Technology-Supported Care at Home

1 What Should We Know?

Person-centered devices/activities

- Sensors and monitors
  - Emergency response sensors detect falls and location
  - Vital signs monitors manage acute/chronic health conditions
  - Biosensors obtain body-based data for diagnosis, treatment, monitoring
- Medication dispensers
- Communication systems
- Remote physical therapy

Home-centered devices

- Remote activity monitoring
  - Passively track activity in relation to standard activity patterns
- Home automation
  - “Smart” products that provide home security and automate functions (lights, etc.)

Wireless smart devices

- Prompts and alerts from health care providers
- “Apps” for health tracking and education
- Tools for care planning by provider, family, and friends

For more information, see Panel 1 Addendum on last page.

Opportunities

- New relationships with client’s caregiver(s)
- Help maximize the aging experience
Why Should We Know?

Health care reforms

- Reduce Medicare-related hospital admissions, readmissions, and ER visits
- Testing methods for hospital-to-community transitions
- Using home-based primary care teams

Nationally, 1 in 5 Medicare patients discharged is readmitted within 30 days

In 2013, 60% of Medicare admissions came through the ER

Independence at Home Demonstration aims to reduce hospitalizations and lower Medicare costs

Booming senior demographic

- More health care needs
- Fewer family caregivers
- Fewer health care workers
- Higher long-term care costs

77 million baby boomers

75% of total US medical care costs are for chronic diseases

70% of people with Alzheimer’s live at home and need support

In 2012, assisted living averaged $43,000 per year; nursing home, $87,000

For more information, see Panel 2 Addendum on last page.

Opportunities

- New relationships with health care industry
- Relevance with tech-savvy boomer market
How Can This Benefit Us?

Leverage technology with current programs/services
- Improves customer service
- Can save $$ for you and clients

Establish or modify programs to support technology
- Determine cost-benefit

Educate/train clients and families on technology options
- Provides new connection with client

For more information, see Panel 3 Addendum on last page.

Opportunities
- Potential partnership with device provider
- Be seen as up-to-date resource
Electronic health/wellness device categories and needs met include:

- Activity/safety sensor monitoring – track movement, daily routines
- Caregiving – services, supports
- Communications – modified/adapted equipment and engagement systems (web cam, video camera, etc.)
- Emergency/fall monitoring – link with wander monitoring
- Hearing/vision – supports
- Medication adherence/management
- Physical functioning – rehabilitation, sleep monitoring, etc.
- Robotics – monitoring and care provision
- Vital signs monitoring – heart and lungs; blood sugar, oxygen, pressure; medications
- Wander monitoring – link with emergency/fall monitoring

Additional smart device uses include:

- Multi-purpose apps from health-related businesses (e.g., pharmacies)
- Peripheral medical equipment attached to smart device for vital signs use
- Devices as diagnostic tools

Tracking for Health survey of 3,000+ US adults (Pew “Internet and American Life Project,” 2013)
- 45% use smart phone
- 19% of smart phone users use at least one health care app; 22% for caregivers
- 69% monitor at least one health indicator

Other digital resources that support caregivers

- Recordkeeping, scheduling appointments, managing meds, tracking care records
- Phones adapted for persons with hearing loss, easy-to-use cell phone models
- Devices that convert speech to text
- Videoconferencing

Current authorizations require Accountable Care Organizations (ACOs) to use technology-supported care and remote monitoring to better coordinate care
- Through 2016, Community Care Transition Program (part of Affordable Care Act) will test models for improving hospital-to-community care transitions and avoiding re-hospitalization of high-risk Medicare beneficiaries
- Through 2015, Independence at Home Demonstration involves 16 organizations and 10,000 participants, using home-based primary care teams to reduce hospitalizations, improve patient and caregiver satisfaction, and lower Medicare costs

Seniors are adopting technologies
- Pew “Internet and American Life Project,” 2013: 69% of adults age 65+ own a cell phone; 56% of age 76+ / 86% of Internet users age 65+ use e-mail
- Deloitte Center for Health Solutions survey, 2012: 35% of seniors and 44% of boomers receptive to self-monitoring technology and electronic submit to doctor
- EAR Foundation and Clarity survey, 2012: 65% of seniors receptive to using technology; half willing to have sensors in home to monitor health and safety
- 49% of boomers interested in technologies to help monitor parents’ safety and health; half willing to use monitoring devices

Device manufacturers are partnering with telecommunication carriers
- Minnesota example: Verizon and Healthsense partnered to integrate technologies in senior housing and assisted living facilities
- Health care industry teaming up with venture capitalists on “incubator” centers for new products

2012 Home Care Technology Report—showcases eight companies offering technology-supported home care as a service, including
- Supplying equipment
- Installing equipment
- Receiving and following up on monitoring data
- Handling care planning/coordination