

# **Innovation in medical technology as a response to Europe's healthcare challenges - Industry's viewpoint -**

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Vice President, Medtronic**

High Level Conference

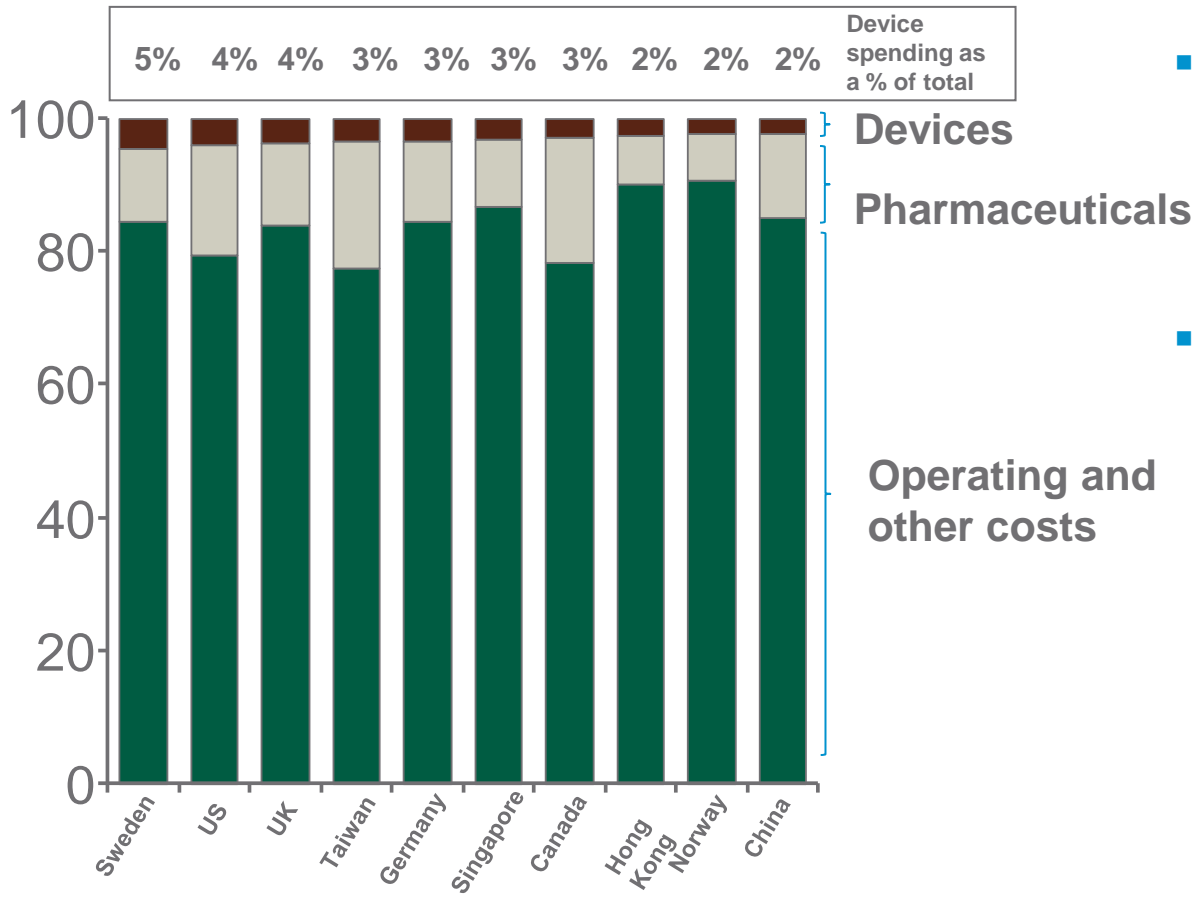
Exploring Innovative Healthcare – The Role of Medical Technology Innovation and Regulation

22 March 2011

Brussels, BELGIUM

# Breakdown of current healthcare spending

(%, 2008)



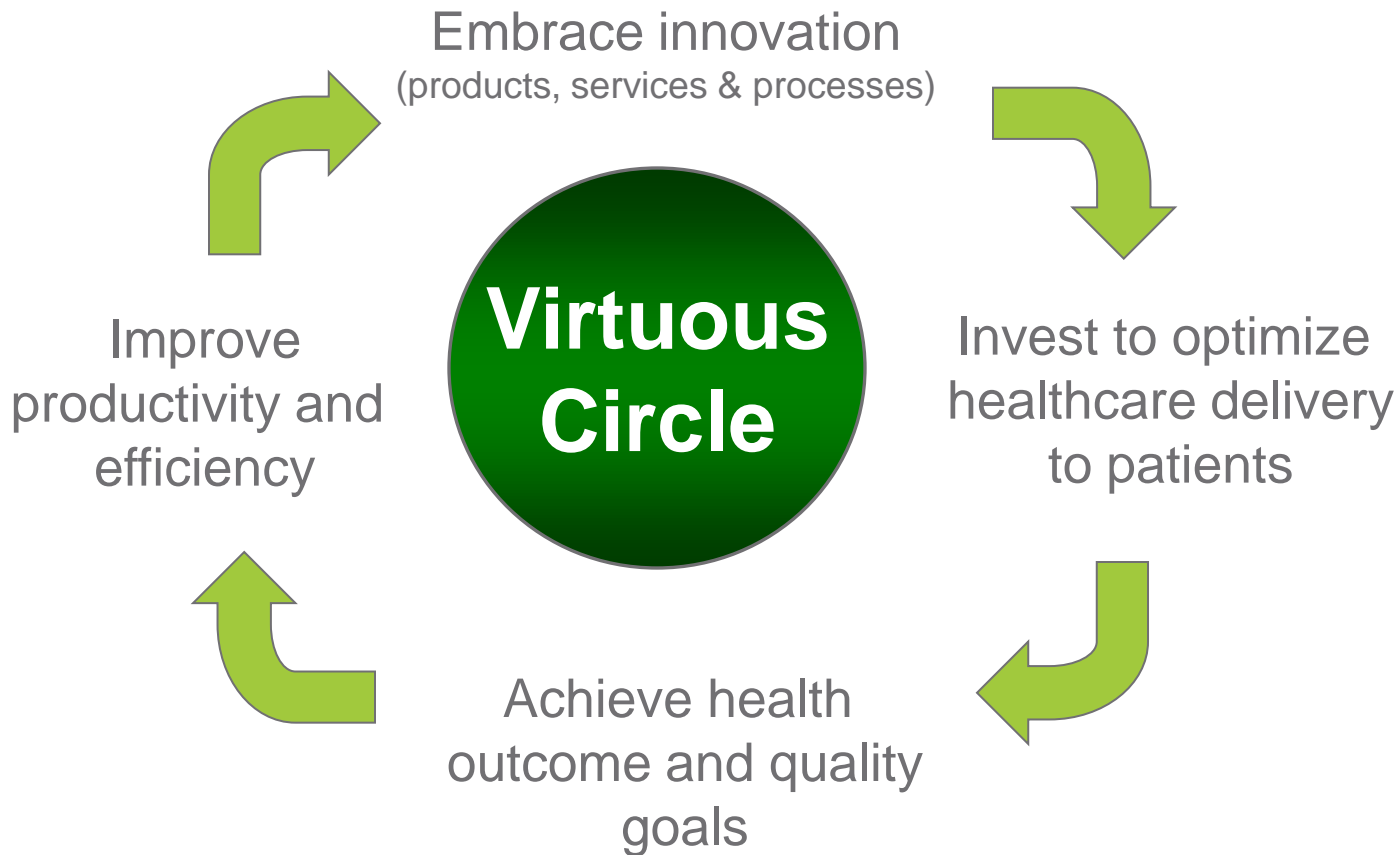
Source: Espicom; WHO; World Bank, LEK analysis

- Medical device spending accounts for 2-5% of total healthcare spending
  - Operational expenses reach ~80-85% of total spending
- Reallocations of spending here have a significant impact!**

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# Our opportunity in Europe: embrace innovation

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# BACKGROUND

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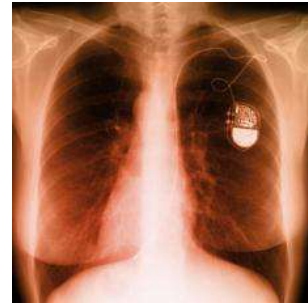
# Eucomed and the Medical Technology Industry

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- Eucomed represents the medical technology industry in Europe
  - Eucomed's mission is to make modern, innovative and reliable medical technology and services available to citizens
  - Members: 25 national associations plus direct corporate members
- Medical technology industry in the EU
  - About 22,500 medical technology companies in EU
  - 80% SMEs
  - €95 billion annual sales; 8% re-invested in R&D
  - Nearly 500,000 employees
  - > 500,000 products (10,000 generic groups)
  - One new European patent every 38 minutes\*



# MedTech: a diverse sector



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# MedTech value comes in different dimensions

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**SOCIAL**

**CLINICAL**



**VALUE**

**ECONOMIC**

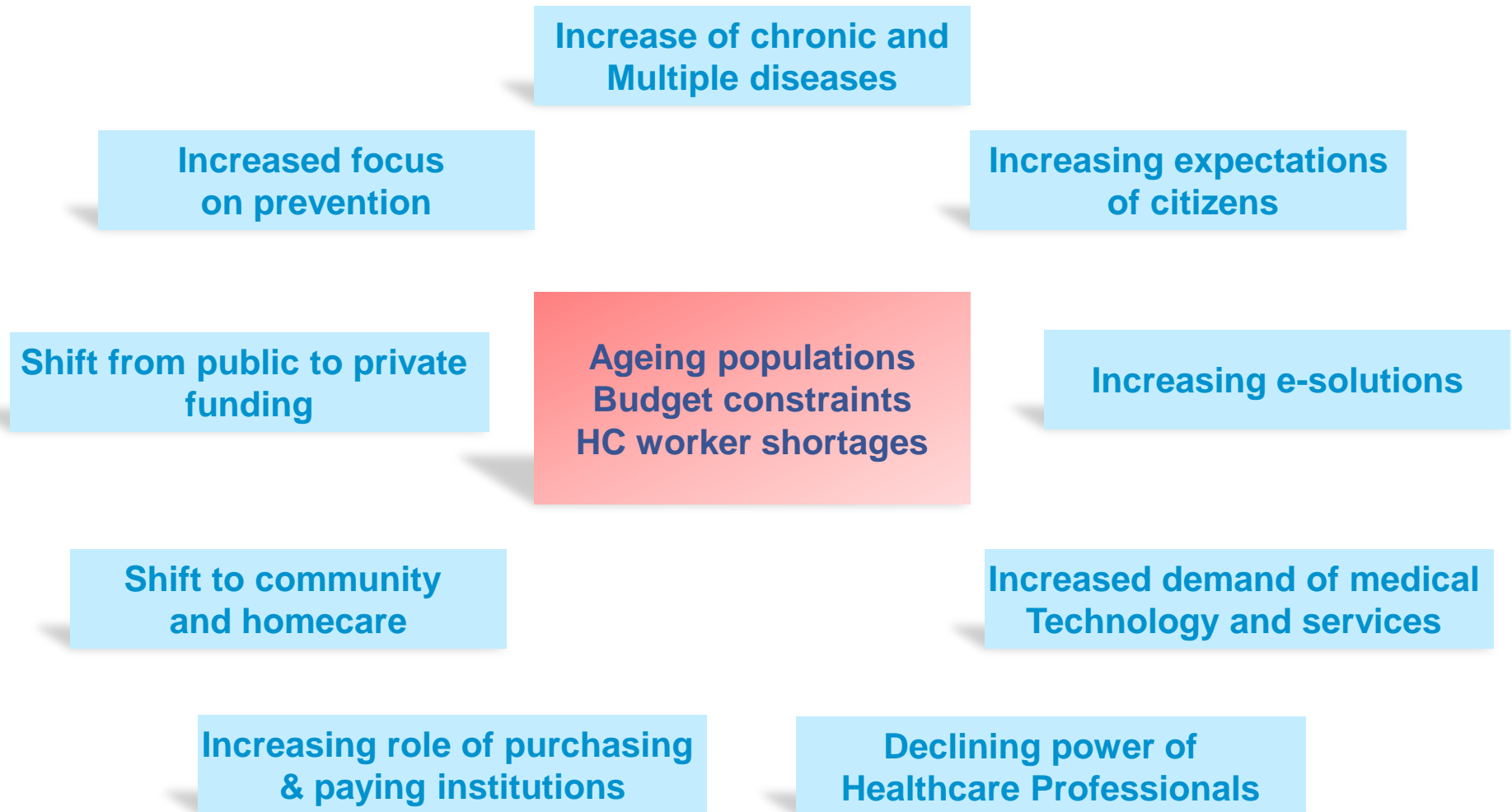


**ORGANISATIONAL**

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# Key trends in healthcare

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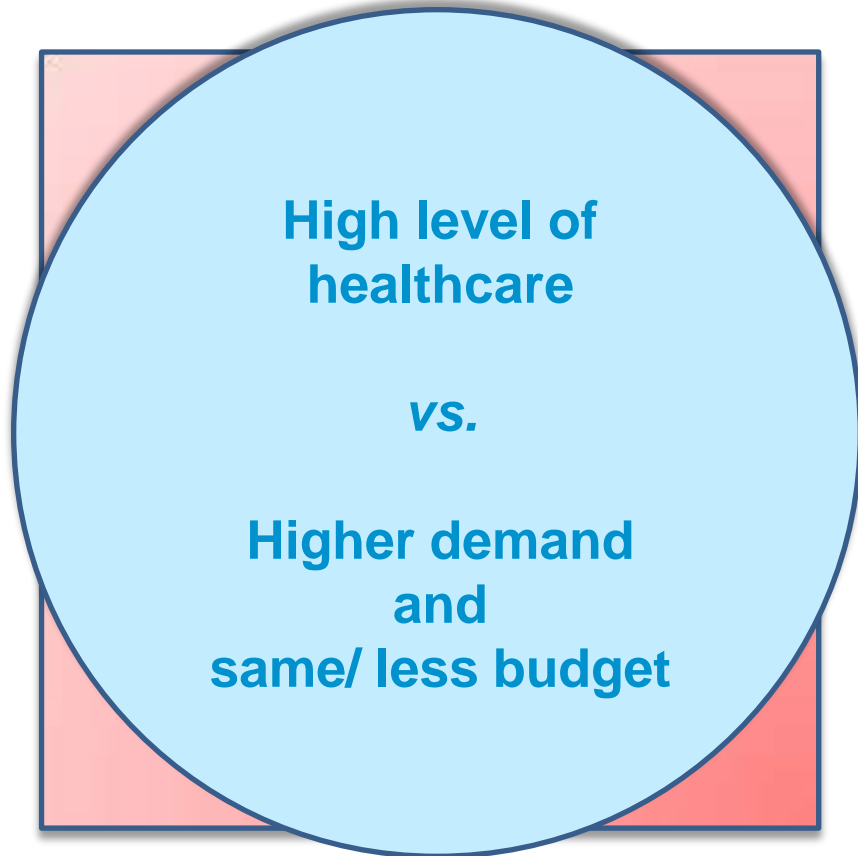


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# Implications for future healthcare management

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**Need to get more value  
from what we spend!**



**Need for new healthcare  
management models!**

1. Addressing the entire patient pathway
2. Integrating patient as an active player
3. Overcoming silo-budgeting and silo-management of healthcare

# Value of Medical Technology

With approximately 2-5% of healthcare budgets (EU average) Medical Technology solutions generate **health/QoL gains** for patients **and quality/productivity** for healthcare systems:

## Patients

1. Safety
2. Quality of Life
3. Lighter intervention, fast recovery
4. Tailor-made solutions
5. Integrated disease management
6. Equity of access
7. Organisational improvements
8. Empowerment of patients / Individual healthcare management

## HC systems

1. Increased efficiency of health professionals
2. Widened range of technical competencies
3. Reduced hospital stays
4. Increased ambulatory/home care
5. Healthy workforce
6. Provision of training & technical assistance, maintenance
7. Reduced risk of infections/medical errors

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# Getting ready for the future

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**We need a SAFE, SMART and SUSTAINABLE legislative FRAMEWORK for the medtech industry, because**

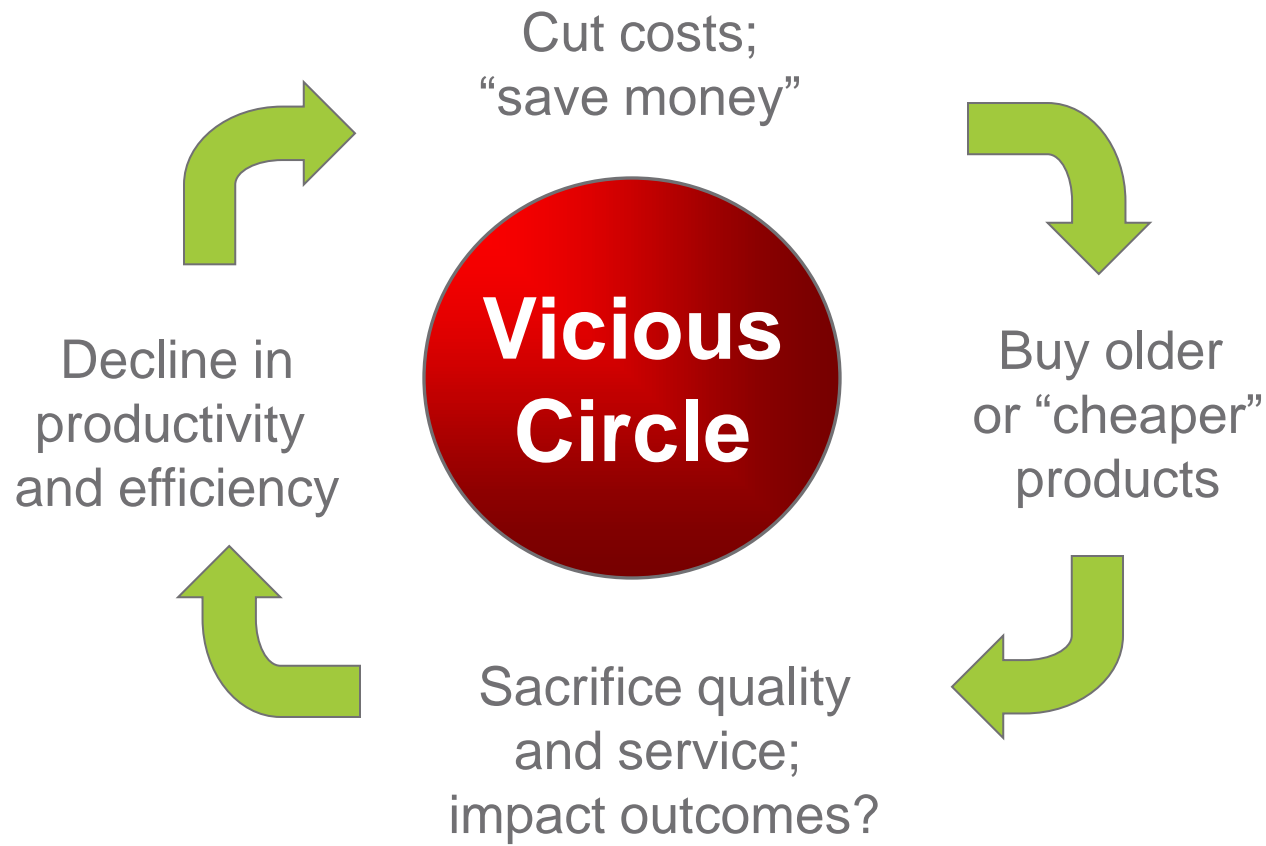
- **Medical technology allows** people to live healthier, more productive and independent lives and is a critical and integral part of an holistic approach to patient care
- **Medical technology helps optimize** health care spending and improves quality and efficiency of care
- **Medical technology industry is a driver** of European growth and jobs through innovation



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# Our challenge in Europe: focus on cutting costs

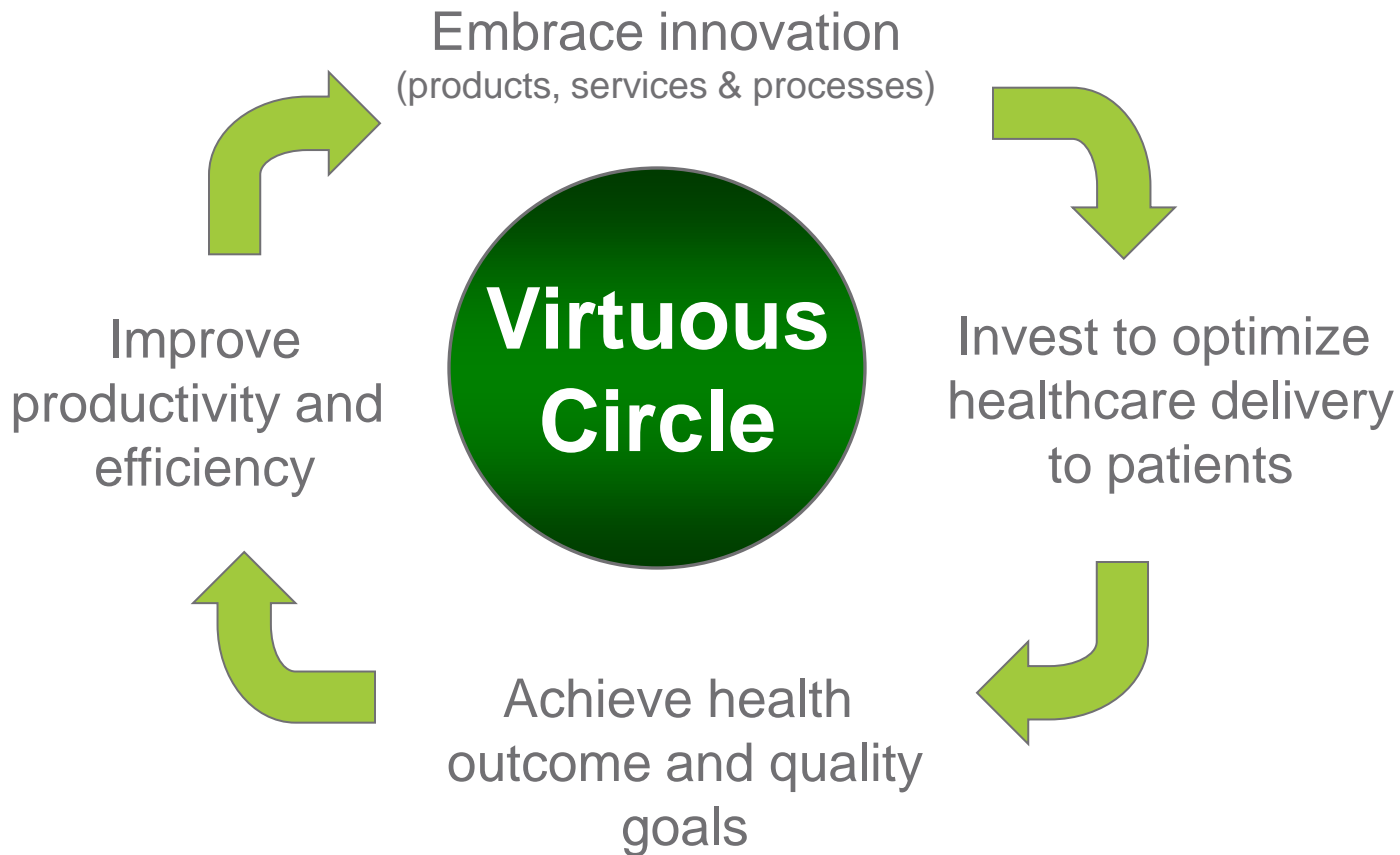
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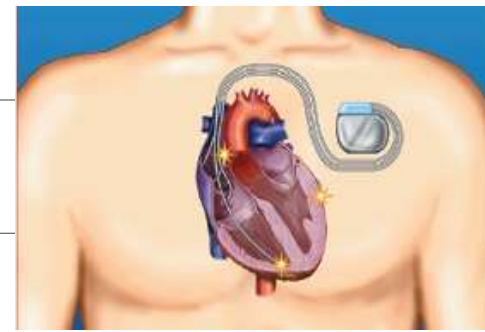
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# Our opportunity in Europe: embrace innovation

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# Remote monitoring of cardiac device patients



*“Carelink”: 600.000 patients, 4.500 clinics, 31 countries*

## Traditional follow ups:

2-4 times per year, face to face; requiring patient & clinic time



## Technology-based remote follow-ups:

2-4 times per year (remote check-ups) OR continuously (remote monitoring) with pre-programmed “CareAlerts”

### AUTOMATIC FOLLOW-UP



- 1 Using the secure Medtronic CareLink Clinician Website, clinic staff can preschedule up to six automatic device checks for each patient – without having to make appointments or coordinate calendars with patients.
- 2 The device automatically “wakes up” at the scheduled time and communicates with the Medtronic CareLink Monitor, which is plugged into a standard phone line and an electrical outlet. Data are transmitted wirelessly from the device to the monitor as the patient sleeps.
- 3 Data are sent automatically from the Medtronic CareLink Monitor via the phone line.
- 4 The clinician reviews the patient’s device data on the secure website.

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# Benefits of cardiac device remote monitoring

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## *The value of remote monitoring:*

- **Reduces in-office visits, scheduled and un-scheduled, by 38%**

Crossley GH. Late breaking clinical trial presented at 59th annual scientific session, American College of Cardiology (ACC), Atlanta GA, Mar 14-16, 2010.

- **Anticipates clinically actionable events and reduces time from event to clinical decision by 79%**

Results of CONNECT trial – 1,997 patients from 136 clinical sites followed for 15 months -- J Am Coll Cardiol Vol. 57, No. 10, 2011.

- **Reduces avg. length of hospital stay (cardiovascular reasons) by 18%, with savings of US\$ 1.793 per admission**

CONNECT trial, J Am Coll Cardiol Vol. 57, No. 10, 2011.

- **Reduces costs by 40%**

Fauchier et al. PACE 2005; 28: S255-9; Raatikainen MJP et al. Europace 2008;10(10):1145–51.

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# Definition of Medical Devices

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## DIRECTIVE 93/42/EEC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

### *Article 1 (a)(i)(a)*

**“MEDICAL DEVICE”** means any **instrument, apparatus, appliance, software, material or other article**, whether used alone or in combination, together with any accessories, **including the software** intended by its manufacturer to be used specifically for diagnostic and/or therapeutic purposes and necessary for its proper application, **intended by the manufacturer** to be used for human beings **for the purpose of:**

- diagnosis, prevention, monitoring, treatment or alleviation of disease,
- diagnosis, monitoring, treatment, alleviation of or compensation for an injury or handicap,
- investigation, replacement or modification of the anatomy or of a physiological process,
- control of conception,

and which does not achieve its principal intended action in or on the human body intended by pharmacological, immunological or metabolic means, but which may be assisted in its function by such means.