Pourquoi et comment réduire les variations de pratiques médicales?

Des pistes pour améliorer la pertinence des soins

Reducing avoidable variation healthcare: the experience of a network of Italian Regions

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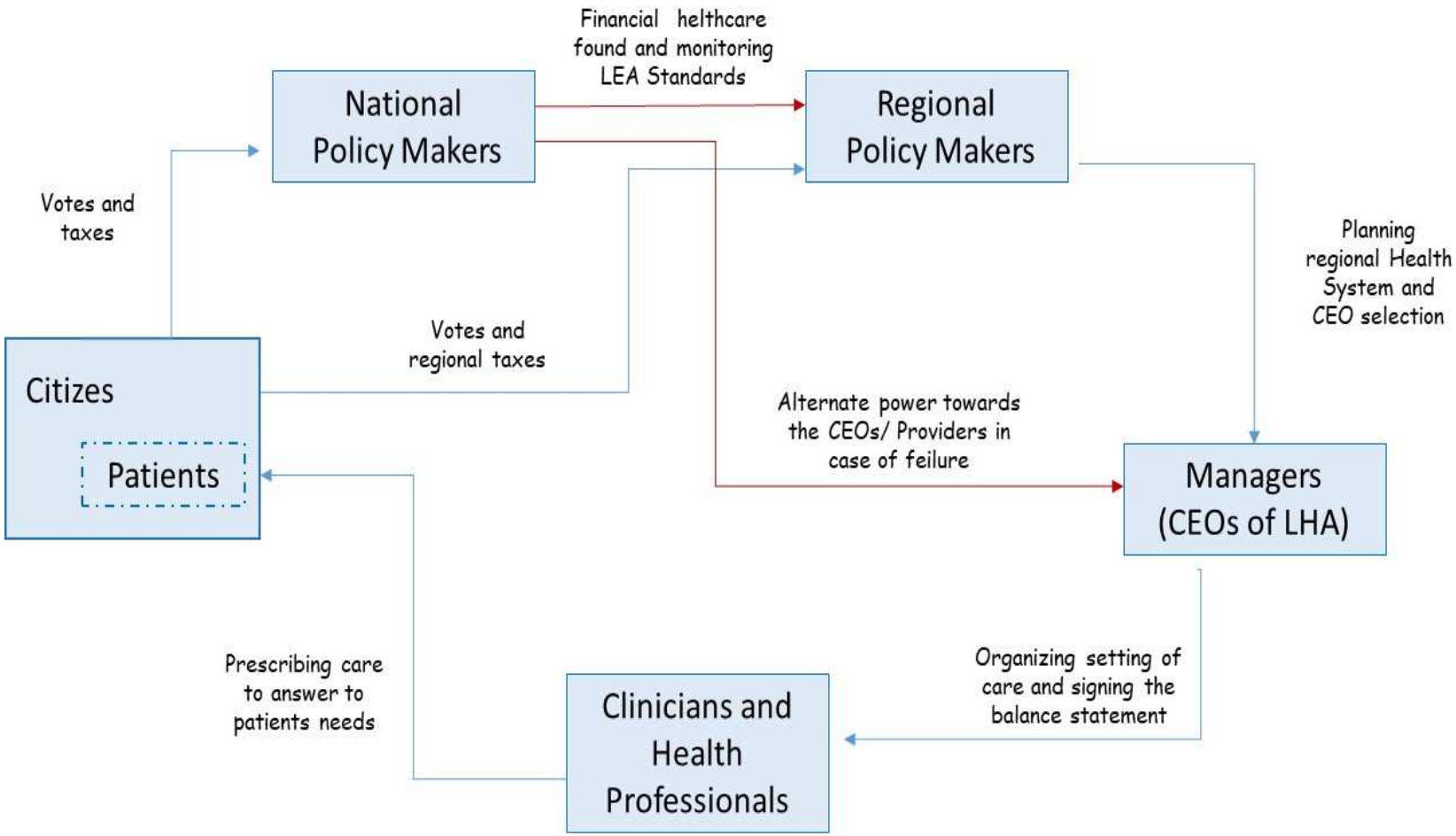
The Italian healthcare system

It's a *Beveridge-like model*: Universal, Comprehensive (almost), Free, Financed by general taxation.

It is organized in three levels:

- The national level is responsible for national health planning, including general aims and annual financial resources and for ensuring a uniform level of services, care and assistance (LEA).
- The regional level has the responsibility for planning, organizing and managing its health care system through LHA's activities in order to meet the needs of their population.
- The local level (Local Health Authorities): provides care through public and/or private hospitals, primary care and prevention services.


Financial helthcare found and monitoring LEA Standards
National Policy Makers
Regional Policy Makers
Votes and taxes
Planning regional Health System and CEO selection
Votes and regional taxes
Citizes
Patients
Alternate power towards the CEOs/ Providers in case of feilure
Managers (CEOs of LHA)
Prescribing care to answer to patients needs
Organizing setting of care and signing the balance statement
Clinicians and Health Professionals

The healthcare system goals

- ✓Quality of care
- ✓Financial sustainability
- ✓Equity

Equity?

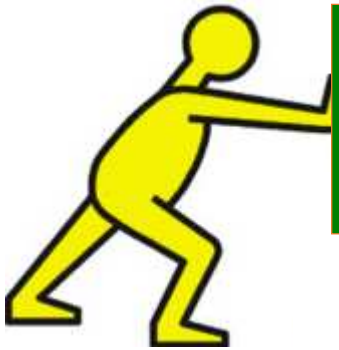
Vertical: “no equal parts for disequal”
(don Lorenzo Milani)

Orizontal: «same needs… same answers»…..
Avoid “Post code medicine”!

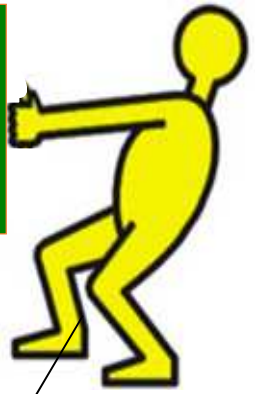
IS ITALY ABLE TO MANAGE
AVOIDABLE VARIATION?

The **national level** duty is granting that essentials levels of care are uniformly guarateed across the country.

It should therefore monitor that each Region reaches minimum thresholds in terms of quality and appropriateness.

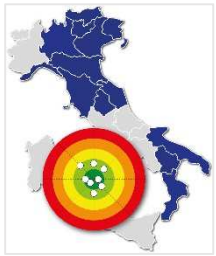


Performance



The **regional level** is responsible for organizing healthcare provision in order to maximize value for money.

Performance evaluation is therefore aimed at detecting best practices, in order to spread the most effective organizational solutions, trought target setting, public disclosure, reward system, **working on employees motivation and comunication** to assure system improvement



performance evaluation at the Italian national level

- National Healthcare Monitoring System (Nuovo Sistema di Garanzia PDTA by MoH)

  →STANDARDS FOR ESSENCIAL LEVELS OF CARE (30 national indicators):

  80% national goal for femur fracture operated within 48 hours, minimum level 55%

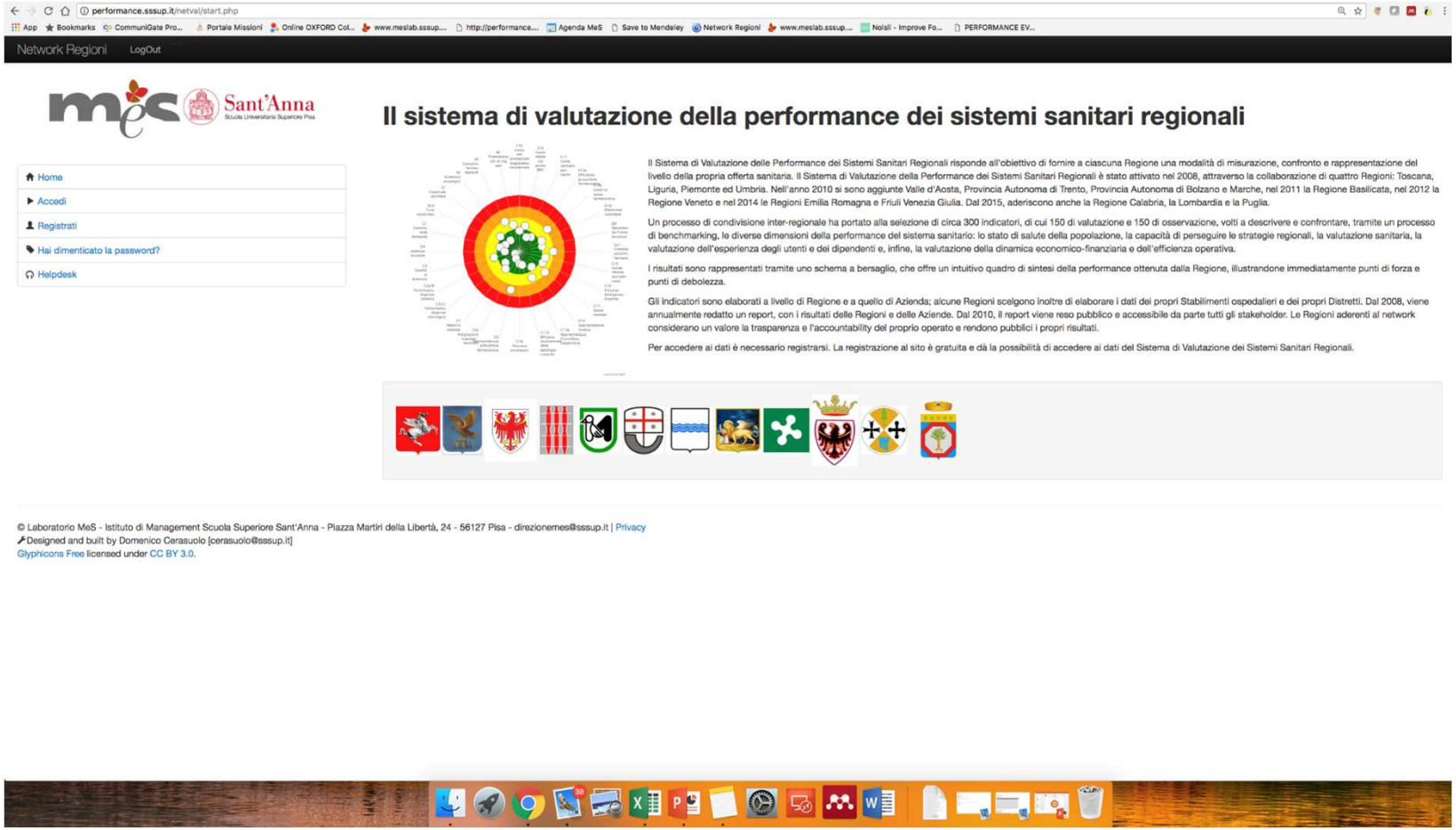
- National Program Outcomes (Piano Nazionale Esiti promoted by AGENAS http://pne2017.agenas.it/)

  → OUTCOME MEASURES FOR SINGLE PROCEDURES

performance evaluation at the regional level:

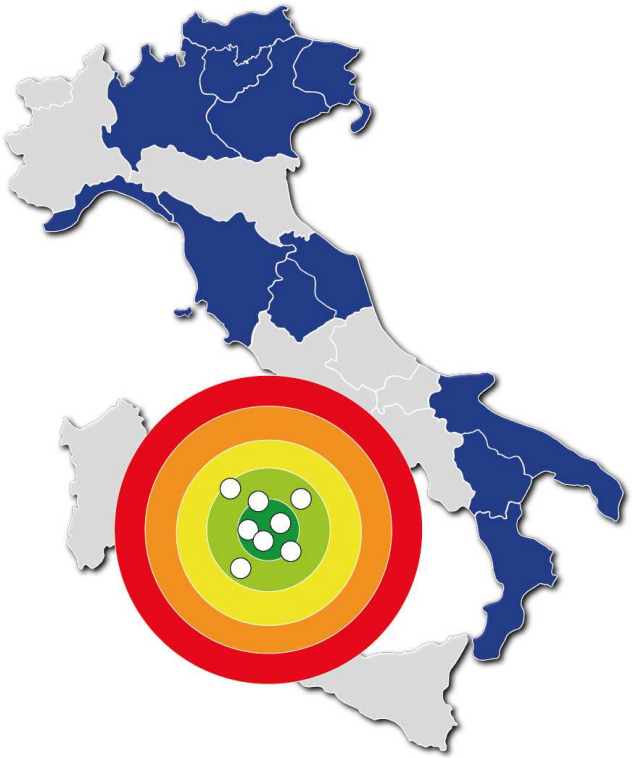
IRPES

Inter Regional Performance Evaluation System



http://performance.sssup.it/netval

The multidimensional reporting system shared by the network of the Italian regions



1. Measuring and benchmarking performance among Regions…

on a voluntary basis …

2. With data public disclosure…

with a Public University guaranteeing the benchmarking process…

3. Engaging health professionals in the process…

Setting targets and priorities…

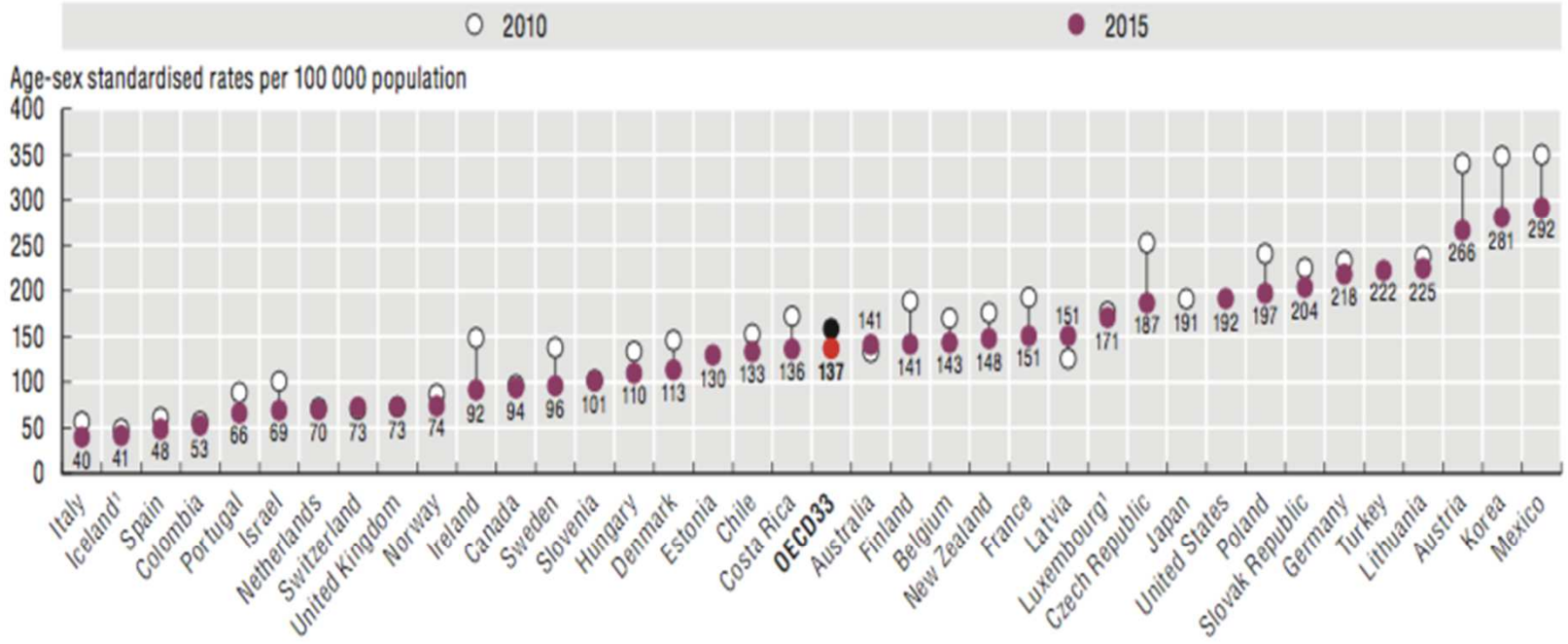
Improving and reducing avoidable variation…

Some examples:

Avoidable hospitalizations for chronic diseases

Quality indicators on primary care

6.11. Diabetes hospital admission in adults, 2010 and 2015 (or nearest year)

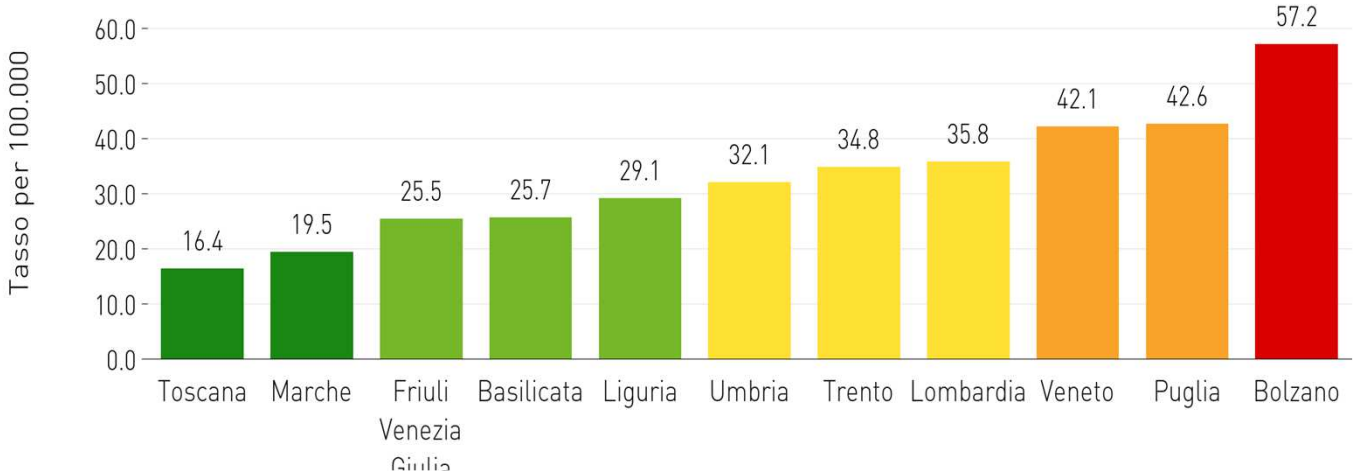


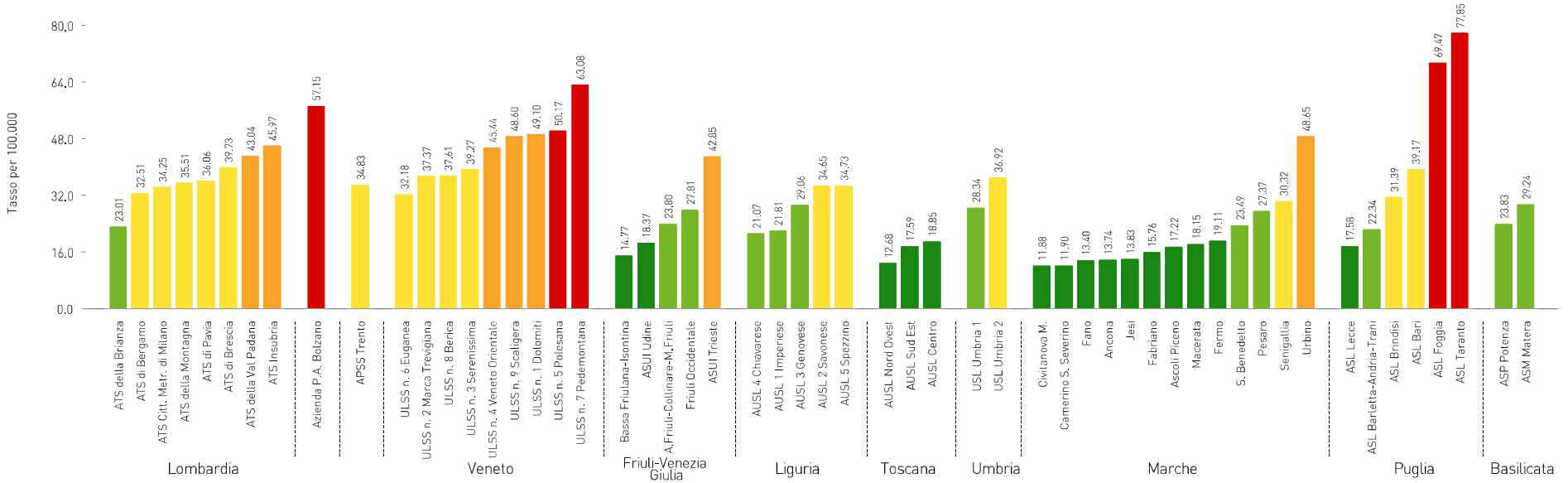
1. Three-year average.

Source: OECD Health Statistics 2017.

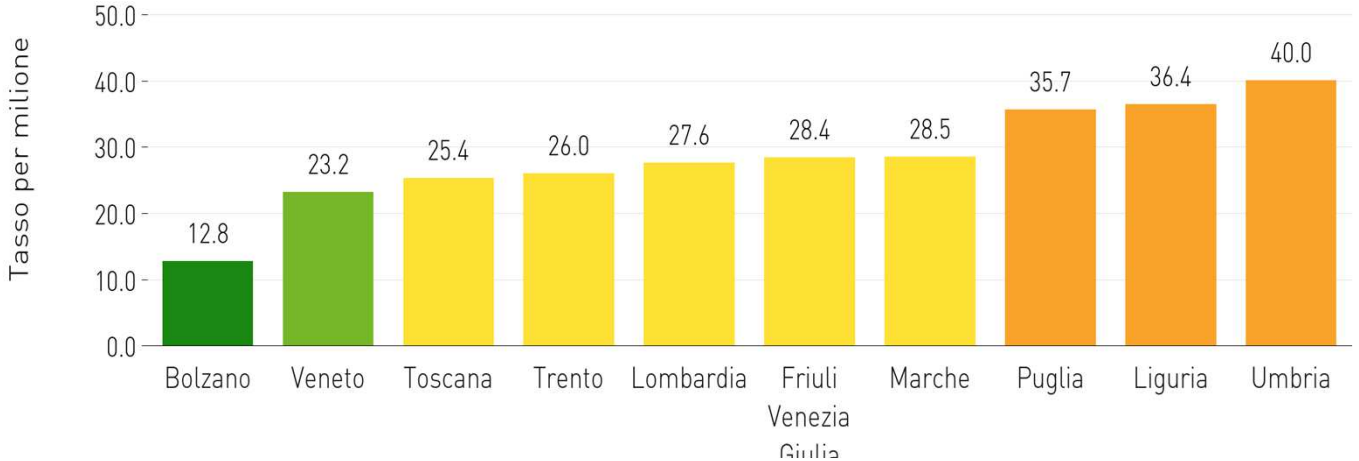
StatLink http://dx.doi.org/10.1787/888933603545

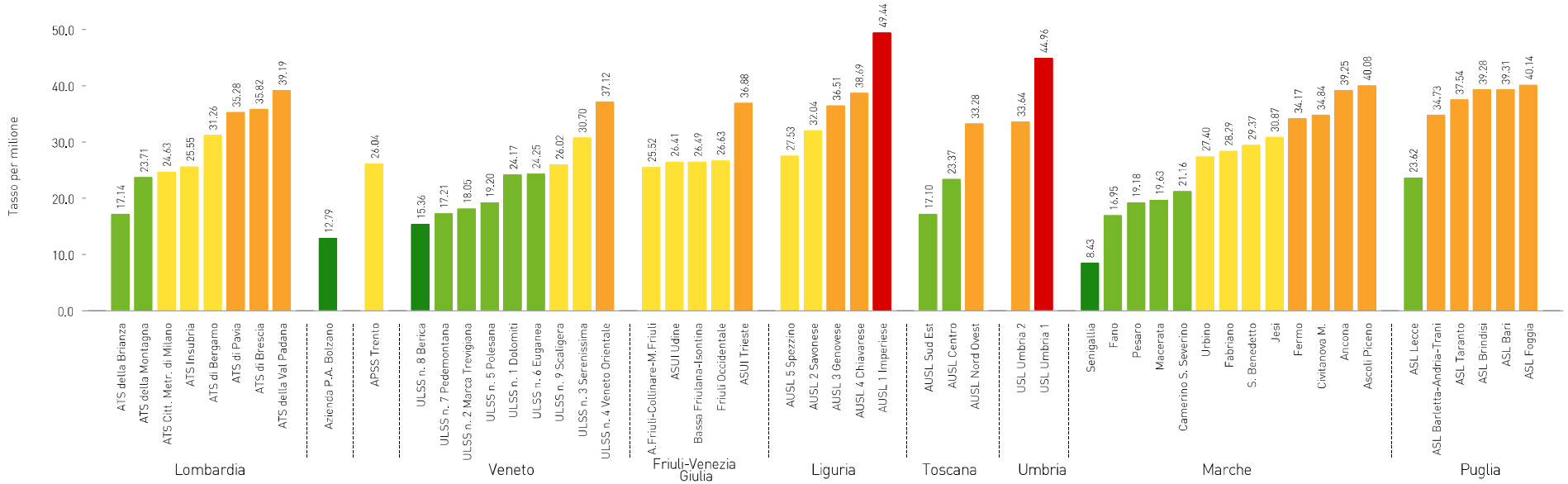
Diabetes hospitalization rate (35-74 years) 2017



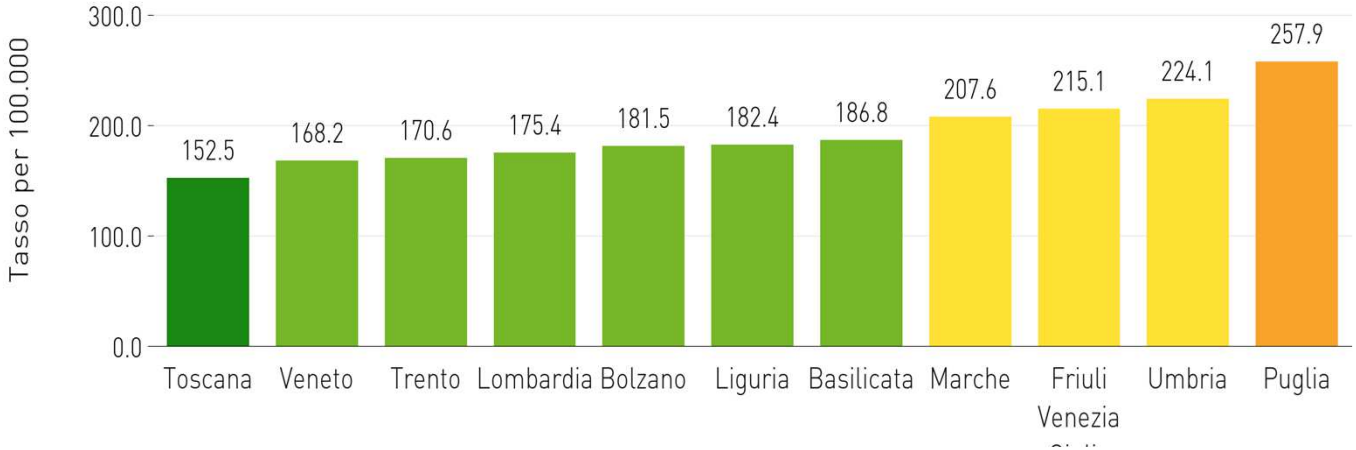


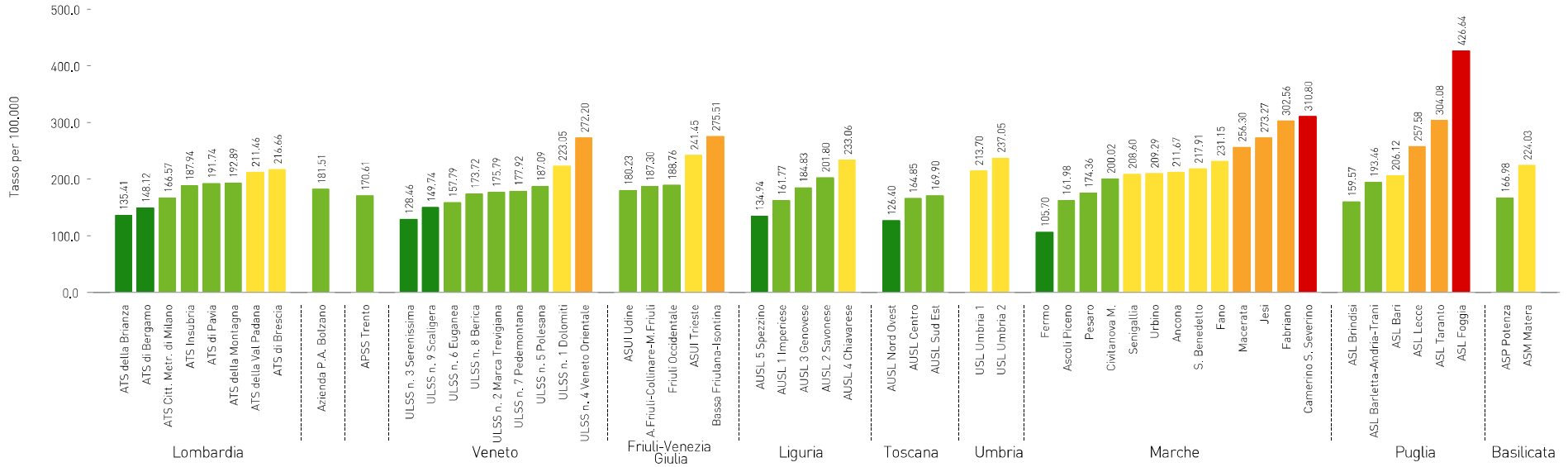
Major amputation rate for diabetes, 2017



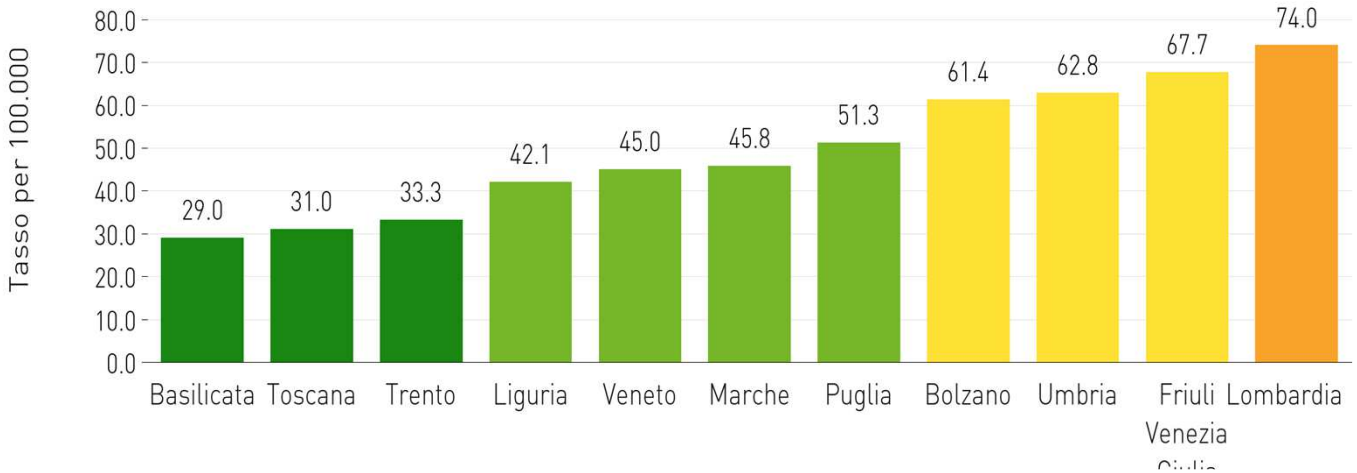


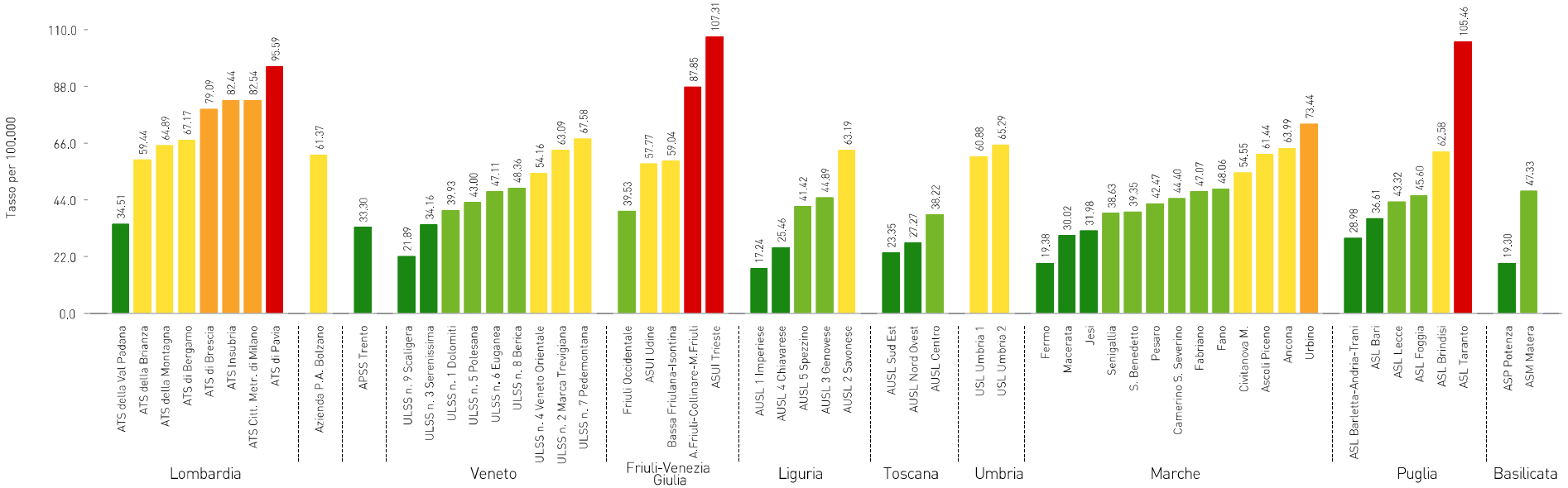
Chronic Heart Failure hospitalization rate (50-74 years) 2017



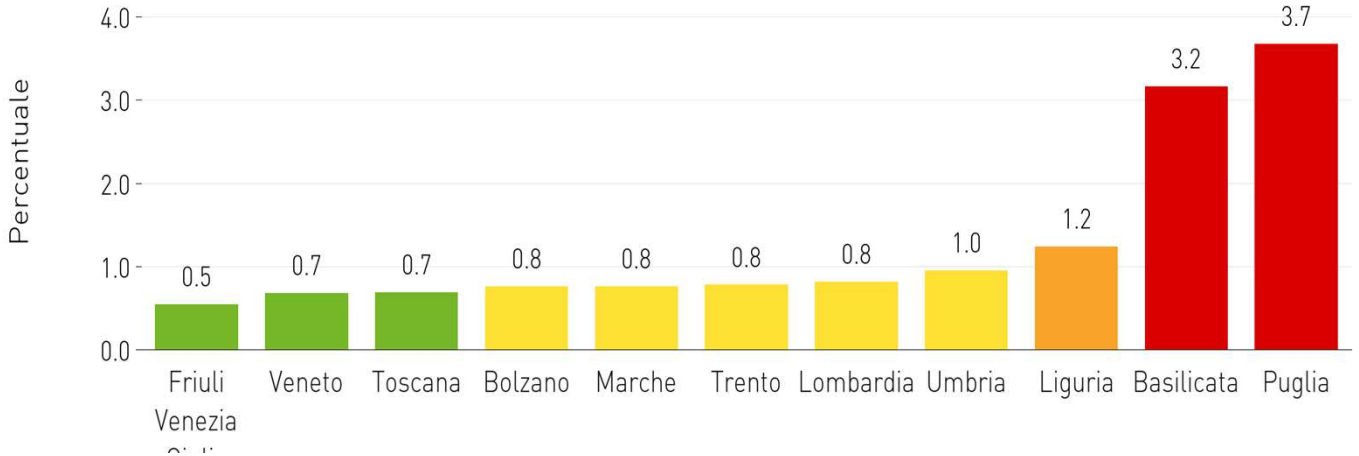


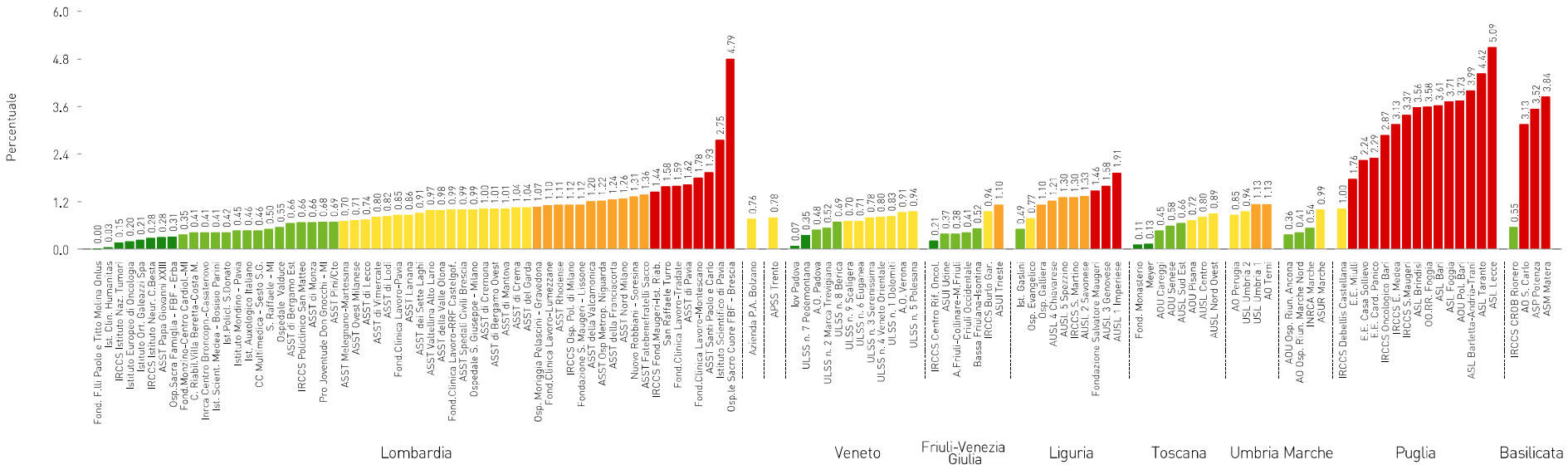
COPD hospitalization rate (50-74 years), 2017



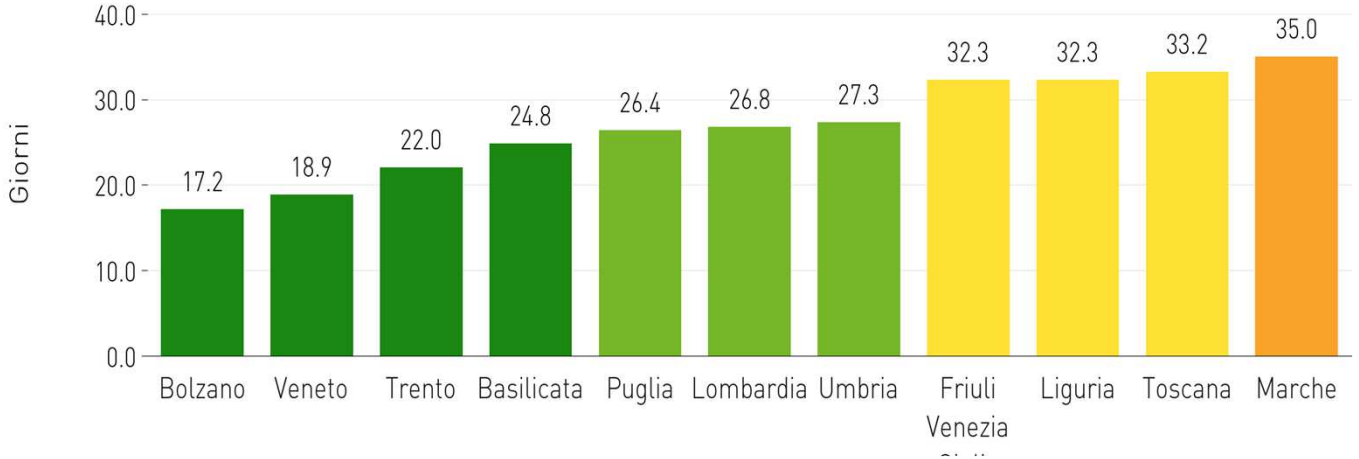


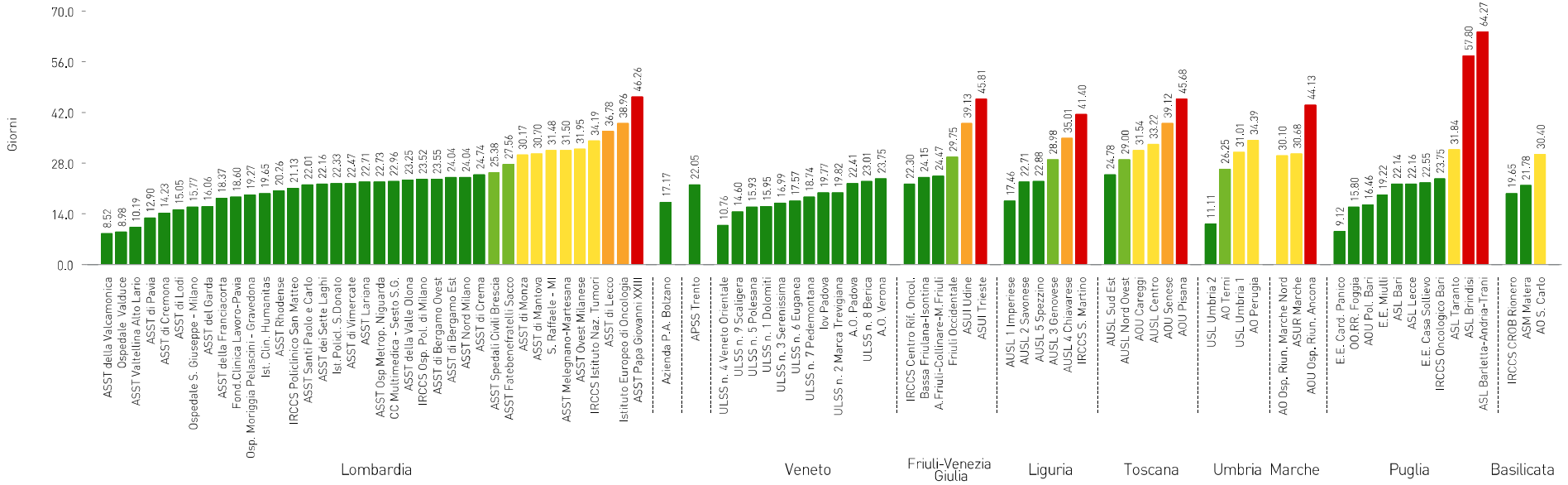
Percentage of patients leaving hospital against medical advice (PLHAMA), 2017





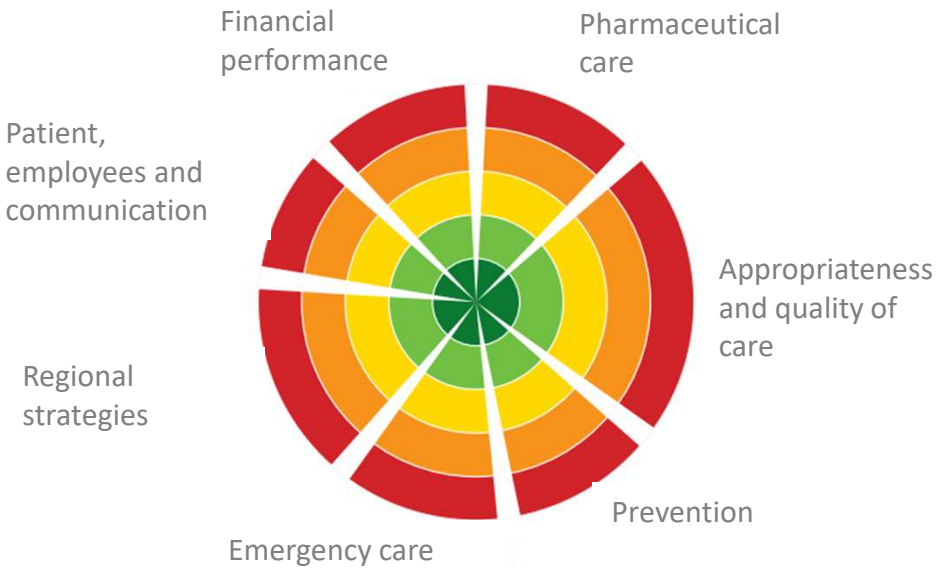
Average waiting times for breast cancer surgery, 2017





The multidimensional reporting system shared by the network of the Italian regions

In order to describe the performance evaluation system, **seven** areas have been identified to highlight the core results of the regional healthcare system



SCORE	BAND COLOUR	PERFORMANCE
4 - 5	DARK GREEN	EXCELLENT
3 - 4	GREEN	GOOD
2 - 3	YELLOW	AVERAGE
1 - 2	ORANGE	POOR
0 - 1	RED	VERY POOR

Valutazione dello stato di salute della popolazione (anni 2013-2015)

A1 Mortalita' infantile

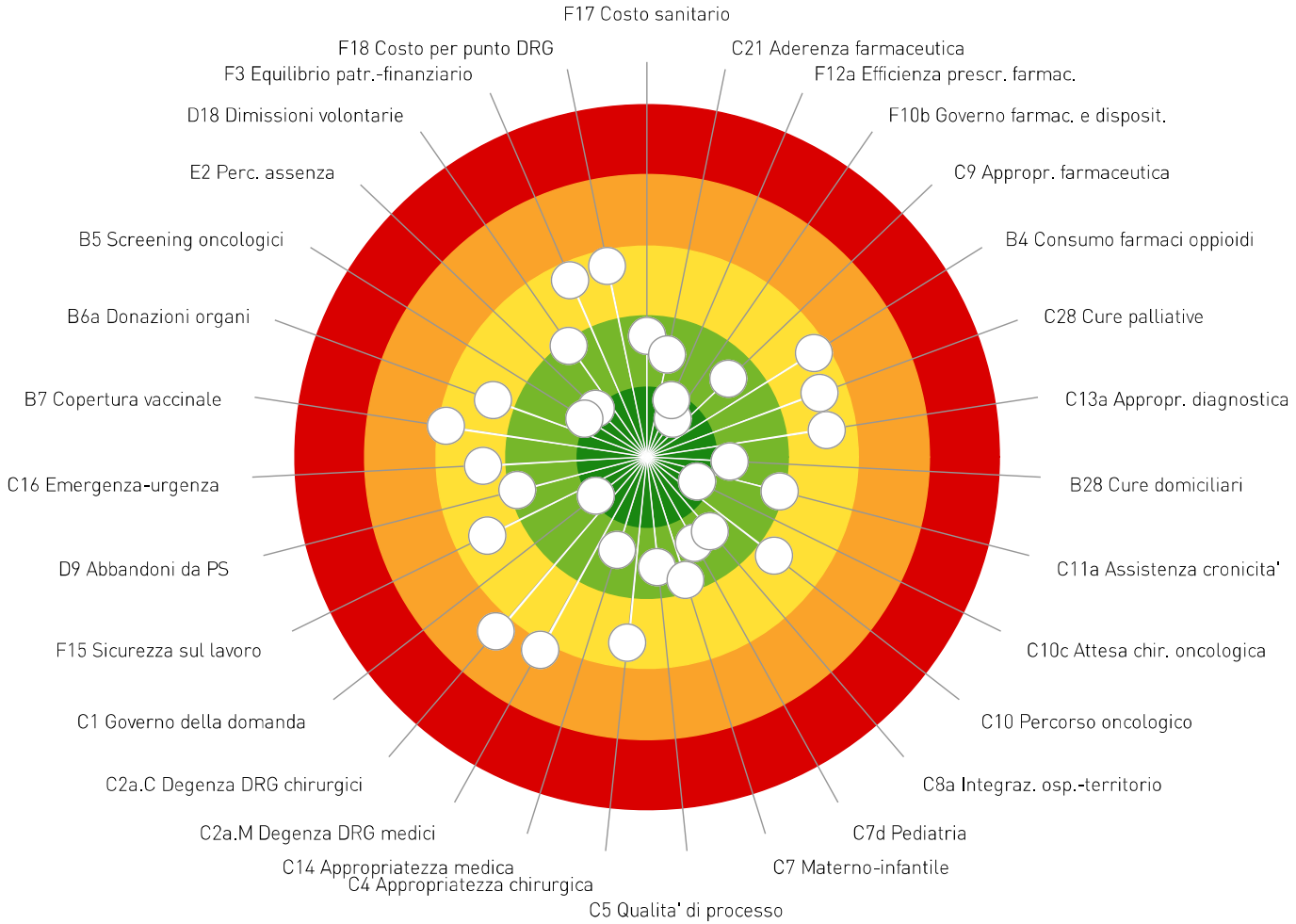
A2 Mortalita' per tumori

A3 Mortalita' per malattie circolatorie

A4 Mortalita' per suicidi

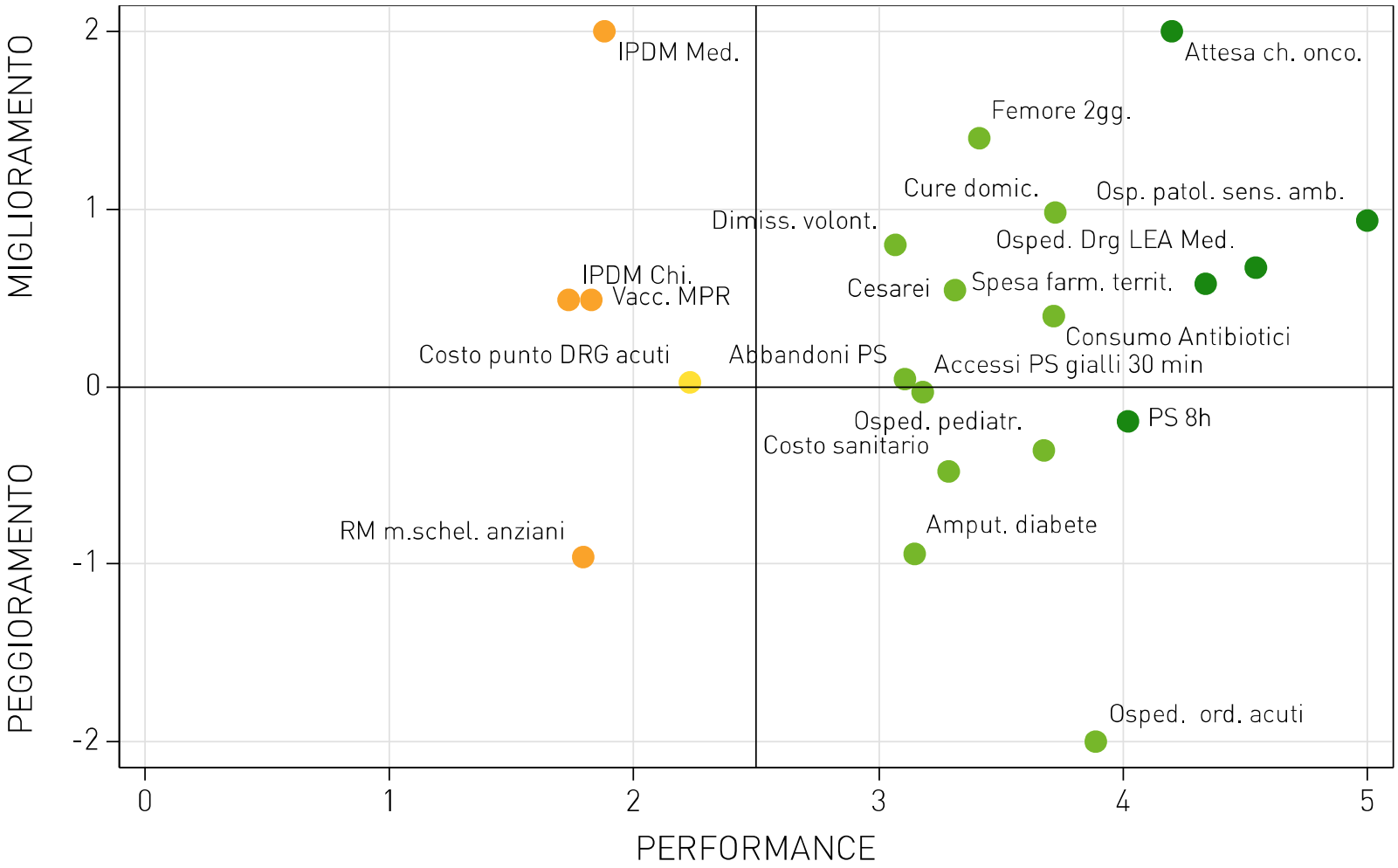
A10 Stili di vita (PASSI)

Bersaglio 2017
Veneto



Mappe di performance e trend (2016-2017) – Selezione indicatori principali

Regione:Veneto



Andamento indicatori / Trend 2016-2017

Valutazione dello stato di salute della popolazione (anni 2013-2015)

A1 Mortalita' infantile

A2 Mortalita' per tumori

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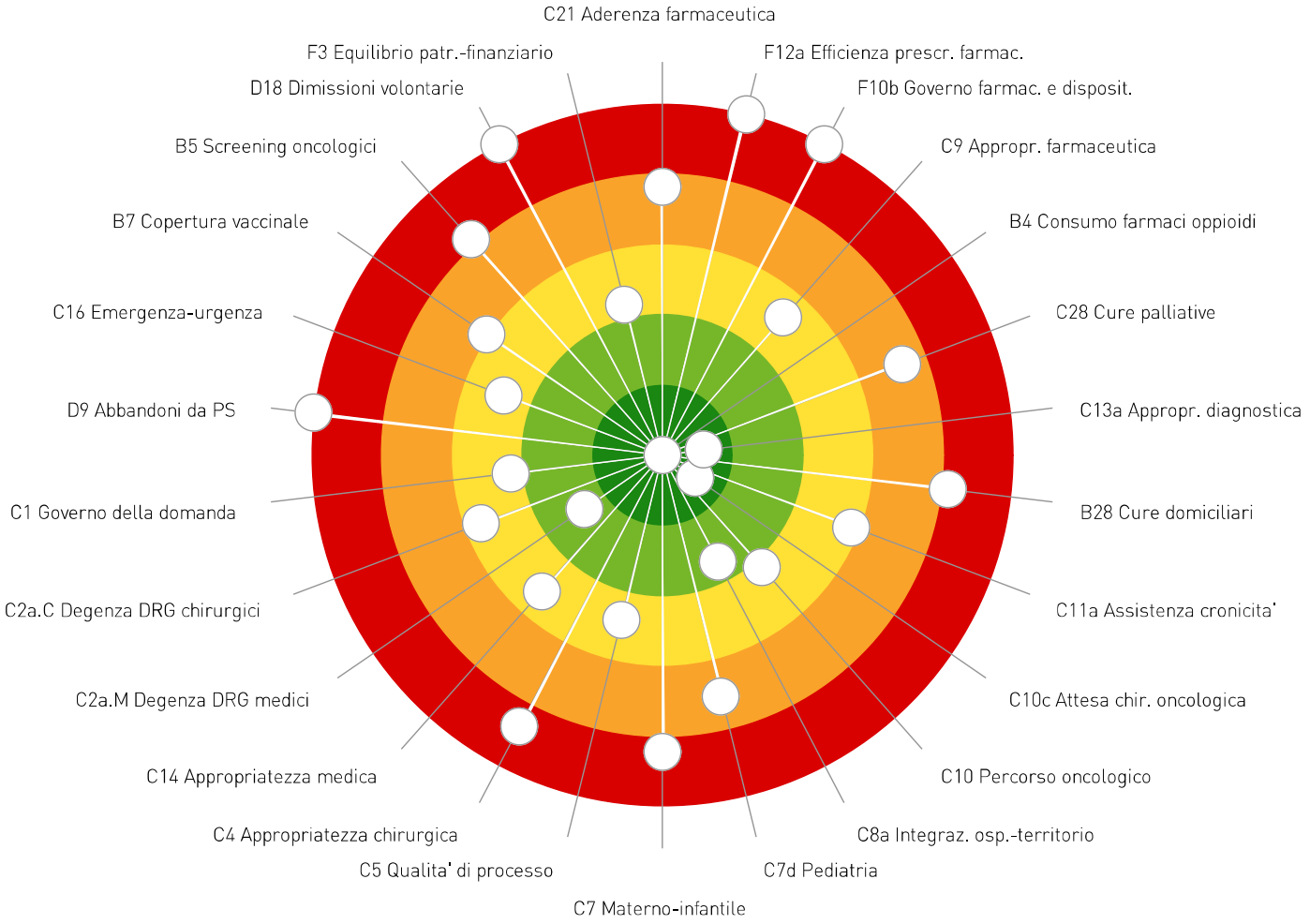
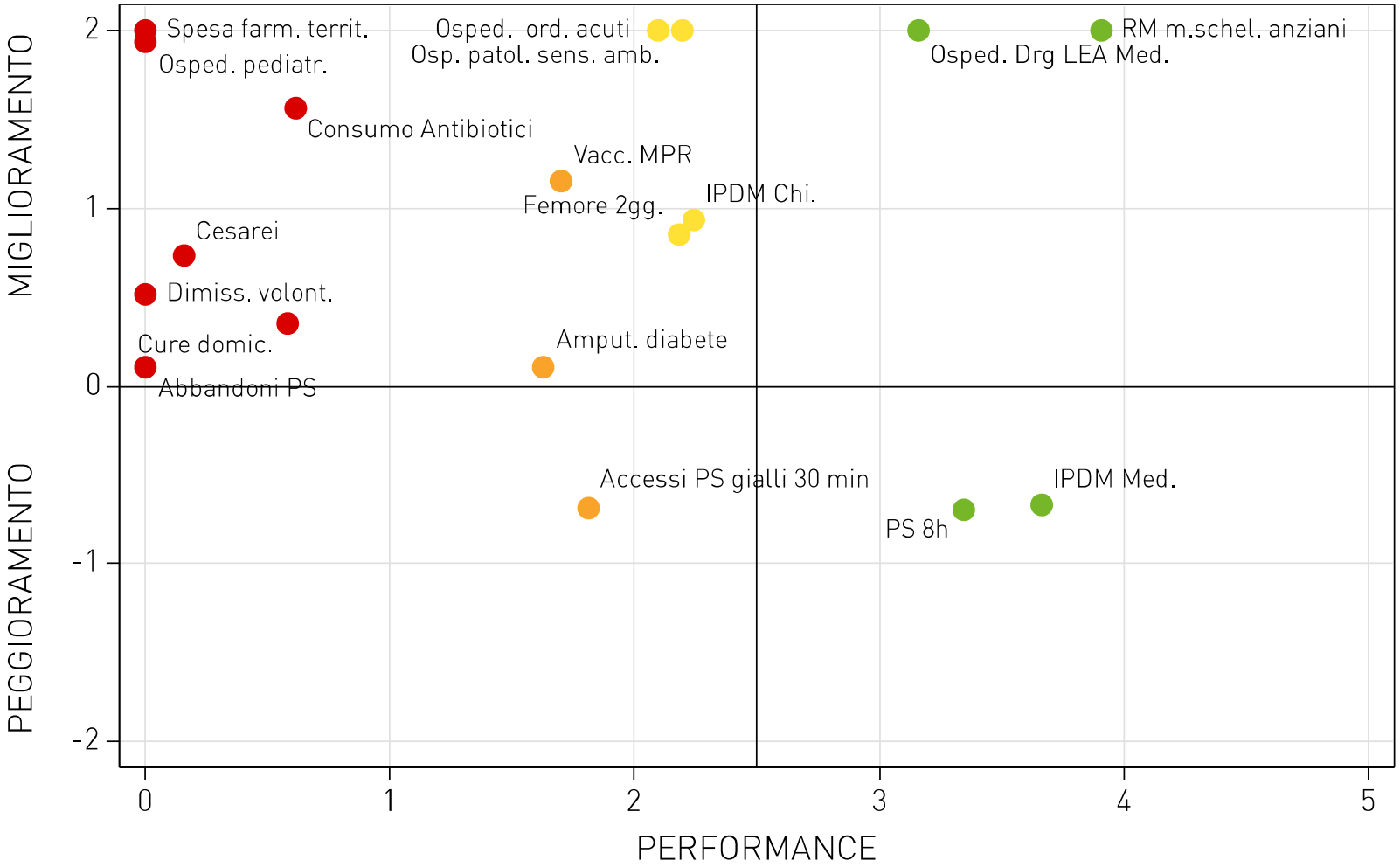
A10 Stili di vita (PASSI)

Bersaglio 2017
Puglia



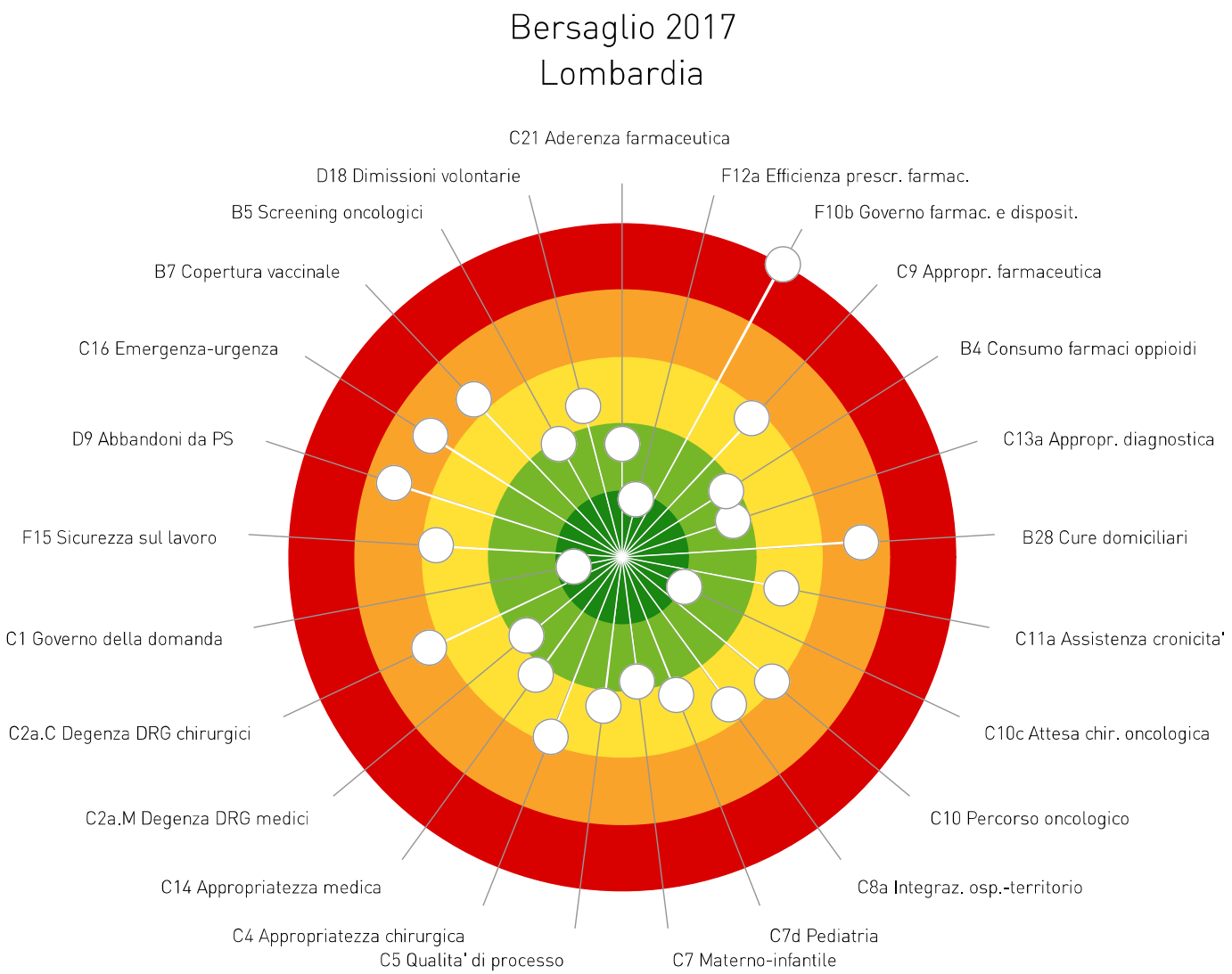
Mappe di performance e trend (2016-2017) – Selezione indicatori principali

Regione:Puglia



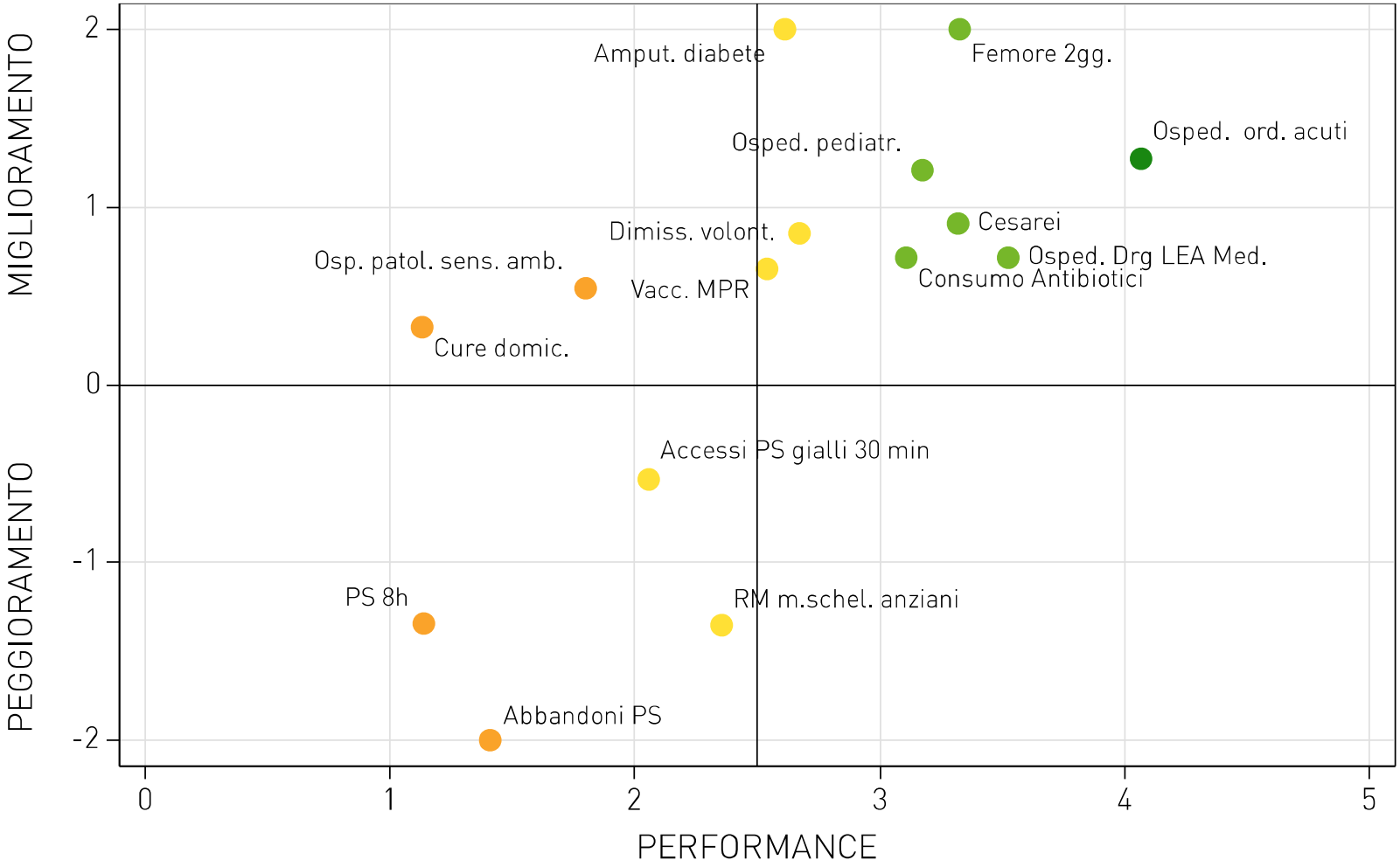
Andamento indicatori / Trend 2016-2017

A1
Mortalita' infantile



Mappe di performance e trend (2016-2017) – Selezione indicatori principali

Regione:Lombardia



Andamento indicatori / Trend 2016-2017

Valutazione dello stato di salute della popolazione (anni 2013-2015)

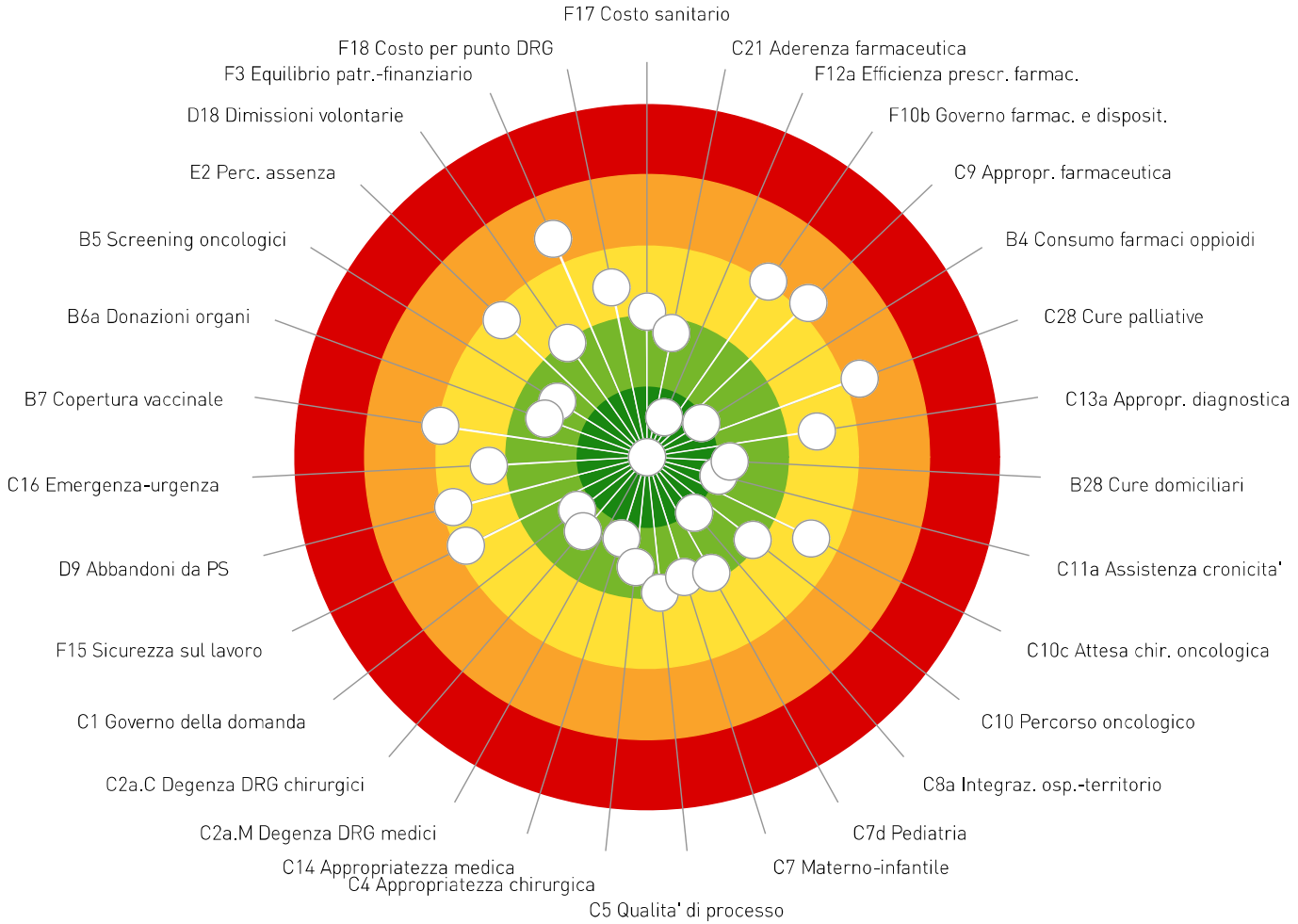
A1 Mortalita' infantile

A2 Mortalita' per tumori

A3 Mortalita' per malattie circolatorie

A4 Mortalita' per suicidi

Bersaglio 2017
Toscana



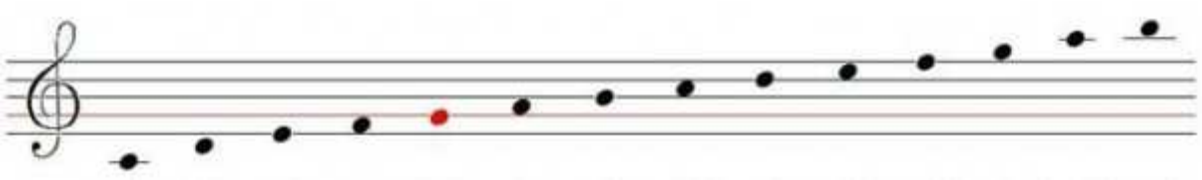
Mappe di performance e trend (2016-2017) – Selezione indicatori principali

Regione:Toscana

Andamento indicatori / Trend 2016-2017

THE PERFORMANCE EVALUATION SYSTEM MUST OVERCOME THE SILOS PERSPECTIVE….

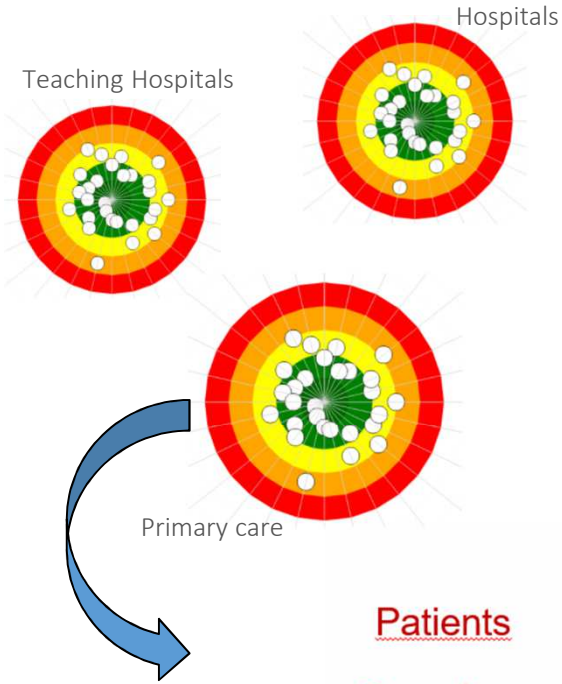
Let’s play the patient’s music….

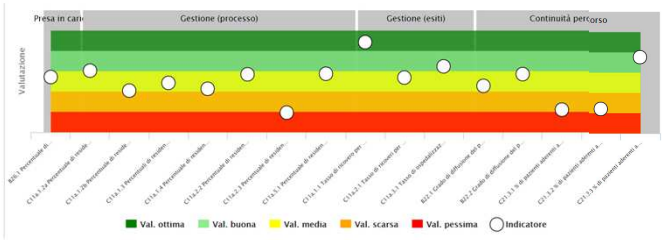


the positive metaphor of the “stave”

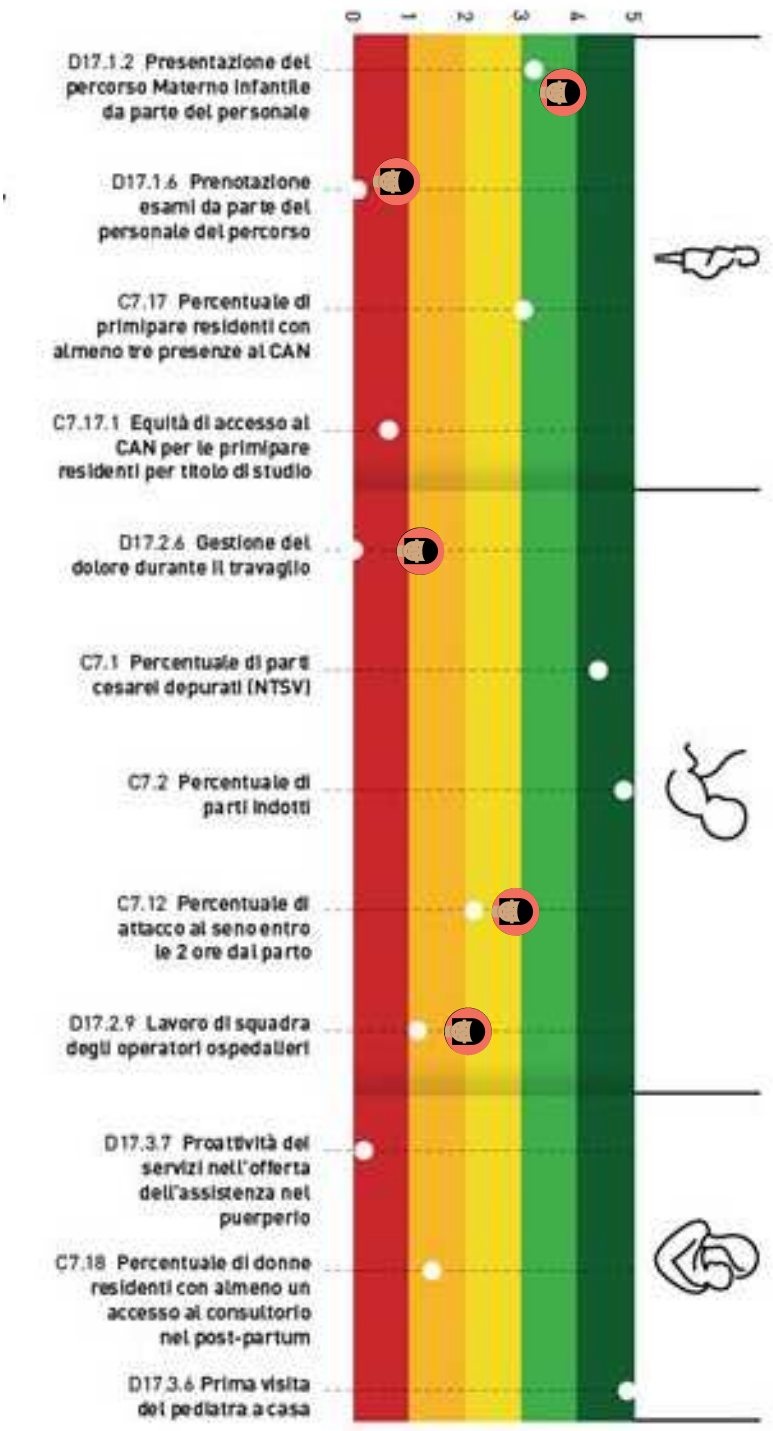
The stave, as well as the dartboard, relies on the five colour bands (from red to dark-green). These bands are now displayed horizontally and are framed to represent the different phases of care pathways. This view allows users to focus on strengths and weaknesses characterizing the healthcare service delivery in the different pathway phases.

From Siloes to Pathways

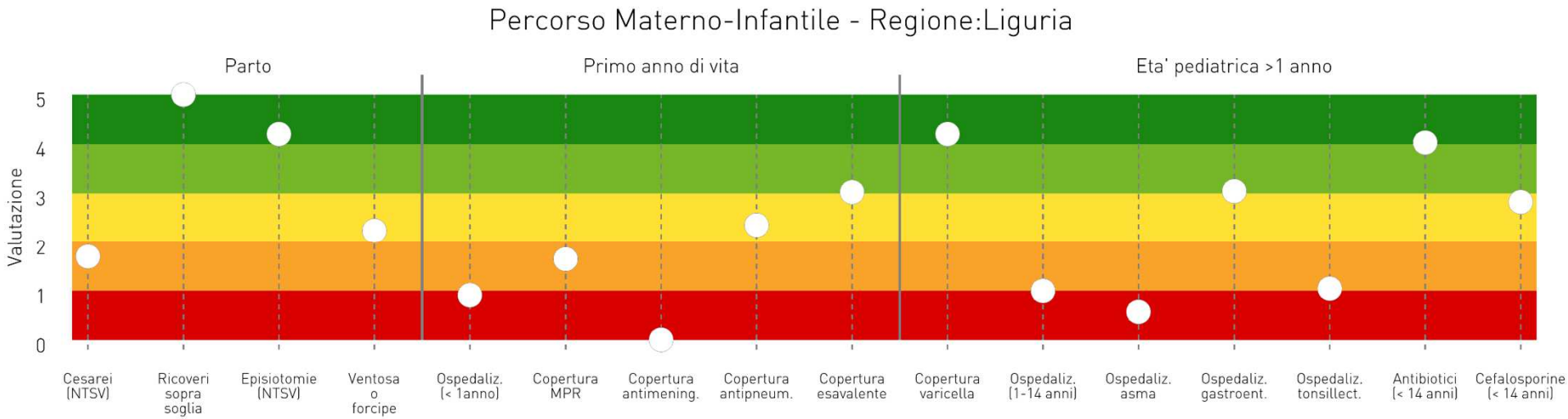




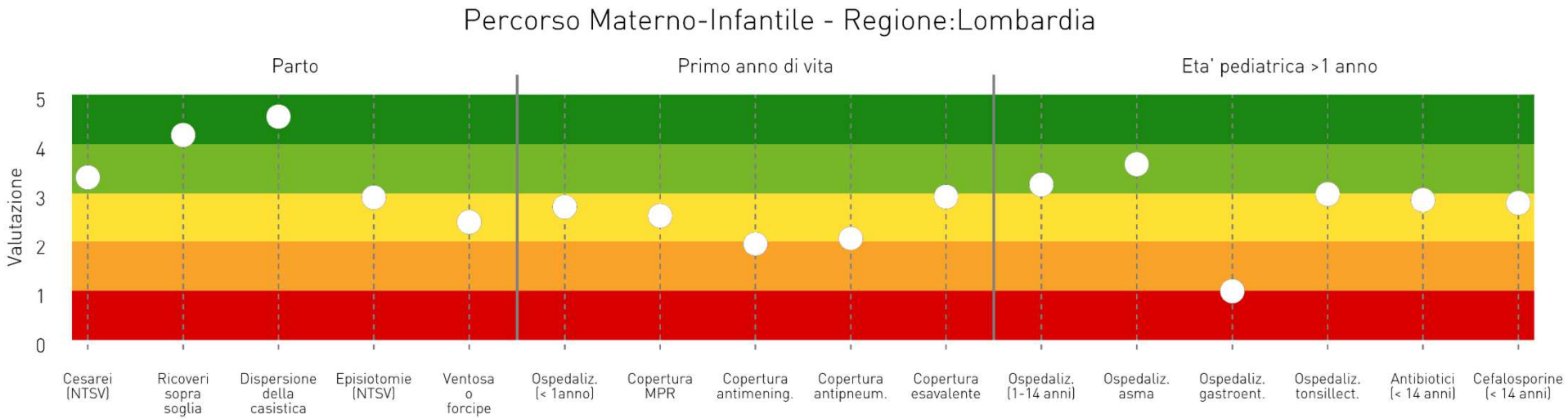
	Experience	Outcome	Adherence
Patients	PREMs	PROMs	…
Caregivers	…	…	…
Professionals	…	…	…


0
1
2
3
4
5
D17.1.2 Presentazione del percorso Materno Infantile da parte del personale
D17.1.6 Prenotazione esami da parte del personale del percorso
C7.17 Percentuale di primipare residenti con almeno tre presenze al CAN
C7.17.1 Equità di accesso al CAN per le primipare residenti per titolo di studio
D17.2.6 Gestione del dolore durante il travaglio
C7.1 Percentuale di parti cesarei depurati (NTSV)
C7.2 Percentuale di parti indotti
C7.12 Percentuale di attacco al seno entro le 2 ore dal parto
D17.2.9 Lavoro di squadra degli operatori ospedalieri
D17.3.7 Proattività dei servizi nell'offerta dell'assistenza nel puerperio
C7.18 Percentuale di donne residenti con almeno un accesso al consultorio nel post-partum
D17.3.6 Prima visita del pediatra a casa

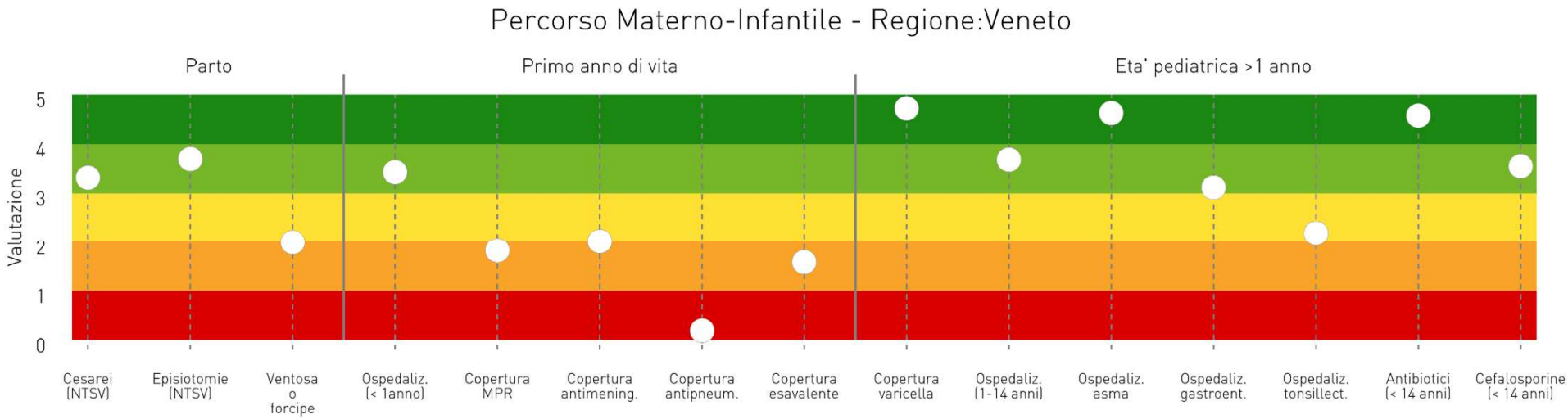
Performance 2017



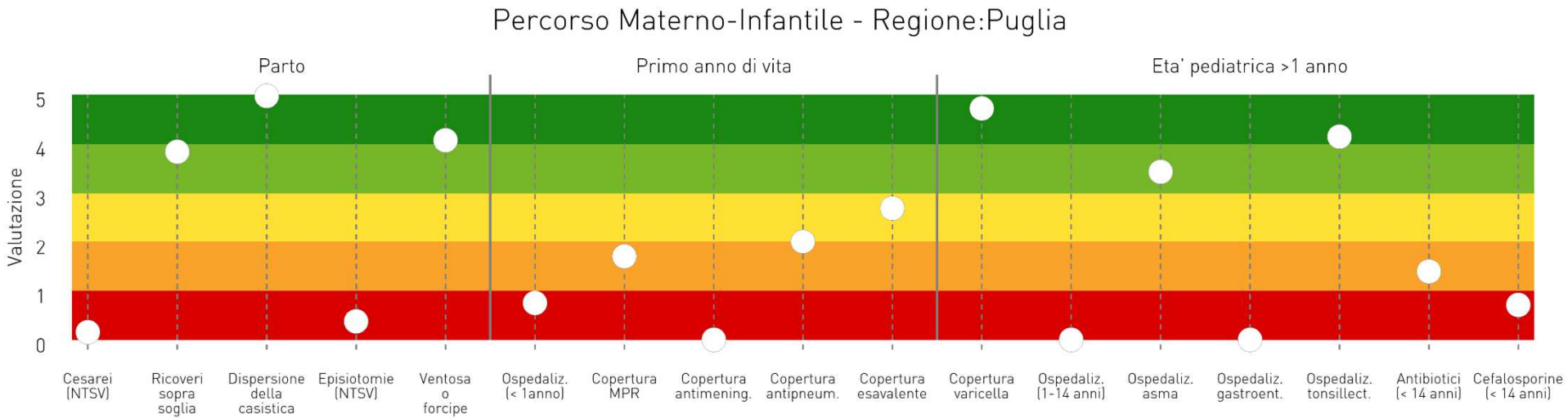
Performance 2017



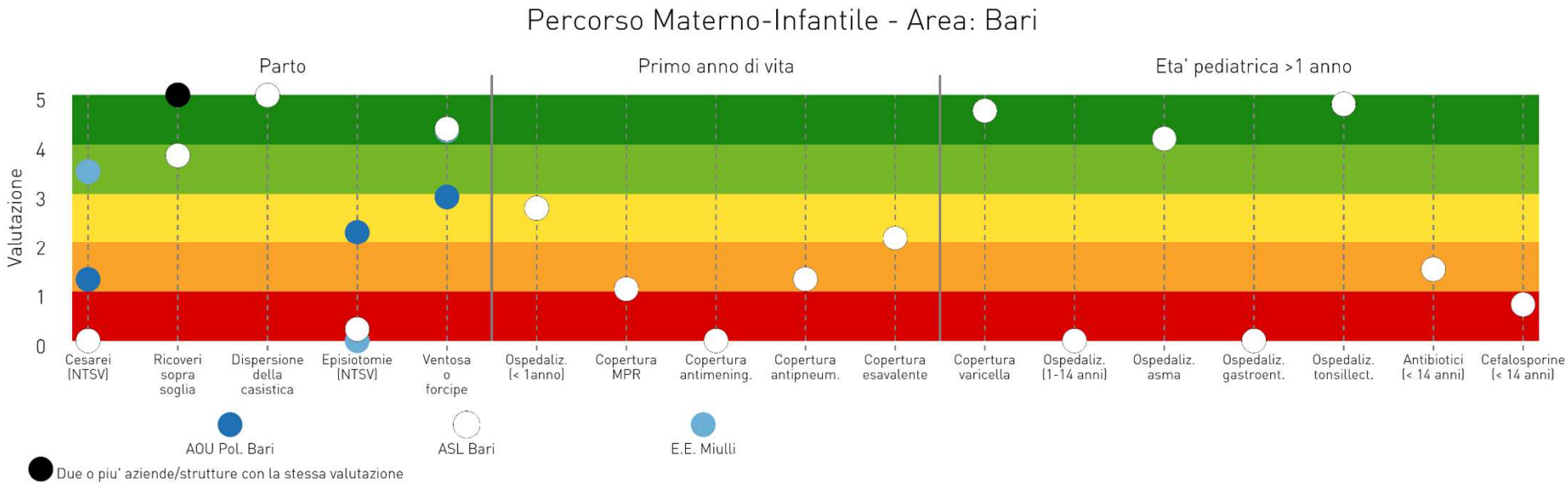
Performance 2017



Performance 2017

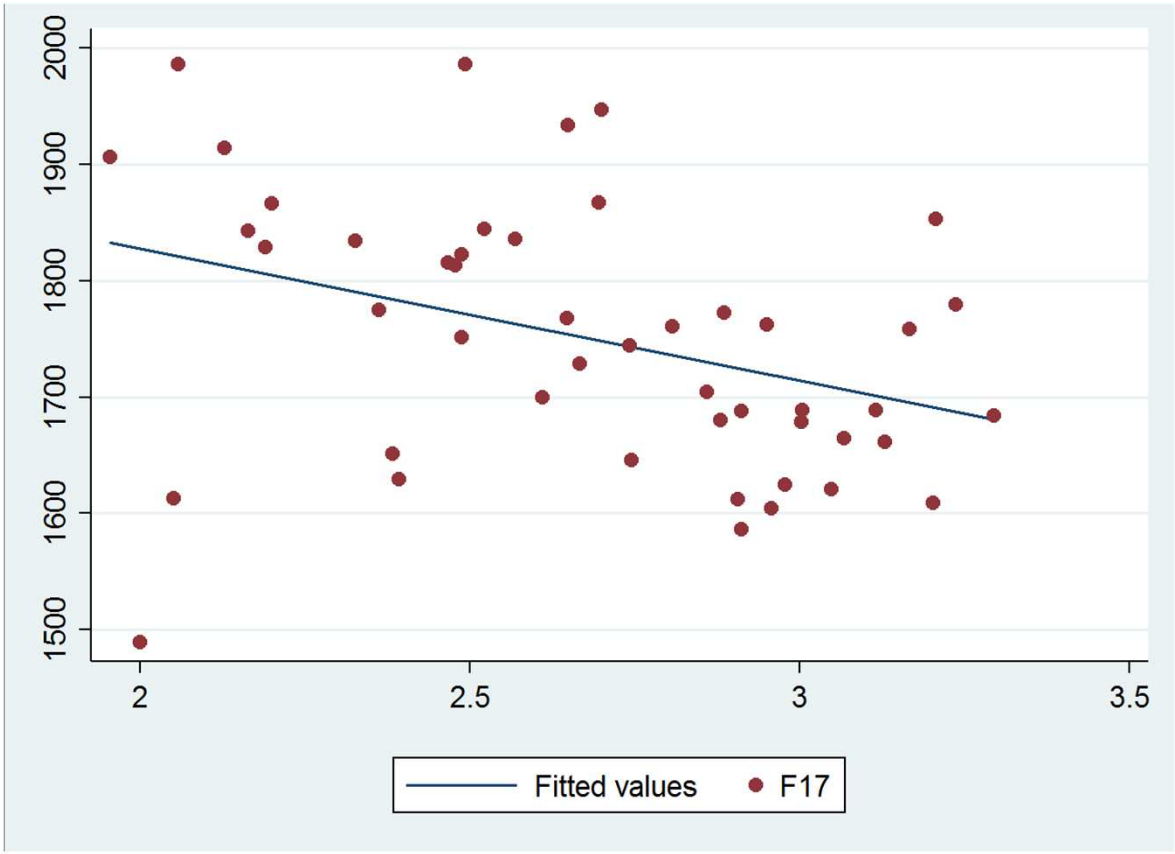


Performance 2017

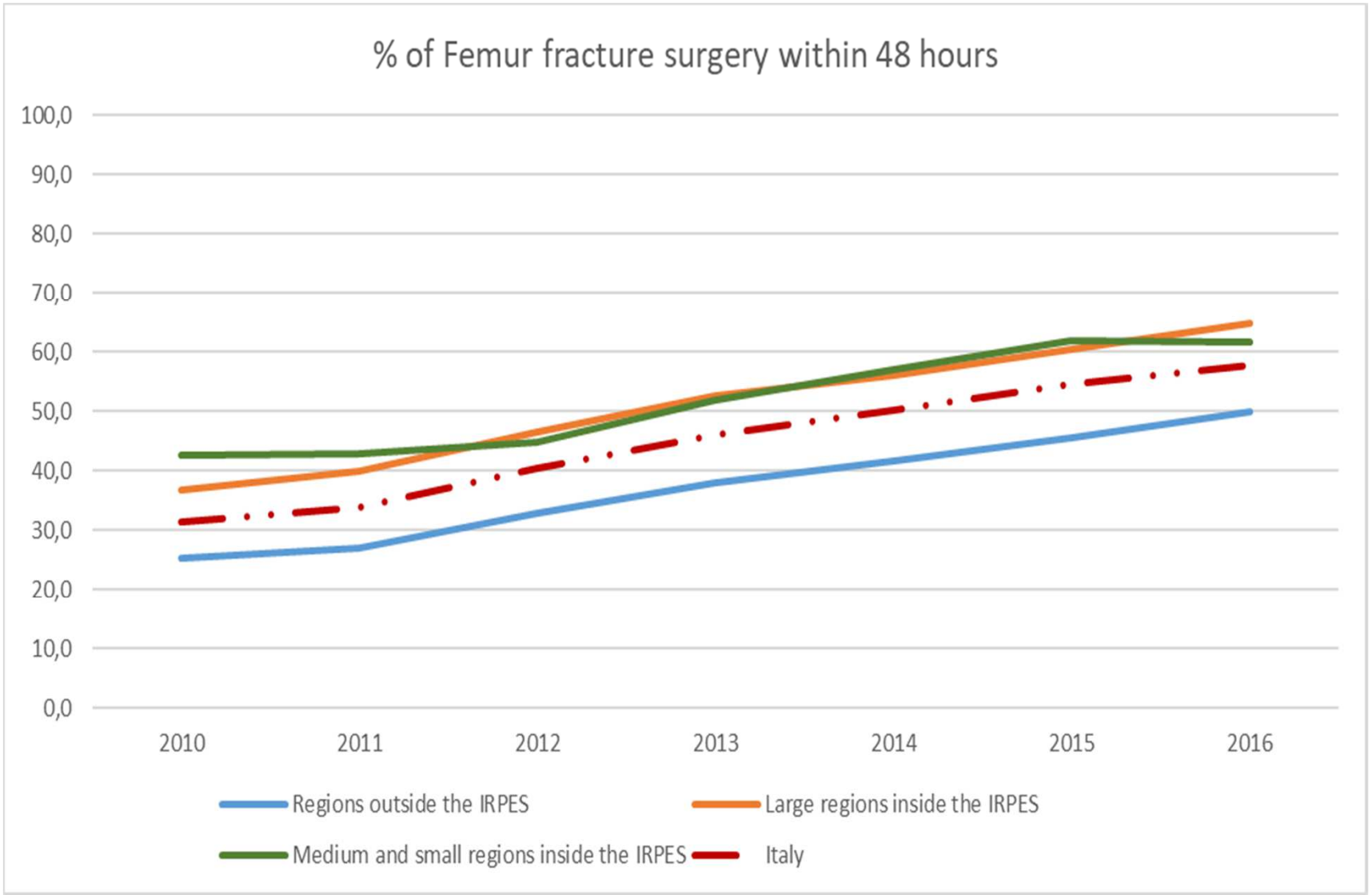


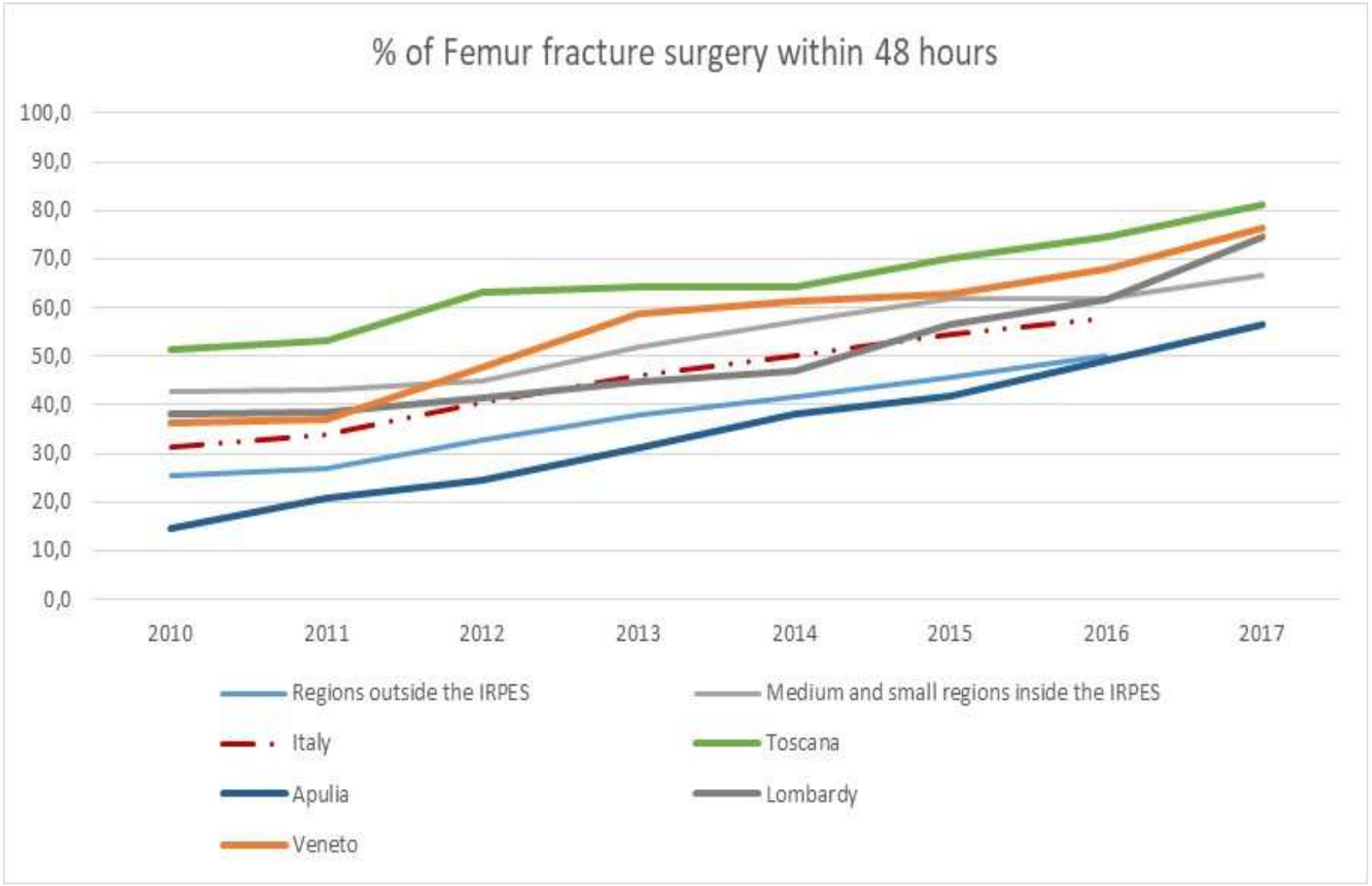
Relationship between per capita cost and global perfomance

Relazione	Indice di correlazione di Pearson	P value
F17 – Performance	- 0.3638	P=0.0110



What are the results achieved by the Italian Healthcare system? What have we learnt?

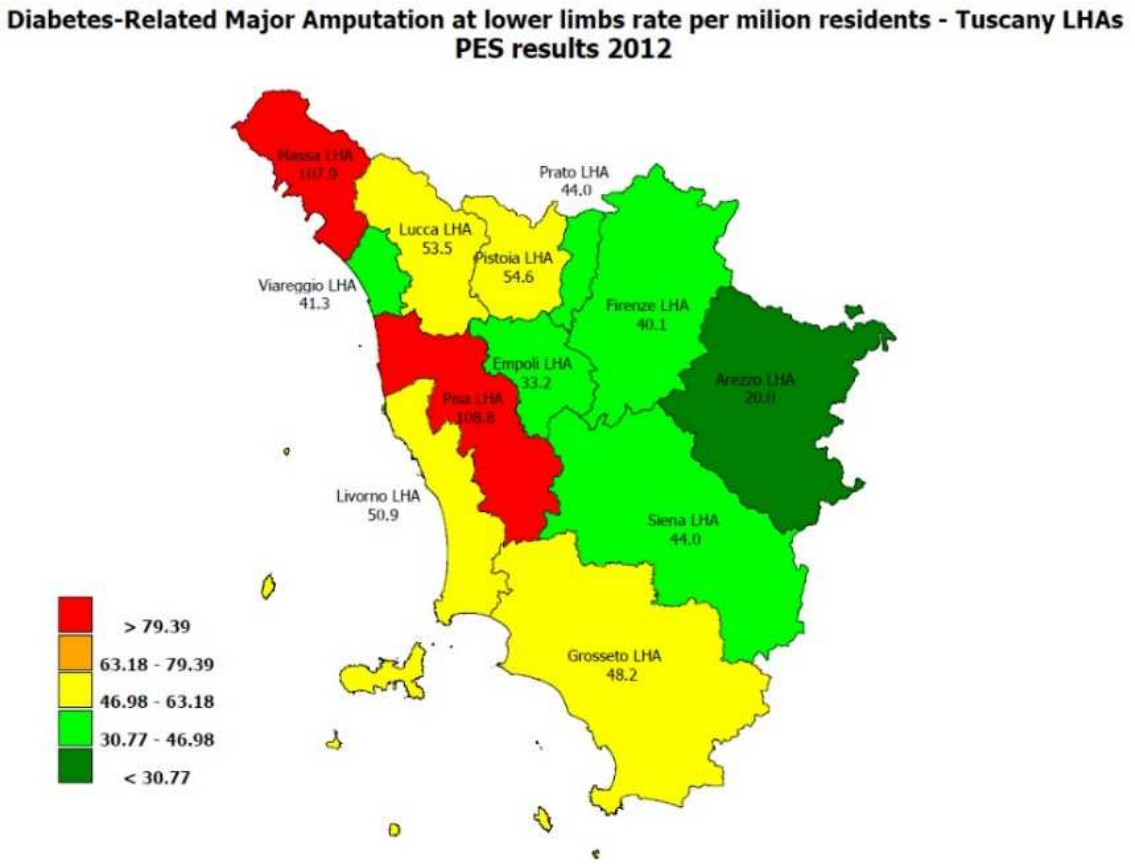



% of Femur fracture surgery within 48 hours
100,0
90,0
80,0
70,0
60,0
50,0
40,0
30,0
20,0
10,0
0,0
2010
2011
2012
2013
2014
2015
2016
2017
Regions outside the IRPES
Medium and small regions inside the IRPES
Italy
Toscana
Apulia
Lombardy
Veneto

	Region	Percentage of improved indicators	Percentage of stable indicators	Percentage of worsened indicators
Medium and large Regions (>2M inhabitants)	Puglia	62.3%	13.0%	24.7%
	Toscana	51.5%	16.2%	32.3%
	Lombardia	52.2%	20.3%	27.5%
	Veneto	61.7%	17.0%	21.3%
	Average	56.9%	16.6%	26.5%
Medium Regions (1-2M inhabitants)	FVG	51.6%	18.3%	30.1%
	Umbria	49.5%	15.1%	35.5%
	Liguria	51.6%	16.8%	31.6%
	Marche	50.0%	19.5%	30.5%
	Average	50.7%	17.4%	31.9%
Small Regions (<1M inhabitants)	Basilicata	46.2%	15.4%	38.5%
	Bolzano	51.7%	14.6%	33.7%
	Trento	50.6%	11.8%	37.6%
	Average	49.5%	13.9%	36.6%

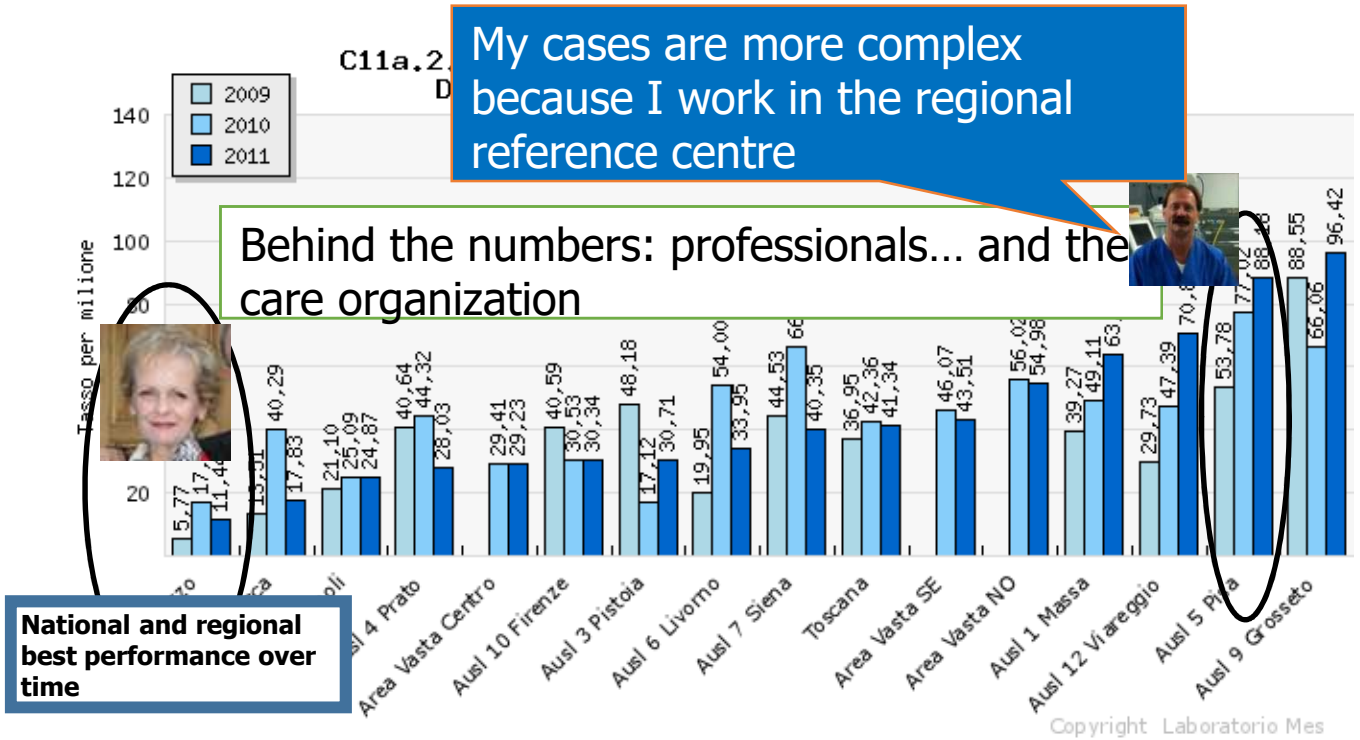
The **size** of the Region is relevant !!!

Improvement process in the large Regions: the story of the diabetic foot in Tuscany…



Diabetes-Related Major Amputation at lower limbs Rate per million residents – MeS-Lab Tuscany PES results, 2012.
Source: MeS-Lab

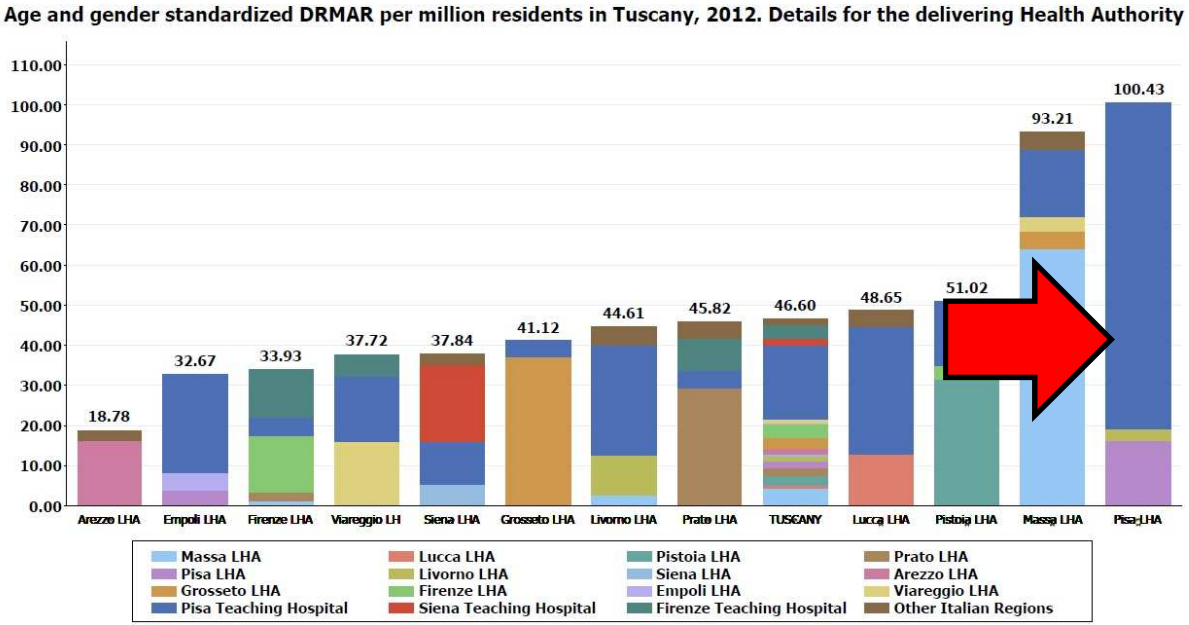
Diabetes-related major amputation rate per million residents in Tuscan Local Health Authorities (LHAs), 2009-2011



Differences could not be fully explained by the diabetes prevalence across LHAs

Changing the perspective…where patients are treated

Age- and gender-standardized Diabetes-Related Major Amputation at lower limbs per million residents in Tuscany, 2012. Details for the delivering Health Authority. Source MeS-Lab



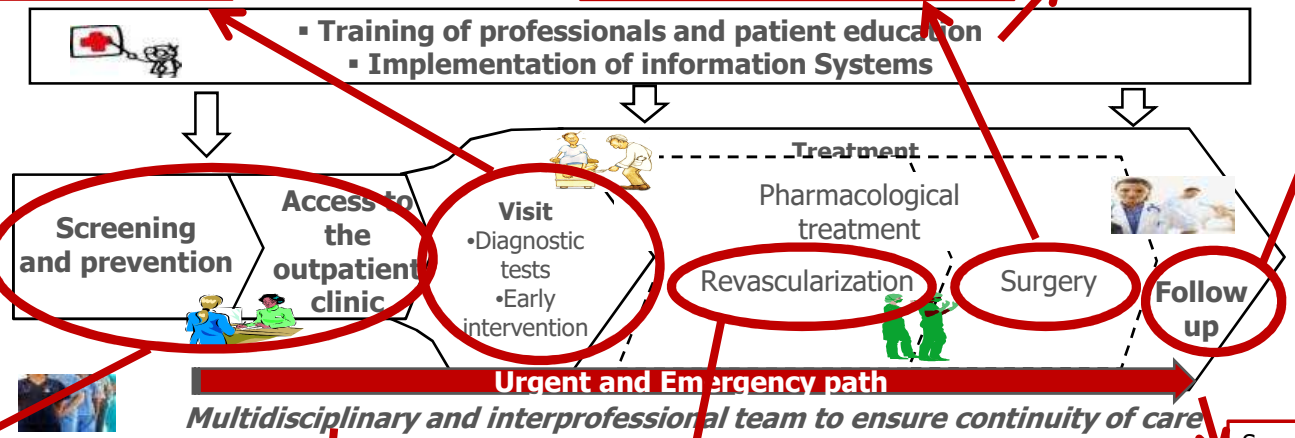
shift professionals' attitudes towards "population medicine". In a Beveridge healthcare system pursuing universal coverage, clinicians should not be considered responsible just for their specific departments and only for the outcomes of their patients. On the contrary, they should be involved in resources allocation decisions to foster shared responsibility <<to the population they serve, to the patients they never see, as well as to the patients who have consulted>> or that have been referred to, as "public health professionals" [Gray, 2013

Mapping and sharing an evaluation of the organizational path

Some organizations perform diagnostic exams directly in the outpatient, whereas in others radiologists departments have dedicated hours to exams for diabetic patients.

The intervention is often planned and scheduled involving the diabetologists. After the intervention the diabetologists are generally informed in order to take appropriate action for follow-up treatments.

Communication with primary care professional is considered an aspect to be improved in almost every organization (training courses).
Education to patients and caregivers is provided not only as individual education during visits, but also as group education.
The level of development and implementation of Information Systems are very different among organizations



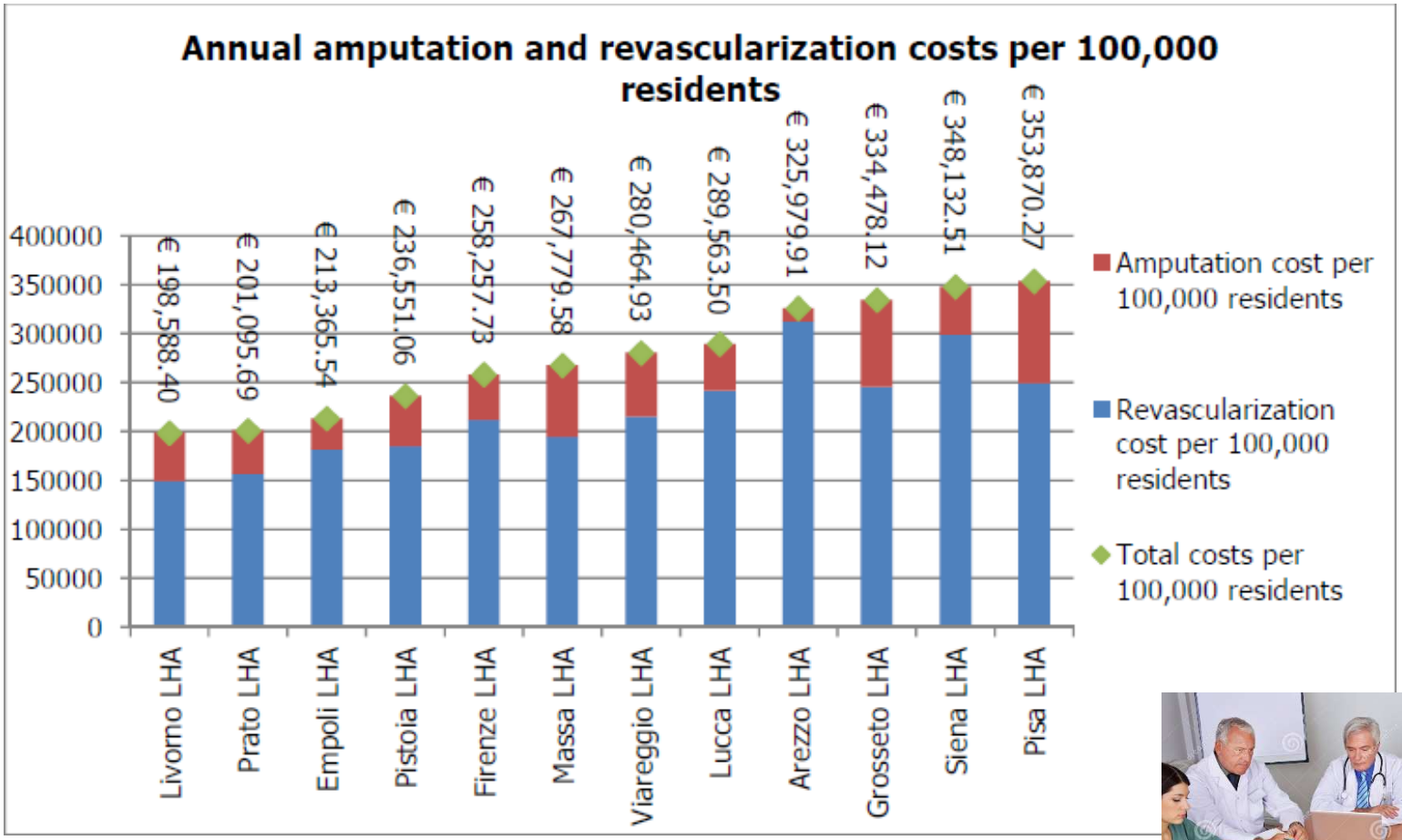
Diabetic patients have direct access or are sent by the GPs to the outpatient clinic.

Sometimes there are problems of communication and collaboration among professionals and providers, especially in big organizations (such as THs).

LHAs without cath labs send their patients to other LHAs or THs for revascularization. Dedicated hours of the cath lab to lower limbs revascularizations are not present in every organization.

Some organizations provide a dedicated "fast track" for exams, revascularization procedures and interventions. Many organizations are very flexible in timing and scheduling in order to meet urgent needs.

- This **variability** among LHAs is also confirmed by **annual per 100,000 residents costs for diabetes-related revascularization procedures** and **for diabetes-related amputations**



A shared proposal from professionals to regional health department

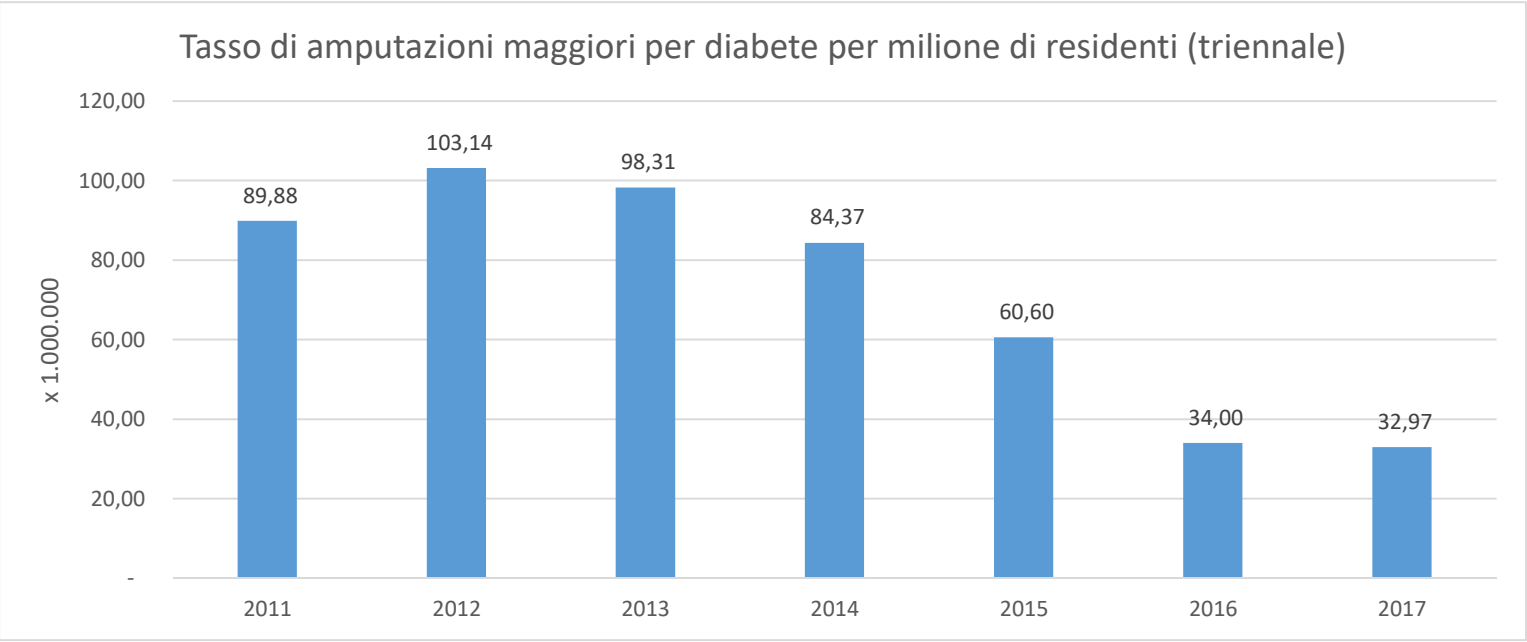
A REGIONAL PROTOCOL FOR DIABETIC PATHWAY (focusing on integration between PC and H)

AND A SPECIFIC DOCUMENT FOR THE DIABETIC FOOT PATH

*I always do my best for my patients and I thought to be on the right way. The population based perspective helped me to have a look at the **entire** path of the patients. I realized that our integration with the other professionals (namely PC) has to be boosted. Moreover this analysis allowed me to have data and results that I can use to reorganize the pathway within the hospital wall.*

Improving results

Diabetes-related major amputation rate per million residents in Pisa LHA, 2011-2017



When outcome unwarrented variation is determined by the absence of integrated care…

Nuti, S et al 2016 Bridging the Gap between Theory and Practice in Integrated Care: The Case of the Diabetic Foot Pathway in Tuscany. *International Journal of Integrated Care*, X(X): X, pp.1–14, DOI: http://dx.doi.org/10.5334/ijic.1991

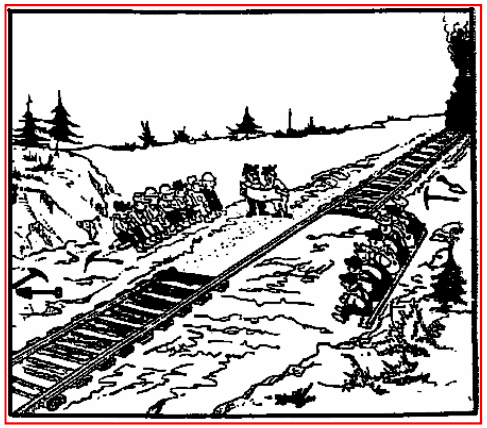
RESEARCH AND THEORY

Bridging the Gap between Theory and Practice in Integrated Care: The Case of the Diabetic Foot Pathway in Tuscany

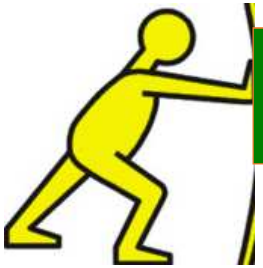
Sabina Nuti*, Barbara Bini*, Tommaso Grillo Ruggieri*, Alberto Piaggesi† and Lucia Ricci‡

Introduction and Background: As diabetic foot (DF) care benefits from integration, monitoring geographic variations in lower limb Major Amputation rate enables to highlight potential lack of Integrated Care. In Tuscany (Italy), these DF outcomes were good on average but they varied within the region. In order to stimulate an improvement process towards integration, the project aimed to shift health professionals' focus on the geographic variation issue, promote the Population Medicine approach, and engage professionals in a community of practice.
Method: Three strategies were thus carried out: the use of a transparent performance evaluation system based on benchmarking; the use of patient stories and benchmarking analyses on outcomes, service utilization and costs that cross-checked delivery- and population-based perspectives; the establishment of a stable community of professionals to discuss data and practices.
Results: The project enabled professionals to shift their focus on geographic variation and to a joint accountability on outcomes and costs for the entire patient pathways. Organizational best practices and gaps in integration were identified and improvement actions towards Integrated Care were implemented.
Conclusion and Discussion: For the specific category of care pathways whose geographic variation is related to a lack of Integrated Care, a comprehensive strategy to improve outcomes and reduce equity gaps by diffusing integration should be carried out.

Keywords: diabetes; diabetic foot; geographic variation; performance evaluation; benchmarking; sentinel events; engagement

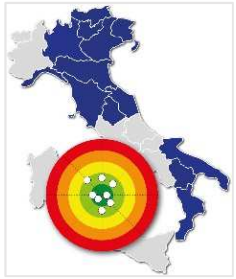


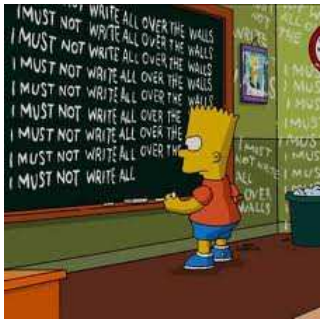
Conclusions



Performance

Ministero della Salute





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

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Selected bibliography related to the Italian Regional PES

Nuti S., Noto G., Vola F., Vainieri M. (2018) Let's play the patients music: A new generation of performance measurement systems in healthcare. Management Decision, https:// doi.org/10.1108/MD-09-2017-0907

Nuti S., De Rosis S., Bonciani M., Murante AM. (2017) Re-thinking healthcare performance evaluation systems towards the people-centeredness approach: their pathways, their experience, their evaluation. HealthcarePapers

Bevan, G., Evans, A. Nuti, S. (2018). Reputations count: why benchmarking performance is improving health care across the world. Health Economics, Policy and Law.

Nuti, S., Seghieri, C., & Vainieri, M. (2013). Assessing the effectiveness of a performance evaluation system in the public health care sector: some novel evidence from the Tuscany region experience. Journal of Management & Governance, 17(1), 59-69

Nuti, S., Vola, F., Bonini, A., & Vainieri, M. (2015). Making governance work in the health care sector: evidence from a 'natural experiment'in Italy. Health Economics, Policy and Law, 11(01), 17-38.

Vainieri M., Vola F., Gomez Soriano G., Nuti S. (2016), "How to set challenging goals and conduct fair evaluation in regional public health systems. Insights from Valencia and Tuscany Regions", Health Policy

Nuti S; Seghieri C (2014) Is variation management included in regional healthcare governance systems? Some proposal from Italy. Health Policy vo.114

Nuti S. Vainieri M (2016) Strategies and tools to manage variations in regional governance systems. Handbook on health services research Vol 1 Springer

Nuti S. Vola F. Vainieri M. (2017) Priorities and targets: a methodology to support the policy-making process in healthcare. Public money and management

Vainieri, Ferrè, Giacomelli, Nuti (2017) Explaining performance in healthcare: how and when top management competencies make the difference. Health care Management Review