



MINNESOTA HEALTH & HOUSING ALLIANCE
Technology Learning Center
Demonstration Descriptions

DMS Imaging

The faster you can deliver the images to the radiologist the sooner the radiologist will receive and interpret them. The sooner the interpretation is done the sooner that information will be made available to the nursing home and the doctor so that treatment can begin and the resident can start the healing process. All in all, resident care will dramatically improve with this technology.

LEARNING OBJECTIVE: Learn how a new technology can send images from your facility immediately to the radiologist for quicker review and interpretation.

GE Security

GE Security will be launching a new GE Home Assurance Program that combines the wireless sensors and monitoring technology of the GE Personal Emergency Response System with the connectivity of new communication technologies and web-based systems to create innovative solutions for Independent Living. With this new system, families and caregivers can help seniors live at home longer by remotely monitoring a variety of functions, daily activities and medication compliance. Home activities are then channeled to a web-based system that provides alerts, alarms and notifications for any activities outside normal parameters. This added level of monitoring and notification provides greater peace of mind for family caregivers who care for seniors from afar.

LEARNING OBJECTIVE: Understand how wireless sensors and monitoring technology can seamlessly integrate into the homes of older adults to provide unobtrusive monitoring of daily activities.

It's Never 2 Late

A Colorado based company that is 100% dedicated to connecting older adults (particularly older adults with physical and cognitive disabilities) to the information, friends and family through computers and the Internet. They have partnered with a variety of hardware and software providers to develop systems that have benefited elders all over the country. Their programs combine traditional activities (e-mail, web browsing, games, etc.) with a variety of next generation tools (flight simulators, virtual reality bikes, driving programs, multimedia videos and music) that make healthy exercise and therapies more engaging. All of this content is delivered on a platform of adaptive technology that allows individuals, regardless of any disabilities, to use today's technology. *It's Never 2 Late* has dozens of programs up and running throughout the country in Colorado, Arizona, Kansas, Idaho, New York, Wisconsin, Illinois, Minnesota, and Iowa and others. They have a particular focus on engagement tools for individuals with dementia.

LEARNING OBJECTIVE: Know how older adults with cognitive and physical disabilities can benefit from the use of computers and technology.

Momentum Health Information Systems

Momentum is focusing their technology efforts to: improve resource utilization, improve quality of care, and maximize revenues. They do this by:

Improve Resource Utilization - The intuitive layout of the technology application allows for simple, fast documentation right at the point of care. Staff will have more time to spend at the bedside by spending less time with the record itself.

Improve Quality of Care (& Reduce Survey Impact and Costs) - Staff document directly against the Care Plan. The application alerts staff to situations that require documentation.

Maximize Revenue - Improved tracking of ADL's and behaviors, as well as all other events that can affect reimbursement are made possible with this tool. Documentation will not be missed because it will populate the MDS automatically and ensure that you are capitalizing appropriately on all reimbursable events.

LEARNING OBJECTIVE: Identify three ways to enhance the care of the people you serve and improve your organization's accuracy, communications and efficiency when you use an electronic health record.

Senior Technologies

The Arial® wireless communication system is more than a nurse call device. It helps caregivers provide a higher caliber of care by reducing risk, increasing safety, optimizing staff time and improving your facility's operating efficiency. The Arial® system's event-tracking software helps maintain information, print reports, and identify problems; making the business of healthcare more manageable. Pull cord wall transmitters, portable pendants, passive infrared monitors, door & window transmitters, smoke detectors, the WanderGuard® system and TABS® fall prevention monitors all integrate with the Arial® system to help prevent people who are confused from leaving the facility unsupervised, reduce the risk of falls, respond to emergencies, and maintain security, all through one centralized system. Portable pagers help caregivers receive these alerts and respond quickly while remaining mobile in the facility. The Arial® system utilizes 900 MHz spread spectrum technology, the most reliable frequency available, and does not require expensive hardwiring.

LEARNING OBJECTIVE: Describe how of wireless technology helps you improve quality, employee effectiveness and efficiency, resulting in greater customer satisfaction.

University of Virginia

The NAPS system, developed by the Medical Automation Research Center (MARC) at the University of Virginia, is a low-cost, low-power, physiological sensor-suite that can passively acquire important physiological and environmental characteristics. The MARC research team has completed preliminary proof-of-concept of the NAPS system, with added value in its ability to be deployed to collect data remotely. The NAPS suite will allow subjects to simply lie on a mattress pad embedded with sensors, to obtain multidimensional data. The data collection sets can be selected to include: body temperature, heart rate, respiration rate, positional mapping and movement; additional development work is being done to monitor airflow. Furthermore, the system can also measure environmental conditions in the immediate surroundings including ambient light level, humidity, and temperature. Once validated, the NAPS system can be used as an effective screening tool for sleep quality assessment, identifying sleep disorders that require a detailed, clinically administered sleep study, as well as an aid to clinicians in the in-home longitudinal assessment of prescribed treatments to relieve sleep problems. Furthermore, the NAPS system's ability to accurately monitor these important physiological characteristics and sleep longitudinally will provide an individual baseline that can be utilized for assessment purposes, such as detection of trends and changes.

LEARNING OBJECTIVE: Learn how to better anticipate what an older person needs to enhance his/her health and well being by using technology that can be installed in chairs or beds. Understand how passive heart rates and breathing sensors can be used to monitor a person's physiology.

Wind Currents Technology

Wind Currents Technology will include an equipment set-up demonstration and discussion of how the Department of Veterans Affairs utilizes Wind Currents Technology (WCT) videophones to achieve nearly 99% patient satisfaction and the savings of millions of dollars. An overview of software applications and advantages will be discussed.

LEARNING OBJECTIVE: Learn how videophone technologies increase client outreach, and reduce risk, liability, and expense, resulting in greater well being of the person being served.

Learn from these fascinating demos, make sure your CEU page is initialed, and earn your technology "Looney."

Minnesota's Critical Need For Technology in Aging Services

- 1 To relieve the pressure on caregivers struggling to do the jobs they love

Healthcare Job Vacancies Rising
 1999-2003 Shows The Beginning of Minnesota's Staffing Crisis And The Need To Do More With Fewer Caregivers

Year - Quarter	RNs	LPNs	CNAs	Home Health
1999-4	~800	~200	~1800	~100
2000-4	~1000	~300	~1900	~150
2001-2	~1200	~400	~2000	~200
2001-4	~1500	~500	~1900	~250
2002-4	~1000	~400	~1800	~200
2003-2	~800	~300	~1700	~150
2003-4	~1000	~400	~1800	~200

Source: Minnesota Department of Employment and Economic Development Job Vacancy Survey

Ratio of All Possible Caregivers to Elderly Dropping
 By 2025 there will be fewer caregivers available to assist a growing population of elderly Minnesotans

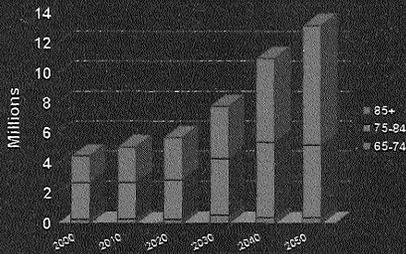
Year	Ratio
2005	13.6
2015	11.5
2025	9.8

Source: Minnesota State Demographer

Minnesota's Critical Need For Technology in Aging Services

- 2 To provide older adults more options for home and community-based services – especially those living with Alzheimer's

Increase in Number of Americans with Alzheimer's Disease



Source: National Institute on Aging

Minnesota's Critical Need For Technology in Aging Services

- 3 To create cost-effective alternatives to institutional care settings

Technology Could Delay NH Placement & Save Money

- Average MA cost for a resident in a nursing facility is \$114.49 per day
- If 1,000 potential MA nursing home residents can be deferred from nursing home placement for a year, the MA program saves \$41.8 million in a year
- State share of the savings is \$20.9 million

Source: Department of Human Services Forecast

Center for Aging Services Technologies (CAST)

- Developed in 2003 by the *American Association of Homes and Services for the Aging (AAHSA)*
- Focuses on issues of applying technology:
 - How will it be used successfully
 - How can we price it effectively
- Chaired by Eric Dishman, Manager *Proactive Health Research, Intel Corporation*

MN-CAST

- Committee developed in 2004 by MHHA to actualize and localize CAST activities in Minnesota
- Includes a coalition of researchers, technology companies and providers
- Purpose is to develop enabling, communication and operational technologies that help people live *where* and *how* they prefer

MN-CAST

- Action Steps Include Establishment of:
 - Consumer-focused protocols
 - Safeguards
 - Effective training and communications
 - Member organizations as beta test sites for technology development
- Public information communicated on benefits of available technologies for older adults and those who care for them

MN-CAST

- Seeking productive working relationships with:
 - Legislators
 - Regulatory agencies
 - Groups that represent consumers
 - Consumers themselves
 - Other stakeholders

Anticipated Needs:

- Incentives encouraging implementation of new technologies (i.e. grants)
- Funding for equipment, training and technical support
- High speed connections in rural communities
- Waivers, agreements and other vehicles that support the use of technologies in older adult services

More Information:

- Minnesota Health & Housing Alliance (MHHA)
www.mhha.com
- American Association of Homes and Services
for the Aging (AAHSA)
www.aahsa.org
- Center for Aging Services Technologies (CAST)
www.agingtech.org



CAST Mission & Vision

The Center for Aging Services Technologies (CAST) is the key catalyst for bringing together companies, universities, aging services providers, organizations, and government to drive awareness, development and application of technologies that will improve services for the aging.

Mission

CAST's mission is to unleash the potential of technology for innovative development across the continuum of health care, housing and services for the aging in order to:

- Help older adults maximize their independence
- Support the needs of professional and family caregivers
- Improve quality of care and quality of life
- Reduce our nation's health care costs
- Increase aging services provider efficiency

Vision

CAST is creating the foundation that will ensure technology solutions attain their fullest potential to meet the needs of our aging society.

Functions

CAST will:

1. Provide opportunities for collaboration to rapidly advance aging services technologies to benefit older adults. Initiatives will include:
 - Bringing together technology companies, researchers, and providers to identify areas where technology can maximize independence and enhance quality of care.
 - Helping technology developers understand the needs of providers so that they can enhance operational systems and human resources management through technology.
 - Encouraging the use of new technologies to foster quality communication among older adults, caregivers, family members and friends that will increase quality of life, new learning, and recreational opportunities.
 - Fostering synergy among companies, providers, and older adults to develop new tele-health applications to better monitor health and medical conditions.
 - Leading the aging services field in developing policy positions and participating in major standards initiatives in electronic medical and wellness records.
 - Educating providers on how to incorporate new technologies into their services.
 - Cultivating global relationships and partnerships to share information and build cross border solutions.
2. Create and maintain an online information clearinghouse to provide the latest information and knowledge on aging services technology developments as well as to provide a forum for providers to engage in discussions with researchers and to share experiences.
3. Engage government representatives to gain support for technology-related policy and facilitate private public sector partnerships to advance technology development and application.
4. Survey and gather the latest intelligence on what is needed by providers, older adults and baby boomers to help ensure that expectations are understood and satisfied.



**American Association
of Homes and Services
for the Aging**



**MINNESOTA
HEALTH & HOUSING
ALLIANCE**

PROMOTING EXCELLENCE AND INNOVATION IN OLDER ADULT SERVICES

**MN-CAST
ESTABLISHING A MINNESOTA AFFILIATE
OF
THE CENTER FOR AGING SERVICES TECHNOLOGY**

November 2004

INTRODUCTION

MHHA members, as providers of older adult services, are in a period of transformation. The aging of Minnesota's population and new expectations older adults have for the services they want and need, and where those services are delivered, are driving change. By 2030, one in four Minnesotans will be over age 65¹, a significant shift from the current proportion of one in ten.

Even at this early stage of Minnesota's population shift, human and financial resources to care for older Minnesotans are strained. Staffing shortages are looming, as the economy improves and as the population shifts. The State of Minnesota is reshaping its reimbursement mechanisms for services and the MN Department of Human Services and the MN Board on Aging have identified policy directions to meet this challenging future.² At this time of change, providers are focused on delivering quality services in a variety of settings and building public trust.

For over 35 years, Minnesota Health & Housing Alliance (MHHA) has represented faith and community based older adult services providers – nursing facilities, assisted living, senior housing and home and community-based services. With a membership of over 650 organizations, MHHA is one of the largest associations of its type in the country and is nationally recognized for its leadership on issues related to long term care and aging. MHHA is the state affiliate of the American Association of Homes and Services for the Aging (AAHSA) and the Assisted Living Federation of America (ALFA)

As a member driven association, MHHA continuously seeks opportunities to help members position their organizations to successfully serve older adults in their communities. The association's efforts in advocacy, education, identifying new models of service, partnerships and other activities are focused on this transformation. This plan describes a technology initiative established by MHHA to coordinate with AAHSA's Center for Aging Services Technology, described below. This initiative, referred to as MN-CAST, will work locally with providers of older adult services and settings identifying how technologies can benefit and provide value to the elders in their communities.

¹ See Appendices

² See Appendices

WHAT IS THE CENTER FOR AGING SERVICES TECHNOLOGY (CAST)?**AAHSA Center for Aging Services Technology (CAST)**

In 2003 MHHA's national affiliate, The American Association of Homes and Services for the Aging launched their **Center for Aging Services Technologies (CAST)**. This major new initiative brought together researchers from universities, technology companies, facility administrators and government representatives to focus on the application of technologies that will help identify potential solutions to the aging services challenges faced by the global community.

Identification of new technologies under development, an understanding of where technology is needed to assist caregivers and new approaches to policy issues that will impact how technology will be used successfully and priced effectively to provide aging services are all part of the CAST agenda.

Eventually, the Center will expand globally in partnership with appropriate international organizations. Sharing knowledge, ideas and technology solutions across global borders will help drive future progress. Furthermore, CAST will drive media visibility for technology solutions. CAST has developed an initial work plan and a series of task groups to help achieve the first stage of success.

Initially issues surrounding technologies being reviewed include:

Enabling Technologies

Exploring ways that the elderly can do more for themselves. These types of technologies help maintain independence and allow the opportunity for elderly to continue living in their own homes or in independent facilities for as long as possible.

Operational Systems Enhancement and Human Resources Management Technologies

Exploring how technology can reduce labor costs while improving productivity and work environment. New systems can enhance ability to foster positive health, security and quality of life for residents.

Communication Technologies

Technology can help the senior or resident stay in contact with family and friends. These connections are important in maintaining relationships, educational opportunities and personal growth.

For more information on CAST, see www.agingtech.org

RELATIONSHIP OF MN-CAST TO MHHA'S STRATEGIC PLAN

Development of MN-CAST is driven by MHHA's strategic plan, which calls the organization to "Advance Change, Develop Leadership and Build Public Trust." Two strategies from the MHHA plan frame the work of MN-CAST.

Service Delivery Transformation: All MHHA members will provide the services their customers and communities want and need.

- Develop a downsized but state-of-the art nursing home sector
- Advocate for appropriate state and federal investment in the overall infrastructure for the growing older population, and
- Seek to identify best practices in new service delivery models -- particularly those that enhance the quality of life of the consumer -- and seek to remove barriers to the creation of these programs.

Quality and Quality Oversight: MHHA members will continuously review and improve their care and service practices as integral to meeting and exceeding community standards of quality

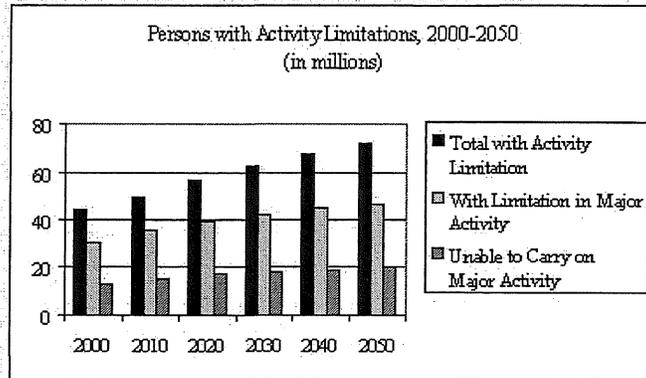
- Promote standards of excellence in care delivery advancing evidence-based best practices...seek opportunities for grant supported initiatives related to quality enhancement in residential long term care settings.
- Coalitions and Grassroots Support: Health and Supportive services to older adults will be recognized and embraced as a public priority.
- Collect, analyze and publish for members and other stakeholder data and information that summarizes key environmental factors and service delivery trends as well as conduct public information activities focused on older adult services and the Association's vision for service delivery transformation.

NEEDS OF OLDER PEOPLE

The unprecedented aging of the state's population referred to in the introduction, further challenges those who will serve them because the nature of their assumptions, needs and demands is changing at the same time. Steve Gillon, author of the 2004 book "Boomer Nation" points out the "Boomers have redefined culture at every phase of their lives. There is nothing to indicate they won't redefine old age. The Minnesota Department of Health and Minnesota Board on Aging's "Project 2030 Report" identifies several trends in Minnesota's aging population. Those key to this initiative are:

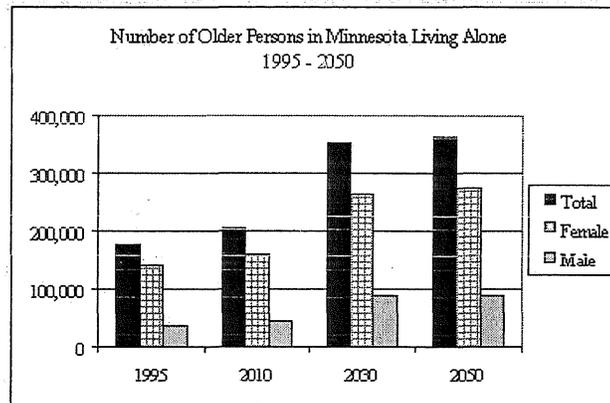
- **More of this larger group will be living longer.**
- **It is already clear they demand more choices and fewer limitations on the services available to them.**

- **The chances of an individual living with at least one chronic condition that impairs their functional ability rises significantly with age.**



Source: Robert Wood Johnson Foundation, 1998 (nationwide data)

- **The tendency to live alone increases with age, especially for women. By 2030, the number of older people living alone will double.**



Source: Minnesota Demographer's Office, 1997

- **Smaller family size and increasing mobility will result in fewer informal resources available to help family members in the future.**
- **Other trends that may also affect delivery of services to older people are:**
 - **The effect increasingly sedentary lifestyles may have on physical condition**
 - **The increasing debt and lack of savings among this aging generation and how that will affect what they have to live on when they are older.**

MN-CAST VISION

MHHA members will have the ability to integrate enabling technologies into their array of services and settings to help them:

- Broaden the continuum of services in new and different ways that support older peoples' self-determination about where and how they want to live;
- Identify and develop new models of services and settings that keep people engaged and productive in their communities.
- Enabling, operational and communications technology will replace routine caregiver tasks, thereby focusing their work on achieving good outcomes through more meaningful, person focused care giving.
- Find efficiencies while preserving care-giving effectiveness to keep services and settings affordable and able to meet the needs of the people who use them.

PROPOSED OPERATIONAL STEPS TO REACH THE VISION

1. Establish an Upper Midwest coalition of researchers, technology companies, consumer products retailers, interested government agencies and other stakeholders, promoting the development of enabling technology that assists older adults to live where and how they wish.
2. Recruit MHHA member organizations to test and help refine developing technology in real life situations.
3. Establish working relationships with stakeholders (legislators, regulators, consumers and their advocates) to create incentives and opportunities for providers of older adult services to beta-test enabling, operations, and communication technology that enhance care delivery and expand their capacity to provide quality services to older people in their communities.
4. Identify supportive funding sources providers can use to equip their services with enabling, operational and communications technology and develop effective training for its use.
5. Produce and distribute public information and education about the development and use of technology in older adult service settings.

In November 2004, the Minnesota Health & Housing Alliance Board of Directors adopted a motion to establish MN-CAST as a standing committee of MHHA and authorize implementation of the proposed MN-CAST work plan to actualize and localize to Minnesota the goals stated by AAHSA'S CAST Commission.

MN-CAST Steering Committee

Wayne Olson, VP of Healthcare &
Housing
Volunteers of America National Services

Richard Edwards, Administrator
Charter House Health Center

John Fossum, CEO/Administrator
Ely-Bloomenson Hospital & Nursing
Home

Robert Hanson, Chief Operating Officer
Augustana Care Corporation

Sharon Klefsaas, VP of Operations
Ebenezer Society

Carol Raw, Director of Finance
St. Francis Health Services of Morris

John Selstad, State Program Admin
Coordinator
MDHS

Barbara Kilbourne, MHHA Staff

MHHA Staff who have assisted the
steering committee:

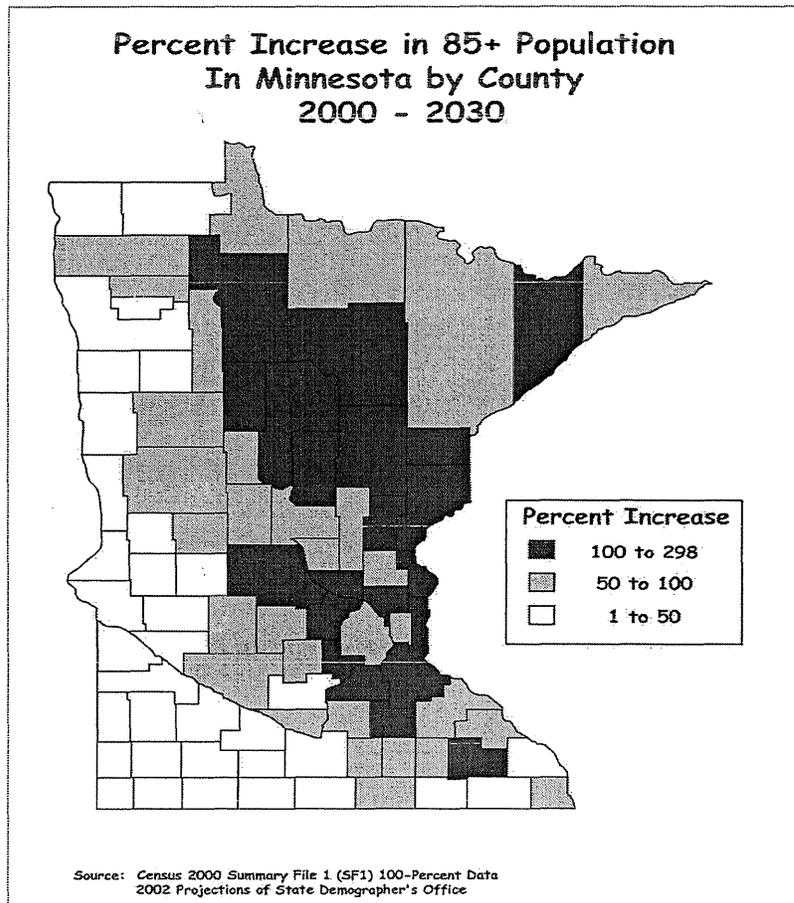
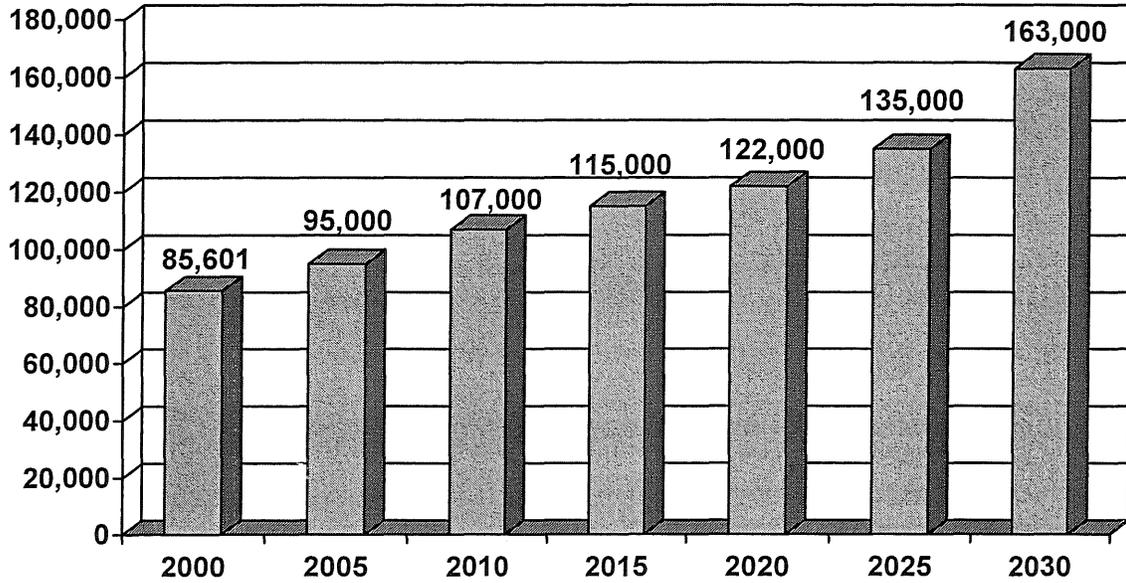
Jeanne Talmadge
John Hustad

MHHA representative on AAHSA's CAST

Kathy Bakkenist, Vice President of Health Care Operations
Ecumen

APPENDIX

Population of Minnesotans 85+ Projected to Increase 90% over 30 Years



EXCERPT FROM**Department of Human Services
Long-Term Care Task Force Final Report
Reshaping Long-Term Care in Minnesota*****State Initiatives:***

The State of Minnesota is reshaping its payment mechanisms for services and predictions are that criteria qualifying individuals for assistance through the Medicaid program will be severely narrowed.

The Minnesota Department of Human Services and the Minnesota Board on Aging in their "Project 2030 Report" have identified the following nine policy directions to for the state to address the implications of this phenomenon:

Policy Direction #1

Maximize peoples' ability to meet their own long-term care needs.

Any redesign of long-term care needs to put primary emphasis on empowering individuals to meet their own long-term care needs to the extent possible. Consumer control over decision-making must be a key feature of new long-term care approaches.

Policy Direction #2

Expand capacity of community long-term care system.

In order to expand the home and community-based options that consumers prefer, much work is needed to develop these services and housing options in all parts of the state so they are truly available to all elderly, including elders in ethnic, immigrant and tribal communities. In addition, communities need assistance to further develop their capacity to support older residents.

Policy Direction #3

Reduce Minnesota's reliance on the institutional model of long-term care.

In order to provide services that are more responsive to consumer needs, we must reduce our reliance on nursing homes, and transform and strengthen the remaining nursing homes to serve those consumers who will need the services best provided in the type of protected setting that nursing homes offer.

Policy Direction #4

Align systems to support high quality and good outcomes.

The current emphasis on paperwork and documentation must be refocused to

ensure achievement of good outcomes for the consumer. More quality data needs to be collected and made accessible to consumers and providers.

Policy Direction #5

Support the informal network of families, friends and neighbors.

Because of smaller families and increasing labor force participation rates among women, family caregivers need more support than they have received in the past to manage continued provision of large amounts of assistance to older, frail relatives.

Policy Direction #6

Recruit and retain a stable long-term care work force.

Because future increases in the numbers of elderly needing long-term care will occur at the same time that the pool of entry level workers is shrinking, it is essential that steps are taken to support a motivated and stable work force in long-term care. While there is no one, single strategy that achieves a solution, a number of actions can be taken to more adequately compensate workers and improve recruitment, retention and training of workers.



Progress and Possibilities

State of Technology and Aging Services
2003

Center for
Aging Services
Technologies



**Progress and Possibilities
State of Technology and Aging Services
2003**



A program of the
American Association of Homes
and Services for the Aging (AAHSA)

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INTRODUCTION: IMAGINING A NEW FIELD FOR A NEW ERA

"Developing technologies for the future of aging services is as much an imagination problem as a technology problem," says Eric Dishman, director of Proactive Health Research for Intel and chair of the Center for Aging Services Technologies.

Imagine a country in which eldercare needs surpass childcare in level of importance to families. Imagine a society in which one out of three households deals with a member suffering from cognitive decline.¹ Imagine a workforce with 400,000 fewer nurses to provide care.² Imagine a social and healthcare system that is on the verge of collapsing under the weight of its most needy beneficiaries. Imagine a workplace where employees are continually missing work to deal with eldercare emergencies.

These scenarios take little imagination for professionals in the aging services field because they are becoming the reality of tomorrow. These scenarios are part of common dialogue taking place among aging service providers and government policy makers today. But while these professionals have had enough foresight to acknowledge that the current system cannot provide for the needs of the graying baby boomers — let alone elderly people today — they have yet to put forth innovative solutions to address these alarming problems.

Imagine a pair of socks that can detect swelling in an older person's feet and relay the change to a caregiver. Picture a "smart" cat that can calm an agitated Alzheimer's patient by purring at their bedside. Envision tracking devices for the soles of shoes that can monitor an older person's gait for irregularities, and ultimately prevent a crippling fall. These are just a few of the innovations that promise to transform the aging services field — from an overburdened safety net to a highly efficient preventative system.

Leaders of the Center for Aging Services Technologies (CAST) came together initially with a vision that a collaboration of technology companies, aging service providers, university researchers, government representatives, and business interests has the potential to revolutionize the way we care for our aging population. CAST envisions technology solutions that will make aging services more efficient, effective, wellness-oriented, and consumer-friendly.

We must take our imagination a step farther, past the looming demographic crisis, towards creative answers that will prepare society to deal with a large portion of its population. Aging services technologies offer the opportunity to bridge tomorrow's aging boom with the innovations that can provide imaginative and feasible solutions. Only by harnessing creative brainpower can we move ahead to meet the challenges that confront us today, and that will only grow larger in the future.

CAST is working to bring the right minds to the table. These partners, who represent diverse interest groups, must confront the realities of today and the future and drive forward technological progress to meet the needs of the largest population of older adults in human history.

Scenario Planning Study Shows that Technology is the "Linchpin"

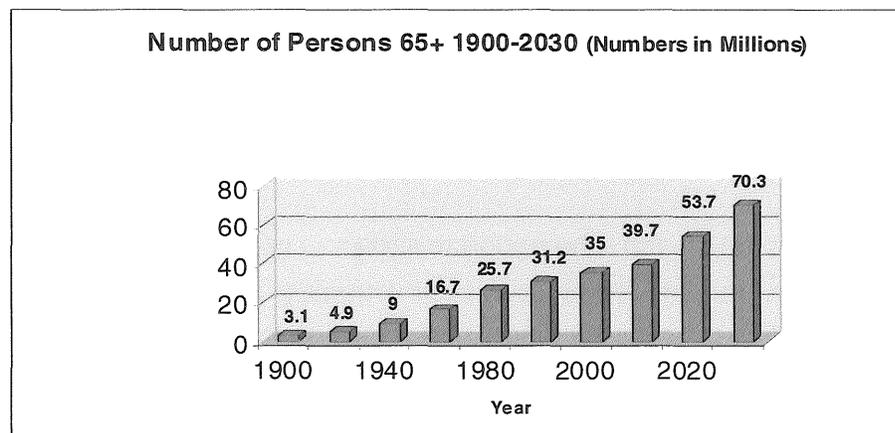
The American Association of Homes and Services for the Aging (AAHSA), working with professors from the Wharton School of Business, conducted a major "scenario planning" study to look at trends and changes in aging services from 2002 to 2012. One of the two major uncertainties that the study revealed is "Will there be major advances in medical and/or information technologies to assist in care for the elderly?" (The other major uncertainty is "How well funded will services for the aging be and through what mechanisms?")

The most pessimistic scenario was called "Living Desert", in which there is a severe lack of resources to care for the elderly, there are no significant technical or medical breakthroughs, and technical resources are diverted to other areas such as homeland security.

The most optimistic scenario was called "New World", in which a prosperous U.S. economy brings private and public money to services for the aging. Technological innovation will lead to improved quality of life, including major advancements in particular diseases, such as a delay in the onset of Alzheimer's, and cures for Parkinson's and osteoporosis. The "New World" scenario would also include smart-houses, effective robotics, and other innovations that will make it easier for older adults to live at home or in a facility and receive the appropriate level of care.

CONFRONTING TODAY'S OBSTACLES AND TOMORROW'S CRISIS

When American colleges admitted the first Baby Boomers in 1964, they had no idea how this enormous group would strain, challenge, and ultimately transform the collegiate infrastructure that had accommodated the previous generation.³ Young boomers not only demanded a freer educational system and better student-to-professor ratios, but they became a voice for radical change in national politics that demanded the country's attention.



(Note: Increments in years are uneven. Based on data from the U.S. Bureau of the Census)

As this demographic bulge known as the Baby Boomers rode through the decades, they overhauled and reshaped American culture, politics, and markets. The diaper shortage in 1946 was just a preview of the changes that were to come with their arrival.⁴ Their stages of life have shaped our nation's recent history, beginning in the 1940s and 1950s when Dr. Spock's parenting advice was in high demand, peaking in the charged 1960s,⁵ when Woodstock attracted an unexpected 500,000, and continuing into the 1980s and 1990s when double income households transformed the U.S. economic structure.

Just as they revolutionized youth, 76 million Baby Boomers are poised to challenge the very concept of growing old. Every seven seconds, another baby boomer turns 50.⁶ While the percentage of the population 65 and older has tripled from less than 5 percent in 1900 to 12.4 percent in 2000,⁷ growth will explode as the number of people over the age of 65 will increase by 76 percent in the years 2010 to 2030.⁸

In the face of such staggering projections and the historical precedents of this generation's tremendous impact, the status quo is not acceptable. Government policy makers must support

new approaches to aging services, companies need to invest in and help drive new solutions, and aging services providers must be open to adjusting their current business models.

The disproportionate growth of the elderly population "will throw into question the sustainability of today's retirement systems — and indeed, society's very ability to provide a decent standard of living without overburdening the young."

*Center for Strategic and International Studies*⁹

Could it be that society lacks foresight, and perhaps is less interested in devoting attention to an age bracket that has traditionally been stigmatized, or is it no more than lack of awareness of the challenges that we face. Just as 76 percent of Americans believe that they will never need long-term care,¹⁰ our society may be less inclined to confront the graying of its largest population group.

These two failures — society's lack of foresight and subscription to ageism — go hand in hand, for, as the historical examples portend, the future will revolutionize our concept of aging. We need to change the image of aging where an older person is no longer stereotyped on television, movies and in books as a docile, penny-pinching BINGO-player from the depression era, but an active, respected, and mature adult.

Baby Boomers will place similar demands on the aging services system as they did on the collegiate system in the 1960s — demanding care the way that they want it in the place where they want it. We are seeing the impact today. Aging services facilities have better staff-to-resident ratios, more freedom to move around the facility and to have a say in their care, a more personal atmosphere, and more connection with the outside community. Seventy-six million voices are likely to be heard, particularly when they carry the purchasing power and political clout that Baby Boomers do.

The New Older Consumer

"Today's first wave of Baby Boomer's heralds the coming ranks of the new consumer. Making up almost half of the U.S. population, graying consumers have the college education, the cash, the computer experience, and the heightened expectations to make significant demands upon the health care system of the 21st century."

*Kemper & Mettler, Managed Care Quarterly*¹¹

But a revolution in aging services cannot happen overnight, which makes our call to action even more urgent.

Those who think that we can put off dealing with the demographic dilemma until it is upon us are deeply mistaken. Aging services is already struggling to meet the needs of today's elders, and the situation grows more critical every day. Though we have had more than a half a century to prepare for the day that the historic boom of babies reached a ripe old age, we have not laid groundwork in aging services nearly adequate enough to provide for this population.

Severe staffing shortages currently exist in many long-term care facilities nationwide, as large numbers of nurses near retirement and as low wages and demanding work make nursing assistant positions unattractive.¹² Many long-term care facilities are finding that Medicare and Medicaid reimbursements fall short of covering their costs of care. Affordable senior housing is dwindling dramatically.¹³ For every subsidized housing unit that became available in the year 1999, nine applicants were on the waiting list for an open unit.¹⁴

The sheer number of Americans approaching old age is astounding. But the fact that this new cohort of millions expects the ailing current system to provide for their needs is simply frightening. Already, the United States does not have adequate housing, health care facilities, financial resources, or caregivers to address the needs of its senior population today. The situation only worsens with each passing day.

Furthermore, Baby Boomers will have to share scarce aging services resources with an even older group that is already draining them: the "oldest old". In 1900, there were 122,000 Americans age 85 and over. For 2002, that number was projected at more than 4.5 million. By 2020, it is estimated there will be over 6.5 million Americans at least age 85.¹⁵

Medical science and technology in many ways has exasperated the aging challenge by enabling people to live much longer. We need to help make these added years meaningful and fruitful. The threat of the approaching demographic wave is made more dire by the fact that the aging pool is not naturally draining, but sustaining itself longer and longer through better medicine and technology. It doesn't require much of a leap of imagination to carry the metaphor and envision the result of a large wave hitting a pool that is already filled to capacity: chaotic spillover.

The approaching age wave will affect every aspect of American life. The family unit for example, will no longer be focused mainly on child rearing. Eldercare needs are growing so rapidly that by 2005 eldercare will surpass childcare in level of importance to American families. Nearly 60 percent of the adult population is or expects to be a family caregiver.¹⁶ This care-giving burden will fall on women disproportionately, as 77 percent of those providing care to older family members and friends are female.¹⁷

The economy will undoubtedly suffer as a result of the caregiving strains placed on the U.S. workforce. In 1997, people leaving work to care for their elderly relatives cost American business up to \$29 billion in

Number of U.S. workers per Social Security beneficiary¹⁸

1950:	16
1996:	3.3
2030:	2

Number of adult caregivers for each disabled elder¹⁹

1990:	11
2050:	1

lost employee wages.²⁰ As more and more people miss or leave work to care for elderly family members, our workforce will already be suffering from a general decline in the ratio of workers to retirees.

The U.S. is not the only country that will face a demographic crisis in its near future. The age wave is a problem in developed countries all over the world. In Italy, Japan, and Spain, the fastest-aging countries, there will be as many retirees as workers by 2040.²¹ Japan's aging population is growing twice as fast as in any other developed nation and their businesses are already suffering from labor shortages.²²

This alarming demographic trend is a problem of global proportions. However, if confronted in an effective way, the solutions to the aging dilemma will be within our reach. If history offers us a wealth of examples of how changing demographics placed strains on the American system, it offers even more cases in which American business, government, and other interest groups rose to the challenge of meeting the needs of the American people.

Why should we shirk from the opportunity to overcome our largest societal challenge today, especially when the consequences of inaction are so severe? Rather than deny the alarming realities of tomorrow and delay our action, we must harness American ingenuity to develop creative solutions to the looming aging services problems.

UNLEASHING POTENTIAL: THE MARRIAGE OF TECHNOLOGY AND AGING SERVICES

a. Introduction

When Eric Dishman began Intel's Proactive Health Research Project by touring the home of an Alzheimer's sufferer named Carl, his imagination ran wild with technological possibilities. Dishman saw Carl struggle to keep his multiple medications straight and imagined a smart pillbox that could track usage and aid a forgetful user. Dishman noted Carl's care and supervising needs and imagined smart furniture that could record human activity and relay vital information to caregivers.

Dishman witnessed Carl's worsening memory and imagined smart appliances that could utilize common devices like televisions to send reminders about daily living activities, like simple food preparation. Applying his technological knowledge to eldercare needs, Dishman developed a vision. He saw how a "smart home" could aid someone with a deteriorating mind to live safely in their familiar home environment for as long as possible.

Dishman's three-year research project uncovered great potential for technology in aging services. His findings bode well for technological advancements in both the home environment and the full range of aging services settings, from senior housing to skilled nursing facilities. Perhaps the most promising part of Dishman's findings is that the needed technologies will not necessarily require major technological breakthroughs. Much of the technology needed to care for elderly individuals in their homes or in facilities is already in existence today. Technology companies and business leaders need to study how existing technologies and research can be applied to fill this need.

b. CAST Serves as Catalyst

The American Association of Homes and Services for the Aging (AAHSA) recognized that no single organization was meeting the challenge that the approaching age wave poses. There was no cohesive force bringing together all of the interested parties that could help develop and benefit from the needed solutions. AAHSA President and CEO William L. (Larry) Minnix, Jr., D.Min., authorized a major new initiative, the Center for Aging Services Technologies (CAST), to bring together key interests groups to drive an aging services technologies agenda.

CAST Survey of AAHSA Members	
What Types of Enabling Technologies Would Benefit Aging Services?	
Monitoring and Sensor Devices	45.8%
Resident Communications with Caregivers and Family	30.5%
Medication Dispensing	22.0%
Security/Safety Systems	19.5%
Work Force Needs	6.8%
Mobility Needs	4.2%
What Types of Automation Technologies Would Benefit Aging Services?	
Workforce needs Automation	81.0%
Office Systems Automation	37.2%
Medication & Treatment Plan Automation	23.1%
Communication	10.7%
Back Office Automation	8.3%
Automated Security & Safety Systems	3.3%
How Would Tele-Health Technologies Benefit Aging Services?	
Increase Efficiency of Level of Care	58.4%
Independence	13.3%
Decrease Cost /Time	9.7%
Other	3.5%
<i>Based on data from the CAST Technology Survey 5/12/03</i>	

In November 2002, Russ Bodoff at AAHSA and Eric Dishman at Intel worked together to launch CAST — for the first time bringing together university researchers, major business and technology companies, aging services providers, and government representatives. CAST's aim is to harness the potential of aging services technology to meet the needs of today's and tomorrow's elders.

The eclectic partnership is what makes CAST such a promising force in the field of aging services technology. It assures that all interest groups will understand one another's needs and priorities. For example, a technology company should not forge ahead in creating new products for frail elderly without consulting aging services providers to find out what types of devices are suited for aging services settings and what products they are interested in purchasing.

AAHSA's leadership of CAST has already aided the field by gathering valuable data from providers concerning their use of technology. CAST recently surveyed 131 AAHSA members to discover where future investments should be directed. Nearly half (45.8 percent) of those who responded said that enabling technologies like monitoring and sensor devices would help their organization better accomplish its mission; 81 percent said that automating paperwork that consumes valuable health care staff time would be beneficial; and more than half (58.4 percent) said that implementing tele-health would increase the efficiency of care in their organization.

Conference Shapes the Future of Aging Services

With the largest turnout ever for a conference on aging services technologies, leaders in the aging services field took the initiative at a major conference to shape their future by addressing technology needs and potential in aging services. The "Future of Aging Services Conference," sponsored by the American Association of Homes and Services for the Aging (AAHSA), was held April 7-9, 2003 in Washington, D.C. Conference attendees learned:

- + How and why aging services technologies require a bold paradigm shift.
- + How university research laboratories, consumer product manufacturers, technology companies, and aging services providers are working together to improve care for older adults.
- + How global positioning systems, wireless phones, robot-assisted therapy, and interactive television will increase quality of care, reduce costs, and enhance independence for older adults.

"Global aging is both a blessing and a looming catastrophe," AAHSA President and CEO William L. (Larry) Minnix, Jr., D.Min. told the more than 900 administrators of aging services facilities, researchers from university labs, executives from technology and consumer product companies, and government agency officials who attended the conference. "Aging services technologies will offer solutions."

Proactive Computing and its Impact on Aging Services David Tennenhouse, Intel Vice President & Director of Research

Proactive computing will become a disruptive technology that may impact the aging services field. Here's the vision for the future:

It's 6:00 am June 12, 2012. Your alarm goes off, sending a signal to turn on both your shower and the coffee machine in the kitchen. The current weather and stock updates are displayed on your mirror while you prepare to step into the shower. You wonder aloud about the traffic and news on a client company you are meeting with that morning. The latest information is delivered instantly over your home sound system.

The bathroom scale says you are up three pounds from last week. The information is sent from the scale to your treadmill, which customizes your weekly workout program and increases the number of calories you'll need to burn. A menu-planning program simultaneously decreases the daily calories and fat in your customized daily menu plan.

A sensor in your toothbrush analyzes your saliva and identifies any vitamin, mineral and enzyme deficiencies, along with your current blood sugar levels. Recommended dosages of vitamins and prescription drugs are displayed on the bathroom mirror. You dress and head to the kitchen for your coffee. On the counter is a printed copy of your customized menu, which if followed, should help get rid of those three extra pounds.

As you leave for work, coffee in hand, the house thermostat adjusts automatically to save energy. The security system is activated as you pass through the door. Once in your car, you review all e-mails and voice messages sent after midnight and respond verbally on your voice-activated cellular phone or radio. Traffic is slower than normal. Your car computer notes an accident up ahead and takes you on an alternate route. You arrive at your office with time to spare.

In the connected world of the future, we will be surrounded by networked computers able to sense and anticipate our daily needs and preferences.

Since the November 2002 launch, CAST has discovered what Dishman excitedly calls "a goldmine of interest" among leaders in the partnering fields. Many aging services providers have shown tremendous support for CAST, and some have shared with CAST how aging services technologies are at work in their facilities. Their case examples help create a clearer picture of how technology can function to offer quality care to seniors and illustrate how technology and aging services are beginning to come together.

"Smart Home" Increases Independence

An example of an enabling technology is the Smart In-Home Monitoring System, which is being developed and tested at the University of Virginia's Medical Automation Research Center. This system monitors older people's activities using low-cost, non-invasive sensors. The system can identify changes in a person's eating or sleeping patterns and report them to a caregiver via the Internet. Technology of this type has the potential to make care of the elderly more preventive by detecting disease early on.

c. A Closer Look at Aging Services Technologies

"Aging services" is a broad term, encompassing nursing homes, continuing care retirement communities, assisted living and senior housing facilities, community service organizations and a variety of home-based care services and consumer products. "Technologies" is an even broader term, referring to the wide array of advancements that have brought us all of our modern conveniences. For initial discussions CAST has divided technologies into four categories:

i. **Enabling Technologies** allow the elderly to do more for themselves and to stay in their own homes or independent settings for as long as possible. Such technologies respond to the older consumer's desire to "age in place" rather than enter a facility prematurely. In addition to responding to this consumer demand, enabling technologies alleviate the burden that the age wave places on providers and the government programs that finance long-term care. The longer older adults can remain independent and healthy, the less need there will be for institutionalization, costly care, and constant supervision.

Operational Technologies at Work

Take a look at the technologies that some aging services providers are using in their own living laboratories, in pursuit of better, more efficient models of care:

- + A "nursebot" named Pearl was developed by the University of Pittsburgh, Carnegie Mellon and the University of Michigan. Pearl will aid elderly people with chronic conditions in a variety of ways, such as by reminding them about activities of daily living, taking vital signs, and fetching items. Pearl was tested and well-received by the residents of Longwood Retirement Homes at Oakmont in Verona, Pennsylvania.
- + In Osaka, Japan, Matsushita Electric built a technology-driven community called Sincere Korien. Here, robot teddy bears assist caregivers. Equipped with sensors, the bear-bots help the staff monitor the medical condition of the residents. The bear called Tama has a built-in sensor that is linked to a large screen in the nurse station to help nurses monitor residents from afar.
- + AIBO, a robotic dog was developed by Sony Corporation for consumer use and is now being field-tested with older people in various living environments. AIBO aids older people as living pets have for years: by decreasing feelings of isolation or depression and increasing morale and socialization.
- + Ohio Presbyterian Retirement Services uses automated medical dispensers to improve safety and reduce errors. These dispensers are equipped with audio and visual reminders and personal emergency response systems. By increasing nurse productivity and enabling staff to manage more patients at one time, such technology helps with staffing issues.
- + Oatfield Estates, an assisted living facility in Milwaukie, Oregon, has designed a software program called Automated Care System (ACS). This program will help the facility prolong independence, improve quality control, develop an early warning system, provide biofeedback and bring about greater efficiencies in staff and utility costs.

One way in which enabling technologies could help make this shift from curative to preventative healthcare is through the early detection of Parkinson's disease. Studies show that about two or three years before a person experiences the first tremor of Parkinson's disease, he or she will develop a slight change in gait. The technology needed to monitor such shifts exists, but simply hasn't been adapted for these medical purposes.

ii. Operational Technologies help aging services providers manage their human resources and internal needs more effectively. These technologies respond to the financial and operational difficulties that aging services providers face and try to develop more viable models of care.

Technology offers new ways to reduce labor costs, prevent medical errors, and increase productivity. Operational technologies also promise to create better work environments, which in turn, aids workforce recruitment and retention. In addition, operational technologies can improve quality of care and help facilities operate more efficiently.

Robotics are being utilized to accomplish some of these improvements. Some robotic technologies have been incorporated into hardware that older people are already familiar with, like walkers. Robotic assistants, which are intended to supplement human care, not replace it, may help older people with eating and drinking, taking medications, or calling for emergency help.

Technology can also help facilities monitor levels of care as well as staff performance and response.

iii. Connective Technologies keep elderly individuals in touch with their caregivers, families, and medical resources. This type of technology responds to feelings of isolation, boredom, and even depression that can result from institutionalization or living alone.

Connective technologies promise to improve quality of life by bringing people together and helping an isolated or homebound elderly person access something that they can't physically be present for, like a sporting event covered by Internet radio or a conversation with a relative overseas.

Connective technologies can also offer recreational and educational opportunities for older people that increase quality of life and foster community among individual elderly people that might not otherwise be able to interact. In addition to improving quality of life, connective technologies may

curb the isolation that often allows mental and health deterioration to go unnoticed by loved ones and outsiders.

One example of connective technology successfully at work is a group of older adults called the Silver Stringers, who use publishing software to write their life stories and to publish them on the Internet. There are a few aging services facilities testing communications systems that allow family members access to data reflecting the daily routine of their family members. This process allows the family member greater input and involvement in their relative's care.

iv. Telemedicine allows a medical source to monitor patients from afar. Telemedicine provides a way to extend medical attention and wellness care to older adults to help them continue to live independently.

Telemedicine offers opportunities to serve both an urban and rural client base by decreasing the need for emergency room care or extended hospital stays, which are both extremely costly. With telemedicine available, fewer older people will have to give up their homes to get the kind of medical attention that was once only available in institutional settings. Telemedicine is not a potential replacement for direct "bedside" care; however, it serves as a useful tool for doctors to reach out to those who want to stay independent and healthy for as long as possible.

The Texas Tech University Health Science Center has been a pioneer in the development of telemedicine, bringing comprehensive healthcare to isolated rural regions of Texas. Because they see great potential in the aging services market, the Texas Tech Center is creating a training program for geriatric telemedicine.

Studies done by universities such as SUNY at Stonybrook have demonstrated that tele-health equipment can significantly cut emergency room visits and improve quality of care. Medical conditions such as diabetes and congestive heart failure are examples of conditions that often deteriorate when appropriate care and monitoring do not take place. Since older adults often develop these impairments, the potential health benefits and costs savings offered by tele-health equipment can have a dramatic impact on health care costs.

THE IMPACT: STRIVING FOR PREVENTION AND WELLNESS

Keeping our elderly independent won't just benefit the individuals who go on living in comfortable, familiar environments. Facilitating home living alleviates the pressure that today's older adults and tomorrow's Baby Boomers place on our aging services system, our economy, and our younger generations. For every older person that remains healthy and independent — through technologies such as preventative weight and gait monitoring, pill dispensation devices, emergency alert systems, or telemedicine — one less person will have to rely on a nurse's aide to bathe them, an emergency room visit to detect a simple urinary tract infection, or institutionalization to provide physical therapy for a broken hip after a fall.

Russ Bodoff of AAHSA and CAST identifies great potential in making our costly aging services system more preventative. "The curative approach in aging services, and health care in general, is tremendously costly. The key to limiting these costs is prevention and proactive approaches. Hundreds of billions of dollars can be cut from our nation's health care bill if we apply technologies proactively," says Bodoff.

Intel's Dishman adds, "We also want technology to be more proactive, to anticipate people's health-related needs and take whatever action is appropriate on their behalf." Our current system is designed for treatment rather than prevention.

Hip fracture scenarios make this metaphor quite literal. More than 340,000 times a year, an older person breaks a hip. This type of fracture usually demands a major shift in care; about half of those that make it into rehabilitation never walk again. About 40 percent need to move into a long-term care facility.²³ A simple slip and fall comes with a huge price tag and a drastic change in lifestyle.

"The key to limiting these costs is prevention and proactive approaches. Hundreds of billions of dollars can be cut from our nation's health care bill if we apply technologies proactively," says Bodoff.

By focusing on wellness, aging services technologies could prevent such traumatic errors. The occurrence of tragic hip fractures could be drastically decreased through simple technological products. Tracking devices in shoes can be used to monitor an older person's gait to assess their fall

risk. Medication reminders can help an older person fight the risk of osteoporosis, by keeping their calcium intake steady for years. Safe, low impact exercise machinery could also function to strengthen the bones of an elderly person. Lastly, simple devices such as smart walkers or hallway rails could aid a frail elderly person in safely maneuvering around their home or an aging services facility. If we can give the elderly the appropriate tools to be their own caregivers, we have made huge strides towards successfully managing limited aging services resources.

Aging services technologies can also reduce the burden placed on caregivers. "Caregiver burnout is a huge problem we're trying to address through technology," explains Dishman. "One avenue we're exploring is how sensor networks could provide a level of monitoring such that the at-home caregiver would know it's safe to take a nap for an hour or so or pursue some other activity." Connective technologies offer to ease the emotional burden of relatives of elderly people, who may be attempting to monitor their loved one's health from afar. Also, because caregivers are oftentimes not free to leave the house, connective technologies such as online support groups, may address the issue of caregiver isolation and function to alleviate stress and guilt.

Intel's Dishman adds, "We also want technology to be more proactive, to anticipate people's health-related needs and take whatever action is appropriate on their behalf. Our current system is designed for treatment rather than prevention."

In addition to promoting wellness among those elderly who live independently and their caregivers, aging services technologies can make equivalent strides within institutional settings, where aging services providers and professional caregivers struggle with the same challenges of providing quality care in the least restrictive environment.

There are countless examples of ways in which aging services technologies can benefit older Americans, their loved ones, aging services providers, and their employees. The cost prevention and efficiency that can be achieved through wellness-oriented aging services technologies will bring financial relief to all of these groups, as well as to the federal, state, and local governments. All stand to gain from the progress of aging services technologies.

But innovative developments in aging services won't naturally evolve or magically turn out of a technology company's assembly line on their own volition. The progress of aging services

technologies hinges on the collaborative effort of all interested parties, from overburdened providers to opportunistic companies. Only with contributions from all players can the right ideas and perspectives emerge and spark the collective imagination needed to overcome the dilemma we face today and in the decades ahead.

MEETING OF THE MINDS: PARTNERS IN AGING SERVICES TECHNOLOGIES

a. Introduction

Three years after he first walked through the house of a struggling Alzheimer's sufferer and imagined technology that could wire caregiving devices right into its walls and furniture, Eric Dishman has not lost an ounce of enthusiasm for aging services technologies. He speaks of its potential with the zeal of someone who holds a promising secret, and is aching to share it with world. But Dishman knows that he alone cannot unleash the power of aging services technology. He insists that the future of the field will rely on the collective contributions of many different partners.

"Transforming the home into a useful locus of health care is an ambitious systems integration effort that will require broad participation from numerous industries," Dishman declares. "No one organization is capable of tackling all of the complex challenges involved."

Who must contribute to the aging services field, and who stands to gain from the field's advancement? The final portion of this paper aims to answer these crucial questions and in doing so, to summon the individual interest groups to action.

b. Defining Roles

i. Aging Services Providers

Having provided for the needs of our nation's elders for years, aging services providers have their fingers on the pulse of consumer needs. Providers are attuned to older peoples' preferences and have begun to get a feel for how Baby Boomers' desires differ. They can predict better than anyone else, what types of products and services will be in high demand. As experts in the aging field, providers must make their knowledge available to companies that are trying to tap into the new market.

Providers must serve as an intermediary between suppliers (technology companies, consumer product companies, etc.) and consumers. By representing the needs of the population they serve, providers will help gear technological development in the right direction today so that it will meet consumer need at critical points in the future.

Providers can also serve as "living laboratories" by opening up their organizations to new technological offerings and relaying feedback to companies about how they functioned in the provider facility. It is no secret that the current model of care for the aging is not meeting the needs of our current elders, and it certainly will not withstand the demographic pressure ahead. Knowing this, providers must be open to alternative models and innovations. Progress can be surprising and even unsettling, but the only way to move forward is to give all options fair consideration.

Providers have a tremendous amount to gain from aging services technologies. They will benefit both from healthier older people and better, more efficient ways of providing care. If technology can make services and long-term care more efficient for providers, then they may have more money to invest in things such as worker recruitment and retention, resident care, and facility development.

Improving quality of life and expanding offerings serves to improve public perception of long-term care and bolsters consumer confidence. Providers will benefit tremendously from the aging services revolution that technology can bring. The largest beneficiaries will be those that join in the development of aging services technologies today and guide its course to meet their needs.

ii. Technology Companies

Technology companies have a crucial role to play in the advancement of aging services technologies. Companies need to recognize the enormous market for aging services related products and hopefully respond to the marketplace needs. Drawing on the help of aging experts, technology companies need to unleash their research capabilities to develop innovations that allow elderly people to remain independent and healthy for as long as possible.

While cutting edge innovations are key to advancing aging services technologies, adapting technologies that already exist for aging applications are equally as important.

Technology companies that take the lead in anticipating future demand will have an advantageous foothold in the vast aging services market. Those technology leaders that work quickly to develop solutions will be in the prime position to both profit and make a valuable contribution to head off a societal crisis that will impact their employees and their customers.

iii. University Researchers

Aging services technology cannot make progress without the help of university researchers. Universities will need to unleash the creative thought processes that exist on their campuses and be engaged in helping respond to this challenge. They must rise to the challenge in league with providers and technology companies to develop innovative solutions that will help our country avert a major demographic crisis.

A shift in research funding priorities is imperative. More funding must be directed towards aging services research so that experts can accurately gauge how technology can improve the aging services system. New partnerships must be forged with consumer product and technology companies, government agencies, and aging services providers.

Those universities that lead the way in researching aging services technology will be poised to meet a major societal challenge and aid the country in overcoming it. Furthermore, because aging services will grow tremendously during the next few decades and open various career opportunities, universities will do their students a great service by exposing them to aging services and engaging them with the opportunities that the future will bring.

iv. Consumer Product Companies

Although the mental picture of 76 million gray heads may be enough to get most consumer product companies rethinking their target markets, U.S. companies need to paint a more detailed picture of elderly consumers in order to plan for their demands. Members of the Baby Boom generation promise to be very different types of consumers than those of their parents' generation. They are informed, demanding, and accustomed to being part of a majority that is catered to.

Furthermore, as many Baby Boomers are aiding their parents in choosing aging services today, they have grown familiar with the field and expect improvements. Due to the unprecedented political muscle that this generation has wielded, Baby Boomers also demand more options. Lastly, technology has a much stronger foothold among Baby Boomer consumers, who have been accustomed to the fast-paced innovation of the Internet Age and expect technological developments to enhance their consumer options.

Having recognized the vast and largely untapped aging services market and evaluated the nature of today's and tomorrow's consumer demands, consumer product companies must embark on an

effort to develop products that can meet the needs of aging individuals and aging services providers. These products must aim to promote wellness and independence, and also provide adequate selection for older consumers.

Consumer product companies that adapt their production to offer attractive products to older consumers will help make old age a less stigmatized stage of life. For example, a walker wouldn't be something people dread purchasing if a wide array of designs, gadgets, colors, and added amenities made the walker appealing to older consumers. Consumer product companies must reach out to gain an in-depth understanding of older peoples' preferences, and plan their production accordingly.

Lastly, it is imperative that consumer product companies collaborate with technology companies. Cross-industry partnerships must be made in order to produce the kind of large-scale out-put necessary to meet current and future consumer need. Those companies that join in the collaborative effort now will be in a position to gain the most in the future. Diaper companies came up short in providing for the boom of babies in the 1940's. We've had a half a century to anticipate another boom on the opposite end of the life spectrum. Opportunism can't wait another day.

v. U.S. Government

The U.S. government needs to take action to confront the aging demographic dilemma. Legislators, executive officials, government agencies, researchers, and research funders must all acknowledge and call attention to the problem in their respective arenas. Legislators and government officials today can push the age wave into the federal spotlight and illuminate how aging services technologies can help the nation provide for its graying population.

Promoting the development and application of aging services technologies and enlisting their support and resources behind CAST and other current efforts is another important step. The appropriate government representatives should take measures to help educate and draw key industry leaders into the collaborative effort driving aging services technology forward. Funding must be appropriated for research in aging services technologies so that the necessary advancement can take place in time to meet future need. Policy makers should help evaluate current policies or regulations that may slow down the innovation and rapidly commercialize

technology-based products and services that help older people live independent, fulfilling lives while supporting the needs of aging care facilities.

Government representatives should become more involved in CAST and help in discussions dealing with issues of privacy, ethics, cost, liability, and reimbursement.

The U.S. government will also benefit by a high deployment of aging services technologies. At a time when Medicaid, Medicare, and Social Security funds are dwindling, technological developments and wellness-oriented applications offer to reduce health care costs and offer innovative solutions for the host of challenges facing the United States, and the larger global community. If the U.S. does not take immediate action and support efforts to apply technology to aging services, it will have a dilemma of massive proportions on its hands.

CAST leaders urge the government to set up a special commission to deal with what Eric Dishman calls the "next national security nightmare." CAST asserts that our aging services dilemma demands both full-time attention and swift planning. CAST believes that a government commission staffed with experts and equipped with the necessary resources will be best able to help drive solutions for our aging services challenge.

CONCLUSION: PLANNING FOR A NATIONAL CRISIS

In 1996, Senator Daniel Patrick Moynihan sent a letter to the President, urging him to pay attention to what he referred to as "The Year 2000 Time Bomb." Moynihan's urgings prompted the establishment of a special Y2K commission. An executive order followed in the year 1998, which required all federal agencies to fix the Y2K problem in their systems. The same year the Department of Defense named a director of the Y2K Oversight and Contingency Planning.²⁴

When New Years 2000 passed without a glitch, some Americans who were not aware of the great effort and global coordination that had gone on behind the scenes in both the public and private arenas concluded that Y2K was nothing more than hype. No one will ever know what would have happened had such extensive precautions and preparations not been made. In fact, from the day the term "Y2K" was coined, there was never any certainty around the predictions, nor any of the measures taken to fix the problem. The nation planned for crisis nonetheless.

There is no doubt, on the other hand, that people age. We are already failing to meet the needs of today's elderly population, which is living longer and growing larger by the day. The problem is here today and will intensify as the years go by. This national security risk is not a supposition, but a reality. The only thing that remains uncertain is whether the demands of an enormous elderly population will take us by surprise, or whether our businesses, technological industry, aging services, and government programs will be prepared to deal with them.

During a time when we are accustomed to associating the term "national security threat" with images of masked suicide bombers, it is a challenge to view senior citizens — who strike us as an innocuous group — as a threat to our country's stability. It requires a leap of imagination to view demographic bulges as frightening problems, or even pressing ones.

But we must take that leap. The stakes are frightfully high; we are not dealing with computer systems, but the lives and care of our peers, parents, and grandparents. Projections on the continuing growth of the elderly population, its needs, and its impact on the world indicate that time is running out and the problem is here and now.

We have about 10 to 15 years before we reach crisis proportions. This is a narrow window of opportunity to lay the groundwork in aging services, collaboration, development, and investment in aging services technologies. We cannot wait.

Those who are skeptical of the affordability of new technologies must consider the growing evidence that many technologies, though expensive up front, can lead to marked reductions in costs by increasing productivity, reducing human error, and improved wellness programs.

Historian and social critic Theodore Roszak once said, "The future belongs to maturity." While statistical projections cast doubt on how smooth and secure old age will actually be for the 76 million Americans who reach it simultaneously, one thing is certain. The future is wide open for those leaders and entrepreneurs that anticipate a mature America and develop the means to provide for it.

RECOMMENDATIONS FOR ACTION

Investment in the application of current technologies and investment in the development of new technologies can show dramatic results in improving an older adult's independence, quality of life and levels of care. At the same time, technology can reduce costs and have a significant positive impact on our nation's health care bill. CAST proposes that approaches are needed.

While much research needs to be done and CAST is pursuing additional data, it is apparent from brainstorming sessions with providers and researchers, results of a recent CAST survey of providers, and discussions with representatives of major research centers, government agencies and companies that we need to identify and concentrate efforts on specific solutions. If we can get major technology and consumer product companies as well as universities to unleash their creative abilities to address technology development, hundreds of billions of dollars can be cut from our nation's health care bill.

Most important, not only will care cost less, but we can improve quality and efficiency of care and independence of life style. Individuals, family members, and caregivers would all benefit by investment in these areas.

Recommendations for providers of aging services

1. Engage in partnerships with technology and consumer products companies to test new products and ideas in real world situations. Providers need to look at applications of new technologies, especially when they offer better levels of quality of care and life style improvement for the older adult.
2. Explore how they can deliver the many services they provide in a variety of environments.
3. Plan how they will fund investments in technologies.

Recommendations for business leaders and the research community

1. Continue developing new technologies or applications of current technologies in the following areas:
 - ✦ Monitoring and sensor devices that can establish the ability to know how an older adult is doing in performing activities of daily living, know when an emergency

takes place, better track and provide greater independence to adults suffering from Alzheimer's and dementia, and provide reminders that assist in maintaining activities of daily living.

- ✦ New communication tools between the older adult, caregivers and family can allow better and timelier information to be shared between the older adult and the family member or caregiver. These technologies — used in any stage of the aging services continuum can improve understanding, provide quicker response to needs, provide emotional well-being through closer family connections and open up new opportunities for the older adult to make new friends, develop new hobbies, and engage in educational and recreational activities.
- ✦ Improved medication dispensing systems for the home that can help prevent the deterioration that takes because an individual forgets to take medication or takes the wrong medication or incorrect dose. Developing new forms of medication dispensing systems that older adults and their caregivers can rely on will significantly reduce health problems and aid wellness.
- ✦ Tele-health solutions can help physicians and nurses better monitor the health of the older adults therefore addressing health problems before they get worse and reducing emergency room visits and hospitalizations. New sets of data can help the medical provider understand trends that they never before had access to and then better respond to the care of the individual.

2. Place the needs of the aging population on the agenda of the Business Roundtable and other leading senior executive industry associations.
3. Partner with aging services providers to better understand the needs of the field.

Recommendations for government

1. Plan a White House sponsored senior industry executive meeting outlining the societal challenge in front of our country. Drive innovation and entrepreneurialism for technology solutions to the aging services challenge.
2. The Commerce Department should educate businesses on the global marketplace opportunities that exist in the aging services field and the danger of losing future market share if U.S. companies are not in a leadership development role.
3. The President of the U.S. should establish a National Commission with participants from companies, aging service providers, university research centers and advocacy groups to coordinate the development of a 10-year plan to map out how our country can proactively respond to the aging challenge,

4. Invest additional government dollars to support work at major university research centers and/or reorient current funding for aging-oriented technology research.
5. Reinstate National Institute of Standards and Technology (NIST) Advanced Technology Program (ATP) with a focus on technologies for aging services.

Joint recommendations for all constituencies

1. Participate in private/public sector fact finding missions to Europe and Japan to learn about technology applications they are using and what their results are.
2. Accelerate broadband and wireless deployment throughout America as high speed intranet access will be a key component of wellness and healthcare activities in the home.
3. Address the many policy issues that impact the application of new technologies.
4. Increase collaboration to rapidly advance aging services technologies.

The Center for Aging Services Technologies (CAST)

The Center for Aging Services Technologies (CAST) is the key catalyst for bringing together companies, universities, aging services providers, organizations, and government to drive awareness, development and application of technologies that will improve services for the aging.

Vision. CAST is creating the foundation that will ensure technology solutions attain their fullest potential to meet the needs of our aging society

Mission. CAST's mission is to unleash the potential of technology for innovative development across the continuum of health care, housing and services for the aging in order to:

- ◆ Reduce our nation's health care costs
- ◆ Help older adults maximize their independence
- ◆ Improve quality of care and quality of life
- ◆ Support the needs of professional and family caregivers
- ◆ Increase aging services provider efficiency

Functions. CAST will:

1. Provide opportunities for collaboration to rapidly advance aging services technologies to benefit older adults. Initiatives will include:
 - ◆ Bringing together technology companies, researchers, and providers to identify areas where technology can maximize independence and enhance quality of care.
 - ◆ Helping technology developers understand the needs of providers so that they can enhance operational systems and human resources management through technology.
 - ◆ Encouraging the use of new technologies to foster quality communication among older adults, caregivers, family members and friends that will increase quality of life, new learning, and recreational opportunities.
 - ◆ Educating providers on how to incorporate new technologies into their services.
 - ◆ Fostering synergy among companies, providers, and older adults to develop new tele-health applications to better monitor health and medical conditions.
 - ◆ Leading the aging services field in developing policy positions and participating in major standards initiatives in electronic medical and wellness records.
 - ◆ Cultivating global relationships and partnerships to share information and build cross border solutions.
2. Create and maintain an online information clearinghouse to provide the latest information and knowledge on aging services technology developments as well as to provide a forum for providers to engage in discussions with researchers and to share experiences.
3. Engage government representatives to gain support for technology-related policy and facilitate private public sector partnerships to advance technology development and application.
4. Survey and gather the latest intelligence on what is needed by providers, older adults and baby boomers to help ensure that expectations are understood and satisfied.

¹ "Interview with Eric Dishman", News Spotlight Story (6/18/2003), http://www.intel.com/research/spotlights/one_on_one_dishman.htm .

² National Center for Health Workforce Analysis, U.S. Department of Health and Human Services, "Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020," July 2002, <http://bhpr.hrsa.gov/healthworkforce/reports/rnproject/default.htm> . See Table 1 (*National Supply and Demand Projections for FTE Registered Nurses, 2000 through 2020*) and Table 7 (*Employment Distribution by Setting and Percentage Distribution by Setting*) in <http://bhpr.hrsa.gov/healthworkforce/reports/rnproject/report.htm#chart1> .

³ Donald J. Mabry, "Student Rebellion in the Sixties," from The Historical Text Archive, accessed 7/11/03 at <http://historicaltextarchive.com/sections.php?op=viewarticle&artid=313>

⁴ "Growing gray tide will color our future," Sacramento Bee Special Report, 27 June 1997, accessed 07/11/03 from Bee Capitol Bureau at <http://www.sacbee.com/static/archive/news/projects/aging/>

⁵ "The Woodstock Generation," Britannica.com, accessed 07/11/03 at <http://www.britannica.com/psychedelic/textonly/woodstockgeneration.html>

⁶ William D. Novelli, American Association of Retired Persons, "How Aging Boomers Will Impact American Business," dated February 2002, accessed 07/11/03 at <http://www.aarp.org/leadership-ceo/Articles/a2003-01-03-agingboomer.html>

⁷ *Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century. A Quiet Crisis in America, A Report to Congress.* Washington, D.C., 2002. Available at http://www.seniorscommission.gov/pages/final_report/finalreport.pdf . See page 5.

⁸ "Projections of the Total Resident Population by 5-Year Age Groups, and Sex with Special Age Categories: Middle Series, 2006 to 2010" (NP-T3-C, released online January 13, 2000); and "Projections of the Population by Age, Sex, Race and Hispanic Origin for the United States: 1999 to 2100 (Middle Series)", July 1, 2030 (NP-D1-A), U.S. Bureau of Census.

⁹ *The Center for Strategic and International Studies.*

¹⁰ "GE Center for Financial Learning National Survey Identifies Myths and Misperceptions About Long Term Care That are Costing Americans Dearly," September 25, 2002, www.elfun.org/seniors/long-term-care.asp. Survey conducted by Peter D. Hart Research Associates.

¹¹ Donald W. Kemper and Molly Mettler, "The Age Wave: Knowledgeable and Demanding and Very, Very, Large," *Managed Care Quarterly*, Vol. 10, No. 3, p.52-54 (Summer 2002), accessed 7/11/03 at <http://209.19.157.25/healthwise/items/document/e0639.pdf>

¹² Hospital and Healthcare Compensation Service, "AAHSA Salary and Benefits Reports" for nursing homes (2002-2003, pages V-3, V-5 and V-7), assisted living (2002-2003, pages V-3, V-4 and V-5), and continuing care retirement communities (2002-2003, pages IV-3, IV-5 and IV-7).

¹³ *Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century. A Quiet Crisis in America, A Report to Congress.* Washington, D.C., 2002. Available at http://www.seniorscommission.gov/pages/final_report/finalreport.pdf . See pages 31 and 278 (Table 17. Rent-Assisted Units to Address Unmet Housing Needs of Households Age 65 and Over, 1999-2020.).

¹⁴ Ibid.

¹⁵ U.S. Census Bureau. For 1900, "Table 42, Single Years of Age: 1880 to 1980," 1980 Census General Population Characteristics, United States Summary, page 1-26. For 2002, "Table NP-T4-B, Projections of the Total Resident Population by 5-Year Age Groups, Race, and Hispanic Origin with Special Age Categories: Middle Series, 2001 to 2005," dated 13 January 2000 accessed 12/23/02 at <http://landview.census.gov/population/projections/nation/summary/np-t4-b.pdf> . For 2020, "Table NP-T4-E, Projections of the Total Resident Population by 5-Year Age Groups, Race, and Hispanic Origin with Special Age Categories: Middle Series, 2016 to 2020," dated 13 January 2000, accessed 12/23/02 at <http://landview.census.gov/population/projections/nation/summary/np-t4-e.pdf> .

¹⁶ National Family Caregivers Association (random sample survey of 1,000 adults sponsored by Alevé).

¹⁷ Family Caregiver Alliance, "Fact Sheet: Selected Caregiver Statistics," accessed 7/11/03 at http://www.caregiver.org/factsheets/selected_caregiver_statisticsC.html

¹⁸ Social Security Advisory Board, "What Will Happen When the Baby Boomers Retire?" from "Why Action Should Be Taken Soon," dated July 1998, accessed 7/11/03 at <http://www.ssab.gov/rep5iv.html>

¹⁹ "Chronic Care in America."

²⁰ "The MetLife Juggling Act Study - Balancing Caregiving with Work and the Costs Involved," findings from a national study by the National Alliance for Caregiving and the National Center on Women and Aging at Brandeis University, November 1999.

²¹ Richard Jackson and Neil Howe, "The 2003 Aging Vulnerability Index," Center for Strategic and International Studies and Watson Wyatt World Wide, March 2003, page 3-4.

²² Sebastian Moffet, "For ailing Japan, longevity begins to take its toll," Wall Street Journal, 11 February 2003. <http://www.burtonsys.com/AilingJapanLongevityToll.html>

²³ "Better treatment sought for elderly with broken hips," Associated Press, 3 May 2001, accessed 7/11/03 at <http://www.usatoday.com/news/health/2001-05-03-hips.htm>

²⁴ U.S. Department of Defense, "Y2K History," accessed 7/11/03 at http://www.defenselink.mil/specials/y2k/y2k_hist.htm



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Fri, May. 21, 2004 St. Paul Pioneer Press

Technology may help seniors live independently

BY TONI COLEMAN
Pioneer Press

Big Brother is watching, and this time it's a good thing.

In the near future, concerned relatives of elderly family members who live alone may be able to turn to a new high-tech system that monitors seniors' activities — or lack thereof.

"Smart House" technology, which checks changes in a senior's normal routine and alerts drop-in caregivers, may help some seniors remain independent by identifying health problems early on and providing peace of mind to relatives.

The technology is on display at The Homestead in Maplewood, a Volunteers of America-owned assisted-living complex, as part of the fifth annual Senior Housing Showcase. The showcase, which allows families to look into 68 living options for senior citizens, runs today and Saturday.

"It's been a great technology," said Sylvia Graham, Homestead residence director. The system has helped prevent a flooding — it detected that the toilet was constantly running — and a fire — the heat sensor alerted staff who found a dried-out coffee pot sitting on a lit burner.

But its greatest potential may lie outside of assisted-living facilities as more seniors opt to remain in their homes. About 77 percent of Minnesotans 65 and older own their homes, and one of three older adults in Minnesota lives alone, according to the 2000 census.

"If I had this at home, I wouldn't have to live here. I would be in my home," one Homestead resident told Graham after a meeting to introduce the system. The woman lives at The Homestead because she had fallen and, after a time lying on the floor, managed to crawl to the phone to summon help.

"It's another little piece ... what can I do to make sure Mom and Dad are safe when I'm not there. Because it measures motion, it also measure the motion of a staff person," Graham added, noting relatives also can determine if the health aide really did give Mom her scheduled 2 p.m. shower.

"It's pretty smart," Graham said. "It's going to be very, very useful in the community."

The technology, developed by the University of Virginia's Medical Automation Research Center, was tested in two Volunteers of America-owned residential facility for senior citizens. Here's how it works:

- The units — small, wireless motion sensors throughout the apartment and a pulse-monitoring strap attached to the mattress — communicate with a small computer under the bed.

The computer sends activity data — such as how often Mom moves around, if Dad is showering or using the bathroom more frequently or if an aunt is having a sleepless night — via a modem to the University of Virginia, which then sends the data to a password-protected Web site.

Then the activity data can be reviewed online by Homestead staff, who provide 24-hour health service to its assisted-living and memory care residents, as well as by residents' family members.

The computer, which compares current activity levels with historical data, alerts staff and family members to changes in the seniors' behavior, such as frequent trips to the bathroom, which might signal a urinary tract infection, for instance.

The under-the-bed computer can send a page to caregivers when, based on preset thresholds, it "infers" that something is amiss. For example, if a senior goes into a room, but no movement is recorded for 20 minutes, the computer infers that the person may have fallen and pages the caregiver.

The system can enable some seniors to remain in their homes longer by detecting early subtle but important changes in behavior that may be symptoms of coming health problems.

"Seniors tend to be dismissive of changes in their health status," said Wayne Olson, senior vice president of health care and housing operations for Volunteers of America. And memory care patients can't articulate a change.

During a six-week pilot project last winter, caregivers were able to identify "issues that were starting to develop (that) we never would have found as early as we did if this technology was not available," Olson said. In one case, a man who was using the bathroom every half-hour overnight was sent to the doctor, who determined he was suffering from internal bleeding.

By staving off chronic illnesses through early detection, seniors are able to live independently longer, Olson said.

The staff used the bed monitor, which also takes respiration readings, to determine that 80-year-old Norma Marcello, who was terminally ill, wasn't getting much rest, although

she hadn't complained about pain. As a result, they adjusted her pain medicine, allowing her to be more comfortable until lung cancer claimed her life in February.

Her family is grateful the monitoring system allowed the Homestead staff to prescribe a solution that enabled her to die in her home rather than being moved to a nursing home.

"The key is, you must leave these people where their home is," said Rosemary Marcello, Norma's daughter-in-law. "That gave Norma a better quality of life. Had Norma gone to a nursing home, it would have been a much less comfortable."

"It was completely unobtrusive to Norma and the family," Marcello said of the monitoring system.

Initially, there was some concern about the "Big Brother" nature of the system, but seniors and their family members warmed to the idea once they learned there would be no cameras or recording devices.

After more pilot programs, the system will be available for purchase in about 12 to 14 months, Olson said.

FYI

"Smart House" technology will be on display at The Homestead, a residential center for senior citizens at 1890 E. Sherren Ave. in Maplewood. The Homestead is among 68 senior residences being showcased from 11 a.m. to 3 p.m. today and Saturday.

For a list of all senior residences on the tour, pick up a Good Age newspaper at Cub or Rainbow Foods stores, or go online at www.wilder.org.

If you're new to looking for senior housing, there's a checklist of what to look for at the Assisted Living Federation of America Web site at www.alfa.org. Look in the Consumer Information Center.

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Bloomington 8600 Nicollet Avenue	952-967-7375	Regions Center for International Health (St. Paul) 640 Jackson St.	952-967-7201	Spring Lake Park 1415 81st Ave. NE	952-967-7966
Brooklyn Center 6845 Lee Avenue North	952-967-6818	Regions Family Physicians (St. Paul) 860 Arcade Street	651-772-9799	Uptown (Minneapolis) Calhoun Square	952-967-7665
Como (St. Paul) 2500 Como Avenue	952-967-7955	Regions Health Center for Women (St. Paul) 2635 University Ave.	952-967-7960	West (St. Louis Park) 5100 Gamble Drive	952-967-7720
Coon Rapids 11475 Robinson Drive	952-967-6990	Regions Seniors Clinic (St. Paul) 640 Jackson St.	952-967-7875	White Bear Lake 1430 Hwy 96	952-967-6614
Inver Grove Heights 5625 Cenex Drive	952-967-7472	Ridgedale (Minnetonka) 14001 Ridgedale Drive	952-967-7578	Woodbury 8450 Seasons Pkwy	952-967-7975
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What's what —

Here are the definitions for various senior housing options

From the Minnesota Health and Housing Alliance

There is a wide range of senior housing options available in the Twin Cities area. Here is a sampling from some of the most common alternatives that range between living in your own house to going to a nursing home:

Adult foster care homes are primarily private homes for up to five people who need some assistance. Families may provide adult foster care in their own home or organizations may provide foster care services in homes using round-the-clock staff. They may offer a variety of support and health-related services. The homes are licensed by counties for the Minnesota Department of Human Services.

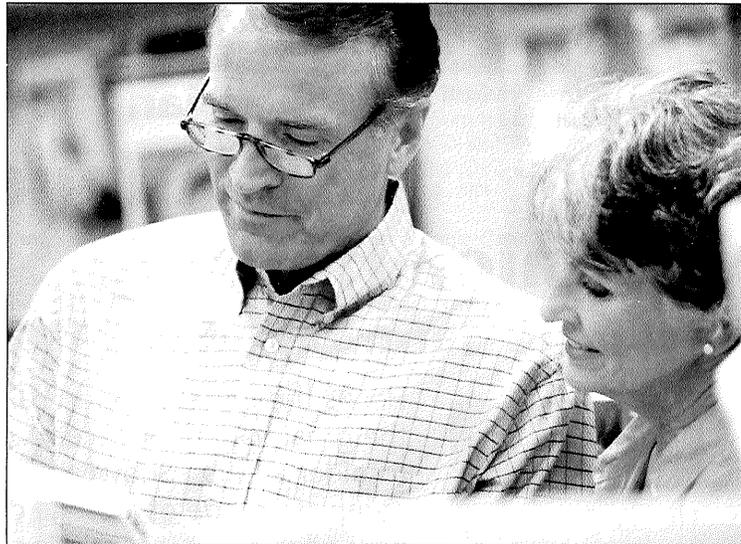
Assisted living is generally packages of services (such as meals, housekeeping, help with dressing and bathing, medication reminders) that are provided in apartments. Some home health care may be provided. Some programs limit the amount of service they provide, while others act as alternatives to nursing homes and provide a full range of services.

Board and lodging establishments are licensed by the state or a local health department to provide room and board to residents. Some provide a variety of personal care or health-related services.

Condominiums offer ownership housing in an apartment-style building or townhouse complex. Condo residents hold title to their own living unit and share ownership of the common areas with other residents at the site.

Continuing care retirement communities are campus-style developments offering a range of housing and long-term care services to residents. Residents pay an entrance fee plus a monthly fee for a package of services specified in a long-term contract.

Cooperatives are another form of ownership housing in a multi-family building or complex. The development is owned by a cooperative on behalf of the occupants, who buy shares in the cooperative in exchange for the



right to occupy a specific living unit.

Federally subsidized rental buildings serve low-income people and vary in size and type. Some are privately owned while public facilities are owned by city or county housing authorities. Some subsidized buildings offer a coordinated assisted living program.

Housing with services settings include a variety of types of buildings, such as market rate rental, subsidized rental, board and lodging and adult foster care. These settings offer, or provide for a fee, one or more health-related services, such as help with personal laundry, handling or assisting with personal funds, or arranging for medical/health-related services, social services or transportation to appointments. Such settings must have a written contract with each resident and must register with the Minnesota Department of Health.

Market rate rental housing has no government subsidy; thus, the rent levels are determined by the market. Some buildings offer a broad range of services, such as meals, housekeeping or other assisted living services.

Noncertified boarding care homes are licensed as health care facilities by the Minnesota Department of Health, but they are often quite homelike. They offer personal care and supportive services, but not skilled nursing care.



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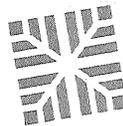
KEYS for the HOUSING SHOWCASE LISTINGS

SERVICES KEY:

- A** - Assisted Living
- B** - Beauty Shop
- F** - Fitness
- H** - Hospice
- I** - Independent
- M** - Meals
- MC** - Memory Care
- NH** - Nursing Home
- O** - Other Services
- RH** - Rehabilitation
- SP** - Social Programs
- T** - Transportation

TYPE KEY:

- A** - Apartment
- BMR** - Below Market Rate
- C** - Condominium
- CCRC** - Continuing Care Retirement Community
- CP** - Co-op
- MR** - Market Rate
- O** - Own
- R** - Rental
- SNF** - Skilled Nursing Facility
- SR** - Subsidized Rental
- TH** - Town Home



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The MHHA symbol denotes residences that are members of the Minnesota Health & Housing Alliance and have adopted their Code of Ethics program.

Anoka



Walker Plaza

131 Monroe Street
763-422-1226 • Bernice Olson
www.walkermethodist.org
Services: A, B, F, I, M, O, SP, T
Type: A, MR, R



Directions: 1 block south of Main Street
between 1st and 2nd Avenue

Apple Valley



Summerhill of Apple Valley

14055 Granite Avenue
952-890-8350 • Dena R. Meyer
www.summerhillcoop.com
Services: I
Type: CP

Directions: SW corner of Cedar Avenue and 140th Street

Timbers at Apple Valley

14018 Pennock Avenue
952-432-4070 • Gene Baugh
www.aaapartments.com
Services: F, I, SP, T;
Type: A, BMR, MR, R

Directions: Corner of 140th and Pennock.
One block off Cedar



Arden Hills



Cottage Villas of Arden Hills

3744 Cleveland Avenue North
651-639-1961 • Karen Martin
Services: I, SP
Type: A, BMR, MR, R

Directions: 35W to County Rd. E2, right on Cleveland Avenue

Bloomington



Friendship Village of Bloomington

8100 Highwood Drive
952-831-7500 • Social Services
www.friendshipvillagemn.com
Services: A, B, F, H, I, M, MC, NH, RH, SP, T
Type: CCRC

Directions: Hwy. 169, just South of 494.
Take Highwood Drive East



Meadow Woods

(Tours only on Friday)
1301 East 100th Street
952-888-1010 • Monica Edwards/Bev
Heise/Judy Gustafson www.meadowwoods.org
Services: A, B, M, NH, O, RH, SP, T
Type: A, MR, R

Directions: Off Old Shakopee Road and E. Bloomington



Brooklyn Center



Earle Brown Terrace

6100 Summit Drive North
763-560-6829 • Kathy Lane
Services: O
Type: A, MR

Directions: I-694 W to Shingle Creek Pkwy., exit and go south,
left on Summit Dr. N



Maranatha Place

5415 69th Avenue N
763-569-4571 • Kari Wilson
Services: A, B, F, I, M, SP, T
Type: A, MR

Directions: 694 to Brooklyn Blvd. W- Left on 69th Avenue



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Brooklyn Center (continued)



Prairie Lodge at Earle Brown Farm
6001 Earle Brown Drive
763-566-1495 • Pam Wolfe
Services: A, B, H, I, M, MC, O, SP, T
Type: CCRC

Directions: Corner of Earle Brown Drive and Summit Drive

Burnsville

Parkway Cooperative of Burnsville

Parkway Cooperative of Burnsville
115 East Burnsville Parkway
952-895-8526 • Sandy Brower
Services: F, I, O
Type: CP

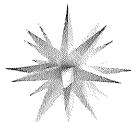
Directions: Nicollet and Burnsville Pkwy.



Regent at Burnsville
14500 Regent Lane
952-898-1910 • Jacque Mihm
www.regentliving.com
Services: A, B, F, I, M, MC, SP, T
Type: A, MR, R, SR

Directions: Off of Burnhaven Drive, southwest of Burnsville Shopping Center

Chaska



Auburn Courts Assisted Living
501 Oak Street North
952-361-0333 • Terry Rank
www.moravian.org
Services: A, B, M, RH, SP
Type: A, MR



Directions: Hwy. 169 So. to Hwy. 41 to Chaska; Hwy. 41 to 4th Street, turn right- go two blocks to Oak

Columbia Heights



The Boulevard at the Crest View Senior Community
4458 Reservoir Blvd. NE
763-782-1606 • Gigi Chollett
www.crestviewcares.org
Services: B, I, M, SP, T
Type: A, CCRC, MR, R



Directions: Corner of Reservoir Blvd. and 44th Avenue



Columbia Village at the Crest View Senior Community
1675 44th Avenue NE
763-782-1606 • Gigi Chollett
www.crestviewcares.org
Services: B, I, M, SP, T
Type: A, CCRC, R, SR



Directions: East on 44th Avenue off of Central Avenue



Crest View Lutheran Home at the Crest View Senior Community
4444 Reservoir Blvd. NE
763-782-1609 • Social Services
www.crestviewcares.org
Services: B, H, M, MC, NH, RH, SP
Type: CCRC



Directions: Corner of Reservoir Blvd. and 44th Avenue



Crest View on 42nd
900 42nd Avenue NE
763-781-5304 • Anita Kottsick
www.crestviewcares.org
Services: A, B, F, H, M, MC, RH, SP, T
Type: A, MR, R



Directions: Corner of Central Avenue and 42nd Avenue

Columbia Heights (continued)



Heights Manor
3850 Stinson Blvd.
763-781-6518 • Mary Wahl
www.commonbond.org
Services: B, I
Type: A, R, SR

Directions: 37th Avenue NE and Stinson Blvd.



Royce Place at the Crest View Senior Community
1515 44th Avenue NE
763-782-1606 • Gigi Chollett
www.crestviewcares.org
Services: A, B, F, H, M, RH, SP, T
Type: A, BMR, CCRC, MR, R



Directions: East on 44th Avenue off of Central Avenue

Coon Rapids



Redwood Terrace
9950 Redwood Street NW
763-862-3545 • Rick Rekstad
redwoodterrace@msn.com
Services: I
Type: MR

Directions: Corner of Coon Rapids Blvd. Ext. and Redwood Street Between Hanson and Foley

Eden Prairie



Colony at Eden Prairie
431 Prairie Center Dr.
952-828-9500 • Daly Goblirsch
Services: A, B, F, I, M, MC, RH, T
Type: A, R

Directions: Corner of Prairie Center Dr. and Preserve Blvd.



Summit Place Senior Campus
8501 Flying Cloud Drive
952-995-1000 • Carol K. Thompson
www.summitplacecampus.com
Services: A, B, F, H, I, M, MC, SP, T
Type: A, BMR, MR, R, TH



Directions: West on 212 (Flying Cloud Drive), 1 block west of E.P. Shopping Center

Edina



Edina Park Plaza
3330 Edinborough Way
952-831-4084 • Cynthia Frances
cfrances@brookdaleliving.com
Services: A, B, F, H, I, M, SP, T
Type: R

Directions: Between York and France Avenue on the North side of 494

Fridley



Banfill Crossing
8310 University Avenue NE
763-785-2278 • Sandi Rekstad
sandirekstad@banfillcrossing.org
Services: B, F, I, SP
Type: A, MR, R

Directions: 82nd and University Service Road

Golden Valley



Calvary Center Cooperative
7600 Golden Valley Road
763-544-1090 • Mike Samz
www.calvaryco-op.com
Services: B, F, I, M, O, SP, T
Type: CP

Directions: 2 blocks north of Highway 55 on Rhode Island and Golden Valley Road

Golden Valley (continued)



Country Villa Assisted Living

7475 Country Club Drive
763-512-1579 • Arlene Samrock
www.countryvv.com
Services: A, B, H, I, M, SP, T
Type: A, R

Directions: Corner of Rhode Island and
Country Club Drive- near Hwy. 55



Covenant Village of Golden Valley

5800 Saint Croix Avenue N
763-546-6125 • Janet Carlyle
JECarlyle@covenantretirement.org
Services: A, B, F, I, M, MC, NH, RH, SP, T
Type: A, CCRC

Directions: South of Spring Gate Shopping Center at
Hwy. 100 and Duluth Street

Inver Grove Heights



Presbyterian Homes of Inver Grove Heights

6307 Burnham Circle
651-552-2800 • Cathy Rommes
www.phsinvergrove.org
Services: A, B, F, I, M, MC, SP, T; Type: A, MR, R, TH

Directions: Hwy. 52 to Upper 55th Street East to Cahill
Avenue. South on Cahill to 62nd. (Between 62nd & 65th Streets)

Long Lake

Long Lake Assisted Living

Long Lake Assisted Living

345 N. Brown Rd.
952-473-2527 • Kati Grengs
Services: A, B, M, SP
Type: A, R

Directions: Hwy. 12 West to N. Brown Road

Maplewood



Concordia Arms

2030 Lydia Avenue
651-770-0402 • Jodi Jefferson
Services: I, M, SP
Type: A, SR

Directions: 35E to 694 West. Take White Bear exit
South to Lydia, turn left



Homestead

1890 Sherren Avenue E
651-770-3959 • Sylvia Graham
Services: A, B, MC, NH, SP, T
Type: A, MR

Directions: Corner of Hwy. 36 and White Bear Avenue E-
Maplewood Cross-street is Cope

Lakeview Commons of Maplewood

1200 Lakewood Drive N.
651-770-1111
Brenda Gammelgaard
www.bsm1.org

Services: A, B, F, M, SP, T Type: A, BMR, MR, R
Directions: Corner of McKnight and Maryland

Rosoto Villa

1901 DeSoto Street
651-771-4464 • Sherrill Somora
Services: F, I
Type: A, MR, R

Directions: East of 35E at Roselawn and Desoto.
Next to St. Jerome Church

Maplewood (continued)



Walker at Hazel Ridge

2730 Hazelwood Street
651-779-9779 • Maryann Schaefer
www.walkermethodist.org
Services: A, B, I, M, O, SP, T
Type: A, MR, R

Directions: Between County Rd. C and Beam Avenue
on Hazelwood Street

Minneapolis



Grace Manor

1507 Lowry Avenue NE
612-781-4871 • Mary Bryan-Day
www.grace-manor.com
Services: B, F, M, O, SP, T
Type: R

Directions: Corner of Lowry Avenue NE and Johnson Street



Signe Burckhardt Manor

2533 1st Avenue S
612-872-7009 • Jill Pierce
www.bsm1.org
Services: A, B, M, O, SP
Type: A, SR

Directions: Corner of 1st Avenue S and 26th Street E.
1 block E. of Nicollet



The Kenwood Retirement Community

825 Summit Avenue
612-374-8100 • Beth Ann Vega
Services: A, B, F, I, M, O, SP, T Type: A, R
Directions: From intersection of Franklin &
Hennepin go half block west on Franklin

to Colfax, turn right and go two blocks north to Summit. Turn
right, go one block east to residence

Minnetonka



WestRidge Retirement Community

11201 Fairfield Road
952-512-0457 • Deborah Parke
www.tcchomes.org
Services: B, I, M, O, SP, T
Type: A, BMR, MR, R

Directions: 1 block north of 394 at Hopkin's Crossroads

Monticello



St. Benedict's Senior Community

1301 E. 7th Street
763-295-4051 • Sandy Haggerty
Services: A, B, F, HC, I, M, MC, SP
Type: A, MR

Directions: 94 West to Monticello, exit 25. Right on 7th Street

Moundsview



Silver Lake Pointe

2701 County Road I
763-785-4771 • Amy Harlan
www.commonbond.org
Services: B, I, SP
Type: A, BMR, MR, R

Directions: On County Rd. I between Old Highway 10 and
Silver Lake Road

New Brighton

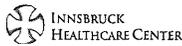


Brightondale

2700 Rice Creek Road
651-633-6484 • Sue Beam
www.brightondale.com
Services: A, B, F, M, O, SP, T
Type: A, MR

Directions: West on Rice Cr. Road off Silver Lake Road

New Brighton (continued)



Innsbruck Health Care Center
2800 Hwy. 694
651-633-1686 • Sue Ager
Services: B, H, M, NH, RH, SP
Type: CCRC

Directions: Near 694 and Silver Lake Road



Meadowood Shores
2100 Silver Lake Road
651-604-2900 • Sue Beam
www.meadowoodshores.com
Services: B, F, I, M, O, SP, T
Type: A, MR

Directions: North on Silver Lake Rd. from 694

New Hope



Woodbridge of New Hope
5700 Boone Avenue N
952-844-6161 • Call for more information
www.woodbridgecoop.com
Services: F, I, SP
Type: CP

Directions: Corner of Bass Lake Rd. and Boone Avenue N

North Oaks



Presbyterian Homes of North Oaks
5959 Centerville Road
651-765-4000 • Deb Newton
www.phsnorthoaks.org
Services: A, B, F, H, I, M, MC, NH, RH, SP, T
Type: A, C, CCRC, MR, R

Directions: Corner of Centerville Rd. and County Rd. J.
West of 35E and Cty. Rd. J

Oak Park Heights



Boutwells Landing
5600 Norwich Parkway
651-275-5006 • Libby Haverlandt
www.boutwells.org
Services: A, B, F, H, I, M, MC, RH, SP, T
Type: A, MR, R, TH

Directions: East on Hwy. 36. South on Norell Avenue West on 58th
Street, South on Norwich Parkway to main town center doors

Oakdale



Oak Meadows Independent and Assisted Senior Living
8131 Fourth Street N
651-578-0676 • Kim Prayfrock
www.oak-meadows.org
Services: A, B, F, I, M, O, SP, T
Type: A, MR, R

Directions: 94 to Radio Drive/ Inwood Avenue

Osseo



Steeple Pointe Senior Living Community
625 Central Avenue
763-425-4440 • Bobbie Guidry
Services: A, B, M, O, SP
Type: A, MR, SR

Directions: Southwest corner of 93rd (County Road 30) and
Central Avenue in Osseo

Richfield



Mainstreet Village
7601 Lyndale Avenue S
612-869-6584 • Jill Schewe
www.tcchomes.org
Services: A, B, I, M, O, SP, T
Type: A, MR, R

Directions: 2 blocks north of 494 on Lyndale

Richfield (continued)



Village Shores
6501 Woodlake Dr.
612-861-1186 • Susan Kroon/Sheila Stocco
www.villageshores.com
Services: B, F, I, M, SP, T
Type: A, R

Directions: Corner of 66th and Lyndale

Rogers



Autumn Trails of Rogers
21845 129th Avenue North
651-645-7271 x284 • Ken Berry
www.accessiblespace.org
Services: I
Type: A, R, SR

Directions: I-94 West to exit 207 to Main Street. Go left to
129th Avenue N

Roseville



RosePointe
2555 Hamline Avenue N
651-639-1000 • Kathryn Morrison
www.rosepointeseniorliving.com
Services: B, F, I, M, O, SP, T
Type: A, MR, R

Directions: On Hamline Avenue N.
Between County Roads B2 and C

Shoreview



Scandia Shores
418 Hwy. 96 W
651-415-9793 • Deborah Parke
www.tcchomes.org
Services: B, I, M, SP, SS, T
Type: A, BMR, MR, R

Directions: SW Corner of Hwy. 96 and Hwy. 49

South St. Paul



HealthEast Residence of South Saint Paul
744 19th Avenue
651-326-6500 • Anna or Linda
www.healtheast.org
Services: A, B, F, H, M, MC, SP, T
Type: A, MR, R

Directions: Corner of Thompson and 19th Avenue

St. Louis Park



Parkshore Senior Campus
3663 Park Center Blvd.
952-848-5819 • Call for more information
Services: A, B, F, I, M, MC, SP, T
Type: A, R

Directions: Between Excelsior Blvd. and W. 36th Street



Parkshore Senior Campus
3633 Park Center Blvd.
952-848-5819 • Call for more information
Services: A, B, F, M, MC, SP, T
Type: A, R

Directions: Between Excelsior Blvd. and W. 36th Street

St. Paul

Bethel Care Center

420 Marshall Ave
651-224-2368 x19 • Celeste Aronson
Services: B, H, M, NH, RH, SP
Type: SNF



Directions: I-94 to Dale to Marshall, east on Marshall



Cornelia Place - Opening Spring 2005

1840 University Avenue W
651-646-1026 • Mark Ladwig, Manager
www.ehomesmn.org/ mladwig@ehomesmn.org
Services: B, I, NH, RH
Type: A, MR, R, SR

Directions: Southwest corner of University Avenue W and Fairview

**HealthEast Residence
Marian of Saint Paul**

225 Frank Street
651-495-1819 • Stacey Pieper
Services: A, B, F, I, M, SP
Type: A, MR, SR



Directions: Corner of Burns and Frank.
One block east of Earl Street

**HealthEast Residence on
Humboldt**

514 Humboldt Avenue
651-220-1700 • Peggy Harnden
pharnden@healtheast.org
Services: A, B, M, O, RH, SP
Type: A, R



Directions: Near Robert Street and George Street

Humboldt Apartments- 508

508 Humboldt Avenue
651-220-1733 • Jane Bicker, Manager
jeb@wilder.org
Services: I, SP
Type: A, BMR, CCRC



Directions: Corner of Humboldt and George

Humboldt Apartments- 510

510 Humboldt Avenue
651-220-1733 • Jane Bicker, Manager
jeb@wilder.org
Services: I, SP
Type: A, BMR, CCRC



Directions: Corner of Humboldt and George

Humboldt Apartments- 516

516 Humboldt Avenue
651-220-1733 • Jane Bicker, Manager
jeb@wilder.org
Services: I, M, SP
Type: A, CCRC, SR



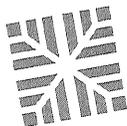
Directions: Corner of Humboldt and George

Iris Park Commons

1850 University Avenue W
651-646-1026 • Mark Ladwig, Manager
www.ehomesmn.org/ mladwig@ehomes.org
Services: A, B, F, I, M, NH, RH, SP
Type: A, MR, R, SR



Directions: Southwest corner of University Avenue W and Fairview



Health Screenings
by HealthPartners
on Friday, 11AM-3PM

St. Paul (continued)

Phalen Shores Apartments

985 E. Ivy Avenue
651-771-6201 • Paulette Bauer
Services: I, SP, T
Type: A, MR



Directions: Off of Maryland on Ivy and Forest Street

The Wellington

2235 Rockwood Avenue
651-699-2664 • Marilou Moringiello
www.wellingtonresidence.com
Services: A, B, H, I, M, MC, SP, T
Type: A, MR, R



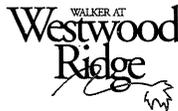
Directions: Off of Shepard Road and Madison
between W. 7th Street and Shepard Rd.



West St. Paul

Walker at Westwood Ridge

One West Thompson Avenue
651-552-7228 • Kristen Edson
www.walkermethodist.org
Services: A, B, F, I, M, SP, T
Type: A, MR, R



Directions: Half mile west of Robert Street on
Thompson Avenue West



White Bear Lake

The Boulders Senior Community

3533 Willow Avenue
651-407-9995 • Nancy Jones
theboulders@juno.com
Services: I
Type: MR



Directions: Near Hwy. 61 and County Rd. E; Right on Linden,
right on Willow

**HealthEast Residence
White Bear Lake**

4615 2nd Avenue
651-232-1867 • Trudy Fuller
Services: A, I, M, SP
Type: A, MR, R



Directions: 2 blocks west of Hwy. 61 and
two blocks north of Hwy. 96.

**KEYS for the
HOUSING SHOWCASE LISTINGS**

SERVICES KEY:

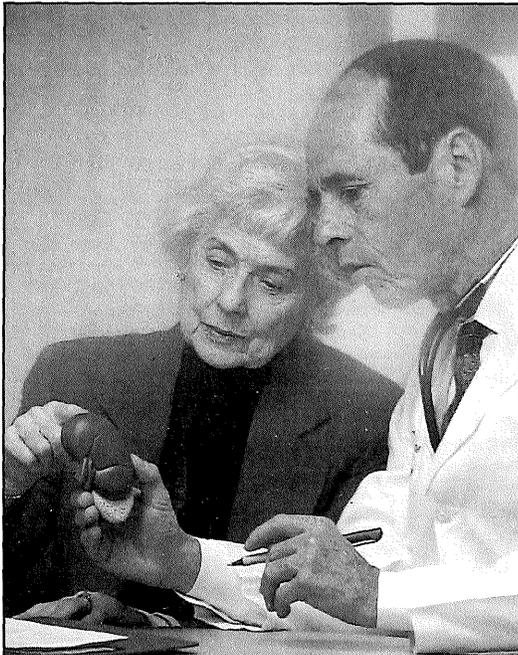
- A** - Assisted Living
- B** - Beauty Shop
- F** - Fitness
- H** - Hospice
- I** - Independent
- M** - Meals
- MC** - Memory Care
- NH** - Nursing Home
- O** - Other Services
- RH** - Rehabilitation
- SP** - Social Programs
- T** - Transportation

TYPE KEY:

- A** - Apartment
- BMR** - Below Market Rate
- C** - Condominium
- CCRC** - Continuing Care Retirement Community
- CP** - Co-op
- MR** - Market Rate
- O** - Own
- R** - Rental
- SNF** - Skilled Nursing Facility
- SR** - Subsidized Rental
- TH** - Town Home



The MHHA symbol denotes residences that are members of the Minnesota Health & Housing Alliance and have adopted their Code of Ethics program.



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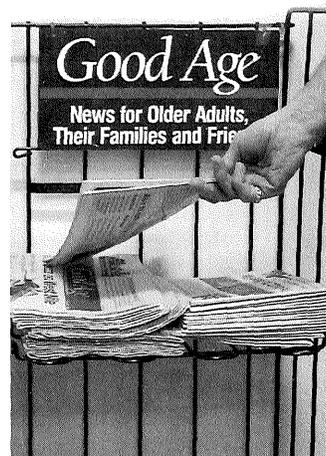
Valuable Health Screenings:

- Hypertension/Blood Pressure*
 - Cardiovascular Risk*
 - Stroke*
 - Diabetes*
 - Cholesterol*
 - Glaucoma
- * these screening available until 3pm - an extra 2 hours

Exhibitors:

Alterra	Mainstreet Village Retirement Village	Scandia Shores Senior Residence
Alzheimers Association	Medica	Sight & Hearing Asson.
American Heart & Stroke Association	Merwin Home Medical	Silver Sneakers
Berman Center	Minneapolis Public Housing Authority	Stratis Health
Emerald Crest of Burnsville	Minnesota DHS/Telephone Equipment Distribution Program	Tourco-Firstline Tours, Inc.
Extendicare Health Facilities	Pfizer Inc.	Washburn McReavy Funeral Chapel
Hamline Health & Wellness	Phillips Eye Institute	Wells Fargo Home Mortgage Inc.
Jones-Harrison Residence	Sabathani Senior Center	WestRidge Retirement Community

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- YMCAs
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www.wilder.org/goodage

The array of senior housing options are a lifestyle choice

From the Minnesota Health and Housing Alliance

Some have the perception of senior housing communities being populated by 55-year-old couples in jogging suits going out for their daily run or a round of golf. Others may think of a nursing home setting. But what is true is that senior housing is more than a place to live – it is a lifestyle. Like other lifestyles, it is a choice that older people can make based on their needs and desires. Since Minnesota has over 1,600 senior housing communities of every type, a wide array of options is available.

However, there are some obvious pros and cons with a move to senior housing. Many people postpone such a decision until they are facing a crisis. When that happens, it is difficult for the older person and their family to explore the many options available, ensure they have accounted for all their needs and desires, and make the best informed choice for their situation. In addition, people moving from a private home to senior housing may experience a sense of loss due to change. Such losses could include the life memories they leave behind in their private home, the cherished garden they nurtured, or a neighbor they would see every day. Two common feelings experienced by older persons are the loss of independence when moving from their long-time home and the fear that they will be unable to make friends in their new setting.

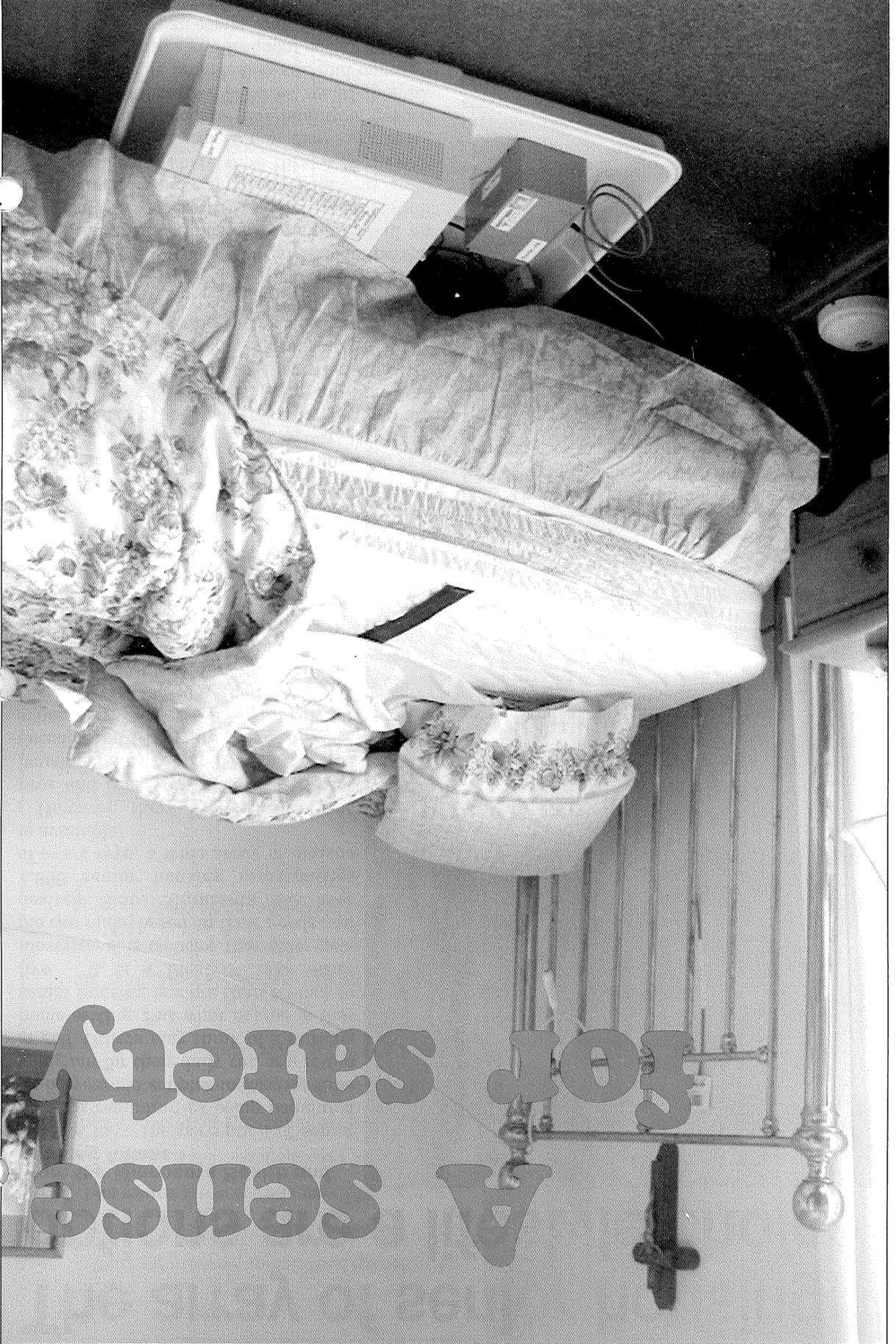
Although a move into senior housing can be a tough choice for older persons, there are tremendous benefits that such settings offer. One national study showed that an older person living in a senior housing community had an average life expectancy of four-and-one-half years longer than a comparable person living in a private home! There were three key reasons cited for the life expectancy increase among senior housing dwellers: availability of needed health and supportive services, well-balanced, nutritious meals provided on-site and opportunities for activities and frequent socialization.

Such housing can compensate for some of the physical losses in life as a person ages, particu-



larly when home maintenance tasks once taken for granted become a burden. Some seniors move just to avoid the mowing, painting, shoveling and other tasks home ownership entails. Others look to the security of a group setting. All senior communities offer opportunities for socialization and companionship. This can be particularly important for those who have lost a spouse or are having problems getting out on their own.

In many senior housing settings, the security of emergency call services is offered, along with health or supportive services as needed. Scheduled transportation to shopping and appointments, personal care with bathing, grooming and dressing, housekeeping and laundry services, meals, and medication reminder services are but some of the common options offered. Depending on the community, many other amenities may be available, including community rooms, beauty and barber shops, garden plots, exercise rooms, libraries, walking paths and more!



A sense
for safety

Smart house's technology keeps an eye on residents

By Thor Carlson

Editor

George Orwell's ominous warning that Big Brother is watching you is taking place every day at a Maplewood assisted living residence.

But rather than keeping tabs on residents' obedience to the party line, as was the case in Orwell's book *1984*, Big Brother at Homestead in Maplewood is a series of sensors scattered throughout apartments that provide another method of protecting residents' safety.

Since implementation of the pilot project in 25 units of the Volunteers of America (VOA)-owned property in December, staff members have discovered a lot.

"There's a lot more that goes on in our building that we didn't know about," says Wayne Olson, VOA vice president of healthcare and housing services. Among those discoveries have been:

- A resident with congestive heart failure and suffering from sleeplessness was spending most of his nights sleeping in his recliner. "We lifted the head of his bed a bit and now he's sleeping the whole night. It's impacted the quality of his life and of his care," Olson says.
- Another resident in a hospice situation was not complaining of any pain, but a check of data from her bed's monitors showed how restless she actually was. Pain medication was adjusted and she was able to be much more comfortable.
- In a third case, monitors showed that a resident was making nighttime trips to the bathroom every half-hour. A trip to the doctor showed that he was actually suffering from internal bleeding and needed to be hospitalized for treatment.
- Finally, the technology came in handy when a resident wasn't even home. A sensor detected that the toilet was running continually and

Left: All of the sensors are linked to a computer hard drive device that is kept under the bed. It connects via phone lines to a computer at the building's main office where data can be compared over time to gauge changes in a resident's behavior. Also, the black strip across the bed mattress collects pulse and respiration readings on residents along with gauging restlessness during their sleep.



Electronic sensors situated throughout apartments at Homestead of Maplewood gauge activity, or lack of activity, that might signal that something is not right with a resident.

support staff were able to get there before the apartment was flooded and possibly costly repairs were needed.

In all three human cases, the technology was able to detect things "that our staff had no way of seeing before the program," says Barb Swanson, the staff nurse of Homestead.

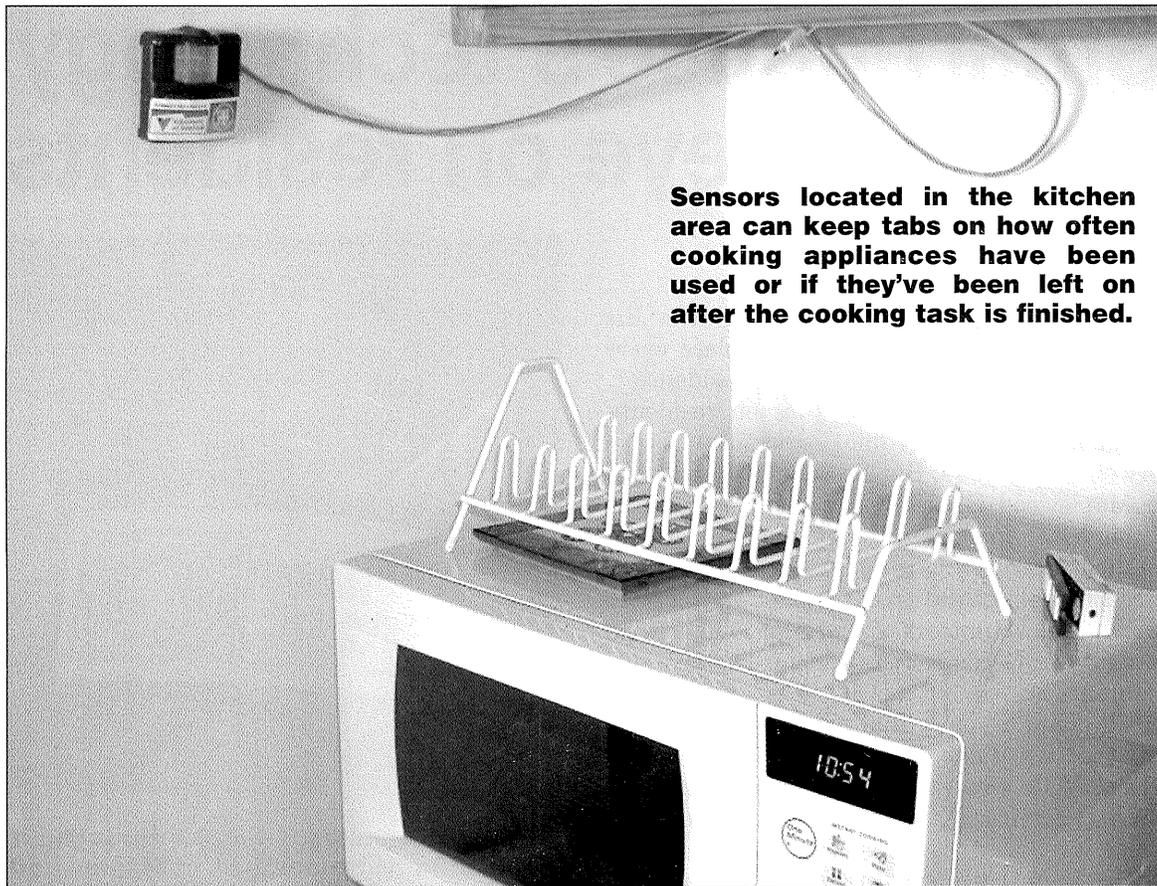
Inference, not intervention

As opposed to emergency call pendants or phone devices, the "smart house" technology isn't designed to immediately report a crisis, Olson says.

"It's mainly designed to collect a stream of information over time that shows longitudinal trends in that person's life," he explains. "When we have enough data, we can give it to someone like Barb to sift through and see that someone has had a significant change in their daily behaviors."

For instance, several sensors are located in the kitchen and can gauge how often a refrigerator door has been opened, if the range has been used for cooking or activity in the microwave. A sudden drop in readings around those areas could signal a change in eating habits for the resident.

Likewise, other sensors are located near the



Sensors located in the kitchen area can keep tabs on how often cooking appliances have been used or if they've been left on after the cooking task is finished.

apartment door, at locations in the bathroom and also around the bed. In the bed, a strap across the mattress can take periodic pulse and respiration readings while a resident is asleep.

All of the wireless sensors communicate to a computer hard drive unit located under the bed, which is tied to the residence office through phone lines. About twice a day data collected is sent to the main computer, where staff members do their periodic checks. Not all residents are checked every day, but residents known to be experiencing medical problems may be checked more frequently.

Through a website and a password, residents' family members can also have access to that information, Olson says.

"Sometimes, people from a distance worry more than they should about their loved one," he said. "This is a good tool to help people know that things are okay."

"We've been providing care to seniors the same way for 100 years," Olson continues. "This technology should be a new way to be truly effective."

It's not as expensive as you might think. VOA has partnered with researchers from the University of Virginia in developing the project. Olson said that an apartment's-worth of sensors can be had for about \$60 at a home supply store like Menard's. The in-room hard drive costs

about \$750. Batteries in the sensors need to be changed about every three months.

The next step

While the pilot project took place in an assisted living facility, VOA and the Virginia researchers started the project with a long-term goal of applying the technology to single-family homes, enabling older homeowners to stay living independently longer. Along with the hardware costs, a home-based system would also have a monthly monitoring fee for health professionals to analyze the collected data.

"This isn't the kind of technology that's going to alert someone if there's an immediate problem, like a heart attack," Olson says. "But how much information we can mine and the analysis we apply might forestall a heart attack by a year or two."

And it also can be an additional piece of information for doctors, other health care providers or family members.

"There are many older people who aren't going to complain about medical situations," Olson says. "They don't want to bother their kids, they might not want to go to the doctor. They might not be taking their medications. But this technology allows us to see what the truth really is and should help strengthen relationships and improve people's quality of life."

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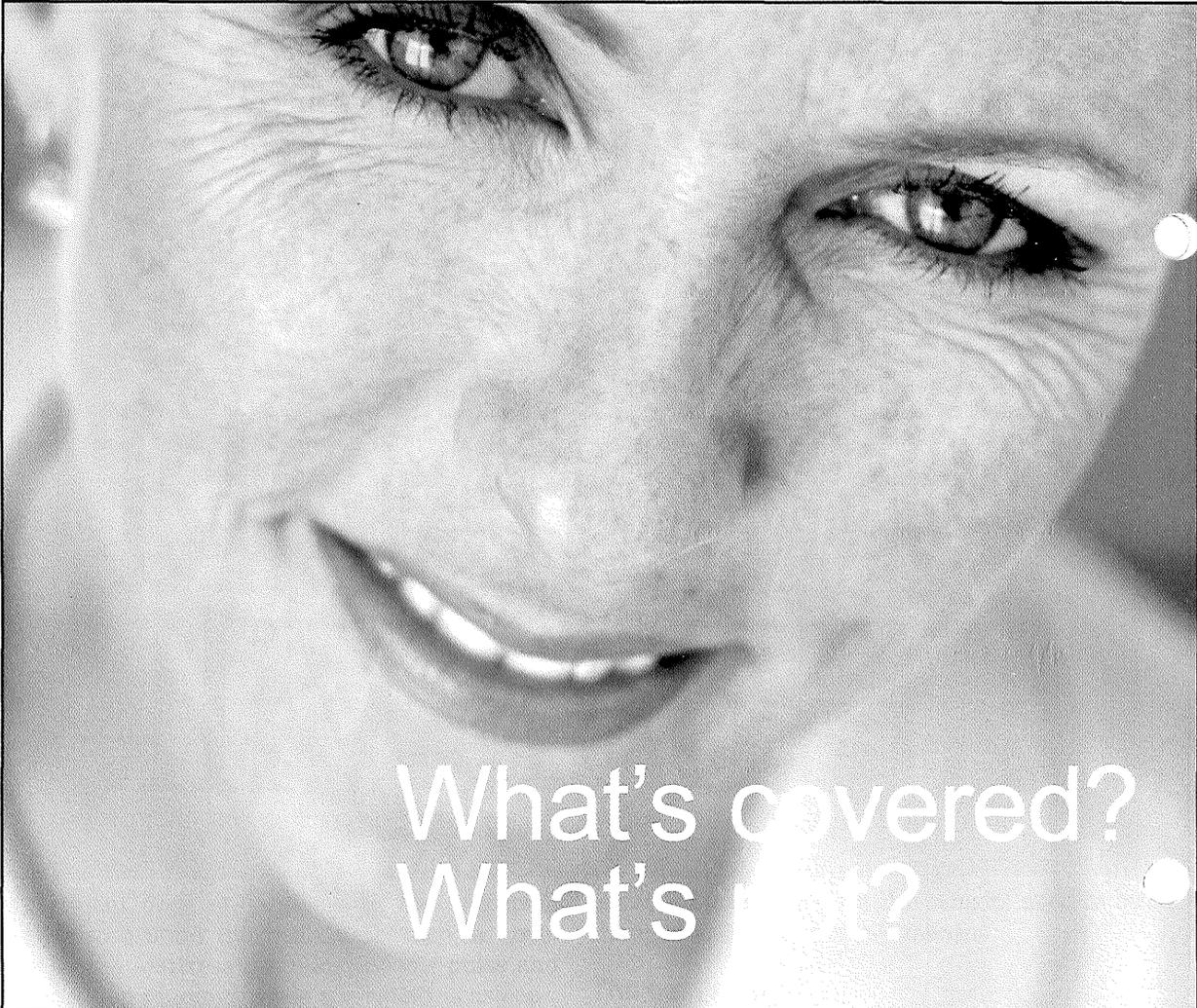


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What is the Minnesota Health & Housing Alliance?

The Minnesota Health & Housing Alliance (MHHA) is a statewide association representing those who provide services for older adults. MHHA membership reflects the complete continuum of services including nursing home care, senior housing with supportive services, independent senior housing and community-based services. MHHA is one of the largest associations of its type in the country, and is nationally recognized for its innovation and leadership on older adult services and related issues.

Mission

- MHHA's mission is to advance excellence and innovation in older adult services. MHHA advances the interests of its members through:
 - **Advocacy**
 - **Public information**
 - **Education**
 - **Products and services relating to the aging services field**
 - **Networking opportunities**

Membership composition

- MHHA membership includes:
 - **171 free-standing nursing**
 - **72 hospital-attached nursing homes**
 - **56 multi-facility organizations**
 - **400 senior housing, housing-with-services and assisted living providers**
 - **130 business partners**
 - **31 associate members**

Our membership represents almost 26,000 beds in nursing homes and over 20,200 units in senior housing residences.

Values

- MHHA member organizations strive to deliver the highest quality care. We value:
 - **Older people and their right to make choices**
 - **Employees, volunteers and the informal networks of family, friends and neighbors who support them**
 - **Accountability to and investment in our communities**
 - **Prudent stewardship of resources**
 - **Integrity, collaboration, innovation and creativity**

Affiliations

- MHHA is the Minnesota affiliate of two national organizations. **The American Association of Homes and Services for the Aging (AAHSA)**, which serves 5,100 not-for-profit nursing homes and senior housing projects throughout the United States. **The Assisted Living Federation of America (ALFA)**, which serves assisted living providers.
- In 2004 MHHA and the **Minnesota HomeCare Association** announced a reciprocal arrangement through which each organization's members benefit from many of the other organization's privileges at member prices.



MHHA Awards

2005 Distinguished Service -
Caregiver of the Year

DOROTHY BERGH

Kittson Memorial

Healthcare Center, Hallock

This year, the MHHA Caregiver of the Year award goes to someone who is not only the face of caregiving today, she is the face of caregiving of the future – someone who is past the “normal” retirement age. Dorothy Bergh, is a certified nursing assistant and restorative aide at Kittson Memorial Healthcare Center.

Kittson Memorial CEO Rick Failing wrote about Bergh that she is the “poster person” for working older adults and that she inspires others much younger than herself as the residents she serves. She began working as a CNA in 1981 and for the past several years has been one of Kittson Memorial’s primary restorative aides. She is professional, compassionate and has a can-do attitude. She’s the first to volunteer to fill shifts when the need arises and first to offer help wherever she is able.

When she is not on duty, Bergh often can be found playing board games with residents, helping them write letters, or just reminiscing with them. To maintain her energy level for all she does, Bergh is an avid enthusiast for biking, hiking, cross-country skiing and canoeing.

Bergh also is active in her community and church and serves the hospital auxiliary in several capacities.

“With her sensitive and compassionate attitude, Dorothy Bergh would be a significant asset to any facility and we at Kittson Memorial Healthcare Center are so fortunate to have her as an employee,” wrote Director of Nurses Kim Anderson.



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