2. Title:
ACT programme: Breaking the barriers for care coordination and telehealth

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5. Abstract:
Introduction: Chronic illness poses a huge social and economic burden. In the EU, heart failure alone accounts for over €10 billion per year in direct healthcare costs, and mortality rates range from 5% in stable patients to above 30% in patients whose condition is not under control [1].

Co-ordinated Care (CC) and TeleHealth (TH) services have the potential to deliver quality care to chronically ill patients. These systems can both reduce the economic burden of chronic care and maximise the delivery of clinical support, despite the shortage of skilled professionals within European healthcare systems. The value of TH services has been highlighted in the Cochrane Review 2010 by Inglis et al. on Telemonitoring in HF [2], and the COPD Cochrane Review 2011 by McLean et al. [3], as well as the Whole System Demonstrator (WSD) findings, announced in December 2011 [4].

Challenges in translating the positive effects of CC&TH into routine clinical practice are currently primarily organisational and structural in nature. To date, healthcare systems have mainly superimposed CC&TH onto their existing care delivery structures. To generate maximum impact however, care ecosystems need to be restructured, and care providers educated as to how to take full advantage of CC&TH and see its impact in health outcomes, administrative efficiency, cost effectiveness and user
(patient and health professional) experience. Translating evidence into practice is complex and requires significant organisational change.

Description of the programme: The Advancing Care Coordination and Telehealth (ACT) project aims to overcome these barriers. Led by Philips, this European consortium of key stakeholders (companies, universities, hospitals and healthcare authorities) will investigate best practices in four significant areas such as:

- patient risk stratification, to provide the adequate service according to the patient needs,
- patient and professional engagement in the integrated health services,
- optimisation of organisations and workflows to ensure the alignment of the organisational structure and the service delivery, and
- efficacy and efficiency factors, evaluating the outcomes versus the resources employed.

The programme addresses the challenge on the management of chronic patients in the area of HF, COPD, diabetes and also complex patients with multiple conditions. By developing key outcome/performance indicators and key drivers that cover the areas of patient stratification, adherence and engagement, efficacy and efficiency and organizational structures, we will be able to assess longitudinally capture the impact of integrated care in the healthcare services. In contrast with previous efforts in the area of assessment of integrated care services or technology interventions, we are focusing on not only covering the high level facilitators or road-blockers for CC and TH but specifically evaluating the change process in the time dimension and understanding the reasons for success or failure of the different regional interventions.

Five European regions (Groningen, Scotland, Lombardy, Basque Country and Catalonia) have committed to deploy and operate their preferred care coordination and telehealth solutions in over 3000 patients each, sharing experiences and data. Starting in February 2013, an initial six-month study will determine a baseline of how CC & TH works in the regions. The care structures and procedures will then be optimized during an 18-month iterative evaluation and then compiled into a 'cookbook' on best practices for large-scale telehealth deployment. As the services are being evaluated within existing healthcare eco-systems, supporting large cohorts of patients, best practice results will be verified with the necessary ‘real world’ rigour, ensuring the findings can be replicated in other EU health regions, taking into account the regional/national boundary conditions & other diversity aspects. The aim is to involve up to 10-15 healthcare regions as affiliated members. The total programme will last 32 months.

The ACT programme is fully aligned with the EC European Innovation Partnership in Active and Healthy Aging objectives to deploy integrated care for chronically ill patients.

References:


3. Inglis SC, Clark RA, McAlister FA, Stewart S, Cleland JG. Which components of heart failure programmes are effective? A systematic review and meta-analysis of the outcomes of structured telephone support or telemonitoring as the primary component of chronic heart failure management in 8323 patients: Abridged Cochrane Review. Eur J Heart Fail 2011 Sep;13(9):1028-1040.


6. Paper summary (100 to 200):

**Introduction:** Chronic illness poses a huge individual, social and economic burden to the European health care systems. Care coordination (CC) and telehealth (TH) solutions can help, but are not widely deployed. **Description of the programme:** Philips is leading ACT-Advancing Care Coordination and Telehealth deployment, an EU co-funded programme to overcome structural and organizational barriers. This will: gather data and best practices from five European regions (Scotland, Groningen, Lombardy, Catalonia and Basque Country), determine a baseline for how CC & TH work in these regions, conduct an iterative evaluation of care structures and procedures and finally create a best practices “cookbook” to ensure that the findings can be replicated in other EU health regions. By developing key outcome/performance indicators and key drivers that cover the areas of patient stratification, adherence and engagement, efficacy and efficiency and organizational structures, we will be able to assess longitudinally capture the impact of integrated care in the healthcare services.

7. **Keywords:**
telehealth, care coordination, chronic illness, best practices, regional evaluation, access to markets, technology support