ESTHER
a Holistic Concept for Inclusion of all Stakeholders in Smart MedTech for the Benefit of Patients

AN INDUSTRY DRIVEN INITIATIVE ON EMERGING AND SMART TECHNOLOGIES FOR HEALTHCARE

KLAUS-MICHAEL WELTRING, MEMBER OF THE ESTHER TASK FORCE
The healthcare transition

- A major revolution from reactive to preventive and integrated healthcare

- A new system approach to disease that will trigger
  - Integrated diagnostics and treatment
  - Outcome based healthcare
  - Prevention of disease in individual patients

- P4 Medicine
  - Personalized
  - Predictive
  - Preventive
  - Participatory
Impact of Medical Technologies

Costs for Healthcare

- Infrastructures 75%
- Pharma 17%
- Biotechnologies
- Medical technologies 8%

Transform Medical Practices
Transform Health Care Structure
Medical Technologies
Transform Health Care Systems
Transform Patient Life
Medical Technologies: from diagnosis to cure...
Economic Data of MedTech

- 106 B€ annual turnover
- 25 000 companies
- 40 000 IVD tests
- 500 000 medical devices
- 550 000 employees
Cross Technologies

The Argus® II Retinal Prosthesis System
Cross Industries

- Medical Devices
- Pharma
- Biotech
- ICT

[Logos of various companies]
Cross Business Models

- **IVD for therapy**
  - Companion tests

- **MD for therapy**
  - Drug delivery devices

- **ICT for health**
  - Connected Medical Devices

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Sanofi to Collaborate with Google Life Sciences to Improve Diabetes Health Outcomes

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IBM & Pfizer Join Forces

For many years, the diagnosis of Parkinson’s disease...
The challenges

Healthcare market: Patients, clinics, Insurances,
The challenges

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The challenges

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Regulatory ecosystem: regulation, reimbursement, HTA, etc.

Medical imaging  IVD  eHealth  Medical devices

DIGITISATION

Biotech  Nanotech  Advanced materials  ICT  Photonics  Electronics

2/8/2018
4 major spheres of activity

- Need for cross-technology products
- Digitization of healthcare
- New business models
- New EU regulatory framework
Objective

- Improve the quality of healthcare with smart medical technologies
- Increase the competitive ability of EU medtech, in a changing regulatory environment
- Reinforce the innovative strength of the EU medical technology research
Open and flexible integrated platform (association) led by industry

- *industry, procurers, patients, regulators, technology providers, HTAs, reimbursement agencies...*

- **Improving** coordination all along the value chain, from R&D to market access

- Contributing to the existing programs with medtech-oriented priorities
Stakeholders along the value chain

- Patients
- Hospitals, patients
- Marketing
- HTA, reimbursement
- Regulatory approval
- HTA agencies, health insurances
- EMA, national agencies
- CMO, OEM
- CE marking
- Clinical validation
- Manufacturing
- Hospitals, CROs
- Notified bodies
- RTOs
- Universities
- Basic research
- Technology development
- Medtech companies
- Buyers
- Patient advocacy groups
Context for implementation

Outcome based healthcare
Holistic approach
Inclusiveness of stakeholders
Overcoming silos
ESTHER-European Technology Platforms
ESTHER-VANGUARD Regions
Healthtech 2030 Mission - Objective

Sustainable Health and Wellbeing for all European citizens

Digitization and convergence of Key Enabling Technologies

Holistic concept based on the inclusion and consent of all stakeholders
Healthtech 2030 Mission - Features

- Review the old boundaries between health vs sickness, central care vs home care, therapy vs prevention, and price vs outcome
- Make social and economic sciences plus humanities an important and integral part of the HEALTHTECH Mission
- Draft new value chains mixing Medtech, IVD, Pharma, Biotech and digital companies with new business models, finance tools, governance systems
- Discuss ways to adapt the regulatory and reimbursement frameworks at the European and Member States levels including setting European rules, standards and protocols for protecting the use and access of personal (health) data
- Implement a continuum of funding instruments from basic research to the product launch with increasing financial engagement and application of decision criteria coming from industry
- Breakdown silos within regional, national and EC administrations
Providing integrated, innovative and smart healthcare solutions for all European patients by promotion of an innovative European Health Technology Industry.
Networking and mapping

- Companies
- Initiatives, PPPs, ETPs...
- Regions
- RTOs and research infrastructures
- Clinical centers
- R&D priorities established

ESTHER Platforms and Joint Actions

- Projects proposed to existing programmes
- NOBEL Coordination and Support Actions
- Implementation under existing instruments

ESTHER in FP9

Integration of priority actions in a single mutual initiative

What?

How?

Informal structure
Existing networks (Medtech Europe, ETPN, EARTO, ECRIN, Vanguard...)

Existing funding tools and support measures (regional, national, European)

Healthtech 2030 Mission
Take home message

1. ESTHER is a totally **new holistic concept** of supporting Europe to master the multi layer disruptive changes in healthcare

2. ESTHER provides the **platform** to plan and combine synergistic actions of all stakeholders along new value chains to implement the concept in a mutual **Healthtech mission**

3. ESTHER aims for **equal access** to personalized healthcare for all groups of citizens in Europe based on a sustainable competitiveness of European industry
## ESTHER Task Force

<table>
<thead>
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Thank you for your attention