

Search Strategy

Research Question
Validating exacerbations of asthma in electronic health records: a systematic review.

Search Concepts (please list how you would break down your question into concepts to search – you might find it useful to use PICO)
<div><div>1. Asthma</div><div>2. Electronic Health records</div><div>3. Validation</div></div>

Keywords (for each concept list the keywords that you would use)
<div><div>1. Asthma :</div><div><div>- Asthma*</div><div>- Bronchoconstriction</div><div>- Respiratory hypersensitivity</div></div></div> <div><div>2. Electronic health records</div><div><div>- Electronic health records</div><div>- Medical records</div><div>- EHR</div><div>- EMR</div><div>- Health records</div><div>- Clinical coding</div><div>- Electronic data</div></div></div> <div><div>3. Validation</div><div><div>- Validation</div><div>- Validity</div><div>- Identification</div><div>- Identify</div><div>- Sensitivity and specificity</div><div>- Predictive value</div><div>- Case or cases adj2 definition* or defin* or evaluat*</div></div></div>

Subject headings (for each concept list the subject headings (in Ovid Medline) that you would use)
<div><div>1. Asthma exacerbations</div><div><div>• asthma</div><div>• asthma, bronchial</div><div>• asthmas</div><div>• bronchial asthma</div><div>• clinical progression</div><div>• disease exacerbation</div><div>• progression, disease</div></div></div>

2. Electronic health records

- computerized medical record
 - computerized medical records
 - electronic health record
 - electronic health record data
 - electronic health records
 - electronic medical record
 - electronic medical records
 - health record, electronic
 - health records, electronic
 - medical record, computerized
 - medical record, electronic
 - medical records, computerized
 - medical records, electronic
3. Administrative claims database

Search as keywords
4. Validation

- validation studies
 - validation study

Search Strategy (write down your search strategy below and include the number of results for each command. This should be Ovid Medline and so include keywords and subject headings. For the keywords show if/when you would use truncation or wildcards. For subject headings show if you would explode them.)

Medline Search Strategy 02-07-2024

<https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=4E6O4Llyo jxbaNJwo9KKTh7fuWEON7EQOtO8CZNtdWihSuE3X8XvB5puSD45nFDJC>

1exp medical records systems, computerized/ or exp electronic health records/

2((electronic* or online or on line or digital*) adj2 (health record* or medical record* or personal record* or patient record*)).mp.

3((web or internet or computer*) adj3 (health record* or medical record* or personal record* or patient record*)).mp.

4(ehr? or phr? or ephr? or emr? or paehr?).mp.

5(patient adj2 portal*).mp.

61 or 2 or 3 or 4 or 5

7exp Asthma/

8Respiratory Sounds/

9Bronchial Spasm/

10Bronchoconstriction/

11Bronchial Hyperreactivity/

12Respiratory Hypersensitivity/

- 13 (asthma* or antiasthma* or wheez* or bronchospasm or bronchoconstrict*).mp.
- 14 (bronch* adj3 spasm*).mp.
- 15 (bronch* adj3 constrict*).mp.
- 16 ((bronchial* or respiratory or airway* or lung*) adj3 (hypersensitive* or hyperreactive* or allerg* or insufficiency)).mp.
- 17 ((dust or mite*) adj3 (aller*\$ or hypersensitive*)).
- 18 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
- 19 (validat* or verif*).mp.
- 20 (PPV or PNV or NPV or "positive predictive value*" or "negative predictive value*" or "predictive positive value*" or "predictive negative value*" or "likelihood ratio" or precision or accuracy or "receiver operating characteristic*" or ROC or kappa).mp.
- 21 Validation Studies/ or validation.mp.
- 22 validation studies as topic/ or "predictive value of tests"/ or "reproducibility of results"/
- 23 (valid* or reproducib* or reliab* or repeat* or eval* or predict* or responsiveness).ti,hw,kf.
- 24 19 or 20 or 21 or 22 or 23
- 25 6 and 18 and 24

Embase Search strategy

- 1 exp medical record/ or exp electronic health record/ or exp electronic medical record/
- 2 ((electronic* or online or on line or digital*) adj2 (health record* or medical record* or personal record* or patient record*)).mp.
- 3 ((web or internet or computer*) adj3 (health record* or medical record* or personal record* or patient record*)).mp.
- 4 (ehr? or phr? or ephr? or emr? or paehr?).mp.
- 5 (patient adj2 portal*).mp.
- 6 1 or 2 or 3 or 4 or 5
- 7 exp asthma/
- 8 bronchoconstriction/
- 9 (asthma* or antiasthma* or wheez* or bronchospasm or bronchoconstrict*).mp.
- 10 ((bronchial* or respiratory or airway* or lung*) adj3 (hypersensitive* or hyperreactive* or allerg* or insufficiency)).mp.
- 11 7 or 8 or 9 or 10
- 12 validation process/ or validation study/
- 13 (validat* or verif*).mp.
- 14 (sensitivity or specificity or "Sensitivity and Specificity").mp.
- 15 (PPV or PNV or NPV or "positive predictive value" or "predictive negative value" or "negative predictive value" or "likelihood ratio" or precision or accuracy or "receiver operating characteristic" or ROC or kappa).mp.
- 16 12 or 13 or 14 or 15
- 17 6 and 11 and 16

