



The future of Connected health

Cécile WENDLING
Head of Foresight
AXA

EXTERNAL



This presentation is a foresight exercise

- ➔ It is analysing **trends and weak signals** to identify changes in the health sector.
- ➔ It is exploring **possibilities in order to be thought provoking**.
- ➔ It is based on a **world wide approach with 2030 as horizon**.

5 World Mega Trends



New Actors Entering the Market





New Costs Balance ?

COSTS



RISE OF OAUOT OF THE POCKET HEALTH EXPENDITURES

US 2012 growth: +4.1%

RISE OF PREVENTIVE, PERSONALIZED AND PREDICTIVE MEDICINE

DNA sequencing price: divided by 100 000 in 10Y

CONNECTION FOR HEALTH PURPOSES ON THE RAISE

PWC: in 2017 mhealth could save 99Bs in UE

NEW WEARABLE BODY SENSORS

shift towards medical grade sensors

HEALTH DATA DIVERSIFICATION

genomics/social/ environment/statistics

HEALTH PLATFORMS ON THE RAISE FROM PUBLIC & PRIVATE SECTORS

USHA: 1608 datasets

HEALTH MOBILE DEVICES ON THE RISE

2012 : 107M devices 2017: 515M devices

NEW WEARABLE BODY SENSORS

shift towards medical grade sensors

WHO: 36 million deaths/year

RISE OF MEDICAL COSTS TO CHRONICLE DISEASES

ANTIBIOTIC RESISTANCE

5 000 deaths/ y in UK TODAY

RISE OF MEDICAL COSTS TO CHRONICLE DISEASES

Alzheimer: from 5 m. today to 16M in 2050

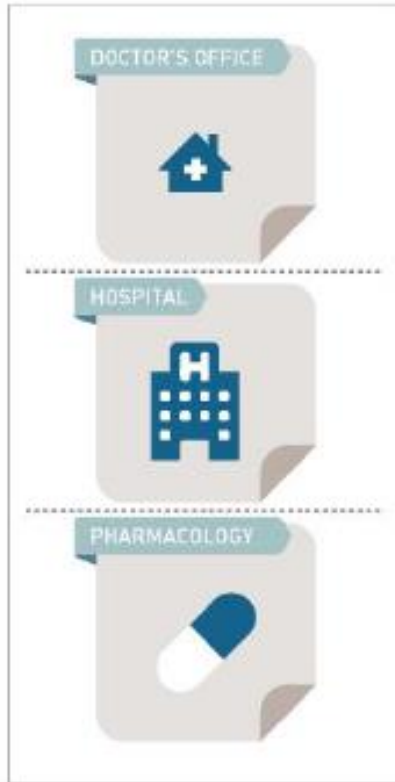


MEDICAL TRENDS

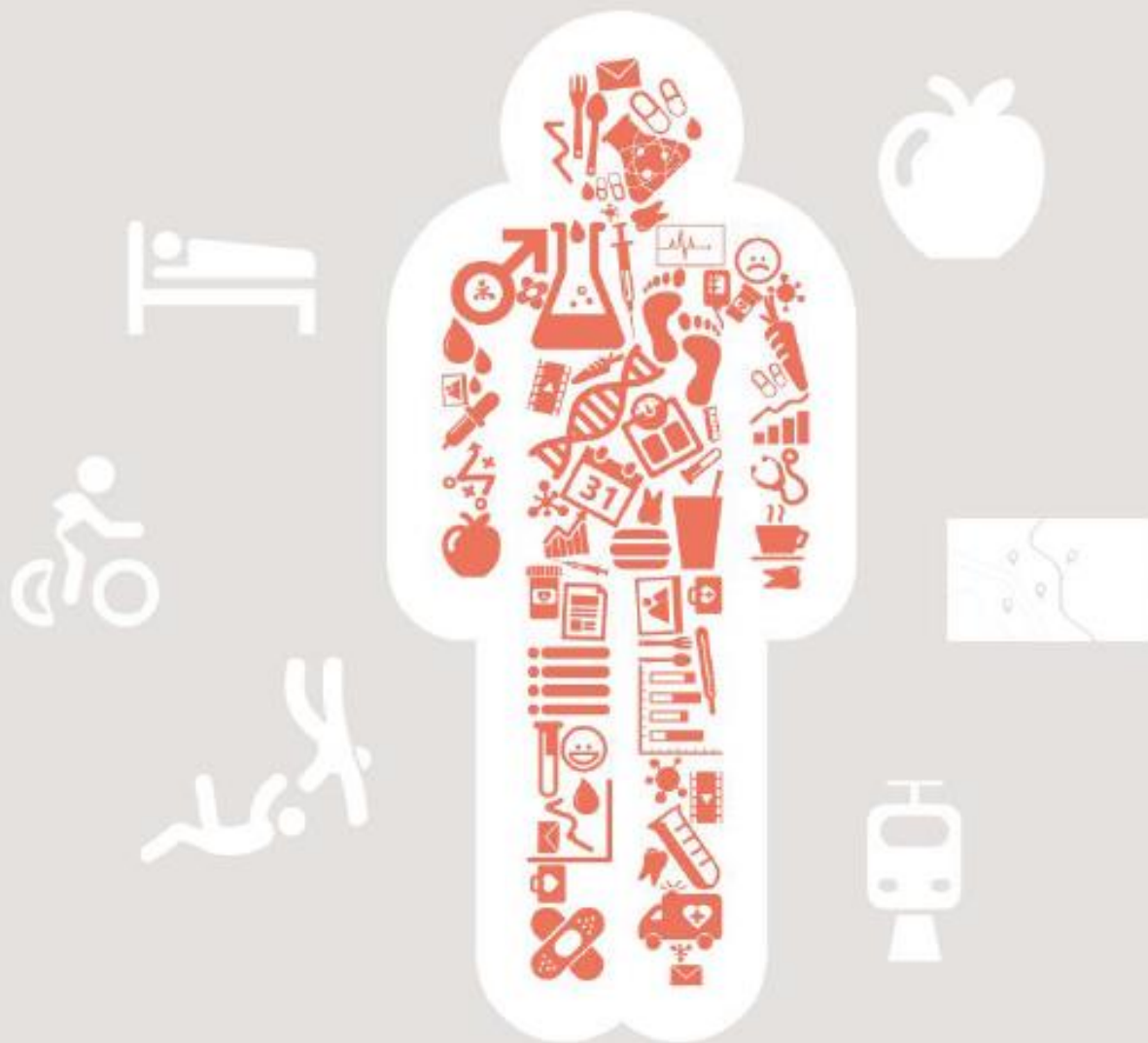


TECHNOLOGICAL TRENDS

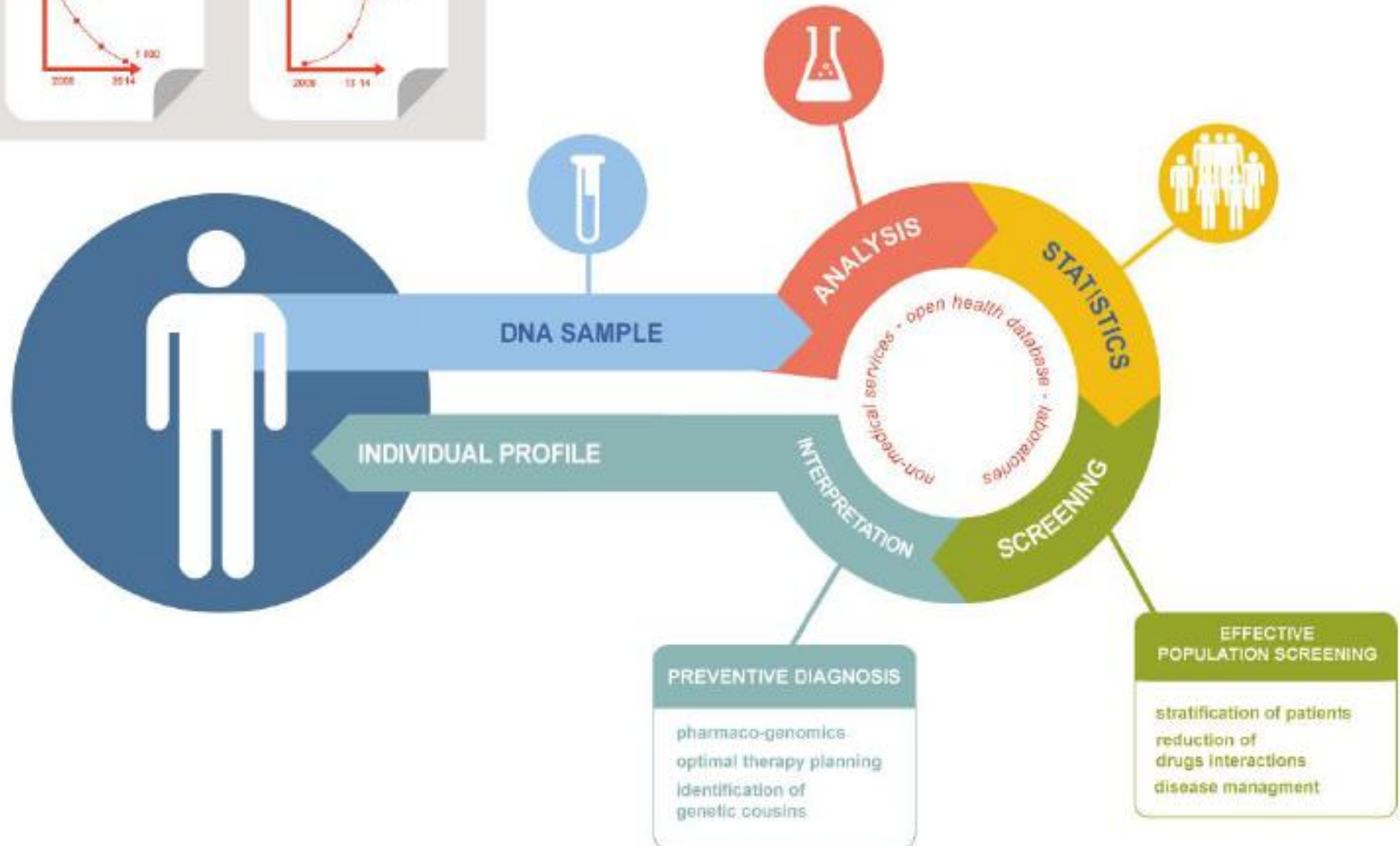
Convergence of Sciences



Health Data Diversification

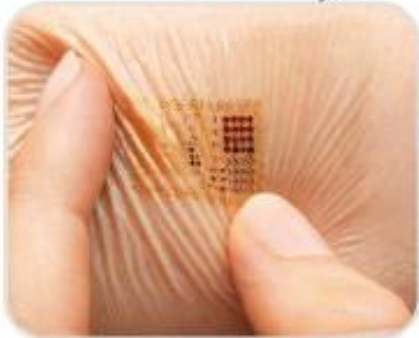


Preventive, Personalised and Predictive Medicine



Connected Objects Will Replace Labs

BioStamp by MC10



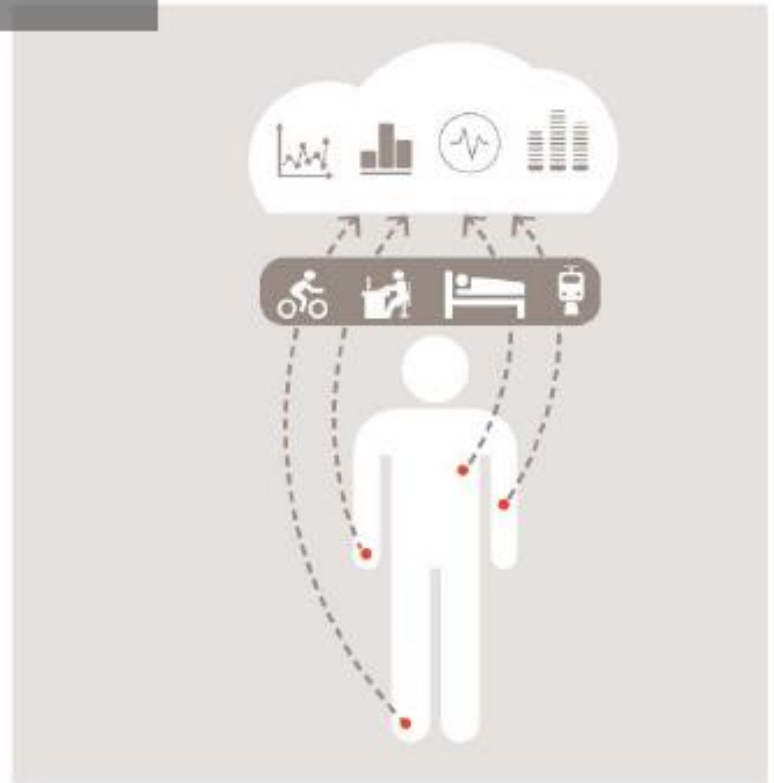
Scanadu Scout



BabySense



Stool analysis through Smart toilets



Algorithms Will Replace Doctors

Diagnostics



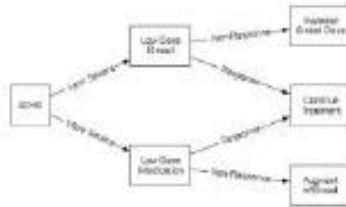
Personalized
Medicine



Disease response



Dynamic treatment
regimes (DTRs)



Robots Will Replace Hospitals

Ingestible sensors



Artificial womb



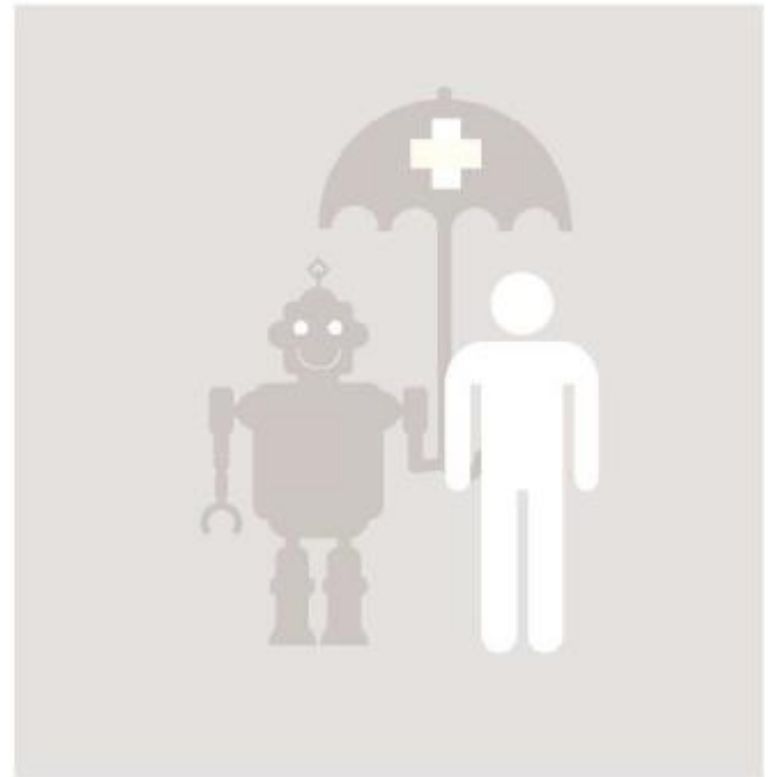
Robosurgeons



Social robots



Elder-care robots

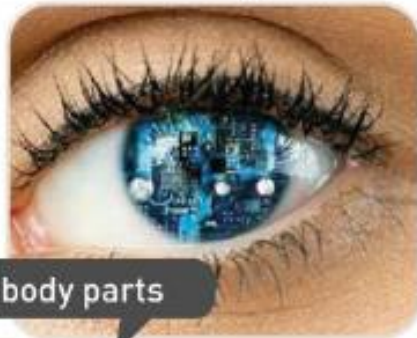


Artificial Devices Will Replace Body Parts

nano inside!



bionic eyes



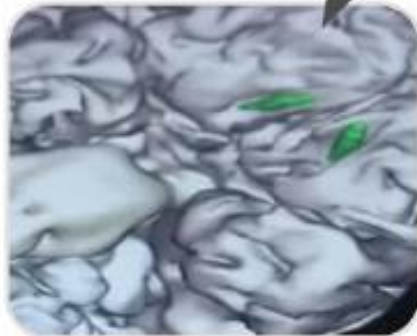
artificial body parts



neuroprosthetics



nervous system patch



ID CARD

SIMON: 238 yo

- Heart icon: e. 25 y -
- Brain icon: e. 35 y -
- Stomach icon: e. 15 y -
- Ear icon: e. 80 y -
- Hand icon: e. 30 y -
- Hand icon: e. 75 y -
- Tooth icon: e. 10 y -





redefining / standards