

## Digital Health Sandbox Challenge Massachusetts Medicaid Challenge: Revolutionizing Home-Based Care

The [Massachusetts eHealth Institute](#) (MeHI) at the MassTech Collaborative seeks digital health companies who are developing and validating remote patient monitoring solutions that support community-dwelling older adults with behavioral and psychological symptoms of dementia (BPSD) to participate in the Massachusetts Medicaid Challenge: Revolutionizing Home-Based Care. Challenge finalists will compete for the opportunity to pilot their solution with members of the WellSense Senior Care Options plan. The pilot opportunity is valued at \$50,000 and will be supported by a collaboration of two of MeHI's [Digital Health Sandboxes](#): UMass Chan Medical School and UMass Lowell.

Over 77,000 Massachusetts older adults were enrolled in Senior Care Options (SCO) plans in 2023. SCO plans offer comprehensive healthcare services to residents aged 65 or older who are eligible for both Medicaid and Medicare. SCO plans combine health services with specialized social support programs and serve a portion of the population that typically has complex healthcare needs. WellSense has over 2,000 SCO plan members in Massachusetts with an estimated 200 to 300 with Alzheimer's Disease and Related Dementias (ADRD). For the remainder of this document, the term people living with dementia (PLwD) will be used interchangeably with the term people living with ADRD.

Across the country, more than six million Americans, or 1 in 9 over 65 years old, are living with ADRD. The vast majority of them are cared for by unpaid caregivers. 83% of the help provided to older adults in the United States comes from family members, friends, or other unpaid caregivers and nearly half of all caregivers for older adults are supporting someone with ADRD.<sup>1</sup> Caring for a person with ADRD is particularly demanding. 59% percent of those family caregivers rate the emotional stress of caregiving as high or very high.<sup>2</sup>

PLwD can experience severe behavioral and psychological symptoms, including agitation, aggression, disrupted sleep, anxiety, exit seeking, and wandering into unsafe areas. It can be challenging for caregivers to safely intervene once these behaviors occur, and to avoid injury to themselves or the person they are caring for. Severe episodes of BPSD may also lead to unnecessary visits to the emergency department to control behaviors. Caring for people with dementia who have four or more of these behavioral and psychological symptoms often represents a "tipping point," for family caregivers who are more likely to report clinically meaningful depression and burden.

Remote patient monitoring (RPM) solutions have great potential for supporting older adults as they age at home, and can also provide benefits for their caregivers. The University of Pittsburgh Medical Center found in a 2018 study that Medicare members who enrolled in their RPM program were 76% less likely to be readmitted to the hospital.<sup>3</sup> Specific to dementia, in an 18-month study of remote monitoring and system alerts, caregivers showed promise in being able to identify digital biomarkers associated with falls, wandering events, and avoidable emergency room visits.<sup>4</sup> The increasing evidence, along with the challenges of accessing care during the COVID-19 pandemic, has led to more reimbursement and adoption of RPM across all age groups. From 2019 to 2021, the number of new Medicare patients using RPM rose from 20,640 to 123,476.<sup>5</sup>

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<sup>1</sup> <https://www.alz.org/media/Documents/alzheimers-facts-and-figures.pdf>

<sup>2</sup> <https://www.alz.org/news/2022/six-essential-alzheimers-terms#>

<sup>3</sup> <https://www.healthcareitnews.com/news/upmc-remote-patient-monitoring-helps-reduce-er-utilizationand-hospital-readmissions>

<sup>4</sup> Gaugler JE, et al. Outcomes of remote activity monitoring for persons living with dementia over an 18 month period. *J Am Geriatr Soc.* 2022 Aug; 70 (8): 2439-2442

<sup>5</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10186184/>

RFA Release Date: January 30, 2024

RPM is being used to assess and follow older adults with conditions such as heart failure, diabetes, and falls and more payers are covering these solutions. However, the use of RPM in the care of individuals dually eligible for Medicare and Medicaid has not been well studied, especially for individuals with behavioral disturbances. MeHI launched this challenge to identify digital health solutions that can provide remote monitoring of community-dwelling older adults who have BPSD and who are at risk for adverse health outcomes and inadequate access to healthcare because of racial, ethnic, or socioeconomic factors.

## **Challenge Area and Solutions Sought**

This Challenge seeks remote patient monitoring solutions for older adults with BPSD. Solutions should provide an alternative approach to periodic, outpatient assessments of PLwD and provide on-going, actionable, in-home assessments of changes in their symptoms and responses to interventions.

Solutions should track symptoms and alert users, including providers and family caregivers, to behaviors and events that may signal severe BPSD or adverse health outcomes. Solutions should identify digital biomarkers that can be tracked and used to detect falls, wandering events, or other events that lead to avoidable emergency department visits. Solutions may include wearables, passive monitoring devices, or other devices to remotely monitor PLwD.

All applicants must address the unique needs of WellSense's SCO population, including racial inequities, geographic limitations, accessibility concerns, broadband access, and digital literacy, among others. To learn more about WellSense's organization and their priorities for the pilot, view their [response](#) to MeHI's SCO Plan Mini-Bid.

## Program Overview

The Massachusetts Medicaid Challenge is designed to identify and pilot digital health solutions that may benefit Massachusetts Medicaid beneficiaries. The program is funded and administered by the [Massachusetts eHealth Institute \(MeHI\)](#) at the [Massachusetts Technology Collaborative](#).

The Challenge, *Revolutionizing Home-Based Care*, seeks solutions that will support the Massachusetts Medicaid program in its efforts to provide high-quality care for individuals aged 65 and older. This initiative will provide digital health innovators across the nation the opportunity to work with one of the cutting-edge R&D Centers in the [Massachusetts Digital Health Sandbox Network](#) and to pilot their solution with members of a Senior Care Options (SCO) plan operating in Massachusetts.

Through competitive procurement processes, MeHI selected UMass Chan Medical School and UMass Lowell to serve as the Sandbox partners and WellSense Health Plan to serve as the SCO plan partner for this Challenge. UMass Chan Medical School and UMass Lowell (UMCMS and UML) will lead the design and execution of a pilot implementation of the Challenge winner's solution with members of the WellSense SCO plan. MeHI, WellSense, and the Challenge winner will provide guidance and input on the pilot design. WellSense will promote the pilot to their members and lead member recruitment efforts. They will work closely with UMCMS and UML and the Challenge winner on execution of the pilot and data collection. UMCMS and UML will be responsible for the data analysis and will produce a final report on the project discussing the pilot design, execution, and outcomes.

Applicants from across the country can apply for this Challenge. A group of external expert reviewers will evaluate applicants and recommend 3-6 companies to participate in the program. Reviewers will evaluate applications on the proposed solution's uniqueness in the market, potential commercial viability, and ability to support SCO plan members with BPSD. Reviewers will also consider the applicant's ability to work with Medicaid beneficiaries and their commitment to incorporating social determinants of health and building cultural competence into their solution.

Selected companies will participate in a one-day virtual workshop and pitch prep sessions. The workshop may include an introduction to SCO plans and the Massachusetts Medicaid Program, including their priorities and how they work with and evaluate technology solutions. Companies will also be provided with pitch prep coaching to prepare for the final pitch competition.

The final pitch competition will be held virtually and the selected companies will pitch before a panel of expert judges. Judges will select one winner to work with UMCMS and UML to pilot their solutions with members of the WellSense SCO plan. Funding for the pilot will be paid directly from MeHI to UMCMS, UML, and WellSense to cover their fees for conducting the pilot. No funding will be provided directly to the Challenge winner.

## **Benefits to Participants**

While only one company will be selected to pilot their solution with WellSense and UMass Chan Medical School and UMass Lowell, all participants will benefit from the program. Benefits include:

- Meeting with leaders from a SCO plan
  - Opportunity to share your solution
  - Understand the payer priorities
  - Learn how startups can engage with Medicaid plans
- Learning about the priorities of the Massachusetts Medicaid Program
- Receiving expert pitch prep coaching that will prepare your company for this program, future pitch events, and investor meetings
- Pitching before a virtual audience of healthcare leaders, investors, government representatives, and tech entrepreneurs

RFA Release Date: January 30, 2024

## **Timeline**

RFA Release: Tuesday, January 30, 2024

Final Application deadline: Friday, March 8, 2024

MeHI Selects Company Finalists: Friday, March 29, 2024

Virtual Workshop for Company Finalists: April 2024, exact date to be determined

Virtual Pitch Event: Late April 2024, exact date to be determined

Expected Pilot Timeframe: July 2024 - July 2025

The workshop for finalists, pitch prep sessions, and final pitch event will take place virtually. These dates are subject to change.

## Eligibility

- Applicants do not need to meet a minimum requirement of revenue or investment to participate in the program, however, applicants must propose a new solution that is ready for a pilot implementation. Companies that have participated in an accelerator program previously will receive preference.
- Applicants may be located anywhere in the US.
- Participants must agree to participate in annual follow-up surveys for five years after the end of the program. The survey will ask about company metrics, including:
  - Number of jobs created at your company
  - Number of new customers gained
  - Number of new patents, copyrights, or trademarks obtained
  - Diversity of your board members and/or executive team

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## **How to Apply**

Click [here](#) to apply

For more information visit: <https://massdigitalhealth.org/medicaid-challenge-revolutionizing-home-based-care>

Contact: Ben Stevens, Program Associate: [stevens@masstech.org](mailto:stevens@masstech.org); 617.371.3999 X212



## **Terms**

Applicants are cautioned to read this application carefully and to conform to its requirements. Failure to comply with the requirements may serve as grounds for rejection of an application.

Any and all responses, applications, data, materials, information and documentation submitted to MassTech in response to this application shall become MassTech's property and shall be subject to public disclosure. As a public entity, MassTech is subject to the Massachusetts Public Records Law (set forth at Massachusetts General Laws Chapter 66). There are very limited and narrow exceptions to disclosure under the Public Records Law. If an applicant wishes to have MassTech treat certain information or documentation as confidential, the applicant must submit a written request to MassTech's General Counsel before submitting the materials. The request must precisely identify the information and/or documentation that is the subject of the request and provide a detailed explanation supporting the application of the statutory exemption(s) from the public records cited by the Respondent. If the General Counsel approves the request, the applicant shall clearly label the relevant information and/or documentation as "CONFIDENTIAL" in the application. Any statements in an application reserving any confidentiality or privacy rights that is inconsistent with these requirements and procedures will be disregarded.

This application, as may be amended from time to time by MassTech, does not commit MassTech to select any applicant, award any contracts, or pay any costs incurred in submitting this application. MassTech reserves the right, in its sole discretion, to withdraw the application, to engage in preliminary discussions with prospective applicants, to accept or reject any or all applications received, to request supplemental or clarifying information, to negotiate with any or all qualified applicants, and to request modifications to applications in accordance with negotiations.

MassTech may provide reasonable accommodations, including the provision of materials in an alternative format, for applicants with disabilities or other hardships. Applicants requiring accommodations shall submit requests in writing, with supporting documentation justifying the accommodations, to the Program Associate. MassTech reserves the right to grant or reject any request for accommodations.

## **About the Massachusetts eHealth Institute at the Massachusetts Technology Collaborative**

The [MassTech Collaborative](#) is an economic development agency that strengthens the competitiveness of the tech and innovation economy by driving strategic investments, partnerships, and insights that harness the talent of Massachusetts. MeHI is a division of MassTech and the Commonwealth's entity for healthcare innovation, technology, and competitiveness. MeHI partners with industry, government, and healthcare organizations to support the Massachusetts Digital Health Initiative. MeHI also helps all the Commonwealth's providers harness the benefits of electronic health records and the Mass Hlway, the statewide health information exchange. For more information, please visit <https://mehi.masstech.org> and follow @MassEHealth. Learn more about the Massachusetts Digital Health Initiative at [www.massdigitalhealth.org](http://www.massdigitalhealth.org).

## **About the Massachusetts Digital Health Sandbox Network**

The [Digital Health Sandbox Network and Grant Program](#) was launched in 2019 and is administered by the Massachusetts eHealth Institute at MassTech. The program is designed to support digital health companies in their product development and expand the user base for cutting-edge research and development facilities. There are currently twelve Sandboxes in the Network offering a variety of real-world and simulated environments, state-of-the-art equipment, subject matter expertise, and consulting services to digital health companies to support their clinical, technical, and user product validation.