

Joost Felix

Business Unit Manager Integrated Care Agfa HealthCare



Technology for Health & Wellbeing



- TECHNOLOGY DRIVING CHANGE
- H DIGITAL PATIENT
- NOT JUST TECHNOLOGY



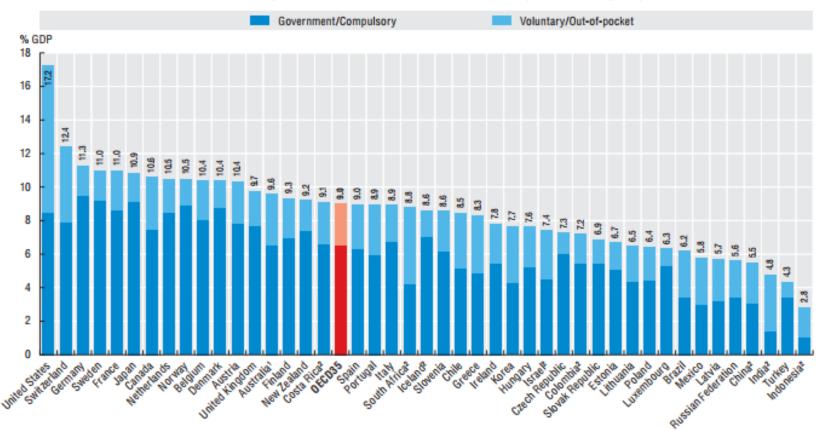




Agfa HealthCare

Healthcare Costs

7.3. Health expenditure as a share of GDP, 2016 (or nearest year)

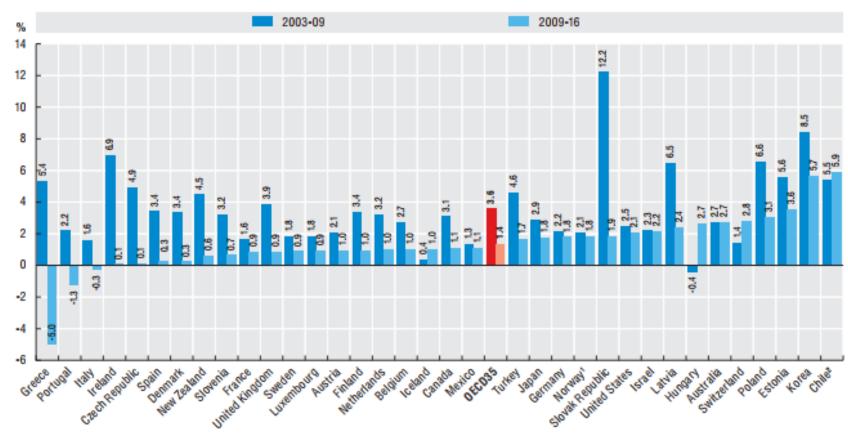


Note: Expenditure excludes investments, unless otherwise stated.

- 1. Australian expenditure estimates exclude all expenditure for residential aged care facilities in welfare (social) services.
- Includes investments.

Source: OECD Health Statistics 2017, WHO Global Health Expenditure Database.

7.2. Annual average growth rate in per capita health expenditure, real terms, 2003 to 2016 (or nearest year)



Mainland Norway GDP price index used as deflator. CPI used as deflator.

nurce: OECD Health Statistics 2017.

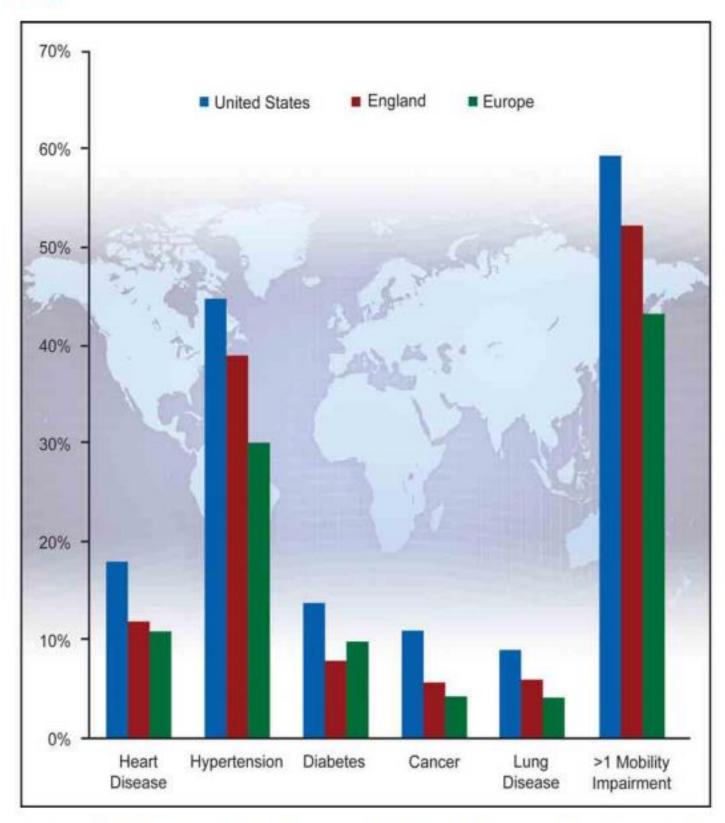
StatLink http://dx.doi.org/10.1787/888933604210

StatLink | http://dx.doi.org/10.1787/888933604229

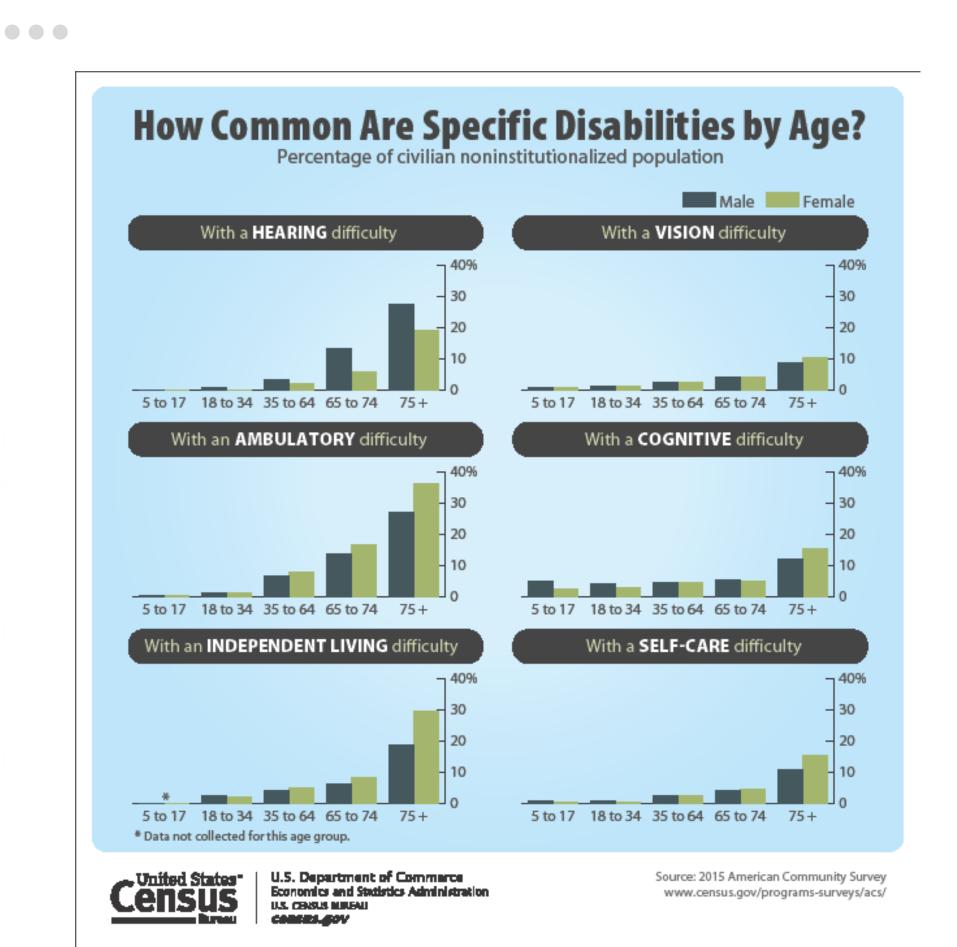
Burden of Chronic Disease

Figure 8.

Prevalence of Chronic Disease and Disability among Men and
Women Aged 50-74 Years in the United States, England, and Europe:
2004



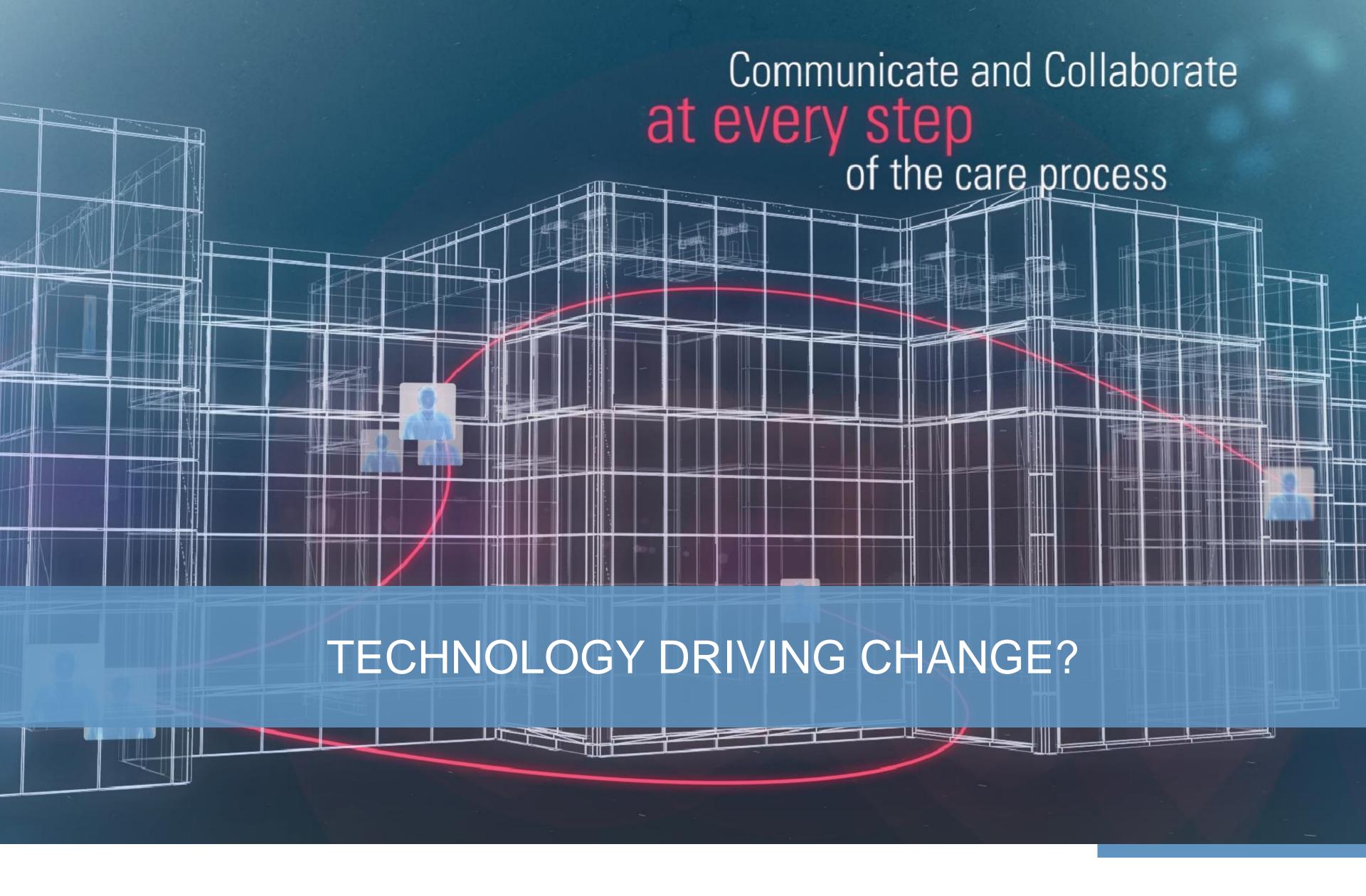
Source: Adapted from Avendano M, Glymour MM, Banks J, Mackenbach JP. Health disadvantage in US adults aged 50 to 74 years: A comparison of the health of rich and poor Americans with that of Europeans. *American Journal of Public Health 2009*; 99/3:540-548, using data from the Health and Retirement Study, the English Longitudinal Study of Ageing, and the Survey of Health, Ageing and Retirement in Europe. Please see original source for additional information.



Cost of Chronic Disease

Chronic diseases, such as heart disease, cancer, and diabetes, are responsible for 7 of every 10 deaths among Americans each year and account for 75% of the nation's health spending.

Source: CDC web-site, 27 November 2017





eHealth Roadmap

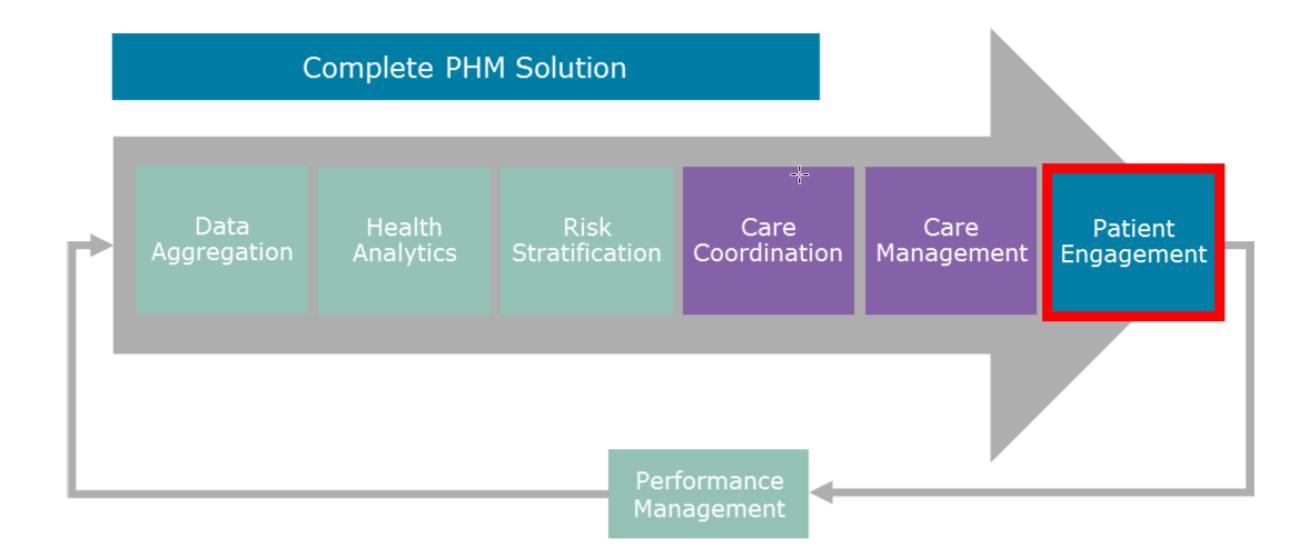
SS	1 CAPTURE	2 AGGREGATE & SHARE	3 COLLABORATE	COORDINATE	SMART CARE	6 POPULATION HEALTI
PHASES		(A)				
FUNCTIONS	All stakeholders in the care continuum capture all necessary data	All stakeholders in the care continuum may access, share, aggregate and visualise meaningful data on a daily basis	Multidisciplinary teams, including the patient, formal and informal caregivers and processes for collaboration are set-up	Delivery of integrated care may begin, based on agreed care pathways across health and care settings, covering first medical care but evolving to wellness and social care	Smart applications routinely support caregivers and patients, taking into account the changing medical, social and operational context. Quality management processes are in place	The acquired experience and insights trickles down to health care experts and health policy makers, enabling them to further focus on outcomes and adopt a VBHC approach
	POLICY		INCENTIVES		SKILLS	

INTEROPE	INTEROPERABILITY		OTECTION	HEALTH TECHNOLOGY ASSESSMENT
1. Usability of EMRs, data capture and navigation tools 2. Non-traditional data capture: medical devices, wearables, social media, -omics, Patient Reported Outcomes 3. Cloud and Mobile-ready tools	Semantic Interoperability for data and workflows Standards Natural Language Processing Identity management and patient consent Visual integration of external data sources Data sharing platforms	IT support for the establishment of teams and collaboration between team members Bi-directional instantaneous communication between team members	1. Distributed and dynamic workflows and associated tools 2. Patient-specific care plans 3. Visual integration in daily used IT tools and apps 4. Gamification to engage citizens and patients 5. Telehealth	1. Big Data Lakes (from diverse data sources) 2. Deep Machine Learning (bottom up) 3. Rule based decision support (top down) 4. Knowledge sharing platforms 5. Big data analytics, including risk stratification tools 6. Impact assessment tools

The modular approach to eHealth

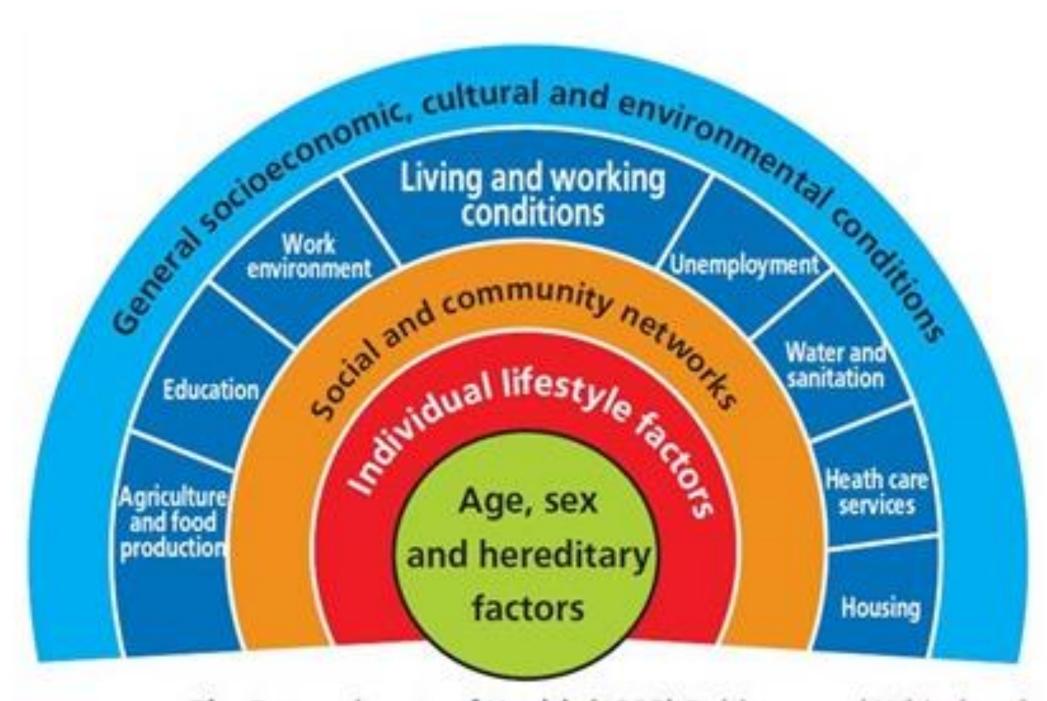
PHM and the Role of Patient Engagement





HealthCare as Data Science

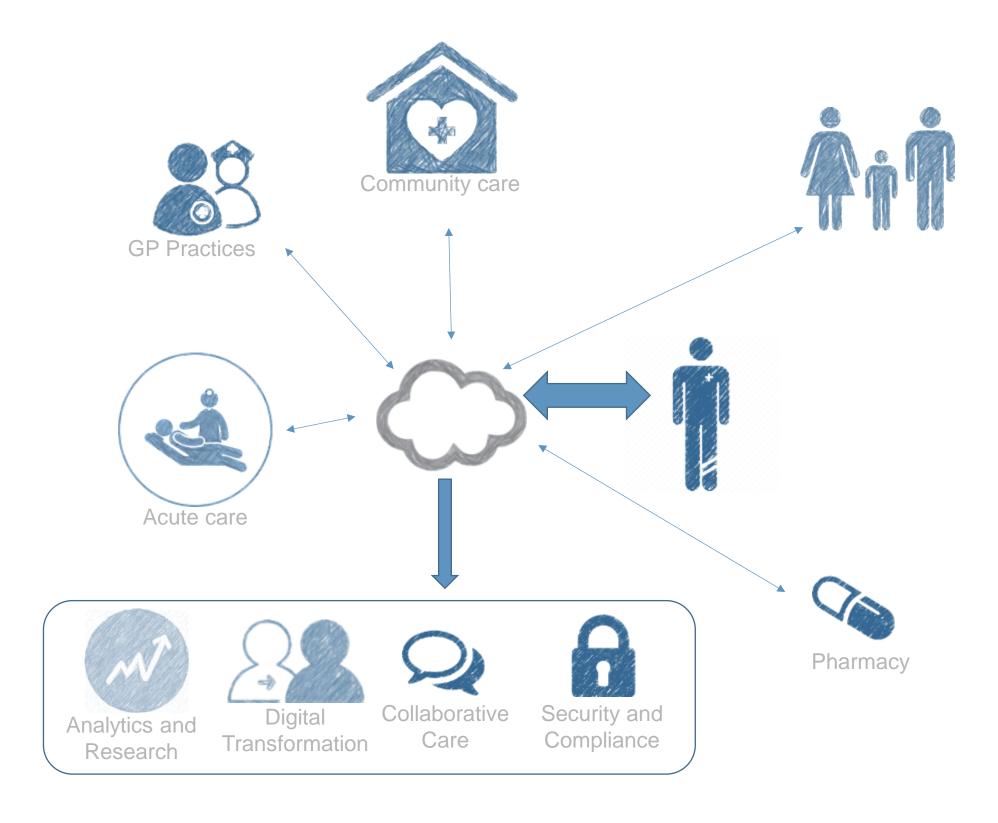
000



The Determinants of Health (1992) Dahlgren and Whitehead

IT Platform for Care Transformation

000



Characteristics

- Neutral, Open Standards based platform
- Aggregated Health records with centralized consent and compliance
- Support multiple standards
- Opening Data and Care Orchestration tools for Micro applications
- Provide access to the patient's longitudinal record embedded within each entity's system
- FHIR based Open APIs, Smart
 Notifications and Workflow Engines

Impact

- !! Vendor Neutral and interchangeable Platform
- !! Implement digital transformation strategies without underlying system complexities
- !! Aggregated Clinical Data
- !! Patient-centric design

Data Analytics & Integrated Care

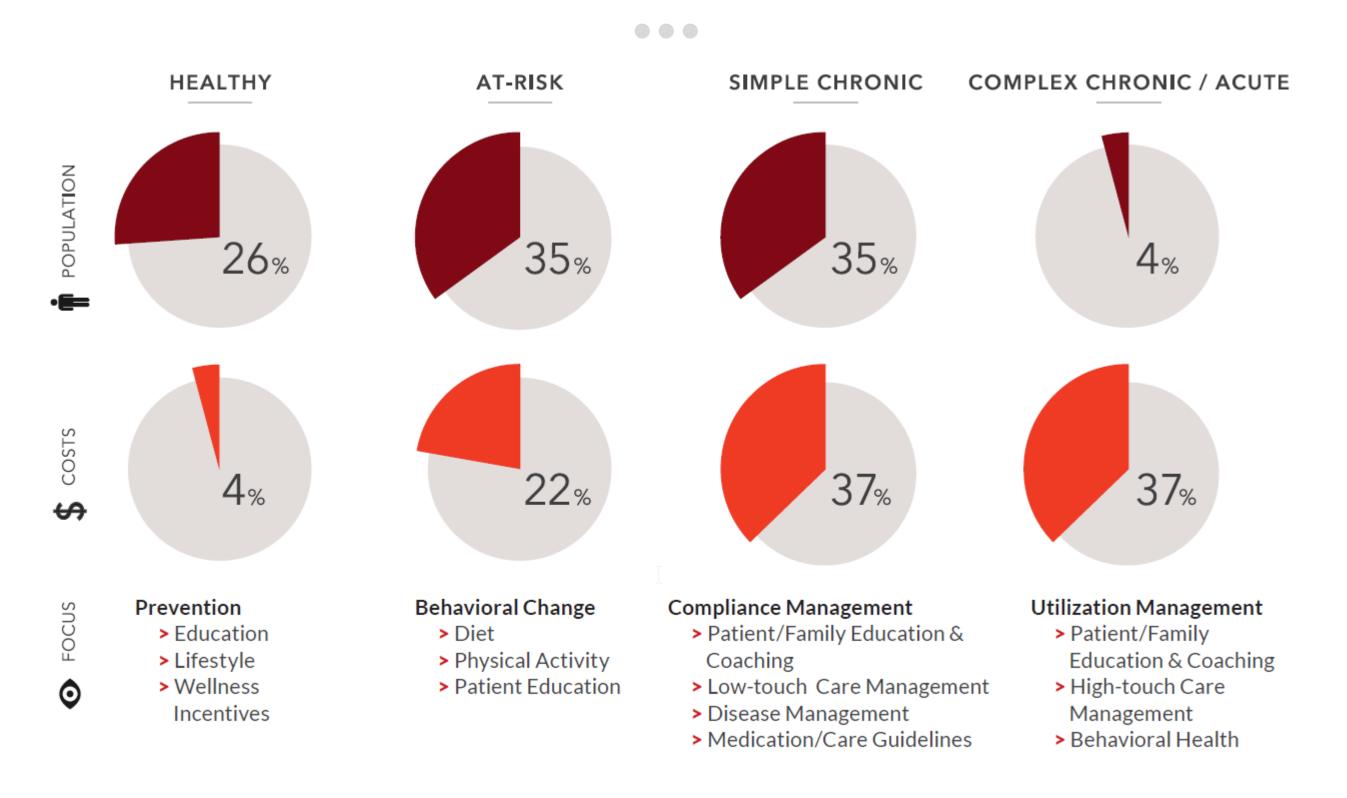


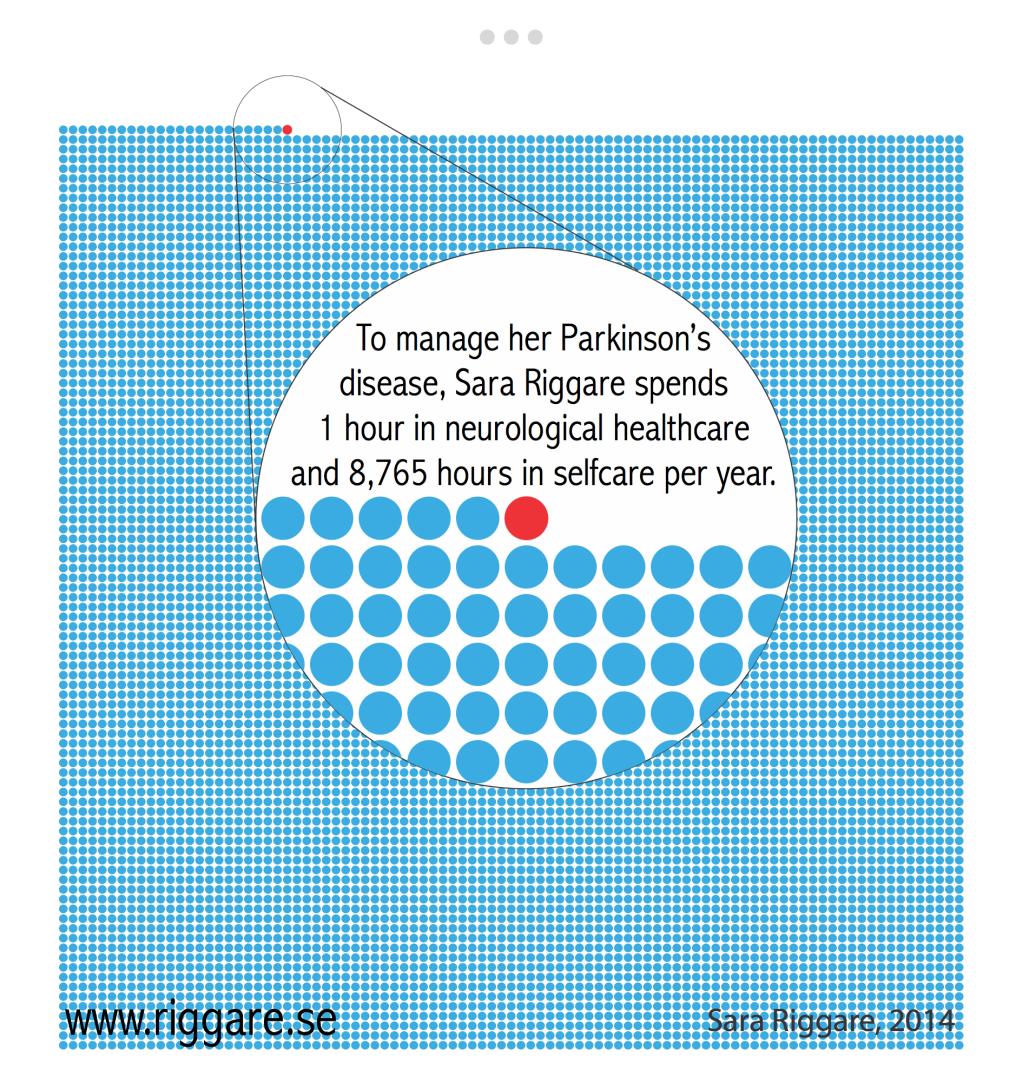
Figure 2.3: Stratifying Population for Cost and Care Models

Self Care

- Patients with chronic conditions spend most time outside of primary or acute care
- Patients with chronic conditions make day-to-day decisions about—self manage—their illnesses.
- Digital programs for self care management of chronic diseases have high drop out rates
- Chronic diseases not well managed have a higher change for complications and increased costs.



The Digital Patient





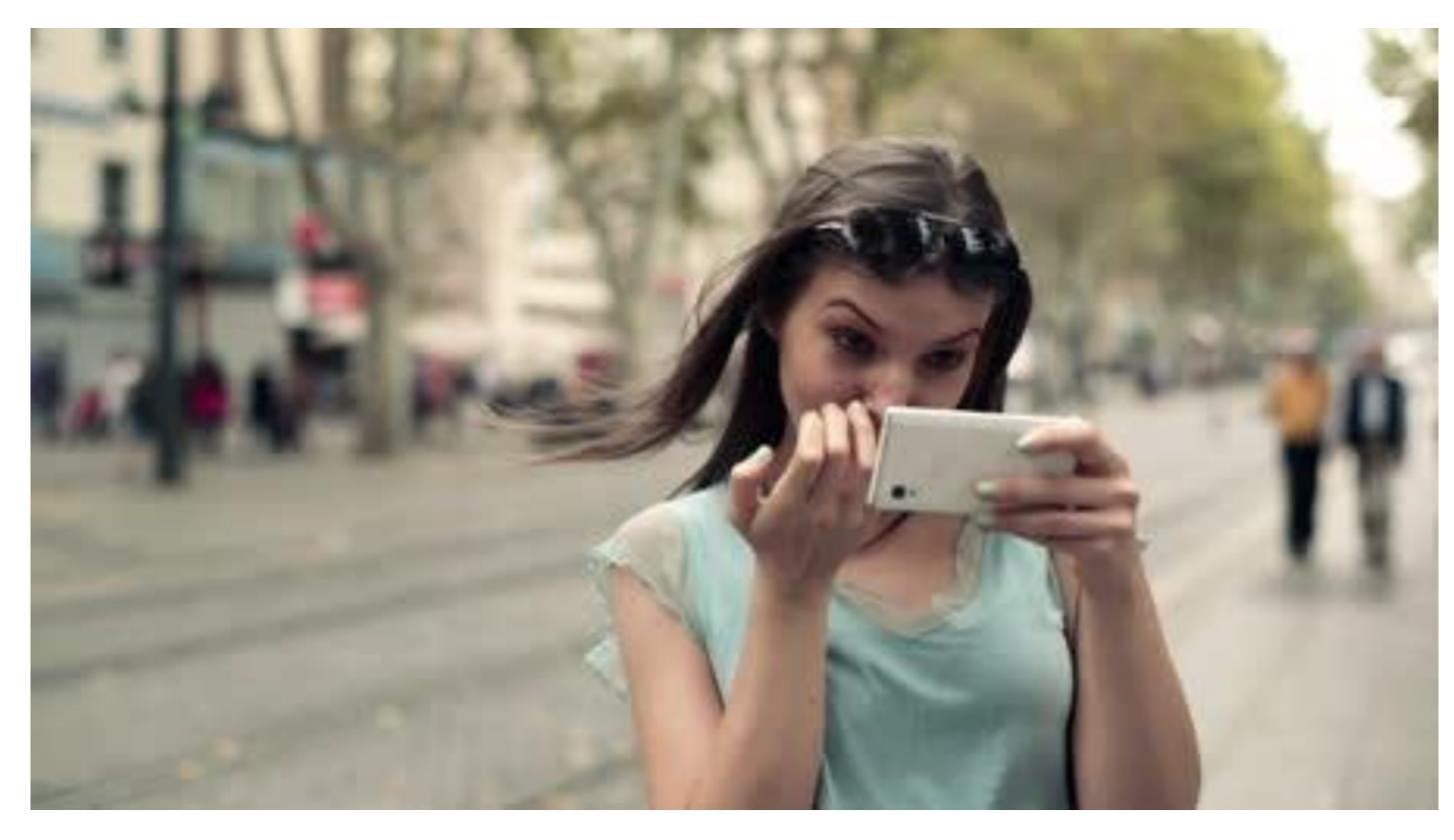


The Digital Patient



The Digital Patient

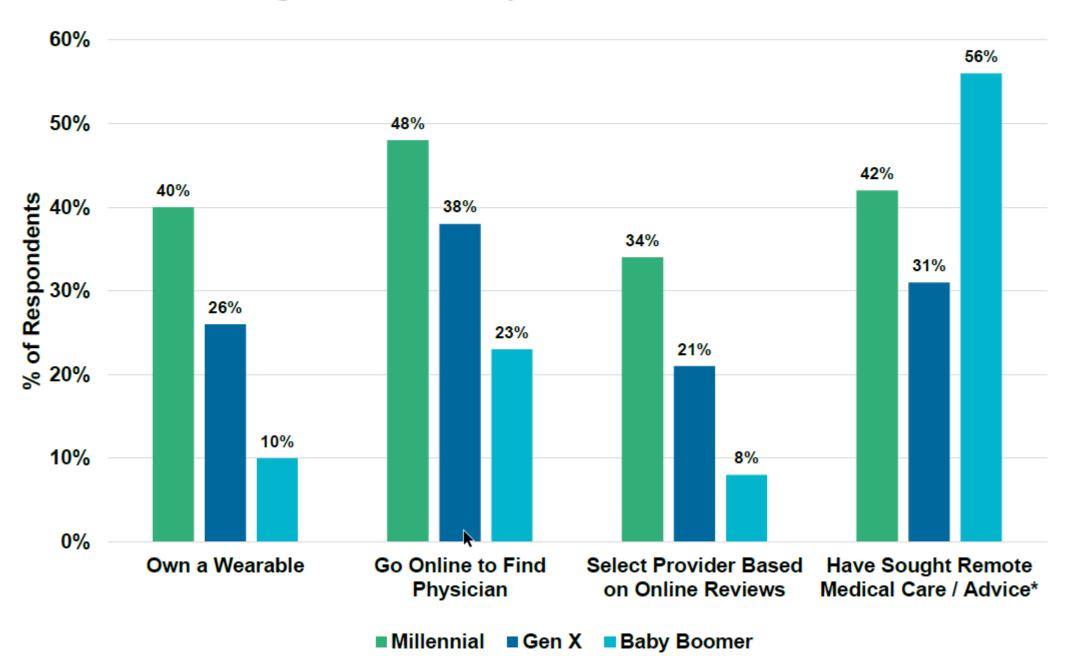
0 0 0



2017 Mary Meeker Internet Trends Report

Consumers = Increasingly Expect Digital Health Services... Especially Millennials...

Digital Health Adoption Across Generations





Source: Rock Health Digital Health Consumer Adoption (12/16) *Represents % of Millennials that have sought medical care/advice over live video, % of Gen X that have over text message, and % of Baby Boomers who have over phone

Millennials include 18-34 year olds; Gen X include 35-54 year olds; Baby Boomers include 55+ year olds





Person Centered Care

The four principles of person-centred care



Risk Of Well Coordinated Professionals



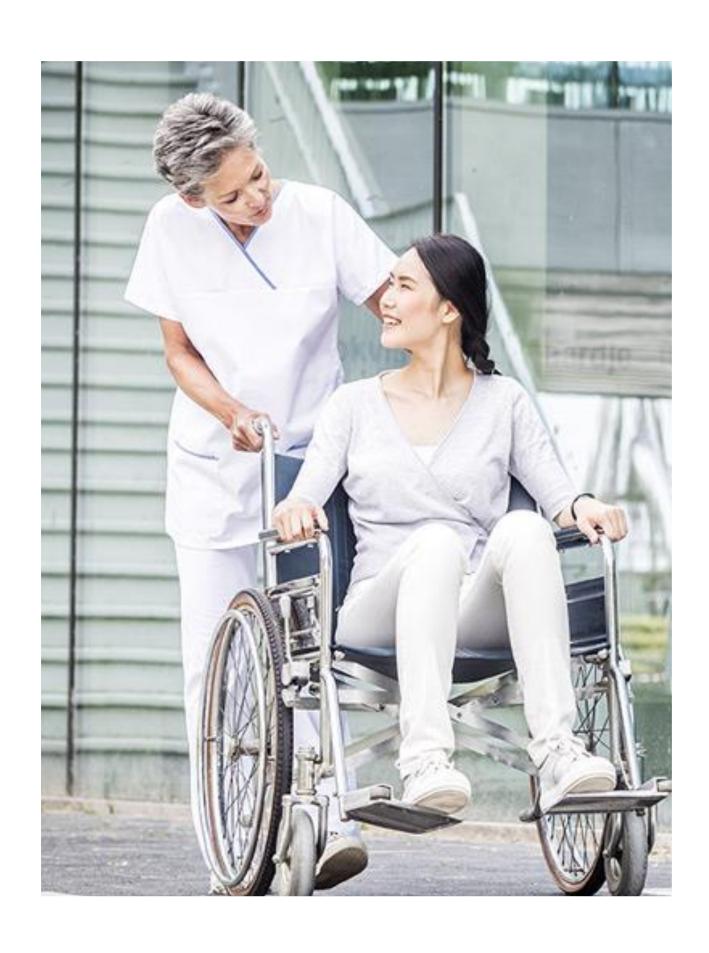


Do Not Forget ...

0 0 0

66 ... the secret of the care of the patient is in caring for the patient.
59

Frances W. Peabody, MD, October 22, 1926



THANK YOU!



Joost Felix

Business Unit Manager Integrated Care Agfa HealthCare













Joost.felix@agfa.com