

Puglia, Italy:

Telemonitoring, Teleassistance and Teleconsultation project for patients with heart failure and chronic pulmonary disease

### Part 1: General Information

Publication on EIP on AHA Portal	Yes
Copyright	Yes
Verification of the Good Practice	No
Evaluation of the Good Practice	Yes
Type of the Good Practice	Notable practice

### Part 2: Description of the Good Practice

Name of the Good Practice	Telemonitoring, teleassistance and teleconsultation project for patients with heart failure and chronic pulmonary disease
Short name (Acronym)	Telescopico
URL of the Good Practice	Not available
Geographical scope	Local level
Country	Italy
Region(s) involved	ASL-Bari Area
Status of the Good Practice	On-going
Stakeholders involved	<ul style="list-style-type: none"> <li>• Hospitals</li> <li>• Specialised physicians</li> <li>• General practitioners</li> <li>• Primary care centres</li> <li>• Nurses</li> <li>• Local public authorities</li> </ul>
Size of population covered	250-999
Targeted audience	Irrelevant

### Summary of the Good Practice

Telescopico aims to create a telemonitoring system, teleconsultation and remote assistance for patients with chronic conditions, in particular with chronic heart failure and COPD, at risk of clinical instability. The system ensures a continuous link between specialist (in hospital) and general practitioners, allowing for monitoring of clinical and instrumental parameters of the patients.

The project, through the adoption of the system, aims to validate telemedicine models in the integrated management between territory and hospital about diagnosis and treatment for heart failure, COPD, improve territorial management of these patients, intercept phases of instability before reach criticality, reduce the rate re- hospitalization.

Through Telescopico Project we aim to:

- Reduce the steps of destabilization of Heart Failure patients with chronic Diseases
- Reduce the re-hospitalization
- Optimize the therapy
- To promote the integrated management of Hospital and Territory
- Train specialized nursing figures
- Evaluate the satisfaction Practitioners and patients of this type of management
- Evaluate costs and benefits

The primary end point is to verify the possible use of technological telemedicine devices within integrated management models between hospital and territory of cardio-pulmonary chronic diseases in order to improve its management and to facilitate the integration between specialists and practitioners.

Secondary end points are:

- Reduce the number of hospitalizations for Heart Failure and for COPD in area of interest
- Reduce days of hospitalization for SC and COPD

**Key words:** telemedicine, de-hospitalisation, management of chronicity, innovative technological instruments, integration

### Good practice being part of the larger programme

Yes.

Final program of the project is to monitoring all patients with Chronic diseases, like heart failure and COPD, with clinical instability managed by Local Health Board of Apulia Region. To improve patient monitoring with chronic diseases, to

<p>reduce re- hospitalization and to improve the adherence to drug treatment and not.</p>
<p><b>Challenges / problems addressed by the good practice</b></p> <p>Telescopico wants to implement a new kind of monitoring of the patients with chronic diseases, based on continuous collaboration and patient monitoring.</p> <p>The five challenges that the Project intends to pursue are:</p> <ul style="list-style-type: none"> <li>• Reduce the steps of destabilization of Heart Failure or COPD patients</li> <li>• Reduce the re-hospitalization</li> <li>• Optimize the therapy</li> <li>• Evaluate the costs and benefits</li> <li>• Promote the empowerment of patients affect by chronic diseases</li> </ul>
<p><b>Importance of the challenges / problems before starting to implement good practice</b></p> <p>The main problems encountered during the first period of activities have been mainly due to the activity of collaboration between general practitioners, specialists and all health personnel involved in the activity. Technical difficulties have occurred during the training activities.</p>
<p><b>Environment before the good practice was implemented</b></p> <p>Before Telehomecare Project was not active in territory any project of telemonitoring, teleconsult or teleassistance.</p>
<p><b>Key innovative elements of the good practice and how the good practice improved situation compared to previous practice</b></p> <p>The patients have a more direct with their practitioners; it is not necessary that the patients go to the hospital or in specialist ambulatory. The patients are subjected to a clinical planned follow up. Physiological parameters as ECG, SpO2, Respiratory frequency, Heart frequency, Temperature, etc are monitored. Easy collaboration between practitioners and Specialist. Reduced of waiting time for the monitoring.</p>

### Part 3: Transferability of the Good Practice

<p><b>Cost-effectiveness of the good practice (including all kind of costs and outcomes such as better health, quality of life or other resources)</b></p>	<p>Lower costs, improved outcomes</p>
<p><b>Resources required for the deployment of the good practice (personnel, equipment, facilities, ICT and other resources required)</b></p> <p>Telescopico project includes:</p>	

<ul style="list-style-type: none"> <li>• The involvement of general practitioners;</li> <li>• The involvement of specialists;</li> <li>• The involvement of nurses;</li> <li>• Innovative technologies.</li> </ul> <p>For the activities is used a new technology called H@H Hospital at Home; that system is allocated at the clinical ambulatory, connected with hospital, by pc, telephone, tablet, etc.</p> <p>All clinical parameters of patients are stored on a dedicated server, respecting all the rules for the respect of privacy. The system permits to the doctor (pulmonologist and cardiologists) remotely, to see patient.</p> <p>Infact, in addition to real-time monitoring of physiological parameters, the doctor can monitor the physical and technical characteristics of the home device.</p> <p>It is possible to deliver therapy to the patient, remotely. In particular, it is possible to deliver oxygen therapy and endocavitary aspiration. Doctor or health care professional determines the limit of the range of physiological parameter values and when the parameter is out of range, the system draws the operator's attention through the alert. Practitioner or specialist can talk to the patient because the system has a video communications system. All the data are saved on the server at any time.</p>	
<b>Total budget of the Good Practice</b>	€100.00 - €499,999
<b>Source of funding</b>	European funding
<b>The main actions that have to be done to deploy the Good Practice</b>	
<p>Before start of the project were carried out research on any preliminary experience of similar projects in international literature. Were made meetings between practitioners and specialists; has been called a protocol clinical care, it was carried out training of personnel authorized to use the correct new technologies, were made of design verification meetings. Periodically, updated newsletters were produced.</p>	
<b>Issues during the implementation of the Good Practice</b>	
No issues were observed.	
<b>Additional resources required to scale up Good Practice</b>	
<p>Yes.</p> <p>Technological integration with equipment that provide an enrichment of the monitoring activities. It is expected the presence of a figure of Care Manager who is necessary to ensure compliance with the time and the activities foreseen in the planning stages. It also envisages the development of a website dedicated to Telescopico Project.</p>	
<b>Basis to support sustainability of the Good Practice</b>	

No information provided.
<b>Evidence to observe the Good Practice</b>
A practice report; Video or other digital media (web page, audio)

#### Part 4: Viability assessment of the Good Practice

<b>Time needed to deploy the Good Practice</b>
Less than a year;
<b>Investment per citizens / patient / client in terms of financial resources</b>
No available calculation.
<b>Evidence behind the Good Practice</b>
Documented evidence. Evidence is based on systematic qualitative and quantitative studies.
<b>Maturity of the Good Practice</b>
There is evidence that the practice is economically viable and brings benefits to the target group. Further research and development is needed in order to achieve market impact and for the practice to become routine use.
<b>Estimated time of impact of the Good Practice</b>
Medium impact - e.g. shortly beyond the pilot project period
<b>Impact observed</b>
Better care integration (economic and social).  We have also noticed a reduction in hospital admissions, a higher patient monitoring, a reduction of the waiting lists. Stronger relationship between practitioners and patients.
<b>Transferability of the Good Practice</b>
Ready for transfer, but the innovative practice has not been transferred yet. The innovative practice has been developed on local/regional/national level and transferability has been considered and structural, political and systematic recommendations have been presented. However, the innovative practice has not been transferred yet.

#### Part 5: Your organisation

<b>Name of the organisation</b>	ASL Bari
<b>Address of the organisation</b>	ASL Bari, Lungomare Starita 6, 70123 Bari (BA)



<b>Type of organisation</b>	Hospitals
<b>Name of the contact person</b>	Doctor Pasquale Caldarola
<b>Email address of the contact person</b>	<a href="mailto:PASCALD@LIBERO.IT">PASCALD@LIBERO.IT</a>