Querying in health

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« Citing Wikipedia 
Don’t do it—Wikipedians wouldn’t »

• Rasberry L. Citing Wikipedia. BMJ [Internet]. 6 mars 2014 [cité 20 mars 2014];348(mar05 4):g1819-g1819. Disponible sur: http://www.bmj.com/cgi/doi/10.1136/bmj.g1819
Formulation of the query

Choice of the sources
Translation of ideas into keywords and concepts (terminologies & ontologies)
Elaborating the query
Managing the citations
Obtaining the articles
## PICO Criteria

<table>
<thead>
<tr>
<th>PICO</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>P as Patient</td>
<td>Patient or problem</td>
<td>Characteristics of the patient (age, sex)</td>
</tr>
<tr>
<td>I as Intervention</td>
<td>Evaluated intervention (intervention as control, if necessary)</td>
<td>New (diagnostic) test or treatment</td>
</tr>
<tr>
<td>C as Comparison</td>
<td>Intervention as control, if necessary</td>
<td>Placebo, treatment or test of reference if exists</td>
</tr>
<tr>
<td>O as Outcome</td>
<td>Measured event</td>
<td>Mortality rate at one year</td>
</tr>
</tbody>
</table>
# Question on PICO

A patient, 64 y, obese is asking his GP if chitosan may help him to reduce his weight

<table>
<thead>
<tr>
<th>PICO</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>P as Patient</td>
<td>Patient or problem</td>
<td></td>
</tr>
<tr>
<td>I as Intervention</td>
<td>Evaluated intervention (intervention as control, if necessary)</td>
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<td></td>
</tr>
<tr>
<td>O as Outcome</td>
<td>Measured event</td>
<td></td>
</tr>
</tbody>
</table>
Formulation of the query

**Choice of the sources**

Translation of ideas into keywords and concepts (terminologies & ontologies)

Elaborating the query

Managing the citations

Obtaining the articles
<table>
<thead>
<tr>
<th>Content</th>
<th>Language</th>
<th>Number of citations</th>
<th>Access to the information</th>
<th>Controlled vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>scholar.google.fr</td>
<td>Toutes</td>
<td>? &gt;100 millions</td>
<td>Mixte: free and $ potential Access to PDF</td>
<td>No</td>
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<tr>
<td>pubmed.gov</td>
<td>&gt;80%</td>
<td>24 Millions</td>
<td>Indirect free and $</td>
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<tr>
<td><a href="http://www.cismef.org">www.cismef.org</a></td>
<td>Health</td>
<td>110 000</td>
<td>free</td>
<td>Yes</td>
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<tr>
<td><a href="http://www.bdsp.ehesp.fr">www.bdsp.ehesp.fr</a></td>
<td>Public health</td>
<td>~470 000</td>
<td>1/6 in free access</td>
<td>Yes</td>
</tr>
<tr>
<td><a href="http://www.cairn.info">www.cairn.info</a></td>
<td>Portal of human &amp; social sciences</td>
<td>~150 000</td>
<td>2/3 in free access</td>
<td>No</td>
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<tr>
<td>BDBfr = PubMed Fr</td>
<td>Biomedicine and health</td>
<td>~650,000</td>
<td>Indirect free and $</td>
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<tr>
<td>The +</td>
<td>The -</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-----------------------------------</td>
<td>--------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerful ranking</td>
<td>Fuzzy limits</td>
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<td></td>
</tr>
<tr>
<td>Easy access to PDF</td>
<td>No controlled vocabulary</td>
<td></td>
<td></td>
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<tr>
<td>Export biblio (Zotero, End Note)</td>
<td>Incorrect citations</td>
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<tr>
<td>« Social »: following citations</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>(H-index) +++ &gt;&gt; IF</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

http://scholar.google.com/scholar?q=TGFBR1

VS

http://scholar.google.com/scholar?q=+transforming+growth+factor+beta+type+I+receptor
Stéfan Darmoni

Professor of Medical Informatics, Rouen University Hospital & LITIS EA 4108 & LIMICS INSERM U1142

medical informatics, knowledge engineering, information retrieval, indexing, terminology

Verified email at chu-rouen.fr

My profile is public

Citations indices

<table>
<thead>
<tr>
<th>Citation indices</th>
<th>All</th>
<th>Since 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citations</td>
<td>2009</td>
<td>898</td>
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<tr>
<td>h-index</td>
<td>22</td>
<td>15</td>
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<tr>
<td>i10-index</td>
<td>61</td>
<td>27</td>
</tr>
</tbody>
</table>

Add co-authors

Frantz Thiessard
Blandine Plaisantin Alecu
wassim jouini
Boris Campillo-Gimenez
Andre Kushniruk
Melissa Baysari

Cismef
S Darmoni, M Joubert
Methods of information in medicine 39 (1), 30-35

Reading factor: a new bibliometric criterion for managing digital libraries
SJ Darmoni, F Roussel, J Benichou, B Thirion, N Pinhas
Journal of the Medical Library Association 90 (3), 323

Representing the MeSH in OWL: Towards a semi-automatic migration.
LF Soualmia, C Golbreich, SJ Darmoni
KR-MED 102, 81-87
• Detect, describe (Dublin Core) and index (partially manually) the main resources available freely on the Internet about health in French
• Grey litterature (guidelines, teaching documents, bookelts)
• since Fev 1995
Based on multiterminology concept extraction + bilingual (Fr En) extendable to multilinguism Management of synonymy and NLP.
Explosion
Recherche implicite

Maladies pulmonaires
- Abscès du poumon
- Atélectasie pulmonaire
- Syndrome du lobe moyen
- Bronchopneumopathies obstructives
  - Asthme
  - Bronchite
  - Bronchiolite
  - Bronchite chronique
  - Broncho-pneumopathie chronique obstructive
- Embolie pulmonaire
- Infarctus pulmonaire
- Emphysème pulmonaire
- Fibrose pulmonaire
- Granulome à plasmocytes du poumon
- Hypertension artérielle pulmonaire

Adresses
- France
- Canada
- Suisse
- Belgique

Éditeur
- HAS - Haute Autorité de Santé
- Centre Cochrane Français
- ANSM - Agence nationale de sécurité du médicament
- EMA - Agence européenne des médicaments

Typo de ressource
- Article de périodique
- Avis de la commission de transparence
- Méta-analyse
- Information scientifique et technique

Indexation
- Résultat thérapeutique
- Adulte
- Enfant
- Asthme

Pays
- France
- Canada
- Suisse
- Belgique

Voir aussi

Recherche avancée

1353 entrées trouvées en 0,28 s
concept(s) identifié(s) : maladie du poumon, maladies pulmonaires
Ranking based on date (PubMed) and adequation to the query, relevance score
Facets to filter results (based on Dublin Core metadata)
Link to PubMed and other English-speaking main databases

Automatic (conceptual) translation

Google « CISMeF selection »
List of 4,100 sites (several millions of pages)

http://www.chu-rouen.fr/documed/cismefgoogle.htm
Health MultiTerminology CrossLingual Server HeTOP

- **Source of information (+ or - a medical dictionary)**

- **Crosslingual access to PubMed**

- **http://www.hetop.eu/**

  Health Terminology/Ontology Portal
HeTOP interface
Description of the corresponding term

Navigation among hierarchies

Access to PubMed

Zone of results
Choice of qualifiers is different according to the MeSH descriptor.
PubMed
Main access to MEDLINE

Medline
Medical Literature Analysis and Retrieval System Online
U.S. National Library of Medicine, US NIH
Main bibliographic health database (only citation of articles)

Content of PubMed
Biomedicine & health
From 1966 à aujourd’hui
+ de 4800 scientific journals, mainly in English (90%) + Us tropis (NIH syndrome)
24 millions of citations
70% of citations with abstracts
Formulation of the query
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Elaborating the query
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Obtaining the articles
An idea can be «translated» in many ways into a descriptor or a concept searchable. Using a controlled vocabulary may help to reduce this difficulty.
Paying patients with psychosis to improve adherence.
Kendall T.

Author information

Comment on
Effectiveness of financial incentives to improve adherence to maintenance treatment with antipsychotics: cluster randomised controlled trial. [BMJ. 2013]

PMID: 24149817 [PubMed - indexed for MEDLINE]

Curbing unnecessary use of antipsychotic medication.
Rothe J, Gold JA.

Author information


MeSH Terms, Substances

MeSH Terms
Antipsychotic Agents/therapeutic use*
Female
Humans
Income*
Maintenance Chemotherapy/economics*
Male
Medication Adherence/statistics & numerical data*
Motivation*
Psychotic Disorders/drug therapy*
Reward*

MeSH Terms
Aged
Antipsychotic Agents/administration & dosage
Antipsychotic Agents/adverse effects
Antipsychotic Agents/therapeutic use*
Dementia/drug therapy*
Humans
Nursing Homes*
Off-Label Use*
Wisconsin

Substances
Antipsychotic Agents
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Query interpretation by PubMed

• « Automatic Term Mapping Process »
• A « simple » query is designed to maximize the recall (less precision)

Search Details

Query Translation:
"angina pectoris"[MeSH Terms] OR ("angina"[All Fields] AND "pectoris"[All Fields]) OR "angina pectoris"[All Fields] OR "stenocardia"[All Fields]

Explosion:

Angina Pectoris
- Angina Pectoris, Variant
- Angina, Unstable
- Syndrome X
SIBM improvements

• Add MeSH synonyms
  – Improvement of recall and precision

• Add UMLS synonyms
  – Recall +3%; Precision -3%: not efficient as UMLS synonyms not real synonyms (hypernyms or hyponyms)

• Add SIBM synonyms
  – Systematic manual review of UMLS synonyms
  – Add synonyms from terminologies and ontologies not included in UMLS
  – Yet to be evaluated
Related Articles

Tous les articles sur le même sujet, triés par pertinence.

Méthode efficace pour commencer une bibliographie.
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Clipboard, the « basket »

« clipboard » may contain a temporary selection of citation
Maximum of 500 citations
« clipboard » empty after 8 jours of inactivity
Export

- « file » text file without any specific form
- « clipboard »
- « collections » durable selection
- « e-mail » (200 citations max.)
My NCBI

Save of queries

Alert via email
Zotero for Firefox

Zotero for Firefox lets you capture and organize all your research without ever leaving the browser.

Add a plugin for Word or LibreOffice

Zotero Standalone

Zotero Standalone runs as a separate application and plugs into your choice of browser.

Add one of the following browser extensions:

Plugins for Word and LibreOffice are included

www.zotero.org/download
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**Obtaining the articles**
Number of articles and % of open access per year in PubMed

PubMed - Nombre d'articles et part du libre accès par année (21/01/2014)
The link to the publisher is mainly € or $ (in health, around 30$ for one paper).

You may use:
- Hospital or University Library
  - Inter library loan
- Email to authors (50%)
- Google Scholar