



IECS

INSTITUTO
DE EFECTIVIDAD
CLINICA
Y SANITARIA



Cochrane
Argentina

The Global Evidence
Synthesis Initiative



HTA Rapid Reviews

What are they?

How to do it?

How can they improve decision making?

Agustín Ciapponi

Cochrane Argentina Director, Instituto de Efectividad Clínica
y Sanitaria (IECS), Argentina

- SR/HTAs take unacceptably long time but information is needed now!



Rapid reviews/HTAs have emerged as an approach to synthesizing evidence, for informing decision makers in health care settings.



It is uncertain if much shorter timeframe could be adequate to capture properly the key evidence.



Traditional systematic reviews



Rapid reviews



Products and terminology

- **SR and HTA** (6 months to ~3 years)
- **technology assessment report** (6-9 months)
- **rapid assessment** (6 months)
- **accelerated SR** (4 months)
- **rapid review** (3 months)
- **tech notes** (6 weeks – 6 months)
- **technology overview** (3 months)
- **rapid response** (1 week - 1 month)
- **mini HTA** (month?)
- **rapid HTA** (2-4 weeks)
- **quick note** (5-7 days)
- **ultra rapid response** (hours – days)
- **scope searches** (1/2 day)



Quality

Timeliness

Days

Weeks

Months

Years



Scoping

Rapid review

HTA /Review

Ultra-rapid

Rapid HTA

Response

How do we develop a procedure for the best available answer within a proper timeframe?

RESEARCH ARTICLE

Open Access



325 (58.5%) of 556
decision-makers and
guideline developers
worldwide completed
our survey.

Trading certainty for speed - how much
uncertainty are decisionmakers and
guideline developers willing to accept
when using rapid reviews: an international survey



Traditional Systematic Review, 18 months (100%)



Rapid Review, 3 months (90%), 10% error tolerance



Rapid Review, <1month

Background

- Several agencies increasingly do rapid reviews/responses (23 out of 25 surveyed agencies did rapid reviews in 2006)

But they varied in:

- methodology
- search strategy
- quality assessment
- restriction on study type
- Analysis
- Economic evaluations

IECS Setting

- 🌈 **IECS** is an Argentinean HTA agency, that provides reports to public institutions, social security and private insurance entities.
- 🌈 Since 2012 we produce Ultra-rapid HTAs, made in up to 3 days, aiming to solve specific coverage problems, often related to a single patient needs.
- 🌈 The **rapid-HTAs** allow a more exhaustive assessment of the PICO question applicable to **similar patients**.
- 🌈 Decision-makers systematically complete a brief survey on usefulness and satisfaction within two weeks of receiving the Ultra-rapid HTAs.





Ultra-rapid HTA
(produced in **2-3 days**)

**1. ≠ Conclusions,
amount and direction
of the evidence?**



Rapid-HTA
(produced in **4-8 weeks**)

2.a What is the decision-makers' perception about **ultra-rapid HTAs**?

2.b Which is the agreement between coverage decisions and **ultra-rapid HTAs**' conclusions



Main features of HTAs



Ultra-rapid

Rapid



Elaboration time	2-3 days	4-8 weeks
Developer training	High	Moderate-High
Supervision	1 Senior tutor	Whole HTA team
Previous scoping	Not formally	Yes
Focused search	Highly	Moderately
Evidence source	SRs, CPGs, HTAs, Coverage policies, complementary primary studies	

Methods

- 🔧 We selected pair of documents (**ultra-rapid HTAs** & **rapid-HTAs**) oriented to the same research question.
- 🔧 All the **rapid-HTAs** were published after the **ultra-rapid HTAs**, within the following 12 months.
- 🔧 The additional evidence identified by the **rapid-HTAs**, which was compiled at a later search date than the **ultra-rapid HTA**, was excluded and the conclusions modified wherever necessary.
- 🔧 Pairs of independent researchers extracted outcomes, and disagreements were solved by a third researcher.
- 🔧 We analyzed the routine survey to study decision-makers' perception and compared their coverage decision against the conclusions of the reports.

..... We selected 32 pairs of documents and **24** that met inclusion criteria were finally included.

..... 92% of **rapid-HTAs** included more **evidence** than **ultra-rapid-HTAs**

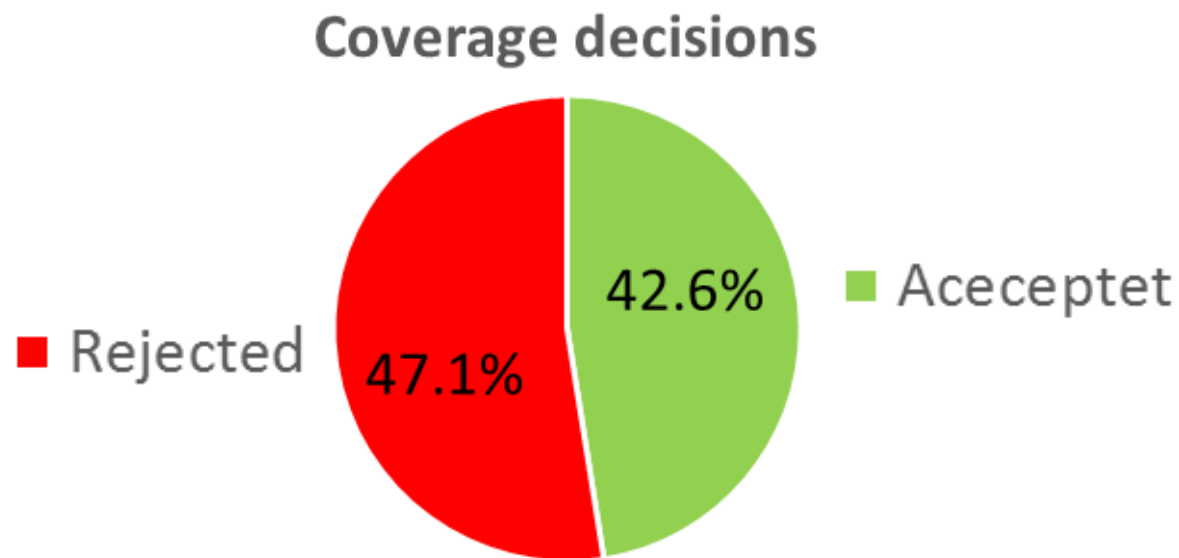
Included Evidence	ultra-rapid-HTAs (Mean ± SD)	rapid-HTAs (Mean ± SD)	Difference (95% CI)	P value (t test)
Guidelines	2	5.5 ± 5.5	3.5 (1.2 - 5.8)	0.0043
Systematic Reviews	1.7 ± 1.5	3.4 ± 3.5	2.2 (0.6 - 3.8)	0.0071
RCTs	0.2 ± 0.7	1.1 ± 1.2	0.9 (0.3 - 1.5)	0.0028

..... The **rapid-HTAs** included 50% more safety and quality of life **outcomes** than **ultra-rapid-HTAs** in this sample

||||. Despite the more evidence considered by **rapid-HTAs**, there was a **96% (95% CI 78.9 to 99.9) of conclusion matching** with **ultra-rapid-HTAs**

||||. The only one mismatch was because a **rapid-HTAs** considered a technology for selected cases and **ultra-rapid-HTAs** considered the same technology as experimental.

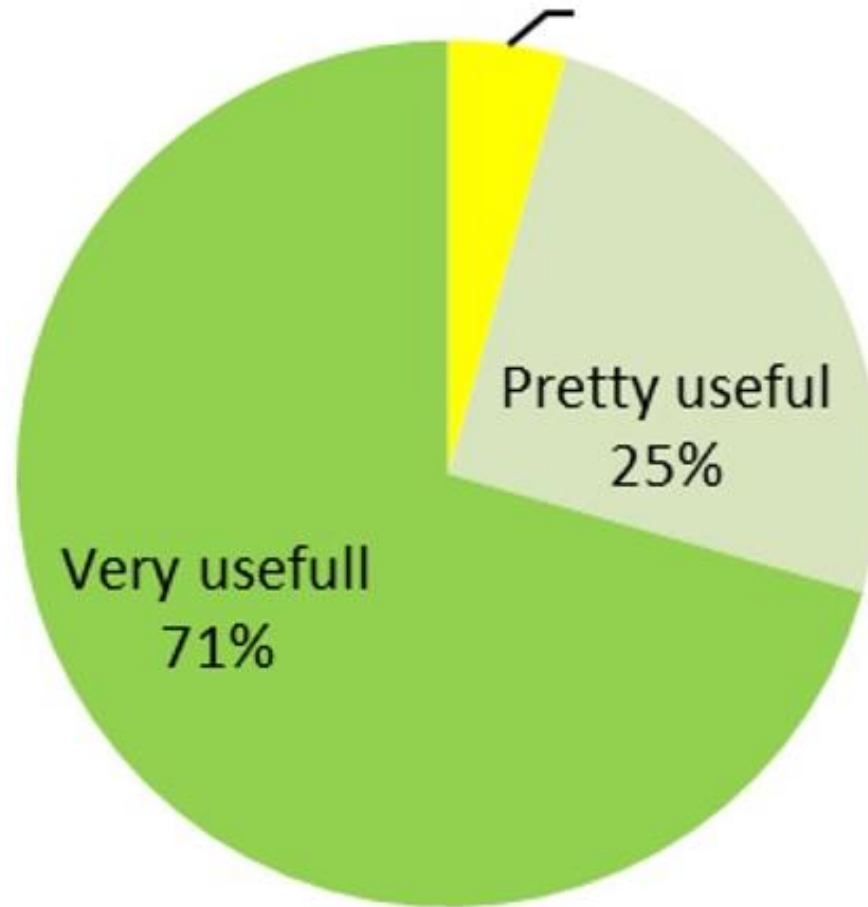
- From May 2014 to February 2016 we collected a total of 68 responses from 117 reports (58%).
- The 3 most frequently consultations were related to cancer, neurological and musculoskeletal disorders; and half of the cases were related to drugs.
- In 10% of the cases had pending coverage decisions (all – conclusions).



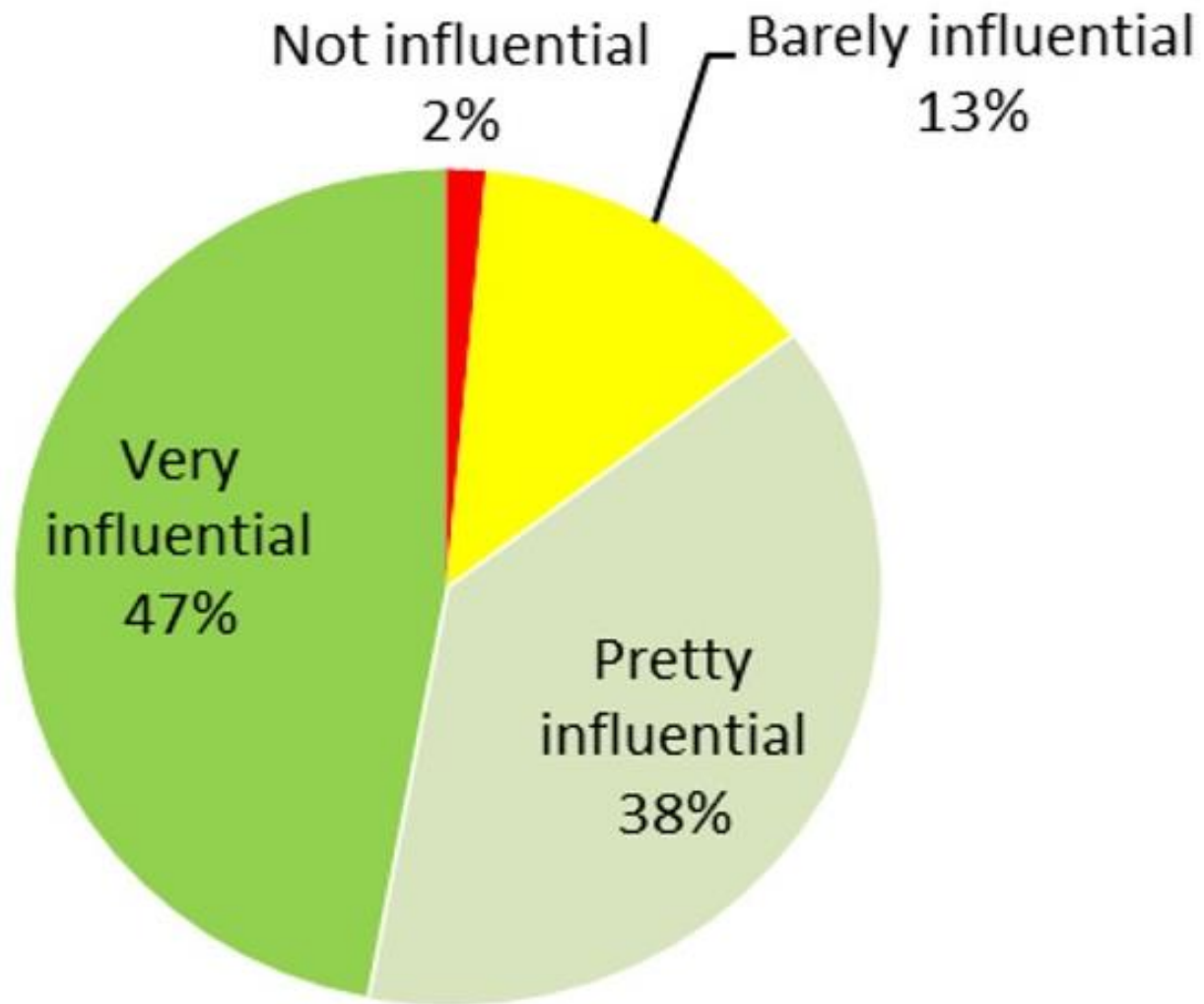
Usefulness

Neither useful nor useless

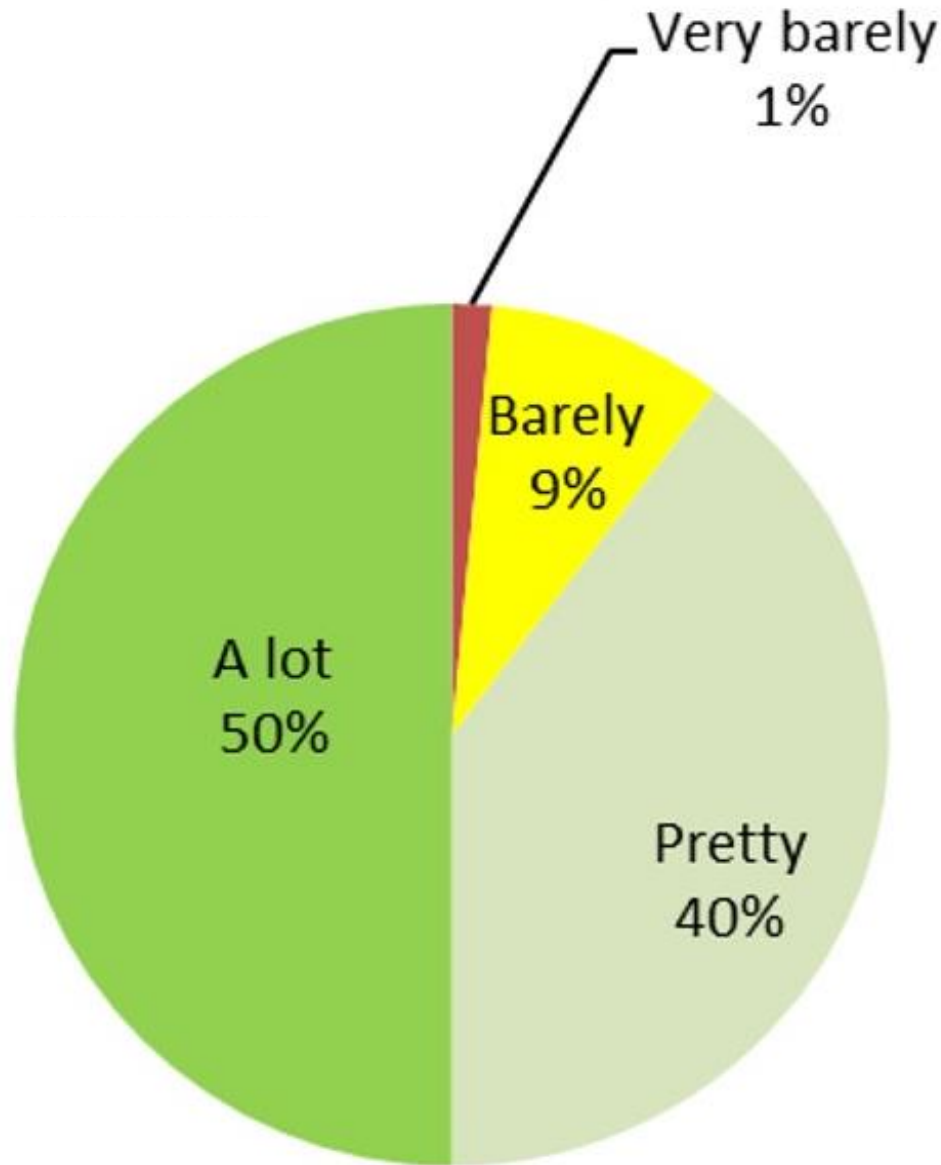
4%



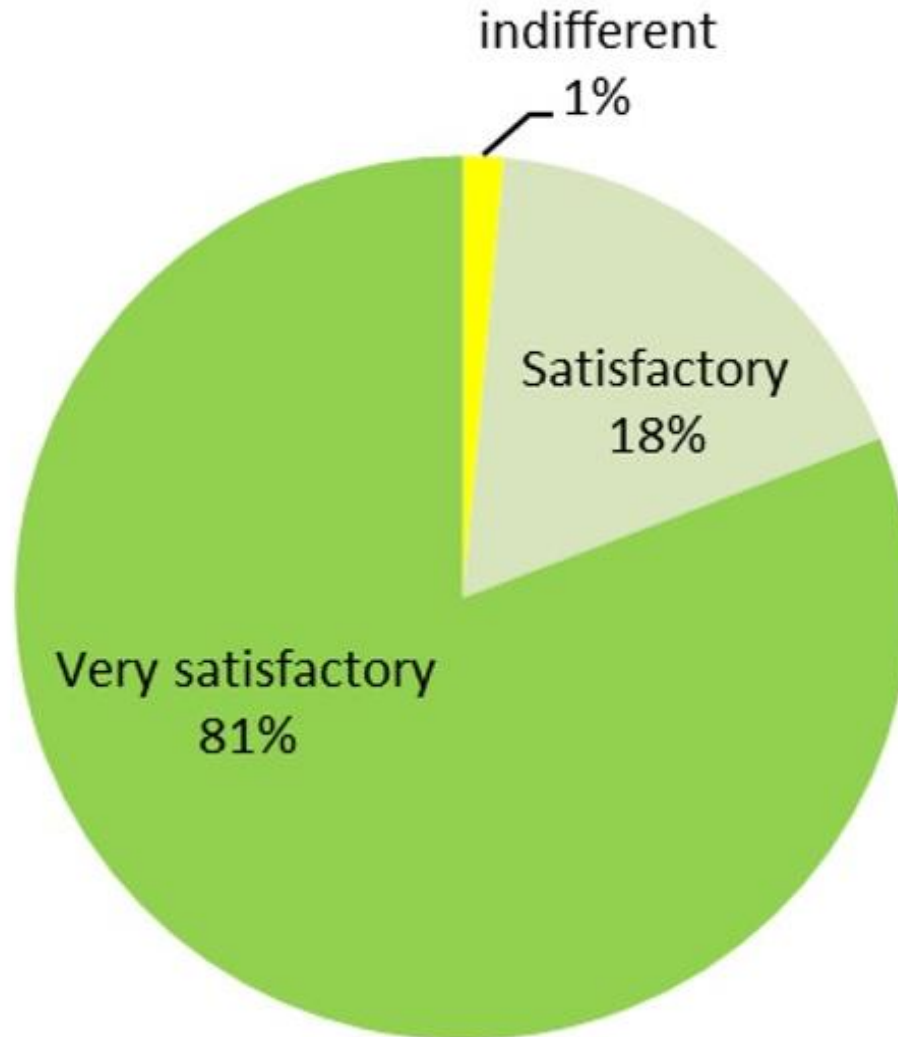
Influence



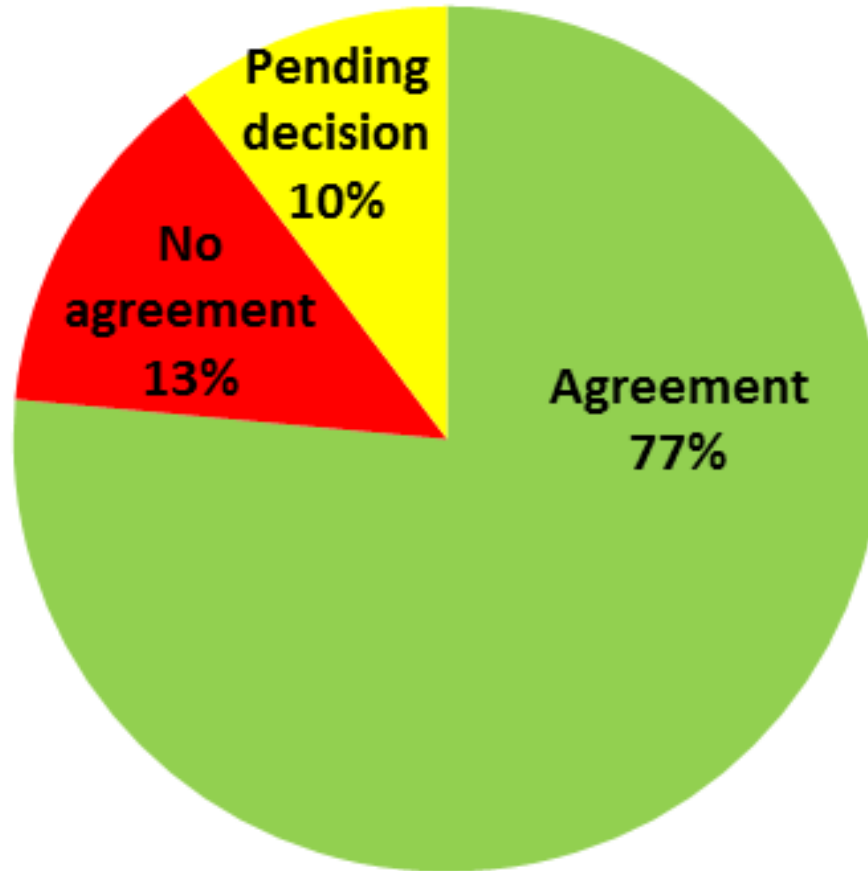
Decision improvement



Results: Satisfaction






Agreement between coverage decision and repots' conclusions



Conclusions

- ✔ We found no serious mismatching between **ultra-rapid HTAs** & **rapid-HTAs**.
- ✔ Although **ultra-rapid HTAs** included less amount of evidence and in this sample not reported important outcomes as safety and quality of life, **ultra-rapid HTAs seem to be a reliable source for the short-term decision-making**.
- 👍 Most decision makers found **ultra-rapid HTAs** useful and their final decisions were influenced and improved by them.
- 👍 Agreement with final decisions was high.

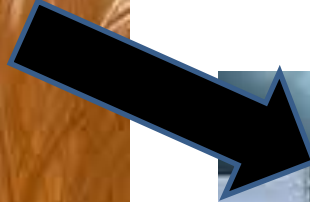
Discussion

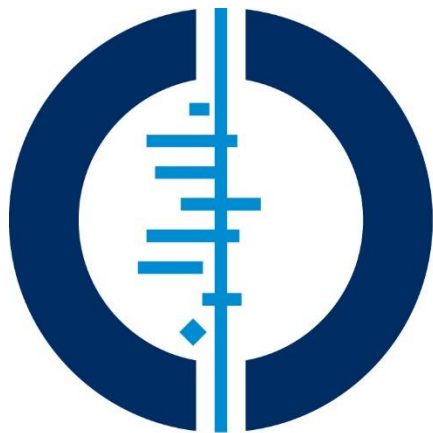
-  The timeframe to produce evidence is becoming shorter: from **quick and dirty** to **quick and best**
-  It is critical to determine that **ultra-rapid-HTAs** produced by highly trained teams are also reliable for the short-term decision-making in **other setting**.
-  Although there was a high conclusion-matching, the **“slower”evidence synthesis** are still useful since they provide a more complete evidence picture and a possibly better informed decision-making.





Need for standardization !





Cochrane Argentina

<http://www.iecs.org.ar/centro-cochrane-iecs/>