



Performance improvement between innovation and sustainability: international comparisons of health systems reforms in Europe

Session I – International landscape

Evidence-based digital health: current needs vs future challenges

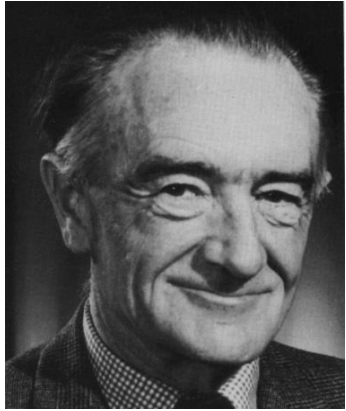
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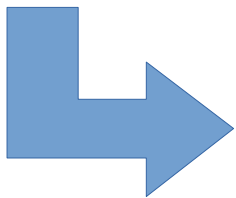
Evidence-based medicine

D Sackett, W Rosenberg, M Gray, B Haynes & S Richardson.
Evidence based medicine: what it is and what it isn't. 1996;312:71

“Evidence-based medicine is the conscientious, explicit, and judicious use of the best available evidence in making decisions about the care of individual patients”



A.Cochrane



What we know

What we do



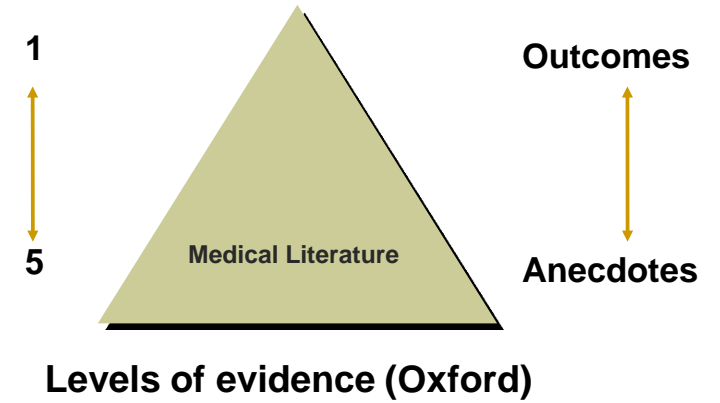
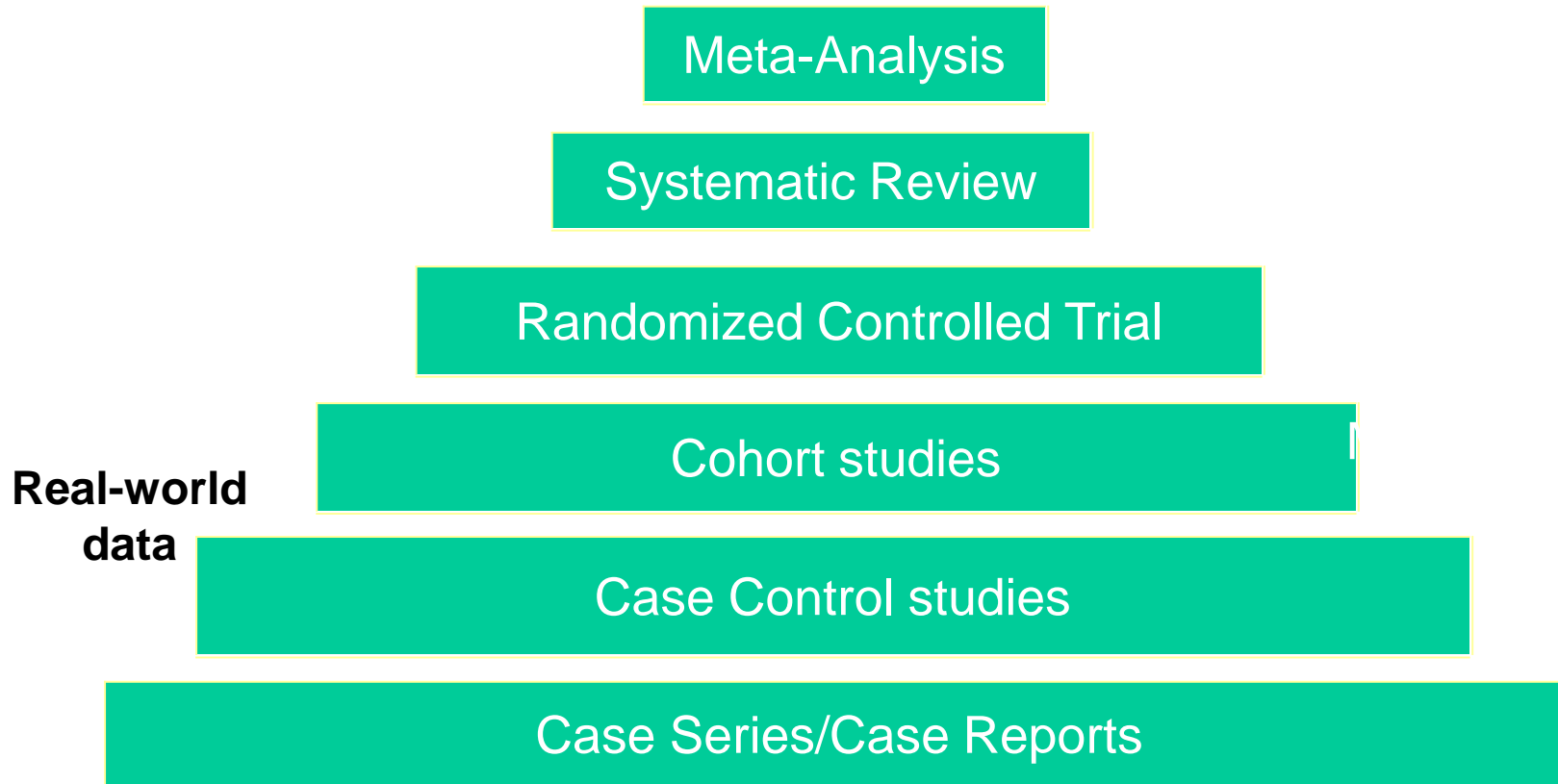
- Huge variations in practice
- Delays in introducing treatments of proven effectiveness
- Delays in withdrawing ineffective and/or harmful treatments
- Costly decisions made in the absence of evidence



Systems Performance



Pyramid of Evidence



Review

The Current Status of Telemedicine Technology Use Across the World Health Organization European Region: An Overview of Systematic Reviews

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Questions:

- **Are the results clinically meaningful (statistical significance may not translate into clear advantages)?**
- **Are the results policy relevant (eg. sustainable in specific settings and/or reforms)?**

Results:

This overview drew on data from >2239 primary studies, with >20,000 enrolled patients in total, within the WHO European Region. On the basis of data from randomized trials, observational studies, and economic evaluations from several countries, the results show a clear benefit of telemedicine technologies in the screening, diagnosis, management, treatment, and long-term follow-up of a series of chronic diseases.

However, we were unable to pool the results into a reliable numeric parameter because of the high heterogeneity of intervention methodologies, scheduling, primary study design discrepancies, settings, and geographical locations.

Evolution of outcomes measurement

Deaths

Mortality and life-expectancy: classical parameters to measure health systems outcomes - Public health perspective - Registries as information sources

Diseases

*Prevalence and incidence of diseases to assess morbidity in a country - Try to capture the reduction in morbidity and the outcomes of specific diseases (e.g. QALYs, SF36) - **Medical/clinical perspective**. Outcome measurement is dependent on clinical registries (eg cancer and diabetes) - **Linking to costs (value)** at system level and **cost-effectiveness studies**.*

Disability

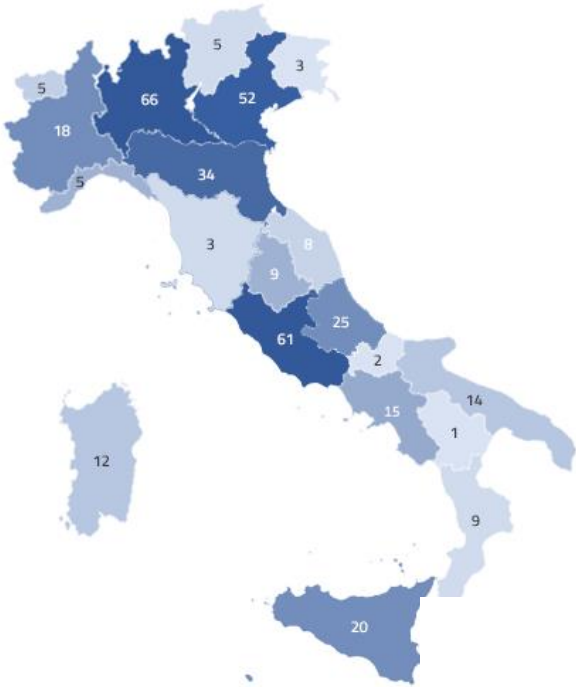
*Chronic diseases generate long term disabilities. Outcomes should address the way a health system deals with disabilities - **DALY (Disability Adjusted Life Expectancy)** is a most well-known measure - at health services level various instruments available to assess disabilities and their outcomes - **Administrative data-bases and surveys may be used as main data source***

Discomfort

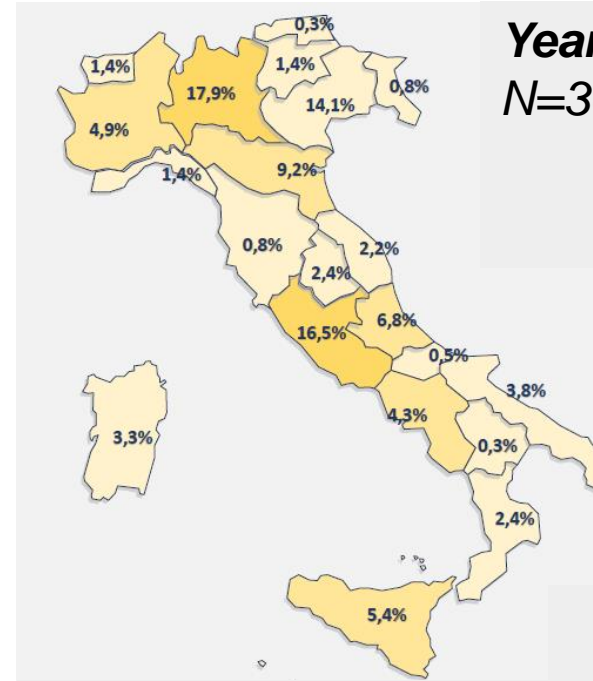
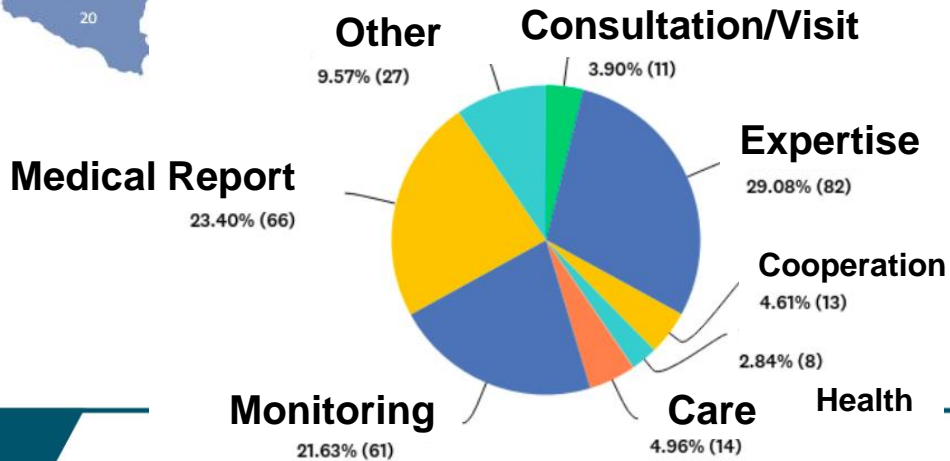
*Outcomes **experienced by citizens/patients** - **PROMS (patient reported outcomes)** tested for clinical procedures and treatments and still under development for chronic conditions; **EQ5D is frequently the generic measure used** - **PREMs** with some limited international validation of instruments*

Italian Telemedicine Mapping Surveys 2018, 2021

Ministry of Health – National Institute of Health



Year 2018
N=282 experiences



Year 2021
N=369 experiences

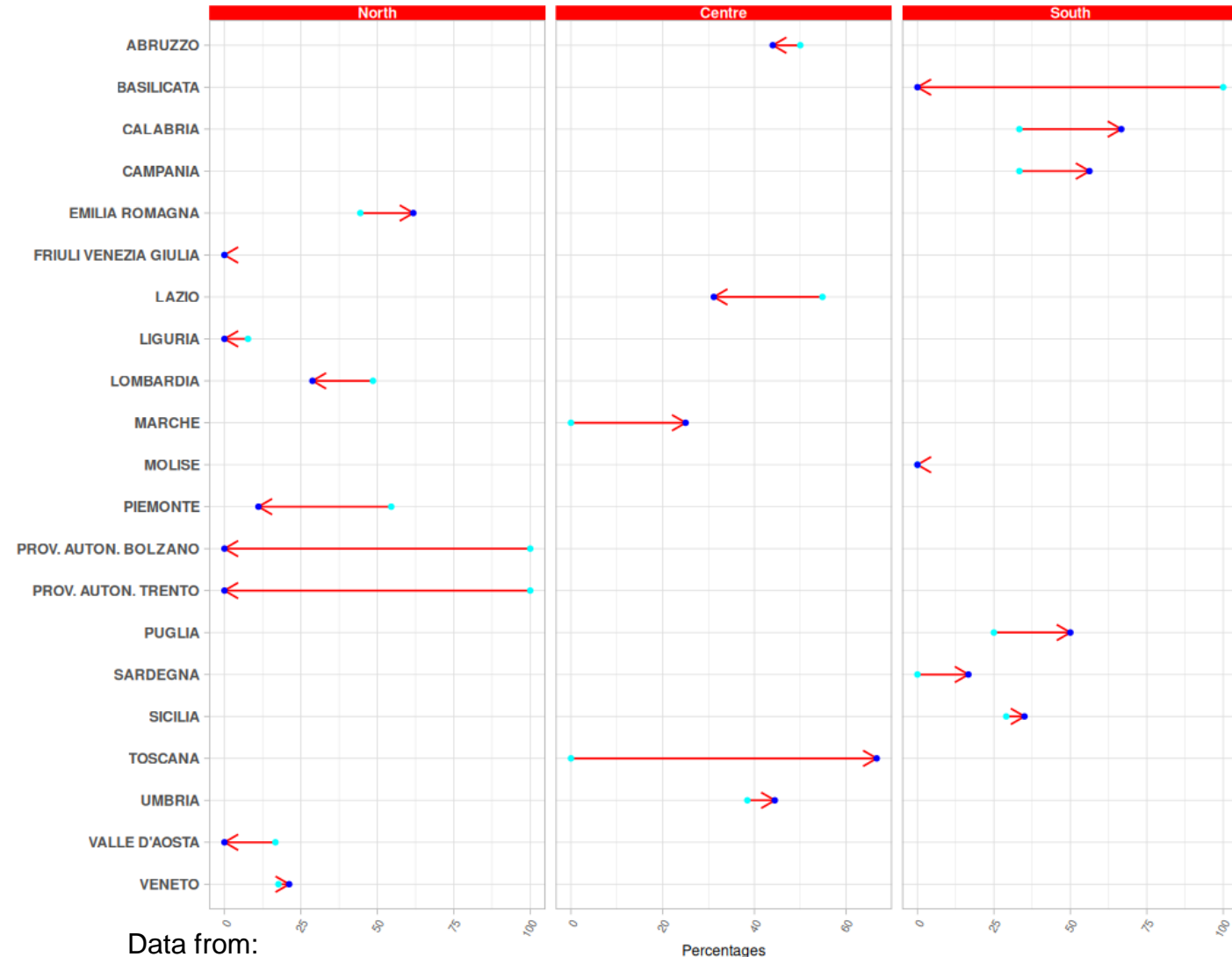


Data from:
Italian Ministry of Health 2023

Variation in Evaluation Rates (“ever”)

Variation in Evaluation Rates of Telemedicine Experiences Across Italian Regions - Year 2021 vs 2018

Cyan Circle: 2018 - Blue Circle: 2021



Questions:

- Is there an “**acceptable evaluation rate**” for digital health in decentralised governance?
- Does the picture ensure that **innovation can match sustainability** across the country?