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#### Conference Abstract

# Assessing the organizational change towards care coordination and telehealth. ACT Programme: Example of the Basque Region

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## Abstract

**Introduction:** Co-ordinated Care (CC) and TeleHealth (TH) services can potentially deliver quality care to chronically ill patients, reduce economic burden of chronic care and improve health outcomes of population. The main challenge for CC&TH is to scale up beyond pilots to become routine practice.

Aims and Objectives: ACT programme (Advancing Care Coordination and Telehealth Deployment) is an EC sponsored initiative led by Philips Hospital to Home, intending to study 4 areas of CC&TH: workflow and structure optimization, effective patient stratification, improvement of patient adherence and staff engagement, and efficacy & efficiency, to be evaluated by innovative healthcare regions (Scotland, Groningen, Lombardy, Catalonia and Basque Country), and clinical experts.

The present communication shows results from the first iteration to compare four Population Intervention Plans (Multimorbidity, DM, COPD and HF) developed in eleven organizational units of the Basque Health System.

**Methods:** An assessment framework was constructed, comprising key performance indicators organized in domains and subdomains relevant to the 4 areas under study. An Evaluation Engine based on an open source computational infrastructure enabling centralized data collection, storage, analysis, and web-based data access and visualization was used to capture, monitor and report the results of the CC&TH, serving as support for management and analysis of health information. The engine identifies specific drivers in each area having an impact on a given outcome, therefore serving to identify improvement areas.

**Results:** DM is the most prevalent disease in the Basque Country, present in 5.7% of population, lower than the 10.3% of men and 9.6% of women reported by the WHO. HF and COPD show 2% and 1.9% prevalence. COPD prevalence is lower than measured prevalence of COPD in Europe, between 4% and 10% of adults.

Results from ACT programme showed that there are substantial differences between disease management (DM, HF and COPD) and case management (Multimorbidity) levels in use of resources. Disease management is characterized by a higher number of consultations (4.73 per patient per year) followed by emergencies (0.75) and admissions (0.41). DM shows a higher number of consultations (5.14), whereas HF shows the higher number of emergencies and admissions (0.86 and 0.46, respectively). Resource utilization is higher in case management with admissions (0.91), emergencies (1.47) and consultations (6.5).

Analyses by organizational units showed that Gipuzkoa is characterized by a high number of consultations (6.56), with low numbers of emergencies (1.33) and admissions (0.79). In contrast, OSI Bidasoa, Araba and Alto Deba are characterized by over the average resource consumption.

**Conclusions:** COPD is underdiagnosed in the Basque Country, in agreement with data from the European COPD Coalition. Importantly, admissions and emergencies in case management double the numbers of disease management level. In regard to stratification and patient selection process, it can be concluded that patients are adequately selected in the multimorbidity group, because, not surprisingly, they show higher consumption of resources, underlying a higher morbidity.

The CC&TH model of Gipuzkoa organizational unit will be collected in the ACT cookbook as a best practice and disseminated to the rest of participating regions.

### **Keywords**

care coordination; telehealth; chronic care; evaluation engine

#### **PowerPoint presentation:**

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