

## Case Study with CReG

### Chronic Disease Management Service



#### Overview

**Who:** The Regional Health Council of Lombardy, Italy.

**What:** Service design of coordination care. Designed minimum care plan, based on best practice, input from GP meetings, related technology and integration of additional services.

**Why:** To move the focus of care from the hospital to the community with GPs becoming case managers, with the goal of supporting patients and GPs to stay adherent to their care plan.

#### Background

The Lombardy region has a population of 10 million, including over 4.6 million chronic patients, most over the age of 65 years and affected by three or more pathologies. Chronic diseases are a growing burden for the regional health and social economy.

Operating since December 2011, CReG is delivered in partnership with Telbios Technology, the Regional Health Council of Lombardy and over 300 GPs.

The European Commission has recognized the CReG programme as a model for the management of chronic diseases for its innovation on active and healthy ageing (a reference model for the development of best practices for the management of chronically ill patients).

#### Introduction

S3 Connected Health was responsible for defining and designing the innovative chronic disease management service and related technology and processes for CReG (Chronic Related Grouping), which was launched in Lombardy in 2011. Of the 40,000 plus people suffering from chronic conditions such as asthma, diabetes, COPD and heart failure who were enrolled in the service, 74.77% of the patients believed the service helped manage their disease.

#### The service

- **400,000** scheduled services per year
- **100,000** care plans issued in May 2015
- **10,000** interactions between the service center and patients
- **20,000** readings from home monitoring
- **2,000** telemedicine services
- **200** hours training on telemedicine and telemonitoring

### The project

#### How it works

The CReG provider is a cooperative of family doctors (GPs) that assigns a personalized care pathway to each chronic patient and ensures patient adherence.

Patients are set up on the telemonitoring system and promoted to self-manage and monitor their own care. Structured online patient education programs are provided.

Patients can monitor their blood pressure, pulse oximetry, and temperature with a range of connected devices, and record patient-reported outcomes.

A service center operated by trained personnel is available to patients 24 hours, 365 days of the year. The triage nurses assess and analyze clinical readings sent by the patient or reported by the GP or consultant, manage situations where measurements are outside set parameters and escalate to the GP where necessary.

Through the telemonitoring service, GPs can easily track their patient's measurements and adherence to medication and care plans.

#### Key learnings

Importance of the health economic model that supported GPs in moving to a preventative care model, and ultimately drove 40,000 patients onto the program in the first 3 months.



### Outcomes

The results of CReG have been impressive. User satisfaction surveys have shown that the service has helped patients to manage their disease and improve their health. An analysis has found reductions in blood pressure, LDL cholesterol and HbA1c levels among the patients using the service.

### Key results

- **Care plans:** 97% of patients have been introduced to standardized care plans
- **Improvements in adherence:** 77% of patients and clinicians followed care plans
- **Positive health impact:** 66% of patients believed that participation positively affected their health
- **Improved disease management:** 74.77% of the patients believed the service helped manage their disease
- **Better communication:** 93% of patients informed their GP of their outcomes

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