Overview
The University of Tokyo Center of Innovation
‘Self-Managing Healthy Society’

東京大学
THE UNIVERSITY OF TOKYO

Back-casting

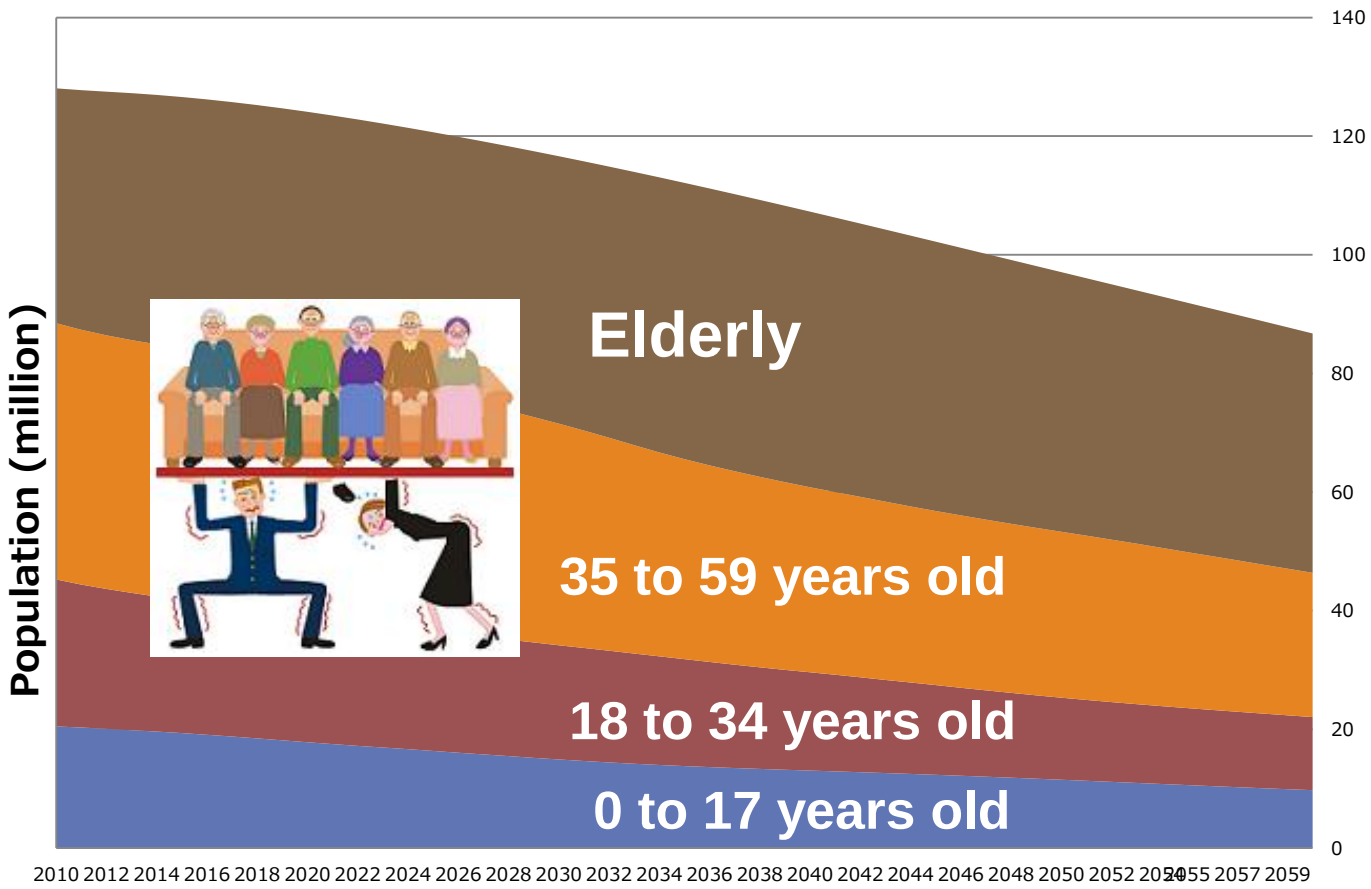
Current mindset & need:

- I go to hospital if I get sick
- Younger generations support elderly
- Medical cost for elderly should be reduced by all means

GAP

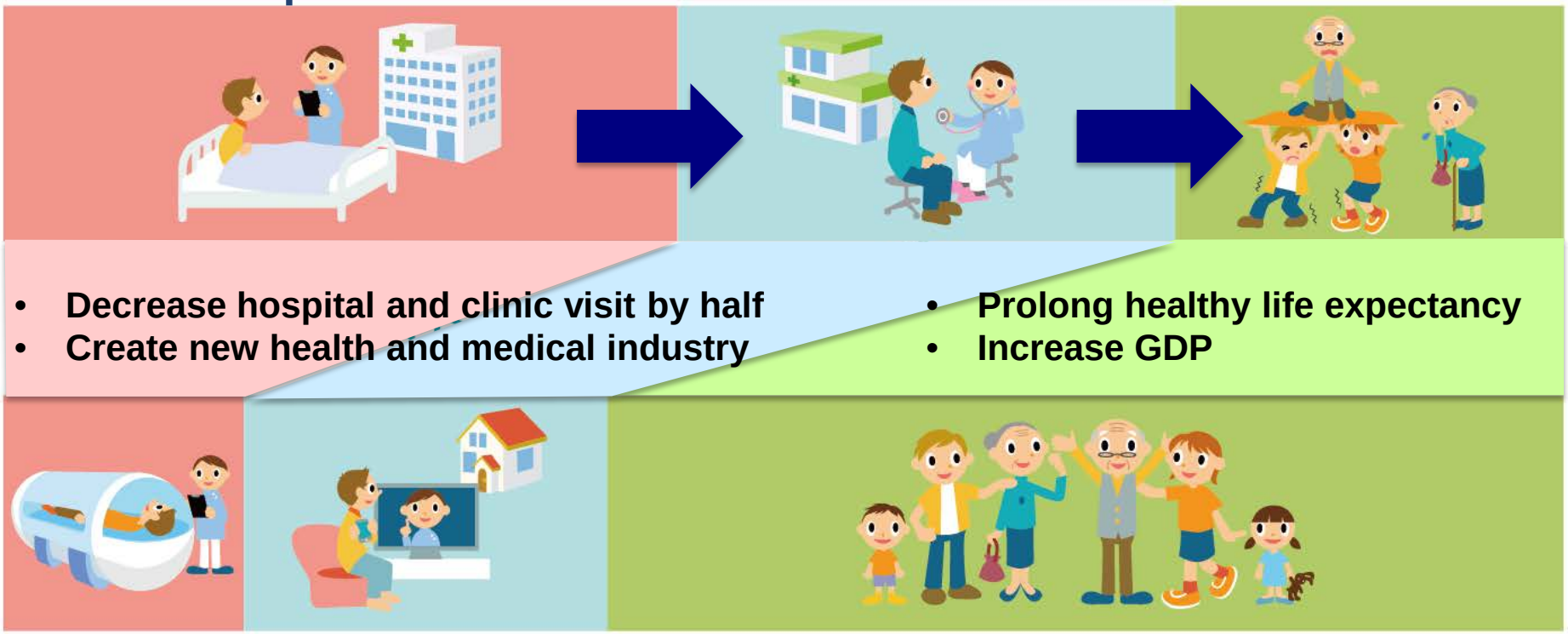
Future mindset & need:

- I should take care of my own health
- Elderly should also support society
- Increase GDP by creating new health and medical industry



Future vision: “Self-Managing Healthy Society”

From hospitalization to outpatient care	From outpatient care to home care	Being healthy at home



- Decrease hospital and clinic visit by half
- Create new health and medical industry

- Prolong healthy life expectancy
- Increase GDP

- **Satisfaction level of ageing society⇧ /medical cost⇩ = health happiness index⇧⇧**
- **A society where everybody takes health seriously as a personal matter, and the lost ties between communities and between generations are regained.**

“LIFELONG WELL-BEING”

From hospitalization to outpatient care	From outpatient care to home care	Being healthy at home

Medical technology innovation

- Day surgery
- Prevention of severe cases with vascular endoscopy

Disease prevention

- Sustainable support with full use of ICT
- Next-generation preventive medicine by genome analysis

Visualization of health risk

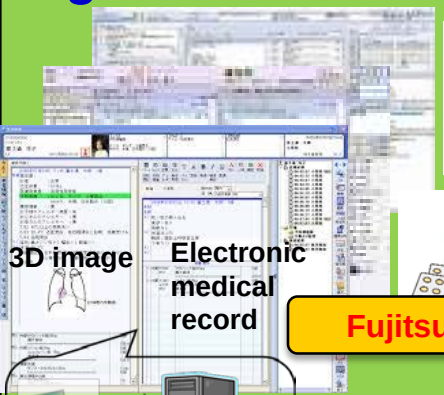
Measurement and visualization of Me-Byo➡Health personalization

Disease	Me-Byo	Healthy

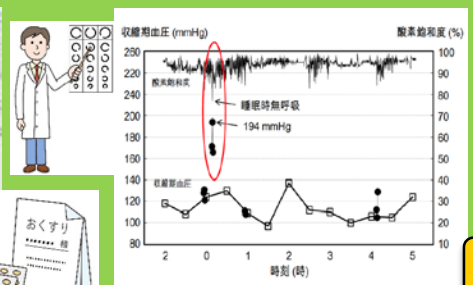
Standardization of health/medical ICT
（MCDRS⇄SS-MIX2⇄PLS⇄Health information）

Prediction of personal health/medical condition from health/medical data and provision of coaching

Data from health and medical checkups + genome data

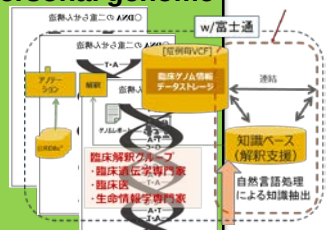


Fujitsu



24-hr, 365-d biomonitoring

Personal genome



Fujitsu

各医療機関の電子カルテ

EMR

Eisai (Dementia, Wasrurenabito)

Tanita & Omron

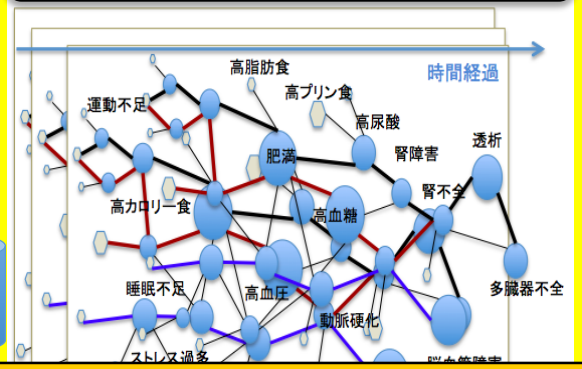
Nippon Sogo Systems

MCDRS

Personal life data（SS-MIX2 compatible）

Personal health prediction

Disease prediction by voice（ＰＳＴ）



Prevention of transition to DM dialysis（NTT, KHK）
Dementia（Eisai）
Immunological disease (Chugai)

PHR

Blood sampling at home (Hitachi High-Tech)

Muscle Age（Hitachi）

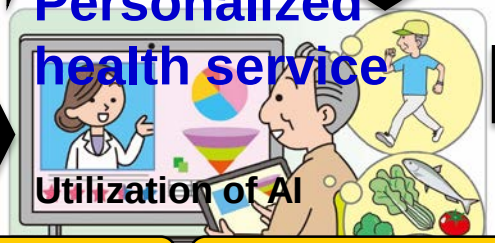
Analysis of phone call

Healthcare sensor（NTTdocomo）

Voice recognition of emotion（PST）

Daily health data

Personalized health service



Utilization of AI

Nihon Chozai

Tokyu Department Store

Next-generation Health Concierge

Patient

Healthy Individual

Promotion of behavior change

Involvement of medical experts

Education with accurate information

1. Prediction and visualization of personalized risks

Response by AI

2. Personalized coping plans and incentives

Execution

3. Visualization of change/effect
⇒Realization of improvement (back to 1)

Support from like-minded fellows

Without realizing, with fun

Health personalization ('Jibun goto ka') and behavior change

Lifelong well-being

State-of-the-art science and technology seeds matching the vision + corresponding needs of industry and government

Kanagawa Prefecture
Test field
Collaboration with WHO

PMDA・NIHS
Promotion of social acceptance of new technology

ISO
Prompt reflection to international standard

Center of Innovation

- Practician of healthcare business
- Hospital officials
- Medical economics experts
- Former PMDA and NIHS officials
- ISO committee member
- Investment Fund
- Medical technology assessment lab
- IP agreement management
- Full-time PL

Involvement of all stakeholders in industry, government, academia and private sectors from early stage of R&D

UTokyo educational system

Securement of sustainability by development of "knowledge professionals" utilizing industry-academica partnership

Social implementation through speedy R&D, human resource development and policy proposal

Towards a sustainable "Next Generation Health and Medical Development Center" by integration and development of the above

The University of Tokyo Center of Innovation challenges major issues!

We pledge to contribute to solving problems facing ageing society through innovation and social system reform using the University's intellectual asset including voice analysis, ultrasound, ICT, and behavior change technologies.

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