

Keys to facilitate the interrogation of Pubmed

International Teaching Program

16 octobre 2019

Claire Villepinte

Objectives



1. Introduce PubMed
2. Introduce PICO method for searching
3. Combining search terms
4. MeSH Search

Outline



1. What is PubMed?
2. PICO Model
3. PubMed Search
4. Logic of Boolean
5. Combining Search Terms
6. What is MeSH
7. MeSH Search
8. Search Filters ?
9. References

Outcomes



Participants will:

- Know search tools
- Construct PICO model
- Combine search terms
- Search in PubMed search database

PubMed



NCBI Resources How To villeclair My NCBI Sign Out

PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed [dropdown arrow] [input field] Search

Advanced Help



PubMed

PubMed comprises more than 29 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

Using PubMed

[PubMed Quick Start Guide](#)

[Full Text Articles](#)

[PubMed FAQs](#)

[PubMed Tutorials](#)

[New and Noteworthy](#)

PubMed Tools

[PubMed Mobile](#)

[Single Citation Matcher](#)

[Batch Citation Matcher](#)

[Clinical Queries](#)

[Topic-Specific Queries](#)

More Resources

[MeSH Database](#)

[Journals in NCBI Databases](#)

[Clinical Trials](#)

[E-Utilities \(API\)](#)

[LinkOut](#)

Source: <http://www.ncbi.nlm.nih.gov>

What is PubMed



- More than 26 million citations from 1946 to the present
- Produced by NCBI, PubMed is part of the *Entrez* retrieval system of related biomolecular databases
- Includes MEDLINE, a premier NLM biomedical database of worldwide journal literature in medicine, nursing, dentistry, veterinary medicine, public
- Articles on most health/medicine topics.
- Citations come from approx 5,000 biomedical journals.
- Recent articles and updated each week.
- Free.
- Includes links to full text at publisher or library web sites
- Includes citations in 37 languages; 87% in english
- Uses Medical Subject Headings (MeSH)



Number of Titles Currently Indexed for *Index Medicus*[®] and MEDLINE[®] on PubMed[®]

As of April 5, 2018, 5,235 journals are currently indexed for [MEDLINE](#). MEDLINE includes journals that are cited as *Index Medicus* as well as other non-*Index Medicus* journals. A breakdown is provided:

Number of Journals	Subset of Journals Currently Indexed*
4,946	journals indexed as <i>Index Medicus</i>
289	additional, non- <i>Index Medicus</i> journals in the following areas:
	53 Dentistry (contribute to Citation Subset=D)
	2 AIDS/HIV (contribute to Citation Subset=X)
	7 Consumer Health (contribute to Citation Subset=K)
	112 Nursing (contribute to Citation Subset=N)
	34 Health care administration and delivery (contribute to Citation Subset=H)
	51 Health care technology indexed by NICHSR/NLM (contribute to Citation Subset=T)
	30 History of medicine core journals indexed fully by HMD/NLM (contribute to Citation Subset=Q or QIS)

*NLM started a long-term project in July 2013 to identify indexed journals that may have ceased or for which NLM is no longer receiving data. This explains why the number of journals may decrease over time.

Guidelines and Guidance

The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration

Alessandro Liberati^{1,2*}, Douglas G. Altman³, Jennifer Tetzlaff⁴, Cynthia Mulrow⁵, Peter C. Gøtzsche⁶, John P. A. Ioannidis⁷, Mike Clarke^{8,9}, P. J. Devereaux¹⁰, Jos Kleijnen^{11,12}, David Moher^{4,13}

1 Università di Modena e Reggio Emilia, Modena, Italy, **2** Centro Cochrane Italiano, Istituto Ricerche Farmacologiche Mario Negri, Milan, Italy, **3** Centre for Statistics in Medicine, University of Oxford, Oxford, United Kingdom, **4** Ottawa Methods Centre, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada, **5** Annals of Internal Medicine, Philadelphia, Pennsylvania, United States of America, **6** The Nordic Cochrane Centre, Copenhagen, Denmark, **7** Department of Hygiene and Epidemiology, University of Ioannina School of Medicine, Ioannina, Greece, **8** UK Cochrane Centre, Oxford, United Kingdom, **9** School of Nursing and Midwifery, Trinity College, Dublin, Ireland, **10** Departments of Medicine, Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario, Canada, **11** Kleijnen Systematic Reviews Ltd, York, United Kingdom, **12** School for Public Health and Primary Care (CAPHRI), University of Maastricht, Maastricht, The Netherlands, **13** Department of Epidemiology and Community Medicine, Faculty of Medicine, Ottawa, Ontario, Canada

PICO Model



PICOS, PICO or **PECO** is an acronym used to identify four primary components of a well formulated clinical question.

P = Patient Population or Problem

I = Intervention or Exposure

C = Comparison

O = Outcome

S = Study Design

P

- **Patient, problem, or population**
- Who does the question relate to?

I

- **Intervention**
- Can be a therapy, diagnostic test, prognostic factor, or issue

C

- **Comparison**
- Can be another intervention, diagnostic test, placebo, or usual ("standard") care

O

- **Outcome(s)**
- Clearly specify the ones you are interested in, e.g. reduction of pain, improved score on functional assessment, decreased length of hospital stay

S

- **Study designs**
- Decide on the study designs best able to answer your question type (i.e. therapy, diagnostic, prognosis, etiology, harm)





PRISMA 2009 Checklist



Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	

Research article

Open Access

Utilization of the PICO framework to improve searching PubMed for clinical questions

Connie Schardt^{†1}, Martha B Adams^{†2}, Thomas Owens^{†3}, Sheri Keitz^{†4} and Paul Fontelo^{*5}

Abstract

Background: Supporting 21st century health care and the practice of evidence-based medicine (EBM) requires ubiquitous access to clinical information and to knowledge-based resources to answer clinical questions. Many questions go unanswered, however, due to lack of skills in formulating questions, crafting effective search strategies, and accessing databases to identify best levels of evidence.

Methods: This randomized trial was designed as a pilot study to measure the relevancy of search results using three different interfaces for the PubMed search system. Two of the search interfaces utilized a specific framework called PICO, which was designed to focus clinical questions and to prompt for publication type or type of question asked. The third interface was the standard PubMed interface readily available on the Web. Study subjects were recruited from interns and residents on an inpatient general medicine rotation at an academic medical center in the US. Thirty-one subjects were randomized to one of the three interfaces, given 3 clinical questions, and asked to search PubMed for a set of relevant articles that would provide an answer for each question. The success of the search results was determined by a precision score, which compared the number of relevant or gold standard articles retrieved in a result set to the total number of articles retrieved in that set.

Results: Participants using the PICO templates (Protocol A or Protocol B) had higher precision scores for each question than the participants who used Protocol C, the standard PubMed Web interface. (Question 1: A = 35%, B = 28%, C = 20%; Question 2: A = 5%, B = 6%, C = 4%; Question 3: A = 1%, B = 0%, C = 0%) 95% confidence intervals were calculated for the precision for each question using a lower boundary of zero. However, the 95% confidence limits were overlapping, suggesting no statistical difference between the groups.

Conclusion: Due to the small number of searches for each arm, this pilot study could not demonstrate a statistically significant difference between the search protocols. However there was a trend towards higher precision that needs to be investigated in a larger study to determine if PICO can improve the relevancy of search results.

Schardt et al. 2007

Search MEDLINE/PubMed via PICO with Spelling Checker

Patient, Intervention, Comparison, Outcome

go.usa.gov/xFn

Patient/Problem:

Medical condition:

Intervention:

(therapy, diagnostic test, etc.)

Compare to:

(same as above, optional):

Outcome:

(optional)

Select Publication type:

Not specified



Submit

Clear

Source: <https://pubmedhh.nlm.nih.gov/nlmd/pico/piconew.php>

PubMed Search



- PRISMA requirement
- Use a combination of keywords and MeSH terms in conjunction with PICO search model
- Useful as basis to adapt searches on other databases

Pubmed search

- 90% of PubMed is made up of references containing helpful *indexing* terms that can improve your searches *enormously*.
 - These terms, added by human indexers, include: medical subject headings (MeSH); study type; age; drug names; and much more
- However, 10% of PubMed references *don't* have these indexing terms (yet), but you can still retrieve the references by searching titles, abstracts, authors, journal names, etc.
 - This means, a well-constructed search of PubMed should include strategies for the 90% of indexed references *and* the 10% of un-indexed references

PubMed Search



- Refinements to limit to specific aspects of a topic;
 - Meta-Analysis
 - Human or animal studies
 - Male or female subjects
 - Age groups, for example adolescents or infants
 - Time periods
 - Languages
- Use of search filters → study design
- Use of quotation marks for a specific search
“systematic review” or “Wolf Motor Function Test”

[+ Introduction](#)[Understanding the Vocabulary](#)[+ Building the Search](#)[+ Managing the Results](#)[+ Saving the Search](#)[+ Getting the Articles](#)[+ Beyond PubMed](#)[+ My NCBI](#)[Review](#)

PubMed Tutorial

Introduction

PubMed is a free resource that provides access to MEDLINE, the National Library of Medicine database of citations and abstracts in the fields of medicine, nursing, dentistry, veterinary medicine, health care systems, and preclinical sciences.

Goals and Objectives

By the end of this course, you should be able to:

- Understand PubMed's scope and content.
- Understand how the Medical Subject Headings (MeSH) are used to describe and retrieve citations.
- Build a search using MeSH and PubMed search tools.
- Manage your results and save records of interest.
- Save your search strategies.
- Link to or order full-text articles.
- Link to related resources.

If you're new to PubMed, we recommend that you go through the modules in order. Experienced users should visit and revisit individual modules as needed.

For brief tutorials on specific topics, see also the [PubMed Quick Tours](#) . See also [PubMed Help](#) for detailed instructions on specific PubMed features.

To see a list of recent PubMed changes, go to PubMed's [New/Noteworthy](#).

PubMed Search Tags

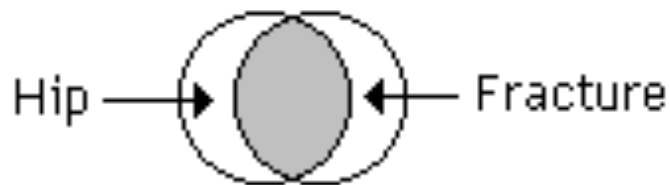


Affiliation [AD]	Grant Number [GR]	Pharmacological Action [PA]
Article Identifier [AID]	Investigator [IR]	Place of Publication [PL]
All Fields [ALL]	ISBN [ISBN]	PMID [PMID]
Author [AU]	Issue [IP]	Publisher [PUBN]
Author Identifier [AUID]	Journal [TA]	Publication Date [DP]
Book [book]	Language [LA]	Publication Type [PT]
Comment Corrections	Last Author [LASTAU]	Secondary Source ID [SI]
Corporate Author [CN]	Location ID [LID]	Subset [SB]
Create Date [CRDT]	MeSH Date [MHDA]	Supplementary Concept [NM]
Completion Date [DCOM]	MeSH Major Topic [MAJR]	Text Words [TW]
Conflict of Interest [COIS]	MeSH Subheadings [SH]	Title [TI]
EC/RN Number [RN]	MeSH Terms [MH]	Title/Abstract [TIAB]
Editor [ED]	Modification Date [LR]	Transliterated Title [TT]
Entrez Date [EDAT]	NLM Unique ID [JID]	UID [PMID]
Filter [FILTER]	Other Term [OT]	Version
First Author Name [1AU]	Owner	Volume [VI]
Full Author Name [FAU]	Pagination [PG]	
Full Investigator Name [FIR]	Personal Name as Subject [PS]	

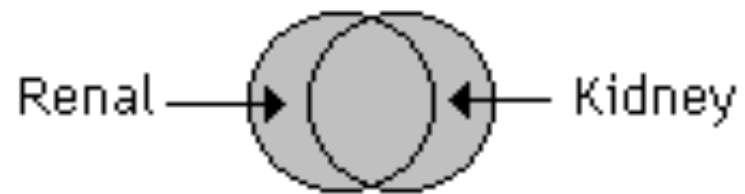
Logic of Boolean



- Boolean logic refers to logical relationships among search terms
- **AND, OR, NOT** can be used to combine search terms
- PubMed, Boolean operators must be entered in UPPERCASE letters
- AND is the default operator in PubMed

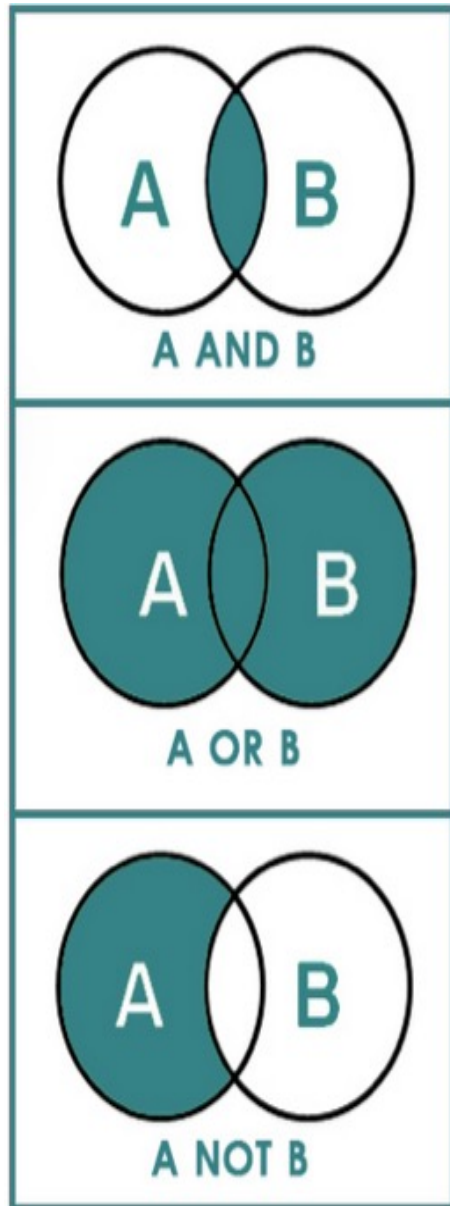


hip **AND** fracture



renal **OR** kidney

Logic of Boolean



- AND is the AND = to retrieve a set in which each citation contains *all* search terms, Stroke AND traumatic head injury
- OR = when you want to pull together articles on the same topic, (to retrieve a set in which each citation contains at least one of the search items), Stroke OR traumatic head injury
- NOT = a set from which citations to articles containing specified search terms following the NOT operator are eliminated, (Stroke NOT traumatic head injury) **try NOT to use**

Truncation PubMed



- Stemming, is a technique that broadens your search to include various word endings and spellings.
- Enter the root of a word with truncation symbol at the end.
 - Eg; hemi= hemiparesis, hemiplegia...
 - wom*n = woman, women
 - child* = child, childs, children, childrens, childhood
 - genetic* = genetic, genetics, genetically
- PubMed truncation symbol = * *(symbols vary by database)*
- Finding all terms that begin with a given string of text.



Combining Search Terms

Example : Physiotherapy for improvement of quality of life in adults with heart failure.



((("heart failure"[MH] OR ("heart failure"[TW] OR "Right-Sided Heart Failure"[TW] OR "heart decompensation"[TW] OR "myocardial failure"[TW] OR "Left-Sided Heart Failure"[TW] OR "cardiac failure"[TW] OR "cardiac decompensation"[TW] OR "Heart Failure, Congestive"[TW] OR "congestive heart failure"[TW] OR "Right Sided Heart Failure"[TW] OR "Left Sided Heart Failure"[TW] OR "heart failures"[TW] OR "Failure heart"[TW] OR "Cardiac insufficiency"[TW] OR "congestive failure"[TW] OR "Cardiac failure congestive"[TW] OR "congestive cardiac failure"[TW] OR "Heart insufficiency"[TW] OR "Heart failure (disorder)"[TW] OR "Weak heart"[TW] OR "HF - Heart failure"[TW] OR "CHF - Congestive heart failure"[TW] OR "CCF - Congestive cardiac failure"[TW] OR "Congestive heart disease"[TW] OR "Cardiac failures"[TW] OR "Chronic heart failure"[TW] OR "Insufficiency cardiac"[TW])) AND ("quality of life"[MH] OR ("quality of life"[TW] OR "Health Related Quality Of Life"[TW] OR "HRQOL"[TW] OR "life quality"[TW] OR "life qualities"[TW]))) AND ("physical therapy department, hospital"[MH] OR "physical therapy modalities"[MH] OR "physical therapy specialty"[MH] OR "physical therapists"[MH] OR "physical therapist assistants"[MH]))

following search strategy was implemented: (stroke OR “cerebrovascular accident” OR “cerebrovascular disease” OR CVA OR hemipleg* OR hemipar*) AND (strength* OR power OR force OR “muscle performance” OR “resistance training” OR “task oriented training” OR “task specific training” OR FES OR “functional electrical stimulation”) AND (gait OR walk OR locomotion OR ambulation OR 6MWT OR “Berg balance scale” OR BBS OR “timed up-and-go” OR TUG OR “Barthel index” OR strength OR 1 RM OR isokinetic OR 10MWT). The last search on these databases was on January 20th 2014.

MeSH Medical Subject Headings



- Indexing journal articles.
- MeSH terms are arranged in a hierarchical categorized manner called *MeSH Tree Structures*
- MeSH is a vocabulary of subject headings and subheadings
- Systematic keyword catalogue related to content
- Subject terms, updated annually, are selected and approved for use
- Scope note indicate what is meant by the term
- Used to describe the subject content of all publication types in PubMed and in the library catalogs
- Hierarchy of terms with broad and narrow terms
- Items are indexed with the most specific MeSH term available
- Only available a few months after publication

Stroke

A group of pathological conditions characterized by sudden, non-convulsive loss of neurological functions. Stroke is classified by the type of tissue NECROSIS, such as the anatomic location affected individual, and hemorrhagic vs. non-hemorrhagic nature. (From Adams et al., Principles of Neurology, 10th Edition, Year introduced: 2008 (2000))

All MeSH Categories

Diseases Category

Nervous System Diseases

Central Nervous System Diseases

Brain Diseases

Cerebrovascular Disorders

Stroke

Brain Infarction

Brain Stem Infarctions +

Cerebral Infarction +

Stroke, Lacunar



- Strokes
- Cerebrovascular Accident
- Cerebrovascular Accidents
- CVA (Cerebrovascular Accident)
- CVAs (Cerebrovascular Accident)
- Cerebrovascular Apoplexy
- Apoplexy, Cerebrovascular
- Vascular Accident, Brain
- Brain Vascular Accident
- Brain Vascular Accidents
- Vascular Accidents, Brain
- Cerebrovascular Stroke
- Cerebrovascular Strokes
- Stroke, Cerebrovascular
- Strokes, Cerebrovascular
- Apoplexy
- Cerebral Stroke
- Cerebral Strokes
- Stroke, Cerebral
- Strokes, Cerebral
- Stroke, Acute
- Acute Stroke
- Acute Strokes
- Strokes, Acute
- Cerebrovascular Accident, Acute
- Acute Cerebrovascular Accident
- Acute Cerebrovascular Accidents
- Cerebrovascular Accidents, Acute

How to MeSH up your search

Use the builder below to create your search

[Edit](#)

[Clear](#)

Builder

- Affiliation
- ✓ All Fields
- Author
- Author - Corporate
- Author - First
- Author - Full
- Author - Identifier
- Author - Last
- Book
- Date - Completion
- Date - Create
- Date - Entrez
- Date - MeSH
- Date - Modification
- Date - Publication
- EC/RN Number
- Editor
- Filter
- Grant Number
- ISBN
- Investigator
- Investigator - Full
- Issue
- Journal
- Language
- Location ID
- MeSH Major Topic
- MeSH Subheading
- MeSH Terms
- Other Term
- Pharmacological Action
- Publication Type

AND

Search

History

There is

[Show index list](#)

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You are here: NCBI > Literature

Write to the F

GETTING STARTED

- [NCBI Education](#)
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- [Mouse Genome](#)
- [Influenza Virus](#)
- [Primer-BLAST](#)

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How to MeSH up your search

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US National Library of Medicine National Institutes of Health Advanced Help



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Latest Literature

New articles from highly accessed journals

[Am J Clin Nutr \(1\)](#)

[Cell \(2\)](#)

[Circulation \(10\)](#)

[Cochrane Database Syst Rev \(3\)](#)

[J Clin Endocrinol Metab \(7\)](#)

[J Clin Oncol \(1\)](#)

Trending Articles

PubMed records with recent increases in activity

[Integrated Proteogenomic Characterization of HBV-Related Hepatocellular Carcinoma.](#)
Cell. 2019.

[Isolation and Structure of an Antibody that Fully Neutralizes Isolate SIVmac239 Reveals Functional Similarity of SIV and HIV Glycan Shields.](#)
Immunity. 2019.

[Pathways for Oxygen Regulation and Homeostasis: The 2016](#)

Summary 20 per page

Send to

Search results

Items: 19

Click on the term to view full record and access PubMed search options for additional information.

[rehabilitation](#)

Restoration of human functions to the maximum degree possible in a person or persons suffering from disease or injury.

[rehabilitation \[Subheading\]](#)

2. Used with diseases and surgical procedures for restoration of function of the individual.
Year introduced: 1967

[Rehabilitation Nursing](#)

3. A nursing specialty involved in the diagnosis and treatment of human responses of individuals and groups to actual or potential health problems with the characteristics of altered functional ability and altered life-style.
Year introduced: 1997

[Rehabilitation, Vocational](#)

4. Training of the mentally or physically disabled in work skills so they may be returned to regular employment utilizing these skills.
Year introduced: 1967(1966)

[Rehabilitation of Speech and Language Disorders](#)

5. Procedures for assisting a person with a speech or language disorder to communicate with maximum efficiency.
Year introduced: 1998

[Rehabilitation Centers](#)

6. Facilities which provide programs for rehabilitating the mentally or physically disabled individuals.
Year introduced: 1968

PubMed Search Builder

Add to search builder

AND

Search PubMed

YouTube Tutorial

Find related data

Search details

```
"rehabilitation"[Subheading] OR  
"rehabilitation"[MeSH Terms] OR  
rehabilitation[Text Word]
```

Search

See more...

Recent Activity

Turn Off Clear

rehabilitation (19)

MeSH

Rehabilitation

MeSH

PubMed Help - PubMed Help

Full ▾ Send to: ▾

Rehabilitation
Restoration of human functions to the maximum degree possible in a person or persons suffering from disease or injury.

PubMed search builder options

Subheadings: **Subheadings describe specific aspects of the subject. Click if appropriate.**

<input type="checkbox"/> adverse effects	<input type="checkbox"/> instrumentation	<input type="checkbox"/> rehabilitation
<input type="checkbox"/> classification	<input type="checkbox"/> legislation and jurisprudence	<input type="checkbox"/> standards
<input type="checkbox"/> complications	<input type="checkbox"/> methods	<input type="checkbox"/> statistics and numerical data
<input type="checkbox"/> economics	<input type="checkbox"/> mortality	<input type="checkbox"/> supply and distribution
<input type="checkbox"/> education	<input type="checkbox"/> nursing	<input type="checkbox"/> surgery
<input type="checkbox"/> epidemiology	<input type="checkbox"/> organization and administration	<input type="checkbox"/> therapeutic use
<input type="checkbox"/> ethics	<input type="checkbox"/> pharmacology	<input type="checkbox"/> therapy
<input type="checkbox"/> etiology	<input type="checkbox"/> physiology	<input type="checkbox"/> trends
<input type="checkbox"/> growth and development	<input type="checkbox"/> psychology	<input type="checkbox"/> veterinary
<input type="checkbox"/> history		

Restrict to MeSH Major Topic.
 Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): E02.760.169.063.500, E02.831, H02.403.680.600, N02.421.784
MeSH Unique ID: D012046
Entry Terms:
• Habilitation

See Also:
• [Disability Evaluation](#)
• [Halfway Houses](#)
• [Early Intervention \(Education\)](#)

Click to add to search builder

Tick out the appropriate box to broaden or narrow the search for your interest

PubMed Search Builder
"Rehabilitation" [Mesh]

Add to search builder AND ▾
Search PubMed

YouTube Tutorial

Related information

PubMed
PubMed - Major Topic
Clinical Queries
NLM MeSH Browser

Recent Activity Turn Off Clear

Rehabilitation MeSH
rehabilitation (19) MeSH
PubMed Help - PubMed Help
[Table, Search Field Descriptions and Tags]. - PubMed Help

PubMed

"Rehabilitation"[Mesh]

Search

Create RSS Create alert Advanced

Help

Article types

- Clinical Trial
- Review
- Customize ...

Text availability

- Abstract
- Free full text
- Full text

Publication dates

- 5 years
- 10 years
- Custom range...

Species

- Humans
- Other Animals

Clear all

Show additional filters

Format: Summary Sort by: Most Recent Per page: 20

Send to Filters: Manage Filters

Search results

Items: 1 to 20 of 292471

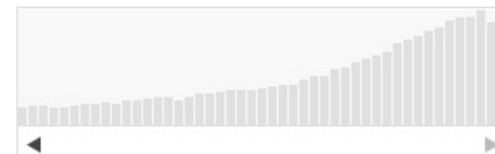
<< First < Prev Page 1 of 14624 Next > Last >>

Sort by:

Best match

Most recent

Results by year



Download CSV

Titles with your search terms

[Psychological Measures and BMI-SDS among Adolescents with O] [Rehabilitation (Stuttg). 2019]

Should **rehabilitation** goals reflect all aspects of functioning in relation to a [Disabil Rehabil. 2019]

Eligibility, Enrollment, and Completion of Exercise-Based Cardiac **Rehat** [Phys Ther. 2019]

See more...

Find related data

Search details

"Rehabilitation" [Mesh]

[Cardiac rehabilitation for heart failure can improve quality of life and fitness.](#)

1. Cook R, Davidson P, Martin R; NIHR Dissemination Centre.

BMJ. 2019 Oct 1;367:l5456. doi: 10.1136/bmj.l5456.

PMID: 31575520

[Similar articles](#)

[Successful pregnancy in a woman with bilateral fallopian tube obstruction and diminished ovarian reserve treated with electroacupuncture: A case report.](#)

2. Sun B, Liu Z.

Medicine (Baltimore). 2019 Sep;98(38):e17160. doi: 10.1097/MD.00000000000017160.

PMID: 31567955 **Free Article**

[Similar articles](#)

[Immediate effects of the respiratory stimulation on ventilation parameters in ischemic stroke survivors: A randomized interventional study \(CONSORT\).](#)

3. Ptaszowska L, Ptaszowski K, Halski T, Taradaj J, Dymarek R, Paprocka-Borowicz M.

Medicine (Baltimore). 2019 Sep;98(38):e17128. doi: 10.1097/MD.00000000000017128.

PMID: 31567951 **Free Article**

[Similar articles](#)

[Infographic: Effects of physical activity on long-term survivorship after metal-on-metal hip resurfacing arthroplasty.](#)

4. Amstutz HC, Le Duff MJ.

Bone Joint J. 2019 Oct;101-B(10):1184-1185. doi: 10.1302/0301-620X.101B10.BJJ-2019-1091. No abstract available.

PMID: 31564145

Advantages of MeSH



- Consistency in meaning of terms is maintained over time
- Synonyms are organized under one MeSH term
- Allows for both specific and comprehensive results
- Cuts down on irrelevant retrieval

Search filters « Hedges»

- Evidence-based search
- ↑ Precision and sensitivity

(Glanville, et al., 2008; Wong et al., 2006; Wist et al., 2016; Lunny, et al. 2015, Higgins and Green, 2001)

Additional filters

- Article types
- Text availability
- PubMed Commons
- Publication dates
- Species
- Languages
- Sex
- Subjects
- Journal categories
- Ages
- Search fields

Filters

Filters add search terms to narrow your results.

- Filter options appear to the left of your results. [Show Me](#)
- Click on a filter to apply it to your search. [Show Me](#) Active filters appear above your search results.
- Filters "stick" and are applied to future searches until you turn them off. [Show Me](#)
- Only the most popular filters display by default. Click Show additional filters to view more options. [Show Me](#)
- Selecting multiple filters from one category will add the filters with "OR," expanding your results. [Show Me](#)

Search filters « Hedges»

Cochrane Collaboration (2: section 6.4.11)

InterTASC Information Specialists' Sub-Group Search Filter Resource (ISSG Guidelines)

<https://sites.google.com/a/york.ac.uk/issg-search-filters-resource/home>

McMasterUniversity Health Information Research Unit

http://hiru.mcmaster.ca/hiru/HIRU_Hedges_MEDLINE_Strategies.aspx

Scottish Intercollegiate Guidelines Network (SIGN)

<http://www.sign.ac.uk/search-filters.html>

BMJ Clinical Evidence Study design search filters

<http://clinicalevidence.bmj.com/x/set/static/ebm/learn/665076.html>

Health Information Research Unit at McMaster

http://hiru.mcmaster.ca/hiru/HIRU_Hedges_home.aspx

Clinical Queries using Research Methodology Filters

Category	Optimized For	Sensitive/ Specific	PubMed Equivalent
therapy	sensitive/broad	99%/70%	((clinical[Title/Abstract] AND trial[Title/Abstract]) OR clinical trials as topic[MeSH Terms] OR clinical trial[Publication Type] OR random*[Title/Abstract] OR random allocation[MeSH Terms] OR therapeutic use[MeSH Subheading])
	specific/narrow	93%/97%	(randomized controlled trial[Publication Type] OR (randomized[Title/Abstract] AND controlled[Title/Abstract] AND trial[Title/Abstract]))
diagnosis	sensitive/broad	98%/74%	(sensitiv*[Title/Abstract] OR sensitivity and specificity[MeSH Terms] OR diagnose[Title/Abstract] OR diagnosed[Title/Abstract] OR diagnoses[Title/Abstract] OR diagnosing[Title/Abstract] OR diagnosis[Title/Abstract] OR diagnostic[Title/Abstract] OR diagnosis[MeSH:noexp] OR diagnostic * [MeSH:noexp] OR diagnosis,differential[MeSH:noexp] OR diagnosis[Subheading:noexp])
	specific/narrow	64%/98%	(specificity[Title/Abstract])
etiology	sensitive/broad	93%/63%	(risk*[Title/Abstract] OR risk*[MeSH:noexp] OR risk * [MeSH:noexp] OR cohort studies[MeSH Terms] OR group[Text Word] OR groups[Text Word] OR grouped [Text Word])
	specific/narrow	51%/95%	((relative[Title/Abstract] AND risk*[Title/Abstract]) OR (relative risk[Text Word] OR risks[Text Word] OR cohort studies[MeSH:noexp] OR (cohort[Title/Abstract] AND study[Title/Abstract]) OR (cohort[Title/Abstract] AND studies[Title/Abstract])))
prognosis	sensitive/broad	90%/80%	(incidence[MeSH:noexp] OR mortality[MeSH Terms] OR follow up studies[MeSH:noexp] OR prognos*[Text Word] OR predict*[Text Word] OR course*[Text Word])
	specific/narrow	52%/94%	(prognos*[Title/Abstract] OR (first[Title/Abstract] AND episode[Title/Abstract]) OR cohort[Title/Abstract])
clinical prediction guides	sensitive/broad	96%/79%	(predict*[tiab] OR predictive value of tests[mh] OR score[tiab] OR scores[tiab] OR scoring system[tiab] OR scoring systems[tiab] OR observ*[tiab] OR observer variation[mh])
	specific/narrow	54%/99%	(validation[tiab] OR validate[tiab])

The Clinical Queries search filters are based on the work of [Haynes RB et al.](#)

2.2. Search strategy

Our literature search was performed on the databases Pubmed, Cochrane, Cinhal, Web of Science et Embase. The following search strategy was implemented: (stroke OR “cerebrovascular accident” OR “cerebrovascular disease” OR CVA OR hemipleg* OR hemipar*) AND (strength* OR power OR force OR “muscle performance” OR “resistance training” OR “task oriented training” OR “task specific training” OR FES OR “functional electrical stimulation”) AND (gait OR walk OR locomotion OR ambulation OR 6MWT OR “Berg balance scale” OR BBS OR “timed up-and-go” OR TUG OR “Barthel index” OR strength OR 1 RM OR isokinetic OR 10MWT). The last search on these databases was on January 20th 2014.

Methodological filters were combined with this search strategy so as to target clinical studies as described by Wong et al. [46] for Embase and Web of Science. For PubMed and Cinal, we used the “clinical queries” proposed by Haynes [47].



Search strategy: MEDLINE (Ovid interface, 1946 to present) (MeSH) last run on 1 May 2016.

1. exp Stroke/
2. stroke*.mp.
3. exp Cerebrovascular Disorders/
4. cerebrovasc*.mp.
5. brain vascular accident*.mp.
6. 1 or 2 or 3 or 4 or 5

7. exp Hemiplegia/
8. exp Paresis/
9. hemiplegia*.mp.
10. hemipares?s*.mp.
11. 7 or 8 or 9 or 10
12. 6 and 11

13. upper extremity/ or arm/ or axilla/ or elbow/ or forearm/ or hand/ or shoulder/
14. upper extremit*.mp.
15. upper limb*.mp.
16. 13 or 14 or 15
17. 12 and 16

18. exp Biomechanical Phenomena/
19. kinematic*.mp.
20. motion capture*.mp.
21. biomechanic*.mp.
22. 18 or 19 or 20 or 21

23. 17 and 22

24. fugl meyer*.mp.
25. FMA.mp.
26. Wolf motor function.mp.
27. WMFT.mp.
28. Action research arm.mp.
29. ARAT.mp.
30. Chedoke arm and hand activity inventory.mp.
31. CAHAI.mp.
32. Box and block test*.mp.
33. BBT.mp.
34. Motor activity log*.mp.

35. 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34

36. 23 and 35

37. exp randomized controlled trial/

38. controlled clinical trial.pt.

39. randomi#ed.ab.

40. randomi#ed.ti

41. placebo.ab.

42. trial*.ab.

43. trial*.ti.

44. groups*.ab.

45. exp meta-analysis/

46. 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45

47. 36 and 46



Thank you for your attention

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