

# ASSISTIVE TECHNOLOGY INVITATIONAL ROUNDTABLE

## *BUILDING A CALIFORNIA ASSISTIVE TECHNOLOGY INITIATIVE*

June 5, 2008

SACRAMENTO, CALIFORNIA

CO-CONVENERS:

Independent Living Partnership (ILP)

California Department of Aging (CDA)

California State University – Fullerton (CSUF)

## ASSISTIVE TECHNOLOGY INVITATIONAL ROUNDTABLE

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### **I. FRAMEWORK FOR ASSISTIVE TECHNOLOGY ROUNDTABLE**

Momentum for convening this roundtable discussion, in part, came from the Assistive Technology movement evidenced at the 2005 White House Conference on Aging (WHCoA) in Washington, DC, at which California had the largest delegation in attendance. Resolutions adopted by the California delegation prior to the conference and those discussed at the WHCoA reflect a growing acknowledgement that the future trend of caring for those seniors and adults with disabilities in need will be enhanced and sustained with the application of new technologies. The largest group of vendors displaying their products at the Conference represented assistive technology, including members of a newly formed Center for Aging Services Technologies (CAST).

Another factor in spurring interest in convening the roundtable discussion came from the Independent Living Partnership (ILP), a non-profit advocacy and service organization in Riverside County. In its efforts to promote independent living by seniors and adults with disabilities, ILP recognized the need for information dissemination and promotion of the concept of utilizing Assistive Technology (AT) that already exists, and in promoting the development of new technologies in the future. Approaching the California Department of Aging (CDA) and the California State University, Fullerton Institute of Gerontology (CSUF), ILP was excited to gain the support of these entities to move an Assistive Technology Initiative forward.

Also framing the discussion was the idea that "Assistive Technology" (AT) not only refers to the "high tech" products on the market or in the pipeline, but also the "low tech/no tech" and "gadgets" that individuals devise to help them live safely and with dignity. AT is a means to an end – empowering people so they can live independently, participate in their communities, and stay connected with families and loved ones. It also is a tool for achieving health care and support services cost savings and other economic and social benefits.

Finally, framing the discussion was the belief that:

- A. California is well positioned to take a leadership role in the Assistive Technology arena;
- B. Silicon Valley has taken initial steps to develop high tech reporting and communication systems in client tracking and treatment;
- C. California academic institutions are well-positioned through established and well recognized Gerontology Centers; and
- D. The Department of Aging and the Independent Living Partnership are positioned to promote an AT initiative through California's aging network and directly with individual seniors and adults with disabilities at the local level.

### **II. PURPOSE OF ASSISTIVE TECHNOLOGY ROUNDTABLE**

Within the framework described above, the three co-convening organizations agreed that a focused discussion with key leaders from throughout California was a necessary beginning step. The purpose of the Roundtable was to hear from these leaders as to how California could partner with public and private sector entities to position the State as a leader in meeting the Assistive Technology needs of a broad audience of consumers, not just a targeted population of seniors and adults with disabilities and their caregivers – an “AT for All” approach.

It was further agreed that the session would be by invitation only so that key leaders from the public and private sectors, including representatives from the corporate community, service providers, educators, researchers, government, end users, caregivers, and advocates could contribute to the discussion and determine the level of interest we, at this table, have to move forward on a *California AT Initiative*. Twenty-eight organization representatives were invited and twenty-three participated in the Roundtable.

### **III. DISCUSSION THEMES**

#### **A. Need for Development and Application of Assistive Technology**

Discussion points focused primarily on two areas:

##### **1. Demographic / Financial Challenges and Opportunities**

- a. With California’s exponentially growing senior population, particularly those 85 years and older, the State will be challenged in meeting their needs under the State’s current funding and delivery mechanisms.
- b. California’s continuing and growing fiscal challenges will force the State leadership to explore and deploy alternative ways of supporting the targeted population.
- c. The health care system will also be challenged, particularly in rural California, to deliver affordable health care services.
- d. Paid caregivers will need AT to help them care for their clients and make home care cost effective in the future. Rising gasoline prices alone will challenge in-home care providers to rein in costs.
- e. Assistive Technology applies to all people of all ages and conditions, including those with brain injuries from Iraq and Afghanistan. Therefore, the target audience for AT development and application is very large not only in California and throughout the United States, but as a world-wide industry.

##### **2. Making the Value Argument**

- a. There is a lack of awareness that when AT works, it can result in cost-savings through an increase in the efficiency of the long-term care workforce, extend the role of the family caregiver, and reduce health care costs. It can also prevent people from falling into the expensive long-term care institutional setting. While some data exists, more must be collected and brought together to support the value argument for widespread access to, and coverage of, AT.
- b. Policymakers, legislators and payers need empirical data on the potential cost-savings and other economic and social benefits associated with the use of Assistive Technology.
- c. The Intel chair, in a Fortune Magazine article, stated that if we can keep people independent at home for an additional two years, we can save \$30 billion in health care costs.
- d. The business community and state officials must be convinced that a robust AT industry in California will benefit the State because of its potential as an economic engine similar to the technology industry in Silicon Valley and the biotechnology industry in San Diego.

**B. Barriers to Widespread Adoption and Use of Assistive Technology**

While numerous barriers and challenges to the development, adoption, and use of AT were discussed at length, the following key points were identified:

1. There is a lack of payer coverage of, and reimbursement for, many Assistive Technologies. There are many AT disincentives built into the Medicare / Medicaid policies that need to be addressed with a greater and collective voice from the consuming public. These policies hinder access and prevent many service providers from informing consumers about AT's availability. Likewise, these restrictive coverage and reimbursement limitations discourage smaller technology companies from entering the AT arena.
  2. Psychologically, the use of Assistive Technology is not an issue; it is a matter of how we incorporate AT into our daily living activities, i.e., making a lifestyle change. However, from a practical standpoint, many older consumers have negative attitudes about Assistive Technology and how they view themselves as current or potential users because they do not see themselves as having disabilities of any sort.
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3. Many developers are skeptical about investing manpower and financial resources in Assistive Technology as they are not aware of the potential extent of the market. However, examples of a growing market, whether targeted or not, are surfacing. While the Nintendo Wii game was intended for kids and marketed to the buying grandparents, the grandparents discovered that they liked the game and kept it for themselves to use for entertainment and memory stimulation.
  4. Currently, aging Boomers are not demanding Assistive Technology, although the potential for increasing demand is looming as more boomers become caregivers. This lack of a strong market demand for Assistive

Technology prevents many venture capitalists from providing funding support for technology companies. This is an evolving field, not an area for investment “home runs”. For example, a Silicon Valley firm has developed a hearing aid for under \$100, but it cannot find venture capital to mass produce the assistive device.

5. Many young researchers are in denial about growing older, therefore, do not recognize a potential market for AT in the aging Boomer population. As many AT products are designed and built by these younger people, they do not understand the dynamics of the market for which they are designing. Thirty-five percent of consumer electronics are returned to retailers because buyers cannot figure out how to assemble or use them.
6. Some developers/investors view the vast rural areas of California as a negative because technology applications are limited. On the other hand, rural areas present opportunities for certain communication technology initiatives.
7. Many health and social service providers are skeptical of AT, fearing it will take away their jobs. However, AT has the potential to help them perform their jobs more efficiently and cost effectively.

### **C. Opportunities for Building a Robust Assistive Technology Industry in California**

All of the above barriers identified by the roundtable participants must be addressed if California is to be home to a robust and profitable Assistive Technology industry. It was recognized that substantial opportunities exist for building this industry in the State.

#### **1. Existing Technology Industry**

The reality from the business perspective is that while there is a responsibility to make money for investors, that cannot be done unless a

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compelling market need is met. So there is a strong desire in the business community to understand what the needs are - not the AT needs, rather the pressing needs of our target audiences. Caregivers, consumers, and service providers know what those needs are, and need to be brought into the discussion to help the business community determine if there is a technology to solve the problem.

Technology companies that are active in the market need help identifying the real-life needs of the target audience since they will enter a market only when they see a pressing need. One way is to identify the major issues of concern to the aging field (transportation, housing, health care, etc.) and identify technologies that could be adapted to these areas.

CAST has started the process by breaking down Assistive Technology into four categories:

- a. Home environment
- b. Health and well-being
- c. Social connectiveness
- d. Care management

It is crucial that a systematic approach should be taken to identify gaps and needs within each of these categories and determine how AT could be used to fill these gaps and meet the needs.

A tailored business model could then assist the private sector in addressing this potential market.

## 2. Creating an Assistive Technology Laboratory

While AT testing labs exist on the east coast, there are currently no academically based development and testing labs on the West Coast that bring developers together with end users to evaluate and validate real-life everyday uses of Assistive Technology. The model (MIT AgeLab and other labs) for creating such a lab exists and can be replicated in California. While Front Porch has just launched a Center for Technology Innovation and Wellbeing to test AT directly with their residents and staff, more widespread testing and evaluation of products with consumers is greatly needed.

Part of CAST's vision is to have centers of excellence established where universities, engineering departments, and potential funders can come together to partner in testing technologies.

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## 3. Establishing Assistive Technology Training and Certification

While we have certification for contractors, cosmetologists and other groups, there are no standards in place for AT specialists. This is of growing importance as AT gains more widespread use, particularly in home monitoring where privacy and security issues come into play.

California's academic institutions are already positioned to take on a role of providing training and a certification process for Assistive Technology specialists who can help caregivers, seniors, and others understand, install, and use Assistive Technology to maximum benefit. Because gerontology centers at CSUF and the University of Southern California (USC) have expressed interest in this area, the State could position itself in a training, education and research leadership role in a *California AT Initiative*.

## **D. Promoting Assistive Technology Applications**

### 1. Need for Information, Education, Advocacy

Numerous academic institutions, small start-up companies, large companies, and service providers are already working on developing, marketing and utilizing Assistive Technology. While this significant amount of work is being done across California and in other states and countries, most people are unaware of what others are doing, especially across different industry sectors. The state can help get the word out about best practices that show AT cost effectiveness; however, participants felt that those at the table have an opportunity to pull this information together and become a clearinghouse as well as a dissemination agent to keep people informed so we avoid reinventing the wheel.

It is important to remember that taking AT into homes across California requires a major paradigm shift. As a result, we need to spend time assessing how people think about their health and wellness, how providers

work today, how payment systems are set up, and other issues. We need to re-envision how we deliver services to people. We need to educate people on how to think about AT and how to incorporate it into their lives, not just how to operate it.

We must also remember there is a training and maintenance piece to the use of AT. In many cases, no one comes and shows users how to use it. If it breaks, users can be without the device for what can be months at a time. To move an AT initiative forward, we have to think about how we are covering costs and how we are helping people maintain their devices. We also must make sure that training is available so users do not spend all their money to get a device and then not be able to use or maintain it.

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Efforts to inform and educate consumers about the availability and value of Assistive Technology require sophisticated marketing skills and resources. Building a *California AT Initiative* needs a prominent spokesperson or spokespersons. California's entertainment industry should be mobilized to heighten awareness and bring Assistive Technology into the mainstream through its inclusion in film and television programs. This AT initiative could provide an excellent opportunity for the California Department of Aging to take a leadership role at the state level to promote and advocate on this issue, such as rewarding Area Agencies on Aging for including creative AT initiatives in their local area plans.

A variety of audiences should be targeted for information and education initiatives addressing the availability of, and benefits associated with, the use of Assistive Technology. Various organizations need to be enlisted to help advocate for the more widespread availability and use of Assistive Technology across California.

## 2. Leaders, Organizations, Public and Private Sector Groups, and Consumers Need to be Enlisted in a *California Assistive Technology Initiative*

a. Consumers and Service Providers – These individuals and groups are generally unaware of Assistive Technology and its potential for helping people become and remain independent. A survey by the Alliance for Technology Access (ATA) found that the lack of information on the uses and availability of AT is the number one barrier when people try to obtain these tools. In addition, providers do not inform patients because they fear they cannot afford the AT. CAST conducted focus groups with Boomers and found that consumers typically do not understand Assistive Technology or its potential benefits to them or to the ones they are caring for. When they need these technologies in caring for a loved one, they do not know where to turn for help, and when they find them, the resources to cover the cost may not be there.

A Health Hero Medicare demonstration project suggests that the use of AT can help cut costs of care in half. But only 35% of the patients use the technology even when their doctors tell them to use it. It is a consumer and provider education challenge.

- b. Formal and Informal Caregivers – These caregivers need to know about the availability and benefits of Assistive Technology, especially as more people are shifted from institutional settings to the home setting as part of the rebalancing of the long-term care system under the Olmstead Act. An AARP report (Healthy@Home)

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concludes that we need to find out from caregivers why those they are caring for do not want to use a particular item so we can better plan for and market AT.

- c. Boomers – Aging Boomers often are in denial about growing older and its associated limitations. They should be educated on how Assistive Technology can help them as caregivers as well as how it can help those for whom they are providing assistance.
- d. Policy and Administration Decision Makers – Champions in the State Legislature should be identified and enlisted in education efforts targeting legislators, their staff, and other policymakers. Administration leadership also needs to be informed of their critical role in promoting AT that cuts across our service delivery silos. This includes the California Department of Finance (DoF) leaders who are generally unaware of the potential cost-savings and other benefits associated with the utilization of Assistive Technology. This lack of information hinders the enactment of legislation and policies that would help ensure the widespread availability of such technologies. Therefore, lawmakers and government decision makers must be educated to recognize this is a public policy issue needing attention. California policy and administration decision makers can also learn how to promote the utilization of AT, i.e., telemonitoring, telehealth, medication dispensing devices, etc., from other states that are building in reimbursement through their Medicaid waiver programs.
- e. Academic Institutions – AT research is one piece from the academic perspective. Education is another. Businesses and companies that develop and market AT want some validation of a product before they create and take it to market. They want experts to look at it; test it in real life settings; and/or link it with known university names to give it legitimacy.
- f. Private and Public Payers – These parties need information proving the cost-savings associated with the use of Assistive Technology so they can be persuaded to broaden their coverage and reimbursement policies.
- g. Wellness Maintenance Market – This group, such as Kaiser Permanente, which covers all ages, should be educated about the potential role of Assistive Technologies in helping people maintain optimal levels of health and independence.

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- h. Investment Community – Financial institutions such as Calpers, should be encouraged to invest in the Assistive Technology industry.
- i. Health Care Delivery System - The health care delivery system is a major touch point for consumers who could benefit from Assistive Technology. Physicians, nurses and other health care professionals should be educated so they can inform their patients of AT availability and use. Medical schools should be approached to add curricula for medical students on geriatric needs, including the application of Assistive Technology. The first wave of AT research has taken place so the current focus should be on creating an infrastructure and reorganizing delivery systems with incentives that will encourage the application of AT and achieve demonstrated cost savings.
- j. Area Agencies on Aging and Service Provider Agencies – The aging network and service provider community throughout California, through their sponsored help lines and websites, are a major source of information for clients and caregivers when they need help. These agencies should be educated and informed about Assistive Technology so they, in turn, can inform their clients. A distribution infra-structure needs to be established across California along with AT cost reimbursement models.
- k. Independent Living Centers – California Independent Living Centers have advocates who could be mobilized and included in the larger advocacy effort; AT Access Centers have family empowerment centers (for youth and other ages) that could be enlisted as well.
- l. Employers – Employers should be informed of the availability and benefits of Assistive Technology so they in turn can educate their employees who are acting in caregiver roles. Employers also need to know how Assistive Technology can help reduce employee caregiver absenteeism and loss of productivity. Employers also need to know how they can use AT (ergonomics) to retain older skilled talent.
- m. Retailers – While retailers such as Wal-Mart, Costco, and Walgreens, sell products that qualify as Assistive Technology, they need to be educated on how to promote or label these products as such, and inform their customers of their availability and use.
- n. Non-Profit Sector – The non-profit sector can be enlisted to play a vital education and advocacy role. California is the birthplace of the independent living movement and there are a significant number of  
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non-profit organizations that serve and represent this population. Local Councils of Churches could also play a role, particularly in rural areas.
- o. Senior and Disabled Communities – These communities, which represent thousands of individuals across California, should be brought together to create a powerful machine to advocate for the development, availability and use of Assistive Technology. We need

a spokesperson to validate all of the activities related to a *California AT Initiative*. That high profile validation would send a signal to AT developers, companies, venture capitalists and others that what is being done in AT development, marketing, and promotion is important.

- p. WHCoA California Delegation – The majority of the California appointed delegates to the 2005 WHCoA have expressed interest in advocating for initiatives that support resolutions adopted at the 2005 event. The delegates represent an advocacy force that could be mobilized to support a *California Assistive Technology Initiative* across the state.

#### **IV. RECOMMENDED SHORT-TERM STEPS**

As a result of the roundtable discussion, participants recommended that the following short-term steps be taken:

##### **A. The Conveners Should Work Together to Sustain this *California Assistive Technology Initiative***

The group felt a momentum was established among the participants representing many aspects of the Assistive Technology arena. The three convener groups (ILP, CDA, CSUF) were asked to sustain this initiative on an on-going basis by coordinating future meetings of the group. The Independent Living Partnership volunteered to act as coordinator. CSUF offered to host a next meeting in Fullerton. The SmartSilvers Alliance volunteered to host a future meeting in Silicon Valley.

##### **B. Broaden Scope of Invited Participants**

The group felt we should broaden the scope of the discussion by including representatives from other sectors, including state government and the health care delivery system.

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##### **C. Video Conferencing**

Video conferencing and other technology should be considered to bridge the distance gap and bring more people into the dialog as the *California AT Initiative* moves forward.

##### **D. Establish a Quasi-Official Coalition Status**

Several members of the group suggested we explore becoming a quasi-official coalition to elevate our profile among legislators, policymakers, and other important constituencies, and enhance our effectiveness in addressing issues raised by the participants. Precedent has been established with other coalitions, such as the group established under Governor Schwarzenegger's Executive Order S-12-06, to improve health and health care through the rapid implementation of health information technology.

##### **E. Establish Clear and Precise Goals and Desired Outcomes**

Because the number of challenges and opportunities associated with Assistive Technology is endless, this coalition must be specific about the issues it wants to address. The coalition needs to establish clear and precise goals and desired outcomes.

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