recently-launched-hospital-at-home-programs.html](http://www.beckershospitalreview.com/telehealth/5-health-systems-that-recently-launched-hospital-at-home-programs.html).

by applying digital health tools and services. Ethical considerations for digitally enabled HCBS are discussed in the third section, recognizing an older population's heightened vulnerability to abuse, social isolation, and frailty in the face of concerns regarding safety, efficacy, privacy, and equitable access. The fourth section proposes recommendations for how to approach expanding digitally enabled HCBS in ways that address individual and system-level issues. Recommendations for individual-level issues focus on user consent practices and the acceptable use of collecting, sharing, and storing health data. System-level recommendations include policies to support reimbursement for remote monitoring and permanently lifting geographic restrictions around the use of telehealth so that older adults can access care from their homes. The scrutiny that follows could not be timelier, as older adults struggle to gain access to LTSS delivered in the home to safely age in place, and state Medicaid programs struggle with mounting costs, workforce shortages, and a growing aging population.

## II INTEGRATION OF DIGITAL HEALTH TOOLS WITH MEDICAID HCBS

To meet the growing demand for LTC in the home, the Centers for Medicare and Medicaid (CMS) must play a prominent role in equitably expanding access to older adults. Medicaid is the primary payer for LTC in the United States, paying for about two-thirds of all LTC stays.<sup>9</sup> HCBS waivers are optional, but the majority of states implement them to address high-use populations with the most intensive needs, such as those aged 65 and over, because LTSS in the home is less expensive than institutionalized care and supports older adults' preference to receive care in the home.<sup>10</sup> States are under increasing financial pressure to meet the needs of a growing aging population and have accordingly raised Medicaid budgets to fund LTSS.<sup>11</sup> While the existing government policies still favor institutional care over optional HCBS for low-income older Americans, notable shifts are underway.

<sup>9</sup> Medicare, which covers about 54 million people based on age, covers only limited forms of in-home care in certain circumstances, and "doesn't cover long-term care if that's the only care you need." *Home Health Services*, Medicare.gov, [www.medicare.gov/coverage/home-health-services](http://www.medicare.gov/coverage/home-health-services); *Long-Term Care*, Medicare.gov, [www.medicare.gov/coverage/long-term-care](http://www.medicare.gov/coverage/long-term-care); Medicare – Statistics & Facts, Statista [www.statista.com/topics/1167/medicare/#dossierKeyfigures](http://www.statista.com/topics/1167/medicare/#dossierKeyfigures). Approximately, 12.3 million people are dually eligible beneficiaries for Medicaid and Medicare. *Seniors & Medicare and Medicaid Enrollees*, Medicaid.gov, [www.medicare.gov/medicaid/eligibility/seniors-medicare-and-medicare-enrollees/index.html](http://www.medicare.gov/medicaid/eligibility/seniors-medicare-and-medicare-enrollees/index.html).

<sup>10</sup> Musumeci et al., *supra* note 1.

<sup>11</sup> Zachary Anderson, *Solving America's Long-Term Care Financing Crisis: Financing Universal Long-Term Care Insurance with a Mandatory Federal Income Tax Surcharge That Increases with Age*, 25 *Elder L. J.* 473, 507 (2018).

In April 2020, the CMS approved Appendix K in 1915(c) state waivers,<sup>12</sup> which expanded LTSS in HCBS waivers to include reimbursement for virtual assessments with providers, electronic service delivery, and other technology-related benefits to better serve beneficiaries during the COVID-19 pandemic. Furthermore, the American Rescue Plan Act, signed by President Biden in March 2021, boosted federal matching in Medicaid for HCBS, and the Infrastructure Investment and Jobs Act of 2022 provided funding to address digital health equity.<sup>13</sup> Highlighting the increasing value of HCBS services, the Agency for Healthcare Research and Quality recently studied the health and welfare of HCBS recipients and found significant benefits from applying emerging technologies during care.<sup>14</sup> The agency identified durable medical supplies and technologies, such as personal care robots, wearable fall detection devices, automated medication administrators, and assistive devices, as tools of the future that would soon be commonly used.

Yet, most Medicaid HCBS cover only assistive devices and emergency alert systems<sup>15</sup> and do not cover the aforementioned digital health tools. Currently, reimbursement for equipment and technology accounts for only a small portion of overall HCBS expenditures despite high usage.<sup>16</sup> This is partially attributable to the lengthy and uncertain process for CMS coverage of new technologies. For a new technology to be granted reimbursement, it must demonstrate significant benefit for the Medicare population beyond existing technologies or services.<sup>17</sup> The rate at which technologies arrive on the market often outpaces the rate of validated studies providing results to meet this high standard, thus, often limiting their use. Even if a technology is approved for reimbursement, it is up to individual states to determine which services will be covered based on needs,<sup>18</sup> making implementation and access to digitally enabled services heterogeneous and difficult to track.

<sup>12</sup> Kaiser Fam. Found., *Medicaid Emergency Authority Tracker: Approved State Actions to Address COVID-19* (July 1, 2021), [www.kff.org/medicaid/issue-brief/medicaid-emergency-authority-tracker-approved-state-actions-to-address-covid-19/](http://www.kff.org/medicaid/issue-brief/medicaid-emergency-authority-tracker-approved-state-actions-to-address-covid-19/).

<sup>13</sup> Tyler Cromer et al., Modernizing Long-Term Services and Supports and Valuing The Caregiver Workforce, *Health Affs.* (April 3, 2021), [www.healthaffairs.org/doi/10.1377/forefront.20210409.424254/full](http://www.healthaffairs.org/doi/10.1377/forefront.20210409.424254/full); Infrastructure Investment and Jobs Act, Pub. L. No. 117–58, 135 Stat. 429 (2021).

<sup>14</sup> Agency for Healthcare Rsch. & Quality, *Assessing the Health and Welfare of the HCBS Population* (December 2012), [www.ahrq.gov/patient-safety/settings/long-term-care/resource/hcbs/findings/find3.html](http://www.ahrq.gov/patient-safety/settings/long-term-care/resource/hcbs/findings/find3.html).

<sup>15</sup> Molly O'Malley Watts et al., *State Policy Choices About Medicaid Home and Community-Based Services Amid the Pandemic* (2022).

<sup>16</sup> Victoria Peebles & Alex Bohl, The HCBS Taxonomy: A New Language for Classifying Home and Community-Based Services, 4 *Medicare & Medicaid Rsch. Rev.* (2014).

<sup>17</sup> Lee A. Fleisher, Medicare Coverage of Innovative Technologies, *CMS.gov* (September 13, 2021), [www.cms.gov/blog/medicare-coverage-innovative-technologies-mcit](http://www.cms.gov/blog/medicare-coverage-innovative-technologies-mcit).

<sup>18</sup> Robin Rudowitz et al., 10 Things to Know about Medicaid: Setting the Facts Straight, *Kaiser Fam. Found.* (March 6, 2019), [www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid-setting-the-facts-straight/](http://www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid-setting-the-facts-straight/).

Expanding reimbursement coverage for, and therefore access to, new types of devices under HCBS waivers, therefore, may reduce overall costs by supporting a shift away from labor-intensive institutional settings into the home, where more efficient LTSS care can be delivered with reduced administrative and staffing costs.<sup>19</sup> For example, digital tools for organizing and dispensing medications could reduce the high proportion of a home health care aide's time devoted to that task. In the scenario with Cora, rather than relying on an aide, Cora could receive reminders on her smartphone or a wearable device to take her medications, which could be dispensed through an automated cabinet. This digitally enabled approach would improve Cora's compliance and reduce medication errors.<sup>20</sup> Other examples of digital health tools that could reduce demand on the LTC workforce include the strategic placement of Amazon's Ring and Echo Show devices around Cora's home to help her connect via video calls to the home health care agency, when needed, and have 24/7 access to an urgent response service.<sup>21</sup>

Digital health tools could also benefit via the collection of data-driven analytics around the variety of services provided. Currently, state waivers for HCBS differ across the country in terms of eligibility, scope of benefits, and delivery systems.<sup>22</sup> It is estimated that by 2028, there will be 8.2 million HCBS job openings,<sup>23</sup> many of them directly impacting older adult needs. In the face of staffing shortages for personal and nursing care, many of these technologies offer low-cost solutions with reduced labor needs. States are also required to establish a quality assurance, monitoring, and improvement strategy for the HCBS benefit, yet there are no standards for this.<sup>24</sup> Digital health home tools could improve states' ability to monitor their LTSS delivered via HCBS through centralized data collection and analysis and through on-site monitoring of the services delivered by agencies or providers.

There are also lessons for digitally enabled HCBS to be gleaned from the recent expansion of Hospital-at-Home (H@H) practices, which use technology to provide real-time information pertinent to the monitored patient's health and needs. Examples include at-home vital signs checks and alarms for gait changes predicting falls,<sup>25</sup> which could be equally useful as part of HCBS. Another emerging area

<sup>19</sup> Arpita Chattopadhyay et al., *Cost-efficiency in Medicaid Long-Term Support Services: The Role of Home and Community Based Services*, 2 SpringerPlus, 305 (2013).

<sup>20</sup> Bryan C. McCarthy et al., *Implementation and Optimization of Automated Dispensing Cabinet Technology*, 73 *Am. J. Health-Sys. Pharmacy* 1531 (2016).

<sup>21</sup> Lea Lebar et al., *The Psychosocial Impacts of E-care Technology Use for Long-Term Care Recipients and Informal Carers*, 22 *Int'l J. Integrated Care* (2022).

<sup>22</sup> Musumeci et al., *supra* note 1.

<sup>23</sup> Workforce Data Center, *PHI*, <https://phinational.org/policy-research/workforce-data-center/>.

<sup>24</sup> Tara Sklar & Rachel Zuraw, *Preparing to Age in Place: The Role of Medicaid Waivers in Elder Abuse Prevention*, 28 *Annals Health L.* 195 (2019).

<sup>25</sup> Thanos Stavropoulos et al., *IoT Wearable Sensors and Devices in Elderly Care: A Literature Review*, 20 *Sensors* 2826 (2020).

includes Addison, an artificial intelligence care management tool that synchronizes across devices in a patient's home and interacts with a caregiver avatar.<sup>26</sup> Such technologies could be expanded to focus on core HCBS priorities, such as maintaining function by targeting the activities of daily living to help older adults eat, dress, and bathe themselves.<sup>27</sup> In turn, these systems can prevent the hospital admissions that lead to preventable nursing home admissions and resource inefficiencies.<sup>28</sup> Ideally, clinical or behavioral information from these technologies, which continuously collect data, would be available to primary care providers and other medical specialists to further support individualized care plans or chronic disease monitoring.

Despite the potential widespread benefits of integrating digital health tools into HCBS, there is a lack of federal- or state-level guidance on how to adapt digital health tools into medical and custodial care, alongside the corresponding reimbursement.<sup>29</sup> To date, there is little to assure quality or applicability for many digital home technologies – such as devices that monitor medication adherence and changes in the sleep-wake cycle – that will play an increasingly integral part in the care of older adults. For example, early research on automated medication cabinets and care robots is promising, but large randomized clinical trials are lacking to guide their acceptability for use among a diverse HCBS-eligible population.

As Medicaid programs increasingly look to adopt these technologies to provide LTSS in the home, beneficiaries should be engaged to determine if these proposed digital solutions are accessible and understandable. A suggested incremental approach would be for CMS to launch pilot sites with a range of state Medicaid programs to measure efficacy and to inform acceptable-use guidelines for integrating these technologies into daily care routines. Additionally, metrics around communications with digital health tools should be included to address beneficiaries' preferences, audio or visual difficulties, limited English proficiency, and lower digital-health literacy.

<sup>26</sup> Press Release, Electronic Caregiver, *Meet Addison, Electronic Caregiver's Living Avatar for Café Management* (January 3, 2023), <https://ces.vporoom.com/2023-01-03-Meet-Addison,-Electronic-Caregivers-Living-Avatar-for-Care-Management>.

<sup>27</sup> Sasha Sheppard et al., *Is Comprehensive Geriatric Assessment Admission Avoidance Hospital at Home an Alternative to Hospital Admission for Older Persons?* 174 *Annals Internal Med.* 889 (2021); Shubing Cai et al., *Evaluation of the Cincinnati Veterans Affairs Medical Center Hospital-in-Home Program*, 66 *J. Am. Geriatrics Soc'y* 1392 (2018); Roger Harris et al., *The Effectiveness, Acceptability and Costs of a Hospital-at-Home Service Compared with Acute Hospital Care: A Randomized Controlled Trial*, 10 *J. Health Servs. Resch. & Pol'y* 158 (2005).

<sup>28</sup> Nicoletta Aimonino Ricauda et al., *Substitutive "Hospital at Home" Versus Inpatient Care for Elderly Patients with Exacerbations of Chronic Obstructive Pulmonary Disease: A Prospective Randomized, Controlled Trial*, 56 *J. Am. Geriatrics Soc'y* 493 (2008).

<sup>29</sup> Richard Schulz et al., *Advancing the Aging and Technology Agenda in Gerontology*, 55 *Gerontologist* 724 (2015).

### III ETHICAL CONSIDERATIONS WITH DIGITALLY ENABLED HCBS IN AN OLDER POPULATION

Ensuring the safe, effective, and clearly regulated use of new digital health tools for the routine care of older adults requires close ethical analysis. An overarching framework to promote autonomy, safety, privacy, and equity is paramount, especially when stakeholders with such potentially differing interests are involved. In this context, stakeholders include patients and caregivers as end-users, agencies delivering HCBS, the organizations developing digital health tools, regulators, and policy makers. Below are three key considerations that consider the unique vulnerabilities of an HCBS-eligible older adult population, the autonomy and privacy concerns with continuous monitoring, and the required steps to help ensure equitable access to digital models of HCBS.

While older adults prefer to age in place and receive LTSS in the home, they are more prone to frailty, cognitive and sensory impairments, and social isolation.<sup>30</sup> In addition, issues of abuse and neglect are a concern among older adults and need to be taken into consideration as care moves further into the home,<sup>31</sup> where there may be less oversight than in institutional settings, particularly when care is provided digitally. However, if HCBS integrate more digital health tools, then the daily tracking of vital signs and other metrics could vastly improve the current oversight of Medicaid beneficiaries, which sometimes amounts to as little as quarterly phone calls from the state Medicaid office.<sup>32</sup>

To help illustrate the additional possible benefits from appropriate oversight, we turn back to the fictional Cora, who carries a diagnosis of chronic obstructive pulmonary disease, commonly known as COPD, and is discharged home with HCBS. Upon returning home, the home health care agency links an urgent response service to Cora's home pulse oximeter to monitor her remotely. This is a widely available monitoring device, but is not subject to standardization, safety requirements, or proof of diagnostic accuracy, and has received substantial racial and ethnic discrepancy criticism.<sup>33</sup> Currently, these devices are neither reimbursable by CMS nor routinely integrated into HCBS.

Yet, in the near future, this device could play a pivotal role in Cora receiving immediate care or in preventing an unnecessary hospital visit. Remote monitoring through HCBS could detect a drop in Cora's blood oxygen level and prompt her to use oxygen or an inhaler, avoiding a call to emergency medical services or hospitalization. But these interventions are only as good as the accuracy and reliability of the

<sup>30</sup> Jon Sanford & Tina Butterfield, *Using Remote Assessment to Provide Home Modification Services to Underserved Elders*, 45 *Gerontologist* 389 (2005).

<sup>31</sup> Nat'l Inst. on Aging, *Elder Abuse*, [www.nia.nih.gov/health/elder-abuse](http://www.nia.nih.gov/health/elder-abuse).

<sup>32</sup> Sklar & Zuraw, *supra* note 24.

<sup>33</sup> Eric Ward & Mitchell Katz, *Confronting the Clinical Implications of Racial and Ethnic Discrepancy in Pulse Oximetry*, 182 *JAMA Internal Med.* 858 (2022); Annabel Kupke et al., *Pulse Oximeters and Violation of Federal Antidiscrimination Law*, 329 *JAMA* 365 (2023).

technology used. Currently, diagnostic error among older adults in clinical care is pervasive due to the limits around lack of data, complex conditions requiring consistent monitoring, and barriers to communication due to impairments associated with older age.<sup>34</sup> The above is an example of how digital health tools could diagnose in the home to intervene early, but they are only effective if the technology itself can be consistently and reliably used by this population.

In expanding access to new technologies through HCBS waivers, issues of digital health equity may be addressed. Many Medicaid-eligible older adults lack the internet or data services needed to support digitally enabled tools in the home and related access to home telehealth to manage their medical needs.<sup>35</sup> Federal and state government investments in broadband infrastructure and continued reimbursement for home telehealth are essential for this group.

#### IV INDIVIDUAL AND SYSTEM-LEVEL CONSIDERATIONS FOR MODERNIZING HCBS

For digitally enabled HCBS to become a reality, stronger regulatory oversight is needed to ensure the safe and effective deployment of the enabling technologies. The promise of such an approach aligns with the goals of HCBS waivers to reduce LTC costs and ensure high-quality care in the home, particularly for older adults with unique needs, preferences, and vulnerabilities. To support the integration of digital health tools in HCBS, we make the following practice and policy recommendations. These recommendations include focusing on individual user consent practices, as well as system-level advocacy for policies that support payment parity for remote patient monitoring and telehealth.

To date, there are two key issues with digitally enabled services: (1) Inconsistent, difficult-to-interpret consent practices that do little to empower users and (2) ambiguity around device company practices with respect to device monitoring, data collection, use, and security. Both of these are controlled at the company level but could be subject to change when utilized for HCBS care. In studies examining the acceptability of home monitoring and surveillance among caregivers and persons with dementia, many users (or future users) hoped for technologies that would provide peace of mind, safety, and support in the home, with the primary goal of promoting safe aging in place.<sup>36</sup> Yet, the digital health tools used today in the care of

<sup>34</sup> Christine Cassel & Terry Fulmer, Achieving Diagnostic Excellence for Older Patients, 327 JAMA 919 (2022).

<sup>35</sup> Sarah Nouri et al., Commentary, Addressing Equity in Telemedicine for Chronic Disease Management During the Covid-19 Pandemic, *NEJM Catalyst* (May 4, 2020), <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0123>.

<sup>36</sup> Mira Ahn et al., Supporting Aging-in-Place Well: Findings from a Cluster Analysis of the Reasons for Aging-in-Place and Perceptions of Well-Being, 39 J. Applied Gerontology 3 (2020); Sebastiaan T. M. Peek et al., Older Adults' Reasons for Using Technology while Aging in Place, 62 Gerontology 226 (2016).



older adults, such as wearables, in-home cameras and care robots, often use a one-off, click-through process with dense, hard-to-understand terms to obtain consent, if any. These consents are typically presented during initial use or when new users access app-based technologies and fail to account for changes in user preferences over time or, in the case of older adults, changes in cognition and capacity to consent to their use.

Secondly, there is a lack of transparency around how device companies will use and provide security around the data collected from these digital health tools. The proposed recommendations aim to simplify instructions to promote improved understanding among users and delineate privacy and security risks about how health data will be collected, used, shared, and stored to encourage the trust and, ultimately, utilization of these tools.<sup>37</sup> If digitally enabled HCBS are to become widely adopted, then stricter standards around data use and maintenance by device companies must protect patient's privacy by not sharing identifiable health information that would be required by covered entities, namely providers and insurers, under the Health Insurance Portability and Accountability Act (HIPAA).<sup>38</sup>

Currently, many of the device companies who have access to health data are considered non-covered entities (NCEs) under HIPAA, meaning patients or residents have little access to and control over how their health information is handled and shared with unauthorized users, including marketers. Expanding the reach of HIPAA to include these companies as covered entities could encourage more older adults to view digitally enabled HCBS as secure and trustworthy. NCEs could also voluntarily comply with HIPAA to encourage uptake, which would encompass establishing safeguards, such as a firewall, encryption, and two-step authentication, among other steps to protect user privacy.

In addition, a more transparent, formalized process of disclosure and consent can be implemented so that older Medicaid beneficiaries may better understand to what extent their personal data is being collected and how it may be used. Discussions about home surveillance and monitoring devices provide patients and their families with opportunities to make informed decisions about whether to use these technologies given all the factors involved – from data risks to the benefits of continuous monitoring. Requiring transparency and disclosure by device manufacturers provides another step in the right direction. For example, model privacy notices (MPN), akin to FDA nutrition facts labels,<sup>39</sup> allow for clear communication around data use and security practices that cater to a broad range of user understanding and health literacy. Transparency and disclosure requirements for digitally enabled

<sup>37</sup> Peek et al., *supra* note 36 (addressing that tendency requires clearly communicating that at-home test kits have imperfect diagnostic capability and that this carries implications for decision-making).

<sup>38</sup> Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-91, 110 Stat. 1936.

<sup>39</sup> *Model Privacy Notice (MPN)*, HealthIT.gov, [www.healthit.gov/topic/privacy-security-and-hipaa/model-privacy-notice-mpn](http://www.healthit.gov/topic/privacy-security-and-hipaa/model-privacy-notice-mpn).

technologies at the same level of oversight as covered entities (CEs) under HIPAA offer two salient options for improvement on existing practices.

Taking the case of Cora, shared decision-making – around her comfort with in-home surveillance, with cameras or a wearable continuously monitoring her activity – may reveal preferences for sharing information or, alternatively, restricting its use to only certain times or circumstances. Using information readily accessible and understandable through the devices' MPN, Cora and her family could make informed decisions about which devices to use and how. They use a redesigned consent form that explains how companies may use her data when employed through HCBS to keep her safe and independent at home. Under existing HCBS Community Transition Services, for example, Cora would be given some agency in determining which services align with her values, activities-of-daily-living (ADL) needs, and environmental adaptations at the time of her transition to home. Folding digitally enabled services into these decision points would offer greater opportunities for more tailored and personalized care, as well as a seamless integration of custodial-type services with her medical care. Expanding control over how, when, and where these technologies and their derivative data are used may allow older adults to meaningfully drive individually tailored care under their HCBS that better aligns with their specific values around privacy or confidentiality.

System-level tactics that support policies providing access to remote patient monitoring and home telehealth through payment parity would provide another driver for digitally enabled HCBS to become a reality. These broader access issues connect with HCBS to support the ability of Medicaid-beneficiaries to safely age in place by receiving remote management of their chronic or acute conditions. The Consolidated Appropriations Act of 2023 continues to lift telehealth geographic restrictions and allow for payment parity of home telehealth so that those visits are reimbursed by Medicare until December 31, 2024, at the same rate as in-person visits.<sup>40</sup> Medicare also provides reimbursement for remote monitoring so that providers can review data and manage treatment plans for patients without in-person visits. These national trends speak to the rising attention to and support for patient preference and need to remain in place, as well as the value of expanded access to care via in-home technology.

## V CONCLUSION

The greater personal capacity for older adults to maintain function and autonomy in their daily routines via digital health tools with less in-person human assistance would allow for more older adults to safely age in place. Combining these technologies with Medicaid HCBS also serves to advance digital health equity for an older population group with limited resources. Under a person-centered care model, such

<sup>40</sup> Consolidated Appropriations Act, 2023, Pub L. 117–328.

as the one that HCBS strives to deliver, regulators can align user values and preferences with the models used by agencies delivering these services.

Ensuring equitable access, the mitigation of risks, and supported decision-making around digitally enabled HCBS is central to the success of these new models in the care of older adults. The heightened physical and social risks many older adults face when left to struggle at home without support can be significantly reduced for all older adults with these technology-assisted options. State Medicaid programs are in an unsustainable fiscal situation, struggling with an increasing aging population and shrinking long-term care workforce. Through the recommendations posed here, digitally enabled HCBS pose one avenue forward to address the older population's needs and preferences as well as to expand access in a forward-looking health technology supported world.