

MN
2030

LOOKING
FORWARD

Status Check

TECHNOLOGY AND HOME MODIFICATIONS
TO HELP OLDER MINNESOTANS LIVE WELL
AT HOME

MINNESOTA BOARD ON AGING

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REIMAGINING THE FUTURE OF AGING

The Minnesota Board on Aging, in partnership with the Minnesota Department of Human Services, is looking forward to 2030. Today marks the midpoint between our original vision for the long-term services and supports (LTSS) system, and the year that baby boomers start turning 85. It is truly a transformative time in our communities. To that end, we are revisiting our multi-year commitment to prepare for a permanently older society. Across all Minnesota communities, sectors and generations, we aim to refresh and refocus our efforts. In 2000 Minnesota worked with key stakeholders and developed a report called Reshaping Long-Term Care in Minnesota, known as the [Long-Term Care Task Force Report](#). The Long-Term Care Task Force Report identified six broad goals and 15 strategies to prioritize action.

This Status Check document provides a snapshot of progress made on **Technology and Home Modifications to help older Minnesotans Live Well at Home**. The 2000 Long-Term Care Task Force envisioned a long-term care system that meets people’s needs and preferences for help when they need it. Critical to attaining this vision is the use of technology. The task force also recommended that individuals are equipped to meet their own needs through several strategies including information and funding for home modifications, energy modifications, general home repairs and personal adaptive equipment. The report also advised greater investment in these technologies through public Home and Community Based Services (HCBS) programs.

Why is this important?

Technology and home modifications offer tools for us to use to help us with our personal care, maintain independence and remain in our homes. A diverse range of technologies are available to help delay — and potentially avoid — the need to move out of our homes in order to receive the help that we need. Technology continues to rapidly evolve to address our shared desire for maintaining self-sufficiency.

Innovative technology via home modifications, remote monitoring and assistive devices is instrumental because technology can reduce a person’s reliance on getting help from other people, help maintain independence and increase cost effectiveness. In addition, with the existing workforce shortage, and the expectation that this challenge will continue, the need to maximize our use of alternatives to help others, such as home modifications and assistive devices, is critical.

Where Do We Stand Today?

As a direct result of initiatives tested and implemented in Minnesota, the following innovative technologies are available to us today.

Home Modifications

- Environmental accessibility home modifications: installation of grab bars, fixing broken steps, bathroom adaptations and building ramps
- Home repairs
- Accessibility modifications to vehicles
- Occupational Therapy interventions paired with home safety modifications

Assistive Devices, Telehealth and Home Monitoring

- Remote monitoring technology: sensor technology provides health and safety monitoring that sends alert via email or cell to designated responders if a change in routine or movement occurs
- Telehealth for biometrics and vital signs monitoring: technology based monitoring for vital signs and biometrics including motor and cognitive function, glucose monitoring, gait monitoring for prediction and prevention of falls, blood pressure and weight
- Assistive devices: a broad range of devices to support activities of daily living, personal care and home safety such as stove guards and robotics to aid in housekeeping
- Medication monitoring: medication reminder systems include passive and active organizers as well as commercial medication reminders via call or email
- Engagement technology: provides social engagement and interactive therapies at home

Recognizing the importance and outcomes of home modifications and technology, as recently as 2016, DHS amended the elderly waiver (EW) and requested an increase for environmental accessibility adaptations from \$10,000 per year for an EW or Alternative Care (AC) enrollee to \$20,000. This increase allows people on these programs to cover the market rate cost of the environmental accessibility adaptations they need including home modifications and adaptations to a vehicle.

As proposed by the Long-Term Care Task Force, the [Live Well at Home \(LWAH\) Grant Program](#) has for several years offered resources to communities to stimulate advancements in technology. The impact of these efforts includes the accelerated use of home modifications and technology by older adults throughout the state in order to live well at home. Below are examples of these innovations that demonstrate the important work by LWAH grantees. These examples point to the current best practices in this area as well as opportunities for innovations into the future as we look forward to 2030.

Home Modifications

Below are examples from five LWAH grantees that demonstrate different home modification strategies that assist older adults in Minnesota.

Lakes Area Interfaith Caregivers in Crow Wing County is a Faith in Action program that mobilizes volunteers to assist older adults by building ramps and completing home repairs. Without ramps or other similar modifications, older adults with mobility issues are not able to safely enter and move around in their homes.

MAHUBE-OTWA Community Council, Inc., provides supportive services to older adults in Mahnomon, Hubbard, Becker, Otter Tail and Wadena Counties, including home repair and modifications for older adults living in their own homes. Volunteers work on projects such as installing grab bars in bathrooms, fixing broken steps and building ramps which allow older adults to live safely in their own homes.

A sliding fee scale for both initiatives makes it possible for older adults to contribute toward the cost of the materials based on their ability to pay and volunteers donate their time to complete the work, making the services affordable.

Rebuilding Together Twin Cities makes accessibility modifications to the homes of older adults. They pair occupational therapy interventions with home safety modifications to help older adults live well at home. Occupational Therapists use the [Live Well at Home Rapid Screen](#)[®] that measures the likelihood that an older adult will have to move out of their home to get more help. Before a project with Rebuilding Together Twin Cities, the older homeowners were determined to have considerable risk of having to move. After working with Rebuilding Together, their risk dropped considerably and they were able to live well at home. Remarkably the older adults reported far fewer falls, fewer activities that they needed help with, more support from their caregivers and that their caregivers seemed to be less stressed.

St. Ann's Senior Residence is a 163 unit subsidized building with services in St. Louis County. In 2006, through the LWAH grant the residence updated the fire alarm and sprinkler systems and refit the building with a modern heating and cooling system. The updates extended the life of the building, improved the health and safety of the residents while making this affordable option available to older adults. Specifically, the residents' health improved in a temperature controlled environment and, since the upgrade, there have been no hospitalizations for heat related issues. The facility has also seen a steep decrease in the cost of their liability insurance due to having an updated fire alarm and sprinkler system.

Crystal Lake Inn, an adult foster care residence in Otter Tail County, installed an elevator in this two-story home. The elevator creates a safer environment and makes it possible for older adults to remain at the residence even when they are having difficulty climbing stairs. As a result of the renovations, the updates allowed people to move out of the nursing homes and into the residence, where they received care and support in a smaller, more home-like environment.

Assistive Devices and Home Monitoring

LWAH grants have been used to invest in technology that helps organizations become more efficient and mobile, which allows them to do business with large systems such as healthcare and government, and helps them to provide better care. Technology is an important part of the way that HCBS are delivered.

In many rural areas of the state the proportion of the population age 65 and older is higher than it is in urban areas. The demand for in-home services is increasing as the total population in rural areas declines. These areas face shortages of nurses, direct support workers and other health care and LTSS professionals. HCBS providers around the state have purchased tele-health and home monitoring equipment in order to address this challenge. The equipment is installed in an older person's home and is used to monitor vital signs such as blood pressure and weight on a regular basis. The data is then sent to a nurse, who monitors the individual. This equipment can reduce the number of in-home visits required by home care staff, increasing their efficiency and ability to serve more people. Some of the organizations who are using this technology include:

- Worthington Regional Hospital in Nobles County,
- Sioux Valley Canby Campus Home Care in Yellow Medicine County and
- Tri-County Hospital in Wadena County

Many of these organizations have partnered with medical clinics, county human services and HCBS providers to increase their outreach efforts and to implement these home monitoring programs. A staff person from Sioux Valley Home Care said, "We are able to manage complex clients much more cost-effectively through the monitoring system." After tele-health was implemented in organizations around the state, the University of Minnesota Medical School Duluth completed an evaluation of these projects and provided suggestions to other organizations looking to implement this technology.

How can I learn more?

Join the conversation! Go to the [MN2030: Looking Forward](#) website to find out more about the initiative and how you can get involved. There you will find tools to help you be a part of the conversation to shape our state's future.