

# ROME



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## TELEMEDICINE IN INTEGRATED CARE – A MULTI-STAKEHOLDER PERSPECTIVE

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# *TELEMEDICINE IN INTEGRATED CARE – A MULTI-STAKEHOLDER PERSPECTIVE*

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# Epigraph

“Comprehensive programs, such as those directed to bring maximum benefit to persons with chronic diseases ..., *require the coordination of the efforts of many individuals and agencies*... The home care program clearly demonstrates the importance of the close *integration* of clinical, public health, and other services if the needs of chronic disease patients are to be met.”

Source: Burney, **1954**

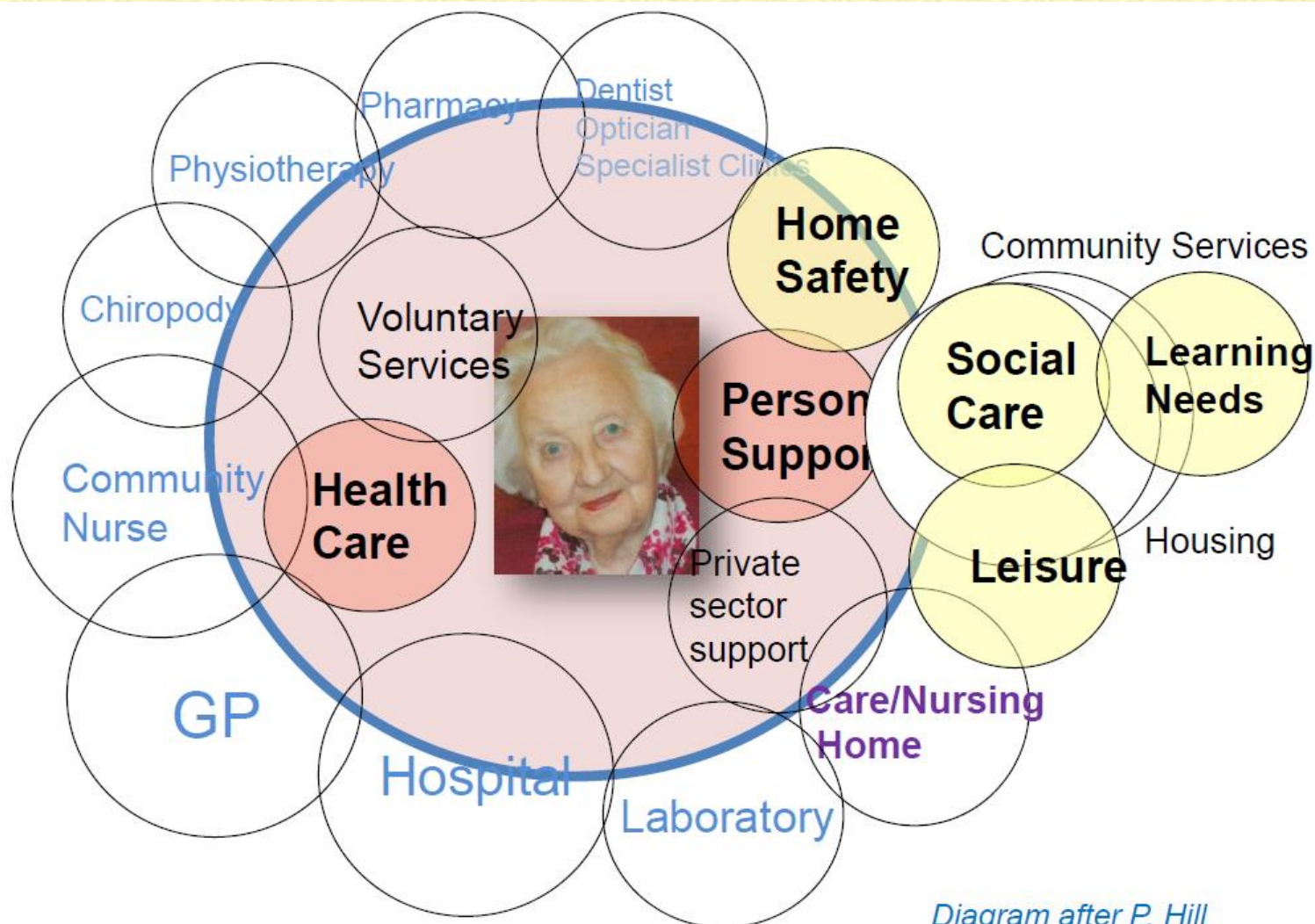


# Integrated care and eHealth – the challenges

- High-quality collaboration across multitude of health and social care service providers and stakeholders (value-adding system of actors)
- Frequent communication among all team members
- Meeting the full spectrum of care needs of older people
- Allocation of benefits and costs
- Efficiency gains from ICT applications (eHealth, eCare)
- Re-engineering of care workflows

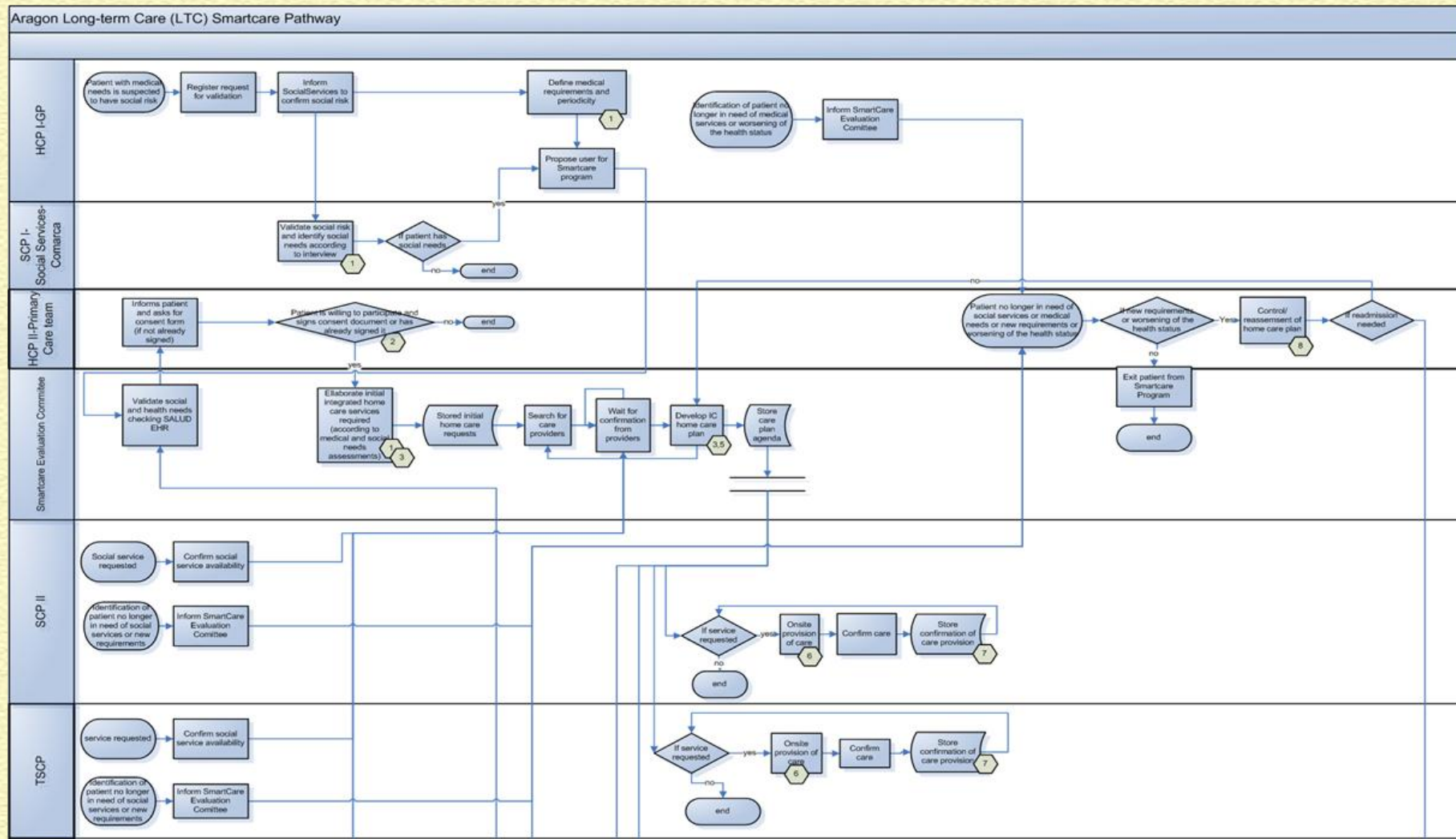


# Integrated care eco-system



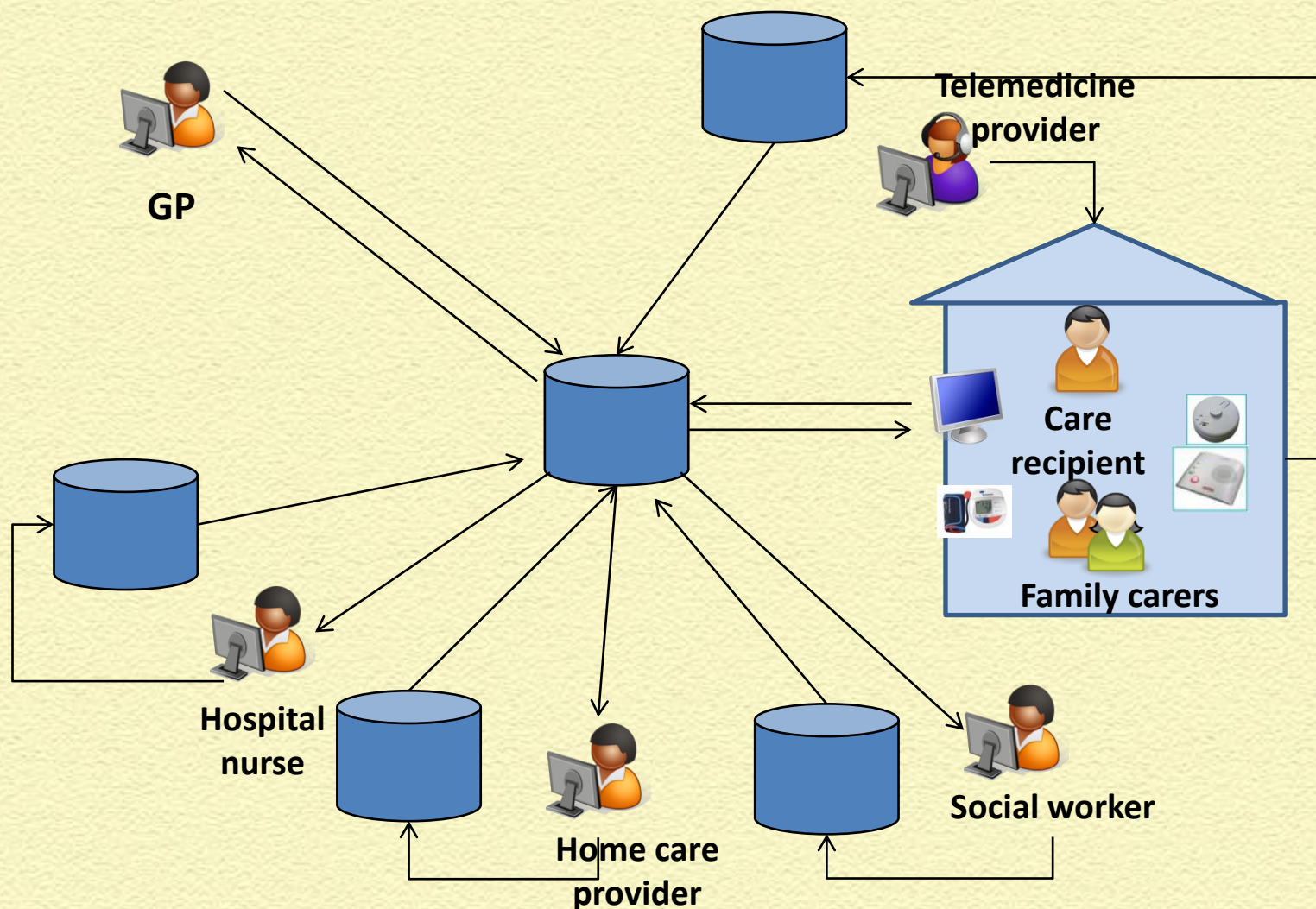
Professor Michael Rigby: Documenting Holistic Care in a European Perspective - the Priorities ICIC14, Brussels

# Complex needs – the workflow response





# Telemedicine applications: the facilitators





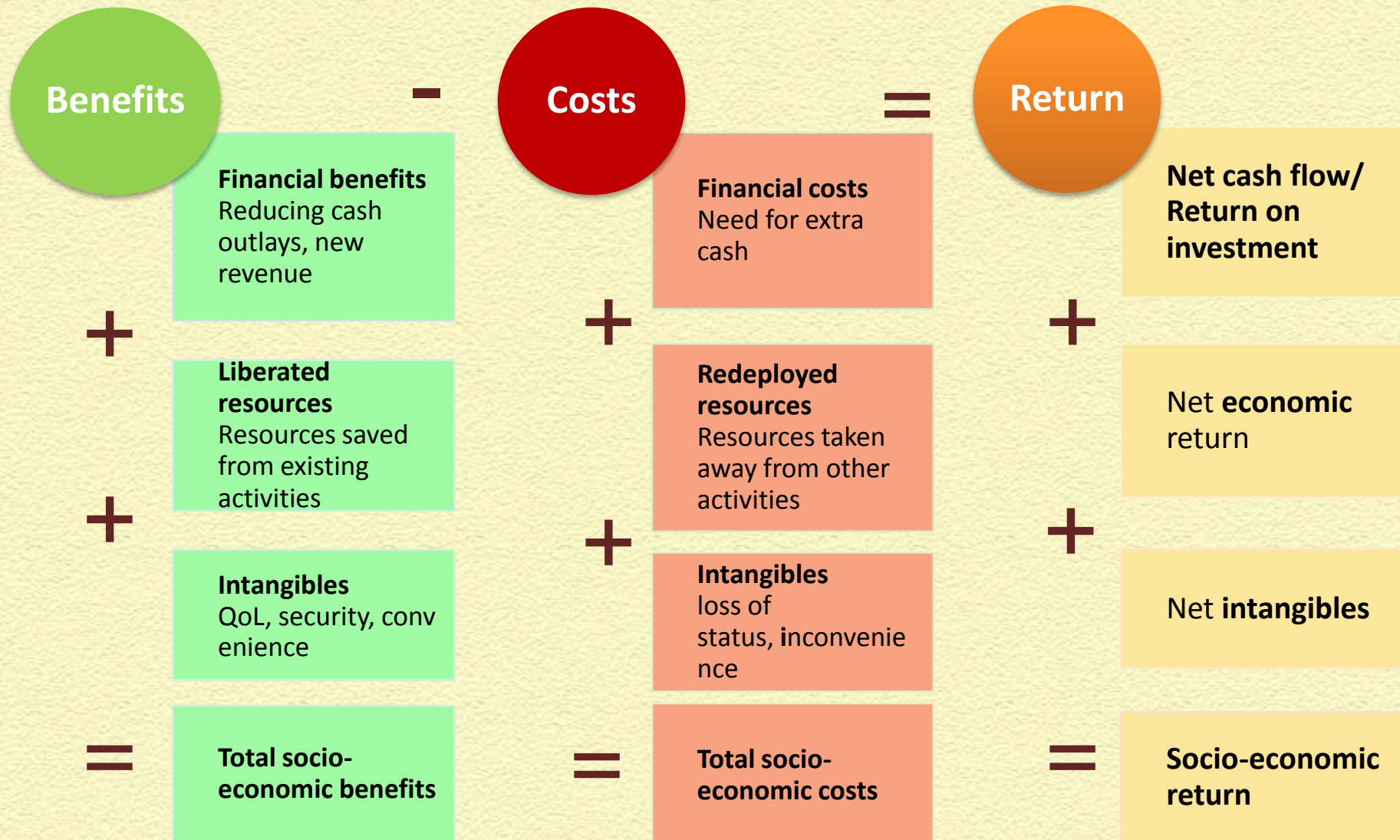
# Assuring a multi-stakeholder perspective – the methodological approach

- **Based on multitude of application contexts** (CommonWell; INDEPENDENT; SmartCare; BeyondSilos)
- **Adapt, improve, develop and facilitate existing/new services through telemedicine, eHealth & eCare applications**
- **Design adapted care pathways and new types of co-operations at the intersection of social & health care (value system concept)**
- **Benefit/cost approach [ASSIST tool]:** measure (in monetary terms), compare – as applicable - at project start and end, and aggregate key variables:
  - **Clinical:** medical indicators and outcomes
  - **Patient/family carers:** QoL, convenience, reassurance, .
  - **Service providers:** cash flow/investment, affordability, sustainability, quality of service
  - **Health system/society:** socio-economic benefits
  - **Industry:** market growth, profit





# The measurement approach





## A joined-up health and social care service scheme (remote home health monitoring & social alarm for COPD patients)

- **Service concept**

- COPD patients leaving hospital after an exacerbation of their condition
- Early support discharge pathway, Referrals to clinical community nursing teams
- Telecare equipment (social alarm) and telehealth monitors (blood pressure, SPO2, temperature)
- Joint call centre (telecare and community matrons )
- Daily triaging by community matrons
- Duration: on average 9 months

- **Service operator:** Milton Keynes Council & MK Community Health Service



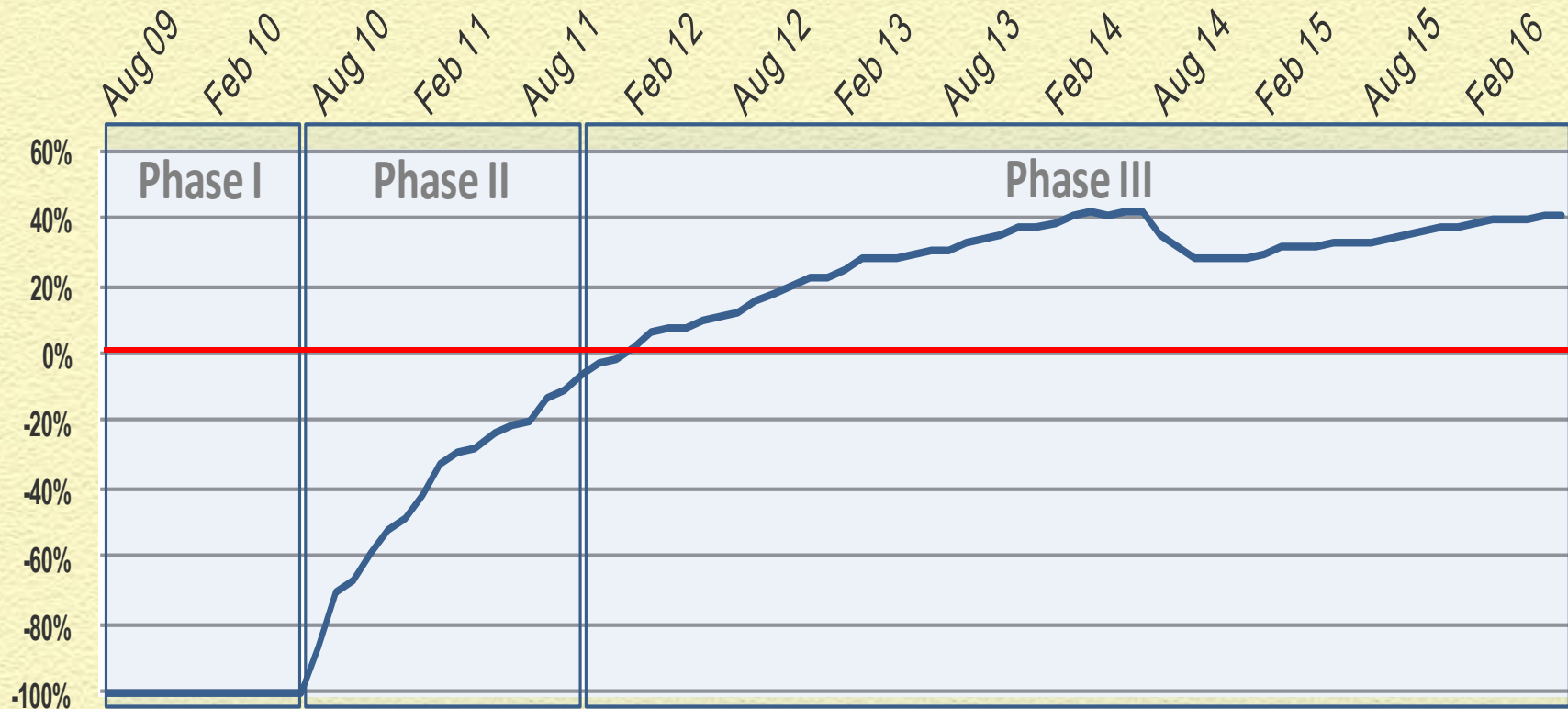
## A joined-up health and social care service scheme (II)

- **Objective: Support COPD patients when their condition deteriorates**
  - Through 24/7 service availability
  - Immediate response to emergencies
  - “Red alert” follow-up by clinicians without delay
- **Benefits:**
  - Patient's quality of life and peace of mind
  - Admissions into hospital and GP visits avoided
  - Time and travel cost saved for GP visits and hospital stays



# Overall Socio-Economic Rate of Return in % (SER)

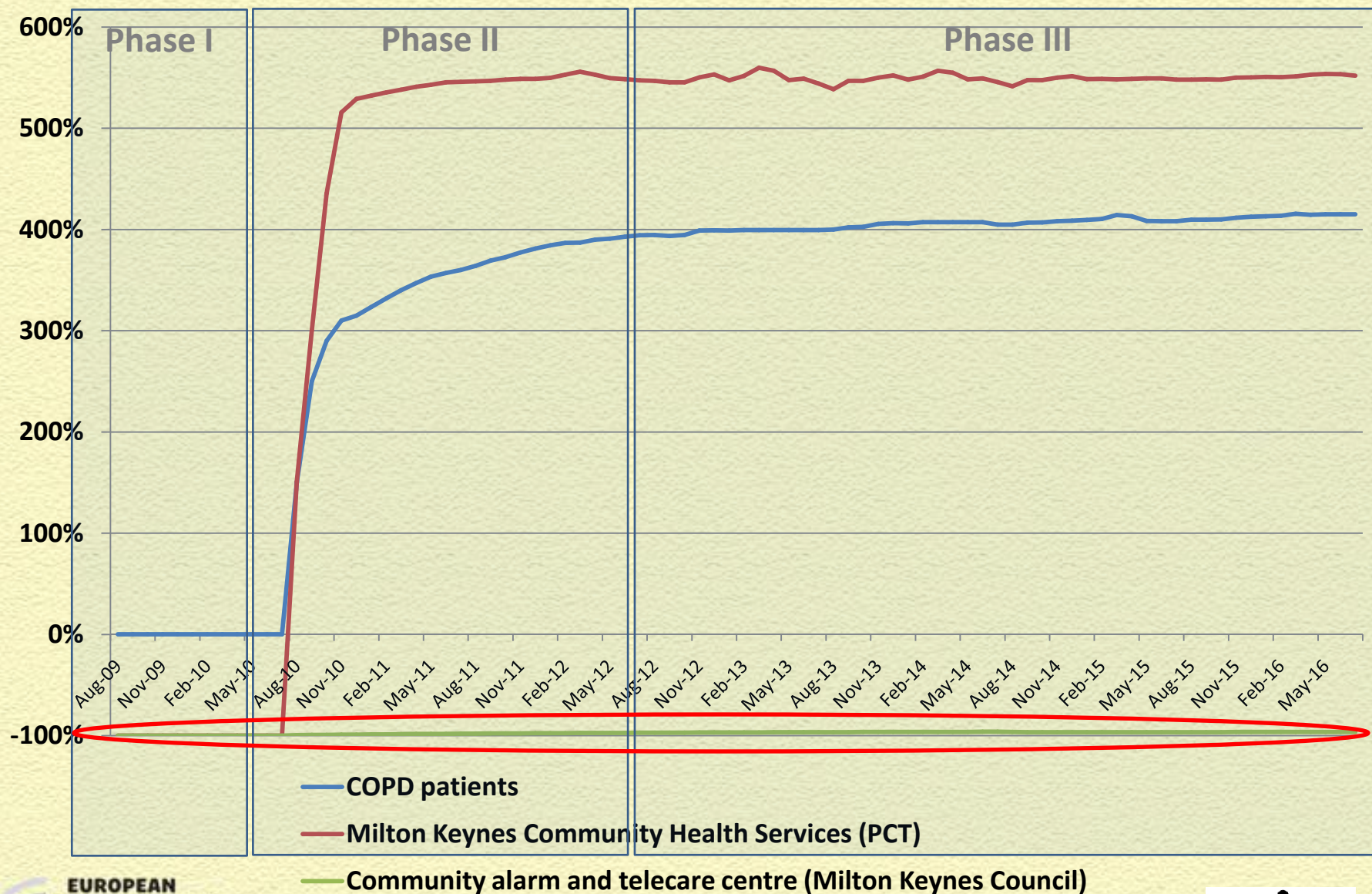
- Ratio of all benefits/costs of all stakeholders - 1 (7 years)



Phase I: Development & implementation (M 1-12) Phase II: Pilot (M 13-28) Phase III: Regular operation (M 29-84)

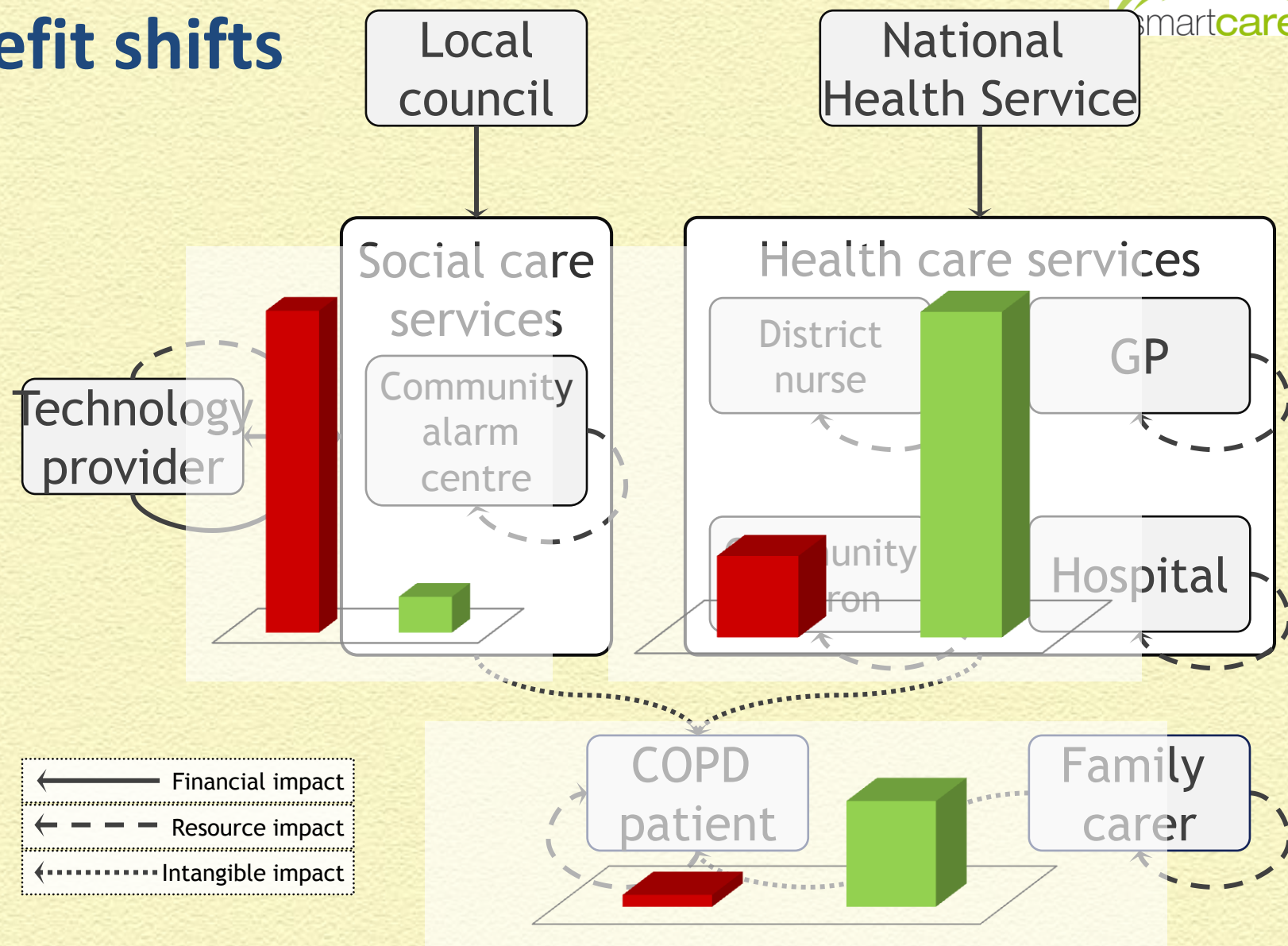


# Return for key stakeholders





# Benefit shifts





# Analysis and discussion (I)

- At the system level, many implementations render both positive clinical impacts and a positive **overall** socio-economic return
- To achieve this, a variety of service providers collaborate in a *complex* health and social care *value system*
- Each of them has to *manage successfully* its own value chain, but
- Due to shifts in flows of benefits and costs, *some (may) lose*
- However, only in a win-win situation for each stakeholder such complex innovations become *sustainable*



# Analysis and discussion (II)

- **Piloting** allows for fine tuning/optimising service delivery processes
- Considerable **investment** needs (funding and HR) – positive SER may need longer time horizon
- Change management: Strong **involvement** of all stakeholders, particularly clinical and social care staff, is mandatory
- Lack of **usability**, usefulness and reliability of eHealth equipment can crystallize discontent



# Conclusions

- **Telemedicine/eHealth facilitated integrated care is**
  - not so much a technical innovation, but rather
  - a social, organisational and business innovation
  - Assessment necessary in its respective local context – which reflects European diversity
- **Learn from each other, but not simply copy supposed “best” practice.**
- **We need to better understand**
  - the (new) business models that go with integrated care for
  - each involved stakeholder group, and the likely impacts for each of them, with a focus on
  - how to best assure a win-win situation for all.
- **A promising approach would be to promote organisational integration with shared budgets and outcome targets**



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