



Hospital-Based Health Technology Assessment in Italy: Lombardy Region

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Italian NHS



"Italy as one nation—still a work in progress" (Ricciardi and Tarricone, 2021, page 1294)

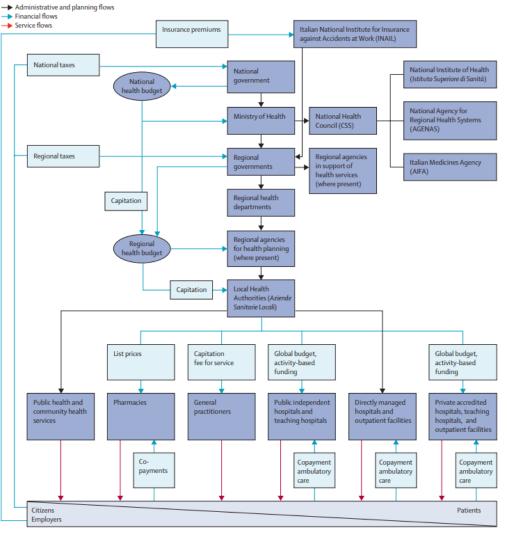


Figure: The Italian National Health Service (Servizio Sanitario Nazionale): current structure and governance Adapted from France et al. and Ferré et al.

Source: Ricciardi, W., & Tarricone, R. (2021). The evolution of the Italian National Health Service. The Lancet, 398(10317),





Current challenges: the perfect storm



Socio-economic situation

New technologies





HTA in Italy

The general objectives and the fundamental principles that should be guaranteed by the healthcare system are provided by the **national level**, the delivery of the services is ensured by the **regional level**, through the **local level** (Local Health and Social Authorities, and public and private hospitals) (Taroni, 1999; Donatini et al., 2001).

National Agency for Regional Health Services (AGENAS)	Italian Drugs Agency (AIFA)	Italian Network for HTA (RiHTA)	Italian Society of HTA (SIHTA)	National Centre for HTA
Support and coordination of regional and local HTA activities Disseminate national HTA results	Undertake HTA activities related to drugs	Support for the systematic production of HTA reports Favor the development of a decentralized culture of HTA	Share mission and objectives of the HTAi Promote training activities at different levels	Improve the quality, standards and the value for money by integrating HTA in the programming of health services





HTA in Italy – National Level

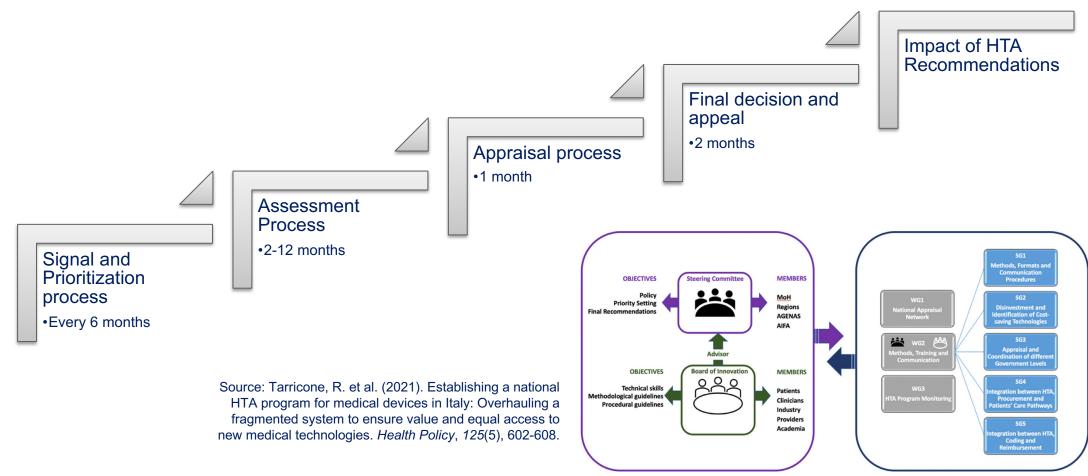


Fig. 1. Governance and Methodology of the Italian National Program of HTA for Medical Devices (PNHTADM).

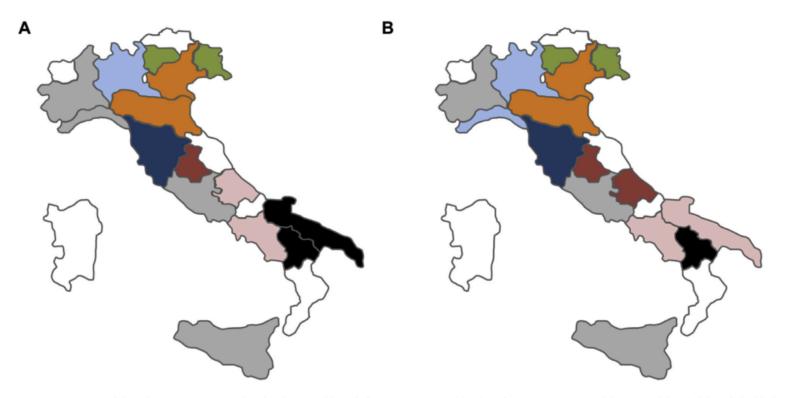


eXplainable Artificial Intelligence in healthcare Management 2020-EU-IA-0098



HTA – Regional level

- No HTA, no centralized procurement
 HB/No HTA, no centralized procurement
 Double-level/regional HTA, no centralized procurement
 HB HTA, centralized procurement
 Regions non participating in the survey
- Double-level HTA, centralized procurement
- Double-level/regional HTA, centralized procurement
- Regional HTA, centralized procurement
- Regional HTA, no centralized procurement



Source: Callea, G., Armeni, P., Marsilio, M., Jommi, C., & Tarricone, R. (2017). The impact of HTA and procurement practices on the selection and prices of medical devices. *Social Science & Medicine*, *174*, 89-95.

Fig. 1. HTA governance models and procurement practices implemented in Italy in 2008–2009 Combination of HTA governance models (regional, hospital-based, double-level, and no HTA) and centralized procurement in the hospitals participating in the survey in 2008 (1a) and 2009 (1b).





Regional HTA - Lombardia

2001				
Consulting committee to evaluate, also for coverage decisions, those innovative health technologies yet approved by authorisation bodies after appropriate clinical research	HTA in the Healthcare and Social Plan 2007-2009 as a priority	2008 Regional Program of HTA: Health General Direction, Core of Priority Evaluation and Conflicts of Interest,	2017 "Key Evidence Leaders"	
		the Regional Technical Table for the Appropriateness in Medicine and external experts «Evaluation of Health	Program (KEL)	
		Technologies" (Valutazione Tecnologie Sanitarie - VTS) framework		





Regional HTA - Lombardia

QUANTITATIVE				
Dimension	Criterium			
D1 – Health problem relevance	C01– Disease severity			
	C02 – Size of affected population			
D2 – Technology solution relevance	C03 – Type of preventive benefit			
	C04 – Type of therapeutic benefit			
	C05 – Quality of evidence			
D3 - Safety	C06 – Comparative safety / tolerability			
D4 - Effectiveness	C07 – Efficacy and effectiveness advantages			
	C08 – Patient reported outcomes advantages			
	C09 – Unmet needs			
	C10 – Clinical practice guidelines and regulatory			
	state			
D5 – Financial aspects	C11 – Direct financial impact on health care budget			
	C12 – Cost consequences on other medical costs			
	C13 – Cost consequences on non-medical costs			
D6 – Organizational aspects	C14 – System capacity and requisites for appropriate			
	use			
QUALITATIVE				
D7 – Ethical aspects	C15 – Equitable opportunities for access and use			
D8 – Social aspects	C16 – Pressures and difficulties of stakeholders			
D9 – Legal aspects	C17 – Mandate and scope of National Healthcare System			

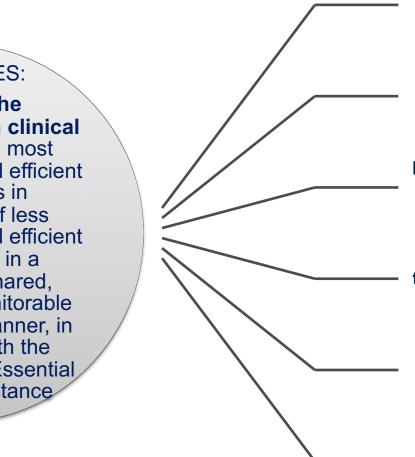
Methodology:

Multiple criteria decision analysis (MCDA), in collaboration with EVIDEM.





HB-HTA in Regione Lombardia



Operational implementation of the indications of the Regional Health Technology Assessment Program and of the National HTA Medical Devices Program

Considering the **level of uncertainty of information** on health technologies and **transferability of the assessments** produced in other national and international contexts to the Lombard Health Service

Production of **technical reports on technologies not prioritized** at national level and of regional strategic interest on the basis of the indications of the D.G. Welfare

Support for the regional network of **contact people for the technical assessment** of health technologies at the Lombard social and health companies

Promotion of the **culture of evaluation** and the use of comparative effectiveness documentation in health planning and clinical practice in Lombardy;

Assurance of the separation between the technical evaluation phase and the formulation of recommendations (appraisal) for the appropriate use of health technologies

OBJECTIVES:

Facilitate the dissemination in clinical practice of the most effective, safe and efficient technologies in replacement of less effective, safe and efficient technologies, in a responsible, shared, transparent, monitorable and verifiable manner, in compliance with the provision of the Essential Levels of Assistance





HB-HTA: San Matteo Hospital, Pavia

- One of the oldest and largest teaching hospitals in Italy.
- Scientific Institute for Research, Hospitalization and Health Care (IRCCS) - biomedical institutions of relevant national interest, which drive clinical assistance in strong relation to research activities.
- More than 1,000 ordinary beds







HB-HTA: San Matteo Hospital, Pavia

Commissione Health Technology Assessment (CHTA), that is a technicalscientific body that operates, in support of the Strategic Management, in order to:

- achieve controlled and sustainable adoption of new medical devices to be introduced and, where necessary, allow the disposal of obsolete ones;
- carry out technology assessment activities, so that the choices are consistent with the needs and specific institutional purposes as well as respectful of economic constraints;
- promote the quality and appropriateness of services.

- Dimensions:
 - technical innovation and clinical-assistance innovation
 - proven clinical efficacy attested by adequate documentation in terms of quality and quantity,
 - security (surveillance),
 - economy (cost/effectiveness),
 - homogeneity of use in the various Structures,
 - periodic analysis of consumption,
 - any infungibility and exclusivity.





HB-HTA: Papa Giovanni XXIII, Bergamo

Among the largest Italian hospitals with all clinical and surgical specialties.

- Active since December 2012, it is a modern hospital with a high level of technology.
- 1,024 ordinary beds









HB-HTA: Papa Giovanni XXIII, Bergamo

- Commissione Health Technology Assessment: Description of the functioning in the Strategic Plan
- Coordinator: Clinical Director

- Main duties:
- carry out analyzes on the introduction of technologies (equipment, medical devices, drugs, etc...) that have a significant clinical, organizational or economic impact whose assessment is required by national/regional legislation;
 carry out analyzes on the introduction of innovative technologies (equipment, medical devices, drugs, DDTA etc) for which the Company

PDTA, etc) for which the **Company Management** deems necessary to acquire specific insights, regardless of the impact economic.





HB-HTA: Niguarda Hospital

 Large metropolitan hospital with social and health skills for territorial care.

 Its orientation: integrating specialist care with territorial social and health care, in synergy with all the actors involved in protecting the health of the citizen.

• 1,167 ordinary beds







HB-HTA: Niguarda Hospital

- Commission Health Technologies (CTS): technicalscientific body that operates for the promotion of efficient, efficacy, rational and safe use of the biomedical technologies, drugs, medical devices and health procedures.
- The proponent of the evaluation can be the end user or the Strategic Director.
- Coordinator: Clinical Director
- Three different bodies:
 - Members by right:
 - decision-making and validation function.
 - Core Team:
 - Multidisciplinary team aimed at providing evaluation of the
 - introduction/use/disinvestment of health technologies. Leadership function.
 - Working group:
 - HTA experts and specialists identified on the basis of the health technology under evaluation. Coordination function.

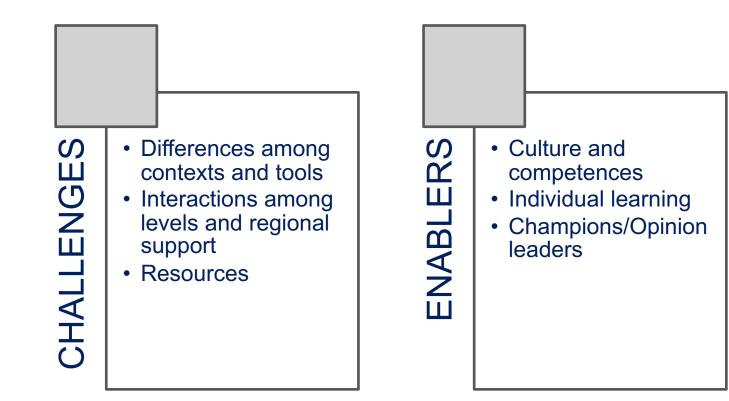
• Dimensions:

- Technology framework
- Literature Review
- Efficacy and safety
- Organizational impact
- Economic impact





Conclusions





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Thank you