

# Transferability of health technology assessment reports from other jurisdictions and their use in the decision making process in Latin America: a survey of researchers and decision makers

Andres Pichon-Riviere (1)(2), Federico Augustovski (1)(2), Sebastián García Martí (1)(2), Sean D. Sullivan (3), Michael Drummond (4)

(1) Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina; (2) School of Public Health, University of Buenos Aires, Argentina; (3) Pharmaceutical Outcomes Research and Policy Program, University of Washington, USA; (4) Centre for Health Economics, University of York, UK



**Source of funding:** A. Pichon-Riviere received partial funding for this work from a Global Health Leadership Award from Global Health Research Initiative (a partnership of the Canadian International Development Agency, the Canadian Institutes for Health Research, Health Canada, and the International Development Research Centre).

# Introduction

- Even in high income countries, many HTA agencies are under-resourced and consequently unable to produce the volume of outputs desirable
- Adapting or using HTAs from other jurisdictions could reduce the need for multiple reports on the same health technology with resultant saving of time and resources.
- Given the scarcity of local HTAs in Latin America, Decision Makers and researchers may be using, formally or informally, HTAs from other jurisdictions when faced to decisions that cannot avoid or postpone.

# Objective

## **To explore these HTA transferability experiences in Latin America:**

1. Are decision makers currently using or applying HTAs from other jurisdictions to guide decisions?
2. Are researchers using HTAs from other jurisdictions as an input/source when developing local HTAs? Have they adapted HTAs from other countries?
3. How useful/applicable/adaptable was the information from these HTAs in different domains (e.g. efficacy, safety, economic evaluation)?
4. What is the perceived theoretical usefulness of the transferability of HTAs in Latin America?
5. What are the main barriers that limit the transferability of HTAs in the region?

# Methods

A confidential, self-administered, web-based survey sent to 13,031 HTA researchers and decision makers in Latin American countries (9,989 in Argentina and 3,042 in other Latin American countries)

	Nada aplicable/inútil			Medianamente aplicable/útil				Extremadamente aplicable /útil			Sin respuesta
	1	2	3	4	5	6	7	8	9	10	
En él/los reportes de ETS de otros países de Latino América y el Caribe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
En él/los reportes de ETS de otras regiones (E): Europa, Canadá)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

?

#### 4.2: Información sobre los efectos adversos de la tecnología

	Nada aplicable/inútil			Medianamente aplicable/útil				Extremadamente aplicable /útil			Sin respuesta
	1	2	3	4	5	6	7	8	9	10	
En él/los reportes de ETS de otros países de Latino América y el Caribe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
En él/los reportes de ETS de otras regiones (E): Europa, Canadá)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

?

#### 4.3: Información sobre la eficacia y efectividad de la tecnología

	Nada aplicable/inútil			Medianamente aplicable/útil				Extremadamente aplicable /útil			Sin respuesta
	1	2	3	4	5	6	7	8	9	10	
En él/los reportes de ETS de otros países de Latino América y el Caribe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
En él/los reportes de ETS de otras regiones (E): Europa, Canadá)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

?

**Country**

<b>Argentina</b>	<b>365 (55.6)</b>
<b>Other LA countries</b>	<b>488 (44.4)</b>
<i>Colombia</i>	<i>69(10.5)</i>
<i>Brazil</i>	<i>31 (4.7)</i>
<i>Uruguay</i>	<i>25(3.8)</i>
<i>Chile</i>	<i>23 (3.5)</i>
<i>Other countries</i> <i>(Anguilla, Bolivia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Venezuela)</i>	<i>124 (18.9)</i>

**Occupation**

<b>Researcher</b>	<b>142 (24.0)</b>
<b>Decision Maker</b>	<b>449 (76.0)</b>
<i>For coverage decisions</i>	<i>125 (21.2)</i>
<i>For other institutional decisions</i>	<i>85 (14.4)</i>
<i>For patient level clinical decisions</i>	<i>147 (24.9)</i>
<i>For other type of decisions</i>	<i>92 (15.6)</i>

**Sector**

<i>Public or Social Security HS</i>	<i>255 (43.2)</i>
<i>Private HS</i>	<i>156 (26.4)</i>
<i>Academic</i>	<i>84 (14.2)</i>
<i>Government</i>	<i>61(10.3)</i>
<i>Pharm. or device industry</i>	<i>20 (3.4)</i>
<i>Other</i>	<i>15 (2.5)</i>

LA, Latin-America; HS, Health Sector; Pharm, Pharmaceutical

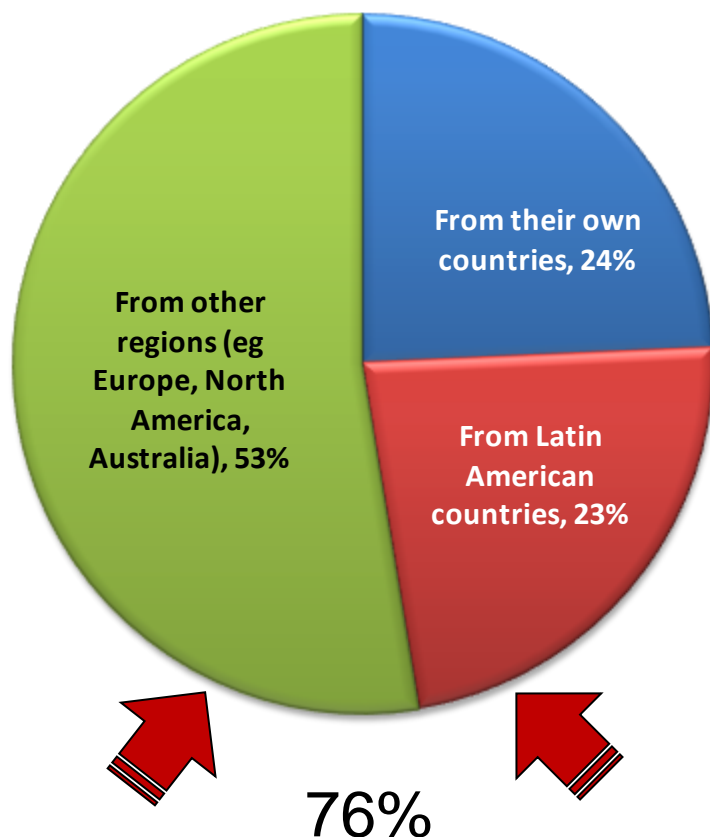
# Results (1)

Between May and December 2010, we received 671 responses with a global response rate of 5.2%

## Results (2) – Decision Makers

Decision makers reported using HTA reports from other jurisdictions in 76% of the situations

### Origin of HTA reports used in decision making



When using reports from other jurisdictions they found more useful, applicable and adaptable (mean score of 7.0 or more in a 1 to 10 scale) the information regarding:

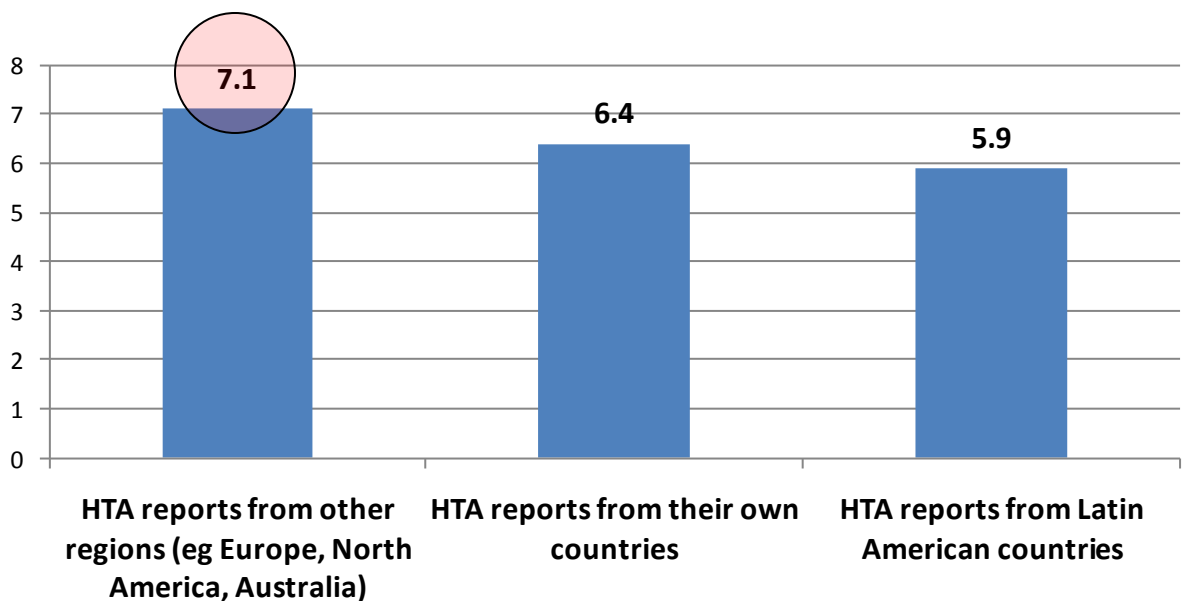
- *Description of the technology*
- *Safety*
- *Efficacy/effectiveness*

Less useful/adaptable

- *Ethic/legal/social implications*
- *Budget impact*
- *Economic evaluation*
- *Organizational issues*

# Results (3) – Decision Makers

Perceived usefulness of HTA reports according to origin



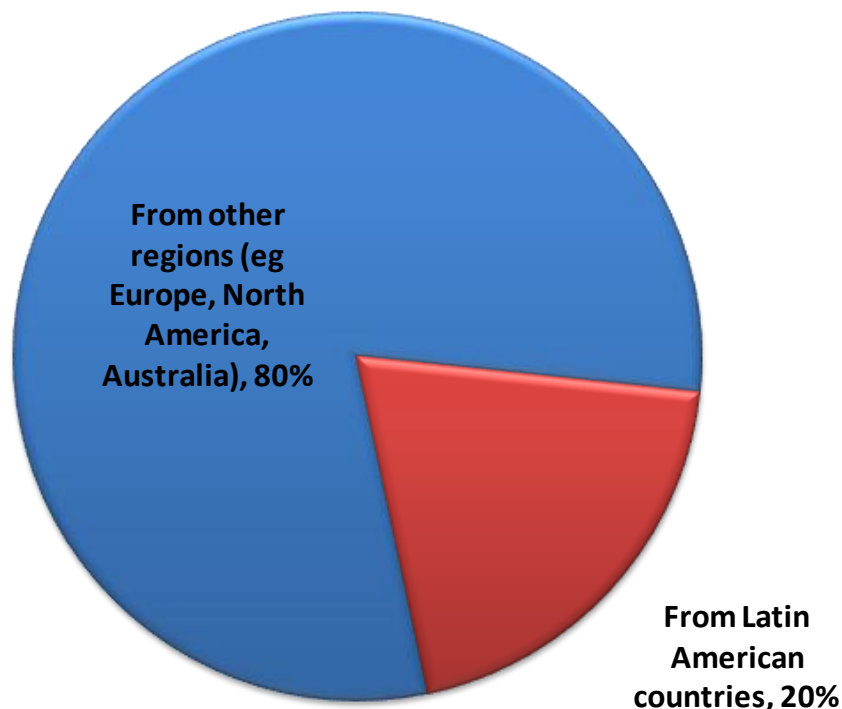
p<0.01

Decision makers, contrary to what might be expected, also considered more useful and more applicable the information from HTA reports from other regions.

# Results (5) – Researchers

Researchers (HTA “doers”) reported using HTA reports from other jurisdictions as an input/source when elaborating local HTA reports in 64% of the situations

## Origin of HTA reports used as an input /source for HTA



When using reports from other jurisdictions they found more useful/adaptable the information regarding:

- *Description of the technology*
- *Safety*
- *Efficacy/Effectiveness*
- *Method. of systematic review*
- *as an aid in the comparisons of results*
- *as a starting point from which to develop a new report*

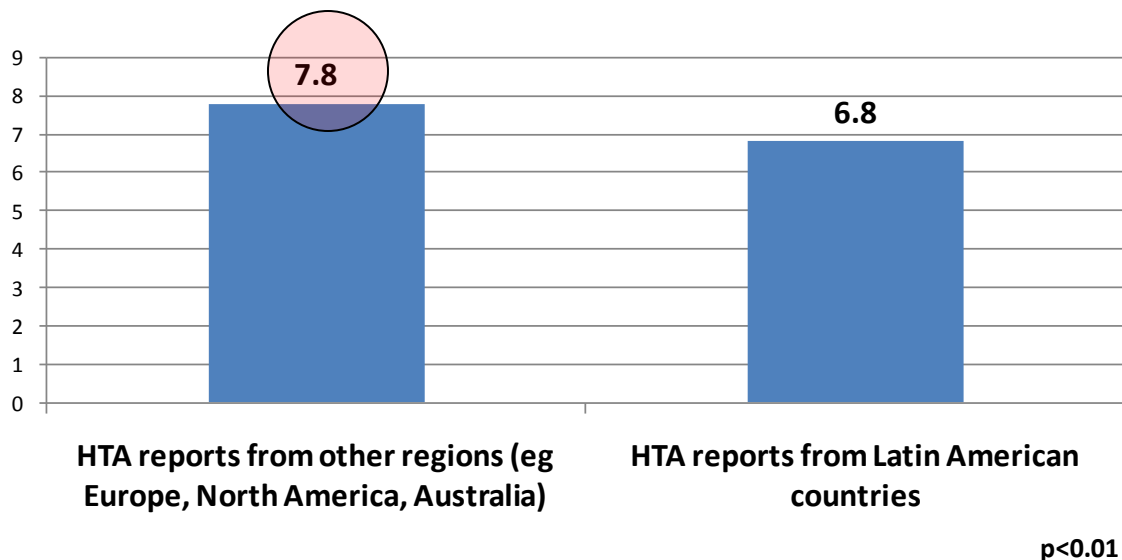
Less useful/adaptable

- *Ethic/legal/social implications*
- *Budget impact*
- *Organizational issues*
- *Economic evaluation*



# Results (6) – Researchers

Perceived usefulness of HTA reports according to origin



Coincidentally with DM they also considered more useful and more applicable the information from HTAs from other regions as compared to HTAs from other LAC countries (7.8 vs. 6.8,  $p<0.01$ ).

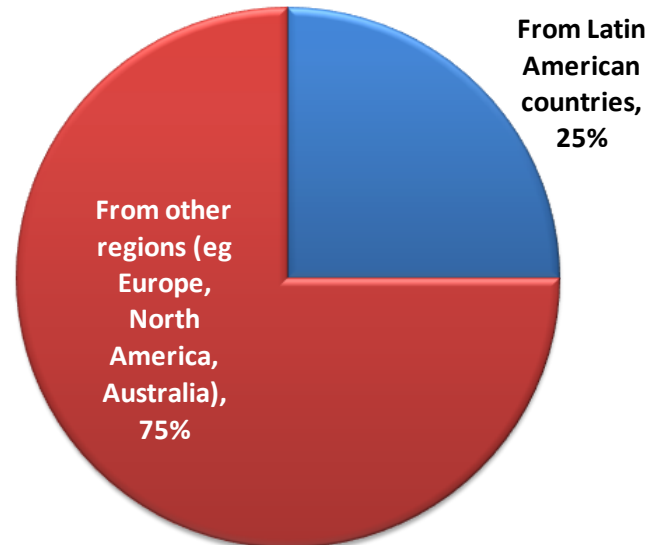
Researchers, as compared to research users, tend to value higher the usefulness of HTAs from other jurisdictions. This was observed mainly for the information regarding the description of the technology (8.4 vs. 7.4,  $p<0.01$ ) and for efficacy/effectiveness (8.3 vs. 7.5,  $p>0.01$ ).

# Results (7) – Researchers

33% of the researchers reported having adapted an HTA report to the local setting.

In 75% of the cases the reports adapted came from other regions and just 25% where reports from other Latin American countries.

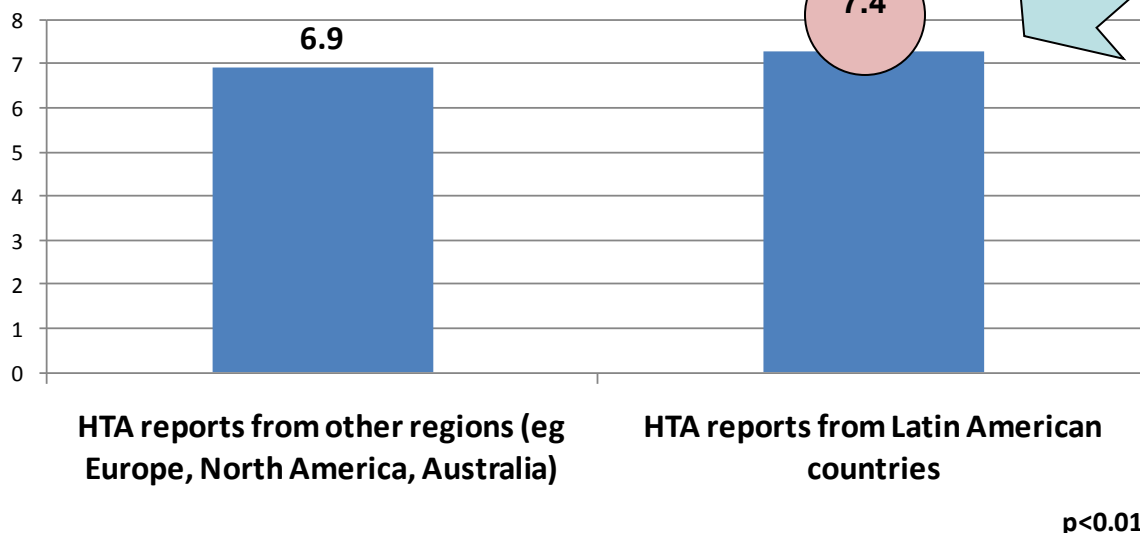
Origin of HTA reports used for adaptation



## General section about transferability: responses from HTA “users” and “doers”

All respondents consider that using HTA reports from other jurisdictions is potentially very useful (mean score 7.2/10). This potential was considered to be **higher for HTA reports from Latin America**.

Potential usefulness of using HTA reports from other jurisdictions according to origin



### They consider it useful to:

- Improve the decision making process
- Fewer resources needed
- Obtain results faster
- Avoid duplication of work

Researchers scored significantly higher this usefulness when compared to DM, mainly as a tool to avoid duplication of work (7.8 vs. 6.9,  $p<0.01$ ) and to obtain results faster (7.7 vs. 7.0,  $p=0.01$ )

# Main barriers than limit the transferability of HTA reports:

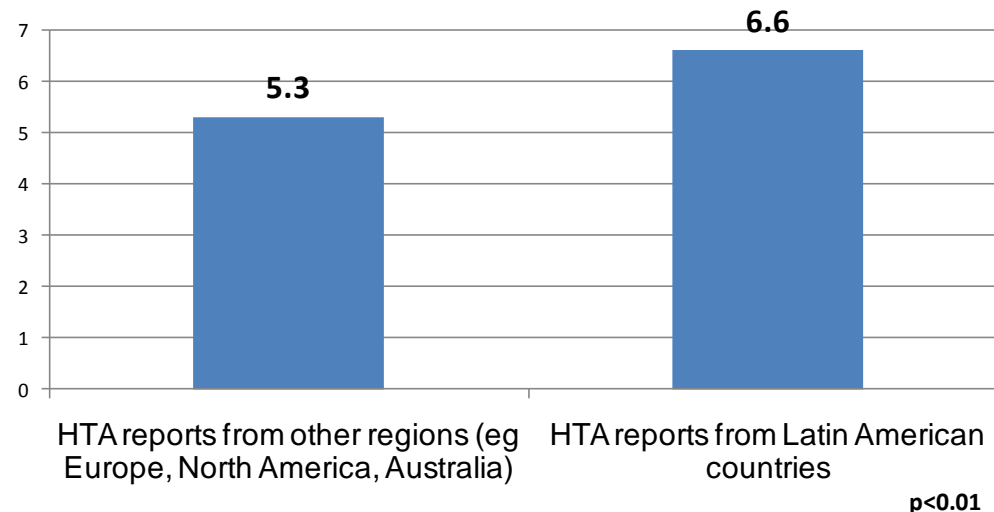
## For HTA reports from Latin America

- Low quantity of HTA reports available
- Lack of guidelines/methods on how to adapt HTA reports
- Poor methodological quality
- Lack of transparency in the HTA reports published

## For HTA reports from other regions

- Differences in health care costs
- Different epidemiological contexts
- Different health care systems

Barriers for transferability: Poor methodological quality



No significant differences between responses from researchers and decision makers

# Main barriers than limit the transferability of HTA reports:

## For HTA reports from Latin America

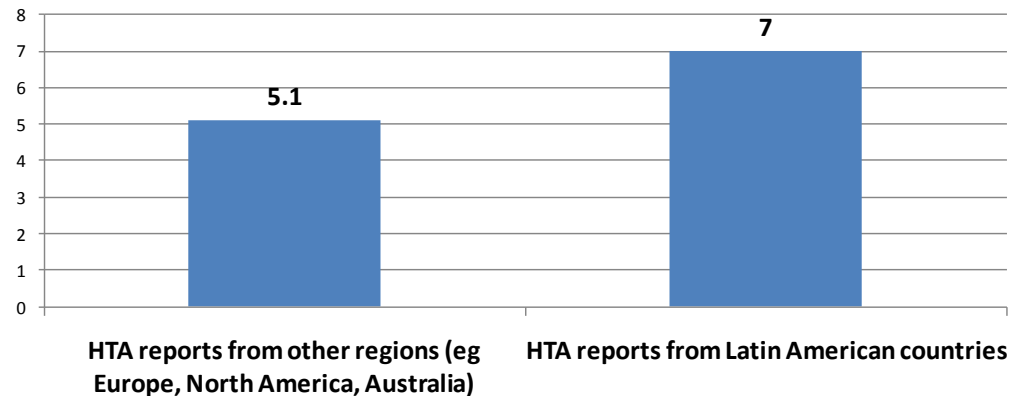
- Low availability of HTA reports
- Lack of guidelines/methods on how to adapt HTA reports
- Poor methodological quality
- Lack of transparency in the HTA reports published



Barriers for transferability: Low quantity of HTA reports available

## For HTA reports from other regions

- Differences in health care costs
- Different epidemiological contexts
- Different health care systems



p<0.01

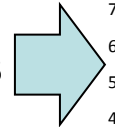
# Main barriers than limit the transferability of HTA reports:

## For HTA reports from Latin America

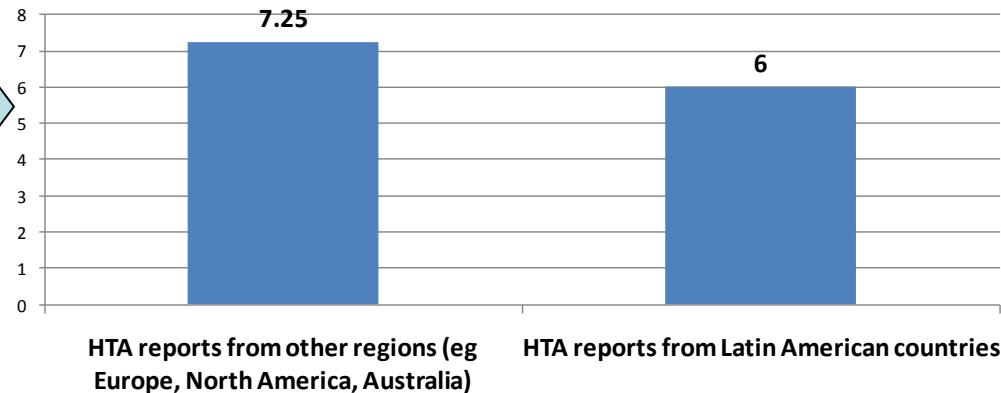
- Low quantity of HTA reports available
- Lack of guidelines/methods on how to adapt HTA reports
- Poor methodological quality
- Lack of transparency in the HTA reports published

## For HTA reports from other regions

- Differences in health care costs
- Different epidemiological contexts
- Different health care systems



Barriers for transferability: Different epidemiological contexts



$p<0.01$

# Main barriers than limit the transferability of HTA reports:

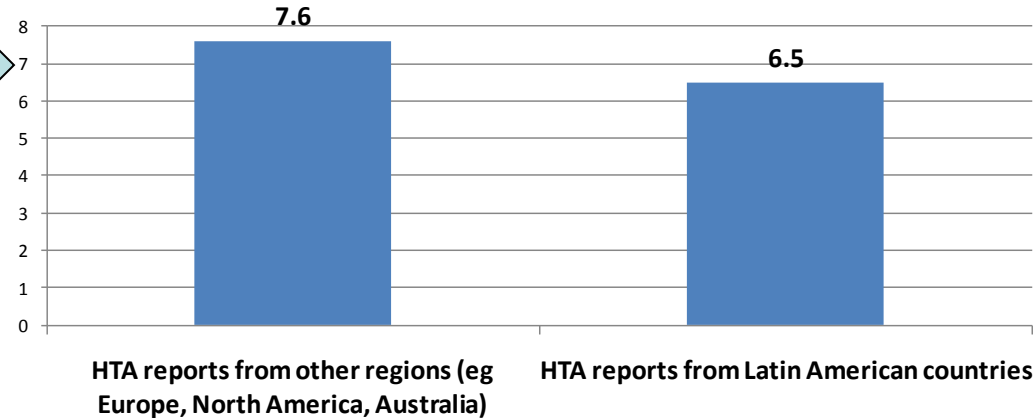
## For HTA reports from Latin America

- Low quantity of HTA reports available
- Lack of guidelines/methods on how to adapt HTA reports
- Poor methodological quality
- Lack of transparency in the HTA reports published

## For HTA reports from other regions

- Differences in health care costs
- Different epidemiological contexts
- Different health care systems

Barriers for transferability: Different healthcare costs



p<0.01

# Conclusions (1)

- Transferability is playing an important role in the region.
- Currently, the use of HTA reports from other regions exceeds that of those from Latin America (**potential threats?**).
- However, both decision-makers and researchers agreed to identify HTA reports from the region with the greatest potential for transferability and applicability.
- Current barriers for local transferability, such as lack of transparency, poor methodological quality and low production of reports, should be overcome.



# Discussion

- The use and adaptation of HTAs from other jurisdictions can be a valuable tool to overcome the scarcity of local information and the lack of time and resources to generate evidence in the short term.
- It is also expected that many of the barriers that are currently limiting a wider transferability of HTAs in LAC will improve in the short term to the extent that local production of HTA increases and methodological quality and transparency of reports is improved.
- However, the use of HTAs from other jurisdictions also requires adequately trained researchers and decisions makers, and even under the best conditions it may involve risks and limitations. Despite its potential value as a tool to assist decision-making process under conditions of lack of information, it is by no means a way to replace the local production of good quality information in the future, which is one of the greatest challenges facing the region today.

# Thank you!

Andres Pichon-Riviere MD MSc PhD  
**apichon@iecs.org.ar**

**Table 3.** Means scores in the rating of the usefulness and applicability of the information found in health technology assessment reports (HTAs) from other jurisdictions for different domains: Responses from researchers and decision makers. Scores in a 1 to 10 scale (1=not useful at all, 10=extremely useful)

Domains	Researchers	Decision Makers	p-value
<i>Information found to be more useful, applicable and adaptable (mean score of 7.0 or more)</i>			
Description of the technology	8.4	7.4	<0.01
Data on efficacy/effectiveness	8.3	7.5	<0.01
Data on safety	7.5	7.0	ns
As starting point to develop a new HTAs	8.0	N/E	
Methods of the systematic review	7.7	N/E	
As an aid in the comparisons of results	7.4	N/E	
<i>Information found to be less useful, applicable or adaptable (mean score below 7.0)</i>			
Ethical, legal and social impact	5.9	5.9	ns
Budget impact	5.6	5.9	ns
Economic Evaluation	6.8	6.5	ns
Impact on the organization	6.2	6.4	ns

HTAs: Health Technology Assessment reports; N/E: not evaluated; ns: p-value not significant (>0.05)

**Table 3.** Means scores in the rating of the importance of the different barriers that may be currently limiting a wider transferability of Health Technology Assessment Reports (1-10 scale, higher scores corresponds to barriers considered to be more important): scores for HTA reports from Latin American and Caribbean countries and for HTA reports from regions outside Latin America (e.g. Europe, Australia, Canada)

Barrier	For HTAs from other LAC countries	For HTAs from regions outside LAC	p-value
<i>Barriers that scored higher for HTAs from LAC</i>			
Low quantity of HTAs available	7.1	5.2	<0.01
Lack of guidelines/methods to adapt HTAs	7.2	6.8	<0.01
Low methodological quality	6.7	5.3	<0.01
Lack of transparency in the HTAs published	6.7	5.9	<0.01
<i>Barriers that scored higher for HTAs from other regions</i>			
Differences in health care costs	6.6	7.9	<0.01
Different epidemiological contexts	6.1	7.5	<0.01
Different health care systems characteristics	6.5	7.8	<0.01
Different scope of the reports	6.1	7.0	<0.01

HTA: Health Technology Assessment; HTAs: Health Technology Assessment reports; LAC: Latin America and the Caribbean