

Aging and Mobile Health Technology

Laurie M. Orlov

Aging in Place Technology Watch

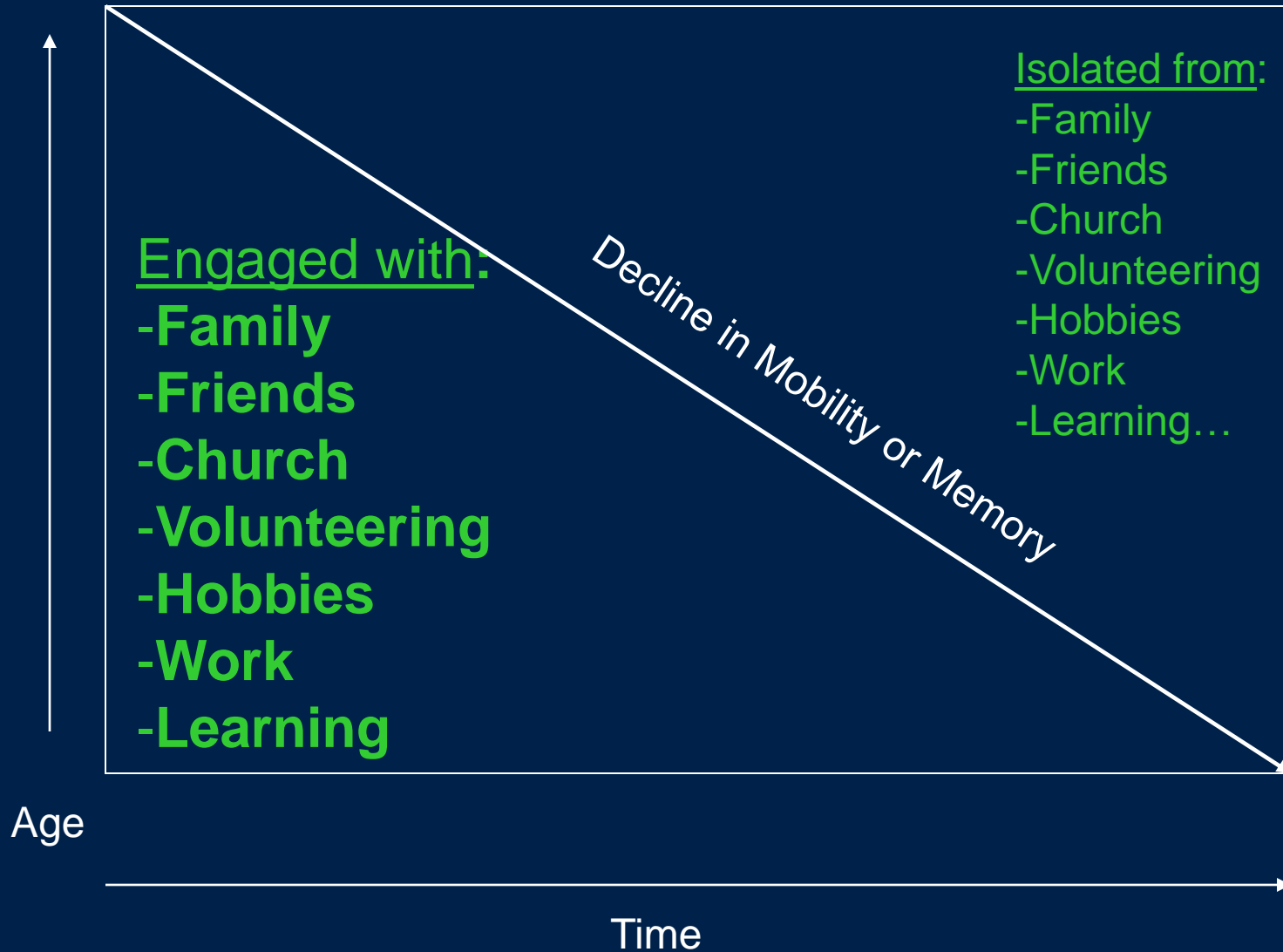
November, 2011



Technology change can be daunting



Does engagement dwindle along with mobility or memory?



Context: Internet, social networking, cell phones



- 58% of US 65+ population has a cell phone (average 3 calls per day, 34% sleep with their cell phones)
- 31% of the 65+ population has a 'broadband' connection, up 1% from 2009 (Pew Research)
- Only 42% of the 65+, 30% of the 75+ population goes online
- Only 15% of iPad buyers are over the age of 56...(NielsenWire)
- ...But baby boomers are the fastest growing age segment of Facebook's 800 million members
- The fastest growing age demographic -- the 85+

Older adults and Internet technology (Pew)



Category	All	Boomers (50-64)	Seniors (65+)	Comment/Example
Online	79%	78%	42%	% of all adults
Use search daily	59%	52%	37%	% adults w/Internet
Use video sharing site	71%	54%	31%	View YouTube, % adults use of video
Seek Health info	59%	58%	29%	% adults w/Internet
Social network	61%	47%	26%	% adults w/Internet

Older adults and online technology (Pew)



Category	All	Boomers (50-64)	Seniors (65+)	Comment/Example
Have cell phone	85%	85%	58%	% all adults
...Smart phone	35%	24%	11%	% all adults
Internet calls	24%	19%	18%	% all adults
Have E-Reader	12%	13%	6%	% all adults
Have a tablet	8%	8%	2%	% all adults
Have mobile health app	9%	6%	5%	% adult cell phone users



Four aging in place technology categories

Email, Chat,
Games, Video,
Cell phone,
Smart phone,
Tablet,
PC, Mac

**Communication
and Engagement**

**Safety and
Security**

Security,
PERS,
Webcam,
Fall detection,
Home monitor

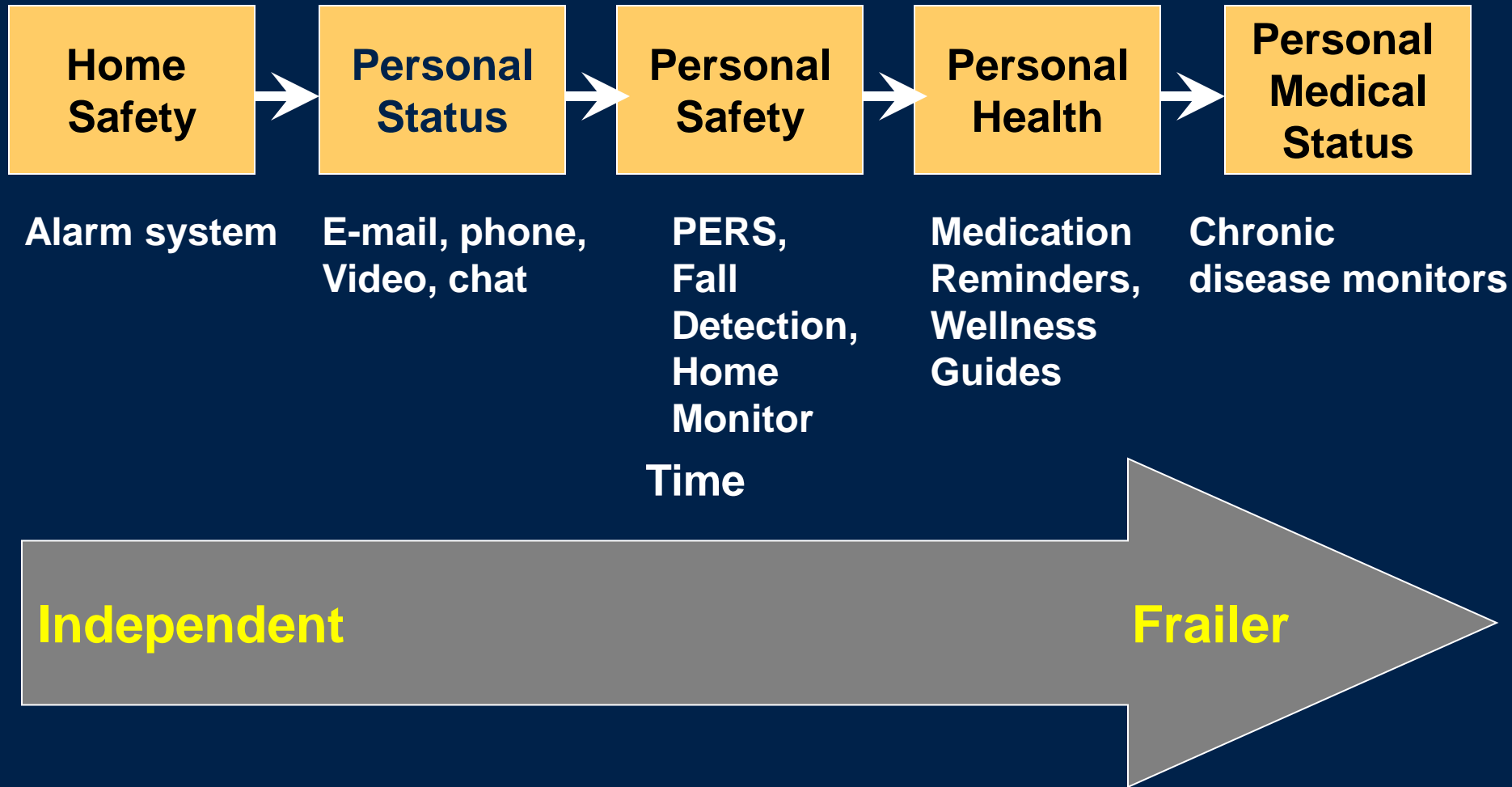
**Learning and
Contribution**

Health and Wellness

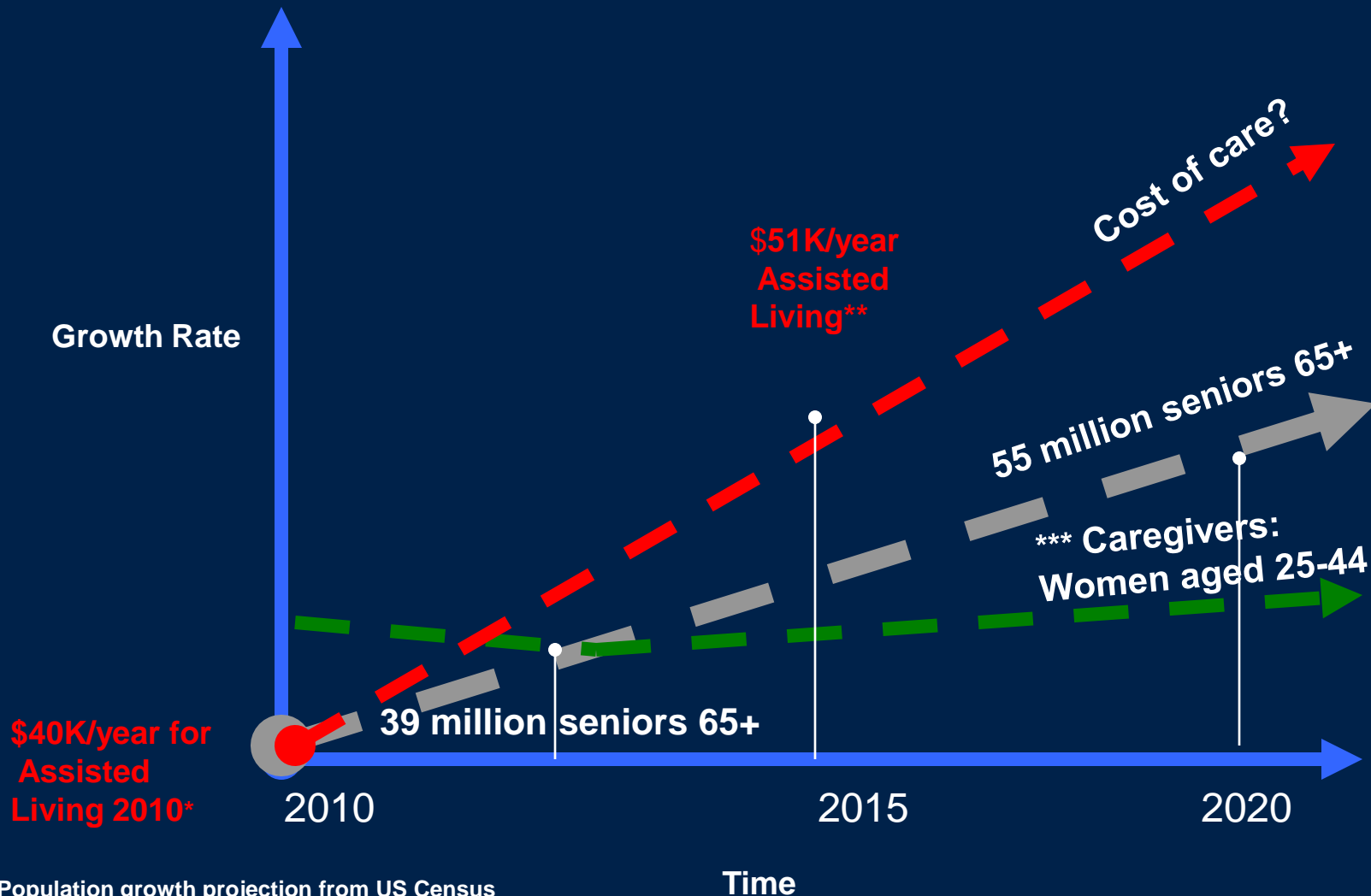
Legacy,
Education and
learning
Volunteer, work

mHealth apps,
Telehealth,
Medication mgmt,
Disease mgmt,
Fitness

Aging status changes vary an individual's needs over time



The looming crisis of care



Population growth projection from US Census

*Source:

2010 MetLife Market Survey of Nursing Home, Assisted Living, Adult Day Services, and Home Care Costs

Time

**Source Amer. Association LTC & MetLife

***Source National Clearinghouse Direct Care Workforce



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Caregiving

Learning
Contributions

Wellness

Legacy,
Education and
learning
Volunteer, work

mHealth apps,
Telehealth,
Medication mgmt,
Disease mgmt,
Fitness

A day in the life: Tech-enabled relationships – meet Margaret



Senior living at home

- Passes doorway motion sensor
- Puts on wearable fall detector
- Receives reminder to take meds
- Gets a video call from grandkids
- Requests a transportation pickup
- Participates in online hobby forum
- Attends online learning course



Long-distance Family



- Makes the video call
- Shares trip photos
- Sets up family tree

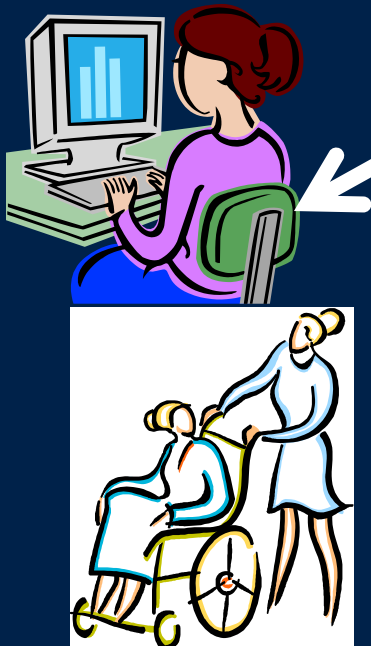
Healthcare Providers



- Updates personal health record
- Writes ePrescription
- Checks downloaded data from wearable blood pressure cuff
- Answers e-mail question
- Provides a video consultation

Family/Caregivers

- Updates personal health record
- Preloads medication canister
- Sets med reminder schedule
- Configures notification phone list
- Receives home-related alerts
- Enters daily activity onto portal



A wave of technology to help Margaret and her family



GrandCare



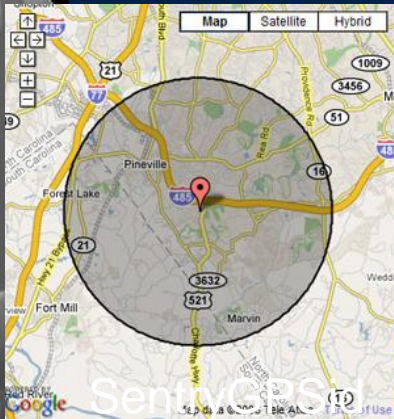
Optelec

Telikin

Microsoft Kinect



What if Margaret had dementia?



CoroHealth



Fewer boxes, less data, more information

- **Referral channels should be critical**

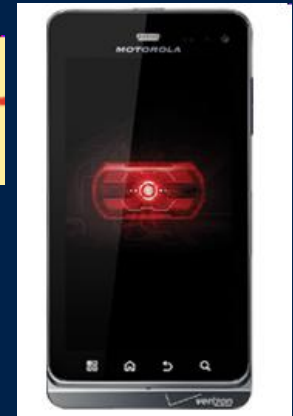
Identifying and marketing to common needs

- » Health and home care provider
- » Social services
- » Geriatric care managers

right@home™

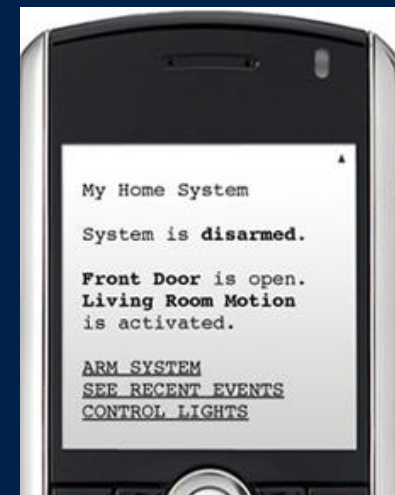
 **SeniorBridge**
Managing Complex Chronic Care

- **Who goes into the home?** Tablets, TVs, smart phones, wireless, with sensors and cameras in and around the home, easily switched on and off



- **Who connects the home and the individual?**

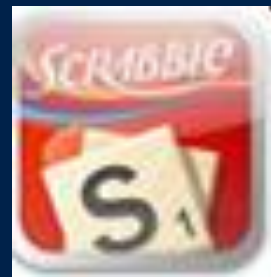
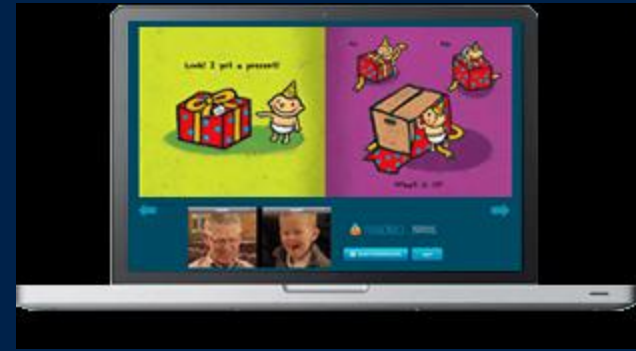
- » ISP Network provider
- » Cable company
- » Security dealer or PERS reseller
- » Cell or smart phone provider



Applications will meet social needs:



- **Subscription**-based services – opt-in
- **Systems** to link home to outside – for health-related monitoring or for sharing information
- **Wearable** inside and outside
- **Passive** without intrusion
- **Discovery** and finding people with common interests
- **Opt-in** information and connecting to services (health, safety, work)
- **Blurred life stages** – available as needed independent of age
- **Mobile** – applications will follow the person from home or away

An advertisement for 'Check-in Calls'. It features a photograph of an older woman and a younger woman embracing. The text reads: 'Check-in Calls', 'Daily calls to provide peace of mind, and immediate assistance, if needed.', '\$5 per month', and 'LEARN MORE' in a red button.

Check-in Calls
Daily calls to provide peace of mind, and immediate assistance, if needed.
\$5
per month
[LEARN MORE](#)

Aging in place market silos will overlap – it's already happening



- **Home automation** bundles as a service will become a feature – 20% of CE vendors are now interested in aging
- **Security vendors** will provide interfaces for healthcare devices
- **Carriers will offer health-apps** through partners, layered on discount bundles
- **Remote healthcare services** will partner with security and home monitoring
- **Vendors will band together** – see AgeTek Alliance

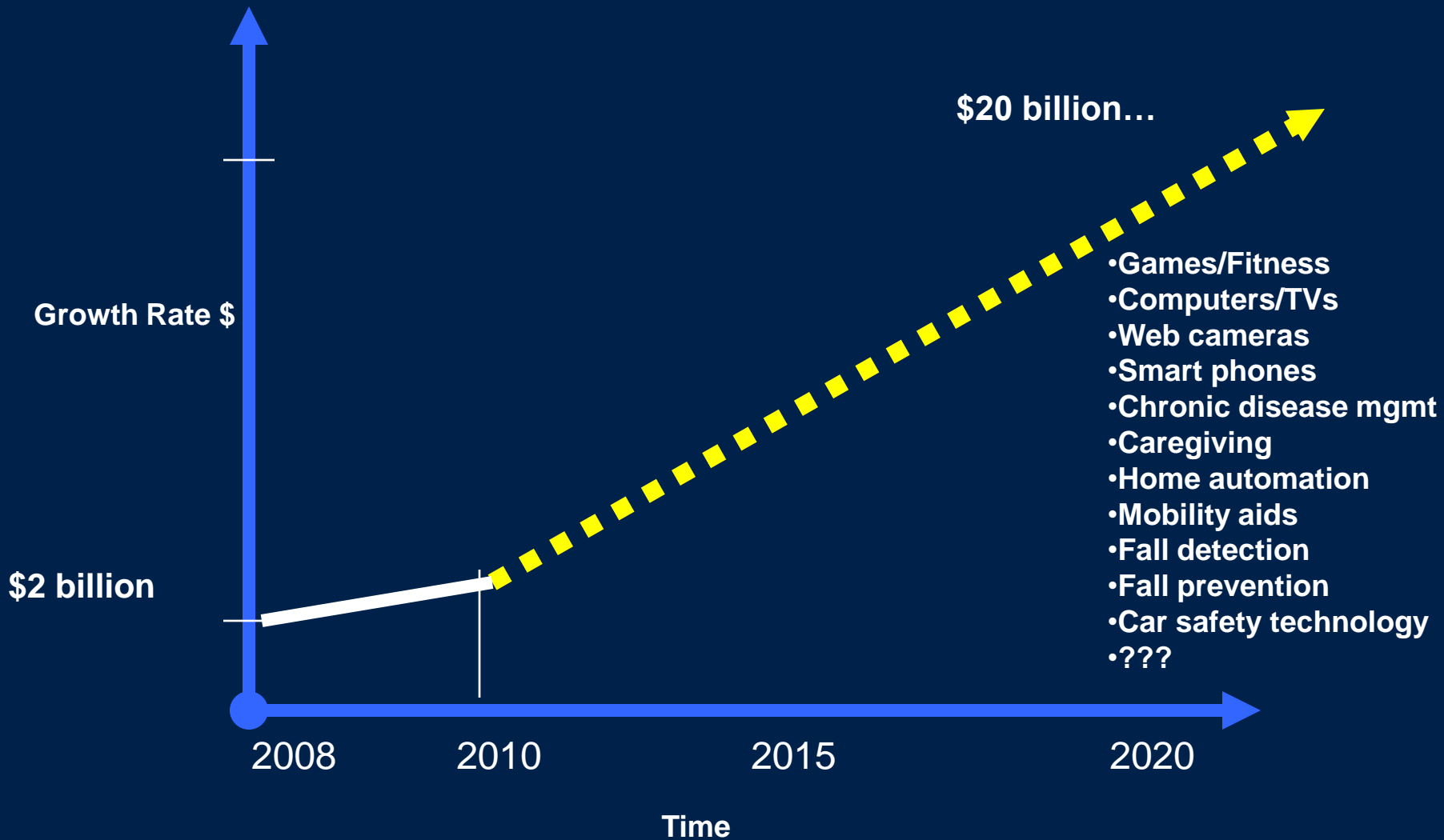


Barriers and disconnects



- Only incremental growth in tech access of oldest adults, hamstrung by current economy
- U.S. adults living with chronic disease are significantly less likely than healthy adults to have access to the internet (62% vs. 81%) (Pew)
- Monitoring tech and chronic disease invite the reimbursement debate and consumer distraction
- New tech niches are interesting, but rarely marketed as solutions
- Mainstream tech like smart phone shuts out seniors
- Referral channels are interested, but not fully engaged
- Resellers are engaged, but not necessarily selling through
- VCs are intrigued, but not necessarily funding the small and the weak

How large is the market?



Thank you!

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