



IL RUOLO DELL'OSPEDALE NEI SISTEMI SANITARI A COPERTURA UNIVERSALE E L'EVOLUZIONE DEI SISTEMI DI VALUTAZIONE

Laboratorio Management e Sanità
Istituto di Management
Scuola Superiore Sant'Anna di Pisa

Prof.ssa Sabina Nuti





Strategia



Valutazione



Per “acuti”, dotato di tecnologie e competenze per affrontare alta complessità di casistica, in cui possano essere garantire elevate economie di scala e di esperienza, in grado di agire tempestivamente per rispondere alle urgenze ...



QUALITA' DELLE CURE

The Quality of Care

How Can It Be Assessed?

Avedis Donabedian, MD, MPH

A three-part approach to quality assessment:
"The quality of care can be classified
under three categories: structure, process
and outcome"

(Avedis Donabedian, 1988)



Dotazione di personale,
tecnologie, risorse
finanziarie...

Efficienza, volumi
erogati, coordinamento
del percorso interno
all'ospedale...

Esiti delle cure e
soddisfazione del
paziente...



SISTEMA SANITARIO



Gli obiettivi del sistema socio sanitario pubblico

✓ Qualità delle cure e dei servizi

✓ Sostenibilità del sistema

Verticale: "non si fanno parti uguali per disuguali" (don Lorenzo Milani)

✓ Equità

Orizzontale: cittadini con pari bisogni richiedono lo stesso livello di risposta

Inter-generazionale: ai giovani le stesse opportunità di vita e di salute degli anziani di oggi

Outcomes for Population



Correct balance of care setting

Prevention

- Effective and targeted
- In time
- Classified according to target

Primary Care

- Designed to manage chronic cases
- Low complexity level
- Differentiated treatments according to patients' needs

Hospital

- for acute cases only
- High technology
- Medium/high level of complexity

FINANCIAL SUSTAINABILITY

Cosa offre Babylon?

Intelligenza artificiale



- Un'applicazione per smartphone
- La possibilità di chattare con un'intelligenza artificiale
- Monitorare la propria salute

Virtual treatment



- Visite con GPs attraverso videochiamate

Physical treatment



- Visite 'fisiche' con GPs
- Prenotare visite specialistiche





Focus: Ruanda



- L'espansione in Africa è motivata dalla missione piuttosto che dal profitto
- In Ruanda il paziente interagisce con l'IA e con il medico attraverso un **call center** che fa da mediatore linguistico e tecnologico tra le parti
- Inizialmente il servizio doveva essere pagato dallo stato
- Enorme successo: **il 17% della popolazione è iscritto al servizio**
- Al momento il progetto è finanziato dall **Melinda & Bill Gates Foundation**



1973 - Hospital Service Areas in Vermont

Small Area Variations in Health Care Delivery

A population-based health information system can
guide planning and regulatory decision-making.

John Wennberg and Alan Gittelsohn

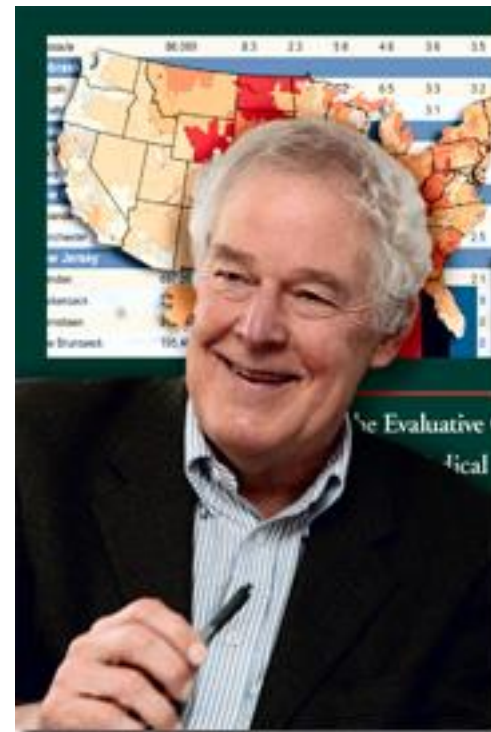
Recent legislation has extended planning and regulatory authority in the health field in a number of important areas. The 1972 amendments to the Social Security Act provide authority for regulating the construction of facilities and establish Professional Standard Review Organizations (PSRO's), which are accountable for setting standards and evaluating professional performance. Phase 3 of the Wage and Stabilization Act of 1970 and state insurance commissions provide authority for regulating dollar flow by controlling

impact of regulatory decisions on the equality of distribution of resources and dollars and the effectiveness of medical care services.

For technical and organizational reasons, documentation of the health care experience of populations has been restricted to large political jurisdictions such as counties, states, or nations. Studies at this level of aggregation have used indicators that support direct comparisons among areas. Relationships between the supply of manpower, facilities, and expenditures and the population on whom health care

twice as high in California as in Arkansas. The number of physicians per thousand persons has been up to three times higher in some states than in others. International comparisons and studies of regions within states show that there are large differences in the rate of delivery of specific surgical procedures (2).

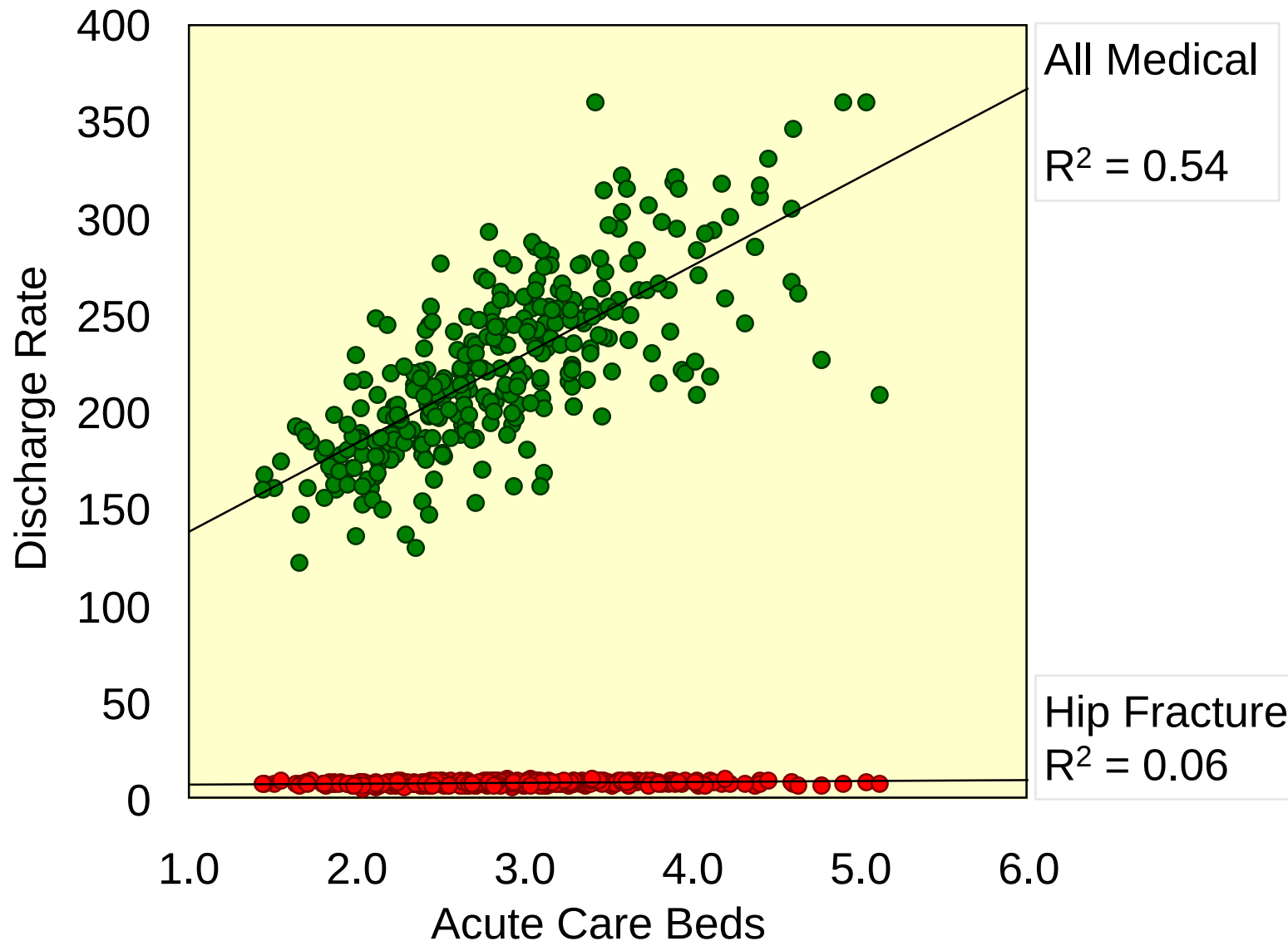
In 1969, there was implemented in the state of Vermont a data system that monitors aspects of health care delivery in each of the 251 towns of the state. When the population of the state is grouped into 13 geographically distinct hospital catchment, or service, areas, variations in health care are often more apparent than they are when the population is divided into fewer, larger areas. Population rates can be used to make direct statistical comparisons between each of the 13 hospital service areas. Since the medical care in each area is delivered predominantly by local physicians, variations tend to reflect differences in the way particular individuals and groups practice medicine. The specificity of the information in Vermont's data system makes it possible to appraise the impact that decisions controlling facility construction, price of insurance, and the mix of service have on the



(Note). Darker line shows boundaries of hospital service areas. Circles represent hospitals. Areas without circles are served principally by hospitals in New Hampshire.

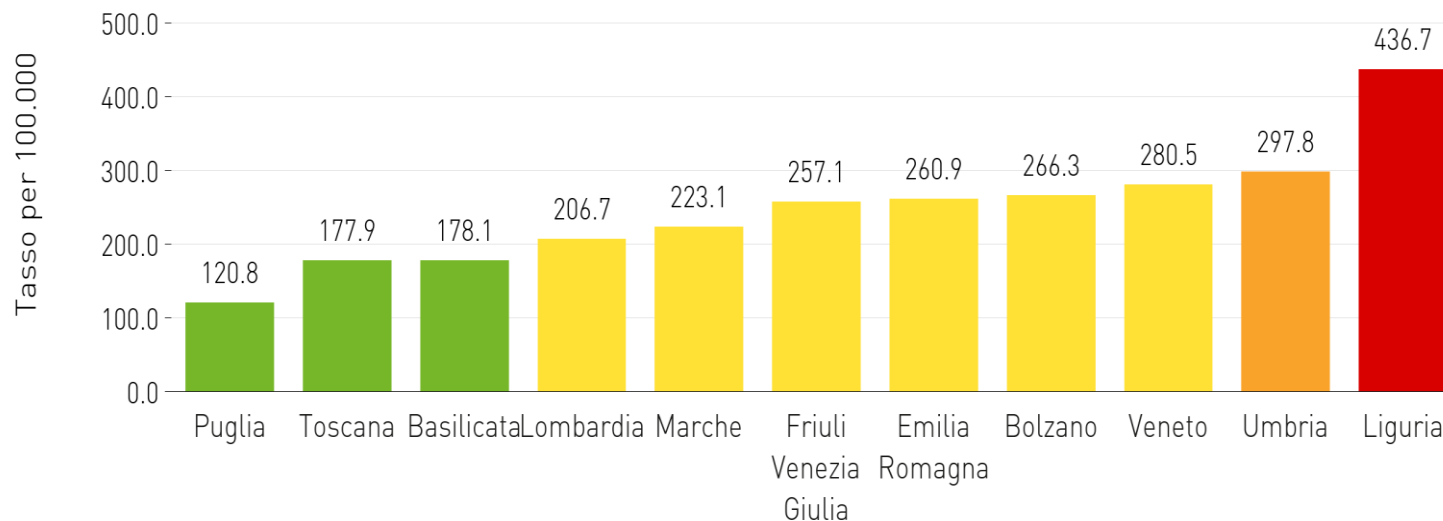
Association between hospital beds per 1,000 and discharges per 1,000 among Medicare Enrollees

306 Hospital Regions

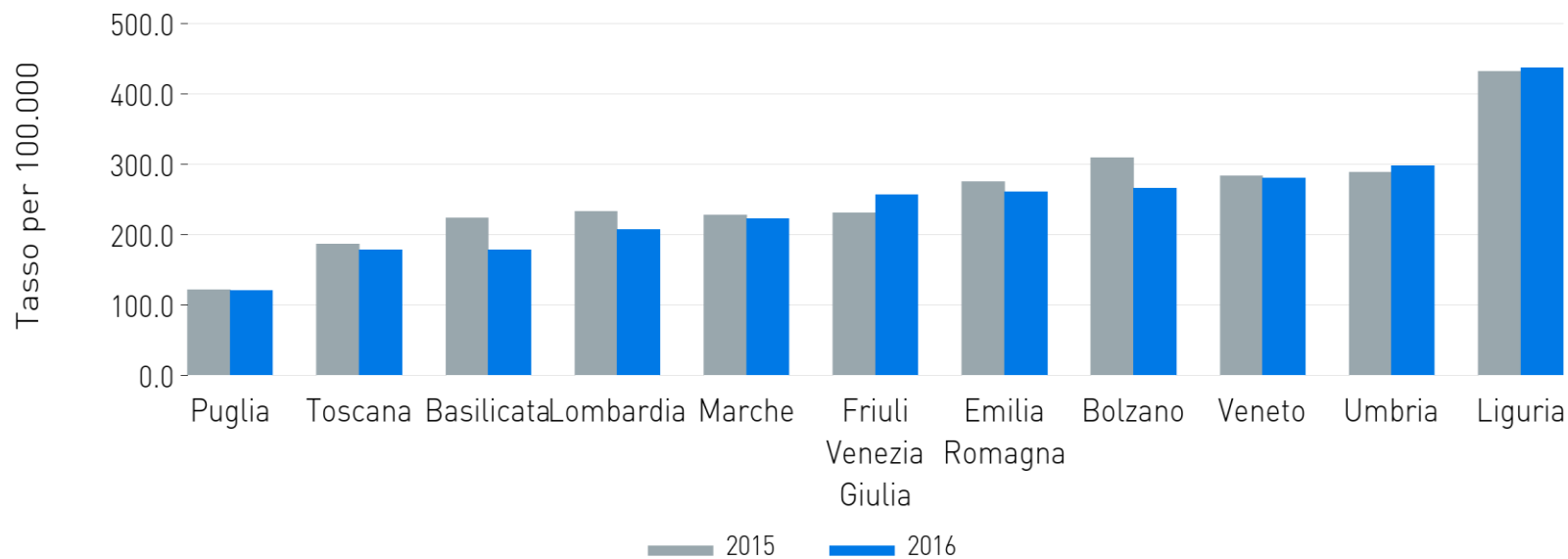




C18.1 - Tasso di ospedalizzazione per interventi di tonsillectomia, per 100.000 residenti std per età e sesso
Regioni - Dati 2016

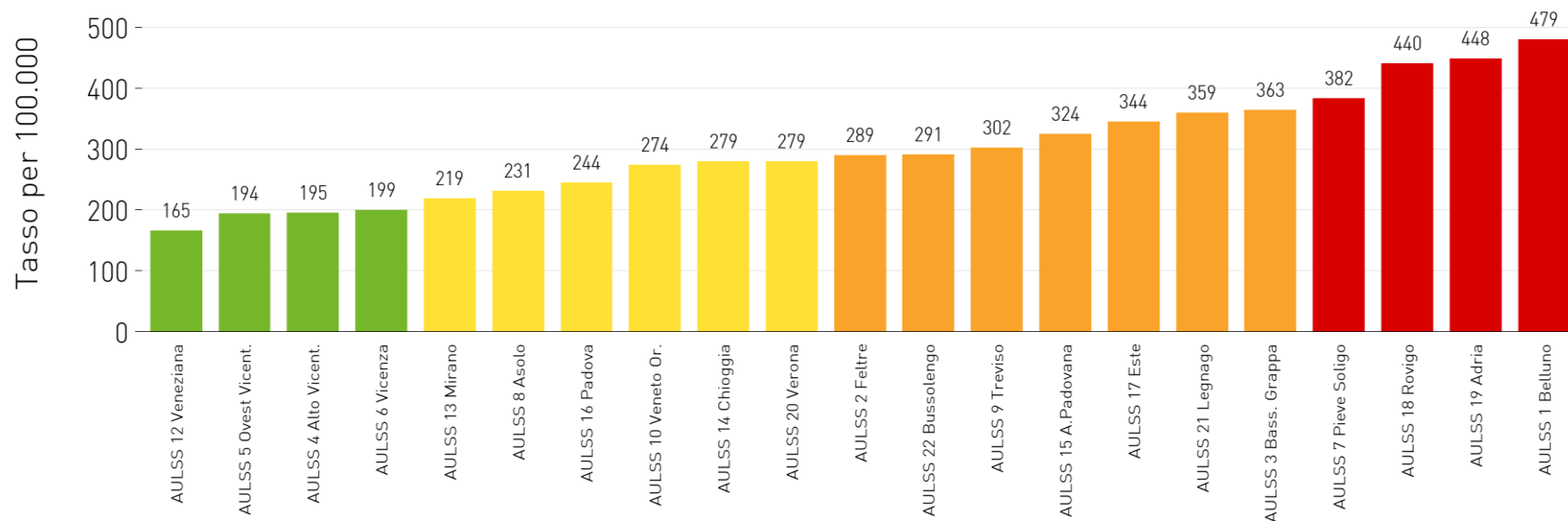


C18.1 - Tasso di ospedalizzazione per interventi di tonsillectomia, per 100.000 residenti std per età e sesso
Regioni - Dati 2015/ 2016

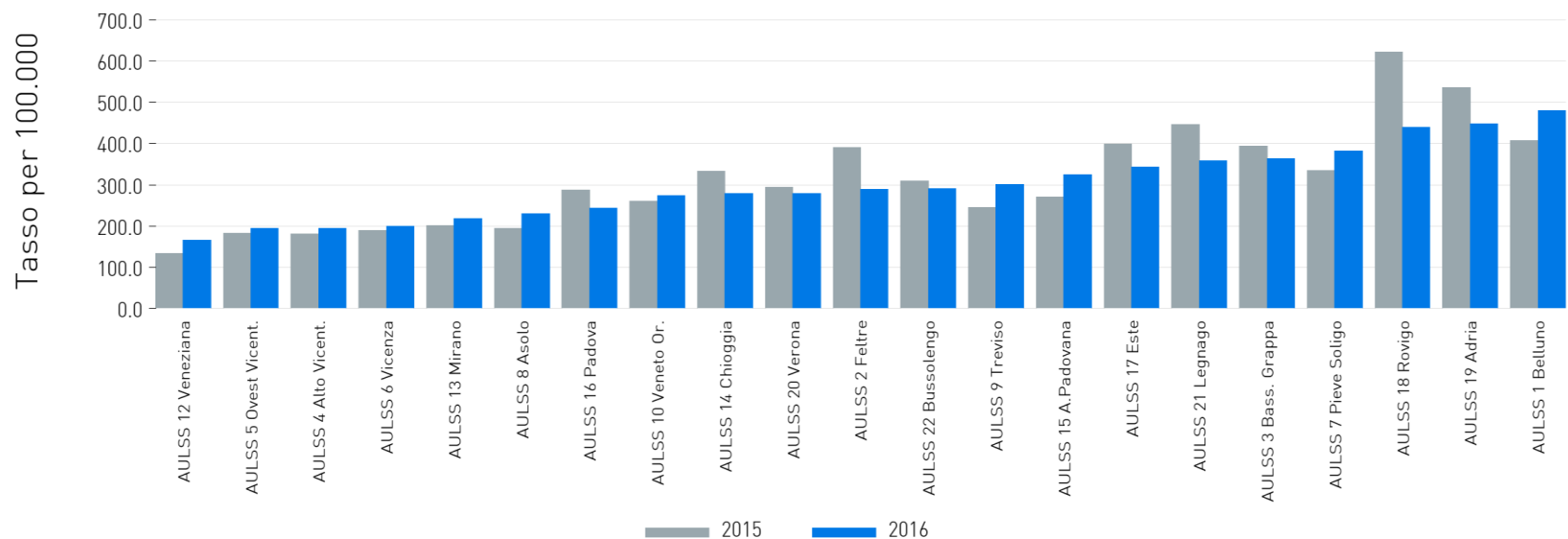




C18.1 - Tasso di ospedalizzazione per interventi di tonsillectomia, per 100.000 residenti std per età e sesso
Aziende - Dati 2016



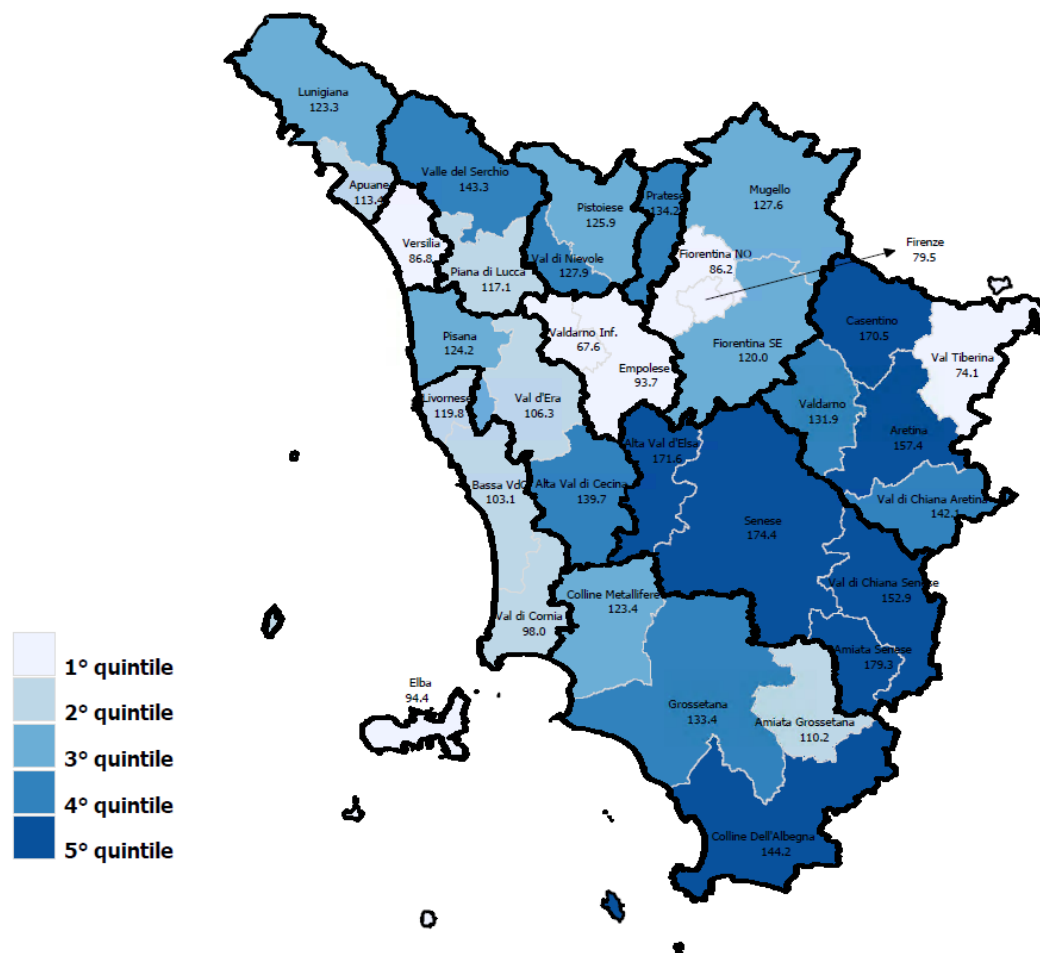
C18.1 - Tasso di ospedalizzazione per interventi di tonsillectomia, per 100.000 residenti std per età e sesso
Regioni - Dati 2015/ 2016





Hysterectomy

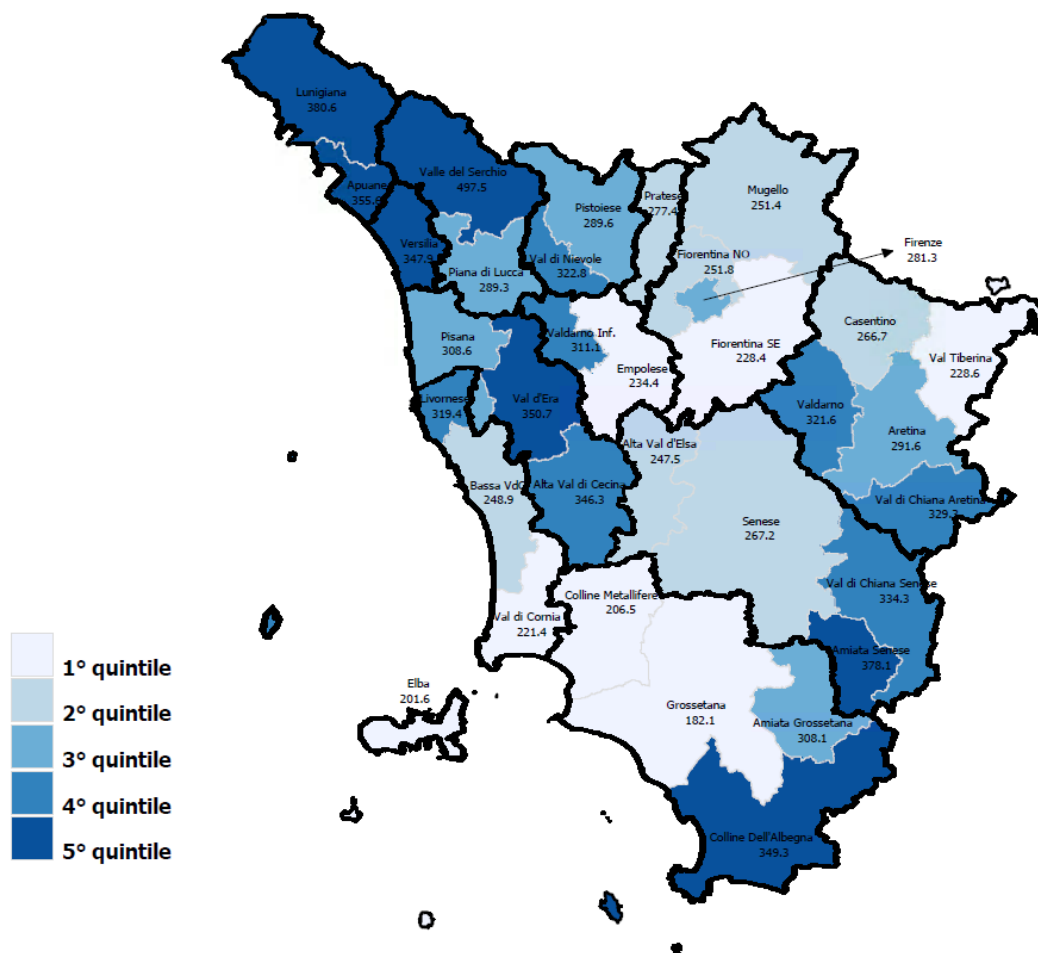
Use rates for 100.000 inhabitants





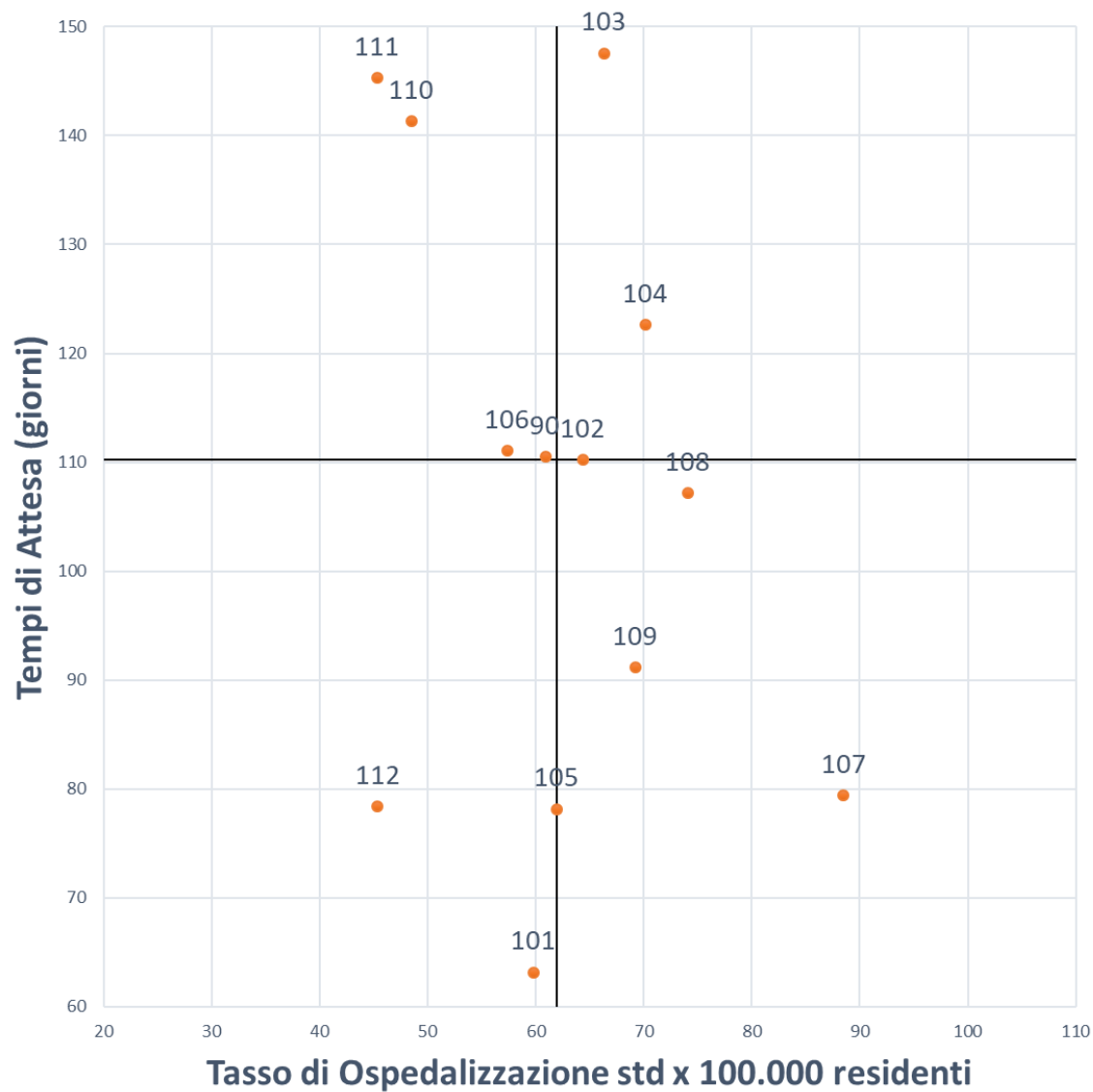
Hip replacement

Use rates for 100.000 inhabitants





Interventi di Isterectomia - Anno 2016

REGIONE
TOSCANA

Providing care doesn't always mean hitting the target...

People who
received care
services

People who could
benefit more from
care

THE ROYAL
SOCIETY OF
MEDICINE
Journal of the Royal Society of Medicine, 92(7), 1-4
DOI: 10.1177/014026887711980

Series: Population healthcare

Deriving optimal value from each system

Muir Gray^{1,2}, Mara Airoidi^{1,2}, Gwyn Bevan^{1,2} and Peter McCulloch^{1,2}
¹Value Based Healthcare Programme, University of Oxford, Oxford OX2 6GG, UK
²Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford OX2 6GG, UK

Corresponding author: Muir Gray. Email: muirgray@medinos.net

From a population perspective, the first stage in optimising value is the resource allocation process. Allocative value is optimised when it is not possible to switch resources from one budget to another and get more health for the population as a whole. As emphasised in a previous article, resources are traditionally allocated to institutions, to health centres and hospitals for example, but increasingly resource allocation to different subgroups of the population is coming up the agenda, driven in no small part by the Commissioning for Value Packs of NHS RightCare.¹ Allocating resource to programmes allows a much clearer understanding of what happens when resources are switched from one programme to another, using the method called marginal analysis the origin of which is entertainingly described in the free RAND book called *How much is enough*.²

in the United States, in particular, within Accountable Care Organisations. The value-based payment relates the outcomes of the patients treated to the resources used in their treatment. However, the meaning of the term value is different in the United States than in the United Kingdom.^{3,5}

The patients' outcomes and the costs of patient treatment are the two elements in the American definition of value, but in the United Kingdom this would count as efficiency because when looking at the resources that have been used, it is essential for any jurisdiction responsible for a population to identify people who have not been treated and to identify people who may have been treated but have got less value from the service than would have been realised if those resources had been used for the people in greater need who missed out on treatment. The rela-

POPULATION VALUE

Gli elementi fondanti del Sistema di valutazione del Network delle Regioni

MULTIDIMENSIONALITA'

per cogliere la complessità e agire sulle determinanti

TRASPARENZA

per rispondere alla missione del sistema pubblico con una gestione responsabile

BENCHMARKING SISTEMATICO

per superare l'autoreferenzialità e per imparare

TEMPESTIVITA'

per fornire i risultati in tempi utili alla programmazione annuale

EVIDENZE

per analizzare e comprendere i fenomeni, ed effettuare delle scelte

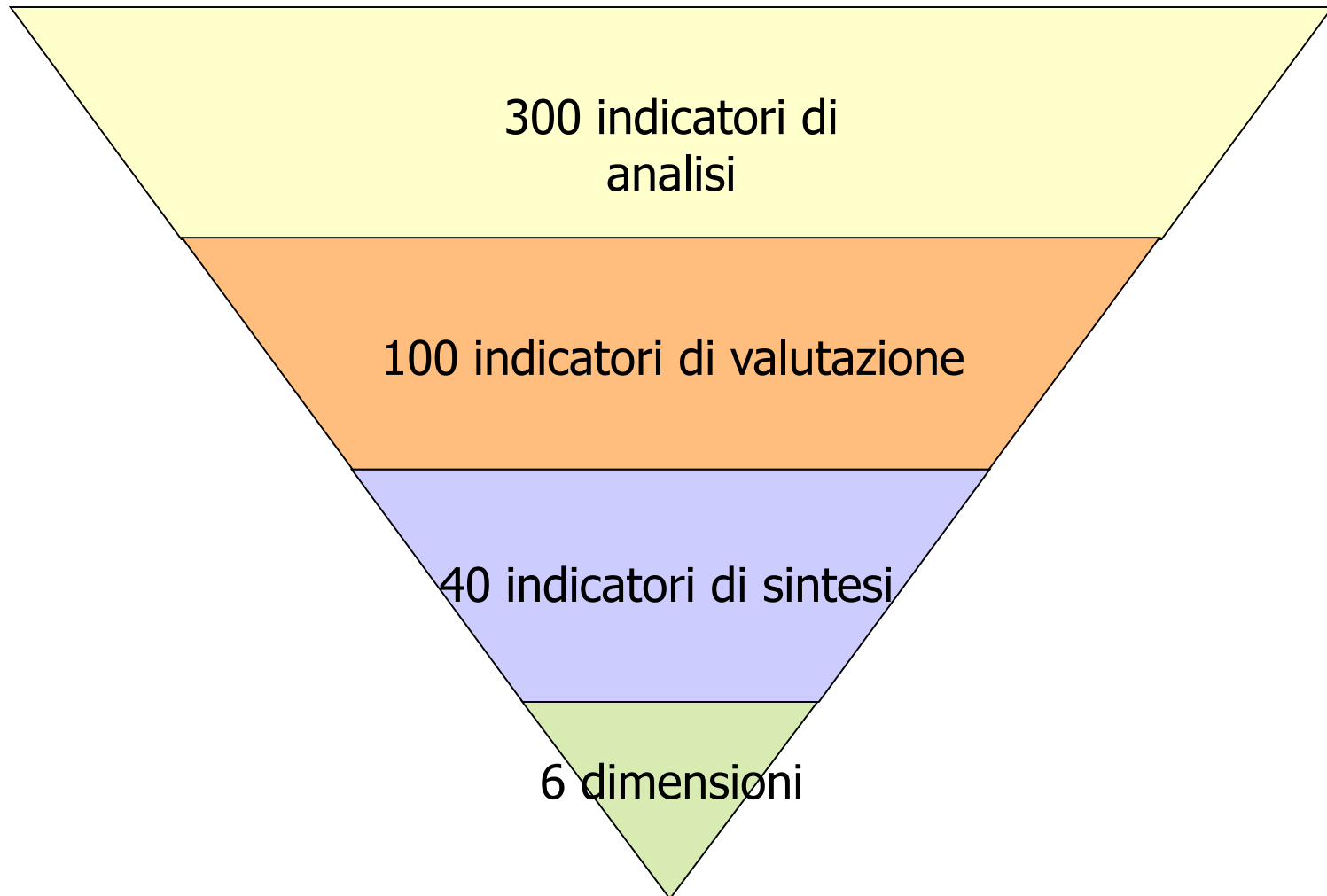
CONDIVISIONE VOLONTARIA

Tra le regioni e con gli operatori del processo e del metodo in viene misurata la performance



<http://performance.sssup.it/netval>

La struttura del sistema di valutazione del network regioni



Criteri di assegnazione delle fasce di valutazione nel network regioni

Fino al 2010 il network delle regioni ha utilizzato il metodo dei **quintili** per assegnare le fasce di valutazione alle regioni e aziende.

Per superare i limiti di tale metodo, nel 2011 le Regioni hanno condiviso degli **standard di riferimento** su ciascun indicatore, su cui applicare le fasce di performance.

Criteri condivisi per l'identificazione degli standard di riferimento:

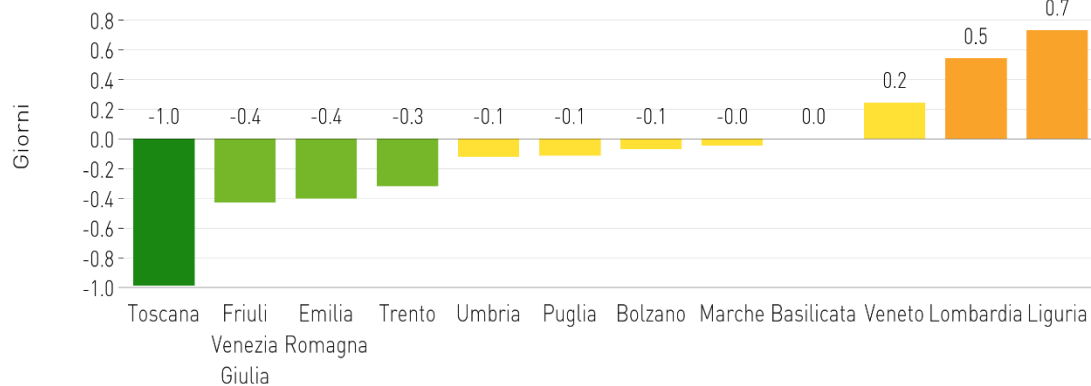
- standard internazionale o nazionale
- standard regionale di una delle regioni del network
- media delle aziende sanitarie del network

Colori e punteggi del bersaglio:

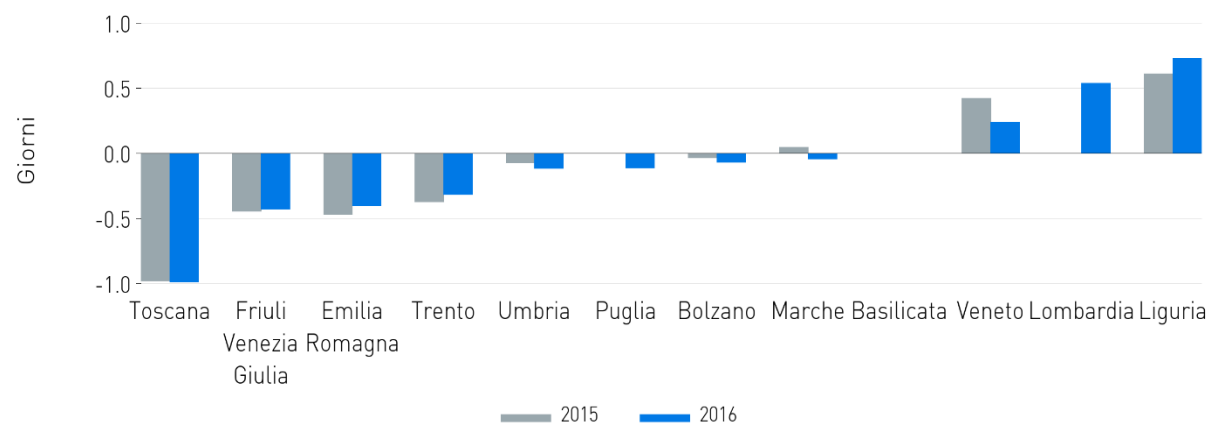
VERDE	4 - 5	Performance ottima (Punto di forza)
VERDINO	3 - 4	Performance buona
GIALLO	2 - 3	Performance media
ARANCIONE	1 - 2	Performance scarsa
ROSSO	0 - 1	Performance molto scarsa (Punto di debolezza)



C2a.C - Indice di performance degenza media - DRG Chirurgici
Regioni - Dati 2016

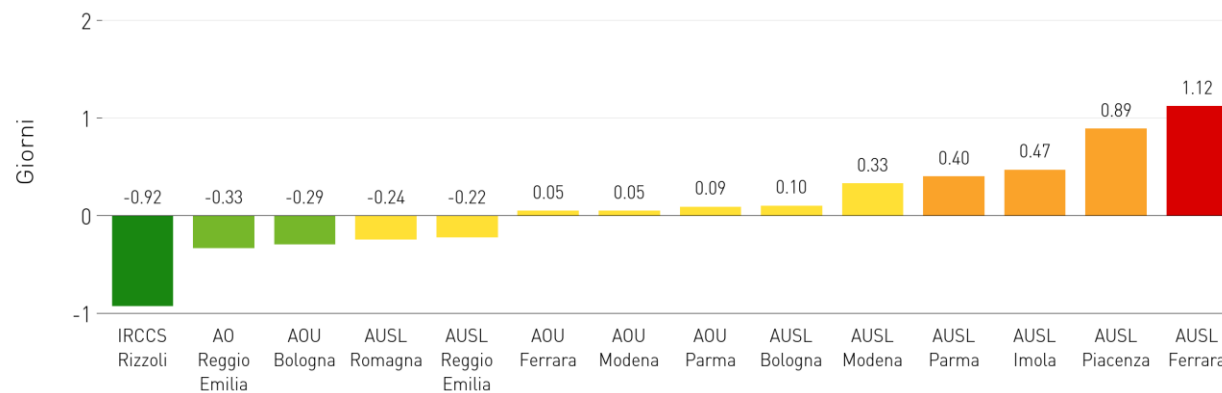


C2a.C - Indice di performance degenza media - DRG Chirurgici
Regioni - Dati 2015 / 2016

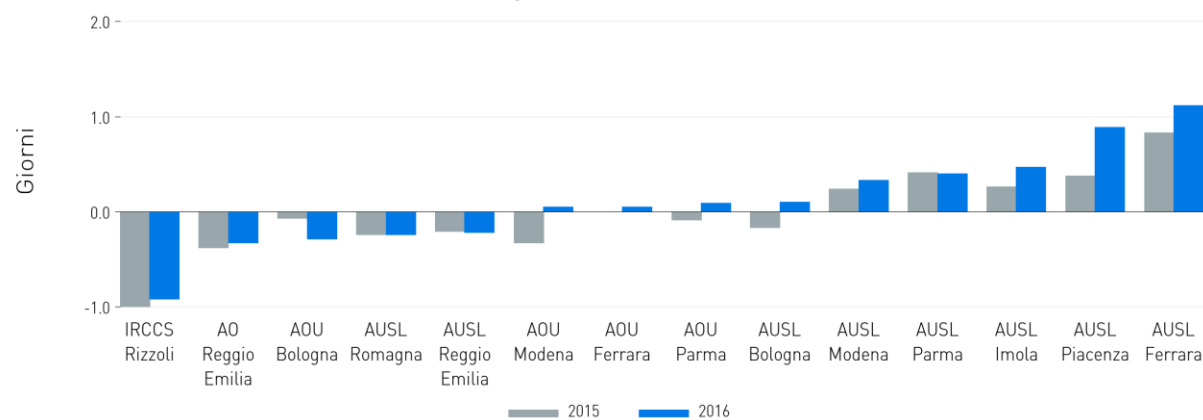


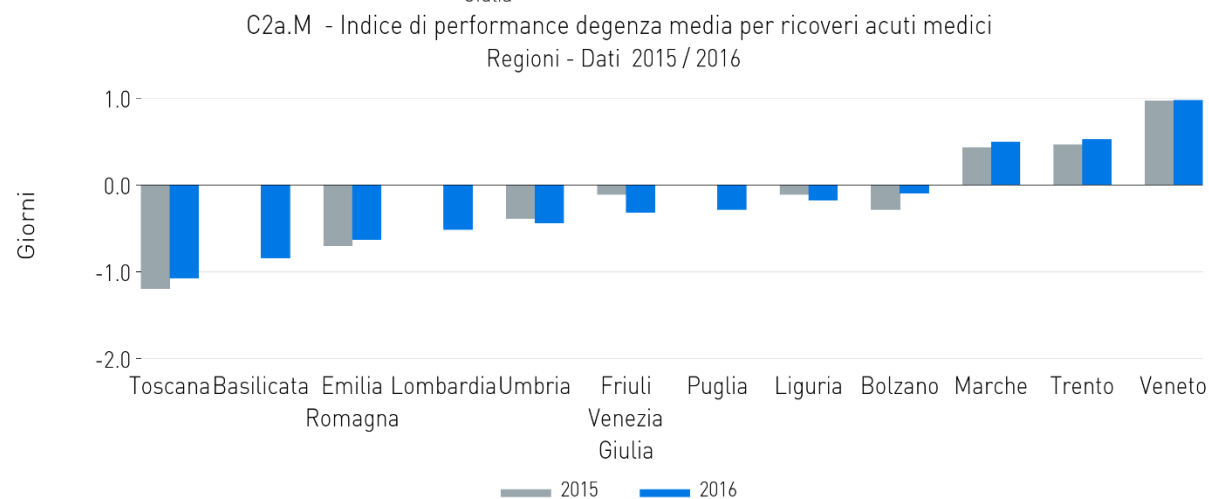
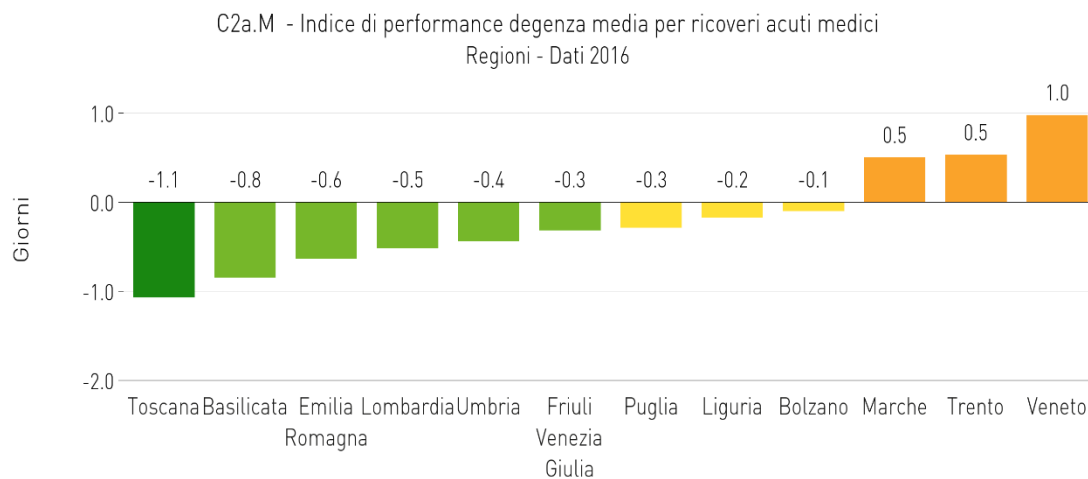


C2a.C - Indice di performance degenza media - DRG Chirurgici
Aziende - Dati 2016



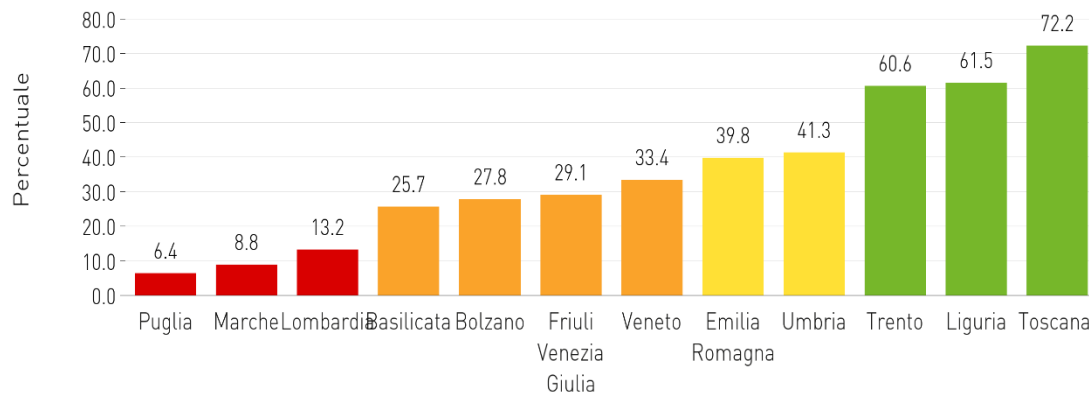
C2a.C - Indice di performance degenza media - DRG Chirurgici
Regioni - Dati 2015 / 2016



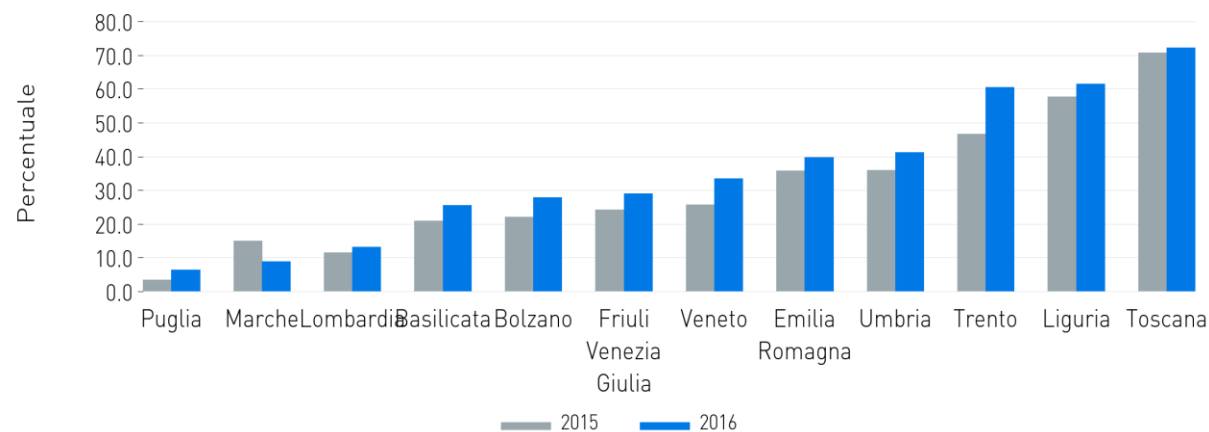




C4.4 - Percentuale di colecistectomie laparoscopiche effettuate in Day-Surgery e ricovero ordinario 0-1 giorno
Regioni - Dati 2016

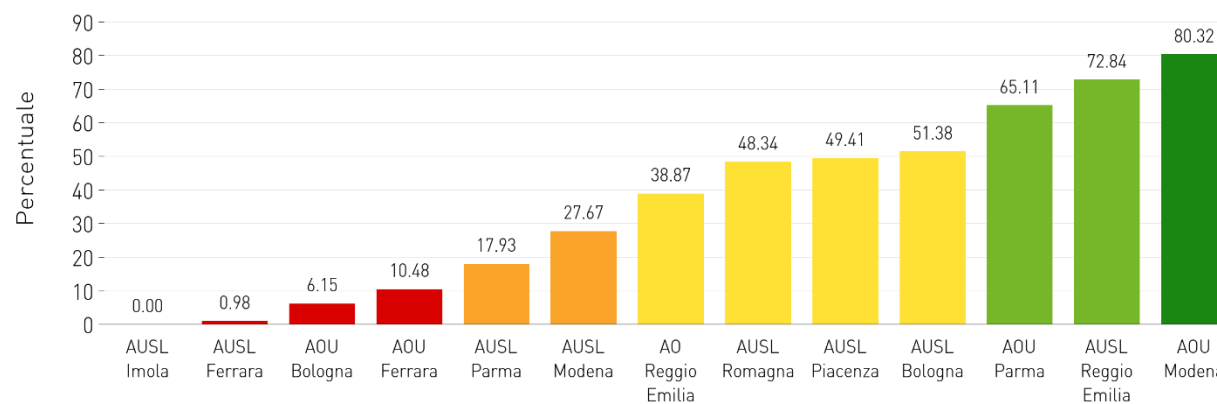


C4.4 - Percentuale di colecistectomie laparoscopiche effettuate in Day-Surgery e ricovero ordinario 0-1 giorno
Regioni - Dati 2015/ 2016

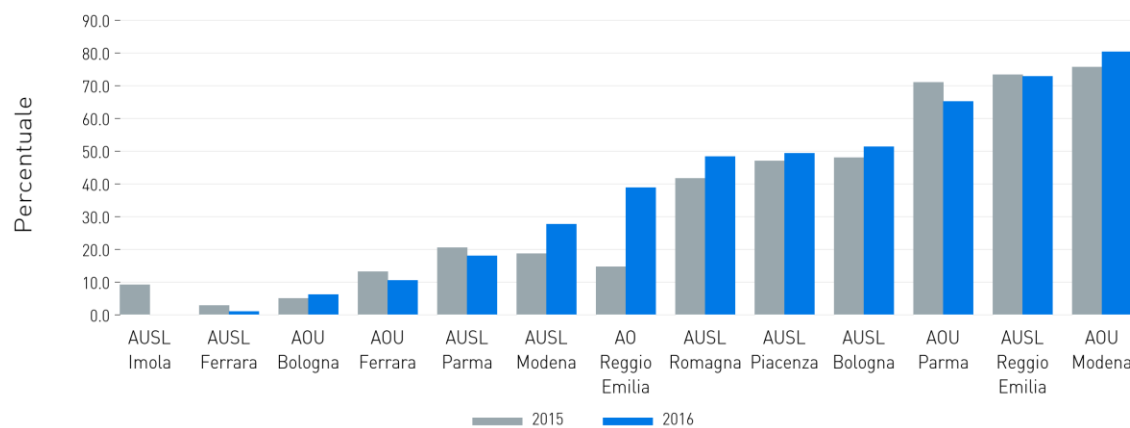




C4.4 - Percentuale di colecistectomie laparoscopiche effettuate in Day-Surgery e ricovero ordinario 0-1 giorno
Aziende - Dati 2016

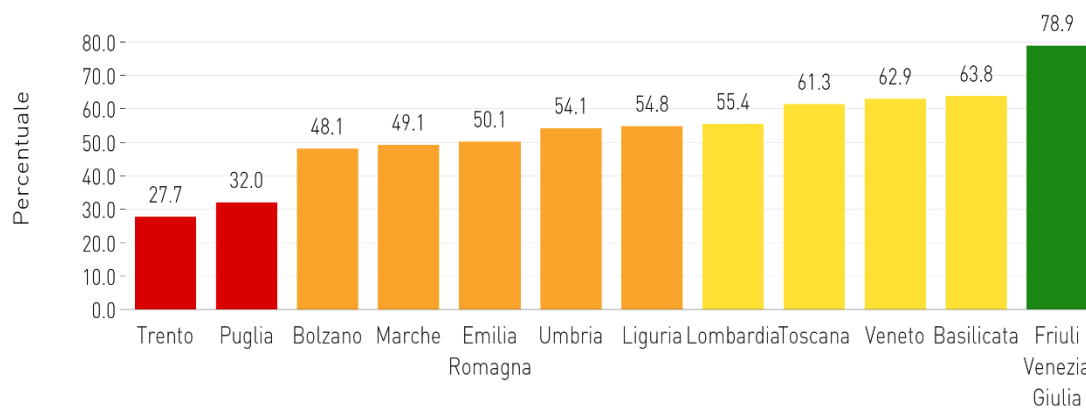


C4.4 - Percentuale di colecistectomie laparoscopiche effettuate in Day-Surgery e ricovero ordinario 0-1 giorno
Regioni - Dati 2015/ 2016

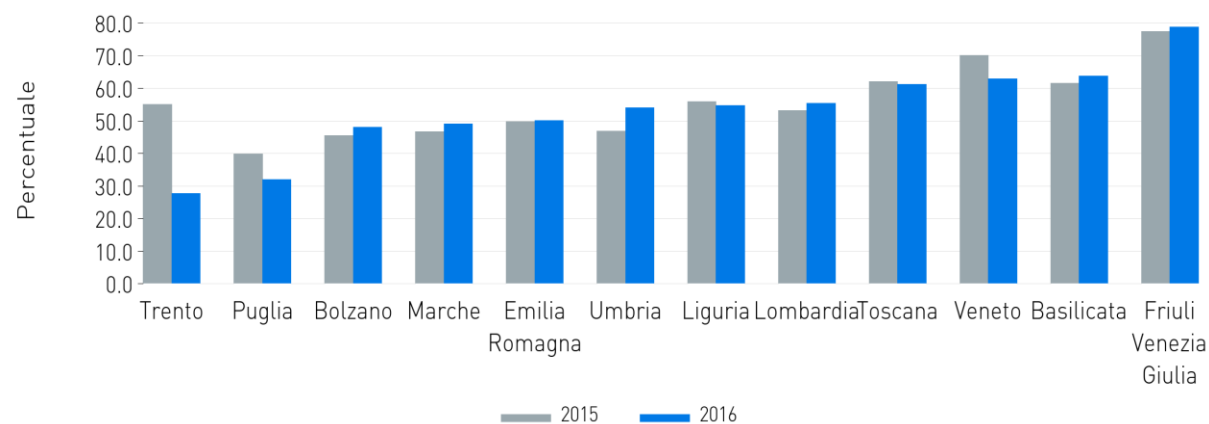




C4.7 - Percentuale di ricoveri effettuati in Day-Surgery per i Drg LEA Chirurgici
Regioni - Dati 2016

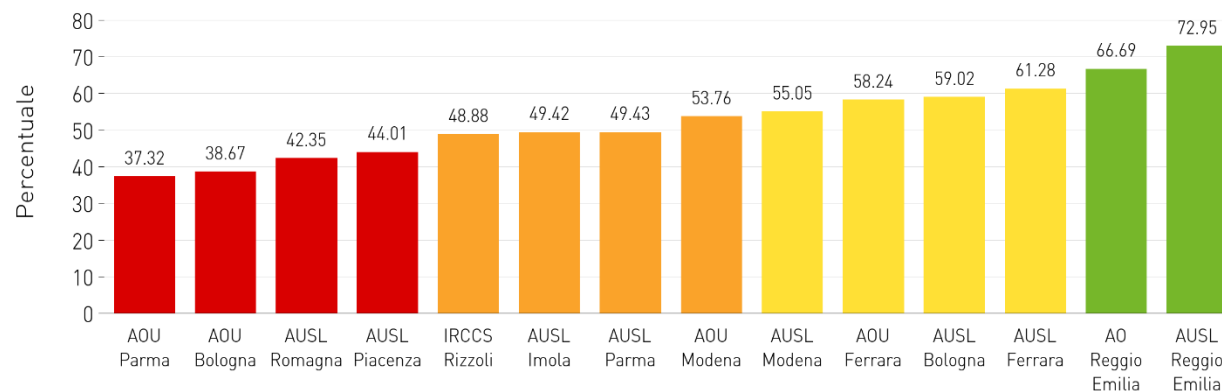


C4.7 - Percentuale di ricoveri effettuati in Day-Surgery per i Drg LEA Chirurgici
Regioni - Dati 2015 / 2016

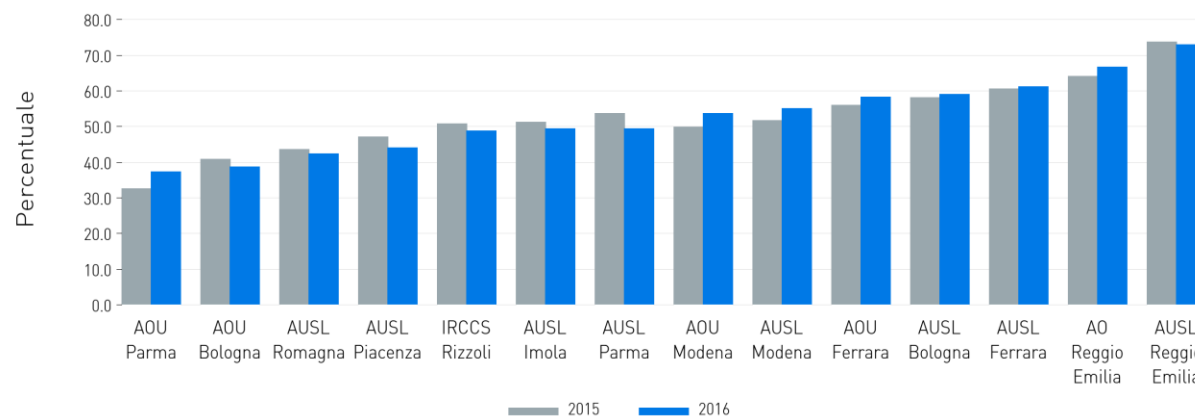




C4.7 - Percentuale di ricoveri effettuati in Day-Surgery per i Drg LEA Chirurgici
Aziende - Dati 2016

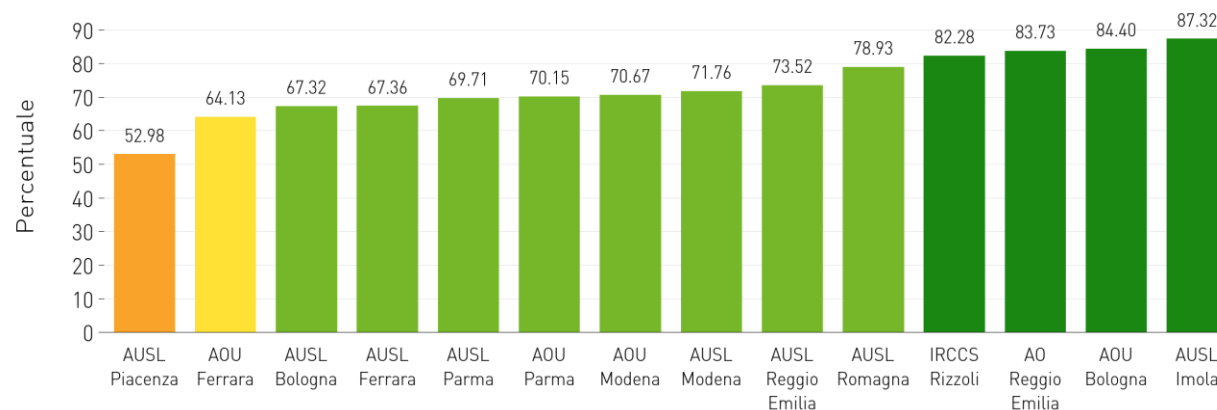


C4.7 - Percentuale di ricoveri effettuati in Day-Surgery per i Drg LEA Chirurgici
Regioni - Dati 2015 / 2016

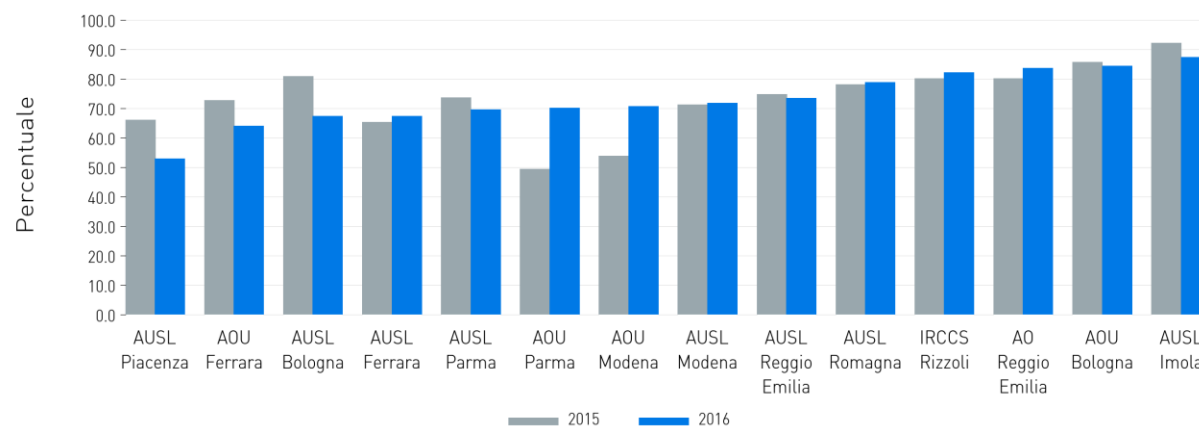


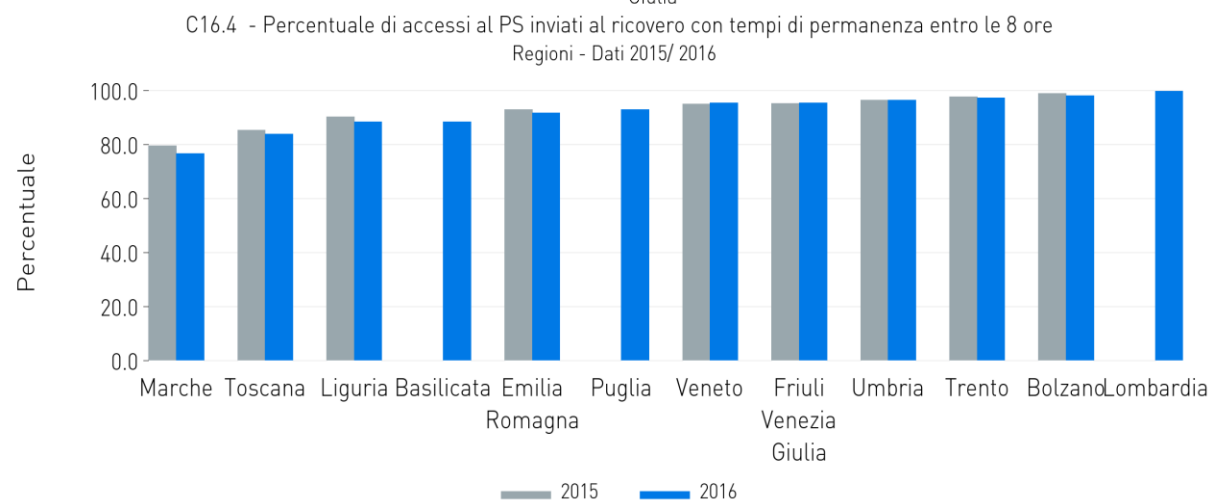
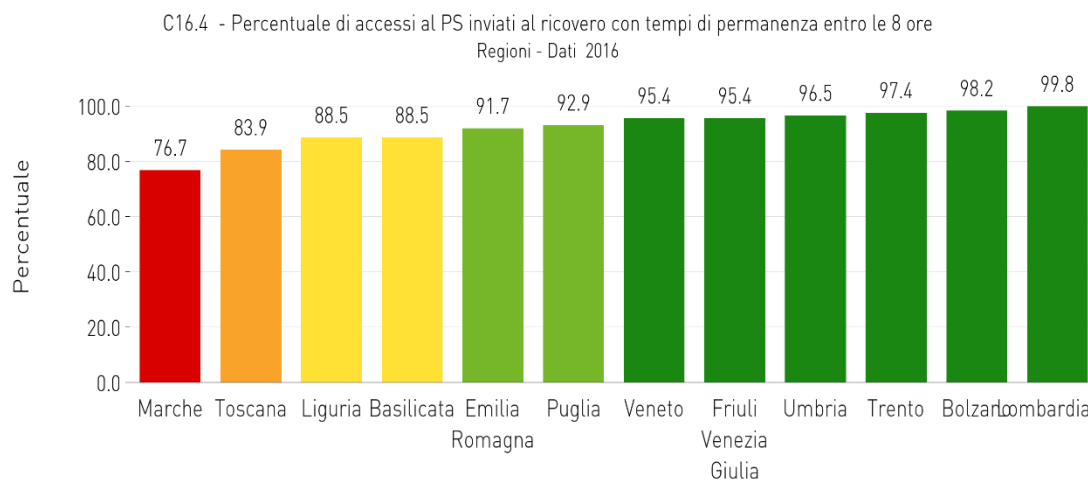


C5.2 - Percentuale di interventi per frattura del collo del femore con durata di degenza tra l'ammissione e l'intervento ≤ 2 giorni
Aziende - Dati 2016



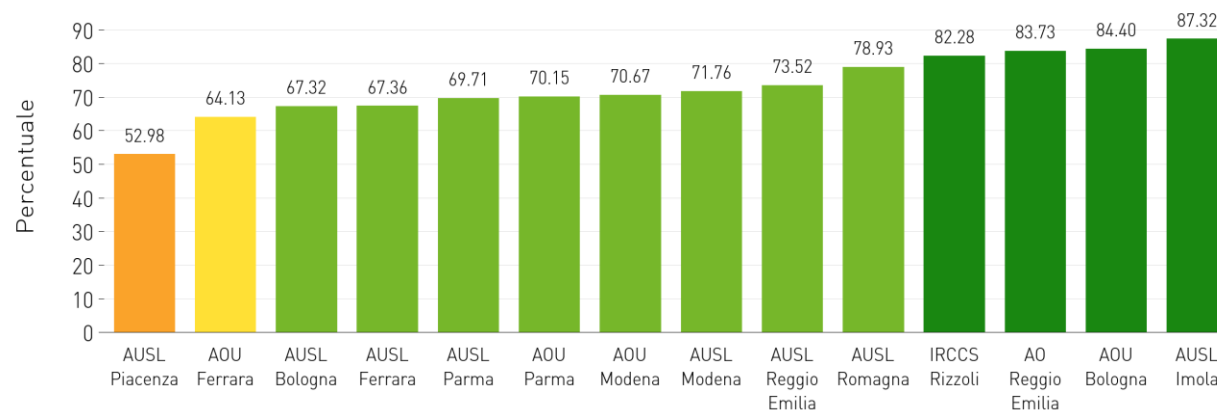
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Regioni - Dati 2015/ 2016



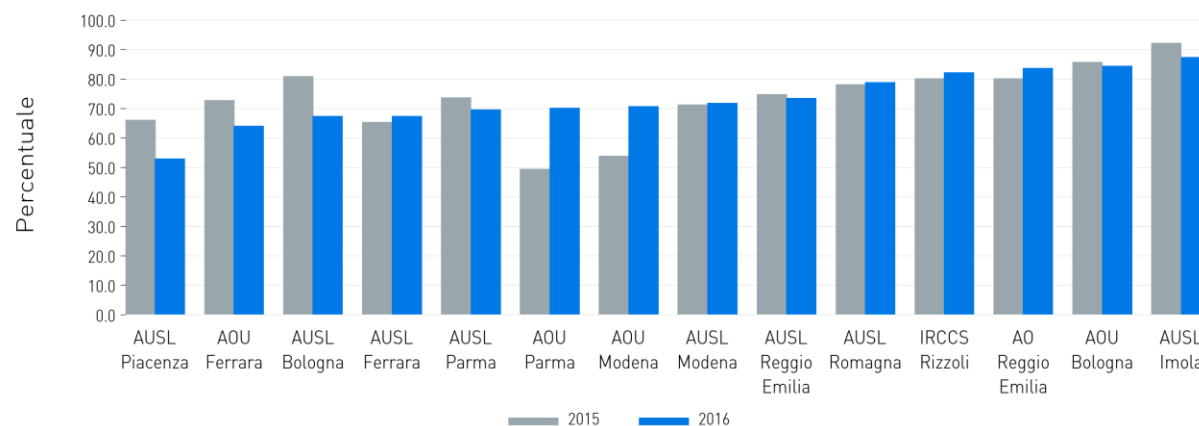




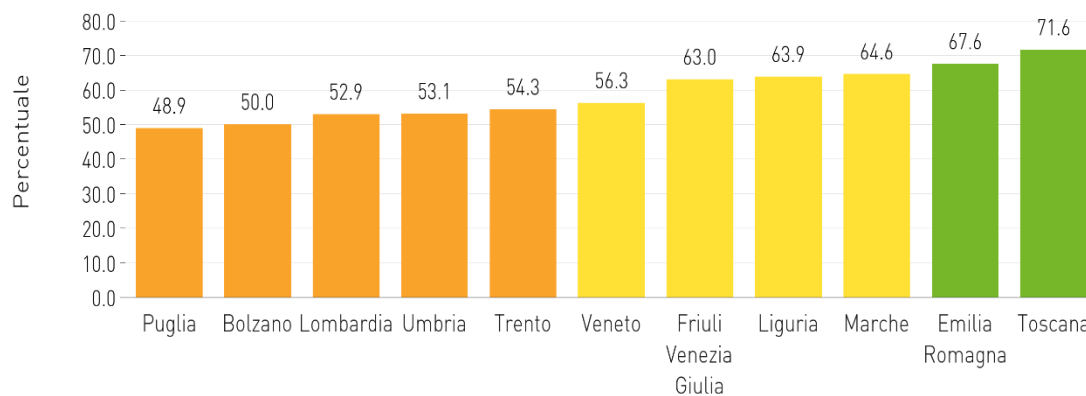
C5.2 - Percentuale di interventi per frattura del collo del femore con durata di degenza tra l'ammissione e l'intervento ≤ 2 giorni
Aziende - Dati 2016



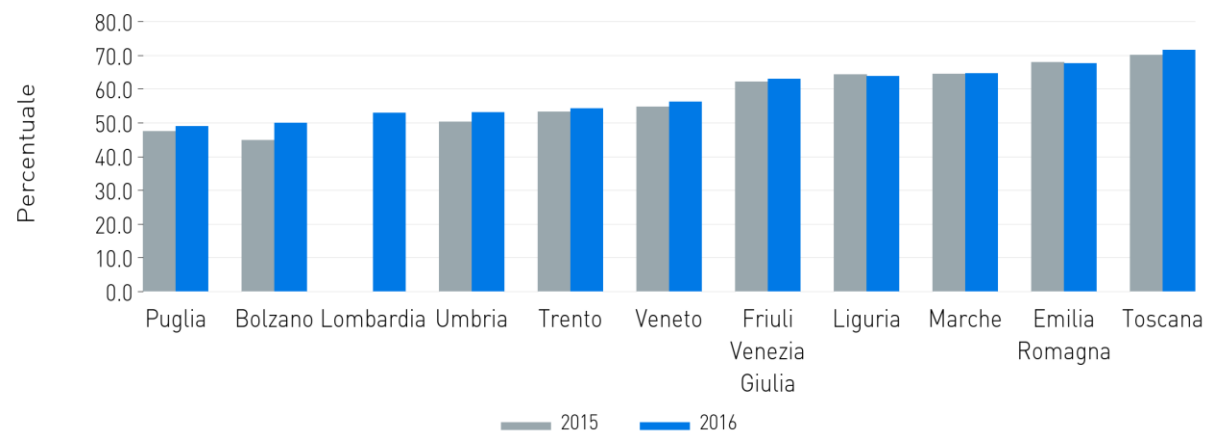
C5.2 - Percentuale di interventi per frattura del collo del femore con durata di degenza tra l'ammissione e l'intervento ≤ 2 giorni
Regioni - Dati 2015/ 2016



C16.7 - Percentuale di ricoveri ospedalieri da Pronto Soccorso in reparti chirurgici con DRG chirurgico alla dimissione
Regioni - Dati 2016

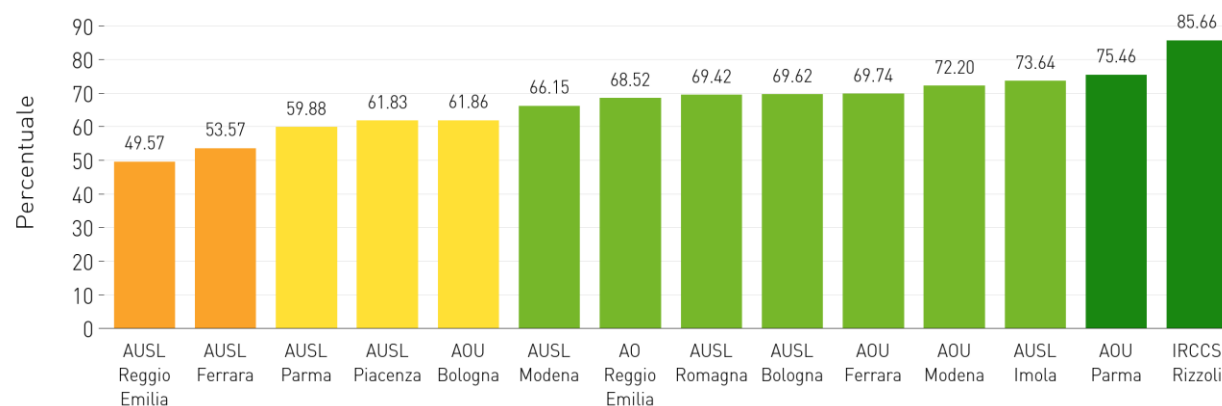


C16.7 - Percentuale di ricoveri ospedalieri da Pronto Soccorso in reparti chirurgici con DRG chirurgico alla dimissione
Regioni - Dati 2015/ 2016

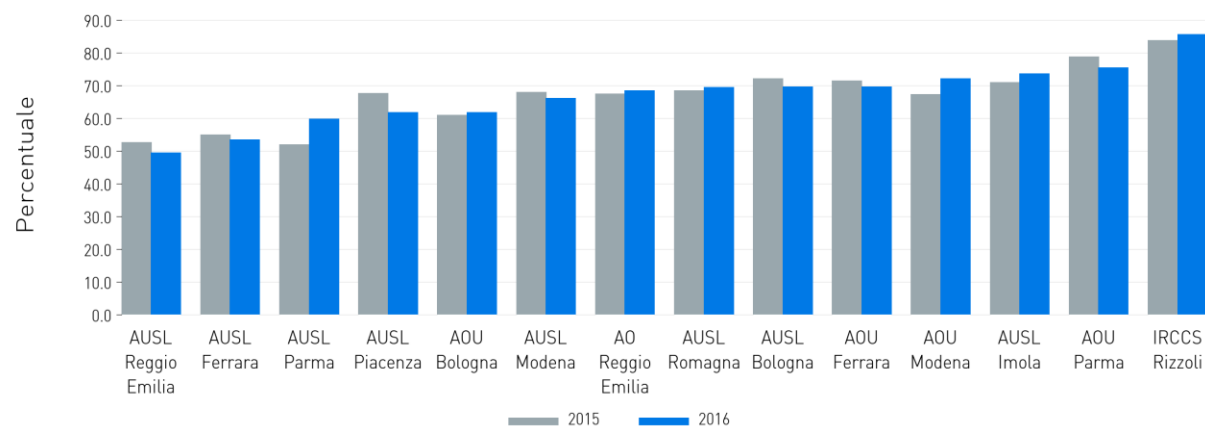




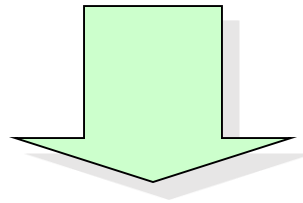
C16.7 - Percentuale di ricoveri ospedalieri da Pronto Soccorso in reparti chirurgici con DRG chirurgico alla dimissione
Aziende - Dati 2016



C16.7 - Percentuale di ricoveri ospedalieri da Pronto Soccorso in reparti chirurgici con DRG chirurgico alla dimissione
Regioni - Dati 2015/ 2016



Come rappresentare la performance multidimensionale
delle Aziende sanitarie e delle regioni?



Il bersaglio!

**Il bersaglio si basa su una metafora
positiva...**

**Per creare motivazione e
«engagement» dei professionisti...**



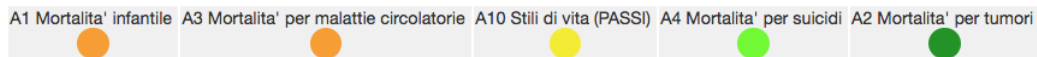


Risultati di sintesi complessivi 2016

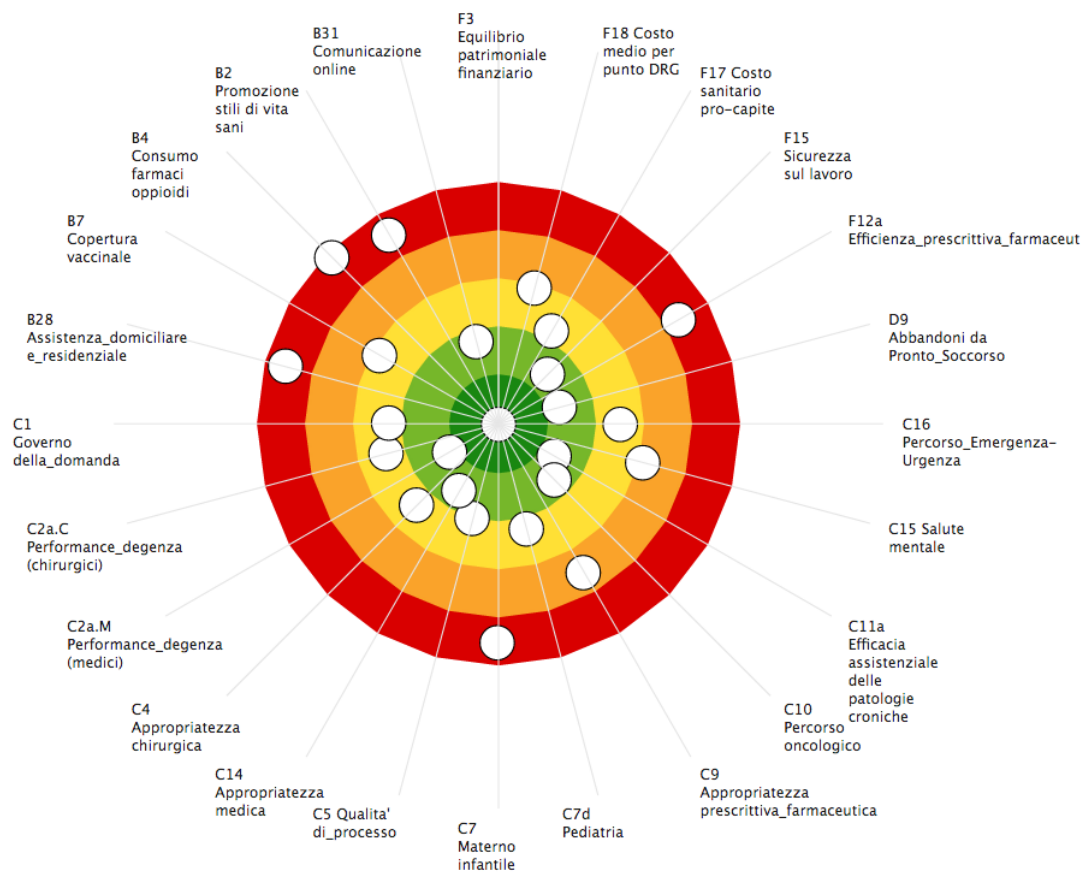


Basilicata

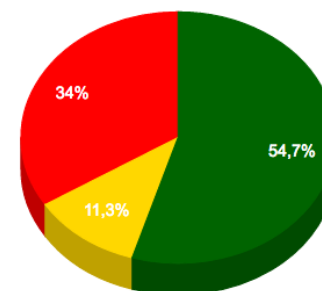
Valutazione dello stato di salute della popolazione. Anni 2012-2014



Bersaglio 2016



Analisi trend 2016



- Migliorati (A): trend positivo
- Stazionari (B)
- Peggiorati (C): trend negativo

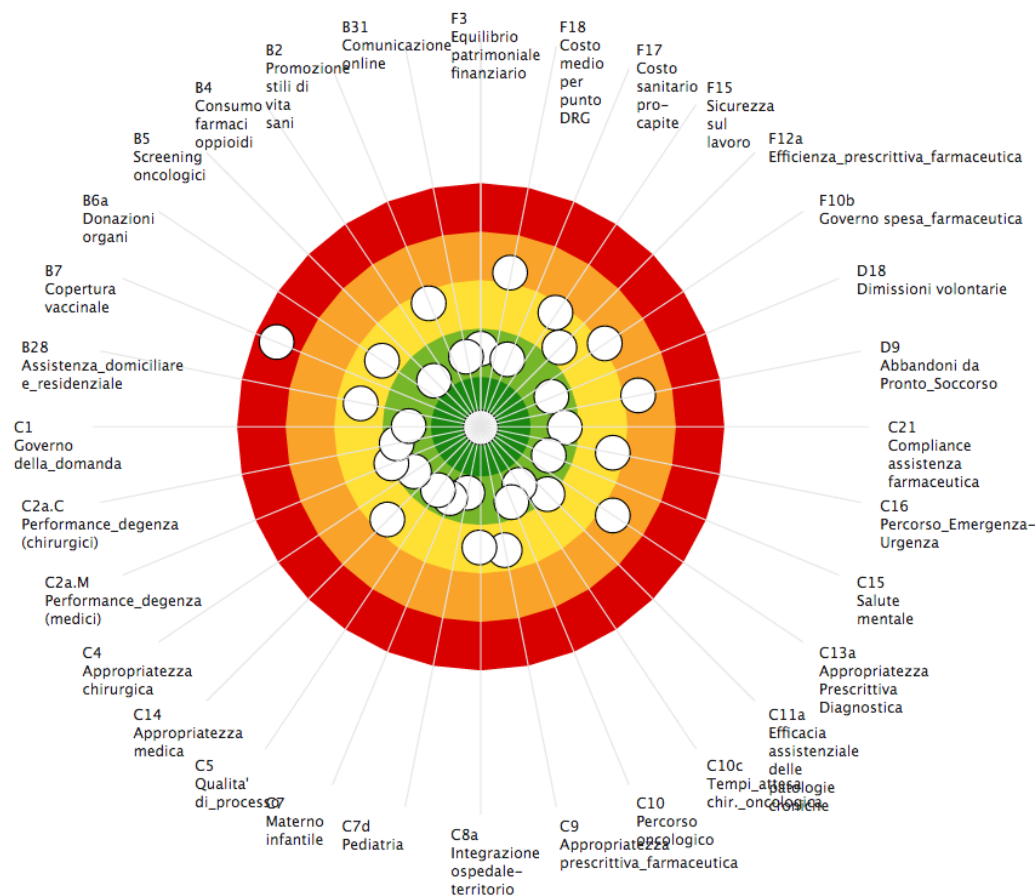
Totale indicatori: 53

FVG

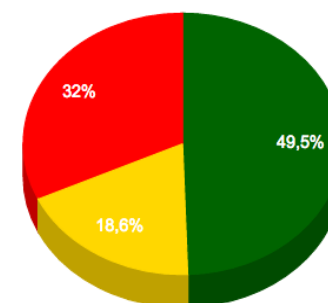
Valutazione dello stato di salute della popolazione. Anni 2012-2014



Bersaglio 2016



Analisi trend 2016



Totale indicatori: 97

- Migliorati (A): trend positivo
- Stazionari (B)
- Peggiorati (C): trend negativo

Liguria

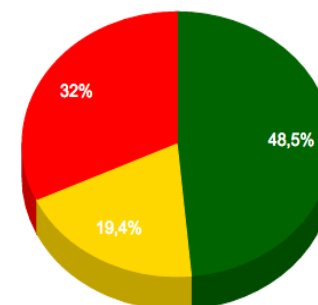
Valutazione dello stato di salute della popolazione. Anni 2012-2014

A10 Stili di vita (PASSI)



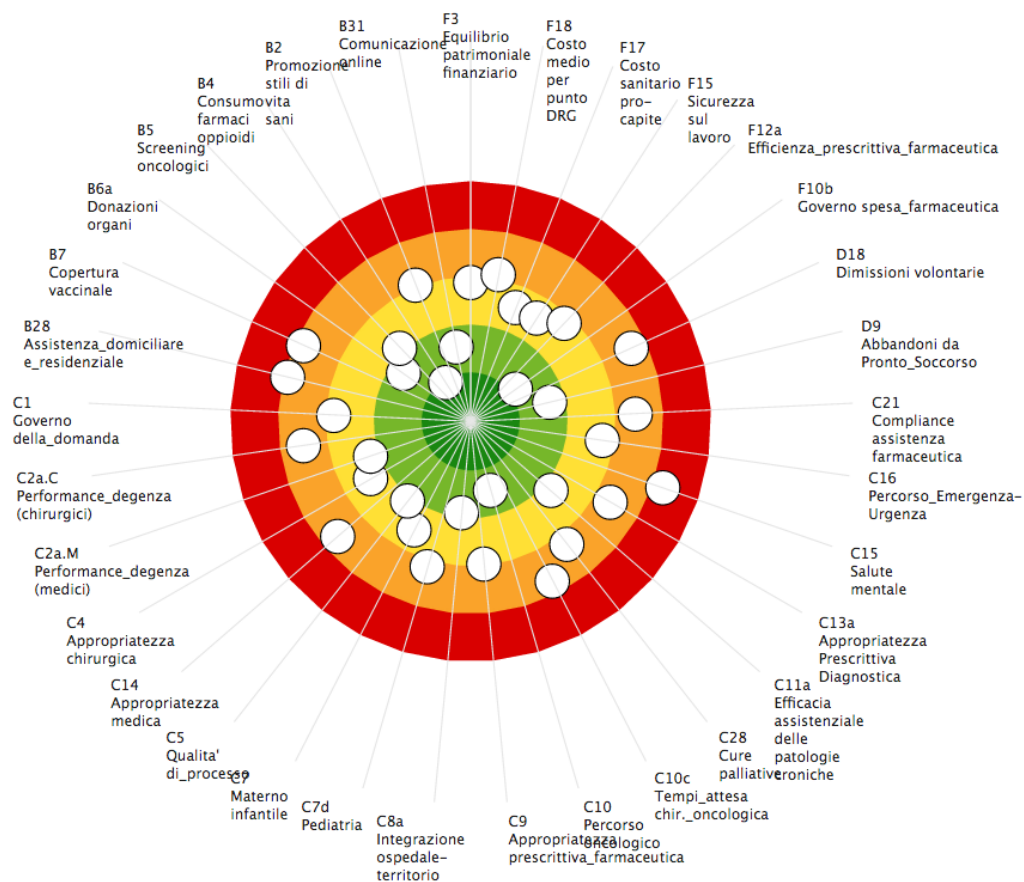
Bersaglio 2016

Analisi trend 2016



- Migliorati (A): trend positivo
- Stazionari (B)
- Peggiorati (C): trend negativo

Totale indicatori: 103



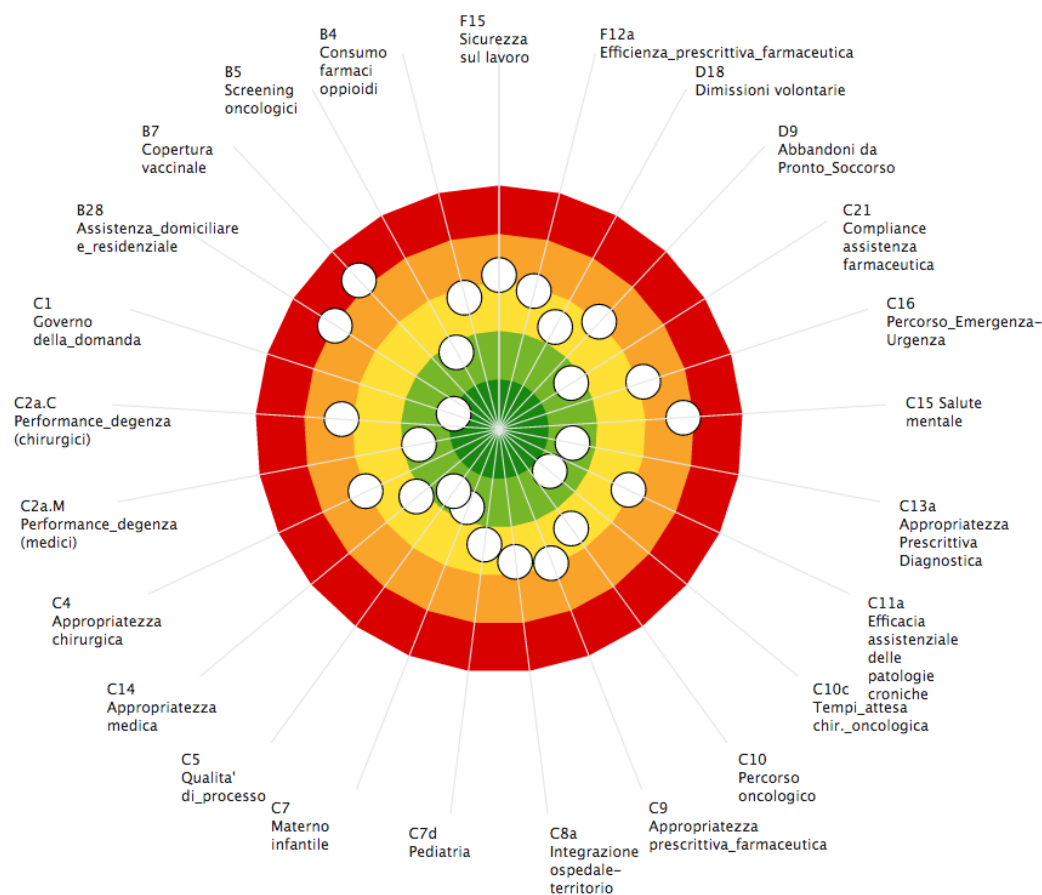
Lombardia

Valutazione dello stato di salute della popolazione. Anni 2012-2014

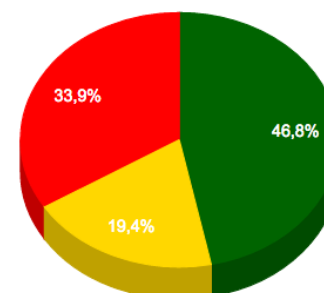
A1 Mortalita' infantile



Bersaglio 2016



Analisi trend 2016



- Migliorati (A): trend positivo
- Stazionari (B)
- Peggiorati (C): trend negativo

Totale indicatori: 62

Marche

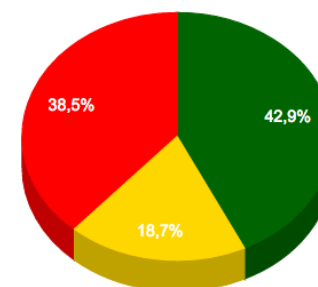
Valutazione dello stato di salute della popolazione.

A10 Stili di vita (PASSI)



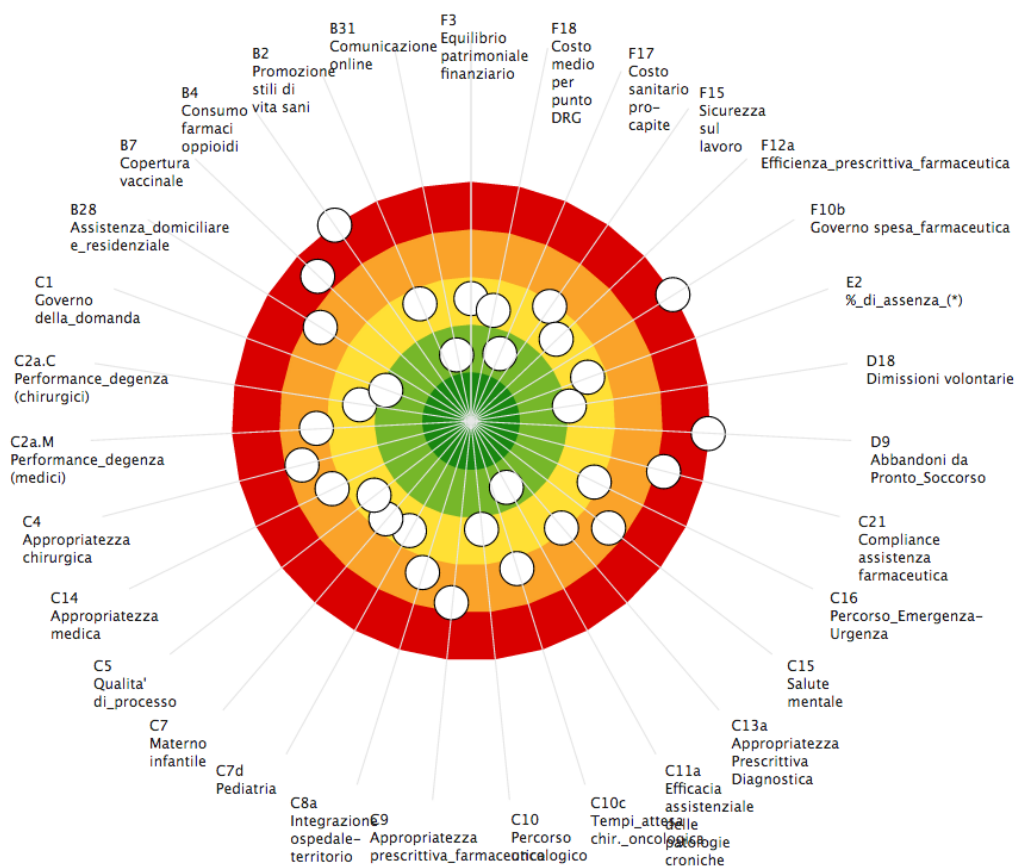
Bersaglio 2016

Analisi trend 2016



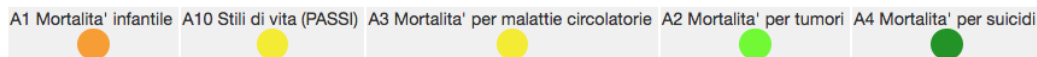
- Migliorati (A): trend positivo
- Stazionari (B)
- Peggiorati (C): trend negativo

Totale indicatori: 91

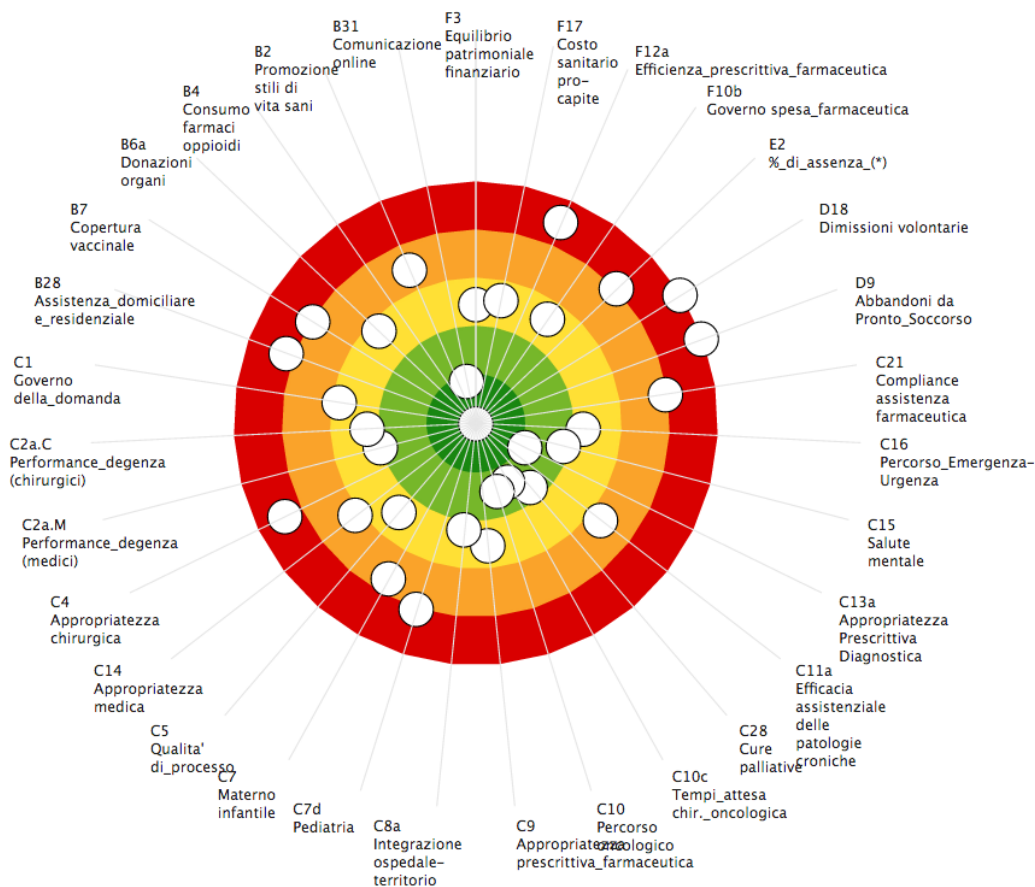


Puglia

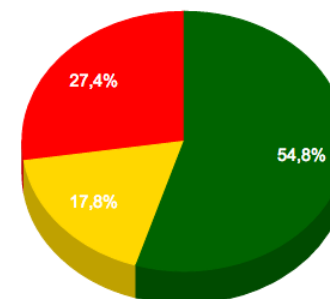
Valutazione dello stato di salute della popolazione. Anni 2012-2014



Bersaglio 2016



Analisi trend 2016

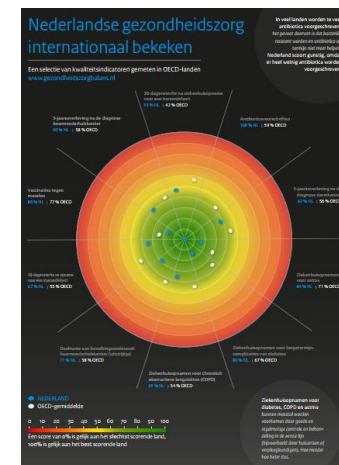
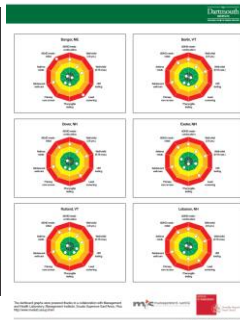
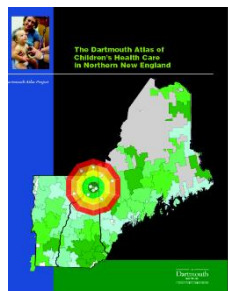


Totale indicatori: 73



The international use

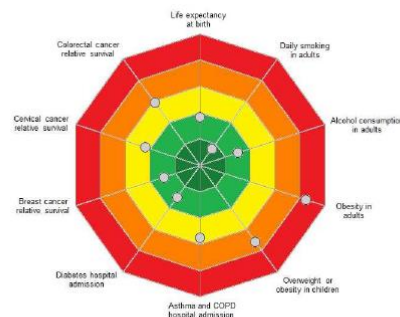
USA, Australia, Netherlands, OECD



Health at a Glance 2015

How does Canada compare?

How Canada compares with other OECD countries on selected indicators of health status, risk factors to health and quality of care (2013 or nearest year)



Note: The closest dot is to the center "target", the better the country performs. The countries in the inner circle are in the top quintile among the best performing OECD countries, while those in the outer circle are in the bottom quintile.

Source: OECD Health at a Glance 2015 (chart design: Laboratorio MeS).

Funziona?

Table 4 Adjusted proportion of hospitalisations for hip fractures in patients aged ≥ 65 years in whom surgery was performed within 48 h of admission, 2006–2007 vs 2008–2009

Region	2006–2007		2008–2009		P
	N	Adjusted proportion	N	Adjusted proportion	
Lazio	12 585	11.8	12 469	16.7	1
Tuscany	11 486	30.2	11 122	45.2	1
Other Italian regions	113 436	29.5	112 222	28.6	0

PES integrated
with other
management tools
drives
improvement

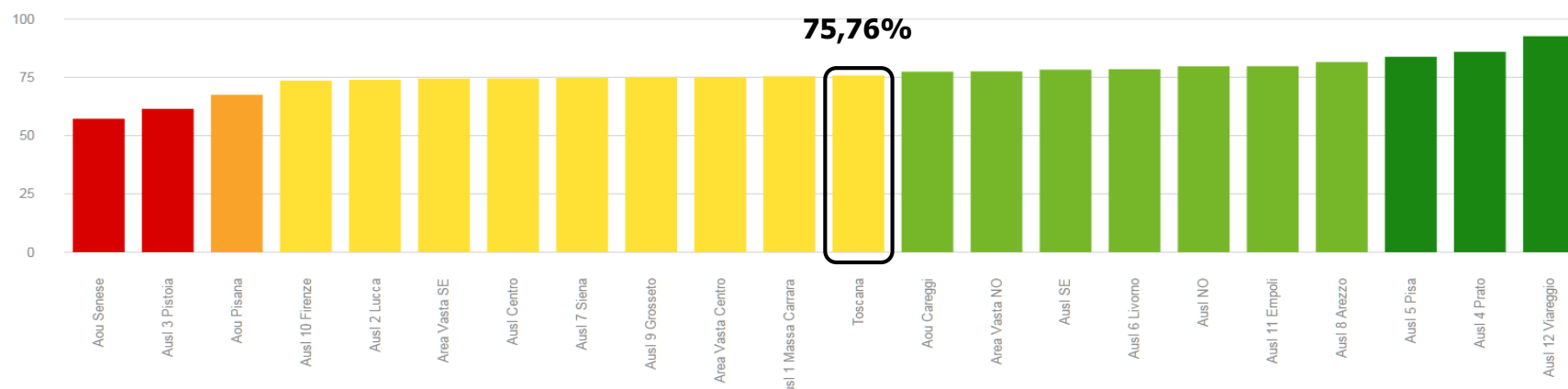
Table 5 Proportion of hip operations performed within 48 h of admission in 2008–2009 compared with 2006–2007 in Lazio and Tuscany hospitals

	Increased		No change		Reduced	
	N (%)	Median change (IQR)	N (%)	Median change (IQR)	N (%)	Median change (IQR)
Lazio hospitals	11 (26.2)	+10.6 (4.8)	30 (71.4)	+0.2 (2.8)	1 (2.3)	NE
Tuscany hospitals	17 (65.4)	+23.3 (14.3)	8 (30.8)	+0.4 (6.3)	1 (3.8)	NE
Other Italian hospitals	43 (11.7)	+12.2 (12.9)	260 (70.6)	−0.3 (5.4)	65 (17.7)	−11.8 (8.6)

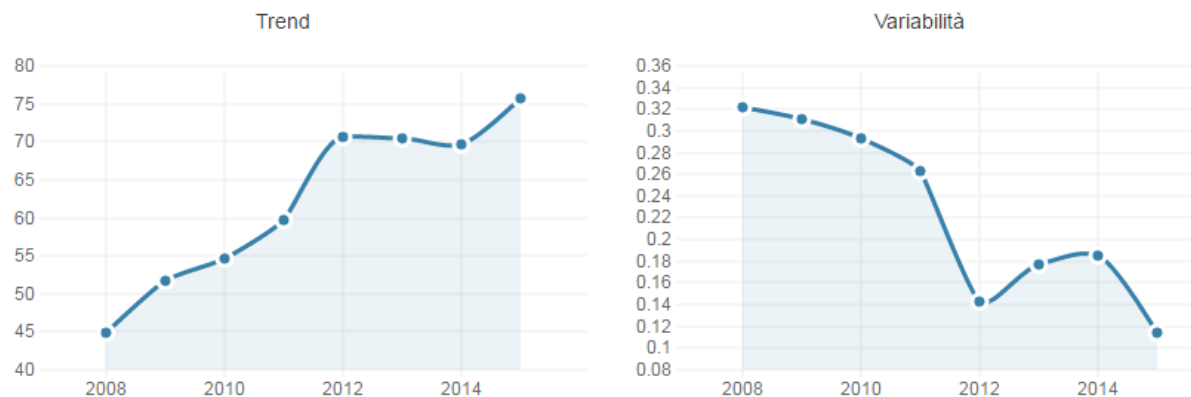
NE, not evaluable.

*Pinnarelli L., Nuti S, Sorge C, Davoli M, Fusco D, Agabiti N, Vainieri M, Perucci CA, 2012
What drives hospital performance? The impact of comparative outcome evaluation of
patients admitted for hip fracture in two Italian regions. BMJ Quality and Safety Vol.2*

Tempestività intervento frattura di femore Interventi entro 48 ore Regione Toscana 2015



C5.2 % fratture del collo del femore operate entro 2 gg (Patto per la Salute 2010 - 2012)



La variabilità è misurata utilizzando il coefficiente di variazione o deviazione standard relativa.

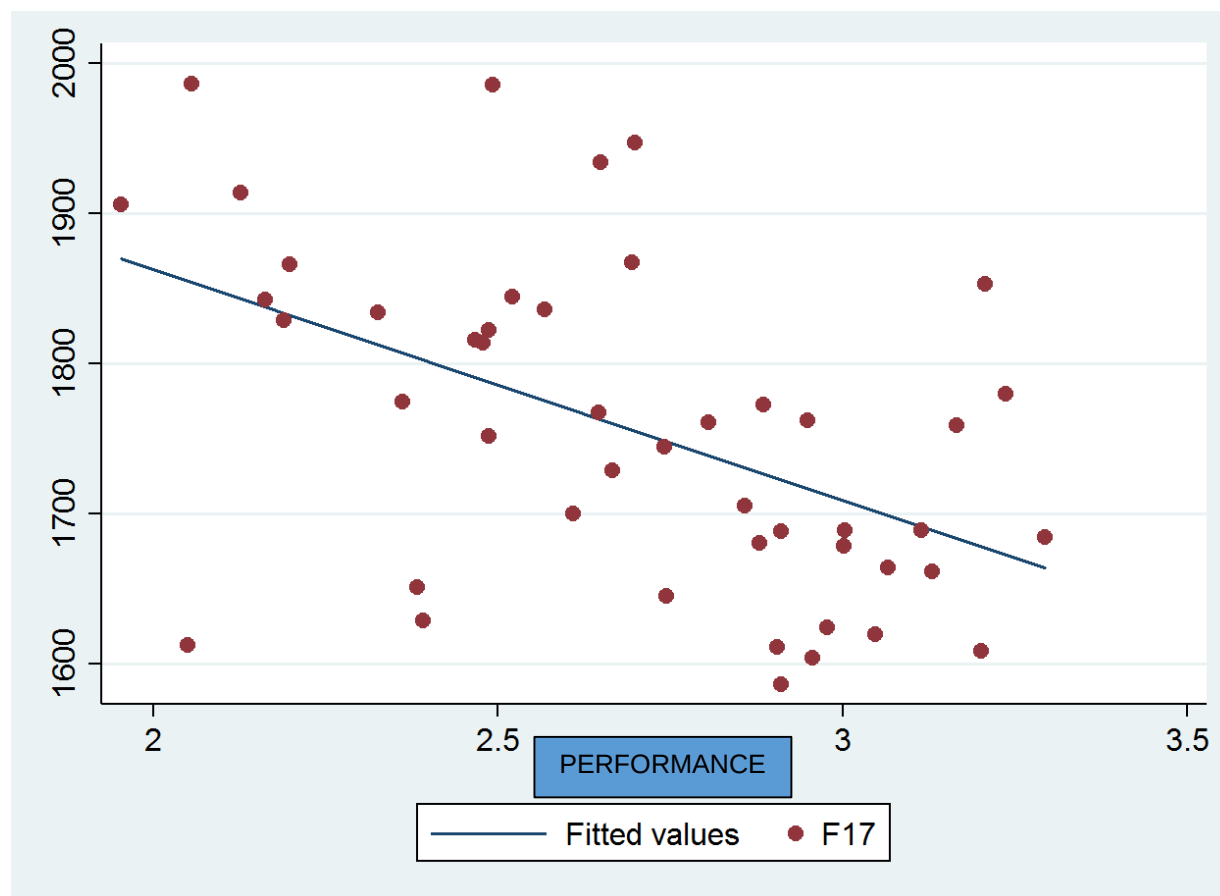
La relazione tra costi e performance: un'analisi empirica sulle regioni del network

È stata condotta un'analisi per esplorare la relazione tra efficienza e qualità in sanità utilizzando gli indicatori disponibili sulla piattaforma del network (dati 2016)

Costo Sanitario pro capite (indicatore F17 bersaglio): rapporto fra il costo totale sostenuto dalla Ausl per i propri residenti e la popolazione di riferimento pesata secondo i criteri di riparto utilizzati a livello nazionale. Ai costi totali sono stati sottratti i ricavi della mobilità attiva ipotizzando che i costi sostenuti dall'azienda per erogare servizi ai non residenti siano pari ai ricavi da mobilità attiva.

Performance: indice di performance calcolato come media di tutti gli indicatori di sintesi del network ad eccezione della dimensione A (stato di salute della popolazione), F (equilibrio economico finanziario) e dell'indicatore E2 (percentuale di assenza).

Relazione	Indice di correlazione di Pearson	$P < 0.05$
costo – perf	-0.5032	$P = 0.0003 < 0.05$

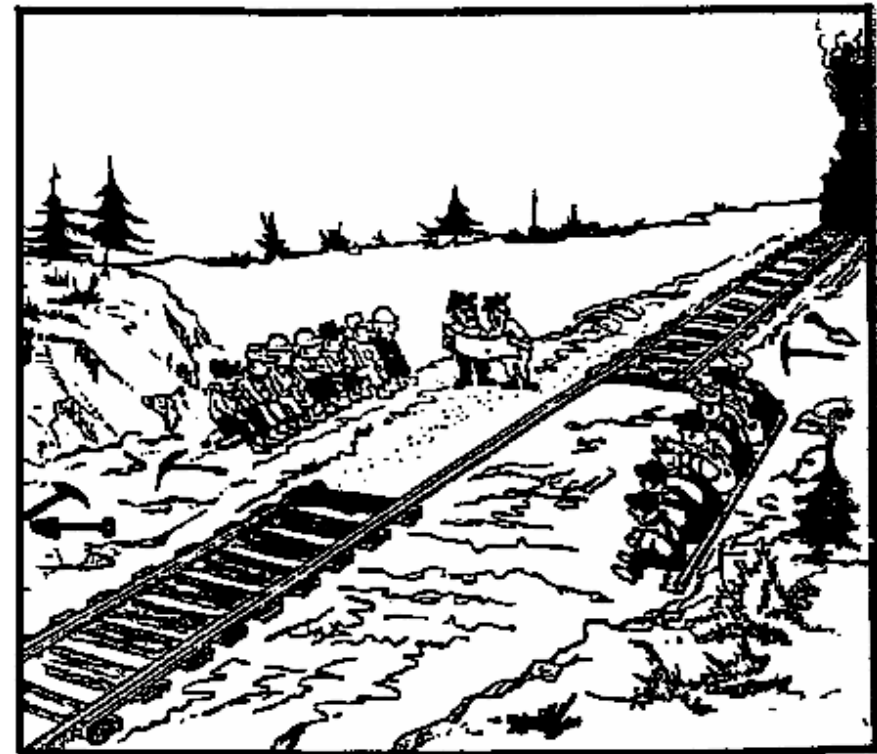


Che cosa non funziona?



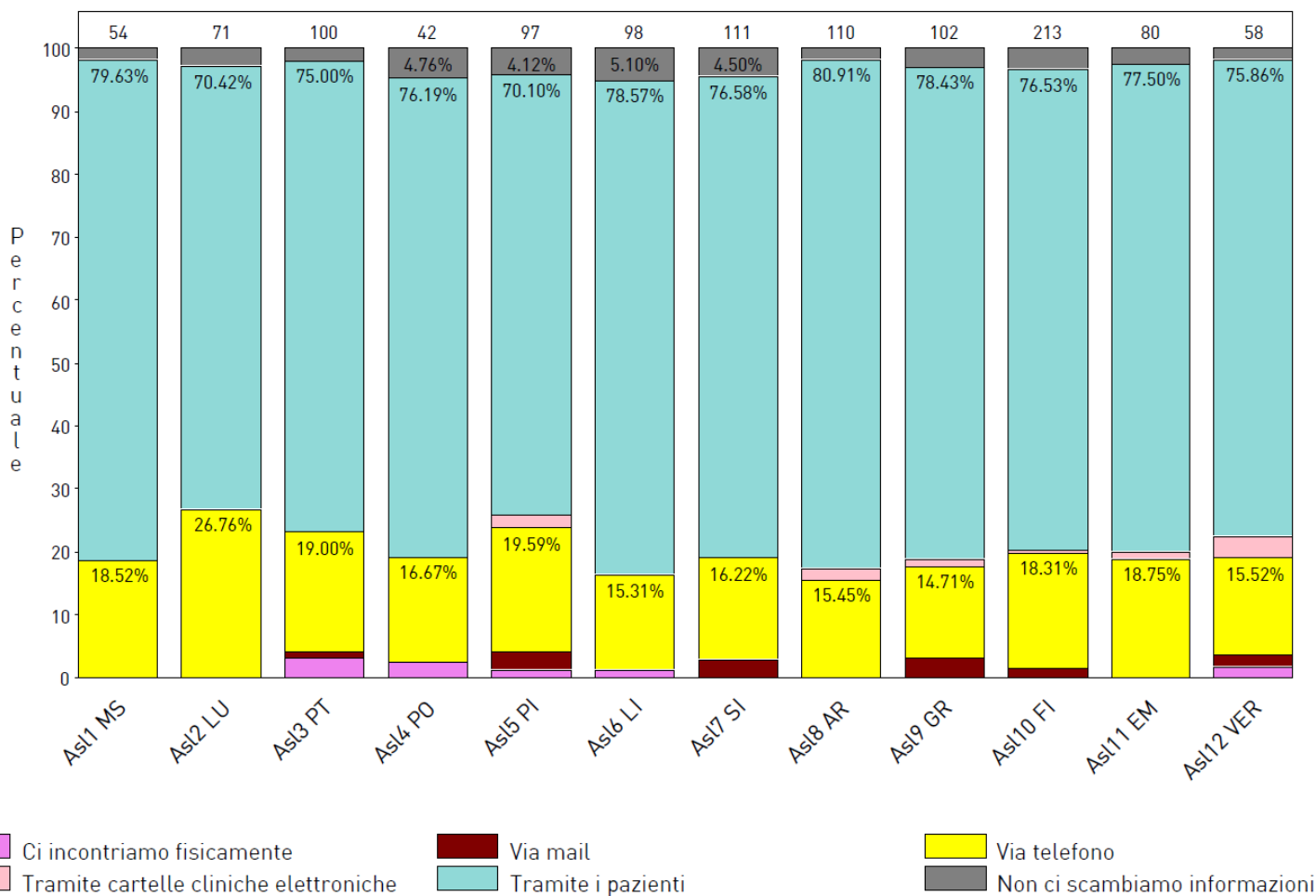
Parliamo di percorsi
assistenziali, di continuità
ospedale e territorio, di
centralità del paziente e.....

Misuriamo e valutiamo la
qualità, l'efficienza e
l'appropriatezza dei
servizi ancora per
SETTING
ASSISTENZIALE!



Qualche dato dall'indagine svolta con i MMG toscani...

'D19- Come avviene generalmente lo scambio di informazioni con gli specialisti?'



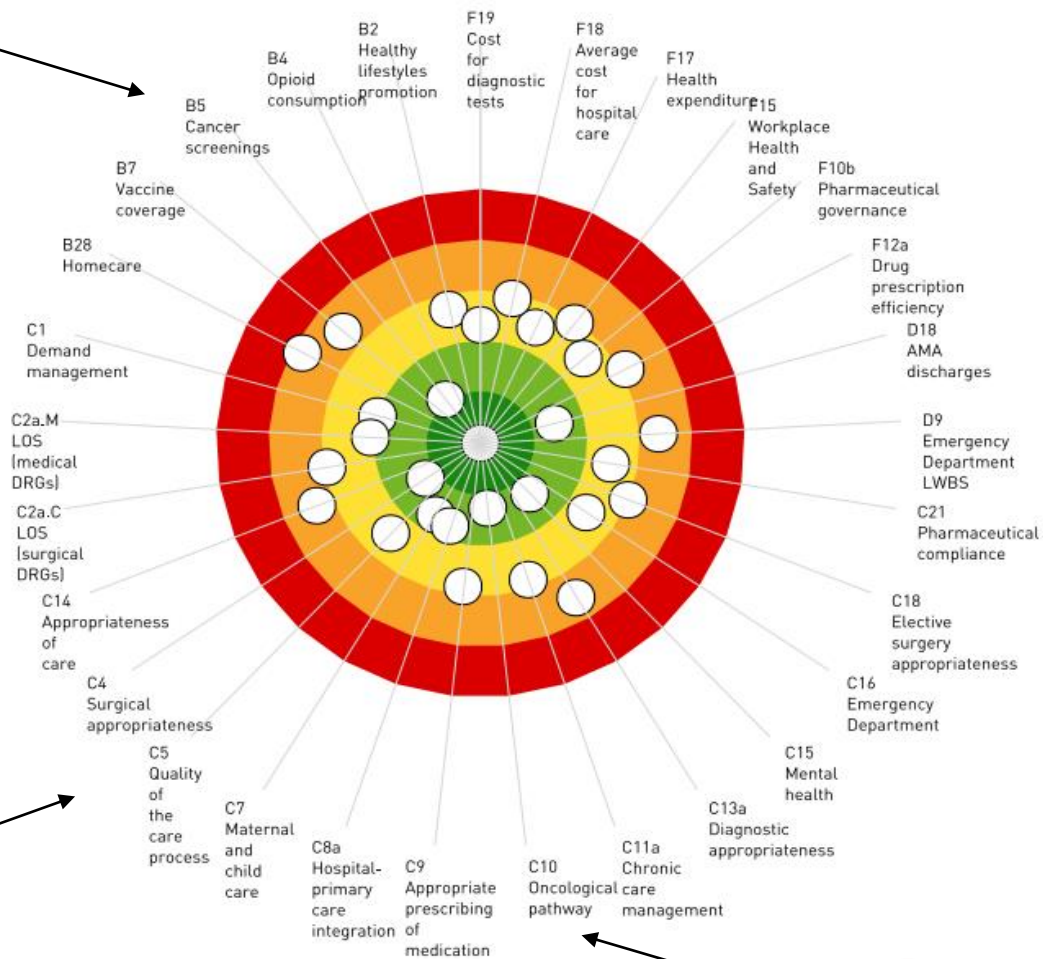
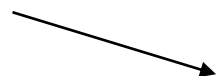


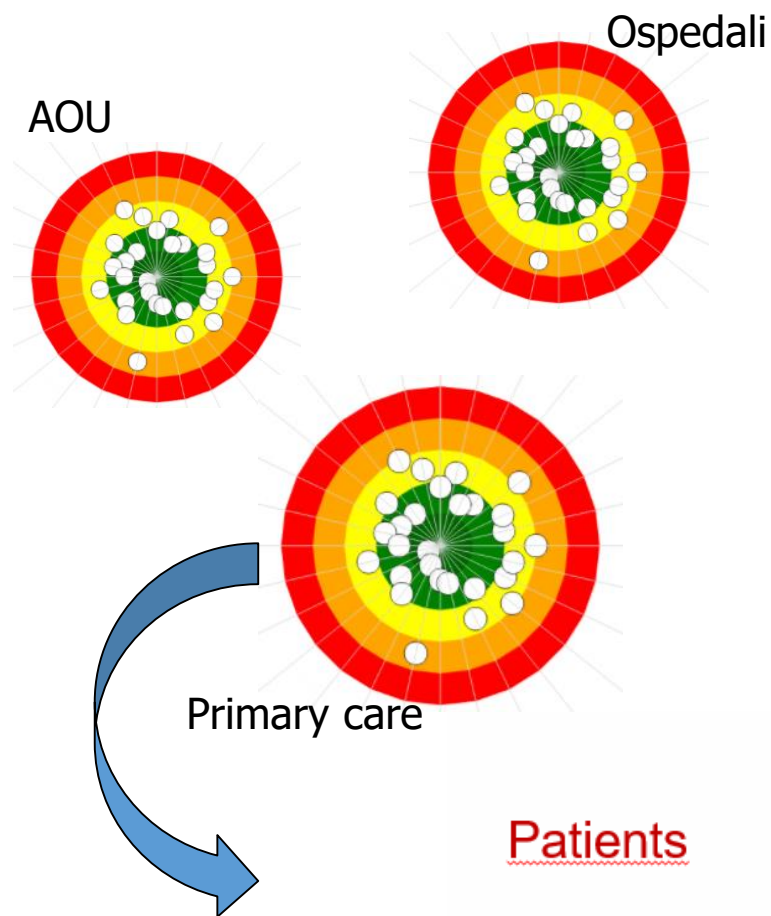
Population's health - 2010-2012

A4 Suicide mortality A2 Cancer mortality A10 Lifestyles A1 Infant mortality A3 Circulatory disease mortality

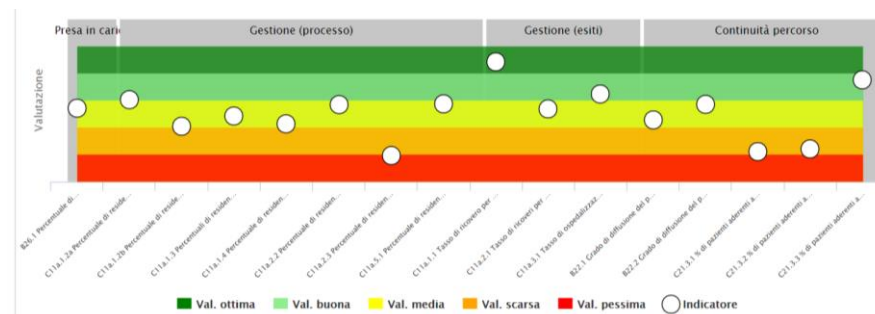


Screening





Dai silos ai percorsi



Experience

Outcome

Adherence

Patients

PREMs

PROMs

...

Caregivers

...

...

...

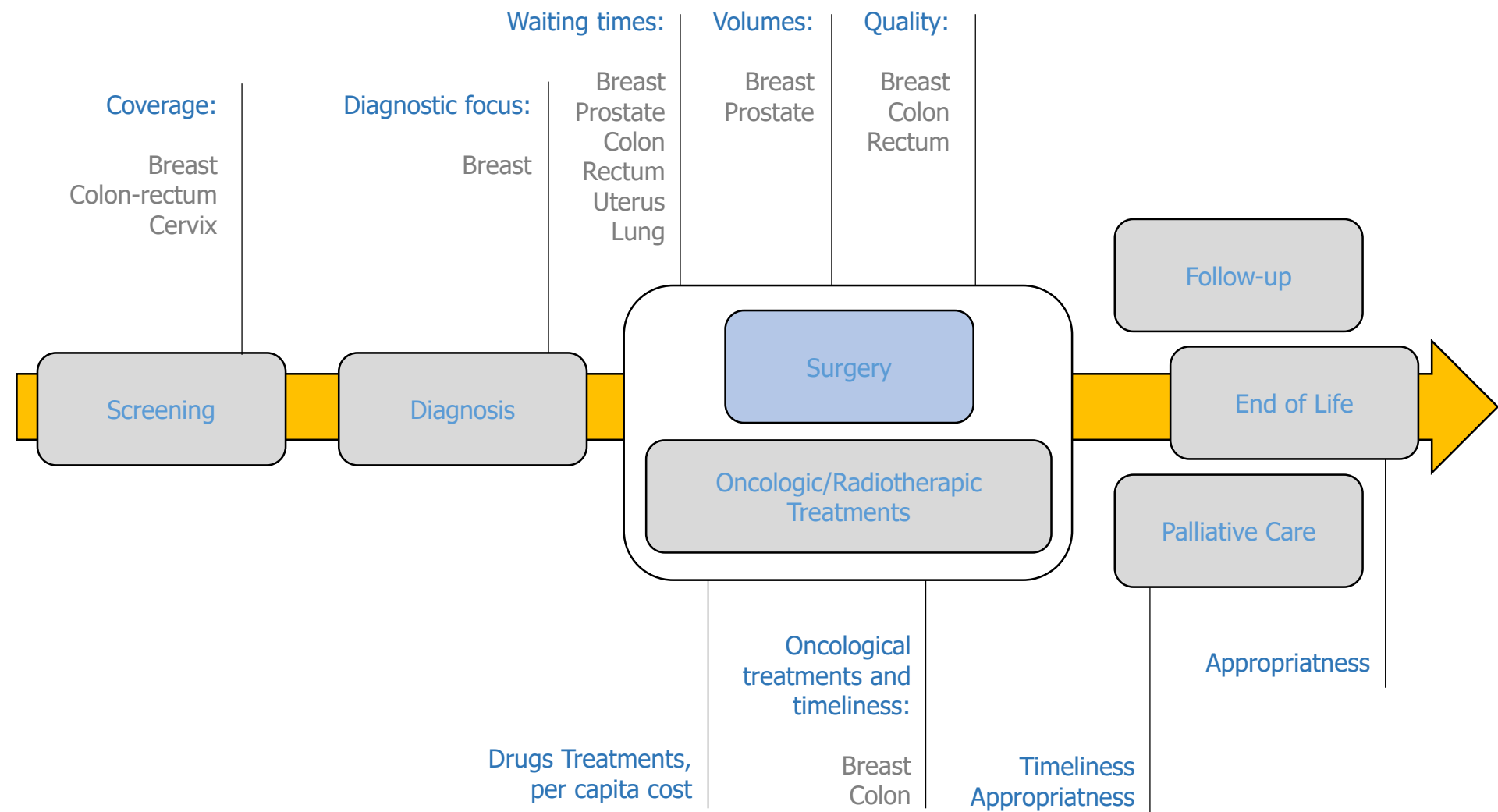
Professionals

...

...

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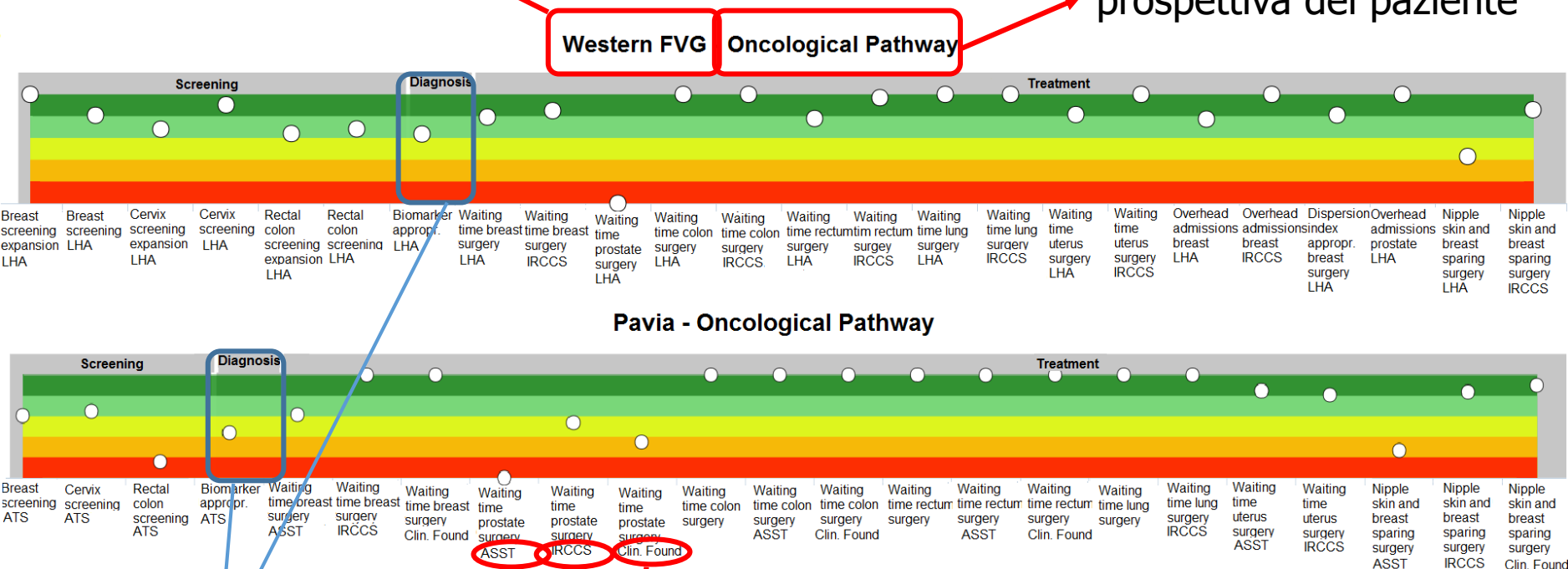
Ridisegno del Sistema di Valutazione Il percorso oncologico



Ridisegno del Sistema di Valutazione – Il Pentagramma

Unità di analisi: aree geografica

Set di indicatori basati sulla prospettiva del paziente

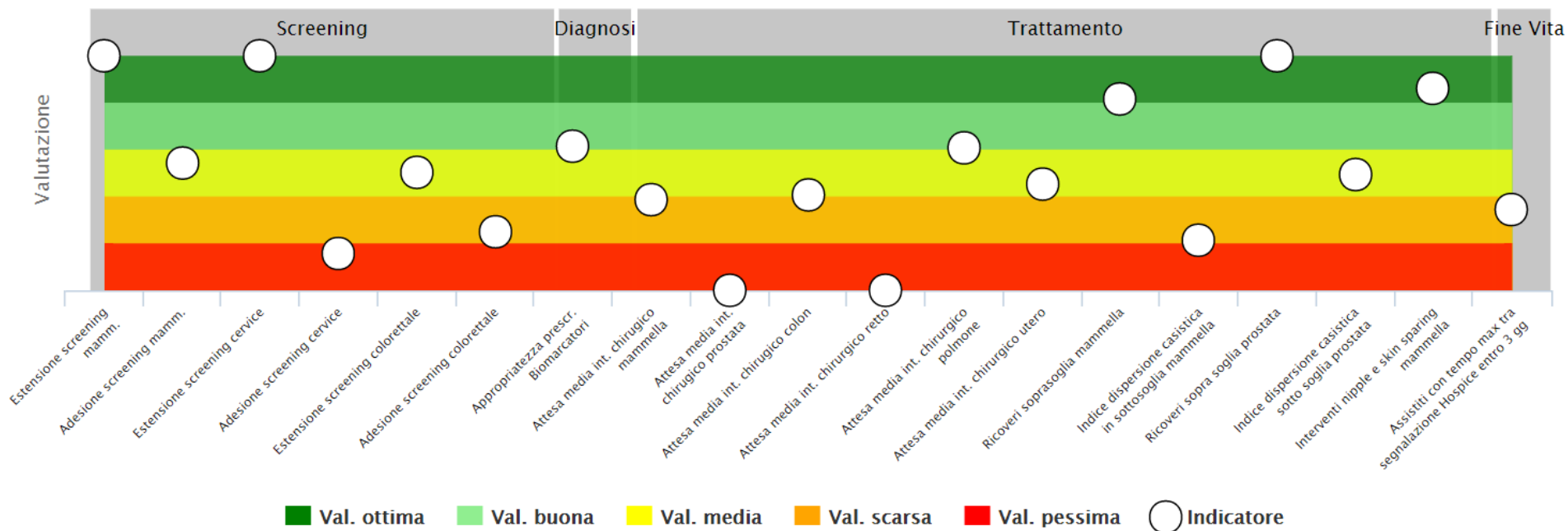


Possibilità di focalizzare le singole fasi del percorso

- **Più provider coinvolti nell'erogazione dell'offerta**
- Più provider coinvolti nell'erogazione dello stesso servizio nell'area geografica analizzata

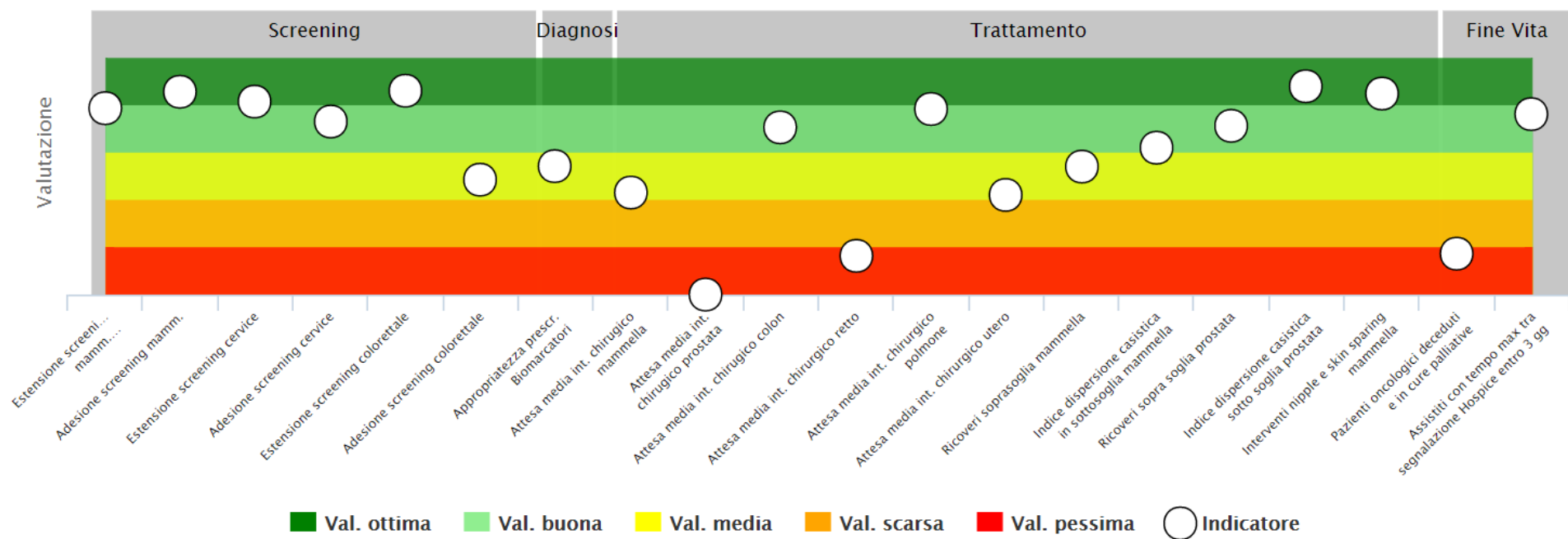


Liguria – Il percorso Oncologico

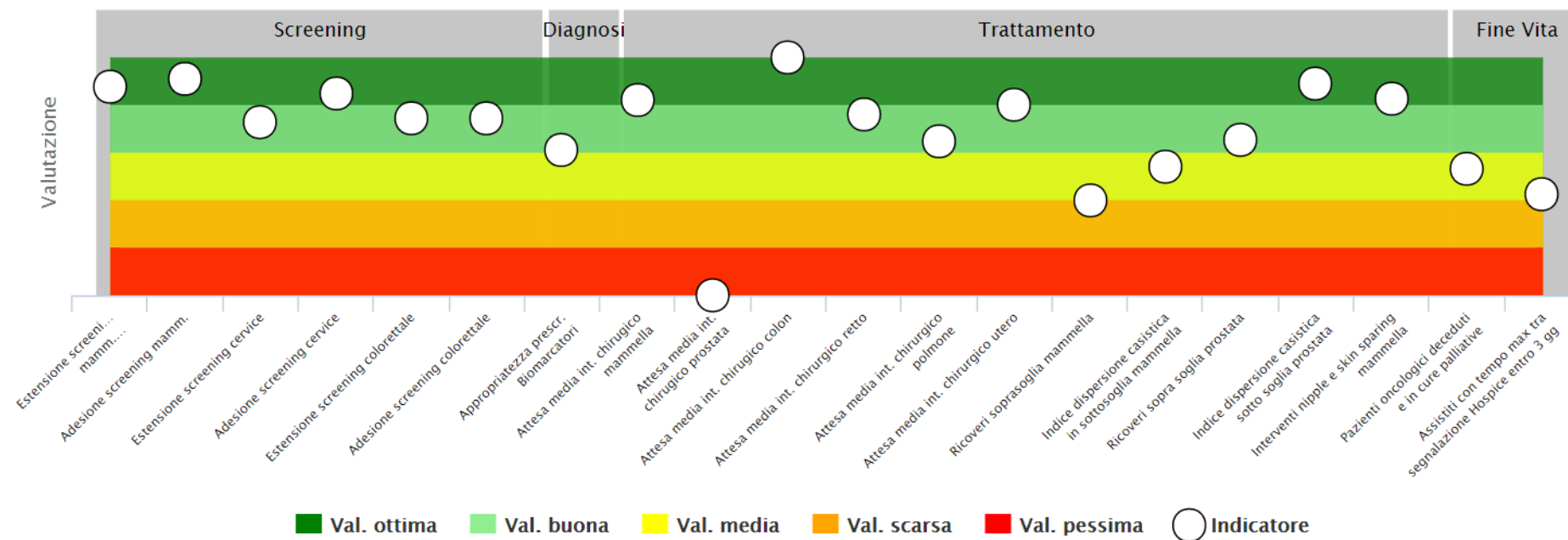




Toscana – Il percorso Oncologico



Veneto - Il percorso Oncologico



Reputations count: why benchmarking performance is improving health care across the world[☆]

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Abstract: This paper explores what motivates improved health care governance. Previously, many have thought that performance would either improve via choice and competition or relying on trust and altruism. But neither assumption is supported by available evidence. So instead we explore a third approach of reciprocal altruism with sanctions for unacceptably poor performance and rewards for high performance. These rewards and sanctions, however, are not monetary but in the form of reputational effects through public reporting of benchmarking of performance. Drawing on natural experiments in Italy and the United Kingdom, we illustrate how public benchmarking can improve poor performance at both the sub-national and national level through ‘naming and shaming’ and enhance good performance through ‘competitive benchmarking’ and peer learning. Ethnographic research in Zambia also showed how reputations count. Policy-makers could use these effects in different ways to improve public services.

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