It's time for timeliness in Health Technology Assessment (HTA)

Sharing hospital-based health technology assessments internationally

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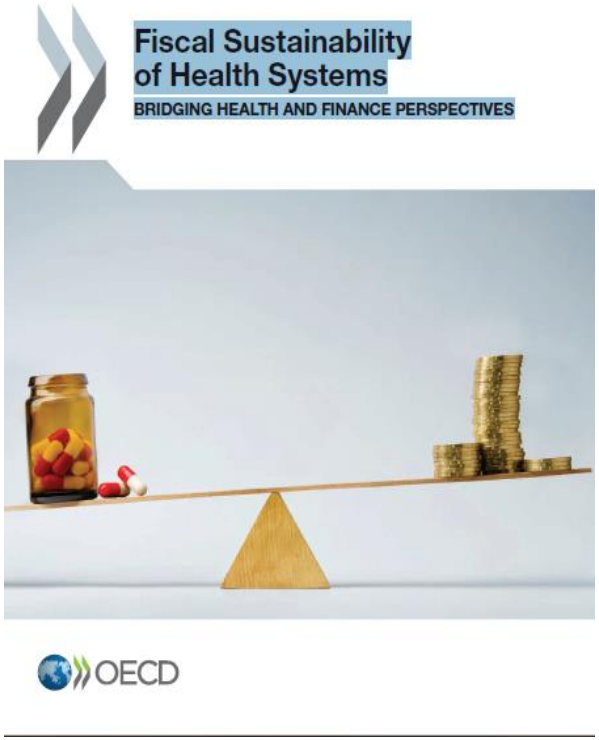
New health technology investment

- National healthcare systems worldwide are at a critical point due to the **fiscal sustainability** challenges faced.
- New investments has to be carefully valued in terms of **effectiveness**, **safety** and **sustainability**.
- New health technology investments are driven by increasing technological progress. This has a great impact on healthcare sector and its costs.



OECD (2015), *Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives*, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/9789264233386-en

Sustainability - definition

- The OECD defines fiscal sustainability as the ability of a government to maintain public finances at a **credibile** and **serviceable** position over a long term (OECD, 2013)
- Fiscal sustainability implies governments are able to **mantain policies** and **expenditure** into the future, without major adjustments and excessive debt burdens for future generations.
- The term refers to overall government spending, revenues, assets and liabilities that reflect past commitments and adapt to future trends such as **socio-economic trends** and **environmental factors.**

Table 1.1. **Fiscal sustainability definitions from the European Commission and the International Monetary Fund**

European Commission	International Monetary Fund
The ability to continue now and in the future current policies (with no changes regarding public services and taxation) without causing public debt to rise continuously as a share of GDP (European Commission, 2014).	A set of policies is sustainable if a borrower is expected to be able to continue servicing its debt without an unrealistically large future correction to the balance of income and expenditure (IMF, 2007).

Source: European Commission (2014), "Identifying Fiscal Sustainability Challenges in the Areas of Pension, Health Care and Long-term Care Policies"; IMF (2007), *Manual on Fiscal Transparency*, IMF, Washington, DC.

Current situation: health expenditure (1/2)

- Fiscal sustainability is an important issue for health systems today and in the future, due to the **rapid growth in health spending**;

- Health spending has generally exceeded economic growth, with spending largely **driven by new technologies;**

- Despite the recent slowdown following the economic crisis, it is expected to consume an additional **2% of GDP** over the next 20 years for health care;

- The implications of increasing healthcare costs are particularly important for public finances, as health care is mostly financed from public sources in most OECD countries;

- Health expenditure is **not automatically a problem** because "Good health" remains is a fundamental part of human development and an important contribution to economic growth;

- Therefore, accepting greater healthcare spending as a share of the state budget is not automatically a problem;

Current situation: health expenditure (2/2)

- The challenge is to ensure that any increase in spending meets fiscal sustainability constraints, and that money is spent effectively.

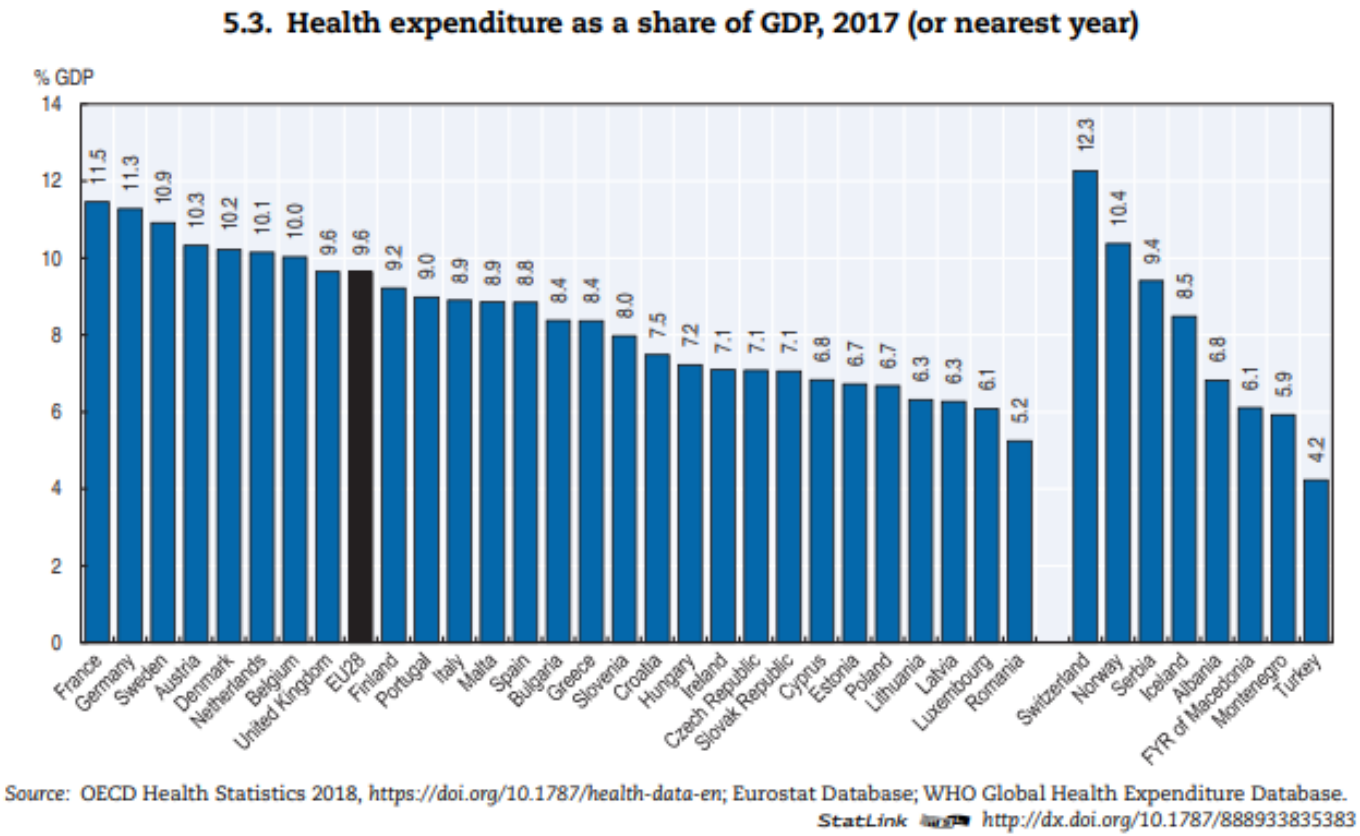
- Despite a dramatic slowdown in spending on health and long-term care in many EU member states following the 2008 economic and financial crisis, more recent estimates show that **spending is back on an upward path**.

- Since, on average, around three-quarters of health spending is financed out of public sources, this represents a sizeable share of government spending, meaning that growth in health and long-term care spending can have a considerable impact on a country's budgetary position.

- In addition, **ageing populations will continue to exert pressures** on health and long-term care spending while at the same time reducing the size of the working-age population able to finance such expenditures, thereby raising concerns around the fiscal sustainability of health and long-term care systems.

OECD (2015), *Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives*, OECD Publishing, Paris, https://doi.org/10.1787/9789264233386-en.

Health expenditure as a share of GDP, 2017 (or nearest year)



Source: OECD Health Statistics 2018, https://doi.org/10.1787/health-data-en; Eurostat Database; WHO Global Health Expenditure Database.
StatLink http://dx.doi.org/10.1787/888933835383

OECD/EU (2018), *Health at a Glance: Europe 2018: State of Health in the EU Cycle*, OECD Publishing, Paris. https://doi.org/10.1787/health_glance_eur-2018-en

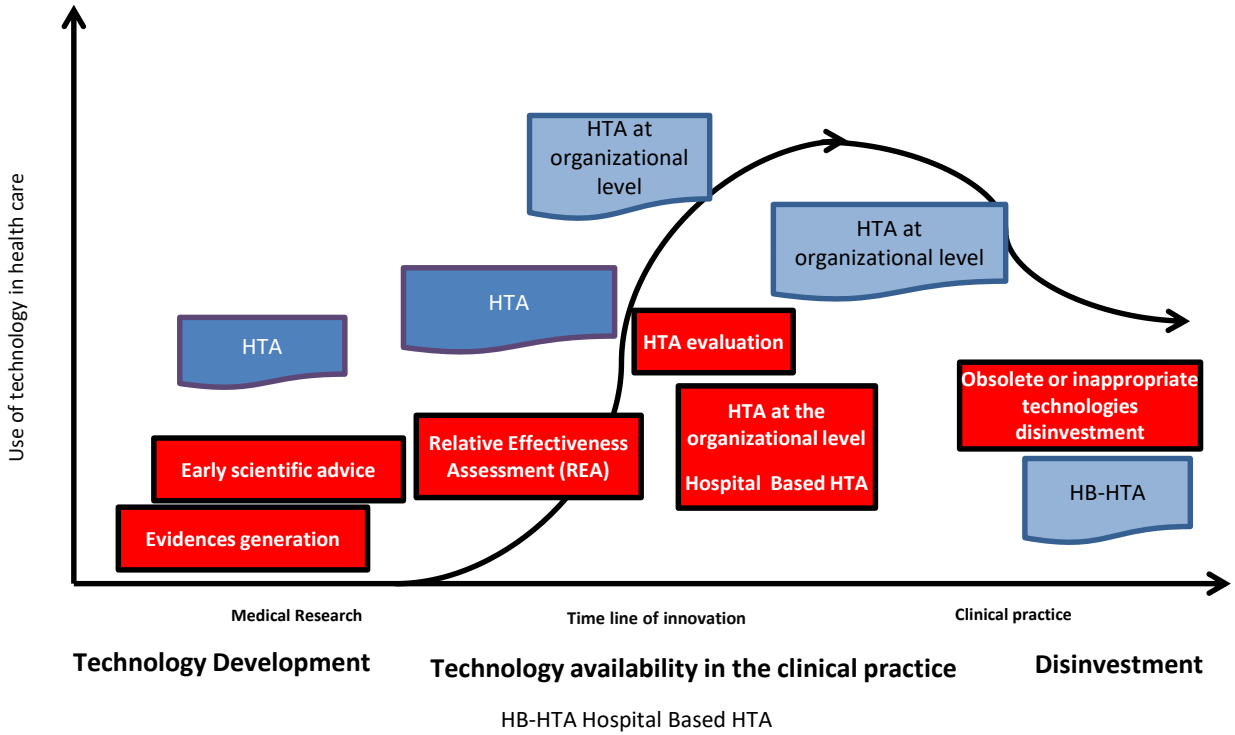
Description of problem

It is therefore extremely important that

Hospitals often serve as the **entry point** for new technologies to the healthcare

Health Technology Assessments (HTA) are available **in timely** order to accurately inform decision-makers on both short- and long-term effects of a health technology

HTA integrated in the technology life cycle
The role of HB-HTA



HB-HTA Hospital Based HTA

What is a potential solution?

Hospital based HTA (HB-HTA) was developed to accommodate the need for evidence based hospital-specific information in a timely manner.

- A substantial increase in the use of HB-HTA has been observed in the last years.
- Only **few reports** are being published → A database for the structured collection of HB-HTA reports could help the **dissemination** and **collaboration** between hospitals.

Hospital Based – HTA: definition (1/2)

- Hospital-Based Health Technology Assessment (HB-HTA) constitutes an approach that has been increasingly used for this purpose, and hospitals in different countries have established HB-HTA units.

- HB-HTA units constantly produce reports that often come in the form of a mini-HTA, **rapid review** or **full** HTA that reflect the hospital context and take into account the information needs of hospital decision-makers.

- Even though decision-makers in hospitals could highly benefit from these studies and prior assessments, many of the existing HB-HTA reports are currently not being shared at all or not consistently in a single database.

Cicchetti A, Marchetti M, Iacopino V, D'Amico G, Sampietro-Colom L. Organizational Models of Hospital Based HTA: Empirical Evidence from Adhophta European Project. *Value in Health*. 2015;18(7):A560-1.

Hospital Based – HTA: definition (2/2)

- A database for the structured collection of HB-HTA reports could help the dissemination and collaboration between hospitals with or without HB-HTA units.
- For this purpose, the EU funded project AdHopHTA created a database in which HB-HTA information (particularly HB-HTA reports) can be stored. It was expected that such database could potentially prevent waste of resources by avoiding duplicative work, and thus saving time and resources.
- Moreover, hospital-managers and/or physicians that have been provided more scientific research are backed up with more evidence and this could lead to improved patient care.

Gagnon M. Hospital-Based Health Technology Assessment: Developments to Date. PharmacoEconomics. 2014;32(9):819-824.

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SHARING AND COLLECTING HOSPITAL-BASED HEALTH TECHNOLOGY ASSESSMENT REPORTS INTERNATIONALLY: IS AN EXTENSIVE PARTICIPATION OF STAKEHOLDERS REALISTIC?

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Abstract

Objectives:
The emergence of new medical technologies and budget restrictions has led to a substantial increase in the use of hospital-based health technology assessment (HB-HTA). This qualitative study explores whether there is a possibility and interest to realize the collection and dissemination of HB-HTA reports on an international scale by exploring the opinions from HB-HTA experts.

Methods:
A survey was designed and sent to an international group of experts knowledgeable in HB-HTA from eighteen different countries. The survey contained questions about their opinions on the collection and distribution of HB-HTA information, and about the meaningful dimensions, barriers and values about a database. The data obtained were analyzed through the method of content analysis.

Results:
A total of thirty-six experts (response rate of 18.3 percent) responded to the survey. The obtained data shows that all respondents agree that the collection of HB-HTA reports is useful. Moreover, 41.7 percent of respondents that are in the position of sharing HB-HTA reports (n = 24) mentioned that full HB-HTA reports can be shared. Many other respondents reported that confidentiality (45.7 percent) and investment into a database (40.0 percent) are important barriers for the dissemination of HB-HTA reports.

Conclusions:
There seem to be enough demand and willingness to share all or most reports by a large community of HB-HTA producers. Therefore, there is a need for a well-designed database with regular maintenance and complete, comparable, and qualitative HB-HTA reports. The database of the AdHopHTA project could potentially facilitate this process.

A survey relative to the project "**Sharing and collecting hospital-based health technology assessment reports internationally: Is an extensive participation of stakeholders realistic?",** performed by an international group of experts knowledgeable in HB-HTA from eighteen different countries has showed that there is an interest to realize the **collection** and **dissemination** of HB-HTA reports on an international scale

Methods

- A **cross-sectional study** among HB-HTA experts;
- The target population was identified as people who are directly or indirectly involved in producing or using HB-HTA reports;
- The HB - HTA interest group consists out of developers and users of HTA reports in the hospital setting such as **hospital managers** and **researchers**.
- The study consisted of **a survey** that was emailed to the target population with the method of convenience sampling, meaning that, email were only sent to the population with easily accessible email addresses and that there was no random component;
- The questionnaire contained out of **seventeen open-ended** and **fifteen close-ended questions**, which were divided in three sections. Data derived from close-ended questions were analyzed using **descriptive statistics**. Responses to open-ended questions were analyzed using the method of **content analysis**.

Results (1/3)

Table 1. Description of Respondents by Country, Job Function, HB-HTA Awareness, and Work Setting

Country	No. of respondents	Proportion of respondents directly involved in HB-HTA	Proportion of hospital managers/ directors	Proportion of researchers/ physician/ consultants	Proportion of respondents working in a local HTA setting (hospital or healthcare setting)[a]
Australia	4	1/4	1/4	3/4	2/4
Argentina	1	1/1	1/1	0/1	1/1
Brazil	2	1/2	1/2	1/2	1/2
Canada	8	8/8	3/8	5/8	5/8
Denmark	2	2/2	1/2	1/2	1/2
Finland	1	1/1	1/1	0/1	1/1
France	1	1/1	0/1	1/1	1/1
Singapore	1	1/1	0/1	1/1	1/1
Spain	1	1/1	1/1	0/1	1/1
South Africa	1	1/1	0/1	1/1	0/1
Sweden	1	1/1	0/1	1/1	1/1
Switzerland	3	2/3	1/3	2/3	3/3
Ireland	1	0/1	0/1	1/1	0/1
Italy	3	3/3	0/3	3/3	3/3
Kazakhstan	1	1/1	1/1	0/1	0/1
Lithuania	1	0/1	1/1	0/1	0/1
Turkey	1	1/1	1/1	0/1	1/1
United States	2	1/2	1/2	1/2	1/2
Total	35	27/35	14/35	21/35	23/35

[a]When a respondent answered both local and, for example, national, it will still be marked as local here.

- The data were collected between April 19 and May 22 in 2016;
- There were **255 emails** sent to persons working in HB-HTA or HTA related activities in this period.

Results (2/3)

Table 2. Current Methods of Sharing HB-HTA Reports Externally

Method	% of respondents using the noted method[a]
On HB-HTA unit's Web pages	54.5
Through direct contact/ (national) networking	40.9
On HTA databases, exception of AdHopHTA database	27.3
In scientific journals	22.7
On the AdHopHTA database	18.2
On newsletters, workshops and/or conferences	9.1

[a]A respondent can use one, more than one, or no method.

- In total, 65.8 percent of the participants responded confirmative to the question **"Does your organization share HB-HTA reports externally?";**
- **Six different** methods of sharing HB-HTA reports by the respondents were identified (see Table 2).

- The most common used methods to share HB-HTA reports **were internal databases or publications on Web pages** of for instance hospitals or national authorities (e.g., www.sst.dk > planning) especially prevalent in countries such as Canada, Denmark, and Sweden;
- The second most used method is the collection of HB-HTA reports through **networking and direct requests** (40.9 percent). This means that information is often only disseminated within local or national networks among, for instance, hospitals (Spain, Switzerland, and Canada);
- Third, 27.3 percent of the respondents mentioned that they shared their HB-HTA reports externally **through common databases (**Canada, Denmark, Sweden and the United States);
- The mentioned databases are:EuroScan, INAHTA, CRD, CADTH, and PubMed;
- Last, the three other methods of sharing HB-HTA reports **are the use of scientific journals** (22.7 percent), the newly developed AdHopHTA database (18.2 percent), newsletters (4.5 percent); workshops (4.5 percent), and conferences (9.1 percent).

Results (3/3)

Table 3. Values, Usefulness, and Barriers of the Collection and Dissemination of HB-HTA Reports According to the Respondents, a Categorization Table Through Content Analysis

Main mentioned values and reasons for usefulness	% of respondents	Main mentioned barriers	% of respondents
V1: Reduce of duplicative work	54.3	B1: Confidential information (e.g. legal and political issues, data on costs, ethics, and patients)	45.7
V2: To learn and help further HB-HTA research	42.9	B2: Investment: time and money to establish, maintain, and update a usable database	40.0
V3: To help with decision and policy making	40.0	B3: Applicability problems (e.g. differences in context, economics, methods, setting, and framework)	31.4
V4: To have easy access to this area of knowledge	28.6	B4: Reports in other languages	20.0
V5: Efficient use of time and resources	25.7	B5: Intellectual property issues	11.4
V6: To show and share the relevance of the HB-HTA community	17.1	B6: Willingness to share any information	5.7
V7: To improve and maintain high quality standards in HTA	2.9	B7: Other reasons (see text)	22.9

In the close-ended questions, every respondent agreed with the second statement of section 3, which states:
"The collection of hospital-based health technology assessment (HB-HTA) information is useful."

- The most frequent answer to the question on values and usefulness is that the collection and dissemination of HB-HTA reports will **reduce duplicative work in this field** (54.3 percent);
- The second most mentioned value is that the collection **helps with further HB-HTA research** (42.9 percent), followed by the fact that **previous research will help with the decision and policy making for other hospitals** (40.0 percent);
- The most frequent mentioned barrier is the **problem of not being able or willing to share confidential information** (45.7 percent).
- The second most mentioned barrier for the collection and sharing HB-HTA reports is that of the **investment of time and money to maintain and update a good working database** (40.0 percent);
- Barriers not mentioned in the table but brought up by the respondents are low availability of internet, bureaucracy, unknown reports, increase of inertia on the part of some hospitals, decentralization of production, ensuring the right use and intention of reports, and difficulties finding the relevant reports.

Discussion

- This study shows that experts in the area of HB-HTA from different countries in general **agree that collection and dissemination of HB-HTA reports is useful and valuable**;

- Many experts have already established networks and HB-HTA unit's databases to share reports internally or on a small scale;

- By looking to the results of this study it can be argued that the willingness is present for most persons in the position of sharing HB-HTA reports but that **a well-established cooperation and resources are not yet available**;

- It could be of added value if there was more research conducted on this topic among, for example, hospital managers who are not involved in HB-HTA or HTA and to explore whether they also think that the collection of these reports is valuable.

Discussion

Important barriers (1/2)

- The most frequently mentioned barrier is the **inability** or **unwillingness** to share confidential information included in some of the HB-HTA reports.
- Hospital managers more often than researchers are reluctant about promoting openness and transparency since this could put a hospital in a vulnerable position. Specifically, the **transparency** about the quality of health care and price is largely missing in the healthcare of some countries.
- However, it is argued that it is favorable that hospitals should be transparent and that 'confidential' information should be open to the public since this will indeed indicate the weak points of a hospital and will therefore enable improvement.
- This could in turn improve the hospital and the quality of care since it will show the comparisons and differences with their competitors. Building on this development patients are likely to develop more confidence in the healthcare given in their country and it in turn would **promote more competitiveness between hospitals**.

Discussion

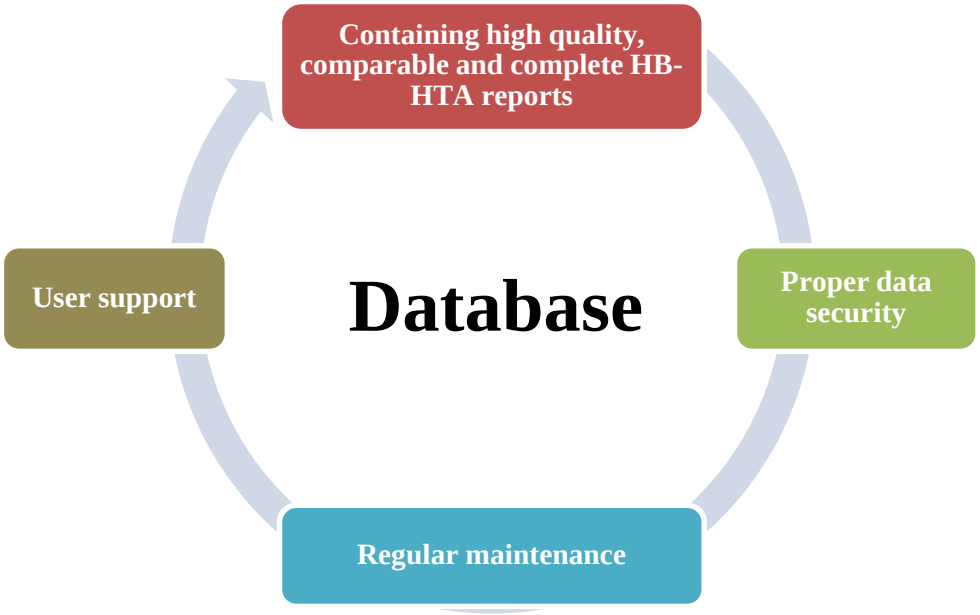
Important barriers (2/2)

- The second most frequently mentioned barrier is **the need of time and resources investment to establish, maintain and update a database in a consistent manner.** Thus, there will have to be financing and plans in order to manage such an operation as maintaining a database. It would probably be beneficial if an organization would **actively promote** the database in order to ensure that it would be used by as many stakeholders as possible.
- The third barrier to be considered is **the applicability problems of reports.** HB-HTA reports contain hospital specific information and it is therefore in the concern of some of the experts whether the reports are transferable and applicable for other hospitals or contexts.
- However, HB-HTA reports should clearly state their goal and scope and should present analysis that are performed systematically using good practice methods and appropriate tools. Moreover, it is argued that the generalizability and transferability of data in HTAs is increasingly relevant as health care becomes **more globalized**.

Effects/Changes

The challenge will therefore be to:

Overcome these barriers AND **design** a database containing HB-HTA reports



Lessons

International collaboration in HB-HTA is the key

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to timely inform decision-makers without compromising the quality of the data or the methodology.

Main messages

Collaboration is an **integral part** of research and the same should apply for HB-HTA in order to secure **timeliness** in HTA and **contain resources.**