Methodology for search, selection and appraisal of evidence used to produce Short Reports

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Short Reports are preliminary assessments of medium-cost health technologies not yet in use in the Emilia-Romagna Regional Health System and which have a limited knowledge base.

The aim of the Short Reports is to provide information for decision makers – policy makers, managers, clinicians - in a short timeframe. Such information is not evaluated and discussed by multidisciplinary panels and cannot be used to formulate clinical recommendations. However it can be sufficient to decide whether more extensive evaluations are required, according to the formal methodologies of Health Technology Assessment.

Search for evidence is performed consulting the main international databases of secondary literature, the websites of main national and international Health Agencies and the MEDLINE database. Grading of the level of evidence is based mainly on study design.

This document describes the methods used for search, selection and appraisal of evidence used to produce Short Reports.

Literature search

Data and results on technologies' clinical effectiveness and safety are searched in secondary and primary literature through a hierarchical searching approach, according to the concept of "theoretical saturation" (*1; 2*). Information on clinical practice is obtained from clinical practice guidelines, searched and retrieved in a non-systematic way on main CPGL databases.

Inclusion criteria: population

Studies must include patients affected by the disorder of interest and referred to the technology under evaluation. Studies including animals or healthy subjects are excluded.

Inclusion criteria: type of documents

Secondary literature

All documents produced with a systematic methodology, i.e. Health Technology Assessment (HTA) reports and Systematic Reviews (SR), are eligible for inclusion. The following *minimal criteria of internal validity* are required, according to the AMSTAR and INAHTA checklists (*3, 4*):

- ¬ explicit definition of objectives;
- ¬ systematic literature search, specifying databases, websites and time limits of search;
- ¬ results based on the analysis of primary studies, whose inclusion criteria are clearly stated.

Documents of primary literature

All clinical studies are eligible for inclusion, with the exception of case reports and case series enrolling less than 10 patients.

Ongoing studies

In order to monitor future developments of the technology under examination, ongoing studies, registered on public databases of clinical trials, are searched and evaluated.

Inclusion criteria: limits

Documents written in Italian, English, French, Spanish and Portuguese are eligible for inclusion. No time limits are applied except when Systematic Reviews are available. In this case the search for primary studies starts from the review's last update.

Sources and search strategies

Systematic Reviews and HTA Reports are searched on the following sources:

- Bibliographic databases: MEDLINE on the PubMed website, through queries filters for clinical SRs

- SR databases: Cochrane Database of Systematic Reviews (CDSR) by The Cochrane Library and Database of Abstracts of Reviews of Effects (DARE) by the Centre for Reviews and Dissemination, University of York

- HTA databases: Health Technology Assessment Database by the Centre for Reviews and Dissemination of the University of York; INAHTA database (The INAHTA publication series); CiSMeF (Catalogue et index des Sites Medicaux de Langue Français); ETSAD (Evaluation de Technologies de Santè pour l'Aide à la Decision); EuroScan by the University of Birmingham

- Websites of HTA agencies: see Appendix.

Primary studies are searched on the following sources:

- Bibliographic databases: MEDLINE on the PubMed website
- Databases of randomized controlled trials: The Cochrane Central Register of Controlled Trials (CENTRAL) by The Cochrane Library

Ongoing trials are searched on the following sources:

- Current Controlled Trials
- Australian Clinical Trials Registry
- ClinicalTrials.gov

- Trials Central
- MRC Clinical Trials Unit (CTU)
- PDQ® Clinical Trials, National Cancer Institute, US NIH

Search strategies are based on the clinical question and follow the structure and rules of each database.

Evidence selection and appraisal

Potentially relevant studies are appraised by a single reviewer on the basis of title and abstract. Whenever doubts on inclusion occur, the full text is retrieved. All selected documents, satisfying the minimal inclusion criteria, are retrieved in full-text, classified and graded according to their study design. Assessment of methodological quality of the studies is based on study design and defined according to the Level of Evidence proposed by the GRADE method (*5; 6*). Results from each study are extracted and analysed according to the clinical question of interest.

Updating

The issue date relates to the update of the literature search. Further updates of each Short Report are undertaken depending on ASSR requirements.

Conflicts of interest

Disclosure of potential conflicts of interests is provided by the authors of the Short Reports and can be requested from ORI.

References

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2. Lilford RJ, Richardson A, Stevens A, Fitzpatrick R, Edwards S, Rock F, Hutton JL. Issues in methodological research: perspectives from researchers and commissioners. Health Technol Assess. 2001; 5: 1-57.

3. Shea B, Grimshaw J, Wells G, Boers M, Andersson N, Hamel C, Porter A, Tugwell P, Moher D, Bouter L. Development of AMSTAR: a measurement tool to assess the methodological quality of systematic reviews. BMC Medical Research Methodology. 2007; *www.biomedcentral.com/1471-2288/7/10.*

4. *www.inahta.org/HTA/Checklist/*

5. Guyatt GH, Oxman AD, Kunz R, Vist GE, Falck-Ytter Y, Schünemann HJ for the GRADE Working Group. What is "quality of evidence" and why is it important to clinicians? BMJ. 2008; 336: 995-998.

6. Schünemann HJ, Oxman AD, Brozek J, Glasziou P, Jaeschke R, Vist GE, Williams JW, Kunz R, Craig J, Montori VM, Bossuyt P, Guyatt GH. GRADE: grading quality of evidence and strength of recommendations for diagnostic tests and strategies. BMJ. 2008; 336: 1106-1110.

APPENDIX - Websites of HTA agencies consulted for searching evidence

EUROPE

AATRM - Agencia d'Avaluaciò de Tecnologia i Recerca Mèdiques
http://www.gencat.cat/salut/depsan/units/aatrm/html/ca/Du8/index.html

AEETS - Asociación Española de Evaluación de Tecnologías Sanitarias
http://www.fgcasal.org/aeets/

AETS - Agencia de Evaluación de Tecnologías Sanitarias - Instituto de Salud Carlos III
http://www.isciii.es/htdocs/investigacion/Agencia_quees.jsp

AETSA - Agencia de Evaluacion de Tecnologias Sanitarias de Andalucia
http://www.juntadeandalucia.es/salud/orgdep/AETSA/documento.asp?id=1

AVALIAT - Axencia de Avaliación de Tecnoloxias Saniatarias de Galicia
http://www.sergas.es/MostrarContidos_N2_T01.aspx?IdPaxina=60056

CEDIT - Comitè d'Evaluation et de Diffusion des Innovations Technologiques
http://cedit.aphp.fr/index_pub.html

DACEHTA - Danish Centre for Evaluation and Health Technology Assessment
http://www.sst.dk/English/DACEHTA/National%20HTA.aspx

DIMDI - German Institute of Medical Documentation and Information
http://www.dimdi.de/static/en/hta/index.htm

Finohta - Finnish Office for Health Technology Assessment
http://finohta.stakes.fi/EN/index.htm

HAS - Haute Autorité de Santé
http://www.has-sante.fr/portail/jcms/j_5/accueil

Health Evidence Bulletins - Wales
http://hebw.cf.ac.uk/

KCE - Belgian Health Care Knowledge Centre
http://www.kce.fgov.be/index_en.aspx?SGREF=5211

IQWiG - Institute for Quality and Efficiency in Health Care
http://www.iqwig.de/index.2.en.html

ITA OAW - Institute of Technology Assessment, Vienna
http://www.oeaw.ac.at/ita/welcome.htm

Ludwig Boltzman Institute
http://www.univie.ac.at/bim/php/bim/index_eng.php

NHS Quality Improvement Scotland
http://www.nhshealthquality.org/nhsqis/CCC_FirstPage.jsp

NHSC - National Horizon Scanning Centre
http://www.haps.bham.ac.uk/publichealth/horizon/index.shtml

NICE - National Intitute of Health and Clinical Excellence
http://www.nice.org.uk/

NIHR Health Technology Assessment programme
http://www.hta.ac.uk/

NOKC - Norwegian Knowledge Centre for the Health Services
http://www.kunnskapssenteret.no/About+us

NWO - Netherlands Organisation for Scientific Research
http://www.nwo.nl/nwohome.nsf/pages/SPPD_5R2QE7_Eng

OSTEBA, Agencia de Evaluación de Tecnologías Sanitarias del País Vasco
http://www.osasun.ejgv.euskadi.net/r52-publ01/es/contenidos/informacion/presentacion_osteba/es_1199/indice_c.html

ZonMw - the Netherlands Organisation for Health Research and Development
http://www.zonmw.nl/en/

AUSTRALIA – NEW ZEALAND

AHTA - Adelaide Health Technology Assessment
http://www.adelaide.edu.au/ahta/

ANZHSN - The Australia and New Zealand Horizon Scanning Network
http://www.horizonscanning.gov.au

ASERNIP - Australian Safety and Efficacy Register of New Interventional Procedure – Surgical, Royal Australasian College of Surgeons
http://www.surgeons.org/Content/NavigationMenu/Research/ASERNIPS/default.htm

CCE - Centre for Clinical Effectiveness Monash University
http://www.mihsr.monash.org/cce/res/evidr.html#critical

MSAC - Medical services advisory committee
http://www.msac.gov.au/internet/msac/publishing.nsf/Content/home-1

NZHTA - New Zealand Health Technology Assessment
http://nzhta.chmeds.ac.nz/

MALAYSIA

MaHTAS - Health Technology Assessment Section, Ministry of Health Malaysia
http://www.medicaldev.moh.gov.my

CANADA

AETMIS - Agence d'évaluation des technologies et des modes d'intervention en santé
http://www.aetmis.gouv.qc.ca/site/accueil.phtml

CADTH - Canadian Agency for Drugs and Technologies in Health
http://www.cadth.ca/index.php/en/home

Health Technology Assessment Unit McGill University
http://www.mcgill.ca/tau/

ICES - Institute for Clinical Evaluative Sciences
http://www.ices.on.ca/webpage.cfm

OHTAC - Ontario Health Technology Advisory Committee
http://www.health.gov.on.ca/english/providers/program/ohtac/ohtac_mn.html

USA

Aetna (medical policy/coverage position)
http://www.aetna.com/

AHRQ - Agency for Healthcare Research and Quality
http://www.ahrq.gov/clinic/techix.htm

Blue Cross Blue Shield Association
http://www.bcbs.com/blueresources/tec/tec-assessments.html#topics

CIGNA (medical policy/coverage position)
www.cigna.com/

CTAF - California Technology Assessment Forum
www.ctaf.org/

HealthLink (medical policy/coverage position)
www.healthlink.com/

ICSI - Institute for clinical system improvement
http://www.icsi.org/guidelines_and_more/technology_assessment_reports/

Institute for Technology Assessment - Massachusetts General hospital
http://www.mgh-ita.org/index.php?option=com_wrapper&Itemid=48

Regence (medical policy/coverage position)
www.regence.com/

VATAP - VA Technology Assessment Program, US Department of Veterans Affairs
www.va.gov/vatap

ARGENTINA

IECS - Instituto de Efectividad Clínica y Sanitaria
http://www.iecs.org.ar/