



What Drives AAL-Markets and How Will they Evolve

AAL Forum

Bucharest | September 9-10th 2014



What Drives AAL-Markets and How Will they Evolve

Session C2- September 10th 2014

Juan Carlos Castrosín, CEO



disclosure

speaker is the CEO of PI&PI, an independent European firm

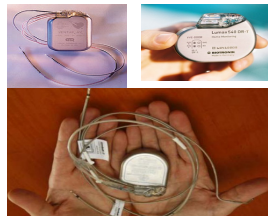
serves in different company board among other AALJP (Ambient Assisted Living Joint Programme, EU funded and backed)

size and age counts



\$1400B 2020

meddev



\$300B 2018

HCIT



\$50B 2014



regulations and protocols: FDA, CE



regulations and protocols: FDA, CE



market, growth, IP, competition



regulations and protocols: FDA, CE



market, growth, IP, competition



investments, profit



regulations and protocols: FDA, CE



market, growth, IP, profit, competition



investments, profit



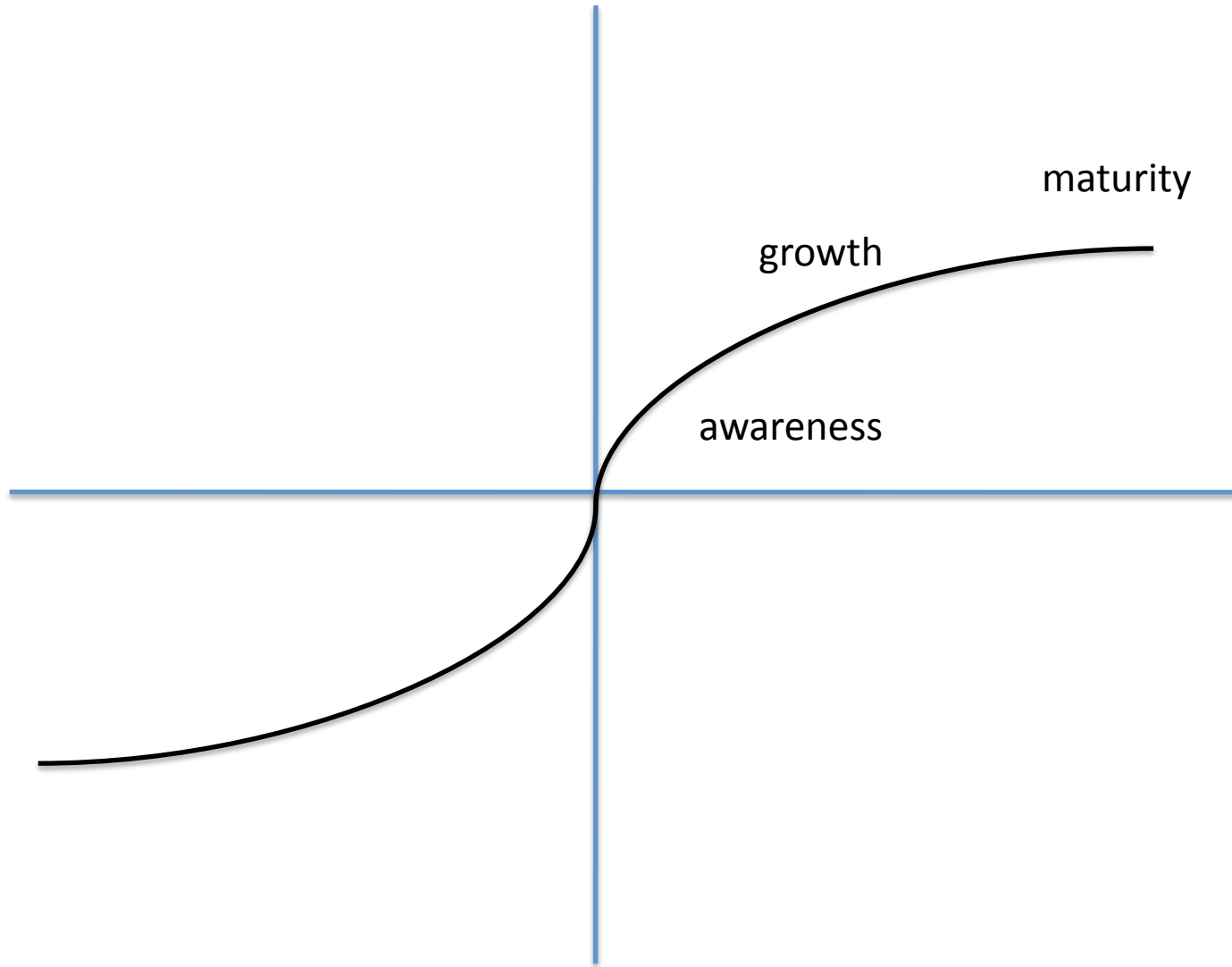
reimbursement

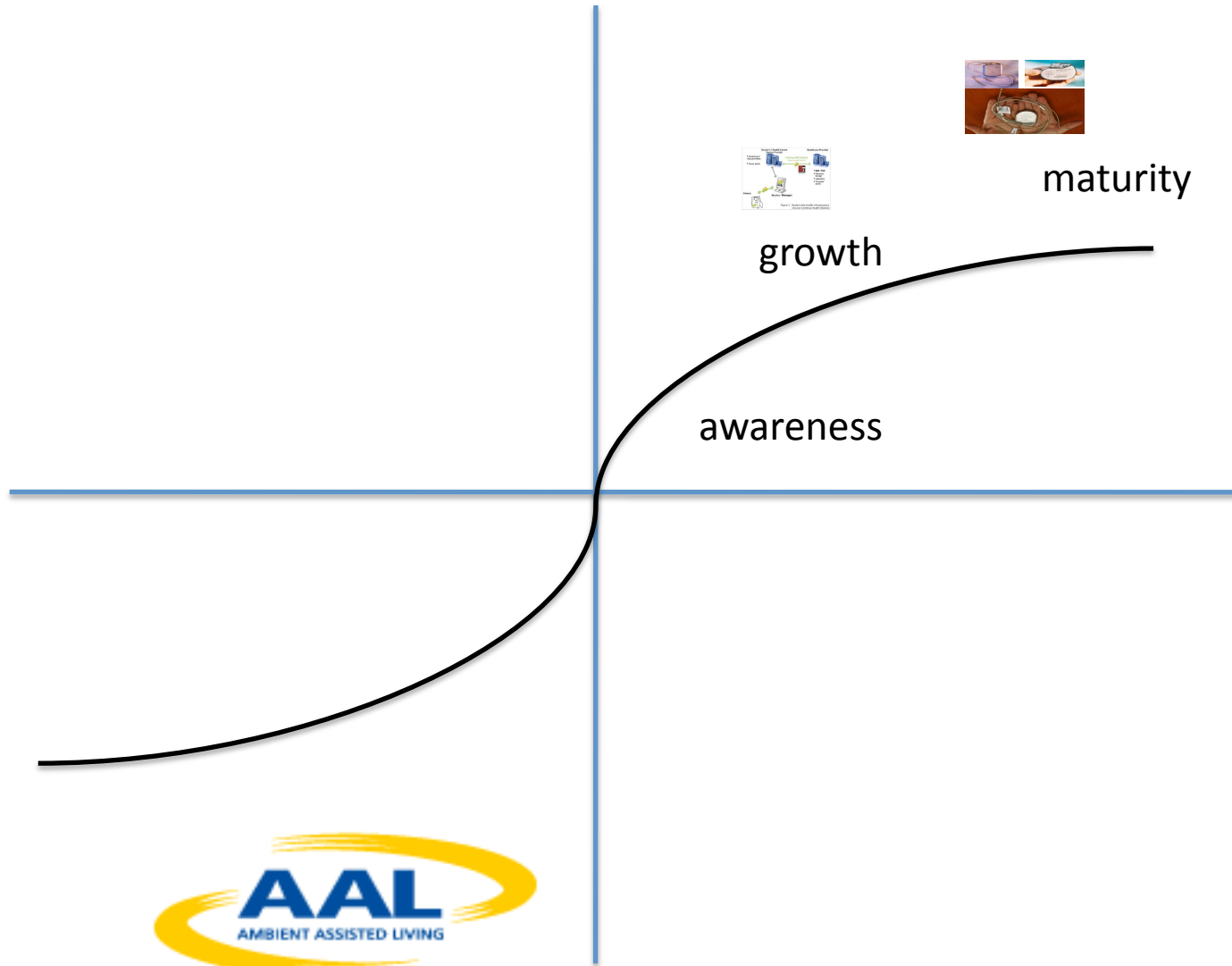
AAL
what market?

- is there a market with unmet needs?
- how big?
- who pays, will pay?

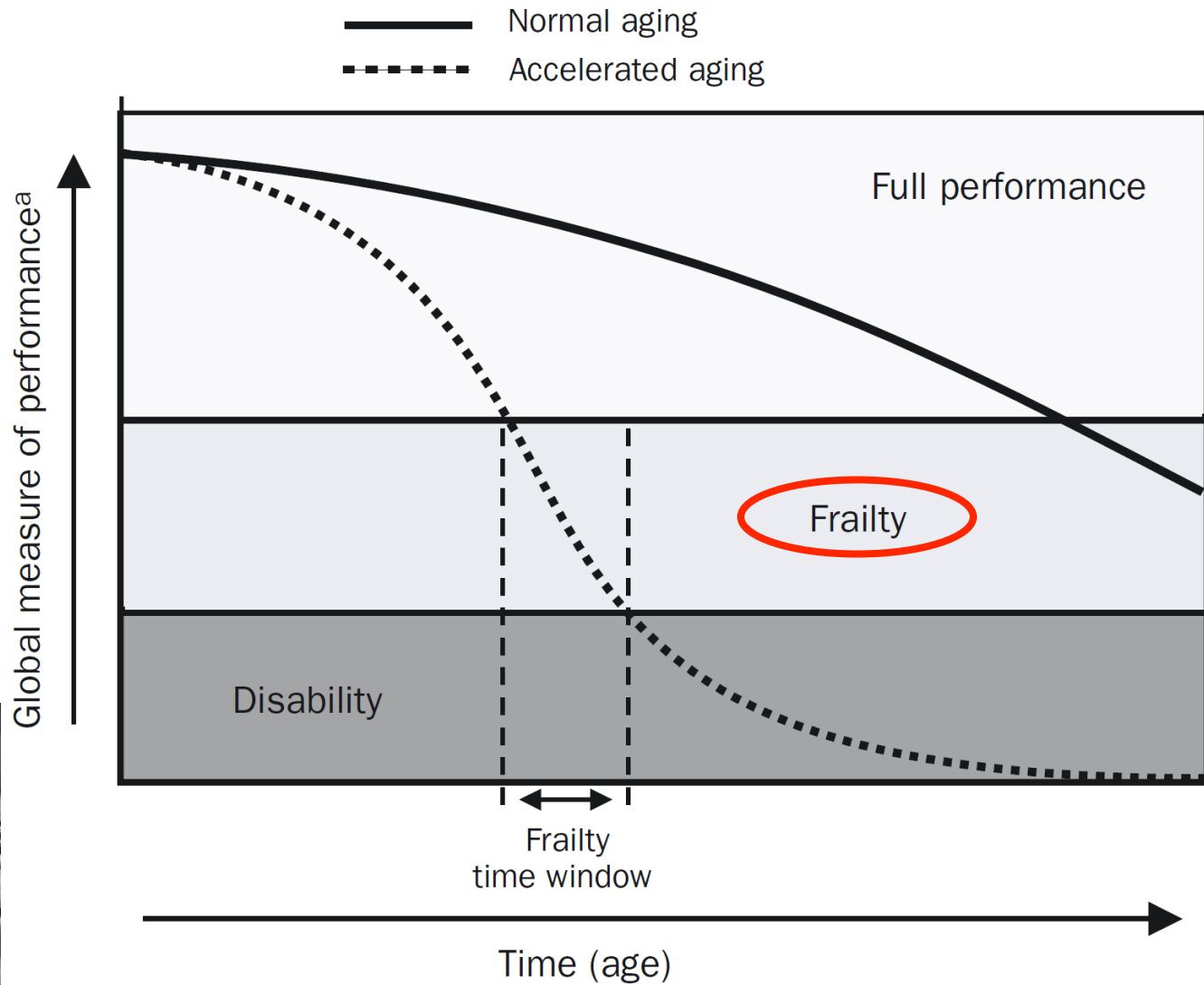
- how to protect and deploy (IP, strategic alliance, growth adoption rate)
- business plan to attract investment

AAL life cycle
market maturity and awareness
frailty status of people | patients





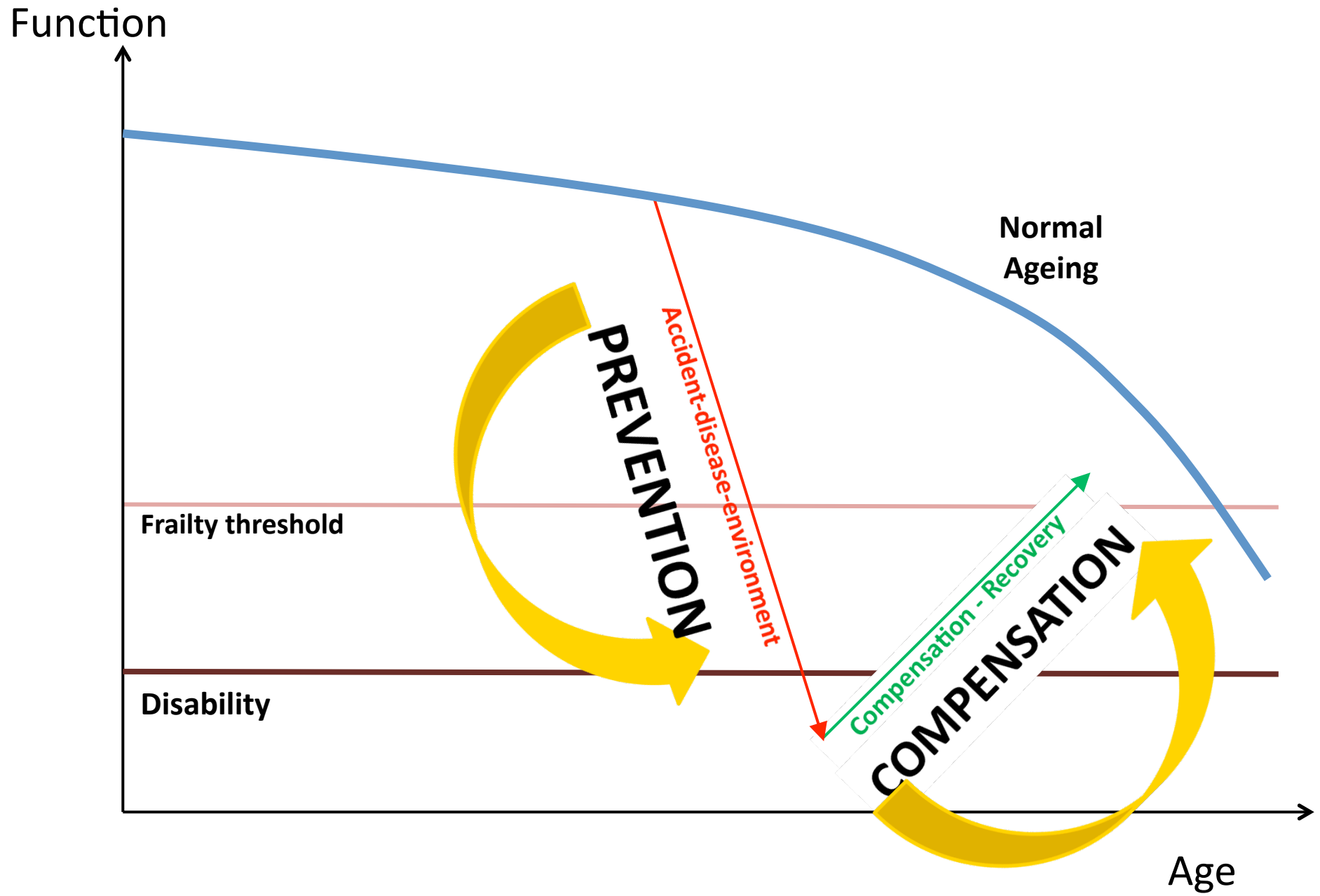
trajectories of health and functioning

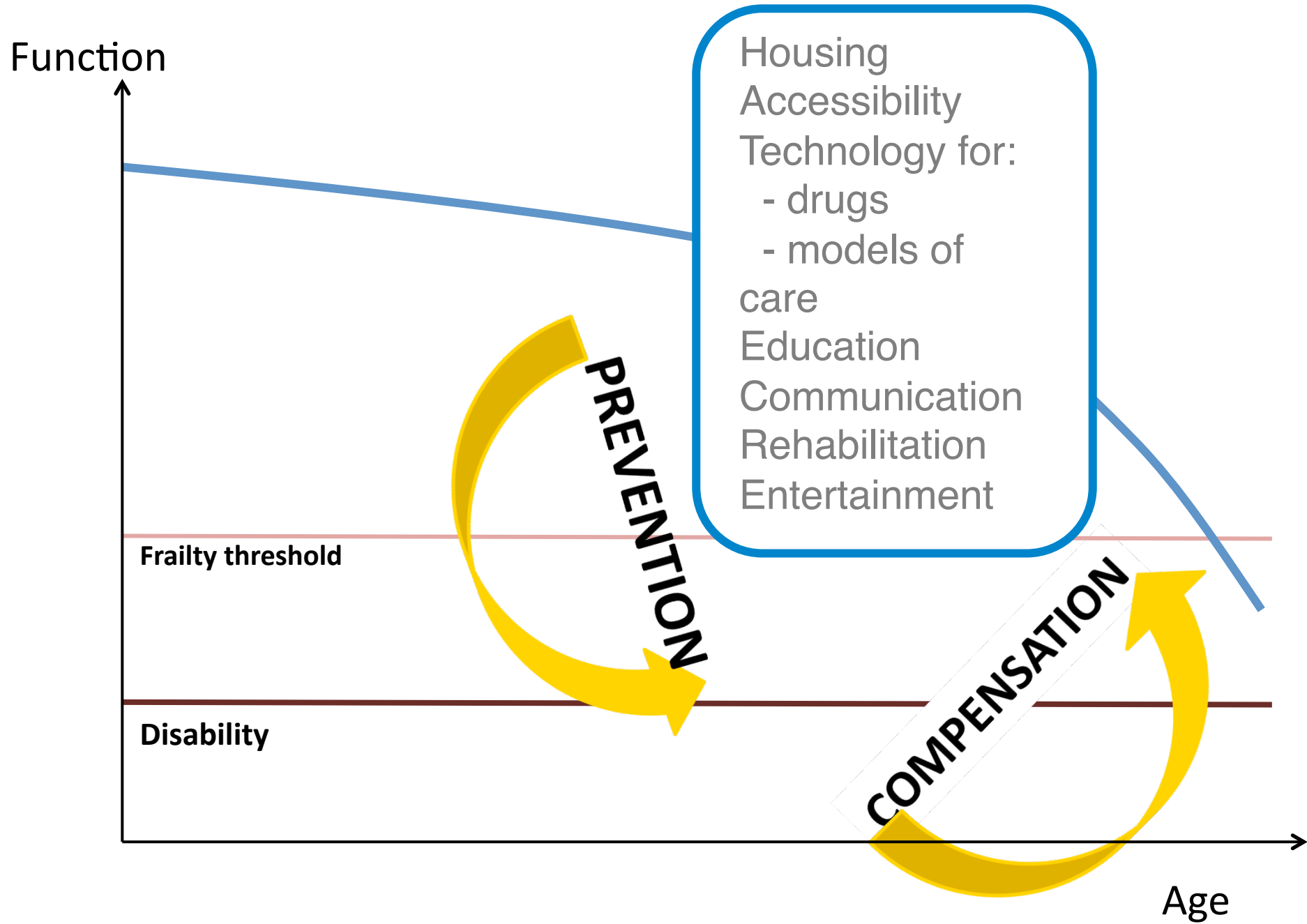


Source D.H Bueno HGM Madrid

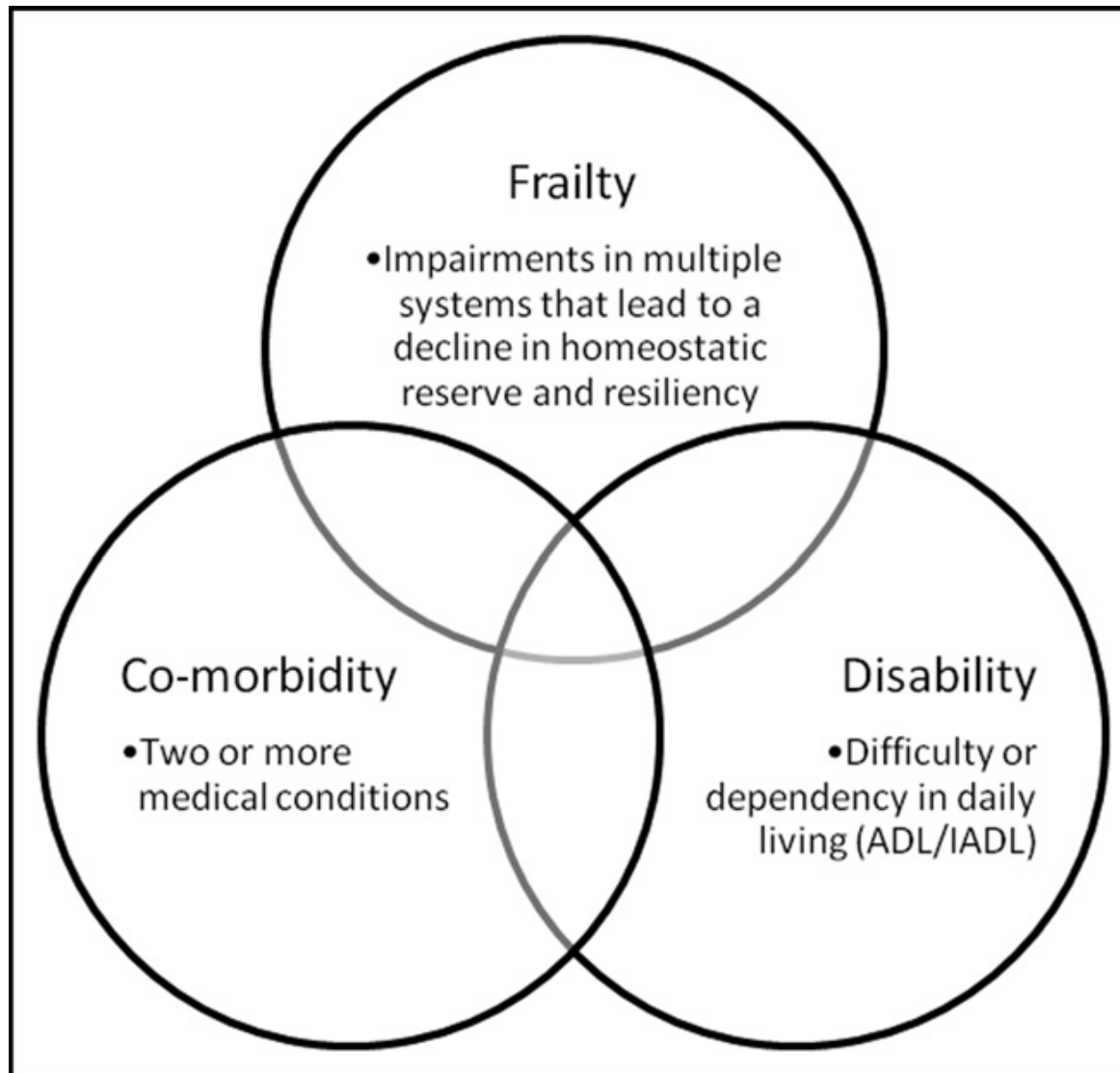
Singh M. *Mayo Clin Proc* 2008;83:1146-53.







Frailty



Everyday Technologies



Accessibility

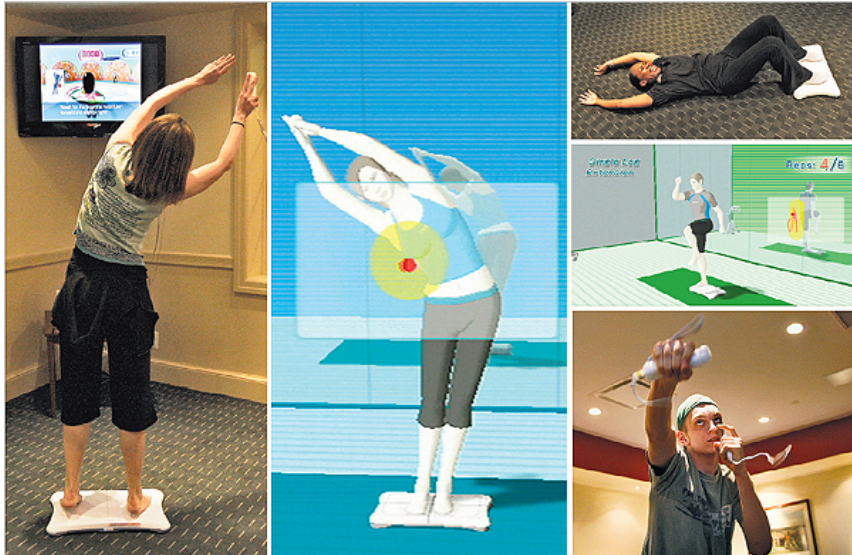


Domotics



NEEDS: Prevention of disability

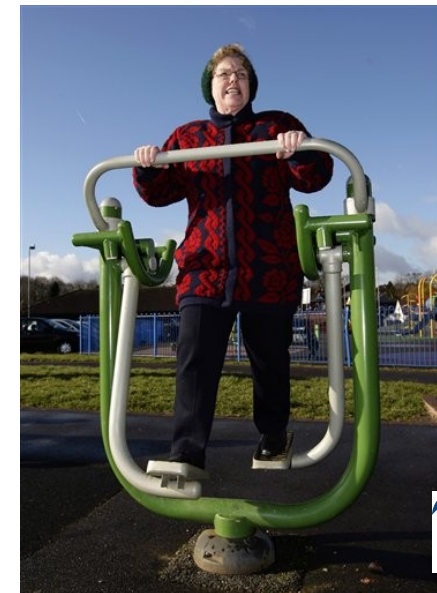
Technology contribution



Exercise and Entertainment



Adapted to the elderly



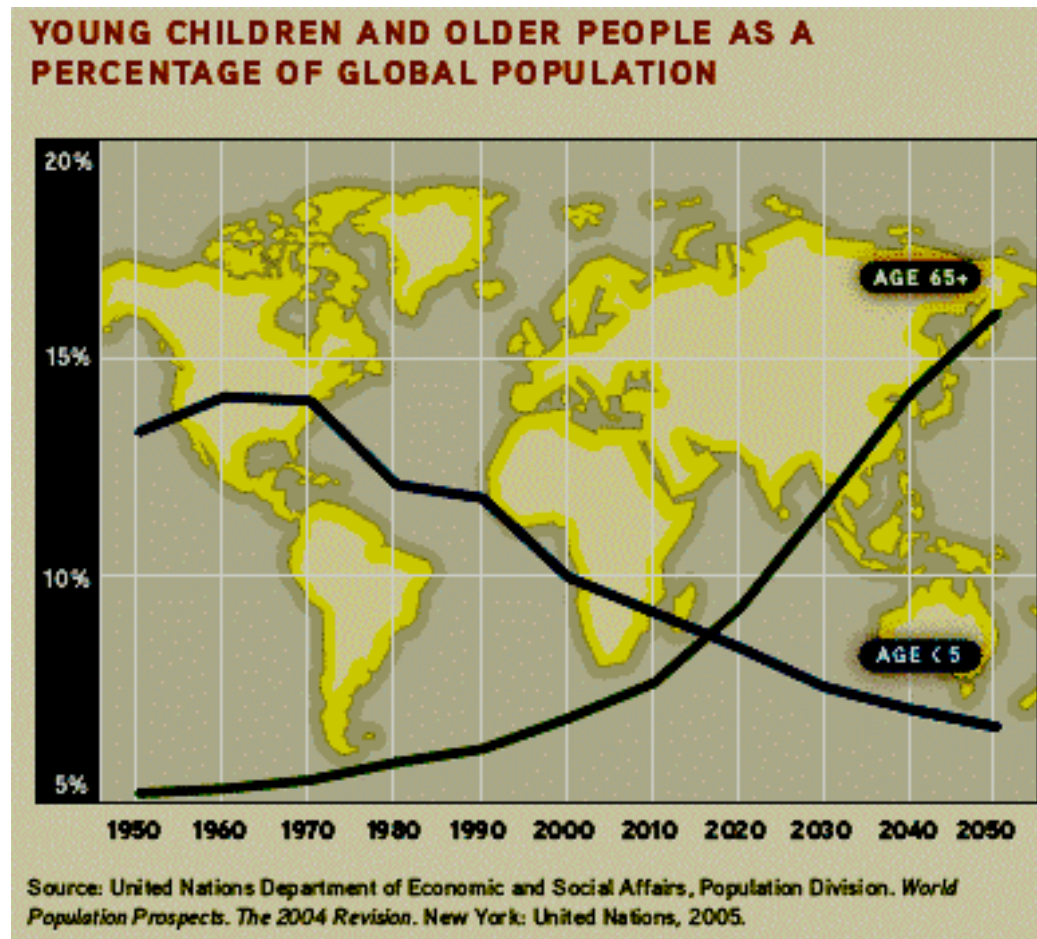
WW trends

an aging population

500 M > 65 years

or

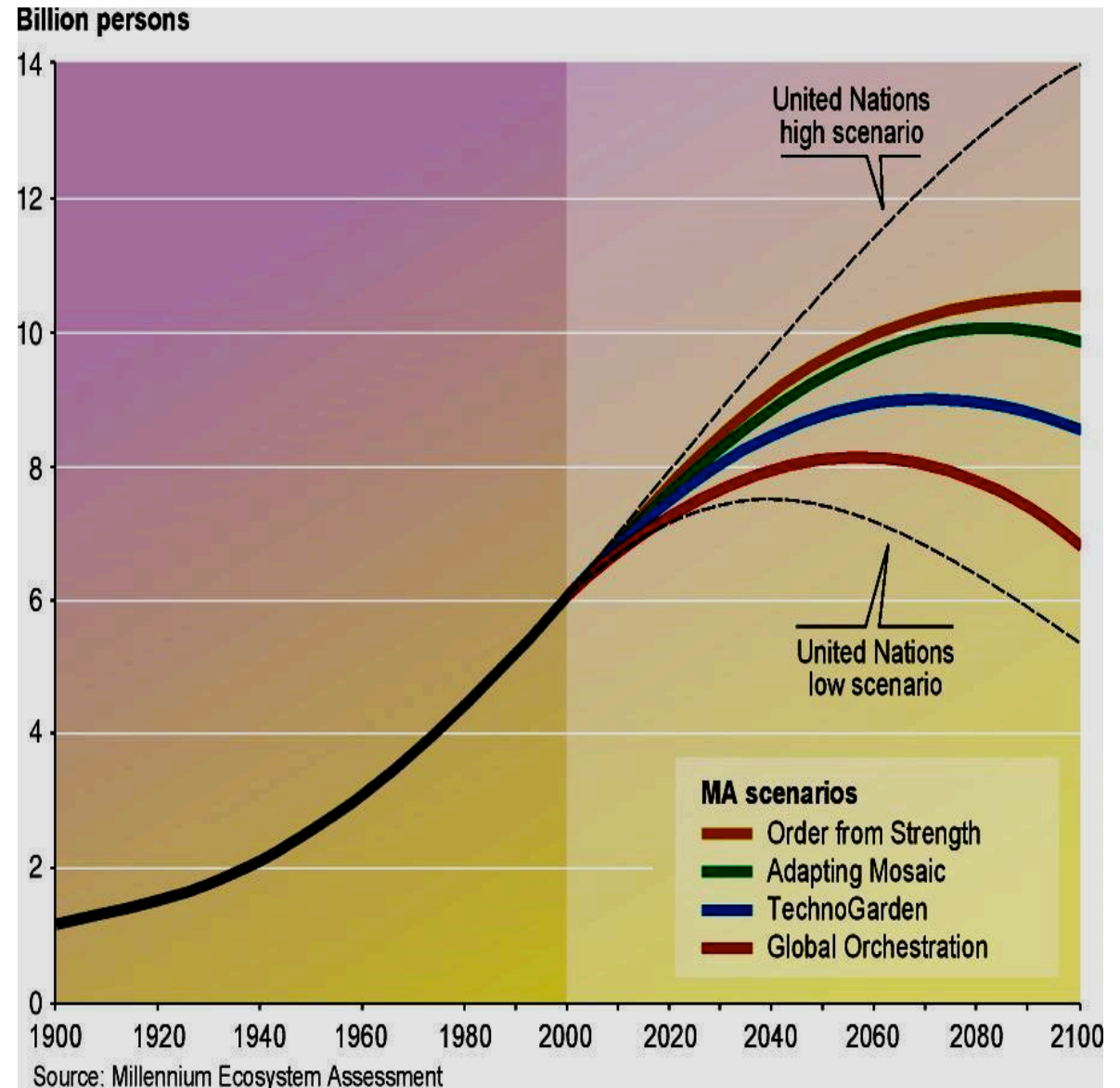
8% of population



aging and population decline

Rusia to shrink by
18 Mh or 13%
2006 – 2030

20 countries 1Mh
Japan, Germany,
Italy



changing family structure

- as people live longer and have fewer children, family structures are transformed
- this has important implications in terms of providing care to older people
- in countries with very low birth rates, future generations will have few if any siblings
- thus people will have less familial care and support as they age



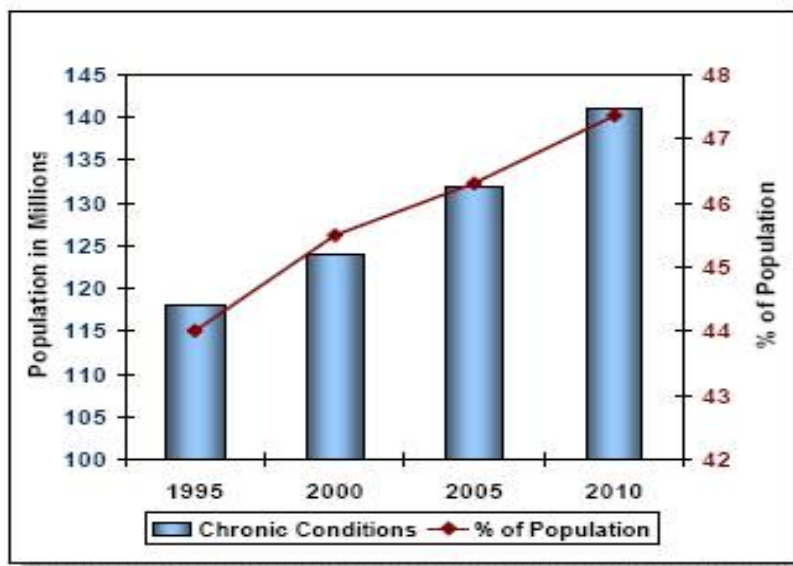
shifting patterns of work & retirement

- no set of issues has stimulated public discourse about population aging more than work, retirement, and economic security in old age
- shrinking ratios of workers to pensioners
- policymakers struggle with the balance between public and private income security systems
- in 1960, men on average could expect to spend 46 years in the workforce and a little more than one year in retirement. By 2014, the number of years in the workforce had decreased to 35 while the number of years in retirement had jumped to 20 plus



growing burden of chronic diseases

More than 130 million Americans suffer from chronic conditions; that number will continue to rise



Chronic Condition	Prevalence U.S. Population	Annual Cost
Diabetes	20.8M	<ul style="list-style-type: none"> ▪ \$132B ▪ 11M lost work days
Heart Disease	60M	<ul style="list-style-type: none"> ▪ \$277B ▪ 5.9M lost work days
Asthma	30M	<ul style="list-style-type: none"> ▪ \$14B ▪ 6.3M lost work days ▪ 14M lost school days
Depression	21M	<ul style="list-style-type: none"> ▪ \$43B ▪ 13.2M lost work days ▪ \$30B in lost productivity

and on top

healthcare expenditure is up

meddev
\$300B 2018

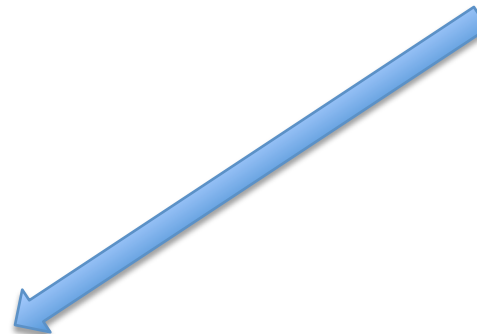


pharma
\$1400B 2020



HCIT
\$50B 2014

AAL



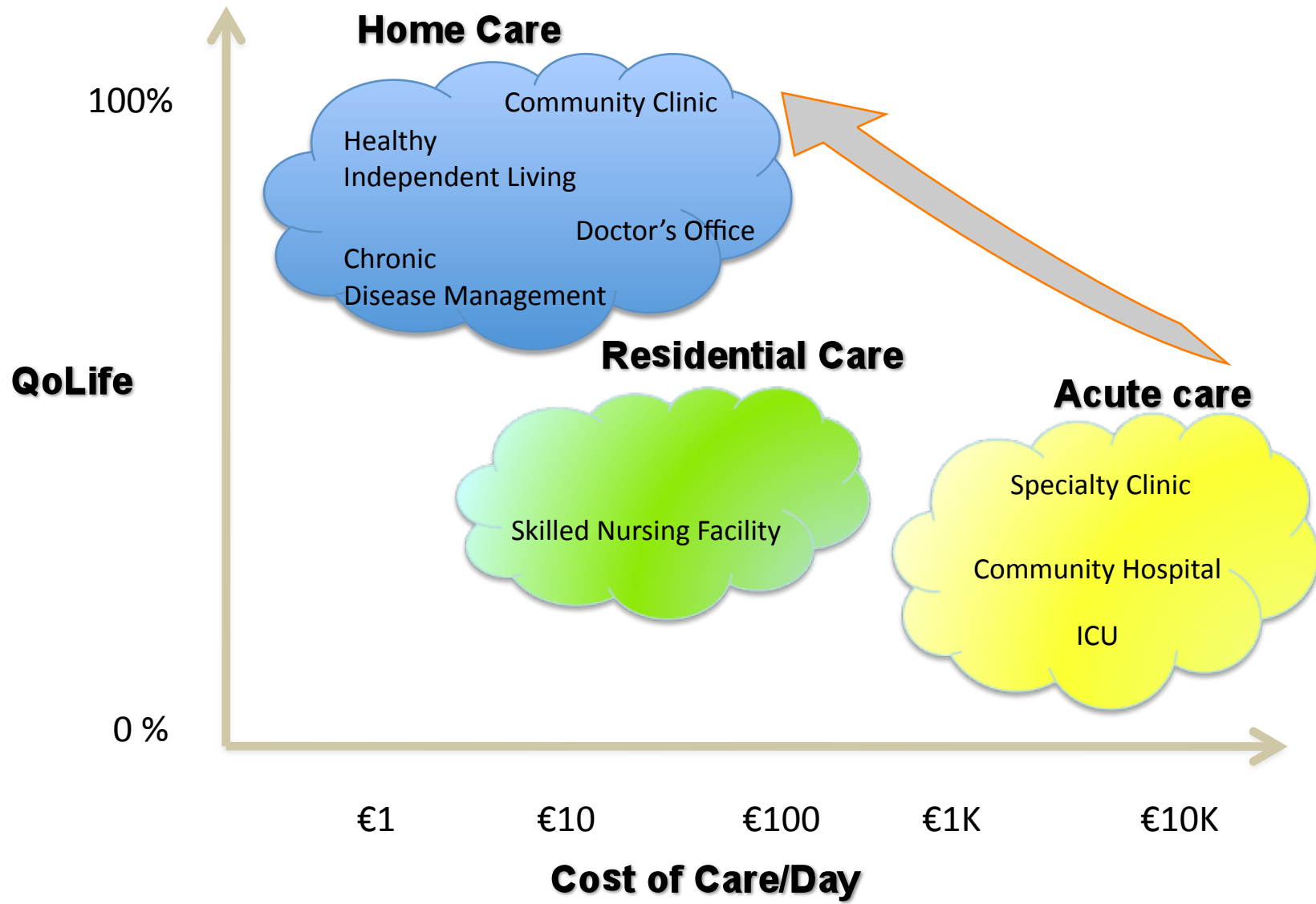
EU macro picture

demographics

low economic growth

public debt

what to do



Source: Own Intel, public data and Center for Aging Services Technologies (CAST)

transformation of care

The transformation of care in the home is required to address demographic changes



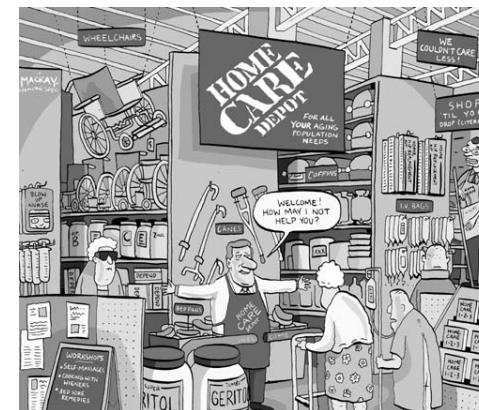
Inpatient

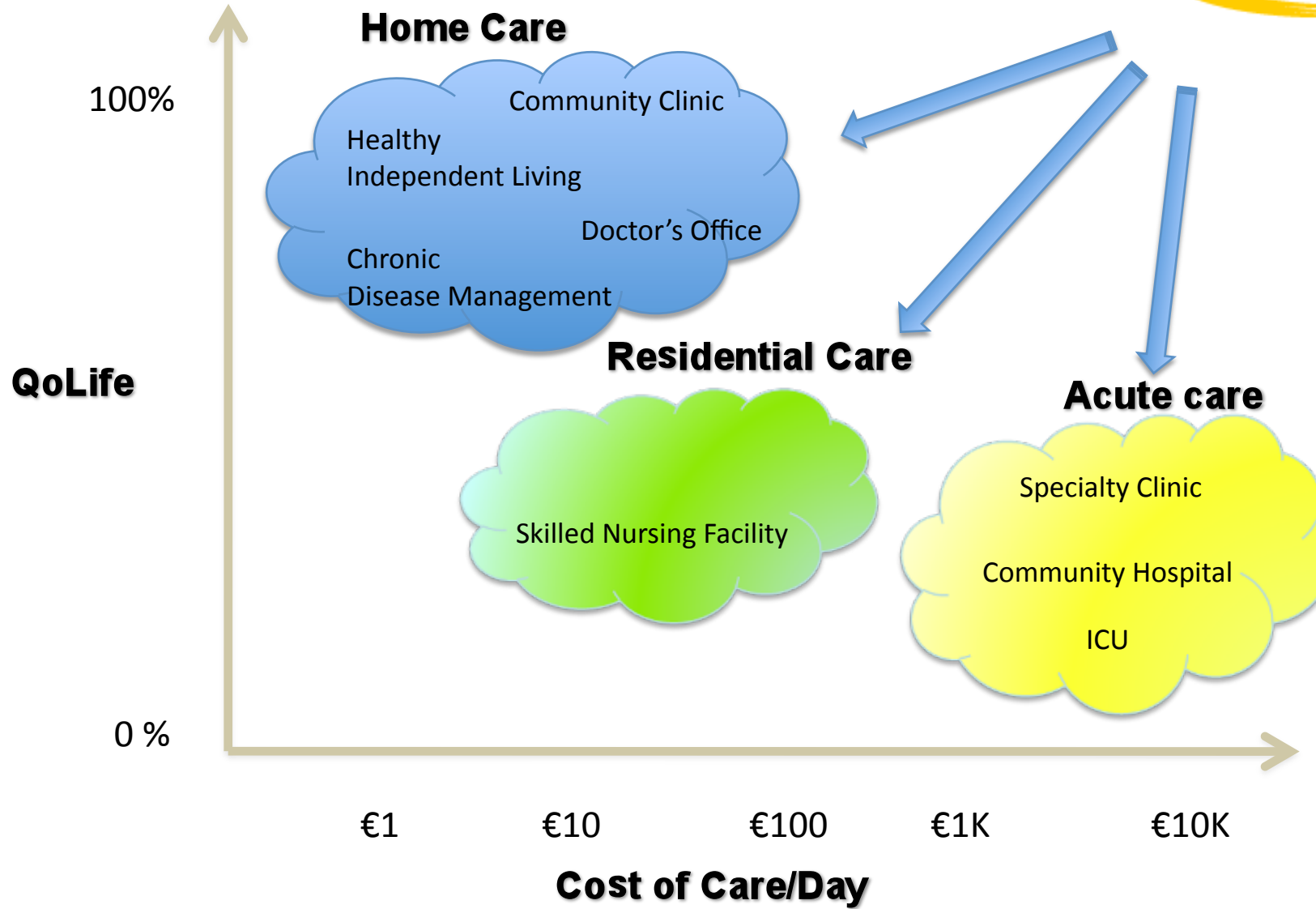
Inpatient care is care given to a patient admitted to a hospital, extended care facility, nursing home or other facility..

Outpatient

Outpatient care is any health care service provided to a patient who is not admitted to a facility. Outpatient care may be provided in a doctor's office, clinic, or hospital outpatient department.

Home





Source: Own Intel, public data and Center for Aging Services Technologies (CAST)



ICT | AAL =


social networking ?

mobile telephone ?

sensors and gadgets ?

ICT | AAL =

apps market
tele-health
prevention
services
monitoring



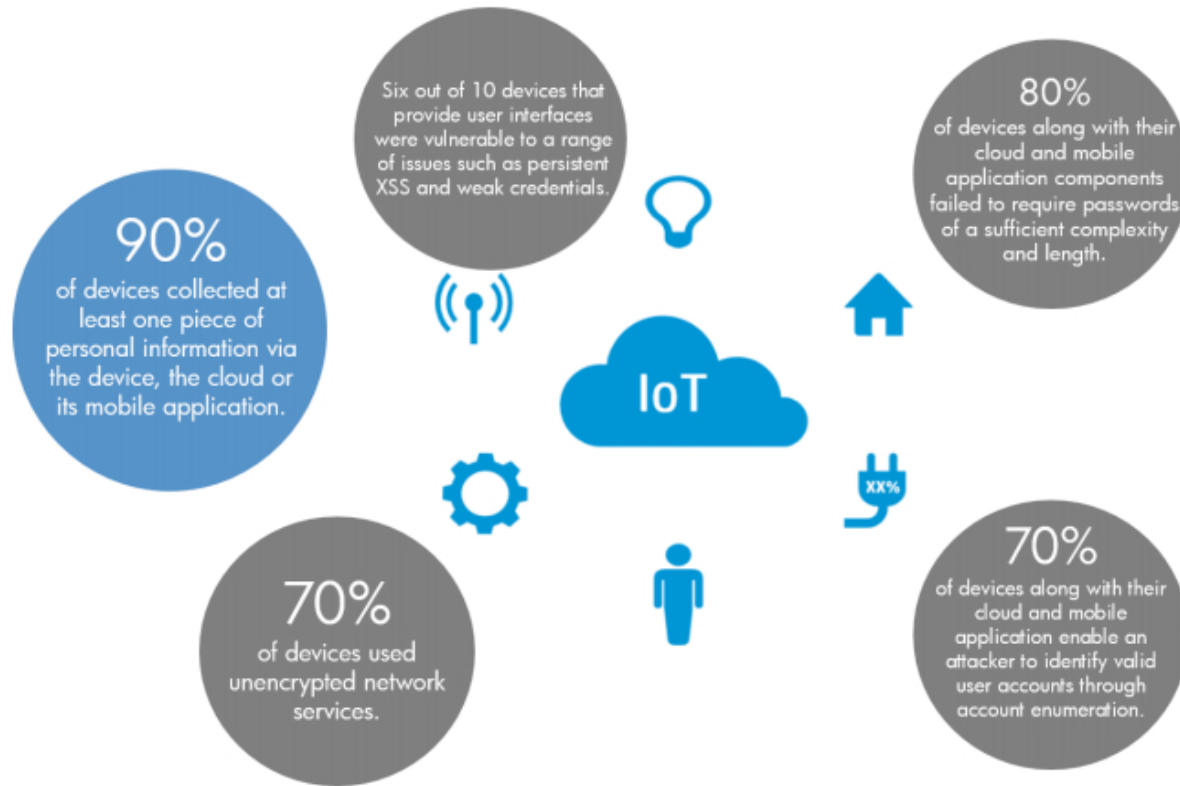
Big issue

Lack of robust and encrypted data flow and network systems

IoT

by 2020 20B

Research Findings



New comers

Google

Amazon

Apple

Microsoft

take away

two broad options

(different speed | success probability)


create the market

jump into an existing moving wagon
and build the bridge

AAL projects
to bridge | complement
pharma and meddev markets

B2C & B2B

Startups should simultaneously address
both consumer-facing and business-to-
business models

A young boy with short dark hair is shown from the chest up, wearing large, bright red boxing gloves. He has a determined and slightly angry expression on his face, with furrowed brows and a slight frown. The background is a dark, solid color. The text "AAL projects must be punching above its weight !" is overlaid on the right side of the image.

**AAL projects must be
punching above its
weight !**

Thank you

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