Connecting health and social care
- the telehealth challenge -

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Epigraphs

"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**

"These services are split into organizational clusters such as Health, Social Care, Housing, and others, each in most settings **separately** organized, **delivered** and recorded by organizations and their staff who are **separately funded, managed, and regulated**. As a result patients are surrounded by uncoordinated Islands of Excellence, when what is needed is Coordinated Care"

Rigby et al, **2013**

Connecting health and social care:
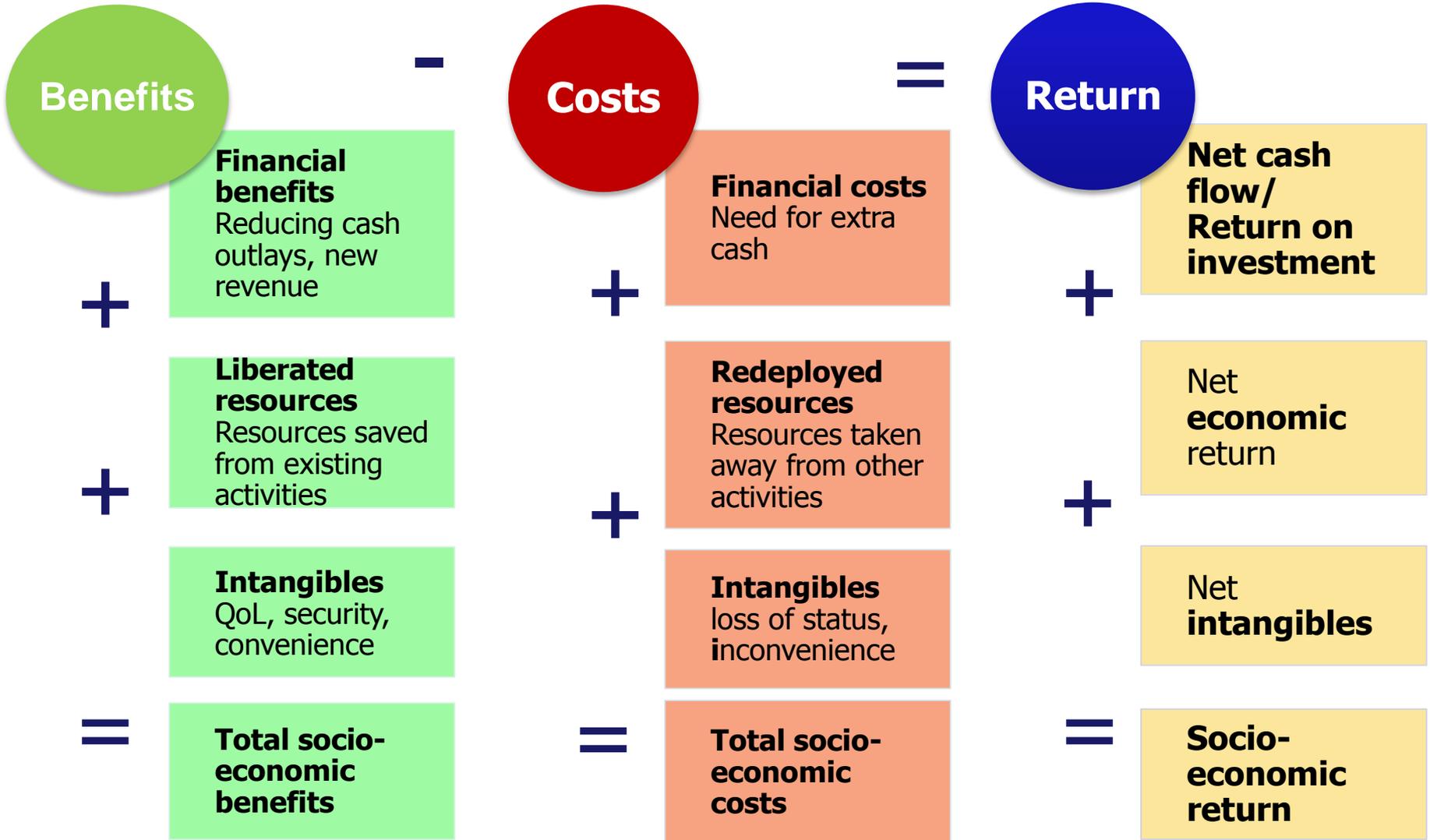
Context:

- Requires high-quality **collaborative** working relationships
- **Commonality** of objectives
- Frequent **communication** among team members
- Facilitated by **eHealth solutions** to enable better coordination
- However, there is still a **dearth of evidence** on how to indeed best organise connected care
- Even the UK 31m GBP "Whole Systems Demonstrator (WSD) for telecare and telehealth" did **not provide "enough evidence for telehealth rollout".**

The **objective** is to explore a core aspect – the stakeholder perspectives - to better understand and provide guidance when shifting towards more connected health and social care provision

Assuring a multi-stakeholder perspective – the methodological approach

- **Based on multitude of application contexts** (European Union co-funded projects CommonWell; SmartCare; CareWell; 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
  - **Industry:** market growth, profit
  - **Health system/society:** socio-economic benefits

The [ASSIST Assisted e-service deployment] measurement approach

Benefits − **Costs** = **Return**

Benefits		Costs		Return	
	Financial benefits Reducing cash outlays, new revenue	+	**Financial costs** Need for extra cash	+	**Net cash flow/ Return on investment**
+	**Liberated resources** Resources saved from existing activities	+	**Redeployed resources** Resources taken away from other activities	+	Net **economic** return
+	**Intangibles** QoL, security, convenience	+	**Intangibles** loss of status, inconvenience	+	Net **intangibles**
=	**Total socio-economic benefits**	=	**Total socio-economic costs**	=	**Socio-economic return**

Case: 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)

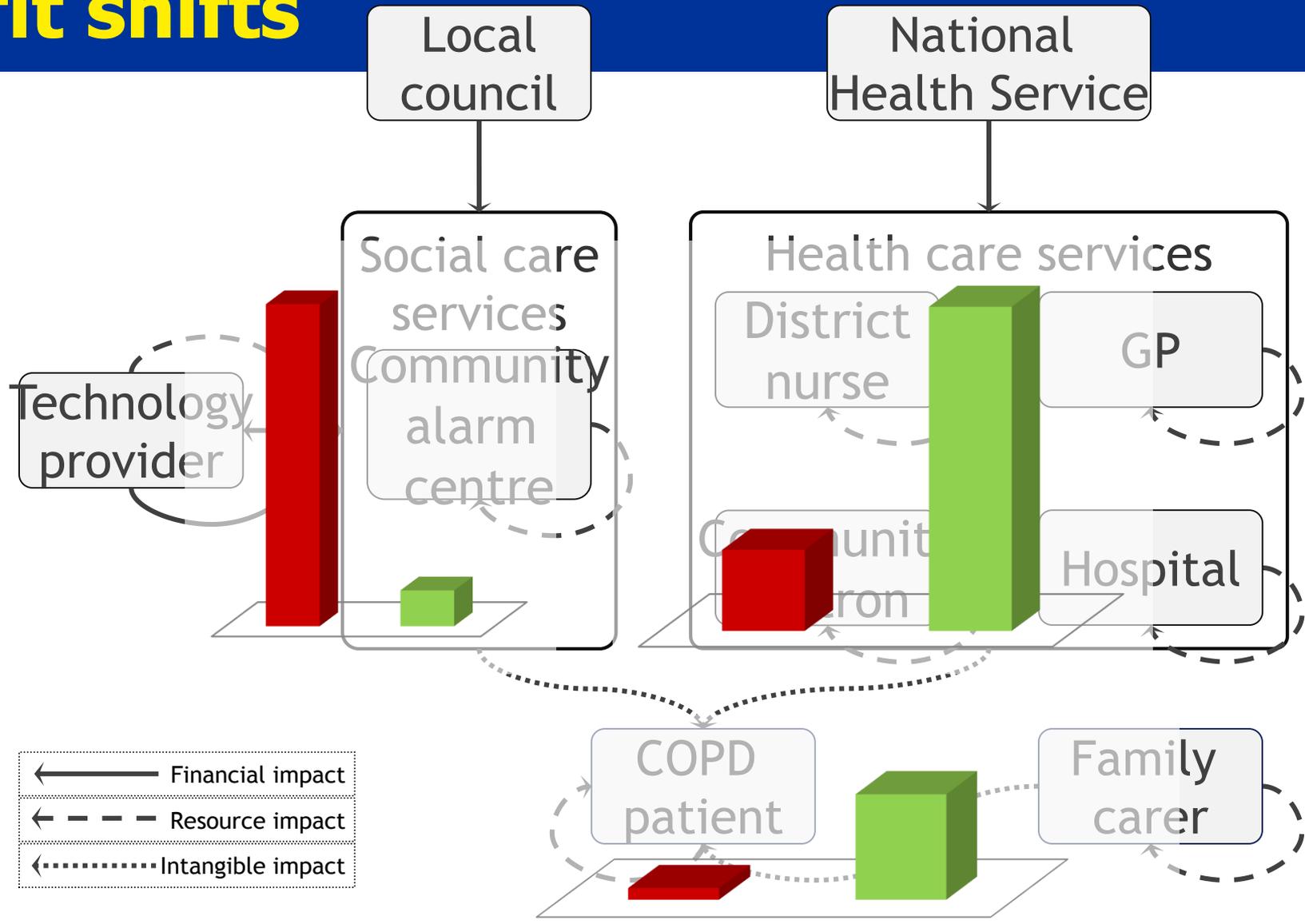## Ratio of all benefits/costs of all stakeholders - 1 (7 years)
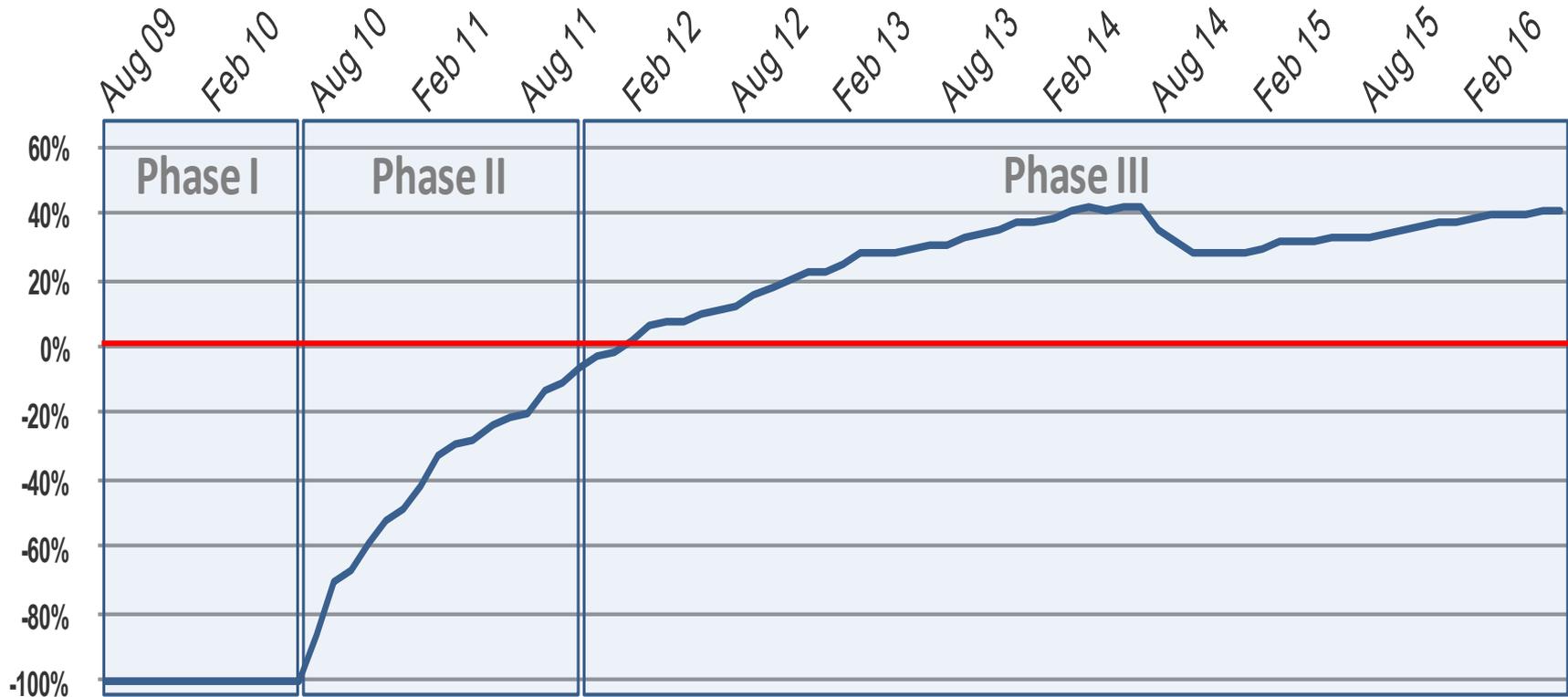
Phase I: Development & implementation (M 1-12)   Phase II: Pilot (M 13-28)   Phase III: Regular operation (M 29-84)

Return for key stakeholders

Phase I · Phase II · Phase III

COPD patients

Milton Keynes Community Health Services (PCT)
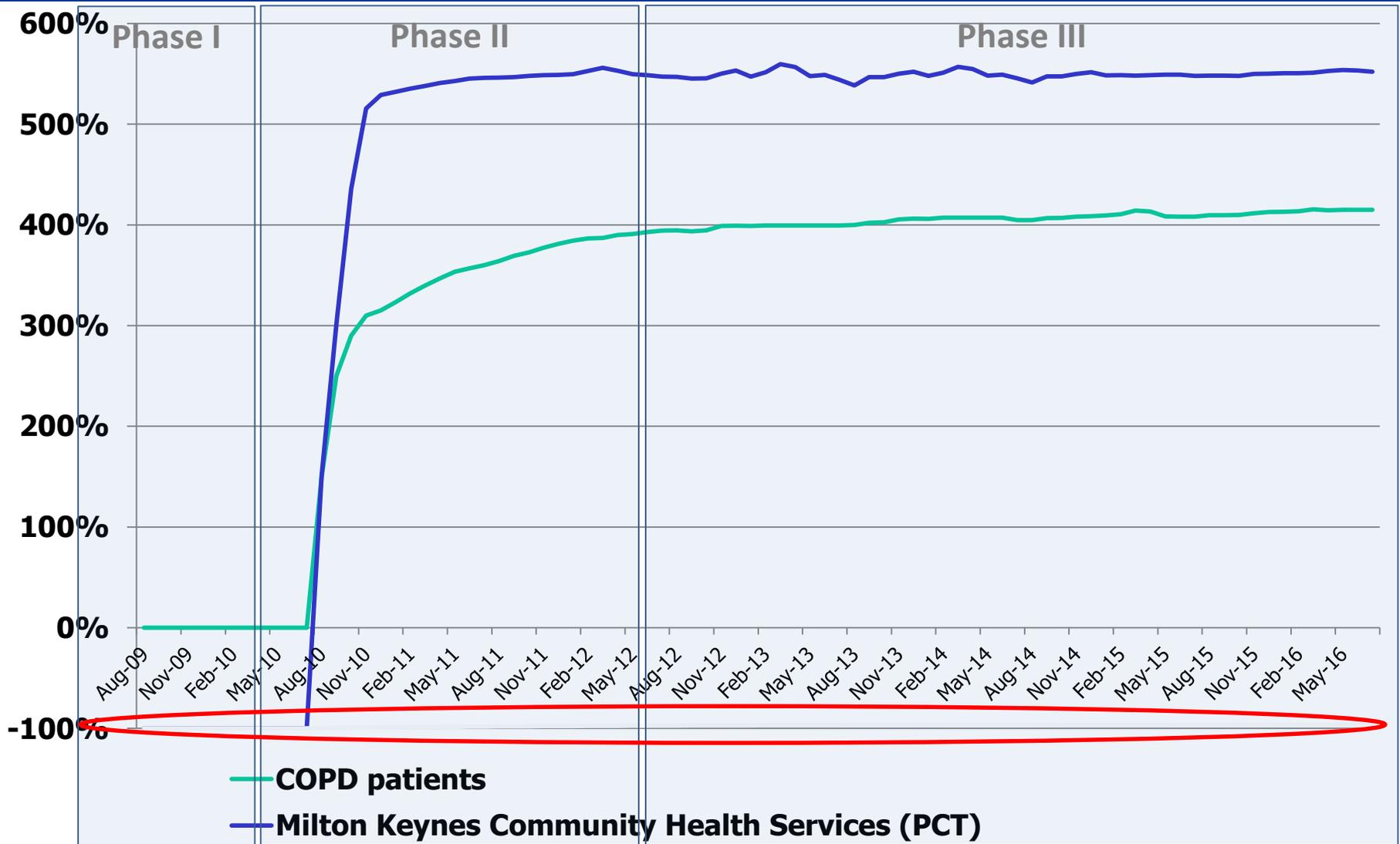
Community alarm and telecare centre (Milton Keynes Council)

Benefit shifts

Analysis and discussion

- **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 delivery 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***

VCH Integration Model

First Nations Health Providers

Family Physicians

Community Partners

Medical Specialists
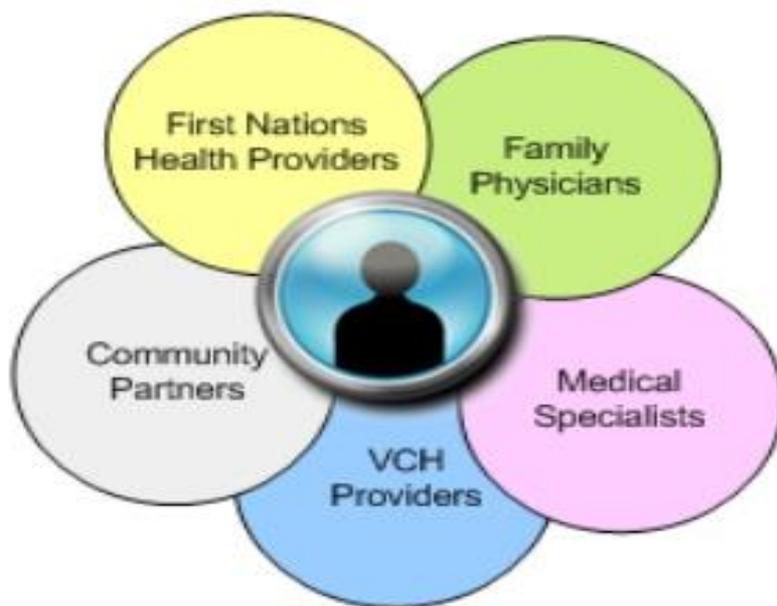
VCH Providers

Priority Areas of Integration

1. Inter-Professional Collaborative Practice Teams
2. Coordinated Processes of Care between Providers and Organizations.
3. Patients as Partners
4. Shared Care GP-Specialist
5. Care Management
6. Expanded Chronic Care Model

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The Process of Integration

RELATIONSHIPS   **COLLABORATIVE SOLUTIONS**   **INTEGRATION**

Knowing one another

Building trust

Sharing knowledge & information

Learning

Identify opportunities

Finding and implementing solutions to problems (gaps)

Sharing resources to make it work

Working together respectfully & transparently

Working to benefit patients & community & providers

Vancouver CoastalHealth
Promoting wellness Ensuring care

4

BeyondSilos   CAREWELL   CommonWell   smartcare   empirica 13

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 cultural and regional 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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