



# **Evolving Aging Services Technology Landscape**

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Majd Alwan, VP

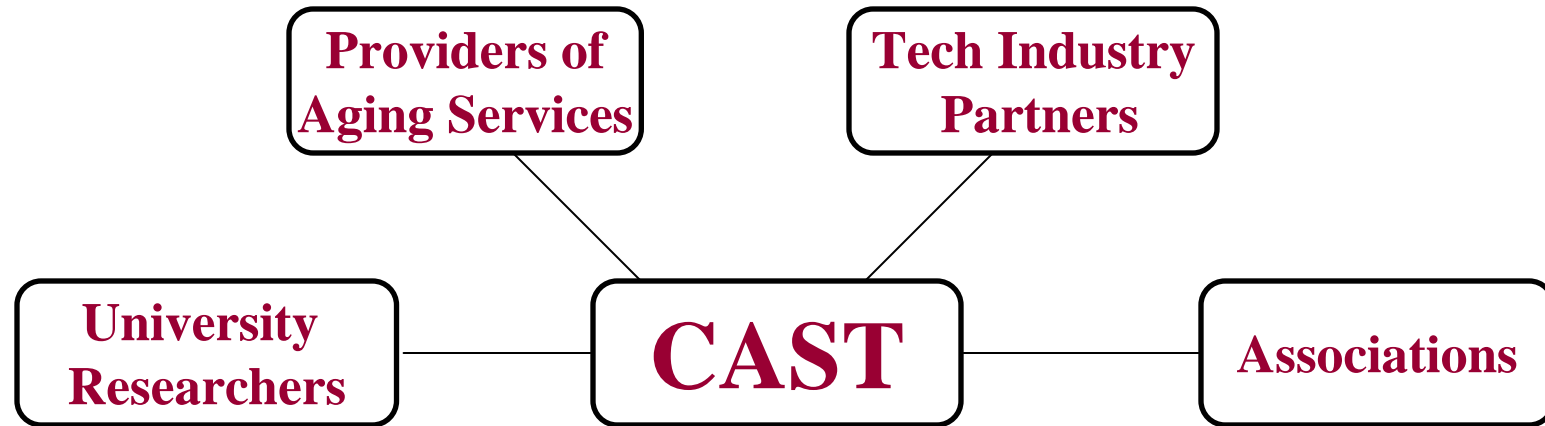
**Center for Aging Services Technologies (CAST)**

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

COLLAGE Symposium

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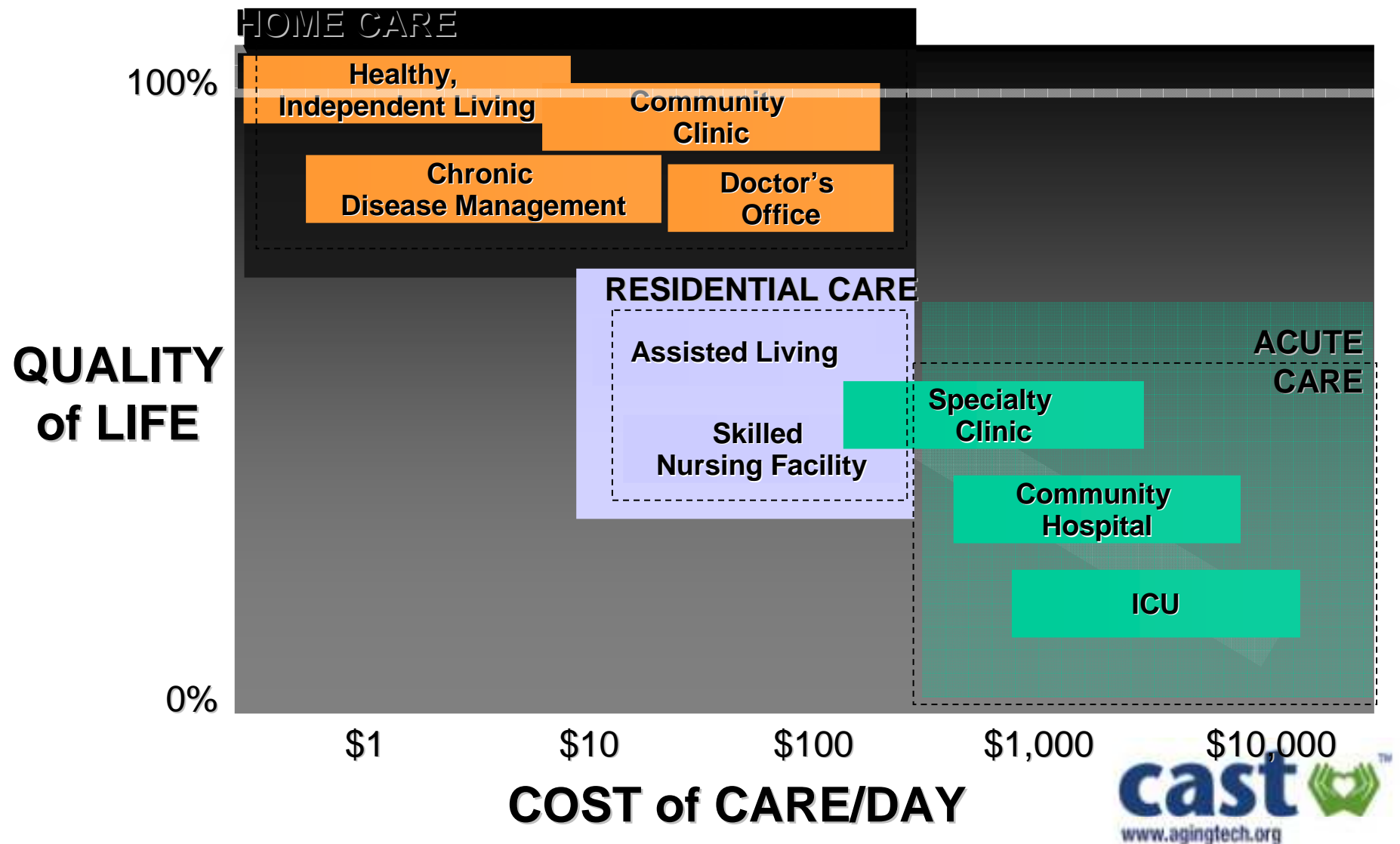
# What is CAST?



The Center for Aging Services Technologies is a national coalition of more than 400 organizations working together to improve the aging experience through technology



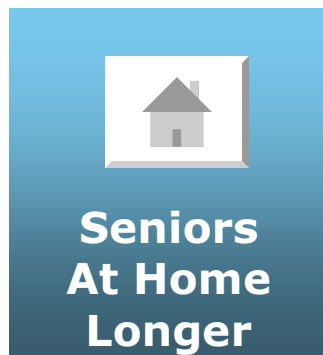
# "Shift Left" through Technology





# Value

**Innovative care models with smart technology**



**...more efficient care with reduced care burden**

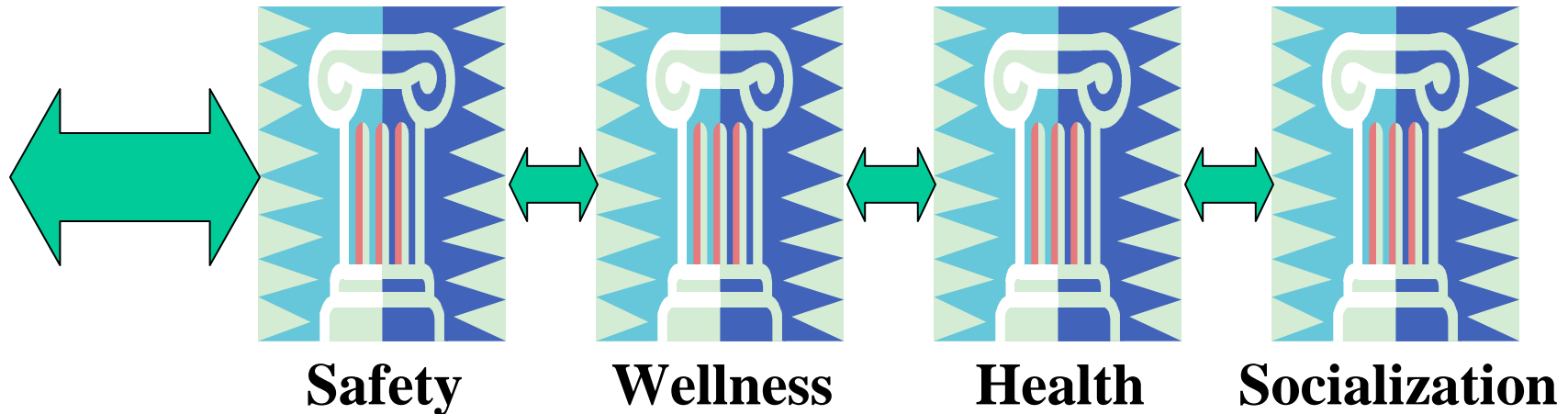
# CAST Focus Areas

- **Pilots:** Identifying needs that can be addressed by technology and accelerating applied research with older adults and aging service providers
- **Policy:** Identifying barriers to the proliferation of proven and appropriate technologies and advocating to remove these barriers (Federal and State)
- **Standards:** *Promoting development of standards to ensure interoperability and widespread access to aging services technologies*
- **Education:** Disseminating information and resources

# Home for Life

Senior  
(Quality of Life)

Supportive Services



Physical Environment

# Safety Technologies

**Wearable devices:**  
(PERS, automatic fall detectors, fall prevention patches, tracking)



# Safety Technologies

- **Environment/Passive** (motion-based sensor monitoring systems, embedded fall-detection systems, stove use detectors, temperature/smoke monitors, safe lighting technologies)



Grand Care Systems





# Physical, Behavioral & Mental Health/Wellbeing

- **Wearable devices**  
(activity monitors, cardiac monitor, ambulatory blood pressure monitors)



- **Environment/Passive**  
(motion sensors based activity monitors, sleep/bed sensors)



# Physical & Mental Health/Wellbeing

- **Telemedicine/ Telehealth** (biometrics: pulse, BP, glucose, temperature, weight; daily wellness check; 2-way video health consultations care coordination; medication compliance)



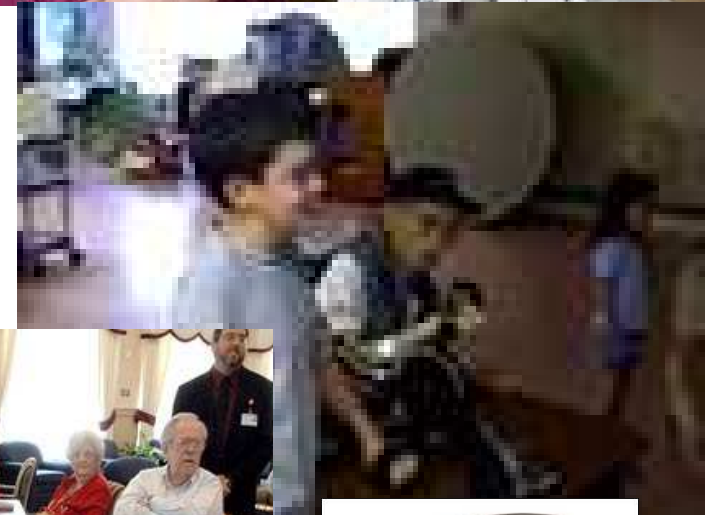
# Physical & Mental Health/Wellbeing

- **Medication Reminder systems**
  - Portable (wrist watch, pager), cell phones with pill reminders, dispensers (mostly unmonitored).
  - Monitored dispensers



# Social Connectedness

- **Phones** (amplified phones, easy to use cell phones)
- **Two-way video conferencing phone**
- **Entertainment/Theraputainment** (Cognitive and/or Physical exercise)



# EHRs & Point of Care Technologies

- EHRs
- Point of Care systems; Electronic clinical charting; Documentation systems; Shared care planning systems; e-Prescribing; e-MAR systems; bedside medication dispensing; Wound care applications.



# COLLAGE & Other Data-Rich Technologies

- Compliment EHR, telehealth, ADL and other types of data
- Allow clinicians to detect decline and health issues early and provide opportunities for intervention, including preventative ones
- Lead to improved outcomes, cost containment, quality of life and prolonged independence
- Provide standardized benchmarking measures
- Make acute care providers more “Meaningful Users” of HIT.

# Challenges

- Validation of functional assessment data collected by technology against “gold Standards” assessments
- Acceptance by clinicians and regulatory bodies
- Standardization of the data elements, representation and transport
- Potential for data/information overload: Data mining, smart analytics, alerts and decision support
- Need to redesign workflows to be data driven.

# Trends

- Convergence between different technologies and decreasing costs
- Push for standardization:
  - Interconnectivity
  - Interoperability
- Providers are looking to adopt technologies that:
  - Are Versatile
  - Are Expandable (multiple peripherals from the same vendor/ product pipeline)
  - Use open or known interconnectivity/ accepted interoperability standards
  - Engage in discussions with acute care partners as well as HIE organizations around the electronic exchange of health information.



# Questions?

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