



# The HTA evidence on e-health/m-health: which challenges?

Vladimir Vukovic, Carlo Favaretti, Chiara de Waure

Department of Public Health - Section of Hygiene - Università Cattolica del Sacro Cuore, Rome

Vienna, 11<sup>th</sup> November 2016



#### The Aim of our work

- There is a lack of consensus in the scientific community on what constitutes appropriate methodology for evaluating e-health/m-health technologies before being introduced into practice and thereby HTA could serve to this scope
- The aim of this study was to perform a systematic review of literature in order to search for HTA reports on ehealth/m-health technologies and to describe their characteristics and methodological quality with the goal to detect fields for improvements



### The Methods

- A literature search was performed on PubMed, ISI Web of Science and NIHR databases in order to identify HTA reports that evaluated e-health/m-health technologies published until the 1<sup>st</sup> of April 2016, in English or Italian language
- Data on the first author's name, year of publication, country,
  HTA Agency, type of report, technology evaluated, were extracted
- We used the INAHTA 14 items checklist to evaluate transparency and consistency of reports
- We also assessed the thoroughness of HTA reports by checking the presence of the evaluation of the 10 HTA domains suggested by the EUnetHTA core model.





1.	Appropriate	contact	details	for	furt	ł
----	-------------	---------	---------	-----	------	---

- 2. Authors identified?
- 3. Statement regarding conflict of inte
- 4. Statement on whether report exter
- 5. Short summary in non-technical lar
- 6. Reference to the policy question th
- 7. Reference to the research question
- 8. Scope of the assessment specified?
- 9. Description of the assessed health
- 10. Details on sources of information
- 11. Information on basis for the asses information?
- 12. Findings of the assessment discuss
- 13. Conclusions from assessment clea
- 14. Suggestions for further action?

	Item								Yes	Partly	No	
	Preliminary											
	Appropriate contact details for further information?											
	2. Authors ident											
	Statement regarding conflict of interest?											
	4. Statement on	Statement on whether report externally reviewed?										
tl	5. Short summary in non-technical language?											
	Why?											
}	6. Reference to the policy question that is addressed?											
	7. Reference to the research question(s) that is/are addressed?											
e	8. Scope of the	8. Scope of the assessment specified?										
r	Description of the assessed health technology?											
	How?			P	111				1- 10			
n		0. Details on sources of information and literature search strategies provid							ded?	Other	kind of	
	Search strategy	Search strategy Databases Ye			range	Language restriction		Prima	ary data	inforr	information	
)	0	(	)		0	0	0		0	resources O		
1												
ľ	Complete refe		List	of exclu studies	I Incius		usion criteria		Exclusion cr		iteria	
?	O	otaaioo		0		0			0			
	11. Information	11. Information on basis for the assessment and interpretation of selected data and information										
t		Critical appraisal					Results of the assessment clearly					
	Method of d extraction desc	method (for quality assessment of the			Method of data synthesis described?		presented, e.g. in the form of evidence					
(			literature) described?				tables?					
S	0	0 0				0			0			
	Context? (ma	Context? (may or may not apply to each HTA)										
		(					Social Other persper					
55					cations implications dered? considered?			patients, consumers)				
	0				(	0 0			considered?			
a	What then?								Yes	Partly	No	
	12. Findings of the assessment discussed?											
	13. Conclusions from assessment clearly stated?											
	14. Suggestions for further action?											

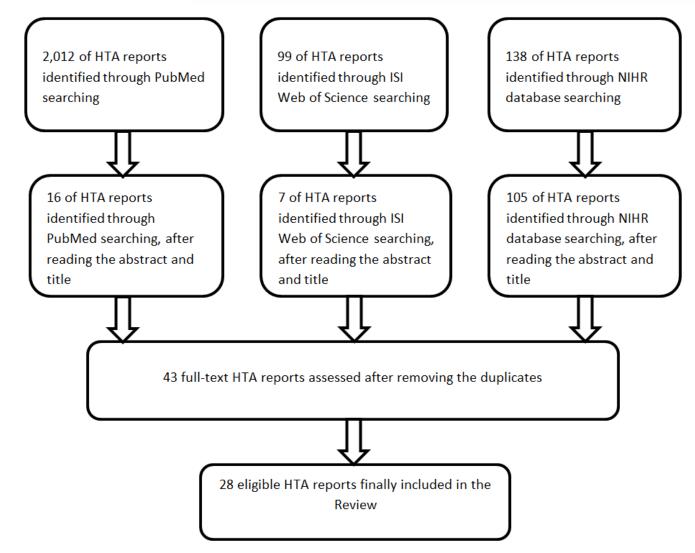


### HTA Core Model domains

- Health Problem and Current Use of the Technology (CUR)
- Description and technical characteristics of technology (TEC)
- Safety (SAF)
- Clinical Effectiveness (EFF)
- Accuracy (ACC)
- Costs and economic evaluation (ECO)
- Ethical analysis (ETH)
- Organisational aspects (ORG)
- Patients and Social aspects (SOC)
- Legal aspects (LEG)



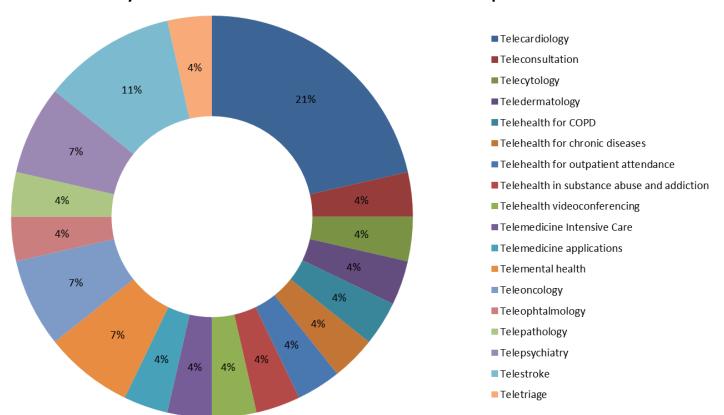
## Flowchart depicting literature search and study selection





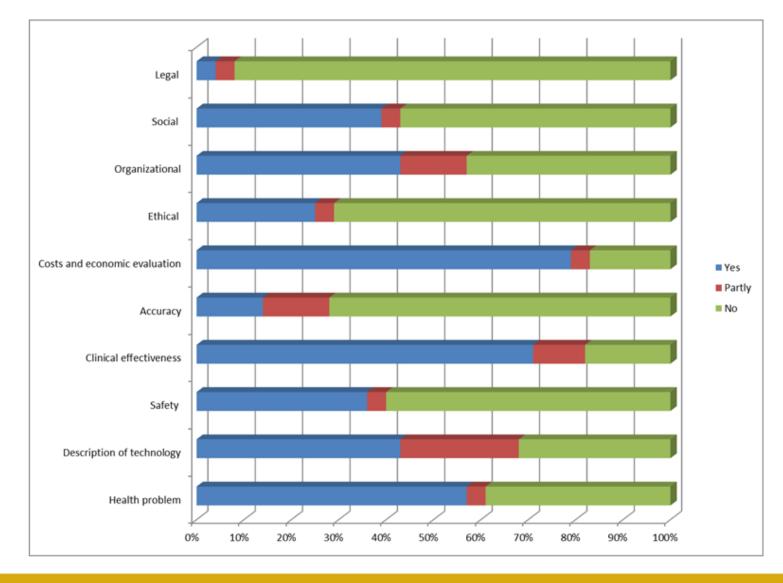
### The Results

 Twenty-eight reports published between 1999 and 2015 were included. The most of reports (71.4%) were delivered by non-European countries and only 35.7% were classified as full reports.





# Results HTA core model domains





### Conclusions & Key notes

- E-health/m-health technologies are increasingly present in the field of HTA
- Our evaluation identified several elements not being included in the available HTA report
- Several reports missed to respond to relevant assessment elements especially ethical implications
- There is a need for strengthening and standardizing methods used for the evaluation of these technologies in order to adequately respond to the multidisciplinary nature of HTA





## Thank you for attention!

Contact e-mail: vladimir.vukovic@rm.unicatt.it