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Center for Aging Services Technologies

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imagine—
the
future
of aging

Vision Video Discussion Guide

Imagine –The Future of Aging: Vision Video Introductory Guide

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Imagine—The Future of Aging: Vision Video Introductory Guide

BACKGROUND

America is facing a major challenge. The way we care for seniors today cannot scale to meet the looming age wave. Our nation needs a vision. A vision that brings together leaders from business, health care and aging services, consumer advocacy, government and research to prepare for the rapid aging of our population. The foundation of the vision is the concept of the "caregiver network." The caregiver network consists of individuals and their family members, extensive care teams in acute and long term care, the community and the technologies that support them. The caregiver network will strengthen relationships and help individuals age healthily and independently in the place they call home.

The *Imagine—the Future of Aging* video will give you a glimpse, through the eyes of one family, of what the future of aging could look like with help from developing technologies that are possible, practical, affordable and ethical. You'll also see how these technologies have the potential to improve care, preserve independence and ensure quality of life for seniors while reducing costs. We must, however, take action through vision, leadership and national commitment to prepare for the demographic and economic changes that will inevitably transform aging.

This video is designed to help viewers understand the ways that care can be provided in the future. With the knowledge and skill sets existing among aging-services providers, research universities and the technology industry, the opportunity to re-invent healthcare and our field is emerging. Aging-services providers are positioned to be leaders in care transformation. However, we need to start planning for these changes now. As technologies that keep people independent and healthy are developed, tomorrow's seniors will want access to these solutions. We must begin planning for change now so we will be prepared to provide cutting-edge high-tech services that tomorrow's seniors will demand. New competitors eager to take advantage of technology-based home-care-delivery systems will appear. As providers of aging services, you are the expert in meeting the needs of older adults and are uniquely positioned to offer these services.

This video's story is based on a vision of where the aging-services technology field could be in 5 - 10 years. To transform this vision into a reality, providers must:

- Strategically explore and prudently plan the elements depicted in the vision.

- Reshape existing service models to maximize the opportunities technologies offers to the field.

- Prepare for changing consumer demands, including technology-driven care options that can be offered at home or in the greater community.

This video is the start of that process. Working together, CAST and AAHSA members will take technology's potential and use it to create the future of aging services.

TECHNOLOGIES IN THE VIDEO

The technologies and concepts described below are listed in the order they appear in the video. When viewing the video for the first time, it is recommended to use this section as a guide. Feel free to print extra copies as needed.

- *Connecting Families*
  Through the technologies shown, family caregivers can support older adults even though they may live far away.

- *Monitoring Activities of Daily Living*
  Via a system of sensors throughout the home, family caregivers can have a sense of how well their loved one is doing. If needed, family members and care providers can respond immediately. There are currently monitoring systems in the market and these will continue to improve. These systems can be used in both home-based and facility-based services.

- *Caregiver Network*
  This is a new concept that offers many possibilities for AAHSA members. It involves developing technology-enabled networks between the older adult, family members, caregivers, doctors, nurses, providers and other families in the same position. The ultimate outcome will be enhanced integration of vital information among all key members of an individual's personal and professional support system to improve quality of care/services and quality of life. While these networks are not in place today and are currently a critical discussion topic, one day these services will be offered in a variety of valuable ways.

■ *Portable Pill Dispenser and Watch Alert*

As people age, medication errors can become a serious problem. There are a number of home medication dispensing systems on the market. The major challenge with most current medication dispensing devices is that they are not portable. However, portable medication dispensing integrated with devices such as cell phones and Personal Digital Assistants (PDAs) can remind an individual when to take their medication and actually dispense the correct dosages. Such portable systems are in development.

■ *Electronic Health Information*

With an individual's permission, caregivers can access their medical data. The medical care team will have information at their fingertips. Over the next 10 years there will be a windfall of electronic medical records (EHR) and personal health records (PHR).

■ *Privacy Respected and Protected*

A variety of security steps can be built in to protect an individual's privacy. When the physician logs on to his tablet computer, the system first reads his fingerprint. Medical information is only shared with the approval of the owner of the information. Privacy and security need to be built in to these systems from the ground up—and the technology for added layers of security for all data shared is under development.

Smart Appliances

Sensors can detect whether or not an appliance is in use. If the appliance is not being used, it can be automatically turned off, even if nobody is inside the house. The video uses the kitchen stove as an example—however, this technology can be applied to any home feature. These technologies are already available.

EHR - Medical Database

The care team can access all of the older adult's information, which saves time and reduces medical errors. The Veterans Administration has a comprehensive medical records system proven to improve levels of care. Some providers are already moving forward with their own EHR systems. The challenge is to develop comprehensive minimum functions and interoperability. Your organization can learn more about standards by visiting the CAST Web site (www.agingtech.org). CAST hosts a volunteer task group that participates in standards development activities. CAST also co-sponsors the Health Information Technology in Long-Term Care Summit and offers sessions at AAHSA conferences to provide the latest information on EHRs to AAHSA members.

Personal Health Records

Older adults can access their own health information and can share that information with family members and caregivers. The video depicts a health card, similar to a credit card, that can store medical data. The latest information from the visit can be uploaded to the health card. Check-in and electronic form completion can save time through the health card. The challenge with current products is that they are not easy to share among different providers. This type of technology is now on the market in a limited basis. Progress in standards development will make personal health records more widespread and soon every American will have access to their own health information.

Two-Way Video Communication

Whether loved ones are 12 or 1,200 miles away, live two-way video communication can help keep the older adult connected to family and friends. Technologies exist today to make this a reality. One system that connects people through a television set top box is under trial in Europe and should be available in the United States in the next five years.

Non-Invasive Blood Glucose Readings

Cutting-edge technologies to monitor blood levels of glucose and other compounds are currently under research and development. Rather than drawing blood with a needle, small portable devices can scan the surface of the skin, interpret the data and transmit it directly to the care team. This type of technology can dramatically improve compliance in management of chronic diseases like diabetes. Such technologies could be available in the next several years.

Games with Embedded Assessment Tools

These technologies allow the monitoring of cognitive functions over long periods of time. Changes inactivity or behavior can be identified and analyzed by care providers. Meanwhile, the older adult engages in enjoyable activities, like poker or solitaire. Embedded technologies are being researched in university environments and should be available in the next six to eight years.

Our future education programs will include more in-depth discussions regarding these types of technologies. To learn more about emerging technologies, products and pilot projects, visitwww.agingtech.org and click on the "Clearinghouse" tab. This section contains information submitted by researchers, technology developers and providers. Your organization can post information to the clearinghouse if you are involved in a pilot project or are currently using or testing technologies.

USING THE VIDEO

Keeping in mind the above key concepts and technologies, the following suggestions will assist you and your organization in best using the video:

1. **Show the video to your key staff and board members to start a regular dialogue about the impact these emerging technologies will have on the field—and on your organization's vision, mission and business model.**

   Boards, senior staff, committees and planning groups all need to start thinking about how these technologies may impact your organization's services in the near and distant future. The convergence of shifting consumer (baby boomer) needs/expectations and the reality that emerging technologies will enable such individuals to remain at home (in non-facility-based environments) much longer, requires today's aging services providers to explore how to sustain their mission while diversifying services in non-traditional ways:

   Host discussions with all staff on what these changes could mean to the way you offer services.

   Discuss how these technologies can be incorporated into your current work.

   Brainstorm how to expand and diversify technology-enabled care, and services, without necessarily adding facility-based programs.

   Regardless of what level or type of care/services you have been offering, how can these technologies enhance both facility-based and non-facility-based programs?

   If you have resident and/or family councils, show them the video to get their input—as well as to demonstrate your organization's interest in studying and developing innovative, consumer-friendly services.

Plan to position your organization as a leader in this newly emerging market. Expand your dialogue to other organizations when possible—and keep in mind that the CAST Web site (www.agingtech.org) offers an online discussion board dedicated to themes from *Imagine—the Future of Aging.*

2. **Explore the "caregiver network" concept throughout your organization.**

   The caregiver network consists of the individual and their family members, physicians and extensive care teams, the community and the technologies that support them. The caregiver network can strengthen relationships and help individuals remain independent and healthy in the places they call home. The caregiver network concept is the foundation for the way care will be provided in the future. CAST will facilitate discussions with AAHSA members as you explore the caregiver network concept. Your organization should start planning now for the development of a caregiver network in your area.

   Have regular organization-wide discussions about the caregiver network concept and what it means to you, your residents and their families, your organization, and your community.

   Brainstorm strategies for developing a caregiver network. Discuss what a caregiver network could look like in your area including the extensive care team and the technologies and services that support them.

   Make the caregiver network concept and their supporting technologies part of your organization's long-term strategic planning process.

   Discuss how present and future technologies might best support your internal teams and the future caregiver network.

3. **Think locally, act locally, understand your needs and partner with companies and universities.**

   It is critical for aging services providers to understand your needs, and then identify nearby universities and companies that are potential partners for future technology trials and pilots:

   Be open to both traditional and non-traditional partners in this regard, as emerging technologies will change the very landscape of our field and will require collaborations you may not have previously imagined.

   Organizations that are responsive to such partnering opportunities will likely have a competitive, innovative edge on productively integrating emerging technologies within existing and new service models.

When your organization determines you are interested in a pilot project or other partnering initiative, let us know. Visit www.agingtech.org and post information about your organization and

the type of partnership you are looking for in the "partnering opportunities" section and fill in the Pilots questionnaire posted on the "Pilots" section. CAST can help you objectively evaluate these technologies.

4. **Make emerging technology a component of your organization's integrated strategic plan.**

   As your organization develops and refines its integrated strategic plan, be sure to include a technology component that reflects the above strategic dialogue about technology *and* the partnerships you are considering:

   > AAHSA Quality First, the aging-services field's quality improvement initiative, specifies the characteristics of the ideal quality aging-services organization. Quality First's "Governance and Accountability" element suggests that your integrated strategic plan include a component addressing the use of technologies to improve care and services.

   > This section of your plan should demonstrate how technologies can improve services to your residents/consumers.

   > Appoint a staff person to monitor and research how new, emerging technologies will influence the delivery of care and services to your current and future consumers.

   > Formalize your plans (including the needed human/financial resources required) to partner around future technology trials and pilots with strategically key universities and/or companies you've identified.

   > Strategize how current and emerging technologies are likely to impact all aspects of your organization—and appropriately integrate those implications/opportunities (and benefits/costs) within your holistic strategic plan.

   > Build the apparent implications of emerging technologies (including better enabling consumer demand for expanded home-based services options) into your SWOT (Strengths/Weaknesses/Opportunities/Threats) analysis, so as to better formulate and adjust your strategic plan and service delivery model.

Your adoption and strategic integration of aging services technologies will position your organization to be better prepared for our changing marketplace—and will contribute greatly to promoting service excellence and earning consumer confidence.

5. **Reach out to local, state and federal government representatives.**

As you work with local, state and federal leaders, show the video to help demonstrate the leadership of your organization in creating the future of aging services:

Policy changes will need to take place to help technology flow into the market and improve the experience of aging and aging services.

Brainstorm with key staff, board members, fellow aging services organizations, your state association and CAST/AAHSA to determine how to best advocate with your representatives to foster the local and national commitments necessary to advance emerging technologies (and their promise for our field).

If you have a meeting scheduled with government leaders, contact Majd Alwan at malwan@agingtech.org to request a complimentary copy of the DVD for the meeting participants.

In the near future, CAST will be sharing policy papers, which you will be able to use to communicate key messages to our political leaders.

CONCLUSION

Given our rapidly changing world and the demographic implications looming on the horizon, today's not-for-profit aging services provider is at a critical juncture. Will you be able to successfully transform your organization to prepare for the future, while remaining true to your mission? There are many roads to consider—but the opportunities that emerging technologies have to offer may present our most advantageous path.

As CAST expands, more in-depth information on these various emerging technologies (and others being developed) will be provided. Join CAST and AAHSA on this visionary journey—and help create the foundation that will ensure technology solutions attain their fullest potential to meet the needs of our aging society.

ACKNOWLEDGEMENTS

About CAST

The Center for Aging Services Technologies (CAST) is leading the charge to expedite the development, evaluation and adoption of emerging technologies that will transform the aging experience.

CAST four focus areas:

1. Driving a global vision of how technologies can improve the quality of life for seniors while reducing health care costs;

2. Accelerating technology research and development through pilot evaluations with seniors;

3. Advocating to remove barriers to the rapid commercialization of proven solutions; and

4. Promoting dialogue about standards to ensure interoperability and widespread access to aging-services technologies.

CAST is now an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives working together under the auspices of the American Association of Homes and Services for the Aging (www.aahsa.org). The members of AAHSA help millions of individuals and their families every day through mission-driven, not-for-profit organizations dedicated to providing the services that people need, when they need them, in the place they call home.

Contact CAST

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