

International CME webinar

GOOD PRACTICES FOR IMPROVING THE EFFICIENCY OF CANCER TREATMENT IN EUROPE



New digital cancer care processes
Mariangela Ciccarese

Scientific
Coordination



Under the
auspices of



Provider
and Organisation






Outline

- Cancer as a “chronic” disease
- Overall survival improving in cancer care
- Italian regulatory framework about telemedicine
- Regional telemedicine center and its operativity plan
- Clinical application in regional cancer network

Backgroundsize of the problem


Presidenza del Consiglio dei Ministri
 CONFERENZA PERMANENTE PER I RAPPORTI
 TRA LO STATO, LE REGIONI E LE PROVINCE AUTONOME
 DI TRENTO E DI BOLZANO

Accordo, ai sensi dell'articolo 4, del decreto legislativo 28 agosto 1997, n. 281, tra il Governo, le Regioni e le Province autonome di Trento e di Bolzano sul documento recante "Revisione delle Linee Guida organizzative e delle raccomandazioni per la Rete Oncologica che integra l'attività ospedaliera per acuti e post acuti con l'attività territoriale".

Repertorio Atti n. 59/CSR del 17 aprile 2019

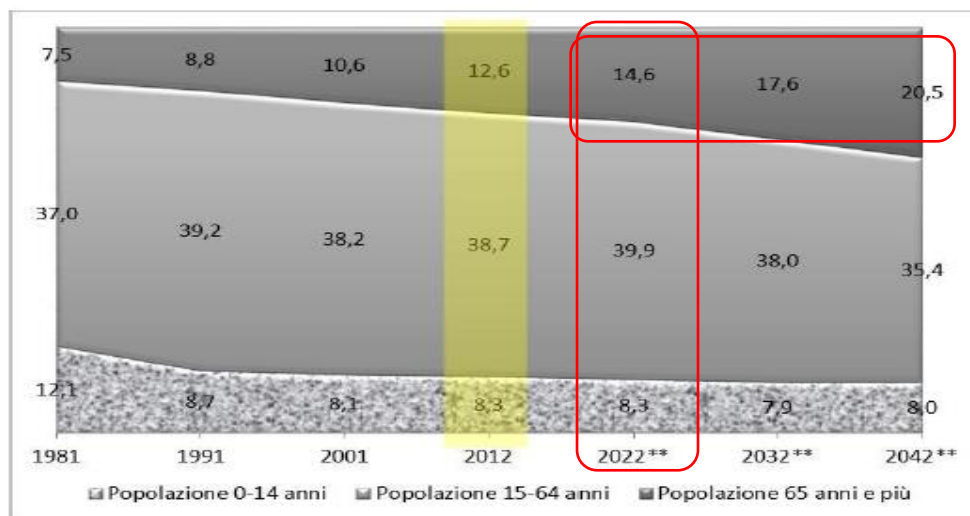
LA CONFERENZA PERMANENTE PER I RAPPORTI TRA LO STATO, LE REGIONI E LE
 PROVINCE AUTONOME DI TRENTO E DI BOLZANO

Nell'odierna seduta del 17 aprile 2019

Distribution of age groups from 1981 to 2041 according to the Italian National Statistic Institute (ISTAT)

L'evoluzione della popolazione italiana per fasce d'età dal 1981 al 2041 (*)

(valore assoluto in milioni)



Increasing age ...more survival , more chance to have a chronicity including cancer

In 2032 over 65 will be 27.6% of the entire population

Cancer as a chronic disease

(*) Dati al 1 gennaio dell'anno successivo (**) Previsioni della popolazione, hp. Centrale
 Fonte: elaborazione CENSIS su dati ISTAT

Assessment of Overall Survival, Quality of Life, and Safety Benefits Associated With New Cancer Medicines

Sebastian Salas-Vega, MSc; Othon Iliopoulos, MD; Elias Mossialos, MD, PhD

Supplemental content

Table. Evidence Generally Reported by HTA Agencies to Evaluate Drug-Related Effects on Key Outcome Measures

Outcome Measure	Evidence
OS	Median OS ^{a,b,c}
	Mean OS ^{a,c}
	Survival probability (%) ^{b,c}
	OS (mean/median, NOS) ^{b,c}
	Expectations of Impact on mortality (NOS) ^b
QoL	Symptom Improvement ^{a,b}
	Time to change (deterioration/Improvement) In functioning or symptoms ^{a,b,c}
	QoL Instruments ^{a,b,c,d}
	Impact on utility ^a
	Expectations of Impact on QoL (NOS) ^{a,b,c,e}
	Patient representative/clinical expert inputs ^{a,b,f}
Safety	Incidence of AE ^{a,b,c,g}
	Incidence of severe or serious AE ^{a,b,c,h}
	Time to first AE (≥grade 3) ^a
	Treatment discontinuation or dose reduction ^{a,b,c}
	Overall tolerance and safety profile (NOS) ^{a,b,c,i}
	Treatment-related deaths ^{a,b,c,j}
	Patient representative/clinical expert inputs ^{a,b,c,k}



patients that live longer and in good general conditions despite the cancer disease in the active phase, more people that must be taken in charge from the health system

ORIGINAL RESEARCH

Evolution of overall survival and receipt of new therapies by subtype among 20 446 metastatic breast cancer patients in the 2008-2017 ESME cohort

T. Grinda¹, A. Antoine², W. Jacot³, C. Blaye⁴, P.-H. Cottu⁵, V. Diéras⁶, F. Dalenc⁷, A. Gonçalves⁸, M. Debled⁹, A. Patsouris⁹, M.-A. Mouret-Reynier¹⁰, A. Mailliez¹¹, F. Clatot¹², C. Levy¹³, J.-M. Ferrero¹⁴, I. Desmoulins¹⁵, L. Uwer¹⁶, T. Petit¹⁷, C. Jouannaud¹⁸, M. Lacroix-Triki¹⁹, E. Deluche²⁰, M. Robain²¹, C. Courtinard^{21,22,23}, T. Bachelot²⁴, E. Brain⁵, D. Pérol² & S. Delaloge^{1*}

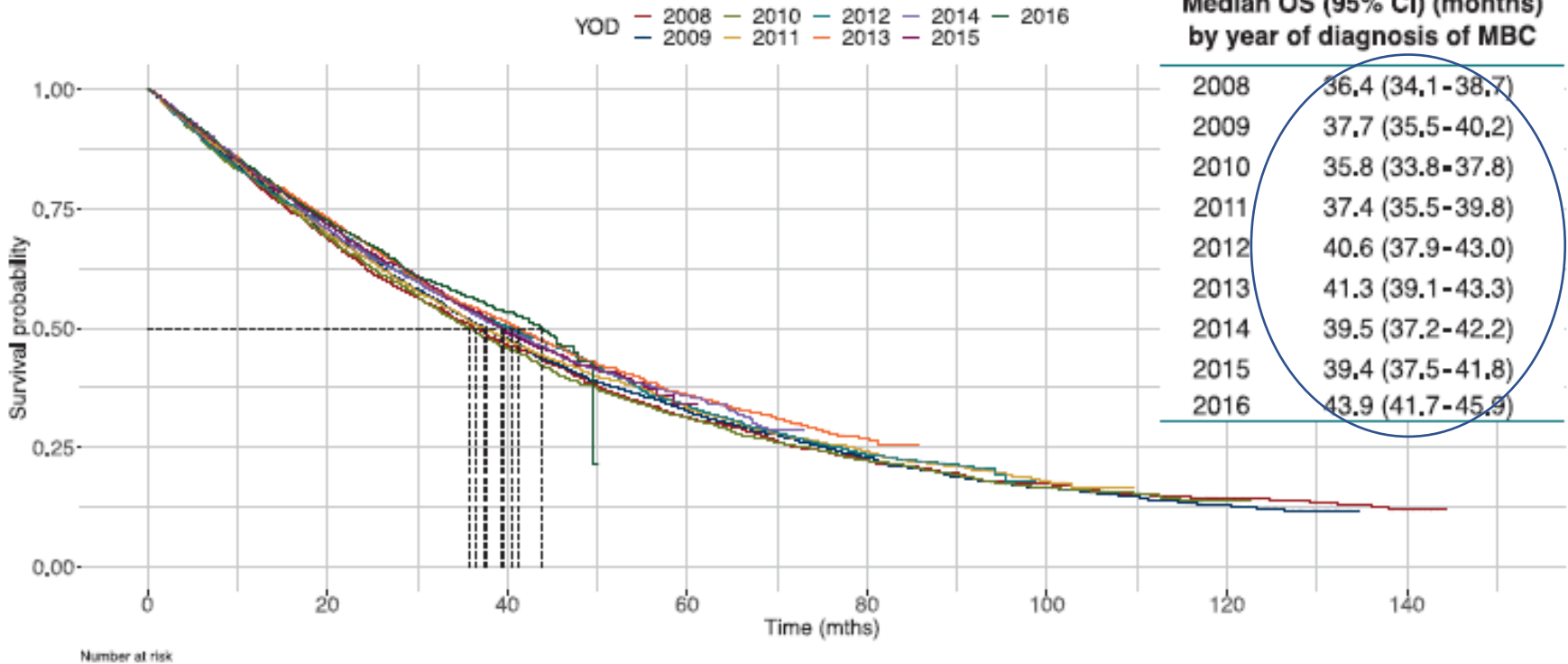
¹Department of Cancer Medicine, Gustave Roussy, Villejuif; ²Department of Biostatistics, Centre Léon Bérard, Lyon; ³Department of Medical Oncology, Institut du Cancer de Montpellier, Montpellier; ⁴Department of Medical Oncology, Institut Bergonié, Bordeaux; ⁵Department of Medical Oncology, Institut Curie, Paris & Saint-Cloud; ⁶Department of Medical Oncology, Centre Eugène Marquis, Rennes; ⁷Department of Medical Oncology, Institut Claudius Regaud — IUCT Oncopole, Toulouse; ⁸Department of Medical Oncology, Institut Paoli-Calmettes, Marseille; ⁹Department of Medical Oncology, Institut de Cancérologie de l'Ouest Pays de Loire, Angers; ¹⁰Department of Medical Oncology, Centre Jean Perrin, Clermont Ferrand; ¹¹Medical Oncology Department, Centre Oscar Lambret, Lille; ¹²Department of Medical Oncology, Centre Henri Becquerel, Rouen; ¹³Department of Medical Oncology, Centre François Baclesse, Caen; ¹⁴Department of Medical Oncology, Centre Antoine Lacassagne, Nice; ¹⁵Department of Medical Oncology, Institut de Cancérologie de Bourgogne, Dijon; ¹⁶Medical Oncology Department, Institut de Cancérologie de Lorraine, Vandœuvre-lès-Nancy, Vandœuvre-lès-Nancy; ¹⁷Department of Medical Oncology, Centre Paul Strauss, Strasbourg; ¹⁸Department of Medical Oncology, Institut de Cancérologie Jean-Godot, Reims; ¹⁹Department of BioPathology, Gustave Roussy, Villejuif; ²⁰Department of Medical Oncology, CHU de Limoges; ²¹Department of Research and Development, R&D Unicancer, Paris; ²²Université de Bordeaux, Inserm, Bordeaux Population Health Research Center, Bordeaux; ²³Université de Bordeaux, Inserm, Bordeaux Population Health Research Center, Epicene Team, UMR 1219, Bordeaux; ²⁴Department of Medical Oncology, Centre Léon Bérard, Lyon, France



Available online 23 April 2021

Patients with advanced breast cancer...improving of overall survival during time

A Overall survival in the whole cohort according to the Year Of Diagnosis (YOD)
Based on Kaplan–Meier estimates



Italian regulatory framework for telemedicine: timeline

Ministero della Salute

TELEMEDICINA
Linee di indirizzo nazionali

**Piano Triennale
per l'informatica**
nella Pubblica
Amministrazione

2020-2022

2014 National Guidelines about telemedicine

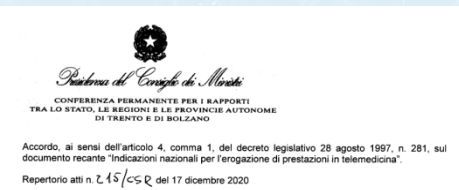
3-year plan for information
technology in public
administration

Indications for telemedicine services
during health emergency by COVID-19
Italian National Institute 2020

great effort to the
development
of telemedicine
was given during
pandemy

National indications for
telemedicine services
December 2020

**E-Health as a source of solutions for health needs
and telemedicine as a potential application**



regional steps of digital cancer process ... from the establishment of the regional telemedicine center to the practical application of cancer care

DELIBERAZIONE DELLA GIUNTA REGIONALE 02 agosto 2016, n. 1231

DGR n. 1116/2014. Indirizzi operativi per la promozione e la diffusione della telemedicina nel servizio sanitario regionale pugliese.

Il Presidente della Giunta Regionale, sulla base dell'istruttoria espletata dalla Sezione Sistemi Informativi e Investimenti in Sanità così come confermata dal Direttore del Dipartimento Promozione della Salute, del Benessere Sociale e dello Sport per Tutti riferisce quanto segue.

2016: establishment of regional telemedicine center as experimental project

DELIBERAZIONE DELLA GIUNTA REGIONALE 16 luglio 2020, n. 1088

DGR n. 1231/2016. Indirizzi operativi per la promozione e la diffusione della telemedicina nel servizio sanitario. Istituzione della Centrale Operativa Regionale per la Telemedicina delle cronicità e delle reti cliniche.

2020: institutionalization of regional telemedicine center for chronicity and clinical networks



Deliberazione del Direttore Generale

N. 65/2021

OGGETTO: "Linee di Indirizzo per la Gestione delle Prestazioni Ambulatoriali di Telemedicina" Approvazione.

L'anno 2021 il giorno 7 del mese di aprile in Bari, nella sede della Agenzia Regionale Strategica per la Salute ed il Sociale della Puglia,

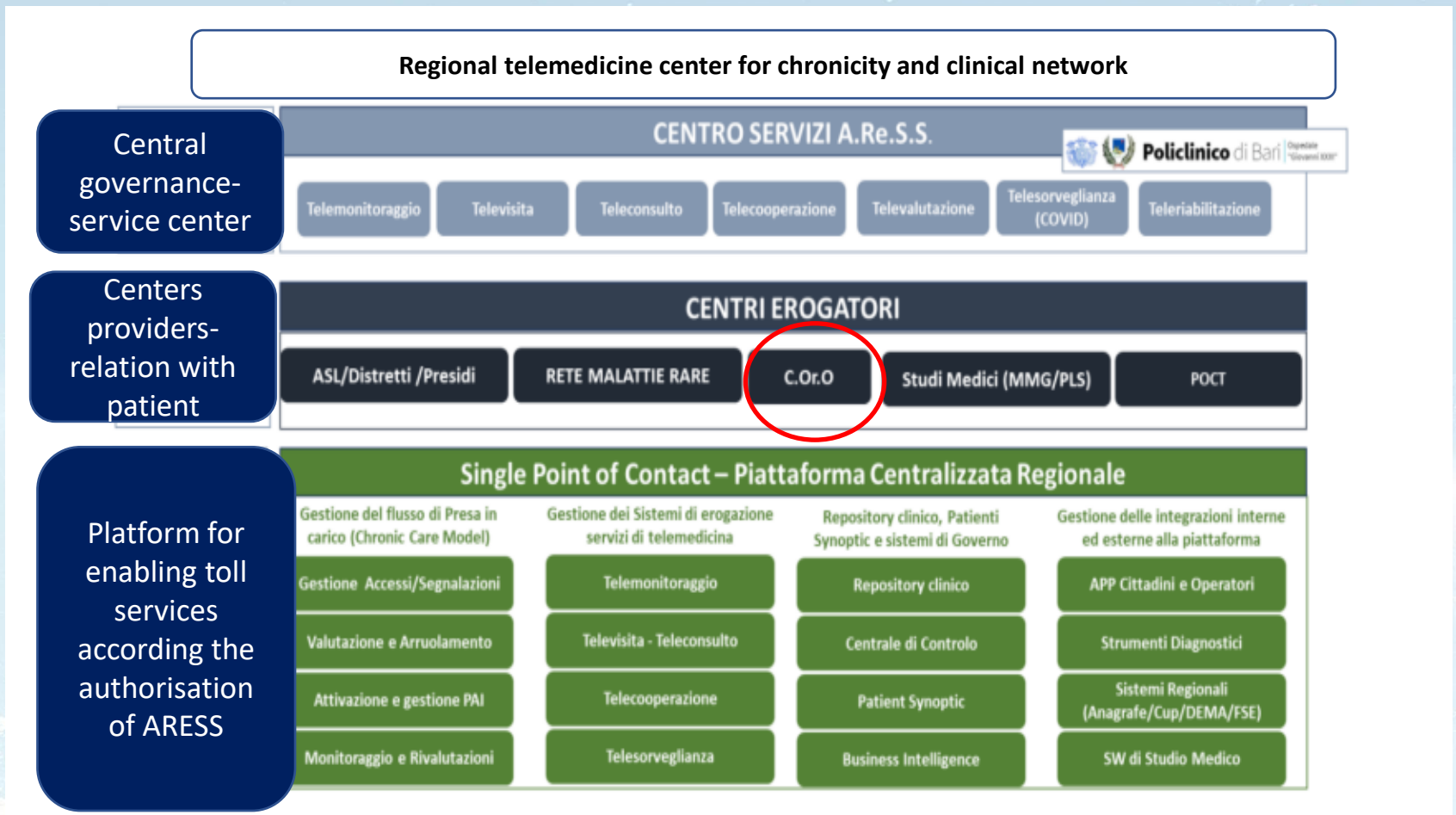
2021 Approval of address lines for outpatient performance management in telemedicine

DELIBERAZIONE DELLA GIUNTA REGIONALE 22 dicembre 2020, n. 2141

O.P.G.R. n. 447 del 4 dicembre 2020. Piattaforma regionale di monitoraggio e consulto a distanza. Atto di indirizzo per il coordinamento e l'impulso delle iniziative in corso.

2021 Act of guidance for the coordination of ongoing initiatives of telemedicine

Organizational model of regional telemedicine center (COR): and its structure -different interconnected levels



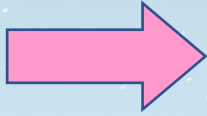


MISSION AND TARGETS

- Optimization of regional cancer pathways for frail patients including cancer through the digitalization
- Epidemiological work-flow, unique central system data
- Improving cooperation and collaboration of health structures involved in the care process according to the different levels of accountability
- **Integrating the entire network of regional services, in particular for rare disease network, and Orientation Cancer center (COro) that are the entry point to the oncological network**
- Efficiency of the telemedicine network for data management through telemonitoring , teleconsultation and sharing of health sanitary data
- Getting health, organizational and economic governance of active operational plans

Technology

- Platform
- Web app
- Devices



COReHealth COME APPARE

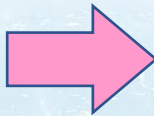
1. Piattaforma

2. Web APP

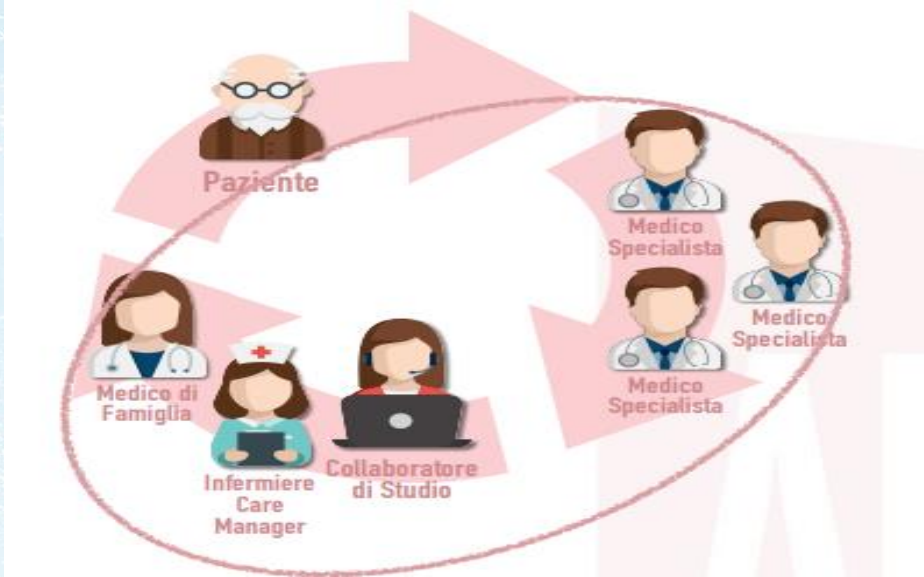
3. Dispositivi



Organization

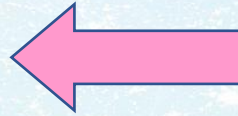


Sharing data among the multidisciplinary team



Improving patient experience and outcome

Sharing therapeutic plan according to pathways



Operativity plan: second step

Application of e-Health within the active regional clinical network
Clinical scenario

Rare disease
network



Regional
oncological
network



Regional
haematological
network



CORO Orientation
Cancer Center



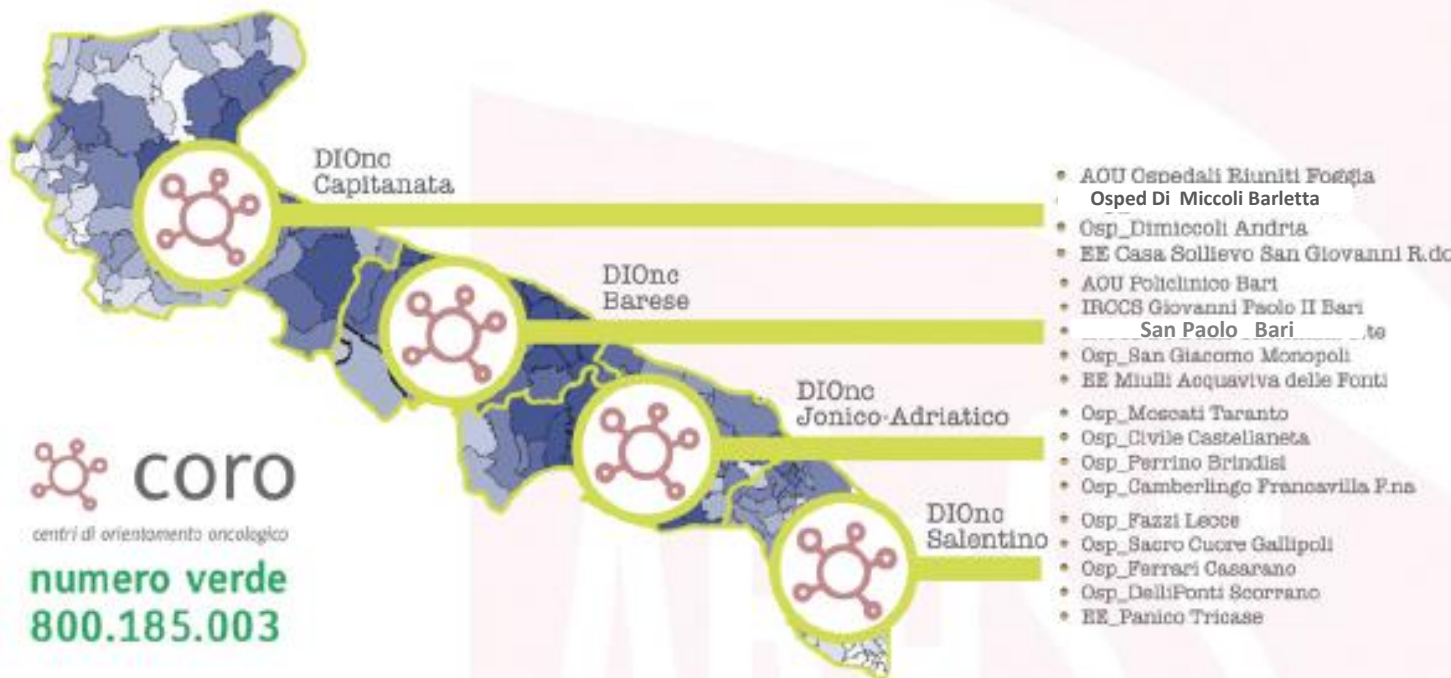
Regional
Breast Unit
network





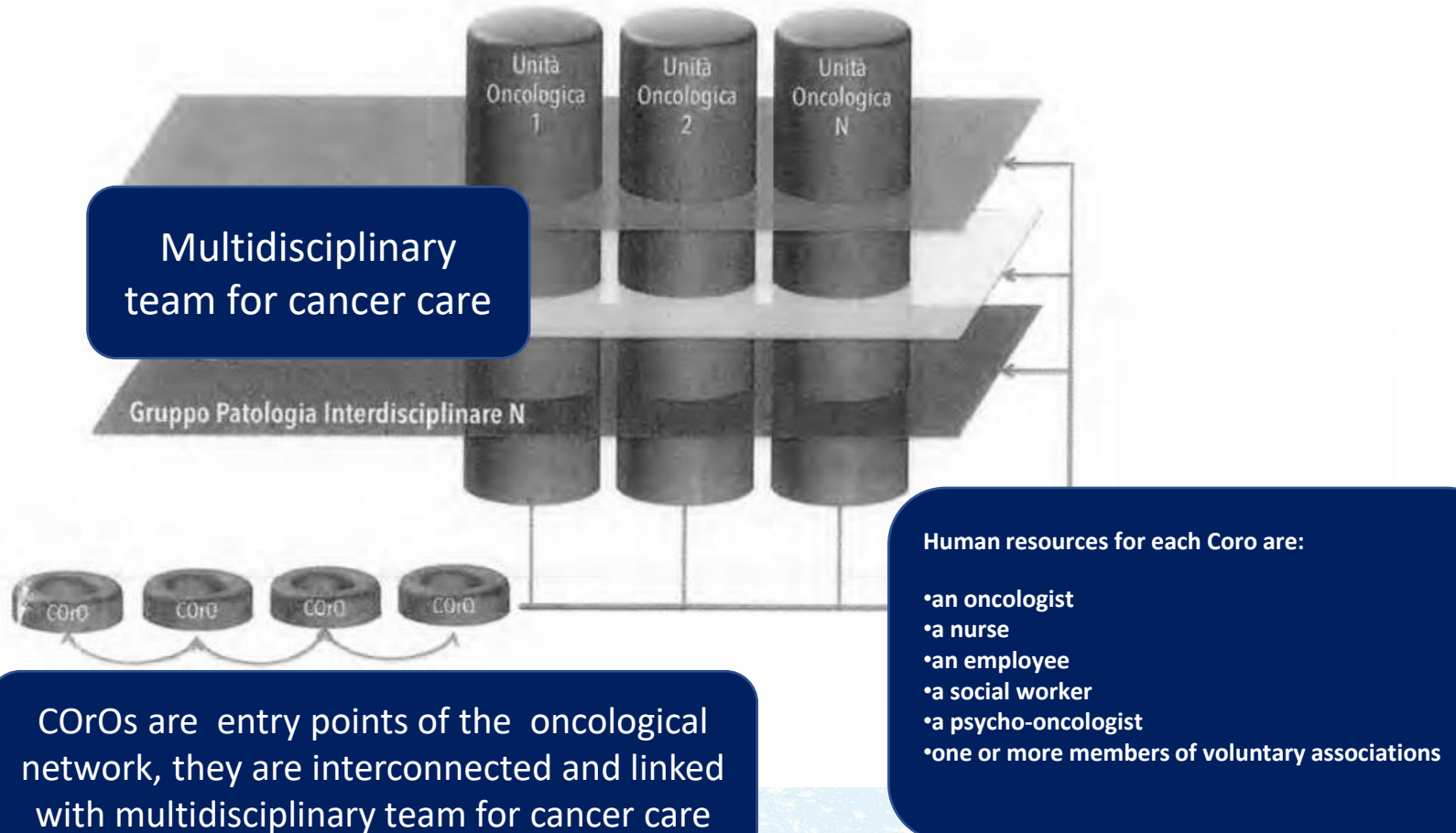
Territorial distribution of 18 Orientation Cancer centers (COROs)

IL CENTRO DI ORIENTAMENTO ONCOLOGICO: DOVE TROVARE I PRIMI 18 CENTRI





Organization of COrOs inside the oncological regional cancer network





The functional structure of COro is created inside the regional oncological network in order to:

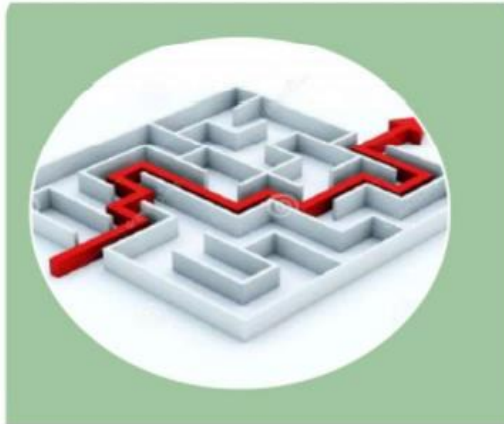
- Increase the take charge time of cancer patients
- Reduce delays of diagnosis
- Reduce sanitary migration i. e. the migration towards cancer centers outside regional area
- Reduce financial toxicity by cancer related to transportation costs if the centre of cure is far from the residency of the patient, lodging cost, cost of cancer cure, days off work, loss of employments
- Reduce psychological distress and time spent in the search of a specialist in presence of diagnosis of cancer



COrO and mutidisciplinary team for breast cancer cure are strictly connected



Breast Unit (multidisciplinary team)



Therapeutic diagnostic plan



COrO





Territorial distribution of 13 Regional Breast Units



The mission of COREeHealth is to digitally connect the breast units each other and with the entry points of the network (COroOs), subsequently all cancer pathway will be uploaded to the platform



Accreditation of regional breast unit centers

The Breast 51 (2020) 65–84

Contents lists available at ScienceDirect

The Breast

journal homepage: www.elsevier.com/brst

Original article

The requirements of a specialist breast centre

Laura Biganzoli ^{a,*,1}, Fatima Cardoso ^{b,1}, Marc Beishon ^c, David Cameron ^d, Luigi Cataliotti ^e, Charlotte E. Coles ^f, Roberto C. Delgado Bolton ^g, Maria Die Trill ^h, Sema Erdem ⁱ, Maria Fjell ^j, Romain Geiss ^k, Mathijs Goossens ^l, Christiane Kuhl ^m, Lorenza Marotti ⁿ, Peter Naredi ^o, Simon Oberst ^p, Jean Palussière ^q, Antonio Ponti ^r, Marco Rosselli Del Turco ^s, Isabel T. Rubio ^t, Anna Sapino ^u, Elzbieta Senkus-Konefka ^v, Marko Skelin ^w, Berta Sousa ^x, Tiina Saarto ^y, Alberto Costa ^c, Philip Poortmans ^z

Available online 12 June 2020
Keywords: Breast



- ✓ A single integrated Unit
- ✓ Sufficient cases to allow effective working and continuing expertise
- ✓ Care by breast specialists in all the required disciplines
- ✓ Working in multidisciplinary fashion in all areas
- ✓ Providing all the services necessary – from genetics and prevention, through the treatment of the primary tumour, to care of advanced disease and palliation.
- ✓ Patient support
- ✓ Data collection and Audit (MDT, MultiDisciplinary Team)

41524

Bollettino Ufficiale della Regione Puglia - n. 85 del 26-6-2018

DELIBERAZIONE DELLA GIUNTA REGIONALE 22 maggio 2018, n. 854

Istituzione della Breast Unit network - Centri pugliesi di senologia: definizione dei criteri organizzativi di funzionamento e monitoraggio ai sensi dell'Accordo Stato-Regioni del 18/12/2014 recante "Linee di indirizzo sulle modalità organizzative ed assistenziali della rete dei Centri di Senologia" (Rep. Atti n. 185/CSR del 18/12/2014).



Qu..T.A.

From

February 2021 to March 2022 verification activities

have been carried out.

The accreditation and quality center for health service (QuOTA) on behalf of ARESS has verified the compliance of breast unit with regional resolution of institution of breast unit network, based upon to EUSOMA guidelines criteria.



Status of enrollment of centers in digital process

Centers involved at May 2022 (start October 2021)	Presentation of regional telemedicine center (start december2021)	Practical session on digital enrollement of patients in the plaform (at today)
Istituto Oncologico Bari **	completed	enrolling
Policlinico Bari**	completed	enrolling
San Paolo Bari **	completed	completed, not yet started
Ospedale Di Miccoli Barletta**	completed	enrolling
Ospedali Riuniti Foggia**	completed	completed, not yet started
Casa Sollievo San Giovanni Rotondo*	completed	completed, not yet started
San Severo Foggia*	completed	completed, not yet started
Taranto **	completed	enrolling
Lecce Ospedale "Vito Fazzi"*	completed	not completed
Tricase *	completed	completed not yet started
Brindisi **	completed	completed not yet started
Casarano *	completed	completed not yet started
Scorrano*	completed	completed, not yet started
Gallipoli*	completed	not completed
FrancaVilla Fontana*	completed	enrolling

* Site of COro

** Site of COro and Breast Unit

Perspectives

- ✓ Digitalization is an opportunity (not a requirement) for the patients but not a replacement of relation patient-doctor
- ✓ Digitalization can be a faster way to contact multidisciplinary team and reference cancer center when there is an health need independently from the date of visit (webapp)
- ✓ It can be a way to simplify administrative practice for patients
- ✓ It can be the best modality to assist frail patients at home with the opportunity to measure and evaluation of parameters (devices)
- ✓ It is a chance for health regional governance to verify quality indicators of pathway and to define actions of improvement , if necessary

We have a dreamthe dream is to realize a “virtual hospital” as an useful instrument within the health system

Closing remarks

- The path to the digital hospital is only at the beginning...
- Clinical networks are the ideal setting to test digital transformation and to improve professionals towards “digital literacy”
- Digitalization requires reengineering for multidisciplinary team ...the process has startedno more possible to going back

“ Together we can make a difference.
With prevention and with research.
With equal access across Europe.
Standing at the side of those who need us.
This is Europe's Beating Cancer Plan”

*Speech by U. Von Der Leyen
Bruxelles 4/02/2020*