



Executive Summary

The experience during the COVID-19 pandemic has accelerated reaching the day when care in the home is a common and widely available option for patients. The advent of the widespread use of telehealth, remote patient monitoring, virtual disease prevention and disease management, caregiver support, medical record sharing, and new practices by providers and patients can make this possible. A massive growth of home-based care models has erupted, spotlighting new models and those that existed before the pandemic. Care in the home also contributes to health equity by giving historically disenfranchised communities the option to receive care on their terms. It promotes trust and communication by removing institutional barriers and placing the interaction in a familiar setting. A recent national poll confirms this, finding that 70 percent of those surveyed are comfortable receiving care in the home citing that a familiar environment helps alleviate anxiety. ¹

In this report, Moving Health Home (MHH), a coalition of health care organizations with a bold vision to make the home a site of clinical services, explores the transformation that home-based care has undergone during the pandemic. Insights and findings from this report are based in part on in-depth interviews conducted by Avalere Health with leaders from organizations that have either based or adapted their clinical and business models to serve patients in their homes.

Based on the interviews with Landmark Health, DispatchHealth, Contessa Health, Ascension, and Advocate Aurora Health, MHH identified four lessons learned from the pandemic experience, including:

- **1.** Home-Based Care Encompasses a lot More than Home Health Care in the home is no longer limited to traditional home health services and exists on a spectrum of intensity and type of services offered.
- 2. Organizations with Experience Providing Home-Based Care Were Well-Positioned to Respond to the COVID-19 Public Health Emergency (PHE) While many organizations quickly adopted to the pandemic, models that succeeded most rapidly typically leveraged existing home-based care programs and infrastructure.
- 3. Home-Based Care Models Boost Patient Satisfaction, Improve Quality, and Reduce Costs Beyond addressing capacity and caregiver fatigue issues, home-based care models have demonstrated the ability to improve quality, boost patient satisfaction, and reduce costs.
- **4. Regulatory Flexibility is Essential to Success –** The pandemic demonstrated that regulatory flexibilities are critical to fully enable care delivery in the home.

While there are tremendous opportunities for care in the home going forward, key barriers could limit broader adoption, including:

01.

Uncertain Regulatory Environment in a Post-PHE World; 02.

Overly Restrictive Requirements for Hospital at Home Programs; and 03.

Significant Variability in Provider Requirements across States.

To fully realize the benefits of home-based care, including improved clinical outcomes, patient experience, and reduced caregiver burden, state and federal policymakers will need to implement permanent flexibilities and programs that build on the lessons learned from the temporary PHE waivers. The pandemic has gifted the opportunity to transform how health care is delivered, and this report is an important step in ensuring home-based care is part of our health care future.

^{1.} "Moving Health Home Fields National Survey of Consumers." (December 2021). Access Here.

1. Overview

Since first emerging in early 2020, COVID-19 and the resulting Public Health Emergency (PHE) have tested the foundations of the U.S. health care system. The clinical infrastructure in communities across the country has been stretched to the breaking point during successive waves of COVID-19 surges exposing workforce shortages, access issues, supply chain challenges, and weaknesses in our public health infrastructure. The pandemic has also upended our system's traditional face-to-face treatment modalities and laid bare the health care access gap for at-risk populations.

In response to these developments, providers turned to remotely caring for patients through a combination of telehealth and in-home services. The surge in virtual care was driven by quick decisions by Congress and the Centers for Medicare and Medicaid Services (CMS) to remove limitations on the use of telehealth in Medicare, and allow for greater coverage of health services in the home during the PHE.

For example, the CMS Hospitals Without Walls waiver, issued in March 2020, permitted hospitals to provide services in locations beyond their physical locations to address the urgent need to expand capacity and to develop sites dedicated to COVID-19 treatment. As part of the Hospitals Without Walls program, hospitals were able to transfer patients to outside facilities, including ambulatory surgery centers, inpatient rehabilitation hospitals, hotels, and dormitories, to receive care while still receiving hospital payments under Medicare.² A second waiver, Acute Hospital Care at Home, built upon this program and permitted treatment for many common acute conditions, such as asthma, pneumonia, and COPD, in home settings.³ The program has been extremely popular, and as of November 15, there are 83 health systems and 187 hospitals in 34 states participating in the Acute Hospital Care at Home program.⁴

While home-based care was already a growing modality prior to the pandemic, decades of federal and state regulations written for a system based on institutional care made finding a sustainable and scalable model challenging. Medicare Advantage plans, which have the flexibility of being outside the fee-for-service (FFS) system, were the only entities with sufficient incentives and regulatory flexibility to cover in-home care in the pre-PHE years.

This dynamic changed rapidly during the pandemic. Not only have the CMS waivers shown the way to viable home-based care models, but patients have also indicated that they want to stay home. Demand for services provided in the safety of a patient's home have soared. In fact, according to a recent survey, 75 percent of consumers said they are very or somewhat likely to get in-home care for a well visit and 78 percent for a chronic care visit.⁵ Another study found that 85 percent of adults say it should be a high priority for the federal government to expand Medicare coverage for at-home health care. That percentage increases to 90 percent when you narrow the respondents to Americans aged 65 or older.⁶ At the same time, an overwhelming majority of people who have received care in the home were satisfied (88 percent) and would be likely to recommend to family and friends (85 percent).⁷



² "Sweeping Regulatory Changes to Help U.S. Healthcare System Address COVID-19 Patient Surge." (March 2020). <u>Access Here</u>.

⁴ CMS. "Approved Facilities/Systems for Acute Hospital Care at Home." <u>Access Here</u>.

³ "CMS Announces Comprehensive Strategy to Enhance Hospital Capacity Amid COVID-19 Surge." (November 2020). Access Here.

⁵ PwC's Health Research Institute, "Consumer health behavior and the COVID-19 pandemic: what we've learned." (April 2021). Access Here.

⁶ "New Public Opinion Poll Finds Strong Support for Home Health, Choose Home Care Act." (September 2021). Access Here.

⁷ "Moving Health Home Fields National Survey of Consumers." (December 2021). Access Here.

This report explores the transformation that home-based care has undergone during the pandemic, and makes recommendations for how it can thrive as an option for patients in the long term. Based on in death intensions with clinical and business leaders from multiple organizations that have either

on in-depth interviews with clinical and business leaders from multiple organizations that have either based or adapted their clinical and business models to serve patients in their homes, we highlight the lessons learned, explore the implications for federal and state policy, and look ahead to what the future could hold. The interviews and research were conducted by Avalere Health.

The scope of this paper does not allow for the full demonstration of what is possible in the home, but the organizations profiled demonstrate an increasingly diverse array of clinical services that can be delivered. As the graphic below illustrates, new companies and "disrupters" have emerged to provide in-home care for practically every part of the health care continuum.

Figure 1. Continuum of Home-Based Care Providers



2. Case Study Profiles

Adapting in Real-Time as the Pandemic Evolves

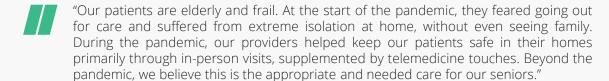
Organizational leaders described providing an array of services that span the full spectrum of care, including primary, emergent, acute, post-acute, home infusion therapy, and palliative care. Below provides a brief overview of each program and describes key changes implemented as a result of the COVID-19 PHE.

In-Home Geriatric Care for Vulnerable Patients with Complex Illnesses



Currently serving roughly 170,000 patients in 18 states, Landmark projects to expand its business to almost 300,000 lives in 22 states by the end of 2022, with a goal of managing care for one million patients by the end of 2025.

- Delivers interdisciplinary, longitudinal home-based primary care for seniors managing complex chronic disease. Works with patients' existing care teams to extend care into the home.
- Conducted over 300,000 visits in 2020 including routine and proactive care visits, in-home urgent care, and postdischarge care.
- Patients on average receive six to eight visits annually from their Landmark physician or advance practice provider.
 As necessary, patients have access to an interdisciplinary care team consisting of: social workers, behavioral health providers, clinical pharmacists, and nurse care managers.
- Landmark's custom-built EMR and Care Coordination platform Ubiquity integrates patient-specific clinical analytics directly into provider workflows, helping to identify who needs care, their risk of hospitalization, and recommended care paths.
- Organizational flexibility enabled a rapid shift to a virtual first model with 95 percent of visits being conducted via telemedicine at the start of the pandemic while PPE was being procured.



Dr. Michael Le, Chief Medical Officer, Landmark Health



Establishing a Viable Alternative to Hospitalization

dispatchhealth

DispatchHealth's home-based acute and advanced care services currently operates in 42 markets in 22 different states, contracting with multiple payers to cover over 150 million lives.

- Founded in 2013, DispatchHealth, works closely with payers, providers, health systems, emergency medical services (EMS), employer groups and others to deliver care in the home to reduce unnecessary emergency room visits, hospital stays, and readmissions.
- DispatchHealth has treated over 450,000 patients generating over \$490 million in savings total.
- OnDemand ER substitution generates \$1,000 to \$1,100 in savings per episode while in-home hospitalizations saved \$5-7,000 per episode.
- Leverages medical teams comprised of an emergency room-trained nurse practitioner or physician's associate along
 with a DispatchHealth Medical Technician, both of whom visit the patient's home, and an ER physician who is on call
 via telephone.
- New use cases emerged for DispatchHealth during the PHE as traditional providers looked to keep patients out of their facilities.
- Minimal staffing ramp-up issues given that DispatchHealth was already in a rapid growth phase leading into 2020.
- Provided a stable model during an uncertain time in health care, which was attractive to clinicians as an employment option..



"The \$4 trillion costs of health care amplified by the ongoing global pandemic demands we rethink everything we know about how care is 'supposed to' be delivered. Patients are seeking new ways of care in the home and we are now able to provide the right care from the comfort of the home at the right price to the right patient."

Kevin Riddleberger, Co-founder and Chief Strategy Officer, DispatchHealth

Advancing the Hospital at Home Model



Contessa is an established player in the hospital at home space, currently contracting with seven health systems, which represent over 180 hospitals across the U.S.

- Introduced their Home Recovery Care model in 2016 to provide acute, inpatient-level care in the homes of Medicare patients.
- Utilizes Care Convergence technology platform and virtual care teams with expertise in managing acute care patients.
- · Partners with health systems through joint ventures to shift lower acuity inpatient cases to the home setting.
- Began partnership with Ascension Saint Thomas, a high-volume acute care hospital in Nashville, TN, with three facilities in its system in 2019 (pre-pandemic).
- In addition to Home Recovery Care, Contessa also created the Completing Hospital Care at Home Program. This modified model was used as a length of stay management tool to send patients out of the hospital to complete the remainder of their inpatient stay from home.



"Hospital at home is a welcome change for both patients and families because it offers the opportunity to be safely and effectively treated for acute medical conditions in the comfort of their own setting."

Mark Hayes, Senior Vice President, Federal Policy and Advocacy, Ascension



Quickly Standing Up a Hospital at Home for COVID-19 Patients

AdvocateAuroraHealth

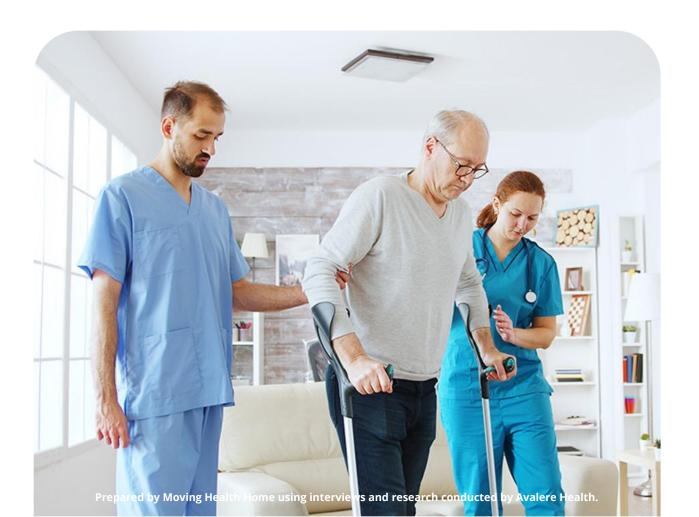
Advocate Aurora Health is a not-for-profit health system with 26 hospitals and over 10,000 physicians. It serves communities across Illinois and Wisconsin, including 1.3 million patients cared for through risk-based contracts.

- Advocate Aurora Health's Continuing Health division supports population health and value-based care through its
 robust set of home-based care programs across the continuum, including primary care for frail and complex
 patients, home-based acute inpatient and observation levels of care, skilled nursing facility care management, home
 health, home infusion, durable medical equipment (DME), palliative care, hospice, and remote monitoring.
- Continuing Health's hospital at home program was created and implemented through a partnership with hospitals, physicians, and care managers with the goal of reducing the burden on hospitals so they could take care of the sickest patients.
- Advocate Aurora Health's Continuing Health was able to quickly respond to the challenges of the COVID-19 pandemic, standing up a hospital at home program in just two weeks. This was made possible due to its experience providing a continuum of home-based care, which has been a key driver of savings and reduced hospitalizations, augmented by use of supportive technology (e.g., remote monitoring).
- The program assists COVID-positive patients with the transition home from the ED, providing 24/7 virtual monitoring of biometric data and vital clinical services such as oxygen and infusion.



"We've learned from managing patients in risk-based environments that shifting care into the home creates a valuable care delivery platform. Our experience... allowed us to be nimble and able to respond to the pandemic quickly with high-level, safe, home-based care."

Denise Keefe, President, Continuing Health Division, Advocate Aurora Health





3. Lessons Learned from the Pandemic Experience

Several cross-cutting themes emerged from our interviews, regardless of the business model of the organization.

Takeaway #1: Home-Based Care Encompasses a lot More than Home Health

While patients have been treated in their homes for decades, the use of home-based care has historically been limited to traditional home health services, including patient monitoring, wound care, injections, intravenous and nutrition therapy, and patient and caregiver support. The COVID-19 pandemic uncovered a myriad of use cases for home-based care that apply beyond the PHE. The organizations interviewed by Avalere each focus on a different aspect of the care continuum and therefore provide unique value to the health care system. Interviewees indicated that home-based care offers much more than traditional home health services and exists on a spectrum of intensity and type of services offered.

Oftentimes, home-based care organizations provide non-acute, primary care-based services to patients in the home before they reach an acute phase of care, and the value of this care increased throughout the pandemic. Landmark, for example, provided a sicker, older population the continued opportunity to receive vital primary care, preventive services, and home-based urgent care. During the pandemic, the organization continued to conduct screenings, provide behavioral health services, and respond to social needs by addressing the isolation felt by patients who were unable to leave their homes. While Landmark's clinical model has not changed significantly during the PHE, the company has been a valuable player due to its ability to keep patients out of high-risk, high-cost inpatient settings and by keeping patients healthy despite the challenges of accessing routine care during the pandemic. Similarly, DispatchHealth was successful in keeping patients who may have otherwise been treated in a hospital emergency department from ever having to enter a hospital facility. By addressing patient needs in the field and treating acute conditions before the patient was transported, DispatchHealth leaders indicated it was able to prevent more than 230,000 emergency room visits and hospitalizations, keeping the country's most vulnerable population, who would have fared very poorly if infected with COVID-19, out of the hospital where facility acquired infection rates are of particular concern.

Further down the care continuum, Contessa successfully treated patients who required inpatient acute care in their own home through its partnership with nine health systems, including Ascension. By treating lower acuity patients in a safe setting at home, interviewees explained this partnership increased inpatient bed capacity for COVID-19 cases and high-acuity patients by moving certain patients to a more appropriate site of care. This was similar to the gap in care that Advocate Aurora provided through the development of its hospital at home program, which was able to transition COVID-positive patients out of COVID units in 26 hospitals across two states. This program directly addressed a critical pandemic-related issue: a lack of capacity to treat, in isolation, those who were infected with COVID.

Beyond the clinical services provided by these profiled organizations, each home-based care model addressed patients' social needs. While the pandemic exacerbated inequities within our health care system, the organizations providing home-based care across the continuum were able to mitigate barriers, such as transportation to medical appointments and social isolation many vulnerable patients were experiencing, through the provision of care in the patient's home.



Takeaway #2: Organizations with Experience Providing Home-Based Care Were Well-Positioned to Respond to the COVID-19 PHE

The COVID-19 pandemic called attention to the value of home-based care for the many patients who were unable to safely see their providers in person. It also clarified the value of home-based care for leaders of traditional, facility-based provider organizations who were reluctant to invest in this care model prior to the PHE. Despite the elevated demand and buy-in for these services, health systems and provider organizations that had not traditionally offered home-based care struggled to rapidly develop effective home-based care programs to meet this demand. Those that succeeded in doing so typically leveraged existing home-based care programs and infrastructure developed by organizations such as Landmark, DispatchHealth, Advocate Aurora Health, and Contessa.

Prior to the pandemic, Ascension partnered with Contessa to launch its hospital at home program after recognizing the clinical value of working with an organization that specialized in treating certain patients in the home, rather than building a standalone program.



"When clinicians are in a pandemic and there are no beds, it's amazing how quickly they would change things. There is much greater openness to behavior change."

Travis Messina, Founder and CEO, Contessa Health

In a similar vein, Advocate Aurora Health, which set up its hospital at home program in under two weeks in March 2020, was well-positioned for the quick response given its well-established Continuing Health division.

Landmark had customers who had previously declined to partner, come forward to discuss how best to care for their most vulnerable members during the pandemic, and many existing customers looking to expand. The foundational elements of Landmark's care model, including predictive analytics, robust clinical training, integrated technology and communication, and established community relationships, are hard to build and customers saw that they could not establish this type of care delivery "in house" overnight. In fact, Landmark attributes the fact that their engaged patients fared better during the pandemic, with 15.7 percent fewer COVID-19 fatalities, on their focus on advanced care planning, patient education on the virus and risks of intubation, and accessibility of care through their in-home primary care model.

The COVID-19 pandemic heightened the immediate need for home-based care and demonstrated that these programs can be responsive when there is an incentive and imperative to do so. It also showed that established leaders in home-based care are well-positioned to support the system in times of crises as well as everyday care.

Takeaway #3: Home-Based Care Models Boost Patient Satisfaction, Improve Quality, and Reduce Costs

Another pandemic specific learning is that home-based models address capacity and caregiver fatigue issues, but they also impact cost significantly. One interviewee, DispatchHealth, outlined the opportunity they see in expanding home-based models, such as Hospital at Home. DispatchHealth believes 40 percent of hospitalized patients, or roughly \$340 billion worth, could likely qualify for hospital-level care at home, where costs are on average 19 to 30 percent lower. That is savings of, on average, \$5,000-\$7,000 per episode.



Additionally, industry literature indicates outcomes are significantly better with a 20 percent reduced mortality rate compared to hospitalization. Similarly, September 2021 results reveal that from November 2019 to April 2021 Advocate Aurora's Continuing Health division decreased total cost of care by 38 percent and inpatient encounters by 46 percent. For Landmark, their home-based model reduced medical costs for engaged patients' last 12 months of life by 20 percent, while at the same time extending life, with a 26 percent reduction in mortality within 12 months

At the same time, home-based care models boost extremely high satisfaction rankings. DispatchHealth, for example, consistently receives a Net Promoter Score of 95 or higher, which is in the highest range; Landmark ranks similarly in the mid-90s. These scores are much higher than the benchmark scores for the health care industry, demonstrating the value patients find in home-based care models.

In shifting 40 percent of the patient volume to the home, which for many is a more conducive environment for healing, hospitals can focus on the 60 percent of patients who need more traditional acute and critical care. By reconsidering how health care entities deliver care, namely the superior efficacy of care in the home, there is an opportunity to transform the stifling cost of medicine in the U.S., while addressing the nation's overall health and well-being.

Takeaway #4: Regulatory Flexibility is Essential to Success

The leaders of the organizations interviewed emphasized the importance of regulatory flexibility and acknowledged the important role that Medicare waivers played in enabling care delivery redesign. For example, these organizations leveraged the flexibilities under the Hospitals Without Walls program (now "Acute Hospital Care at Home"), which allows hospitals to receive reimbursement for acute-level inpatient services provided outside of the inpatient setting. This program was developed as part of an effort to increase hospital capacity, maximize resources, and combat COVID-19.

In addition, interviewees took advantage of additional Medicare FFS waivers released during the PHE, including those that improved payment parity for telehealth services and DME and also waived some requirements for the latter, to improve patient access during the pandemic. Along these lines, Landmark was able to significantly increase use of telehealth. Similarly, Advocate Aurora Health—which utilized DME waivers, and expanded use of telehealth technology, including remote monitoring and video visits—said it was able to interact with a greater volume of patients due to the waivers.



"If we didn't have the DME waiver, we would have had to work with 10 different providers to deliver the same volume of services."

Rebecca Trella, Executive Director, Special Programs, Continuing Health

With the duration of the COVID-19 PHE uncertain, those utilizing the waivers are unsure about program sustainability into the future. At this time, the waivers are temporary, with no decision point from Congress or CMS on when, or if, they will end or be extended. The pandemic has allowed for more data collection in the FFS environment to inform business feasibility, clinical outcomes and quality, and patient satisfaction. Several mentioned the importance of analyzing the use of the waivers to build stronger evidence to permanently expand them in the Medicare FFS program into the future.



In contrast to the Medicare FFS program, Medicare Advantage plans have the flexibility and incentives to offer home-based care alternatives for members. These plans have in turn structured capitated (i.e., per member per month) payment arrangements with organizations like Landmark to provide them with the financial flexibility to provide the services it believes its patients need and treat high-acuity patients with a whole-person care team approach. Many of these services may have inadequate coverage under Medicare FFS. Given the advantages created by the Medicare Advantage program, many home-based care companies traditionally target areas with substantial Medicare Advantage enrollment. For example, Mount Sinai, which has partnered with Contessa since 2016, focused extensively on markets where there is a high density of Medicare Advantage enrollment, allowing it to treat a critical mass of patients and supporting a scalable model. The Hospital Without Walls program and its successor – Acute Hospital at Home – made the flexibilities available under Medicare Advantage available across all Medicare populations.

4. Identifying the Policy and Regulatory Barriers

As noted above, regulatory flexibilities put in place during the COVID-19 PHE are directly responsible for spurring broader adoption and diffusion of in-home care programs across the U.S. Interviewees observed that the spread of home-based care services had the intended effect – to relieve pressure on inpatient hospitals and improve health care outcomes. However, uncertainty about the post-COVID-19 policy environment and persistent challenges related to conditions of participation and state-level provider requirements limit further scale. These barriers are described in further detail below.



Barrier #1: Uncertain Regulatory Environment in a Post-PHE World

Home-based care clearly benefited from a host of PHE-related waivers that created new care options for Medicare FFS beneficiaries, ranging from the Hospital Without Walls/Acute Hospital Care at Home to the telehealth, DME, and skilled nursing facility three-day stay waivers. Despite demonstrated benefits and overwhelming provider support, it is unclear whether these short-term regulatory changes will be made permanent through formal rulemaking by CMS or congressional action. Without visibility into the future regulatory structure, in-home care innovators have struggled to make long-term investments to expand services and develop new clinical and business models.



Barrier #2: Overly Restrictive Requirements for Hospital at Home Programs

The Acute Hospital Care at Home program provided eligible health systems with unprecedented regulatory flexibilities to treat eligible patients in their homes. However, the requirements are too onerous for some non-traditional health care delivery systems to participate, which may limit the potential reach. For example, CMS requires that beneficiaries be admitted to the program from emergency departments or inpatient hospital beds. Additionally, an in-person physician evaluation is required prior to starting care at home. At least one organization interviewed – Advocate Aurora Health – indicated it did not pursue the Acute Hospital Care at Home program, despite having the capacity and their hospital at home program established. Its leadership felt that the requirements were too restrictive and would limit their ability to scale quickly, manage costs, and increase the number of patients that could be cared for in the home. As supported by some interviews, CMS may consider relaxing requirements to encourage participation from more community-based, non-hospital providers.



Barrier #3: Significant Variability in Provider Requirements across States

In addition to facing federal policy barriers, these organizations described state-level policies, including those related to provider licensing and oversight, that limit the proliferation of home-based care. For example, interviewees noted that primary care regulations are still largely based on clinic-based models. For example, Tennessee requires that medical doctors provide in-person oversight of registered nurses in clinics, which raises logistical challenges and creates financial burden.

Additionally, many regulators continue to conflate home-based care with home health services, despite major differences in these models. As noted above, Landmark is providing standard geriatric-focused primary care services, not the post-acute rehabilitative and therapy services provided by home health agencies. State policymakers may need to consider opportunities to provide more appropriate oversight for home-based care service providers so that it aligns more closely to service offerings.



5. Looking Ahead

Action to formalize the regulatory flexibilities granted under the PHE may not materialize in 2022. However, as the Omicron and other variants persist as a continued threat, time-limited regulatory flexibilities, such as waivers and other programs, may need to be extended by Congress. Legislation could extend criterial home-based PHE flexibilities, such as the Acute Hospital Care at Home program, for two years triggered by the end of the PHE. These efforts could be employed to ensure home-based care organizations maintain a level of consistency and access to flexible payment mechanisms. After the PHE, Congress could work to authorize permanent expansions of home-based waivers that build on lessons learned during the pandemic and include additional innovative design elements.

Alternatively, the Centers for Medicare and Medicaid Innovation (CMMI) could use its authority to test and evaluate the impact of these waivers as a model. However, CMMI models are temporary in nature, which does not address the interviewees' concerns related to temporary policy not being enough to justify investments in infrastructure.

To fully realize the benefits of home-based care, including improved patient outcomes and experience, decreased health disparities, and reduced caregiver burden, state and federal policymakers will need to implement permanent flexibilities and programs that build on the lessons learned from the temporary PHE waivers. For example, policymakers may consider removing barriers to participation in models such as Acute Hospital Care at Home from non-traditional health systems and community-based organizations. Many of these entities have established relationships with patients and health systems that can be leveraged to expand access and rethink their concept of home-based care.

The pandemic has gifted the opportunity to transform how health care is delivered, and these are important steps in ensuring home-based care is part of our health care future.

