Mini-HTA

Experiences from use of local HTA at Odense University Hospital,
Denmark

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- **Odense University Hospital:**
- 1068 beds in 40 clinical departments.
- 6.700 full time employees
- Annual budget: € 530 mill.

Main questions:

- The challenge and the solution
- Defintion and content of mini-HTA
- An example
- Who request and use mini-HTA?
- What is the quality of the information in mini-HTA?
- Couldn’t we just use the national HTA-rapports?
- Strengths and weakness
- The latest national and international developments

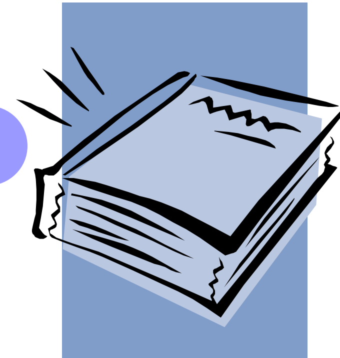
The challenge

The challenge for the Hospital management:

- Want to use HTA as a basis for decision making
- Must make rapid decisions

The salesman's recommendation

2 year national HTA-project



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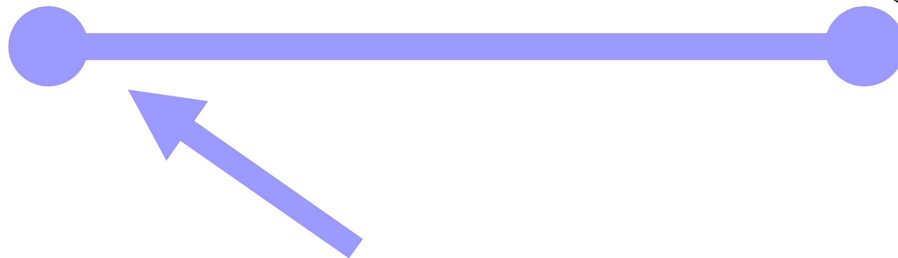

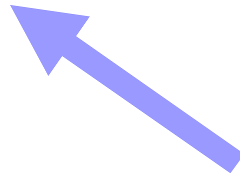

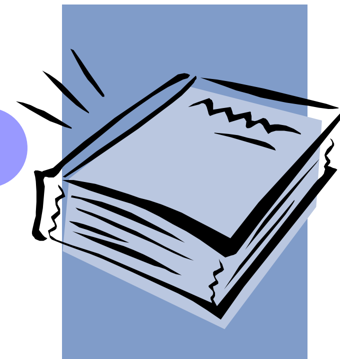

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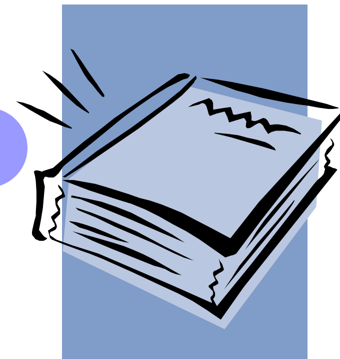

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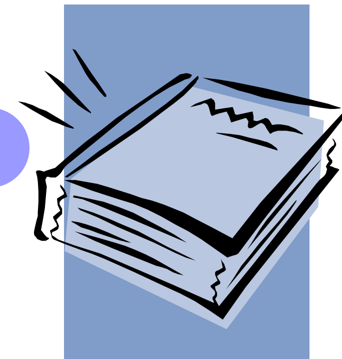

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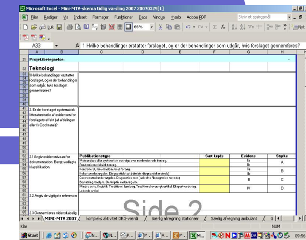
Definition and content of mini-HTA



The pragmatic solution: Mini-HTA

- A check list (spreadsheet) describing the consequences of the introduction of a specific new technology for a specific patient group in a specific clinical department
- Based on a systematic literature review
- Used as a basis for decision making

The mini-HTA form:

- The proposer?
- The purpose and content of the proposal?

Technology	Patient aspects	Organization	Economy

Microsoft Excel - Mini-MTV-skema tidlig varsling 2007 20070329[1]

Filer Rediger Vis Indsæt Formater Funktioner Data Vindue Hjælp Adobe PDF

A33 fx 1 Hvilke behandlinger erstatter forslaget, og er der behandlinger som udgår, hvis forslaget gennemføres?

Projektbetegnelse:

Teknologi

1 Hvilke behandlinger erstatter forslaget, og er der behandlinger som udgår, hvis forslaget gennemføres?

2. Er der foretaget systematisk litteraturstudie af evidensen for forslagets effekt (af afdelingen eller fx Cochrane)?

2.1 Angiv evidensniveau for dokumentation. Benyt vedlagte klassifikation.

Publikationstype	Sæt kryds	Evidens	Styrke
Metaanalyse eller systematisk oversigt over randomiserede forsøg.		Ia	A
Randomiseret klinisk forsøg.		Ib	
Kontrolleret, ikke-randomiseret forsøg.		IIa	B
Kohorteundersøgelse. Diagnostisk test (direkte diagnostisk metode)		IIb	
Case-control undersøgelse. Diagnostisk test (indirekte Nosografisk metode) Beslutningsanalyse. Deskriptiv undersøgelse.		III	C
Mindre serie. Kasuistik. Traditionel lærebog. Traditionel oversigtsartikel. Ekspertvurdering. Ledende artikel		IV	D

2.2 Angiv de vigtigste referencer

2.3 Gennemføres videnskabelig

Side 2

Appendix 3: Mini-HTA (form)

For guidelines regarding completion of the form please refer to appendix 4.

The form may be downloaded from the DACEHTA home page www.dacehta.dk and it can then be completed in the electronic form.

Questions 1 - 3: Introduction

1: Who is the proposer (hospital, department, person)?

2: What is the name/designation of the health technology?

3: Which parties are involved in the proposal?

Questions 4 -12: Technology

4: On which indication will the proposal be used?

5: In which way is the proposal new compared to usual practice?

6: Has an assessment of literature been carried out (by the department or by others)?

7: State the most important references and assess the strength of the evidence.

8: What is the effect of the proposal for the patients in terms of diagnosis, treatment, care, rehabilitation and prevention?

9: Does the proposal imply any risks, adverse effects or other adverse events?

10: Are there any other ongoing studies in other hospitals in Denmark or abroad of the effect of the proposal?

11: Has the proposal been recommended by the National Board of Health, medical associations etc.? If YES, please state institution.

12: Has the department previously or on any other occasions, applied for introduction of the proposal?

Questions 13 -14: Patient

13: Does the proposal entail any special ethical or psychological considerations?

14: Is the proposal expected to influence the patients' quality of life, social or employment situation?

Questions 15 -20: Organisation

15: What are the effects of the proposal on the staff in terms of information, training or working environment?

16: Can the proposal be accommodated within the present physical setting?

17: Will the proposal affect other departments or service functions in the hospital?

18: How does the proposal affect the cooperation with other hospitals, regions, the primary sector etc. (for instance in connection with changes of the requested care pathway)?

19: When can the proposal be implemented?

20: Has the proposal been implemented in other hospitals in Denmark or internationally?

Questions 21 - 26: Economy

21: Are there any start-up costs of equipment, rebuilding, training etc.?

22: What are the consequences in terms of activities for the next couple of years?

23: What is the additional or saved annual cost per patient for the hospital?

24: What is the total additional or saved cost for the hospital in the next couple of years?

25: Which additional or saved cost can be expected for other hospitals, sectors etc.?

26: Which uncertainties apply to these calculations?

Questions 21 - 26: Economy

21: Are there any start-up costs of equipment, rebuilding, training etc.?

MAIN FOCUS:

- Changes in expenditures for the hospital
- Changes in reimbursement (DRG) for the hospital

25: Which additional or saved cost can be expected for other hospitals, sectors etc.?

26: Which uncertainties apply to these calculations?

Example: Mini-HTA of stents for intracranial stenosis (2007)

Proposer: Neurological Department and Department of Radiotherapy

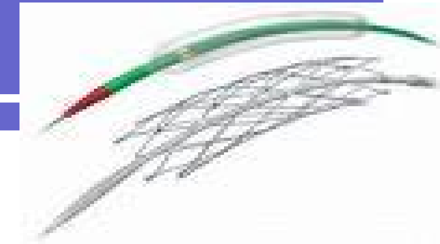
Technology:

- Patients with apoplexy and stenosis have a 22% risk of a new infarct within 2 years.
- New treatment with intracranial stents reduce the risk to 6-7% within 6-9 months
- Evidence: 2 cohort studies with 78 and 45 patients
- Diagnostic examination of 100 patients, surgical procedure for 10 patients
- Data are registered in a clinical multicenter database
- References

Patient aspects:

- In one study: 12 patients had procedural adverse effects
- Need to inform patient about risk of surgery
- Reduction in the risk of new infarct has substantial social and occupational effects

Example: Intracranial stents for intracranial stenosis (2007)



Organisation:

- OUH is leading in Denmark within use of intracranial stents
- We have the staff and the facilities

Economi:

- Costs: Utensils = € 50.000   Staff = € 70.000 kr.
- Increased activity = 10 inpatients, 120 outpatient visits
- DRG-value = € 220.000.
- Possibility of increased DRG-value from treatment of patients from other regions

Produced by: Neurologist, radiologist, nurse, radiographer, economist

Time used: 4 meetings, 25 hours in total

Production of mini-HTA

First meeting	Which parts of the staff should be involved? Which departments should be involved? The purpose of the technology? Primary outcomes? Relevant alternatives/other technologies?	
Tasks:	Systematic literature search Reading and assessment of the literature	
Second meeting	Presentation of effectiveness data/evidence Other alternatives	→ STOP?
Third meeting	Discussion of organisational effects Discussion of use of resources Description of the expected pathways Data collection? Prices?	
Tasks:	Description of organisational effects Calculation of cost per patient	
Fourth meeting	Mini-HTA is Discussion of results and uncertainty	→ STOP?

SUBMIT THE MINI-HTA

Who request a mini-HTA?

The management of the clinical department

- When a doctor apply for introdution of a new technology

The Board of Directors at the hospital

- Compulsory use of mini-HTA in applications for financial support for new treatments at some hospitals

The Association of Danish Regions

- Mini-HTA is compulsory in reports on planned new treatments

The National Board of Health:

- Applications for introduction of new highly specialised treatments
- Annual reports from clinical departments with highly specialised treatments
- Application for new DRG-rates

To what extent is mini-HTA used?

A national study by the National Board of Health (2004)

Results:

- Use of mini-HTA: 55% of counties, 66% of hospitals and 27% of clinical departments
- Different kinds of technologies: Pharmaceuticals, equipment, implants, diagnostics….
- Different purposes: Financing, budget planning, approval of new treatments, early warning…

Main advantages:

- Based on evidence
- Interdisciplinary assessement
- Standardisation of information

Main disadvantages:

- Insufficient evaluation of the evidence
- Lack of quality control
- Increased administrative burden

What is the quality of the mini-HTAs produced?

Review of 52 mini-HTAs from 2008

Strengths

	Yes	No
Description of the assessed health technology	98%	2%
Competing technology described	94%	6%
Systematic literature review performed	96%	4%
Level of evidence described	94%	6%
References described	95%	5%
Types of costs elements described	88%	12%
Organisational consequences in the department described	81%	19%

What is the quality of the mini-HTAs produced?

Review of 52 mini-HTAs from 2008

Quality problems

	Yes	No
Quantative description of effectiveness	25%	75%
Description on patient perception, satisfaction etc.	25%	75%
Description of organisational effects outside department	49%	51%

Examples: *”positive impact on mortality and morbidity”*

”significant improvement in quality of life”

Conclusion:
- Less the 50 % are of good quallity
- Quality assurance is still needed!

Couldn't we just use the national HTA-rapports?

- 2006: Danish hospitals produced 78 mini-HTA's on 46 technologies
- 14 technologies (relevant patient groups) were also assessed by DACHTA
  14 / 46 = **30,4%**

Conclusion:

- There is a need for more and locally focused HTAs in the hospitals!
- However: The national HTA's are our primary source of information!

Strengths of mini-HTA

- Mini-HTA is becoming the standard basis for decision making in the hospitals
- Only the clinical staff know which new treatments they are considering to introduce
- No implementation problem: HTA is only produced when a decision must be made
- HTA is produced by the clinical staff who know the patients, treatment, organisation…
- Timeliness

Weakness of mini-HTA

- Quality problems (25-50 % are OK!) – internal/external review is needed!

- Are all relevant alternatives considered?
- Is the literature search sufficient?
- Are all relevant departments and professions involved?

Preconditions for succes:

- Scientific knowledge and ability to read the literature in the clinical departments
- A hospital management who demands HTA as a basis for decision making
- Access to databases (with full text): Medline, EMBASE, Cochrane, Cinahl…

Tools:

- Support functions (especially health economics)
- mini-HTA courses
- Information on www – HTA portal ect.

Den nationale mini-MTV database - Microsoft Internet Explorer er leveret af OUH

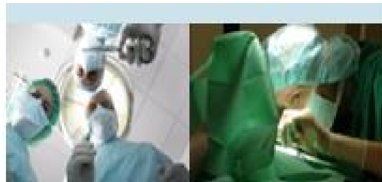
http://www.minimtv.dk/wm221128

Den nationale mini-MTV database

FORSIDE

- Indberetning til Danske Regioner 2009
- Hurtig MTVer
- Vejledning til søgning
- Databasens begreber
- Om databasen
- Om MTV
- Kontakt
- Send din MTV

Login for s-brugere



Søg for eksempel efter mini-MTV'er inden for det kirurgiske speciale. Vælg kirurgi under "teknologi" og afgræns herefter til f.eks. thoraxkirurgi, ortopædisk kirurgi etc.

Den nationale database for mini-MTV er et samarbejde mellem Odense Universitetshospital og Danske Regioner. Formålet med databasen er at give ansatte på danske sygehuse adgang til medicinske teknologivurderinger i form af mini-MTV'er og hurtig-MTV'er, der er udarbejdet på sygehusene og i regionerne. I databasen kan man finde:

- Mini-MTV'er anvendt lokalt på sygehuse og i regioner
- Hurtig-MTV'er anvendt lokalt på sygehuse og i regioner
- Indberetninger af ny behandling til Danske Regioner inkl. mini-MTV og konklusionsskema

Indtast søgeord:

Vælg teknologi: Alle / Lægemidler / Kirurgi / Diagnostik / Forebyggelse

Vælg speciale: Alle / Anæstesiologi / Dermato-venerologi / Gynækologi og obstetrik / Endokrinologi

Vælg region: Alle / Region Hovedstaden / Region Sjælland / Region Syddanmark / Region Midtjylland

Vælg år: Alle / 2004 / 2005 / 2006 / 2007

Vælg type: Indberetning af nye behandlinger til Danske Regioner

Vælg kategori: Alle

Hent søgning

Nyheder

Artikel, december 2008: Artikel om Den nationale mini-MTV database i *Tidsskrift for Dansk Sundhedsvæsen*, december 2008: Download

Samarbejde med DRG-enheden, Sundhedsstyrelsen: Der skal også udarbejdes en mini-MTV, når Sundhedsstyrelsens DRG-enhed anmodes om at oprette en budgettakst inden for DRG-systemet. Det kan f.eks. ske i forbindelse med indførelse af en ny behandling.

Der er derfor indgået aftale med DRG -enheden om, at disse MTV'er med tid vil være tilgængelige for alle via Den nationale mini-MTV database.

Indhold: Den nationale mini-MTV database indeholder alle indberetninger fra både 2007 og 2008, dvs. i alt mere end 280 indberetninger.

Søg pa de store nationale MTV'er udarbejdet af Enhed for MTV (EMTV), Sundhedsstyrelsen: Den nationale projektdatabase for MTV og evaluering

Søg på oversigt over tidlige vurderinger af ny teknologi, indsamlet af det norske kunnskapssenter via månedlige søgninger i internationale databaser

Start 16:00

Mini-HTA: An international development!

Oslo: Kunnskapscentret:

Systems for decision making in hospitals

Ireland: Health Information and Quality Authority

Goal: Establish a programme to support HTAs carried out at local level (hospitals etc.)

GANT – Andalusia, Spain

Region of Lund:

Hospital internal HTA

Danish hospitals and counties

Rome: Policlinico “A. Gemelli”

Veneto Region: mini-HTA

Padova University Hospital

+ Israeli Medical Centers: Greenberg et al. IJATHC, 21 (2) 2005

+ Rapid HTA, McGill University Hospital (Montreal)

Summary

1. Mini-HTA is a pragmatic tool for hospital managers who want evidence based decision making

2. The use of mini-HTA is increasing in Denmark locally and nationally (National Board of Health)

3. There is still quality problems with the content of mini-HTAs: Less than 50 % is OK

4. Quality assurance of the information in mini-HTA is needed:
   - The national mini-HTA database
   - HTA-units at the university hospitals or county councils
   - HTA-courses, systematic literature search, health economics assistance