



AReSS

Agenzia
Regionale
per la Salute
ed il Sociale
Puglia

TELEHOME CARE

WHERE WE ARE: APULIA REGION

APRESSO

CARE NEED AND CARE ANSWER



4.1 millions people
living in
257 Municipalities for
6 Provinces

€ 7.4 billions of annual
health expenditure

6 Local Health Authorities

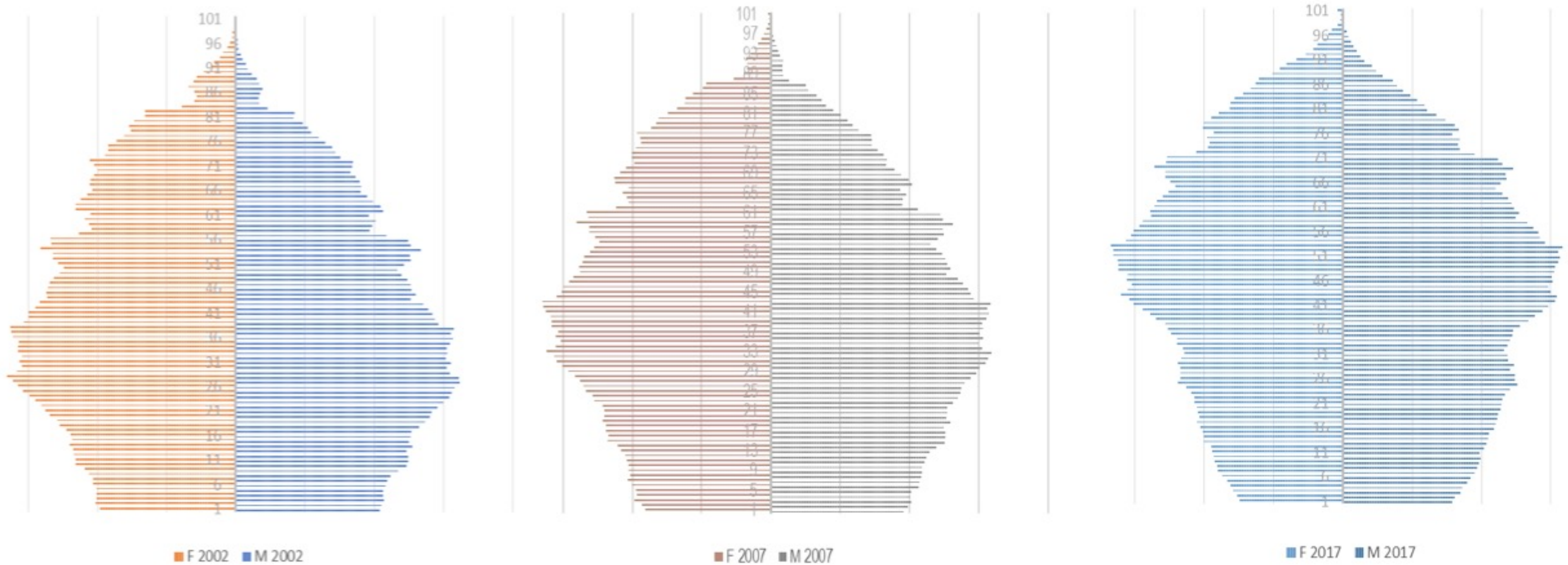
- 27 public hospitals
- 550 health community facilities

2 University Hospitals & **2**
Research Hospitals (all public)

33 private hospitals

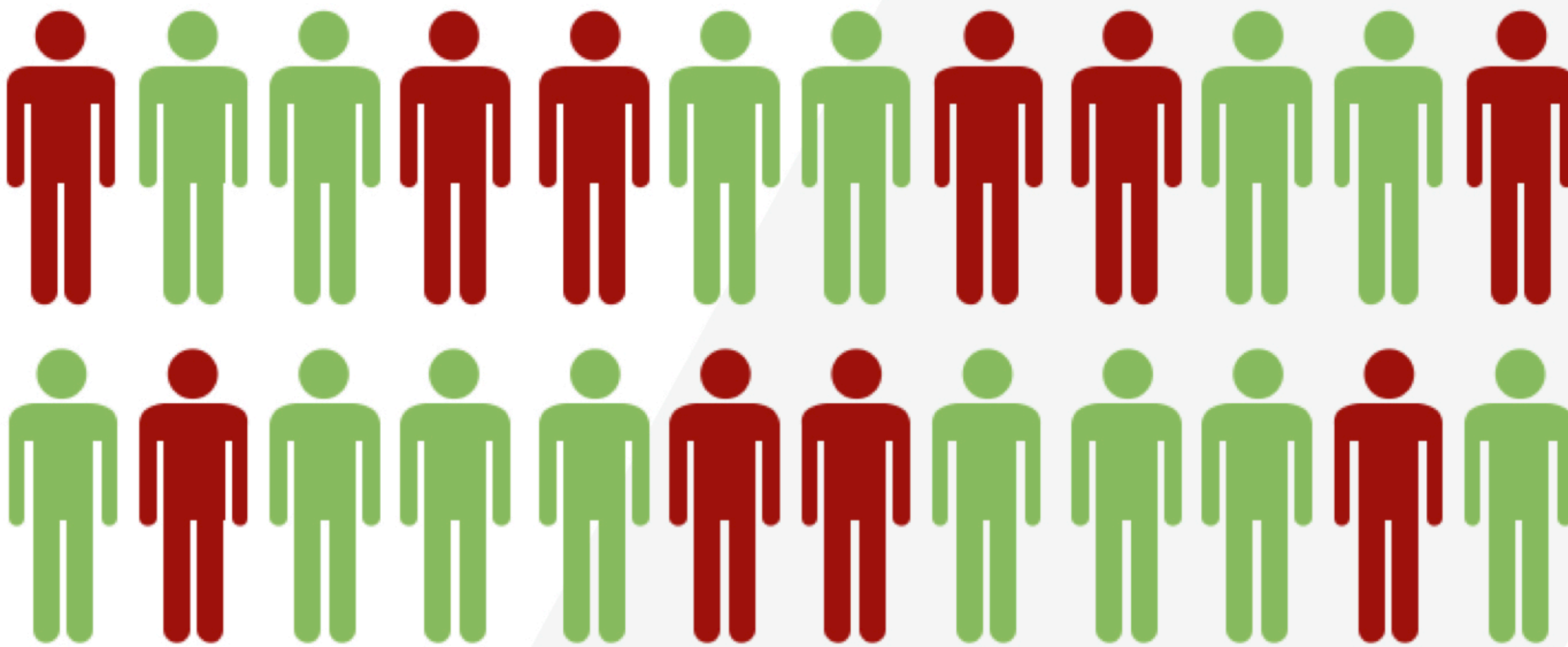
500 private social providers

CARE NEED AND CARE ANSWER



A Region increasingly ageing...

CARE NEED AND CARE ANSWER



4 out of 10
are chronic
patients
and expend
86% of Regional
Health Budget

A Region increasingly ageing...and chronically living

CARE NEED AND CARE ANSWER



1,5 out of **10**
is a severe
chronic
patient (+**17%**
vs italian
average)

A Region increasingly ageing...and chronically living

WHO WE ARE: APULIA REGION...AND ITS HEALTH AGENCY

APRESS

AN AMBIDEXTER MODEL TO IMPROVE AND MANAGE HEALTHCARE

TWO INSTITUTIONAL ENTITIES
FOR HEALTH, WELLBEING AND SOCIAL AFFAIRS

AReSS Puglia
EXPLORATION

Dipartimento Salute
EXPLOITATION

AN AMBIDEXTER MODEL TO IMPROVE AND MANAGE HEALTHCARE

AReSS Puglia
EXPLORATION



AN AMBIDEXTER MODEL TO IMPROVE AND MANAGE HEALTHCARE



Dipartimento Salute
EXPLOITATION

OUR “VERTICAL” FUNCTION AND COMPETENCE AREAS



**EPIDEMIOLOGY AND
CARE INTELLIGENCE**



**TECH ASSESSMENT
AND RESEARCH**



**SYSTEM INNOVATION
AND QUALITY**



E-HEALTH

HOW DID EVERYTHING START: **THE HOSPITAL**

APR 2022

PREVIOUS HOSPITAL-CENTERED SYSTEM PASSED THROUGH TWO STORMS...



60 public hospitals



42 public hospitals



31 public hospitals



33 private hospitals



33 private hospitals



33 private hospitals

15.629 beds

13.086 beds

13.100 beds

158 beds/average

174 beds/average

205 beds/average

before the storms

2010

2016

...SO WE GAINED THE CHANCE TO DESIGN A THREE STAGES CONTINUUM OF CARE



CARE PUGLIA 3.0

The regional
chronic care
model



COMMUNITY CARE CENTERS

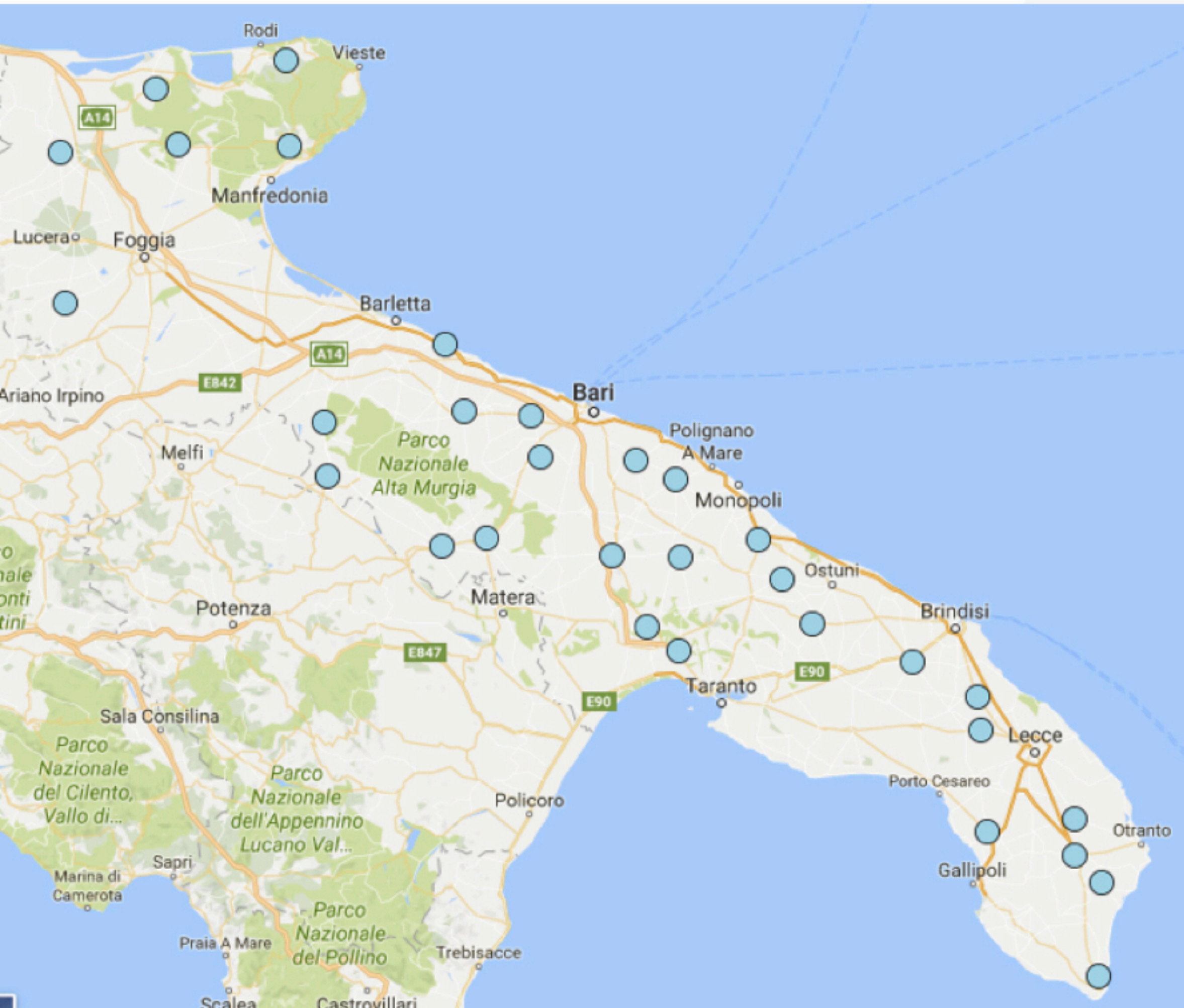
The bridge for
"intermediate"
care



3-TIERS HOSPITAL NETWORK

The ultimate and
"high" place for
acute care

...SO WE GAINED THE CHANCE TO DESIGN A THREE STAGES CONTINUUM OF CARE



Community Care Centers

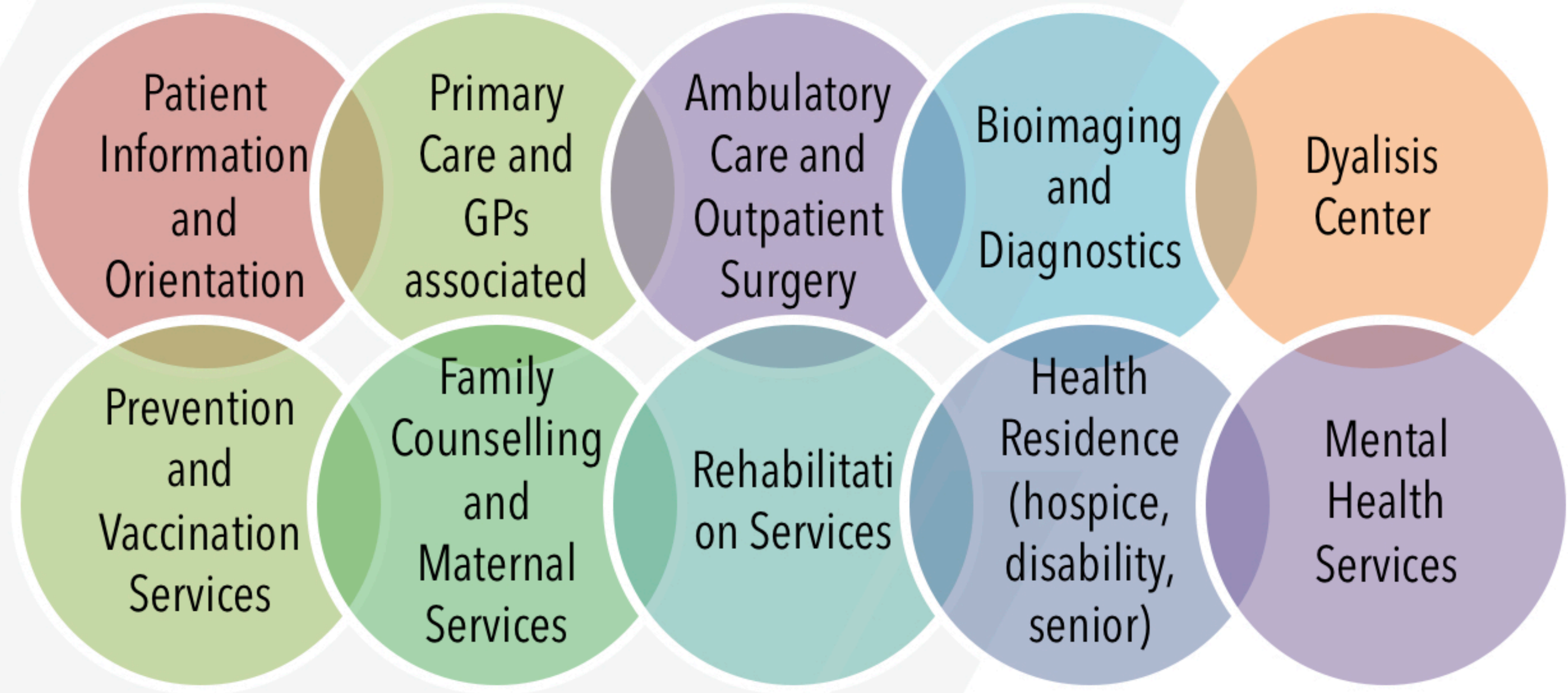
What once was a hospital
now is an intermediate spot
between “Hospital” and
“Patient Home”

→ a “Bridge”!

...SO WE GAINED THE CHANCE TO DESIGN A THREE STAGES CONTINUUM OF CARE

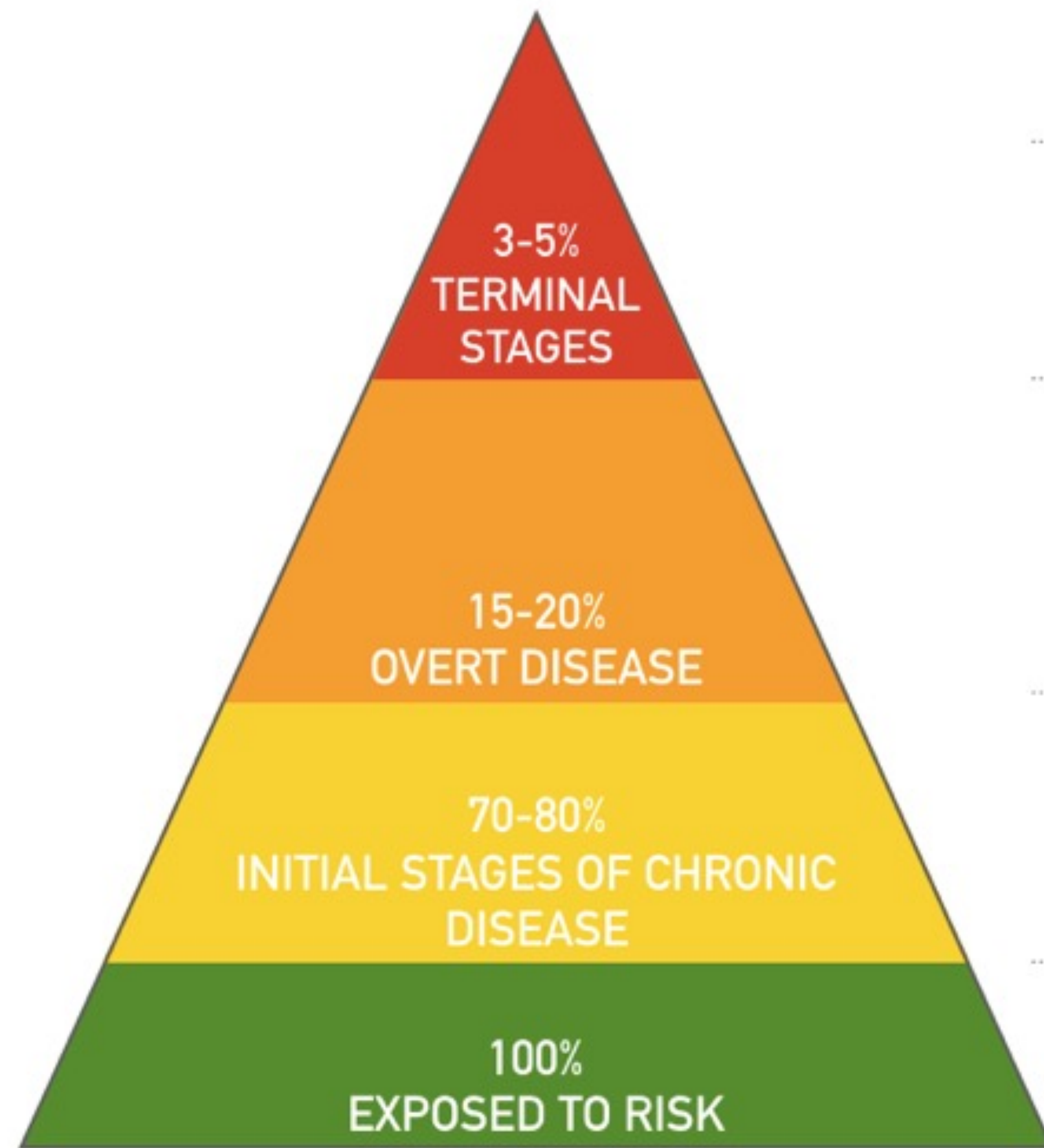


Community Care Centers



Ten service areas: no more “hospital”, never simple “ambulatory”

...SO WE GAINED THE CHANCE TO DESIGN A THREE STAGES CONTINUUM OF CARE



Community	Home	Primary Care Practice	Ambulatory Facility	Intermediate Care Residence	Hospital
				✓	✓
		✓	✓	✓	✓
	✓	✓			
✓	✓	✓			



Five care places (blue cells): just the bridge...

A GOOD PRACTICE ENABLING THE BRIDGE: TELEHOMECARE

BRIDGE

TELEHOMECARE SYSTEM: A BRIEF DESCRIPTION

- For the activities is used a new technology called "**H@H-Hospital at Home**", developed by an apulian startup through regional interventions for industrial development;
- The system is allocated at the **patient's home**, permanently interconnected with the doctor - by pc, telephone, tablet;
- At the Community Care Center of Ceglie Messapica (Brindisi) is present a **central control room** for all patients and all devices located at the patient's home. 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 (neurologists, pulmonologist, cardiologists, diabetologists, etc) remotely, to **see the patient and talk to your health care professional** on a visit at patient's home, through the activation of a video special device.
- 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.

TELEHOMECARE SYSTEM: THE OBJECTIVES

- Reduce the number of patients with heart disease, chronic diseases and diabetes in the process of instability
- Reduce hospitalization and re-hospitalization
- Activate protected de-hospitalization
- Optimize the therapy and diagnosis according to international guidelines
- To promote the integrated management of Hospital Care and Community Territory
- Evaluate the satisfaction of the doctor, caregiver and patient

TELEHOMECARE SYSTEM: THE PATIENT

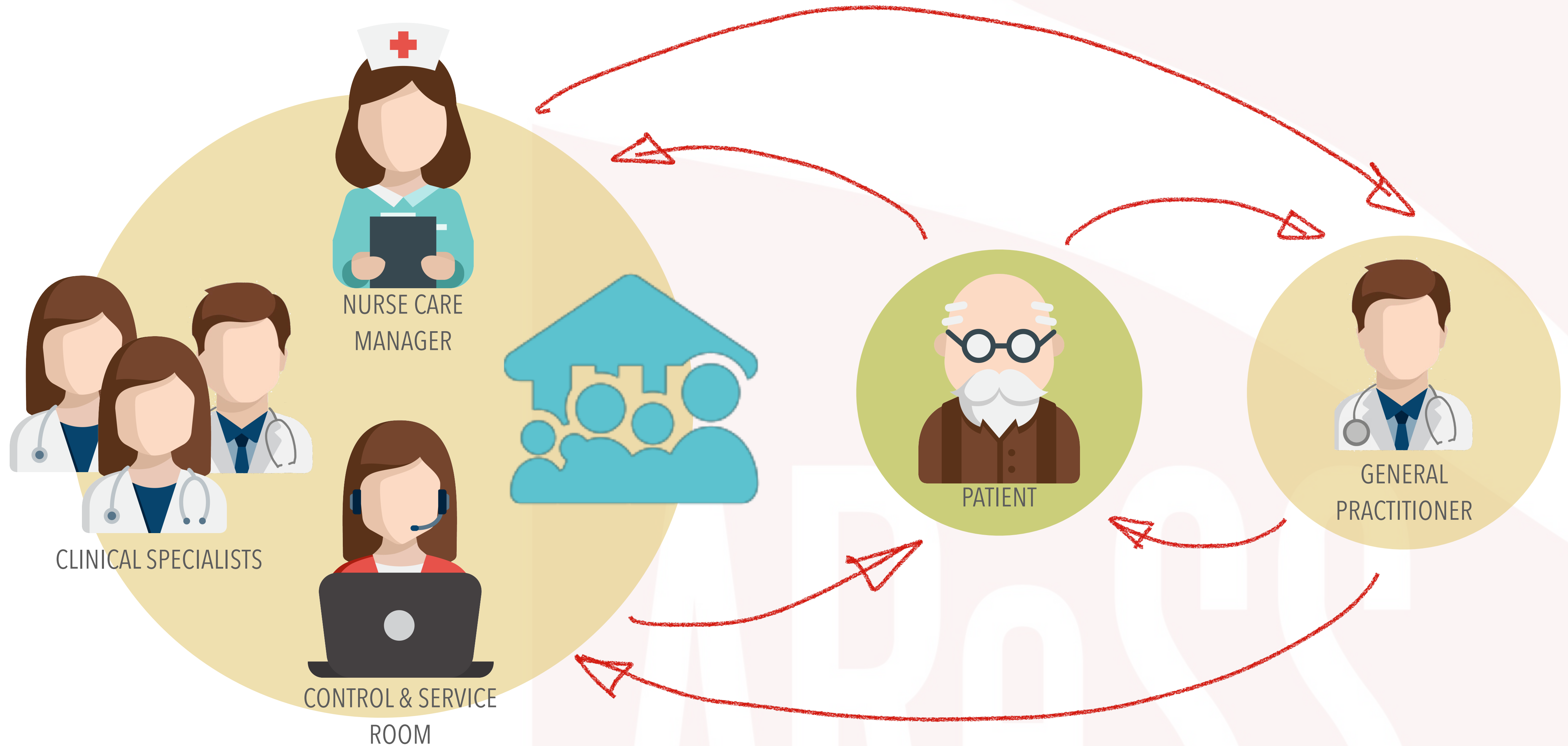


Pilot stage of 36 months (2015-17)

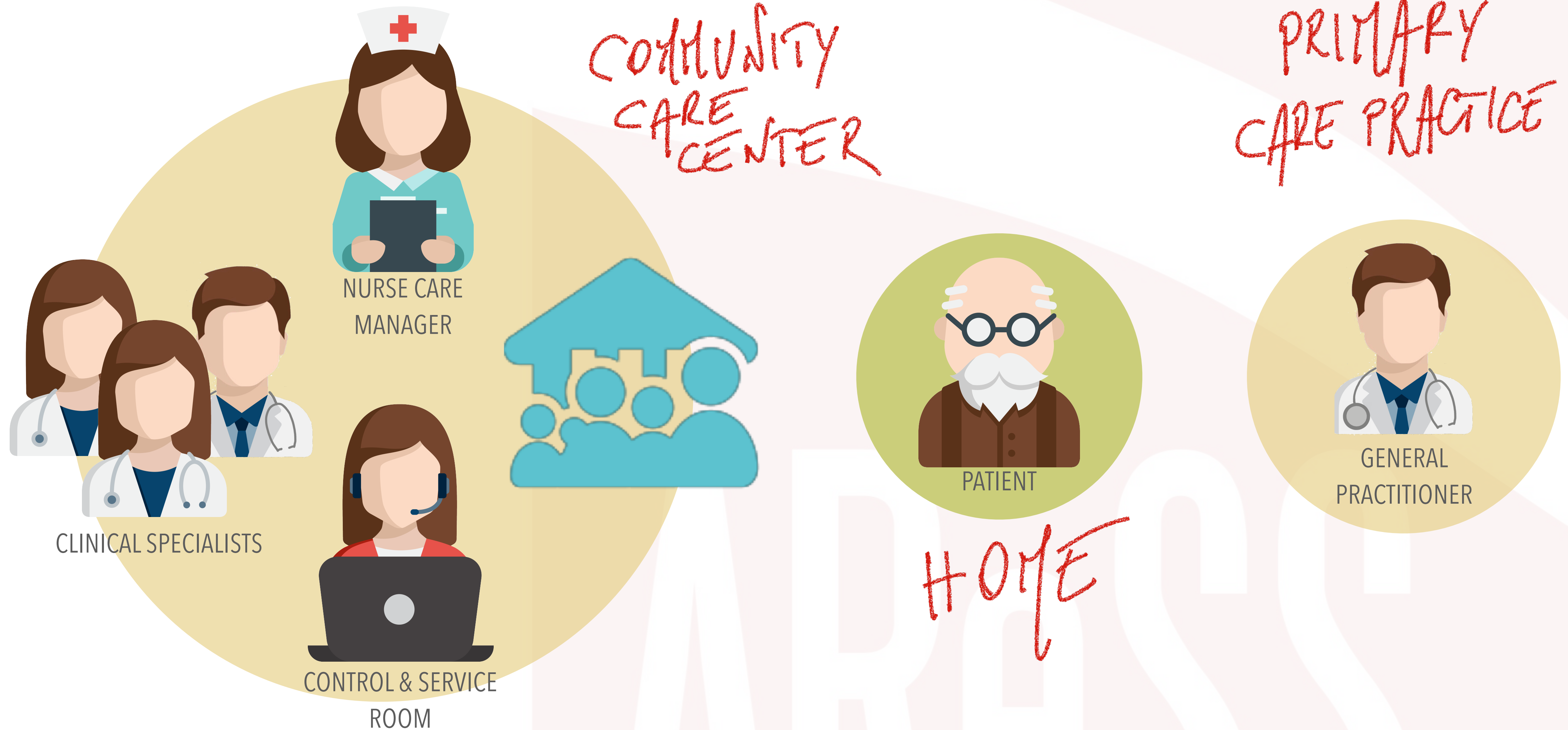
308 "FRAIL" PATIENTS (290 > 65y)

DISEASE	NUMBER	
	TOTAL	of whom with comorbidity
COPD	73	19
HEART FAILURE	93	50
DIABETES	142	52

TELEHOMECARE SYSTEM: THE TEAM...AND CONTINUUM OF CARE



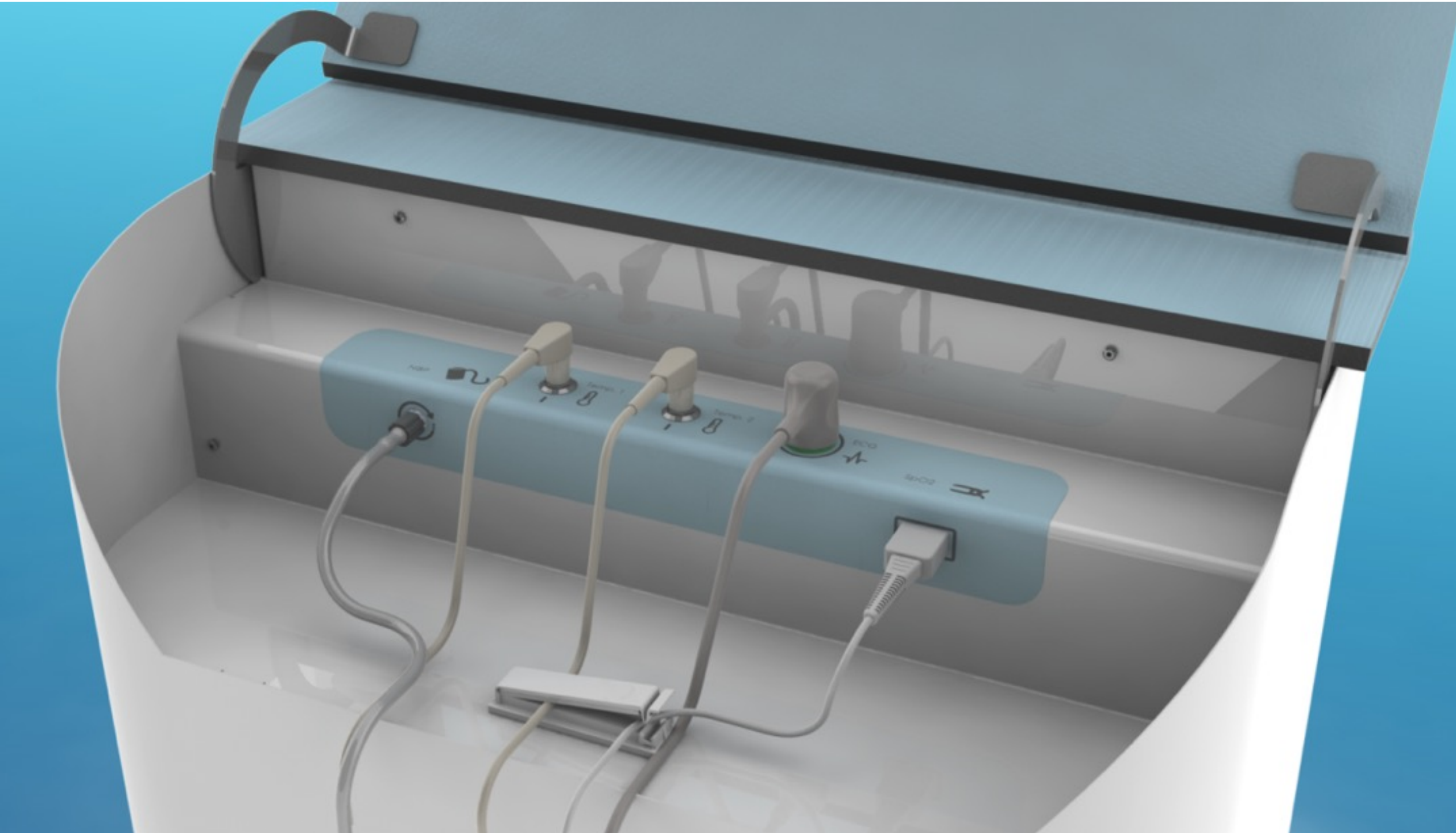
TELEHOMECARE SYSTEM: THE TEAM...AND CONTINUUM OF CARE



TELEHOMECARE SYSTEM: THE DEVICE



TELEHOMECARE SYSTEM: THE DEVICE



- Blood Pressure
- ECG
- Body Temperature
- Heart Rate

- Respiratory Rate
- SpO2
- VideoCommunication Module

- Oxygen administration by concentrator
- Endocavitary aspiration

TELEHOMECARE SYSTEM: THE RESULTS

REDUCTION OF HOSPITALISATION	38% less hospital admissions 28% reduction of hospital LoS 36% less re-admissions
PATIENT SATISFACTION	3% of patients “very little” satisfied 16% of patients “enough” satisfied 81% of patients “very much” satisfied
ENHANCEMENT OF OUT-OF-HOSPITAL SUPPORT	77% of patients cared at home 23% of patients cared at Community Care Center
PATIENT SELF-SUFFICIENCY	From 60% (before enrollment) up to 90% (after enrollment)
COST REDUCTION	~ € 250.000 from avoided hospitalisation

TELEHOMECARE SYSTEM: SCALING UP IN PROGRESS



*from 11 devices
and 300 patients
(2015-17)*



*to 152 (56 wheeled and 96
laptop) for 3.000 patients
(2018-21)*



***a regional
HTA in
progress to
scale up
experience at
regional
extent
through PPI
tender***

CLOSING SUGGESTIONS

- Telemonitoring activity can bring benefits only if it is included in a management model for the chronic «ICT assisted» pathologies: the Telemedicine must be added, not as an alternative to the classic integrated management model, but to facilitate, to intensify and to personalize the monitoring of the disease.
- The strong collaboration between Specialists and GPs is very important both in terms of sharing information (remote access to individual clinical data), both to intensify the mutual knowledge of the patient pathologies.
- The patient recruited in telemedicine program must receive correct information on the disease, on the importance of the commitment to data transmission with an educational intervention on self-monitoring and self-care.
- Interventions must be personalized and not implemented according to rigid assistance models: is important to always must maintain the right balance between the use of technology and attention to aspects of human contact.

THANKS!

APRESS