

Foro de debate Derechos de la ciudadanía en Salud Pública

Sostenibilidad económica y sostenibilidad social del
sistema de salud: el potencial de eHealth

Granada 26 November 2009

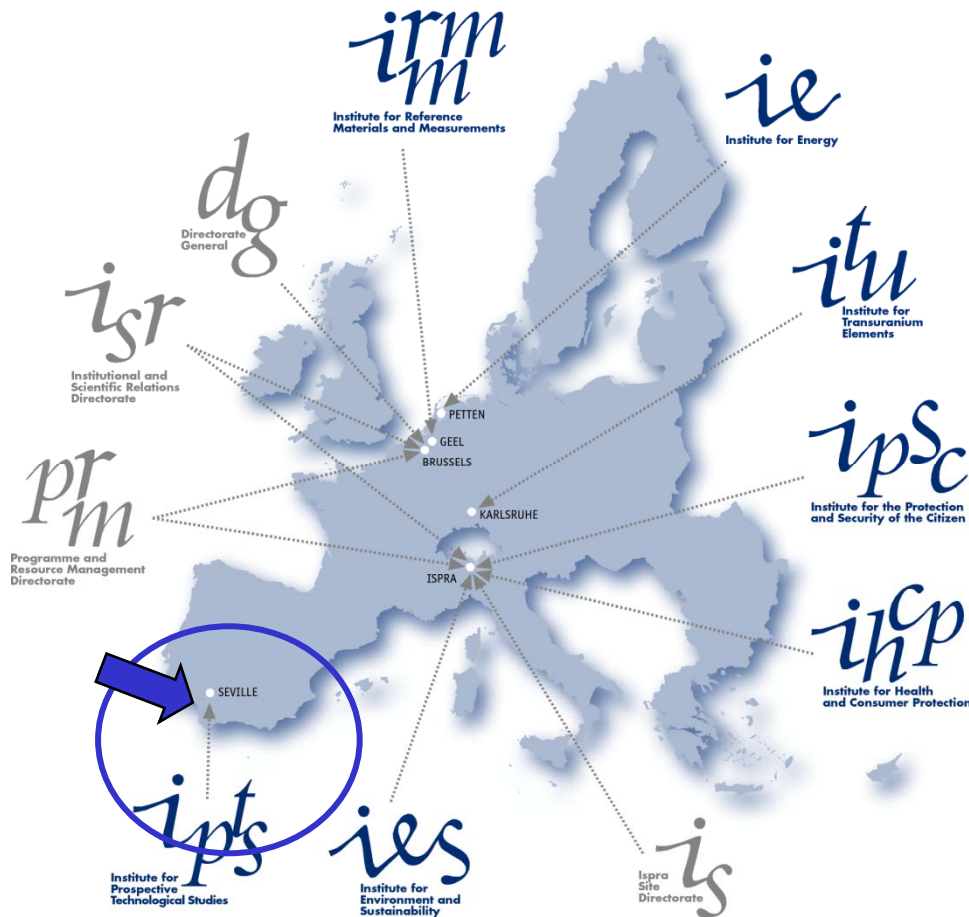


IPTS – IS Unit
Cristiano Codagnone

IPTS: Part of DG JRC of the EC:
7 Research Institutes across Europe

Mission: "to provide customer-driven support to the EU policy-making process by researching science-based responses to policy challenges that have both a socio-economic as well as a scientific / technological dimension"

Modus operandi: desk research, expert groups, modelling, centres of Expertise, foresight



EC Lead Market Initiative defined eHealth as comprising:

- 1. Clinical Information Systems (CIS)
 - Specialised tools for health professionals within care institutions
 - Tools for primary care and/or for outside the care institutions
- 2. Telemedicine and homecare systems and services (Telemedicine)
- 3. Integrated regional/national health Clinical Information Networks (IHCIN) and distributed electronic health record systems and associated services
- 4. Secondary Usage Non-Clinical Systems (SUNCS)
 - Systems for health education and health promotion of patients/citizens
 - Specialised systems for researchers and public health data collection and analysis
 - Support systems for clinical processes not used directly by patients or healthcare professionals.

Strategic Intelligence Monitor on Personal Health Systems

First year focus on Remote Patient Monitoring and Treatment (RMT) systems:

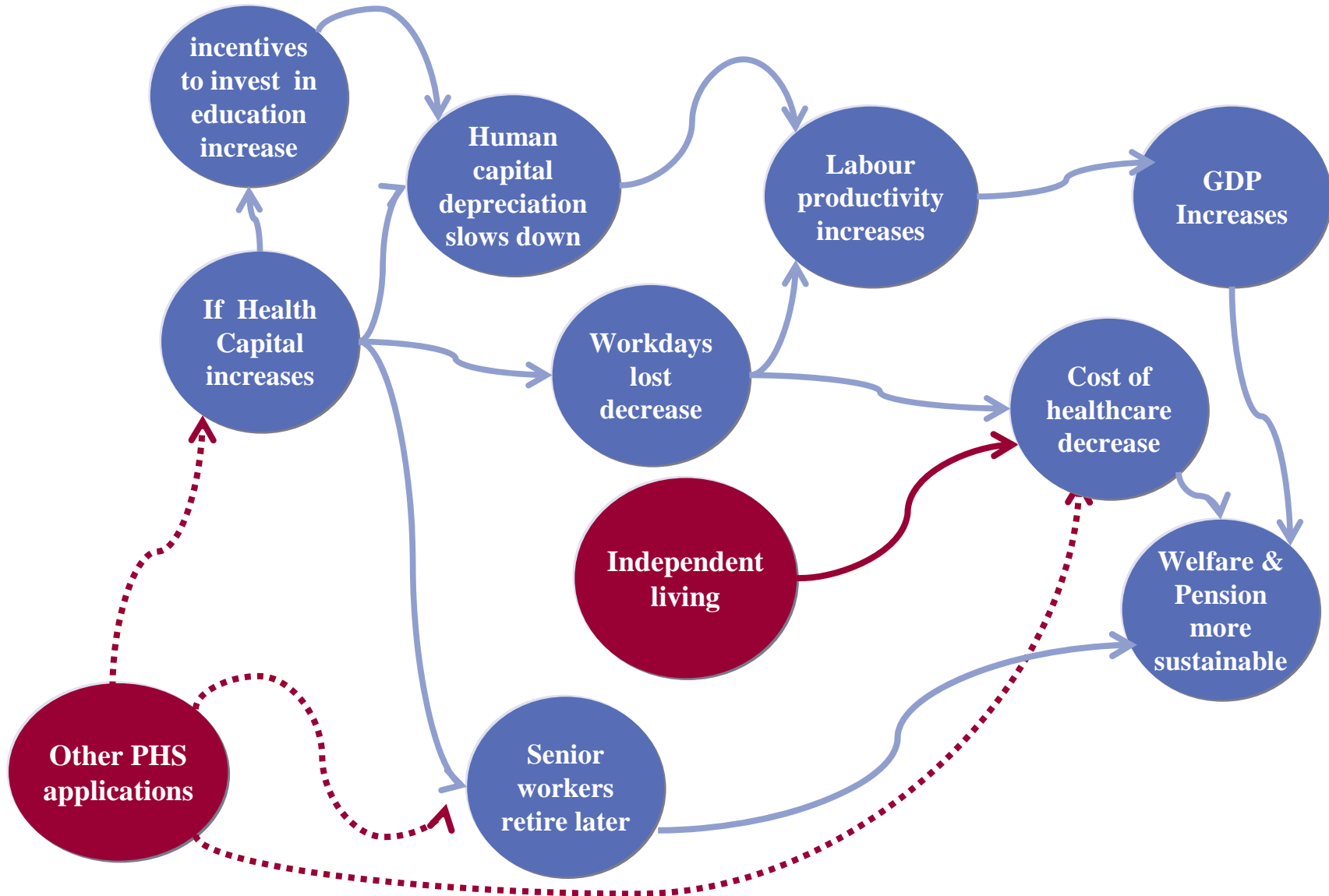
- monitor vital signs of patients with chronic diseases
- improving quality of care and quality of life of the patient
- enabling prediction of aggravations and exacerbations

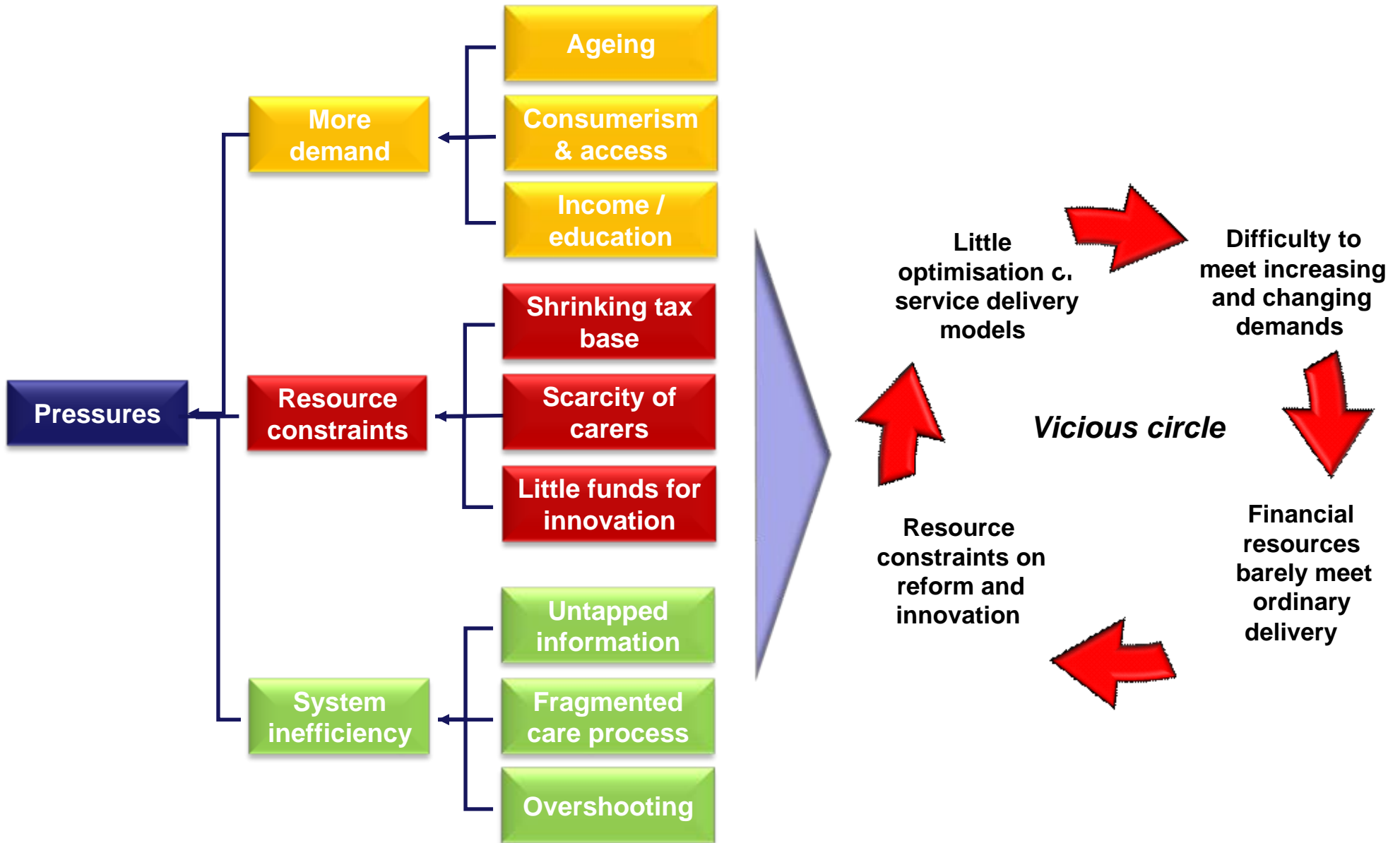
Extensive research activities

- Desk research on EU27
- In depth interviews and several workshop with experts and stakeholders
- 7 in depth countries studies (France, Germany, Spain, Italy, UK, Netherlands, Sweden)

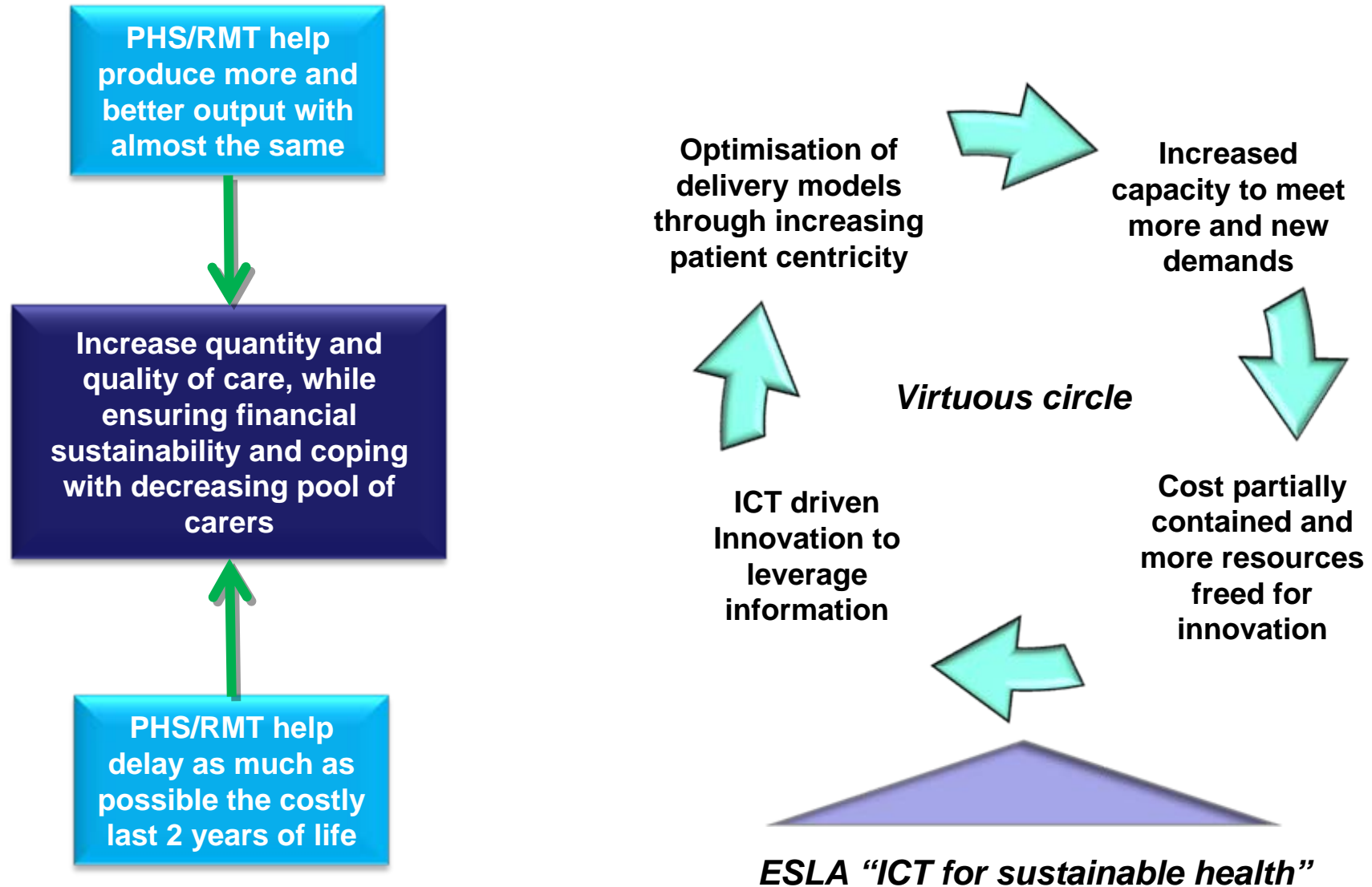
IPTS – IS Unit, SIMPHS Research Team

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Diseases	Prevalence	Costs
Diabetes	<ul style="list-style-type: none"> • 53 m in 2007 (64 m in 2025) • 2.2 million DALYs yearly 	<ul style="list-style-type: none"> • EU 27 ID 82m in 2007 (98m in 2025) • Study on 8 countries: € 29 bln per year (Type II)
COPD	<ul style="list-style-type: none"> • Range from 4% to 11% • 2 million DALY lost yearly 	<ul style="list-style-type: none"> • No aggregate data found • cost per patient per year: from € 400 up to € 2.100
CVD in general	<ul style="list-style-type: none"> • Difficult to calculate, • 12 million DALYs lost yearly 	<ul style="list-style-type: none"> • In 2006 EU27 € 106 bln direct costs= 10% of expenditure • 54% of it for hospitalisation • Indirect costs: € 83 bln
CHF	<ul style="list-style-type: none"> • Difficult to calculate, • No decline since the 1980s • Up to 1/3 of death attributed CHD may be related to CHF 	<ul style="list-style-type: none"> • Up to 20 billion per year • On average 50% re-hospitalisation after six months



- **RMT proven outcomes**

- Clinical outcomes: robust evidence
- Clinical outcomes: robust evidence
- Cost-effectiveness: inconclusive?
- CHF:
 - Re-hospitalisation due to CHF reduced
 - All cause re-hospitalisation not?

- **US VHA study:**

- Diabetes: 20.4% utilisation decrease;
- CHF: 25.9% utilisation decrease
- COPD: 20.7% utilisation decrease

- **Other Studies:**

- RCT for HBT in Italy (↓ hospitalisation readmission, ↓ mortality)
- Similar outcomes with diabetes/ COPD in other studies

Reducing diabetic death

11,000 deaths caused by complication ensuing from diabetes could be reduced in the six Member States through the combined applications of EMR and disease management

Source: EU Swedish Presidency, (2009) *eHealth for a Healthier Europe!*, p. 34

Reduce hospitalisation

Application of telemedicine and home health monitoring could avoid 5.6 million admissions to hospitals for chronically ill patients in the six Member States

Source: EU Swedish Presidency, (2009) *eHealth for a Healthier Europe!*, p. 36

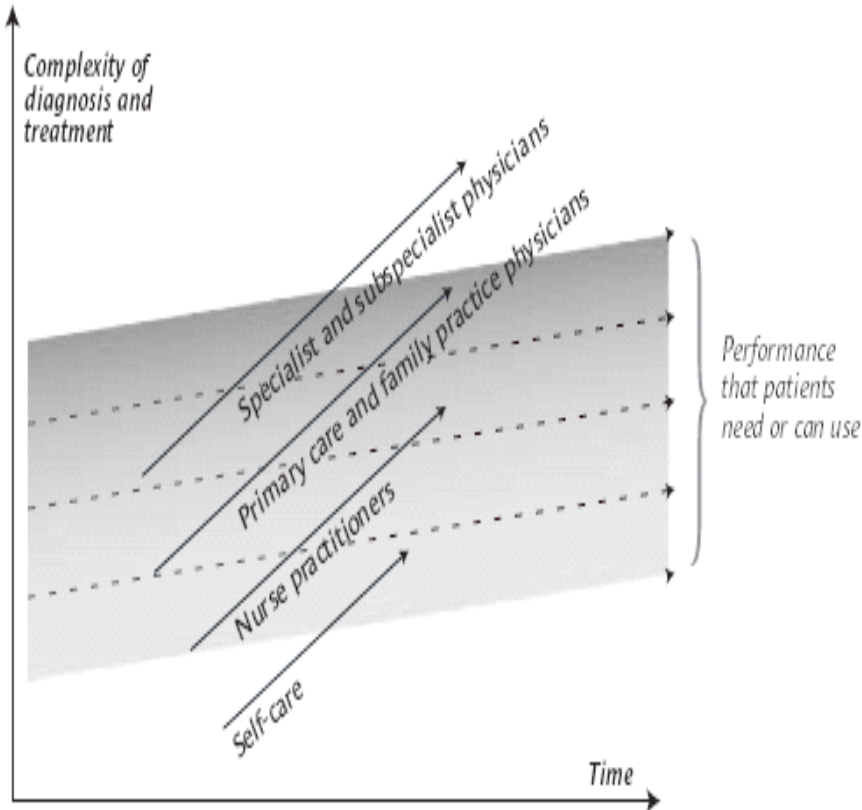
- **F&S 2008 European RMT Report:**

- RMT market estimated worth €127.9 million in 2007, to increase to €292.3 million in 2014
- 40% market share to RMT vendors (€ 52m) / 60% to service providers (€ 76m)
- Service quantification does not include medical activities
- UK is EU leader, followed by Germany, Italy & France

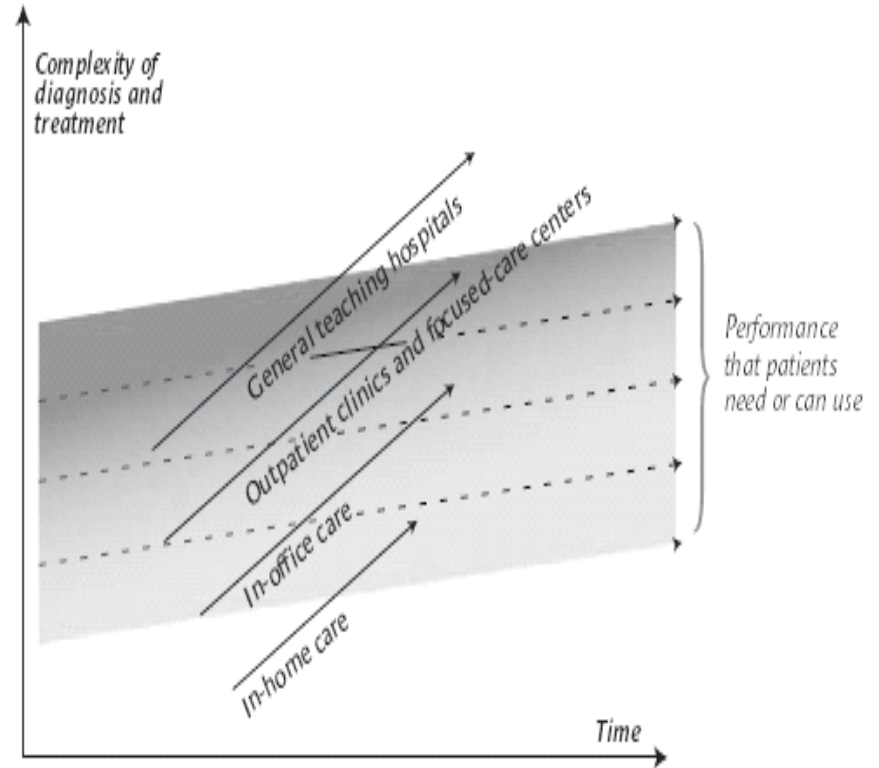
- **In comparative perspective:**

- RMT is 0.6% of total estimated value of eHealth market, € 14.2 billion in 2008 EU27:
 - Secondary Usage Non-Clinical Systems: 71.6%
 - Clinical Information Systems: 22.5%
 - Health Information networks: 5.0%
 - Telemedicine and homecare services: 0.9%

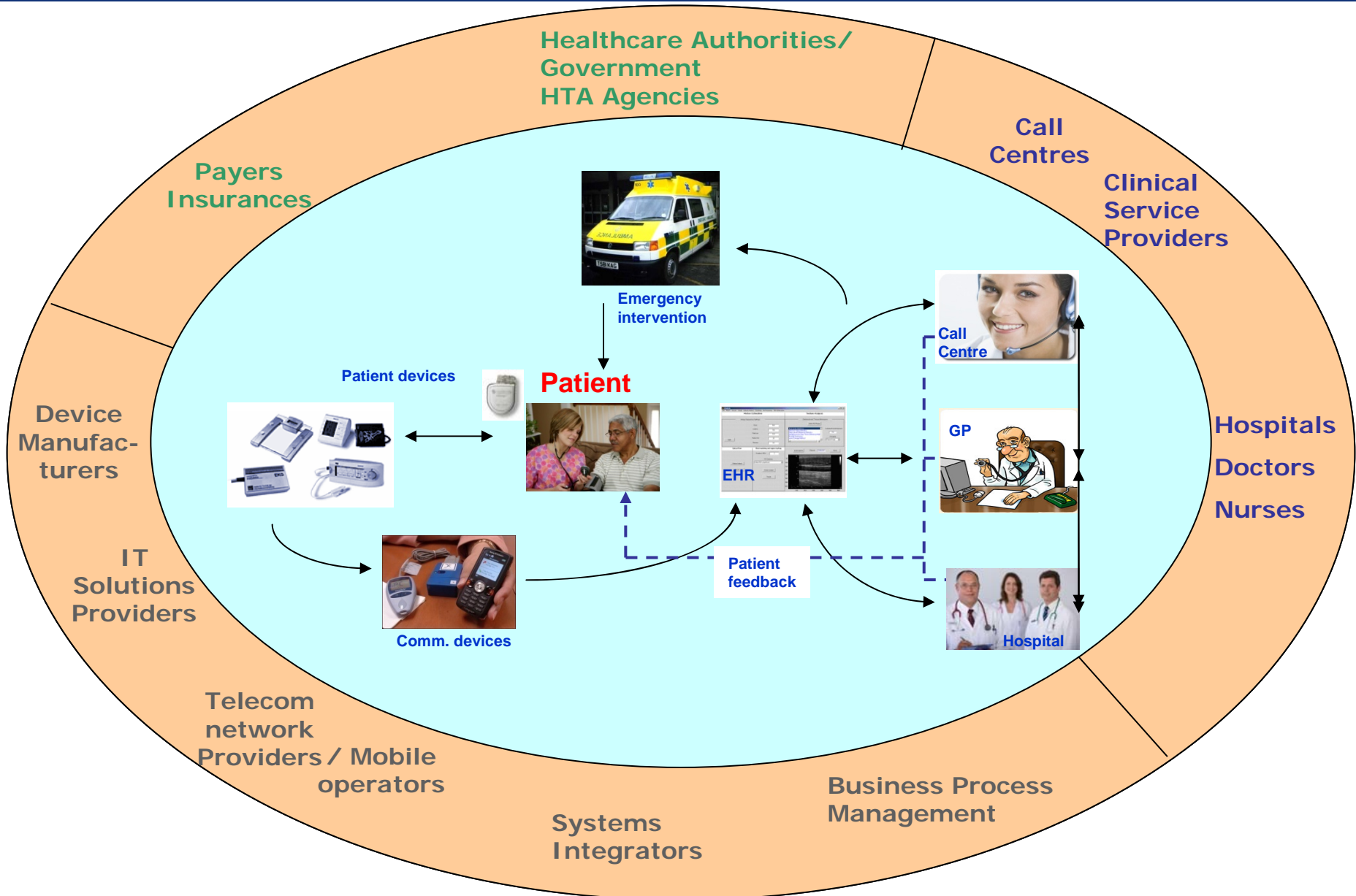
Disruption of healthcare Professions



Disruption of healthcare institution



Source: C. Christensen, et al, Will Disruptive Innovations Cure Health Care?, Harvard Business Review, Sept-Oct (2000), 105-106



Industry players views

- **Lack of reimbursement**
 - No unified approach, ad hoc efforts
 - Unclear revenue streams
 - No viable as out of pocket market
- **Buyers' fragmentation**
 - Locally based strategies
 - Looking in to many directions
 - Institutional and market fragmentation feed each other
- **Entry “barriers”**
 - End-to-end provision by suppliers not easily accepted
 - Space for local opportunistic initiatives
 - Need of intermediary between healthcare system and suppliers



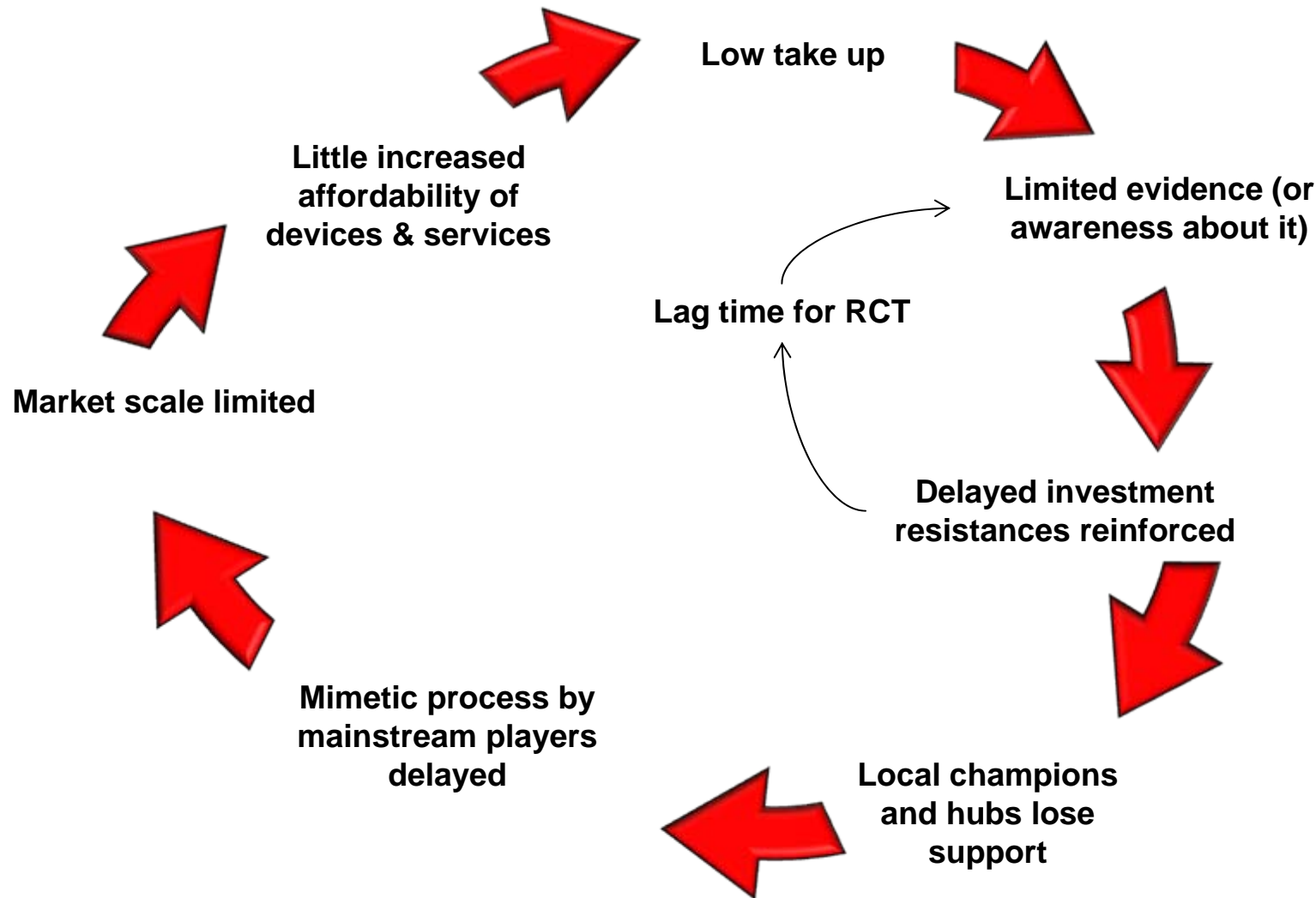
Unclear business model, shaky revenues, diversification

HC experts and insiders views

- **Unfavourable incentives**
 - Neither “fee for service” nor “capitation” incentives work for RMT
 - Outcomes based reimbursement?
 - Create incentives for HC players
- **Missing policy box**
 - RMT is part of ‘territorial’ medicine
 - Not always finds clear policy sponsors
 - Compete for attention and funds with other applications
- **Primary, secondary & social care**
 - Success due to personal commitments or top down decisions
 - No spontaneous emergence of seamless integrated care
- **Evidence/awareness vicious circle**



Lack of strategic vision on organisationally embedded RMT



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