Integrated Care: policies, investments and skills

Changing today for tomorrow

EUREGHA HIGH-LEVEL ANNUAL CONFERENCE 2018

Donato Papini
Agenzia Sanitaria e sociale regionale

RegioneEmilia-Romagna

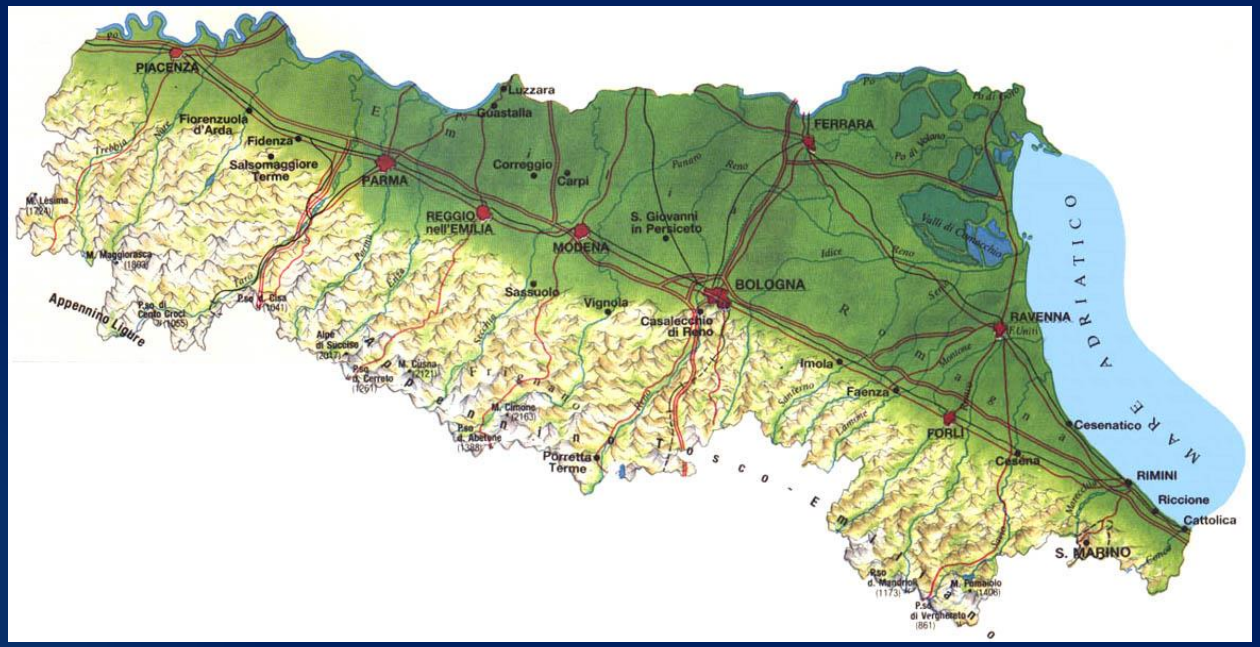
euregha
European Regional and Local Health Authorities

The context: Italy

- 61 million people
- 20 Regions, differing in size, population and levels of economic development
- Public and universalistic Health Service largely funded through taxes, supplemented by co-payments
- healthcare expenditure in 2016 equal to149,500 million euros, that is a 8.9% incidence on GDP (very low), 75% of which financed by the public sector, and the rest by the private sector.
- National health fund for the National Health Service (year 2018) is 110.1 billion Euros
- Since the early 1990s, considerable competences particularly in health-care organization and delivery, devolved to the regional level of government

Source: Istat and WHO

Emilia-Romagna Region



Area: 22446 Km^2 7.4% of the national territory

Population: 4.461.612 (2018)

Municipalities: 340 (grouped in 38 health districts)

Health care in Emilia-Romagna: some figures

	Emilia-Romagna	Italy
Residents (x 1,000)	4.461	60,589
% > 65 yrs	23.7	22.2
GDP (000's €), per capita	33.6	27.1
Infant mortality ‰	2.37	2.90
Public health expenditure (€), per capita	1,890	1,846
Hospital beds ‰ residents	3.9	3.2

Source: Istat and WHO, year 2017 or nearest

The Regional Health Service: characteristics

- Universal and equity-oriented health system
- Health and social care integration
- Patient centred organization and delivery of services
- Comprehensive management of chronic conditions
- Pathways of Care and Personalized Integrated plans
- Proximity and proactive care
- Risk stratification of general population

The Regional Health Service

- ✓ 8 Local Health Units
  - **38 Health Districts**
  - **53 Hospitals**
  - **105 Community Health Centers**
  - **19 Community Hospitals**
- ✓ 4 University Hospital
- ✓ 4 Research Hospitals (IRCCS)

Employed personnel total: 60528
Doctors: 4494
Nurses: 26154

2.993 GPs working under agreement (not employed)

The Regional Health Service organization

- Local Health Units deliver primary care, hospital care, outpatient specialist care, public health services, and health care related to social care. They operate through health districts, where municipalities and health services determine requirements, health and social plan and assess results. Perform mostly clinical research.
- University Hospitals perform biomedical, clinical and "theory enhancing" research and provide advanced care using cutting edge technology
- Research Hospitals IRCCS (officially recognized my Italian MoH) have the specific mission of translational research

Funding

- From the national health fund Emilia-Romagna in 2018 received 8.163 billion Euros
- Region Emilia-Romagna adds an extra fund to support not self-sufficient persons with chronic conditions

Integrated care ensured through primary care services

- Integrated care services are organized through "**Coordination Centres**" located in the Community Health Centres or at Districts level, where specialists, GPs, social workers and other professionals perform the **multidimensional evaluation of people with complex health and social care needs**, and coordinate the assistance from and to the hospital.
- **Specialist Care Centres** (for diabetes, cardiovascular and respiratory problems, others) are the main structures activating and managing integrated care and activation of **person centered diagnostic and care pathways**.

Integrated care ensured through primary care services

- **The nurses' managed ambulatory** for integrated chronic care located in the Community Health Centre is one of the pillar for the model. **It provides case detection and management** (through the application of Pathways of Care and Personalized Integrated plans), under guidance of a case manager, support to self-management (also through telemedicine services for remote areas), in close collaboration with GPs, specialists, social workers and the voluntary sector.
- This multidisciplinary group performs also periodic **equity audits** (to identify potential inequalities) and runs several projects on lifestyles for the promotion and prevention of chronic diseases in healthy adults.

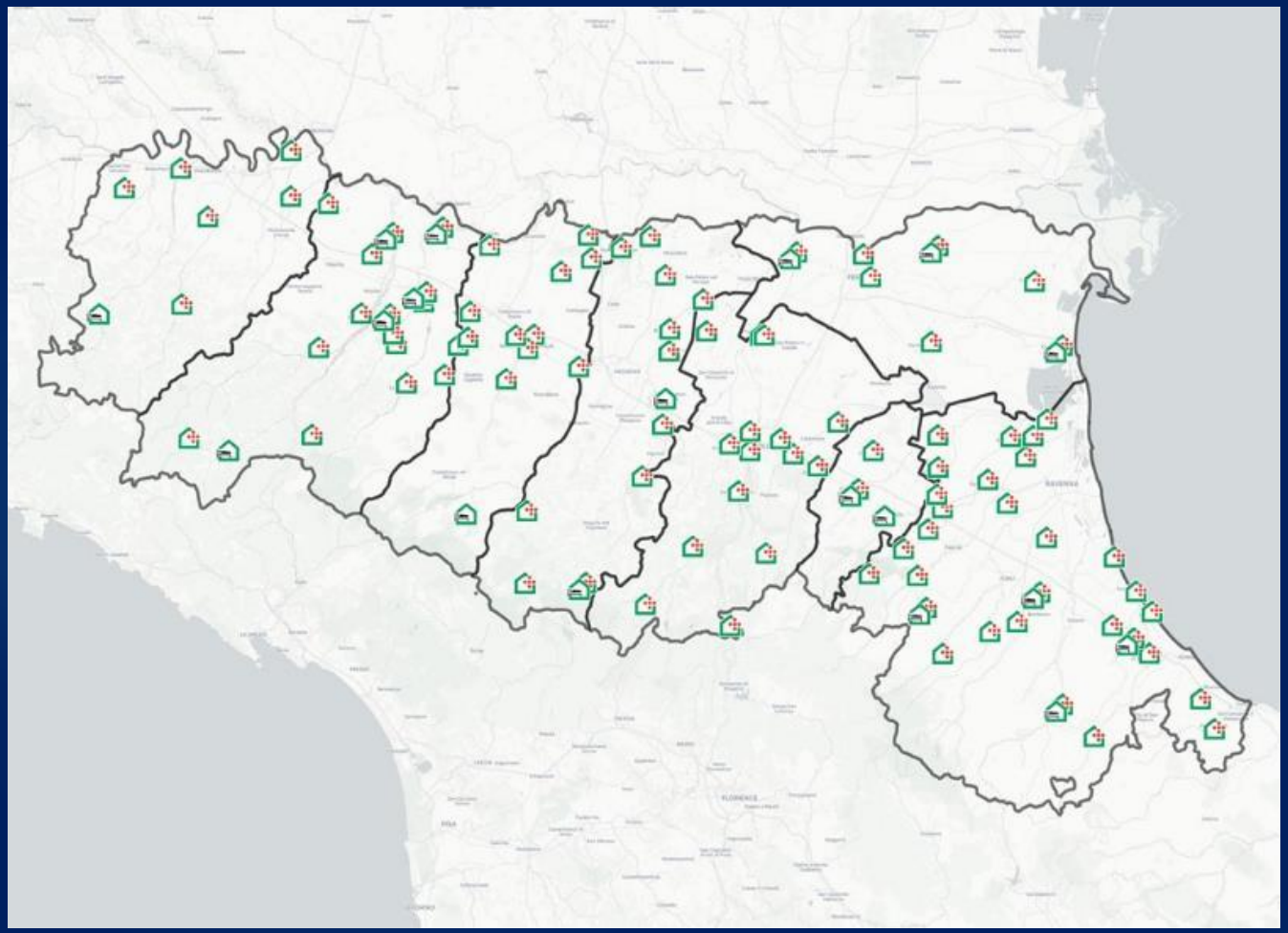
Community Health Centers

Case della Salute: DGR 291/2010, DGR 2128/2016

Key features of the services provided:

- single point of access for citizens;
- coordination of responses for citizens;
- integration among hospitals, social and health services and community care;
- provision of diagnostic pathways;
- management of chronic conditions;
- promotion of citizens and patients' empowerment;
- health prevention and promotion;
- ongoing education and training for healthcare workers;
- access to care 24 hours a day, 7 days a week

105 Community Health Centers covering almost 50% of population

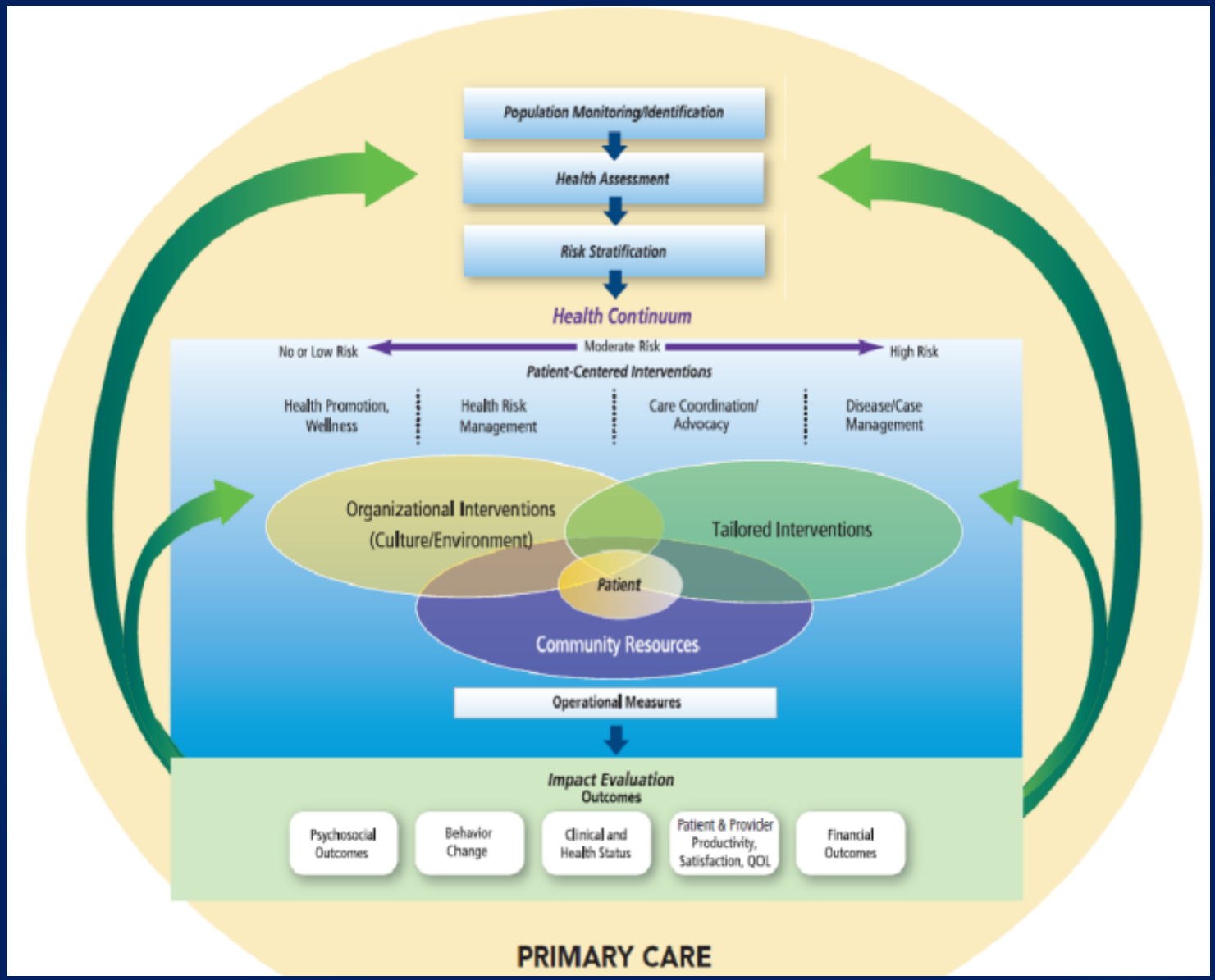


Community Hospitals

- Community Hospitals are territorial facilities managed by nurses (under the clinical responsibility of GPs or LHUs physicians), and with the involvement of physiotherapists and care workers. These facilities have a limited number of beds (usually less than 30), and provide mainly rehabilitation services (physical, respiratory and cognitive), patient empowerment, self-management and caregiver training.
- At present, in the Emilia-Romagna Region there are 21 Community Hospitals.

Community Health Centres and Community Hospitals are the main facilities ensuring the continuity of care, bridging the gap between primary and hospital care, avoiding inappropriate hospitalization and facilitating hospital discharge

Population Health Management



Care Continuum Alliance: Implementation and Evaluation: A Population Health Guide for Primary Care Models. Washington, 2012

The Regional stratification Predictive Model - RiskER

- predictive model to identify patients at high risk of hospitalization and frailty, developed with Jefferson University (BMJ open 2014:4:e005223 Louis DZ) and adapted to regional context
- 'patient risk profiles' providing information on high-risk patients to general practitioners (GPs) and nurses in the Case della Salute (Community Health Centers)

http://assr.regione.emilia-romagna.it/it/servizi/pubblicazioni/rapporti-documenti/report-risker-2018

A Regional Predictive Model - RiskER

- risk of hospitalization for Ambulatory Care Sensitive Condition or death
- adult population
- Risk Score calculation
- high level of statistic performance for risk of hospitalization (C= 0.85)

- use of regional health/administrative data

BMJ Open

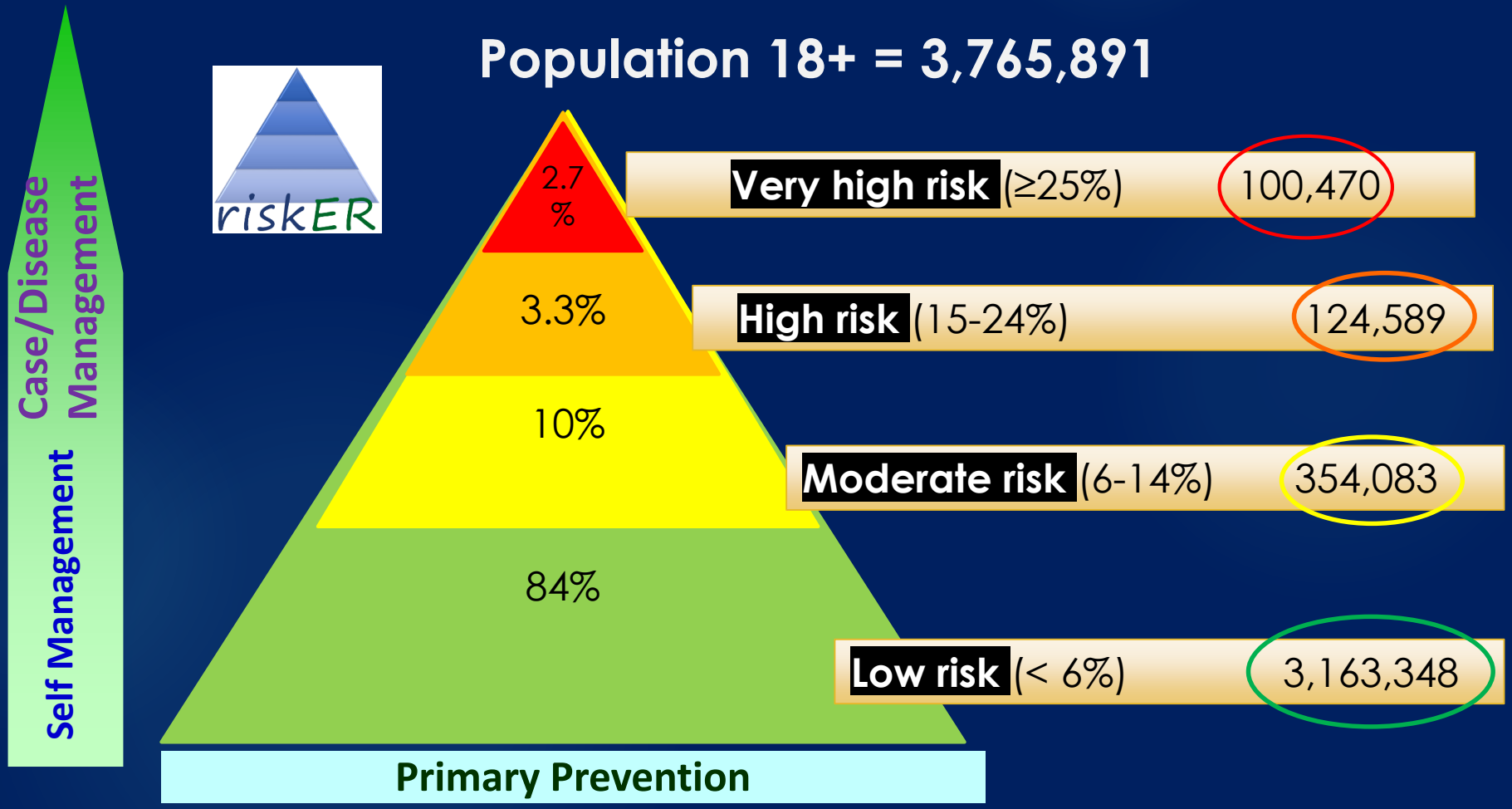
Predicting risk of hospitalisation or death: a retrospective population-based analysis

Daniel Z Louis,[1] Mary Robeson,[1] John McAna,[2] Vittorio Maio,[2] Scott W Keith,[3] Mengdan Liu,[1] Joseph S Gonnella,[1] Roberto Grilli[4]

ABSTRACT

Strengths and limitations of this study

Population risk stratification - 2016



Concentration of expenditure:
1% of patients is responsible for 13 % of expenditure

Risk-ER Actions

- Risk Profiles provided to GPs
- Activation of Professional Teams
  - GPs, specialists, nurses, physioterapists, social workers
  - a proactive response…
- Interdisciplinary Paths
  - prevention, clinical appropriateness and adherence, health education…
- Participation of Community,
  - Patients, Caregivers, Associations

CHC report

CHC Summary

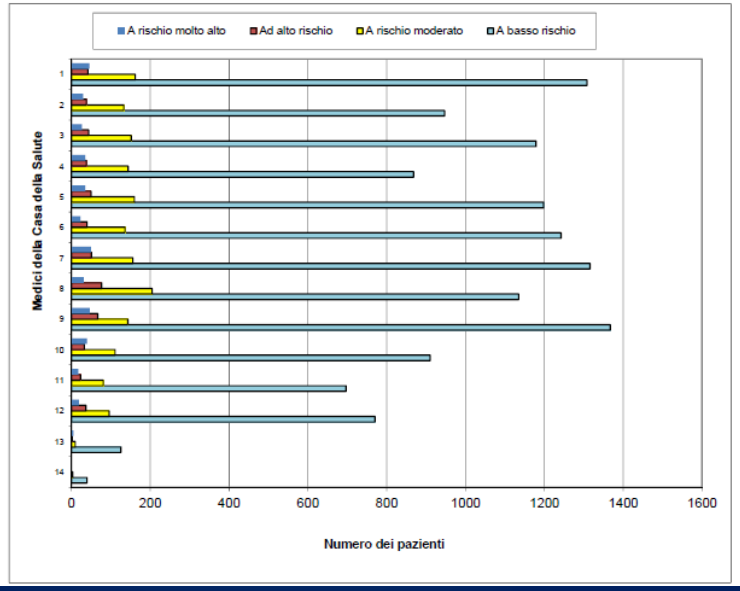
Casa della Salute: Crevalcore **Distretto: PIANURA OVEST**

Sommario - Pazienti adulti (n=15337)

I dati dei pazienti della Casa della Salute sono relativi ai servizi sanitari utilizzati nell'anno 2013. Tali dati sono stati quindi usati per predire nella popolazione adulta il rischio di ospedalizzazione o morte per le condizioni selezionate per il 2014.

A rischio molto alto	Il rischio previsto di ospedalizzazione è ≥ 25%	Rappresenta circa il 4% della popolazione
Ad alto rischio	Il rischio previsto di ospedalizzazione è fra il 15 e il 24%	Rappresenta circa il 6% della popolazione
A rischio moderato	Il rischio previsto di ospedalizzazione è fra il 6 e il 14%	Rappresenta circa il 15% della popolazione – l'intervallo di rischio è stato scelto in base al livello medio di rischio di ospedalizzazione o morte della popolazione adulta
A basso rischio	Il rischio previsto di ospedalizzazione è ≤5%	Rappresenta circa il 75% della popolazione - Il rischio è inferiore al livello medio di rischio di ospedalizzazione o morte della popolazione adulta

Numero dei pazienti per tutti i medici nella Casa della Salute in base alla categoria di rischio di ospedalizzazione



GP report

Patient level report

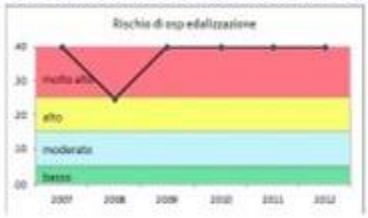
Paziente: 1094553 Patient

Sesso: F *Età:* 44

Rischio di ospedalizzazione previsto per il 2013:

Molto alto

Il grafico mostra il cambiamento nel tempo del rischio di ospedalizzazione previsto per il paziente



Questo documento è un sommario delle informazioni di natura amministrativa per un paziente previsto a probabile 'rischio molto alto' di ospedalizzazione nel 2013 in base ai consumi sanitari del 2012.

Patologie croniche (in base al sistema a eziologia)

☑ *Cardiovascolari*	☐ *Genitourinarie*	☐ *Oftalmologiche*
☐ *Dermatologiche*	☐ *Ginecologiche*	☐ *Otorinoralingoiatriche*
☐ *Ematologiche*	☐ *Immunologiche*	☑ *Psichiatriche*
☐ *Endocrine*	☐ *Infettive*	☐ *Respiratorie*
☑ *Epatiche*	☐ *Muscoloscheletriche*	☐ *Sistema Genitale Maschile*
☑ *Gastrointestinali*	☑ *Neurologiche*	☐ *Tumorali*

Ospedalizzazione 2012 – N. di ricoveri occorsi al paziente: 1

N. 1 *Degenza ordinaria presso Ospedali Riuniti-Pr*

02/01/12 - 02/02/12 gg_deg: 31 *Dimissione:* Ordinaria a domicilio

Patologia principale del ricovero: 785.59 Altro Shock Senza Menzione Di Trauma

Comorbidità: 789.5 Ascite
571.2 Cirrosi Epatica Alcolica
570 Necrosi Acuta E Subacuta Del Fegato
307.1 Anoressia Nervosa
070.54 Epatite C Cronica Senza Menzione Di Coma Epatico

Procedura: 42.91 Legatura Di Varici Esofagee

Pronto Soccorso 2012 – N. : 3

Presso Ospedali Riuniti-Pr

13/02/12 - 13/02/12 Altri Sintomi O Disturbi

Risk-ER clinical impact evaluation

	RISK-ER incidence rate (n=488)		NO RISK-ER incidence rate (n=488)		Incidence rate ratio (exposed vs not exposed)		
	Value	95%CI	Value	95%CI	Value	95%CI	p-value
Emergency departments visits	236 (48,4)	(43,9-52,8)	299 (61,3)	(56,9-65,6)	0,79	(0,70-0,89)	0,001
Hospital admissions	107 (21,9)	(18,3-25,6)	136 (27,9)	(23,9-31,8)	0,78	(063-0,98)	0,033
ACSC admissions	22 (4,5)	(2,7-6,3)	36 (7,4)	(5,1-9,7)	0,61	(0,37-1,02)	0,061
Mortality	20 (4,1)	(2,3-5,9)	27 (5,5)	(3,5-7,6)	0,75	(0,42-1,30)	0,289

The Sunfrail Tool

- A tool aimed to **detect frailty** in elderly over 65 by generating alerts on functionality, especially in social-community dwelling settings
- It has been identified as part of an EU funded project coordinated by the Emilia Romagna-Region between 2015-2018. By focusing on **people at low to medium risk**, the tool complements the regional risk stratification model for this target population.

sunfrail
Reference Sites Network for Prevention and Care of Frailty and Chronic Conditions in community dwelling persons of EU Countries
Co-funded by the Health Programme of the European Union
The SUNFRAIL Project has received funding from the European Union's Health Programme 2014-2020

Sunfrail early identification of frailty tool

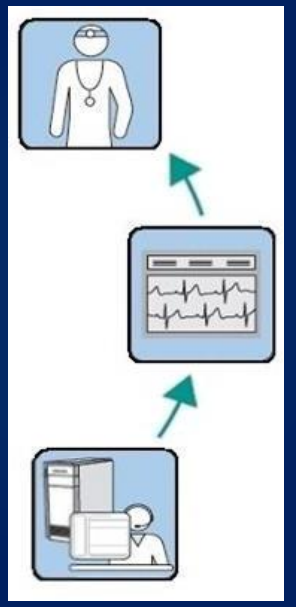
BIOLOGICAL	Q1. Do you regularly take 5 or more medications per day?
	Q2. Have you recently lost weight such that your clothing has become looser?
	Q3. Your physical state made you walk less during last year?
	Q4. Have you been evaluated by your general practitioner during last year?
	Q5. Have you fallen one or more times during last year?
PSYCHOLOGICAL	Q6. Have you experienced memory decline during last year?
SOCIAL	Q7. Do you feel lonely most of the time?
	Q8. In case of need, can you count on someone close to you?
	Q9. Have you had any financial difficulties in facing dental care and health care costs during last year?

Emilia-Romagna Region ICT services

- The ICT regional system is based on integrated and interoperable technologies allowing **sharing of health information** between GPs, pediatricians and specialists of the local health authorities and hospitals and for the citizen's use.
- Mobile health and telemedicine are under implementation in selected areas

Community Health Centre
Operations center – Chronic disease unit

Telemedicine tools

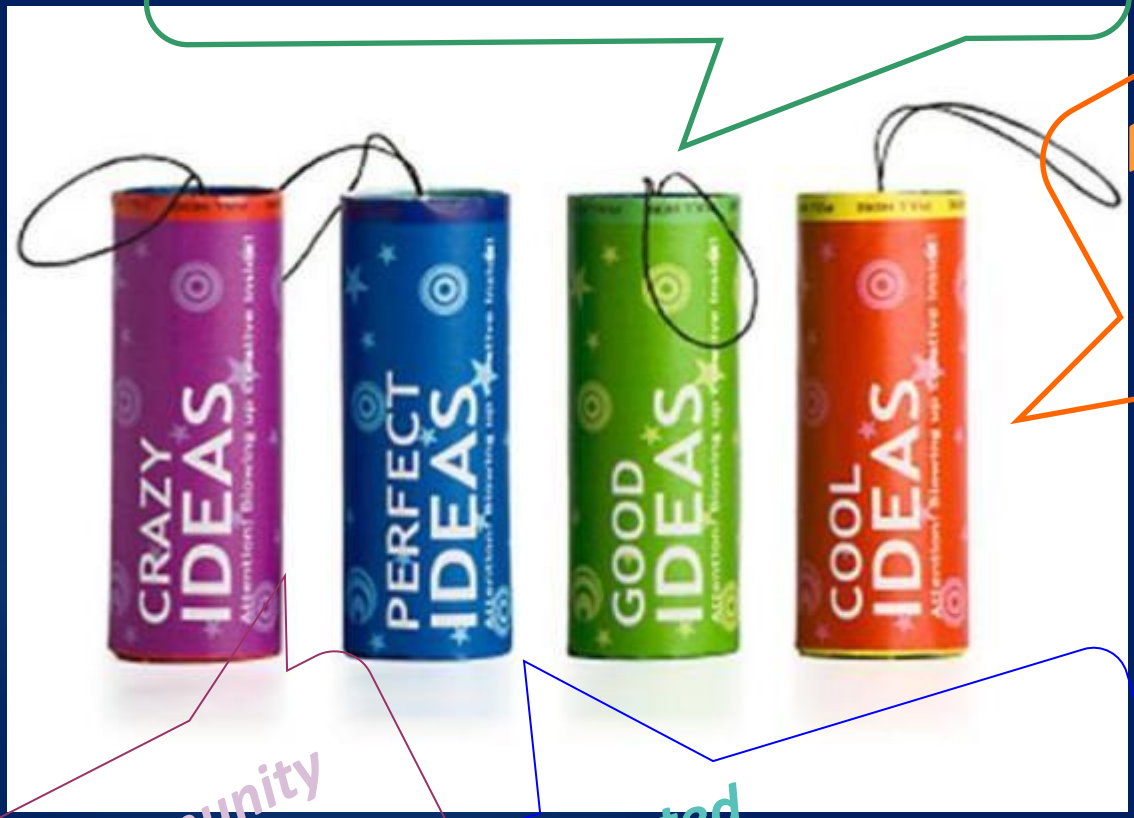


Patient:
Patient monitoring using mHealth system

Hospital/Outpatient specialist :
Data visualisation and analysis for medical records update and consulting

Integrated Care: the future

Multidisciplinary, Integrated and Participated Pathways of Care



Ambulatory (Nurse-Based) Care for Chronic Diseases

All in One…

Community Hospitals

Integrated Home-Based Care

- Thanks for your attention
- Merci!

Emilia Romagna Region: http://salute.regione.emilia-romagna.it

Contact:
Donato.Papini@regione.emilia-romagna.it