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Pruning Emtree: Does Focusing Embase  
Subject Headings Impact Search Strategy  
Precision and Sensitivity?

*Supporting Informed Decisions*

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# Canadian Agency for Drugs and Technologies in Health

## **Pruning Emtree: Does Focusing Embase Subject Headings Impact Search Strategy Precision and Sensitivity?**

Julie Glanville, MA, PGDipLib, MSc<sup>1</sup>  
David Kaunelis, MLIS<sup>2</sup>  
Shaila Mensinkai, MA, MLIS<sup>2</sup>  
Lory Picheca, MLIS<sup>3</sup>

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<sup>1</sup> York Health Economics Consortium, University of York, Heslington, York, UK

<sup>2</sup> CADTH, Ottawa, Ontario

<sup>3</sup> Independent Contractor

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# 1. BACKGROUND

Embase is a key database to be searched when undertaking health technology assessments (HTAs). Despite its overlap of coverage with MEDLINE, much empirical research demonstrates that it contains unique content;<sup>1</sup> which has meant that it should be searched to inform HTAs. Recent developments within The Cochrane Collaboration to incorporate Embase records reporting randomized controlled trials (RCTs) have illustrated that there are thousands of reports of RCTs indexed in Embase that are not also indexed in MEDLINE.<sup>2</sup>

Although Embase is a recommended key database it has several features that hinder efficient searching. One feature is the large number of Emtree index terms that are added to most Embase records: an average of 3 to 4 major terms and up to 50 minor terms.<sup>3</sup> MEDLINE records may contain an average of 10 to 20 (major or minor) index terms.<sup>4</sup> The volume of index terms can lead to poor precision in Embase searches (large proportions of irrelevant records are retrieved) if the terms that are of only marginal relevance to a specific record are added by the indexers. When this occurs it can add to the record processing burden within the HTA process. This experience has led to informal pragmatic recommendations that search results can be reduced by carrying out searches of subject headings combined with subheadings (qualifiers) and/or searches with subject headings limited to those with a major focus (major headings).<sup>4</sup> This is achieved in Embase's OvidSP interface by using the "Restrict to Focus" option when selecting Emtree subject headings. Duffy et al. recently presented a poster at the InterTASC Information Specialists' Subgroup meeting in Exeter, UK where they reported on their investigation of focusing Emtree terms for four reviews.<sup>5</sup> In two reviews, the focusing resulted in loss of sensitivity (from 75% to 50% in one case and from 68% to 60% in the second). The authors felt that their findings were inconclusive and that more research was needed.

It is clear that research evidence to support such pragmatic decisions is needed. This project has been developed to explore whether it is safe, in the context of the imperative when conducting HTAs, to not miss relevant studies reporting relevant effects data, to carry out searches of Embase using some or all major subject headings in the search, rather than all (i.e., non-major) subject headings.

## 2. OBJECTIVE

To identify the proportion of relevant records retrieved by searches using some or all major Emtree subject headings in a search, rather than all (i.e., non-major) subject headings.

## 3. METHODS

The research was undertaken based on a protocol agreed to before the research began (the protocol is available on request). This project was based on a relative recall method<sup>6</sup> using previously completed HTAs or systematic reviews (SRs) produced by a range of agencies. We then reran the search strategies reported in those reviews, varying the use of major Emtree headings, to identify the impact of the changes on the retrieval of the known relevant records (included studies) in the SRs.

We agreed on the standards of acceptable performance a priori:

- less than 95% sensitivity is unacceptable in the context of HTA
- precision of 2% to 3% is typical in the context of SRs<sup>7</sup>

- precision of 4% and higher is very acceptable in the context of HTA.

### 3.1 Identifying systematic reviews

We identified a set of reports of SRs and HTA reports published since January 2010 from the following sources:

- Agency for Healthcare Research and Quality (AHRQ)
- Joanna Briggs Institute (JBI)
- The Cochrane Library (Cochrane Database of Systematic Reviews)
- National Institute for Health Research (NIHR) *Health Technology Assessment* journal
- CADTH.

The search strategies are presented in Appendix 1.

The rationale for selecting publications by these agencies is to achieve a sample of reviews conducted by different organizations undertaking SRs and HTAs. The agencies may have different approaches to searching and this will mean a variety of search approaches can be tested, and the results of this research will be more generalizable than if only CADTH reports had been selected. The style of review/HTA ranges from SRs conducted by international collaborative approaches (the Cochrane Collaboration and JBI) to HTAs conducted by national HTA agencies with different approaches and requirements for the information retrieval.

### 3.2 Inclusion criteria used to select the Systematic Reviews

A sample of 80 records from each source was selected randomly from the results using the Research Randomizer (<http://www.randomizer.org/>) program. The records were loaded into Reference Manager and added to an Excel spreadsheet.<sup>a</sup>

Each SR was assessed for inclusion by a single researcher using the following questions:

- Was the report an SR with an identifiable list of included studies?
- Was an Embase search strategy to identify efficacy/safety data (rather than other HTA topics) reported completely and accurately? (Without a detailed Embase strategy, it would not be possible to amend and rerun the searches.)
- Did the authors only use non-major Emtree terms? (If major Emtree terms were used it would not be possible to test the impact of converting the terms to major headings.)
- Did the strategies use terms with the .hw or .mp suffix? If these suffixes were used, is it still possible to generate a strategy that would be faithful to the original? Note: .hw (heading word) searches for individual terms are used within the subject heading field, while .mp (mapped term) will also search within the subject heading field. It is not possible to search for focused subject headings with either .hw or .mp.
- Did the strategies use terms with the .af or .sh suffix<sup>b</sup>? If these suffixes were used, is it still possible to generate a strategy that would be faithful to the original?
- Did the strategy have identifiable concept groupings to permit selection and change of a clear concept? In particular, the use of precoordinated headings where two concepts are combined (for example exp Obesity, Morbid/su [Surgery]) would constitute a situation in which it would be difficult to assign to individual concepts.

<sup>a</sup> For Joanna Briggs Institute citations, we went into the Ovid database and download the reports one by one.

<sup>b</sup> A word with the .sh suffix cannot be focused, and .sh does not always produce the same results as / in Ovid since it does not explode the subject heading.

- Did the review have fewer than 100 studies? (This was a pragmatic criterion to keep the project manageable.)

Once a study failed on any of these criteria, the researcher stopped looking to see if it passed the other aspects. Decisions for inclusion were not refereed. The actual quality of the various search strategies was not evaluated as part of the selection process.

Each review had to meet the minimum search reporting requirements based on those for Cochrane reviews as set out in the Methodological Expectations of Cochrane Intervention Reviews (MECIR) standards ([http://editorial-unit.cochrane.org/sites/editorial-unit.cochrane.org/files/uploads/MECIR%20Reporting%20standards%201.1\\_17122012\\_2.pdf](http://editorial-unit.cochrane.org/sites/editorial-unit.cochrane.org/files/uploads/MECIR%20Reporting%20standards%201.1_17122012_2.pdf)) (Table 1).

<b>Table 1: Minimum Standards for Reporting Searches (Based on Cochrane Standards)</b>		
<b>Criterion</b>	<b>Notes</b>	<b>Requirement for This Project</b>
Search sources	MECIR guidance requires a list all sources searched, including: databases, trials registers, websites and grey literature, and should state whether reference lists were searched and whether individuals or organizations were contacted.	ESSENTIAL  All reviews in this project must include a list of sources searched and must have searched at least MEDLINE, Embase and one other resource or search technique (such as reference checking).  We will note all resources searched so that we can report on the epidemiology of the reviews we are analyzing.
Search strategies for bibliographic databases	MECIR guidance requires that authors present the exact search strategy (or strategies) used for each database in an appendix, including any limits and filters used, so that it could be replicated.	ESSENTIAL  All reviews in this project must have the full Embase and MEDLINE strategies.  We will note whether other strategies are recorded so that we can report on the epidemiology of the reviews we are analyzing.
References to included studies	List all reports of each included study under the relevant Study ID.	ESSENTIAL  All reviews in this project must provide a list of the references for all included studies.
Latest searches	MECIR recommends that the date of the last search and the issue / version number (where relevant) for each database in which results were evaluated and incorporated into the review be provided. If a search was rerun before publication, the results of which were not incorporated, explain how the results were dealt with and provide the date.	DESIRABLE BUT NOT ESSENTIAL  We will record whether the dates were provided, as a sign of the overall quality of the reporting of the searches, but we will not use this to reject reviews.
Search time frame	Specify and justify any restrictions placed on the time period covered by the search.	DESIRABLE BUT NOT ESSENTIAL  We will record whether search the time frame was provided, as a sign of the overall quality of the reporting of the searches, but we will not use this to reject reviews.
Searches for different types of evidence	If the review has specific eligibility criteria to include additional studies, such as studies of adverse effects, health economics evidence or	DESIRABLE BUT NOT ESSENTIAL  We will record whether topics other than

<b>Table 1: Minimum Standards for Reporting Searches (Based on Cochrane Standards)</b>		
<b>Criterion</b>	<b>Notes</b>	<b>Requirement for This Project</b>
	qualitative research evidence, describe the search methods used for identifying such studies.	intervention effectiveness were the subject of the search, as a sign of the overall quality of the reporting of the searches, but we will not use this to reject reviews.
Search strategies for other sources	Report the search terms used to search any sources other than bibliographic databases (e.g., trial registries the Web), and the dates of the searches.	DESIRABLE BUT NOT ESSENTIAL  We will record whether these searches were reported, as a sign of the overall quality of the reporting of the searches, but we will not use this to reject reviews.

ID = identification; MECIR = Methodological Expectations of Cochrane Intervention Reviews.

Strategies were pasted into a Word document and the included studies were identified from a listing, table, or bibliography within the SR report.

A protocol to identify relevant records, to create and amend the search strategies, and to record each step was used to ensure that the researchers employed a consistent approach.

### 3.3 Identifying the relevant records in Embase

The relevant studies that contributed to the identification of the efficacy/safety records of each SR/HTA were sought in Embase (OvidSP) and MEDLINE (OvidSP) using a known author and/or title search approach and the Find Citations tab in Ovid. Typical examples are shown below:

A prospective randomized comparison of vertical banded gastroplasty.ti.  
 agren g.au. and vertical.ti.  
 prospective randomized trial of laparoscopic gastric bypass versus  
 laparoscopic adjustable gastric banding for the treatment of morbid  
 obesity.ti.  
 (Sleeve gastrectomy and gastric banding: effects on plasma ghrelin  
 levels).ti.  
 Long-long limb Roux-en-Y gastric bypass is more efficacious.ti. and  
 pereira\$.au.

If a search line retrieved more than one record for a specific title, then any duplicates were removed from the list of retrieved records. If a search line did not find a record, then the line was retained in the strategy so that it formed a record of a non-retrieval. The known record search lines were combined using OR and saved as a search strategy, which was in turn combined with the subject searches for the specific review (an example search is shown in Appendix 2).

### 3.4 Running the strategies

The Embase strategy (as reported in the SR) was run in Embase with no major headings, and was combined with the saved search of the included studies. The number of included studies it retrieved was recorded. For searches where only the intervention has been searched, we made all of the intervention terms major headings and ran a second search to assess how many included studies were retrieved. For searches where there was a population concept, we then made the population concepts major headings, reran the search, and determined the number of

retrieved included studies. Finally where there were two concepts, we made both concepts use major headings and assessed the impact on the retrieval of included studies (Figure 1). Where there were more than two concepts, we only used major concepts for two: those closest to intervention and population.

All search histories were saved as Ovid saved searches and as downloaded files.

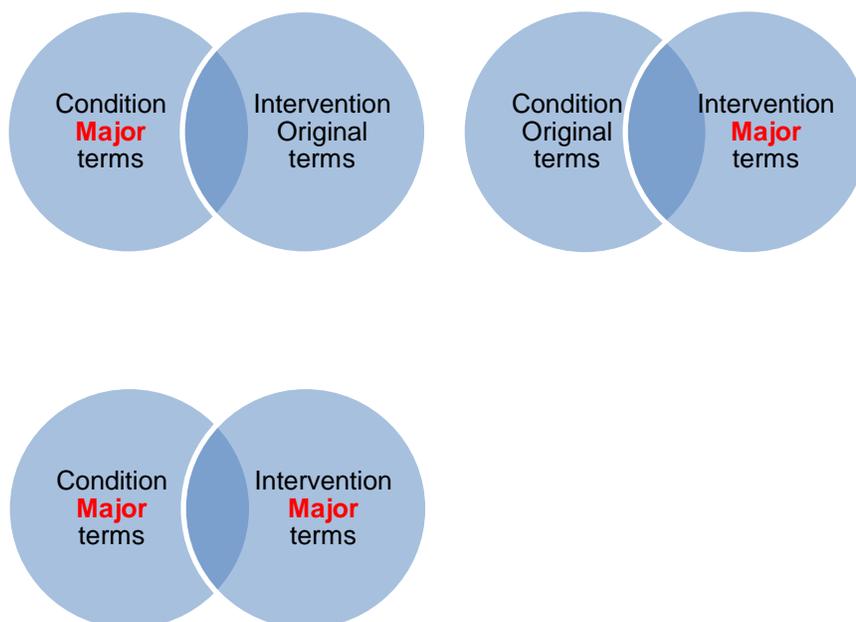
We also assessed the performance of the MEDLINE strategy (as recorded in the SR) in finding the included studies, and the degree of overlap with Embase retrieval. If the original strategies were run in PubMed or another interface to MEDLINE we converted the strategies as accurately as possible. We recorded how many included studies were not in Embase and not in MEDLINE and how many were in both.

For records unique to MEDLINE and included in Embase, the MEDLINE indexing is mapped to Emtree. If a MEDLINE record is subsequently indexed by Elsevier, the Embase record replaces the MEDLINE-unique version. In theory all articles indexed by both Elsevier and MEDLINE are deduplicated and records from MEDLINE added to Embase have MEDLINE in the .cr. field in OvidSP. We have assumed that this is true.

Our search conversions focused on terms within the typical population, intervention, comparator, outcomes (PICO) conceptual breakdown. We did not convert other search concepts such as:

- methodological search filters (e.g., study designs such as RCTs)
- other filters (e.g., geographical search filters — searches specific to regions or countries; or animal filters since these are not part of PICO).

**Figure 1: Search Combinations for Searches with Two Concepts**



For each search strategy we recorded the total number of records retrieved and the number of included studies retrieved, enabling us to calculate the sensitivity and precision of each strategy. We also calculated the percentage decrease in sensitivity and precision from the original strategy for each of the amended strategies. We calculated the mean, median, and ranges for the groups of strategies available for each test.

We conducted some post hoc analyses of the number of included studies identified by the MEDLINE original strategies provided by the review authors, whether the SRs had employed different searches for Embase and MEDLINE and whether the real loss of studies caused by focusing one or both concepts in the Embase strategies would be minimized because the studies would have been likely to have already been found by the MEDLINE strategies.

## 4. RESULTS

### 4.1 Identifying candidate reviews

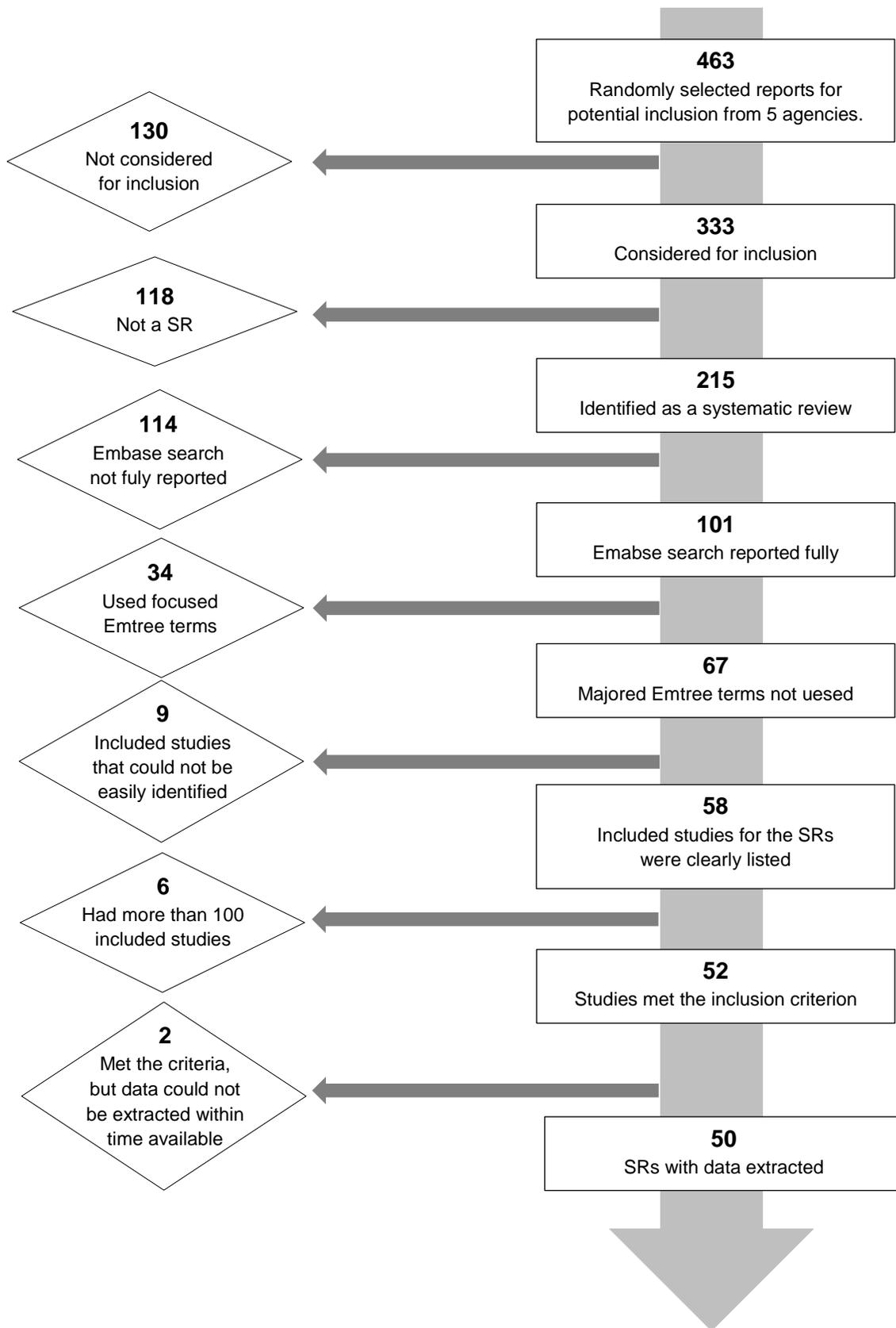
Searches of the key review resources identified 4,471 reports since January 2010 (Table 2).

Resource	Number of Reviews Published Since January 2010	Number of Reviews Randomly Selected	Number of Reviews Included in the Analysis
CADTH	330	143 (two sets of 80 with duplicates removed)	4
NIHR Health Technology Assessment	308	80	10
AHRQ	349	80	11
JBI	179	80	13
Cochrane Database of Systematic Reviews	3,305	80	12
Total	4,471	463	50

AHRQ = Agency for Healthcare Research and Quality; JBI = Joanna Briggs Institute; NIHR = National Institute for Health Research.

Figure 2 shows how the inclusion criteria were applied. Due to time constraints, it was not possible to evaluate all reviews from all publishers. The goal was to select a representative sample from all five publisher sources, ideally 10 records from each publisher. After obtaining 10 SRs from a publisher, the researcher stopped evaluating further SRs from that publisher. Very few CADTH reviews met the inclusion criteria since most were *Rapid Response* reports and were not considered to be systematic. Therefore, a second set of 80 randomly selected CADTH documents were chosen for assessment. However, the return on assessment proved low, so it was agreed to return to sampling the other four agencies to arrive at the desired sample size of 50 studies.

**Figure 2: Record Selection Process**



## 4.2 Number of SR strategies analyzed

There were 50 SRs used in the analysis.<sup>8-57</sup> Of those, 12 were drug reviews, nine were reviews of public health topics, seven were reviews of diagnostic test accuracy studies, five were reviews of medical devices, five were reviews of surgical procedures, and five were reviews of mental health interventions. Of the 50 SRs, there was also one screening review and six reviews were categorized as “other,” most being non-drug and non-surgical treatments.

The mental health category studies are all non-pharmacological interventions covering doll therapy for dementia, strategies to prevent post-traumatic stress disorder and the treatment of depression and cancer-related fatigue. The six “other” category studies addressed non-surgical and non-pharmacological topics such as best practices for enteral nutrition, ventilation techniques in pediatrics and chest physiotherapy for infants, as well as family witnessed cardiopulmonary resuscitation, computerized decision support systems, and tinnitus.

Of the 50 reviews, 13 (26%) were produced by JBI, 12 (24%) were produced by the Cochrane Database of Systematic Reviews (CDSR), 11 (22%) were produced by AHRQ, 10 (20%) were produced by NIHR, and four (8%) were produced by CADTH.

The total number of included studies (from MEDLINE or Embase) in the 50 reviews ranged from one (two SRs) to 95 (1 SR). After removing MEDLINE records from Embase, 47 SRs contributed Embase records and had strategies that could be analyzed.<sup>7-53</sup>

## 4.3 Number of included studies available to be retrieved in Embase

The mean number of studies per SR in those 47 SRs was 23.9 and median was 15 studies. Of these, 17 SRs had between one and 10 studies, 12 SRs had between 11 and 20 studies, six SRs had between 21 and 30 studies, two SRs had between 31 and 40 studies, and 10 SRs had between 41 and 95 studies.

The performance of the strategies in terms of finding the included studies was assessed against the Embase-only records.

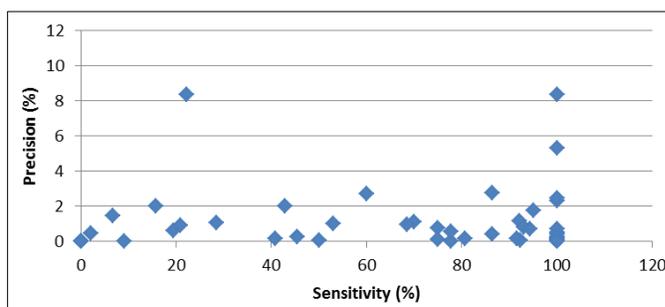
## 4.4 The performance of the original strategies (N = 47)

The mean percentage of included studies available to be found in Embase and retrieved by the original Embase strategy (sensitivity) written by SR authors was 68.5% (range: 0% to 100%) (Table 3). The median percentage sensitivity was 86.4%.

The mean precision of the original Embase strategy in January 2015 was 1% (range: 0% to 8.3%). The median percentage precision was 0.4%.

The spread of performance of the original strategies is shown in Figure 3: each blue diamond is a strategy.

**Figure 3: Performance of the Embase Original Strategies**



### 4.5 Focusing the intervention concept (N = 39)

It was possible to focus the intervention for the original strategy in 39 reviews (Table 3). The mean percentage of included studies retrieved by the intervention-focused Embase strategy reduced from 71.6% to 68.8% (range: 0% to 100%). The median percentage sensitivity changed from 92.1% to 91.7%.

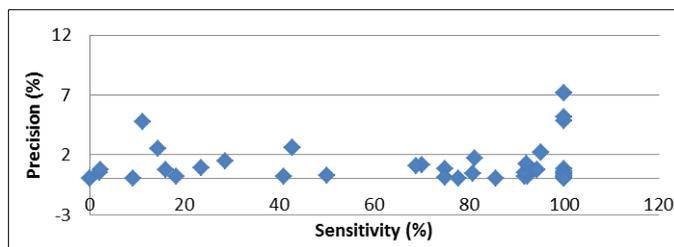
Of the focused intervention strategies, 31 of 39 (79%) had the same sensitivity as the original search. In 8 SRs where sensitivity was reduced, the reduction ranged from 8.3% to 100%. The mean reduction across all 39 SRs was 10.1%.

The mean precision of the intervention-focused Embase strategy at the current day improved from 1% to 1.1% (range: 0% to 7.1%). The median percentage precision improved from 0.4% to 0.5%. There was no difference between the original precision and the focused intervention precision for

one out of the 39 (2.6%) reviews. In five strategies, precision decreased by between 3.4% and 42.9%.<sup>c</sup> In one SR, 0 studies were retrieved. In 32 strategies, precision improved (range: -0.1% to -237.7%). The mean percentage improvement in precision across 39 strategies was -39.6%.

The spread of performance of the Embase intervention-focused strategies is shown in Figure 4: each blue diamond is a strategy.

**Figure 4: Performance of the Embase Intervention Focused Strategies**



<sup>c</sup> This can occur when there is large drop in both records retrieved and relevant records retrieved; for example, before focusing precision was 9/889 and after focusing precision was 4/439.

## 4.6 Focusing the population concept (N = 39)

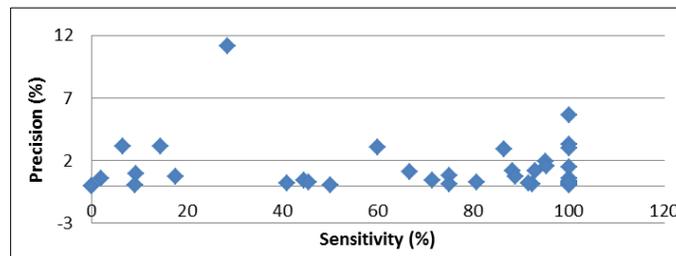
It was possible to focus the population in 39 of 50 reviews (Table 3). The mean percentage of included studies retrieved by the population-focused Embase strategy fell from 74.3% to 67.4% (range: 0% to 100%). The median percentage sensitivity was reduced from 92.1% to 86.4%.

Of the focused population strategies, 27 of 39 (70%) had the same sensitivity compared with the original search. In the other 12 strategies, sensitivity reduction ranged from 4.3% to 100%. The mean reduction in sensitivity across the 39 reviews was 11.7%.

The mean precision of the population-focused Embase strategy at the current day improved from 0.9% to 1.3% (range: 0% to 11.1%). The median percentage precision improved from 0.5% to 0.6%. The percentage change in precision between the original searches and the intervention-focused searches ranged from -445.4% to 27.7%. 31/39 (79%) of the population-focused searches resulted in improved precision, 2/39 in no change, 4/39 in a decrease in precision and two strategies found no relevant records.

The spread of performance of the Embase population-focused strategies is shown in Figure 5: each blue diamond is a strategy.

**Figure 5: Performance of the Embase Population Focused Strategies**



## 4.7 Focusing the intervention and the population concepts (N = 34)

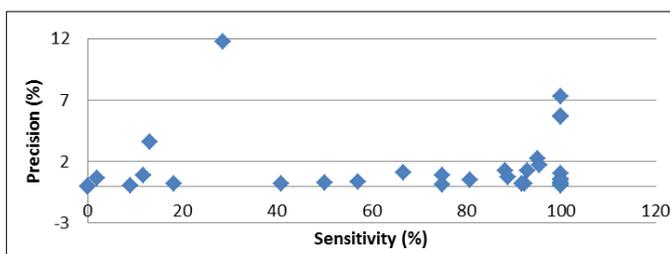
It was possible to test this approach in 34 reviews (Table 3). The mean percentage of included studies retrieved by the intervention and population-focused Embase strategy reduced from 72.8% to 63.9% (range: 0% to 100%). The median percentage sensitivity reduced from 92.2% to 84.5%.

Of the strategies with intervention and population focus, 20 of 34 (59%) had no reduction in sensitivity compared with the original search. In the remaining 14 strategies, the reduction in sensitivity ranged from 4.3% to 100%. The mean reduction across the 34 reviews was 19.1%.

The mean precision of the intervention and population-focused Embase strategy at the current day improved from 0.8% to 1.5% (range: 0.0% to 11.8%). The median percentage precision improved from 0.4% to 0.5%. The percentage change in precision between the original searches and the intervention-focused searches ranged from -476.5% to 15.9%. Of the 34 searches, 27 (79%) resulted in improved precision, three in a decrease in precision, and four strategies found no relevant records.

The spread of performance of the Embase intervention- and population-focused strategies is shown in Figure 6: each blue diamond is a strategy.

**Figure 6: Performance of the Embase Intervention and Population Focused Strategies**



**Table 3: Mean Sensitivity and Precision for the Four Search Approaches in Embase**

		Intervention-Focused Strategy (N = 39)		Population-Focused Strategy (N = 39)		Intervention and Population-Focused Strategy (N = 34)	
	Original Strategy (N = 47)	Original Strategy	Intervention-Focused Strategy	Original Strategy	Population-Focused Strategy	Original Strategy	Intervention and Population-Focused Strategy
Mean sensitivity	68.5%	71.6%	68.8%	74.3%	67.4%	72.8%	63.9%
Mean precision	1%	1%	1.1%	0.9%	1.3%	0.8%	1.5%
Number needed to read	105.3	103.1	91.7	109.9	75.8	119	68.5

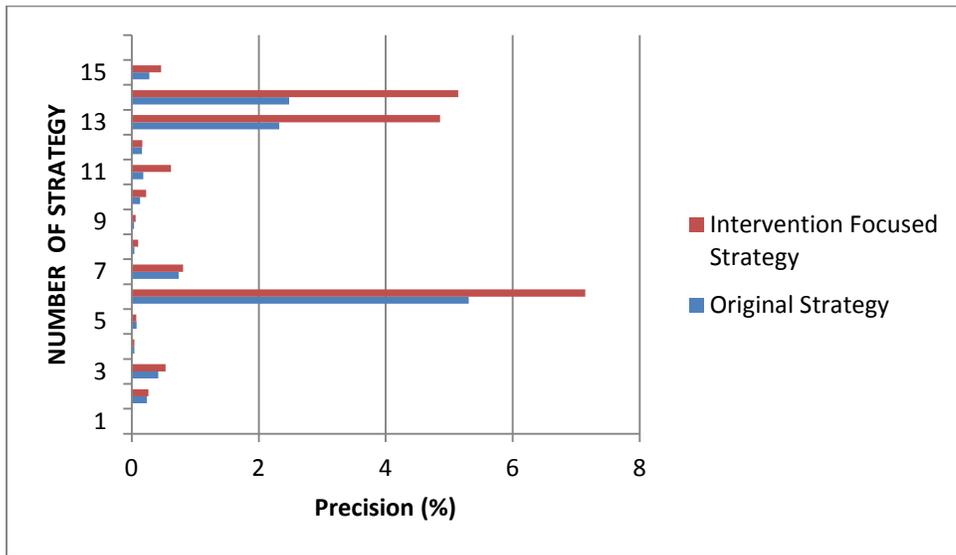
#### 4.8 Looking at the highest sensitivity strategies

Under the assumption that the strategies with the highest sensitivity might be likely to suffer least by focusing the terms, and given our baseline assumption that we would not wish to use strategies that were less than 75% sensitive, we looked at the results of the reviews whose strategies had identified 95% or more of the original studies (Table 4).

17 SRs had strategies with 100% sensitivity in their original searches in Embase. Seven SRs were from CDSR, four SRs were from NIHR, three from AHRQ, and three from JBI. The mean precision of these strategies was 0.8% and precision ranged from 0% to 5.3%.

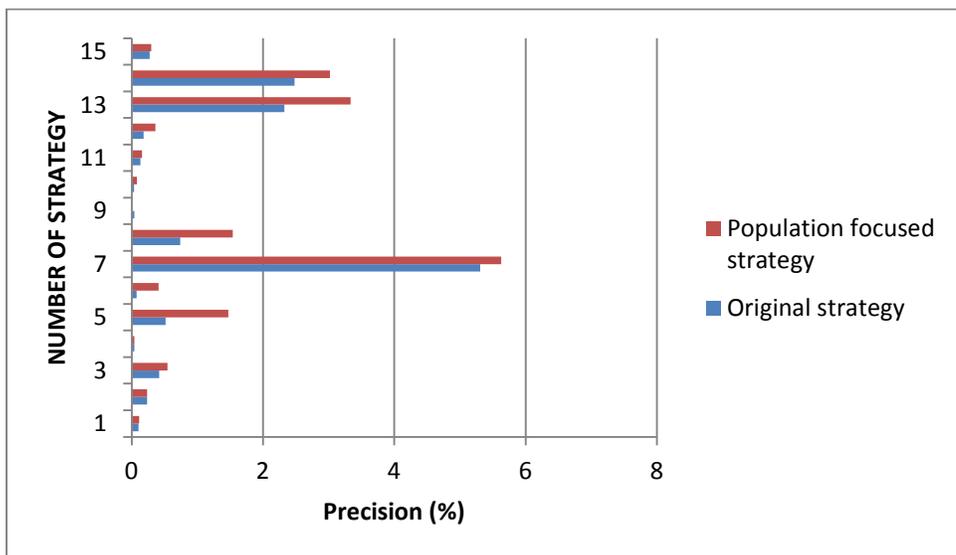
It was possible to test an intervention-focused strategy for 15/17 of these SRs (Figure 7). Focusing the intervention reduced sensitivity in 1/15 reviews: from 100% to 85.7%. Mean sensitivity reduced to 99%. Mean precision in the 15 strategies improved from 0.8% to 1.4% (range: 0% to 7.1%). Precision improved in 14/16 strategies, did not change in one strategy and decreased by 3.4% in one strategy.

**Figure 7: Highly Sensitive Strategies — Impact of Focusing Intervention Emtree Terms**



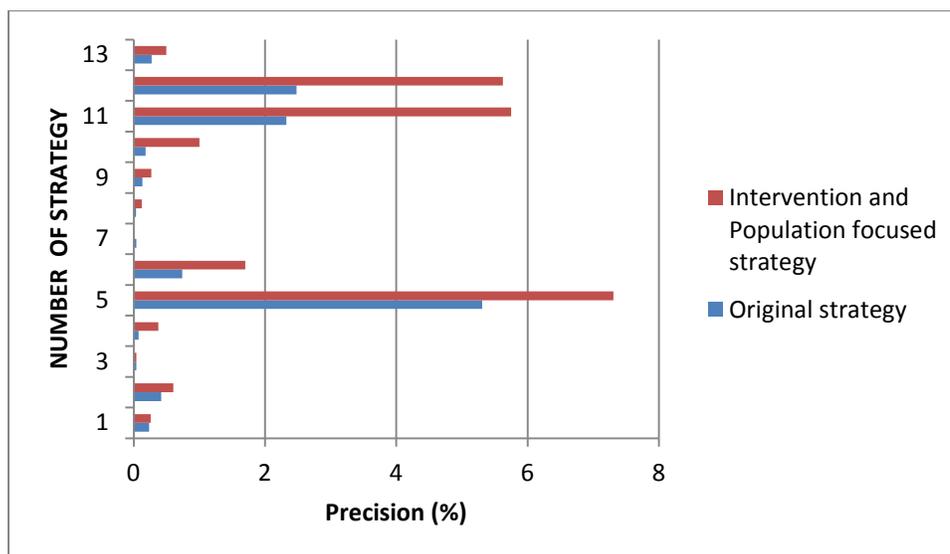
It was possible to test a population-focused strategy for 15/17 of these SRs (Figure 8). Twelve of 15 strategies had no impact on sensitivity. Sensitivity was affected in three strategies where sensitivity reduced to 95.3%, 71.4% and 0%. Mean precision in the 15 strategies improved from 0.9% to 1.2% (range: 0% to 5.6%). Precision improved in 13/15 strategies, did not change in one strategy and was not calculable in one strategy (where sensitivity was 0%).

**Figure 8: Highly Sensitive Strategies — Impact of Focusing Population Emtree Terms**



It was possible to test a population- and intervention-focused strategy for 13/17 SRs (Figure 9). In 10/13 strategies, the focusing had no impact on sensitivity. Sensitivity was affected in three strategies where sensitivity reduced to 95.3%, 57.1%, and 0%. Mean precision in the 13 strategies improved from 0.9% to 1.8% (range: 0% to 7.3%). Precision improved in 12/13 strategies and was not calculable in one strategy.

**Figure 9: Highly Sensitive Strategies — Impact of Focusing Intervention and Population Emtree Terms**



	Comparing intervention-focused approach to original strategy		Comparing population-focused approach to original strategy		Comparing intervention- and population-focused approach to original strategy	
	Original (N = 15)	Intervention-focused (N = 15)	Original (N = 15)	Population-focused (N = 15)	Original (N = 13)	Intervention- and population-focused (N = 13)
Mean sensitivity	100%	99%	100%	91.1%	100%	88.6%
Mean precision	0.8%	1.4%	0.8%	1.2%	0.9%	1.8%
Number needed to read	120.5	73	123.5	87	113.6	55.2

## 4.9 Looking at reviews by topic

The performance of strategies by review topic is presented in Table 5.

The topic with the largest number of reviews was drug treatments. Mean sensitivity was not affected by focusing the intervention Emtree terms (stable at 81.1%, 10 reviews), but was reduced with focusing the population terms (80.8% reduced to 77.4%, 11 reviews), and had a slight reduction when both concept terms were reduced (79% to 78.5%, 9 reviews). Precision improved in all cases.

For reviews of diagnostic tests the mean sensitivity was reduced slightly with the intervention focus (six reviews), but there was not an impact by the focusing of the population concept (four reviews), or both strategies (four reviews). Precision was reduced with focusing the intervention Emtree terms (six reviews), but improved very slightly with focusing the population concept (four reviews), or both concepts (four reviews).

In reviews of medical devices, there was an impact on sensitivity seen by focusing the Emtree terms (60.2% reduced to 46.6%, two reviews), with no improvement in precision (0.5%). Focusing the population Emtree terms had no impact on sensitivity (60.2%, three reviews) and a slight improvement in precision (1.3% to 1.4%). Focusing both concepts reduced sensitivity (60.2% reduced to 46.6%, two reviews) with a slight improvement in precision (0.5% to 0.6%).

In reviews of mental health, focusing the intervention reduced sensitivity from 45.1% to 37.6% (five reviews), but also reduced precision. Focusing the population reduced sensitivity from 45.1% to 37.8% (five reviews), but improved precision from 0.9% to 1.4% (five reviews).

In reviews of public health, focusing the intervention terms in six reviews led to reductions in sensitivity (71.6% to 66.2%) and reductions in precision (0.4% to 0.2%). In five reviews, focusing the population led to reductions in sensitivity (66% to 57.9%) and improvements in precision (0.4% to 0.6%). Focusing both concepts in five reviews led to reductions in sensitivity (66% to 53.2%) with precision remaining the same (0.4%).

In reviews of screening, focusing the intervention terms in one review led to no change in sensitivity (70%) or precision (1.1%). In one review, focusing the population led to reductions in sensitivity (70% to 66.7%) and no change in precision (1.1%). Focusing both concepts in one review led to reductions in sensitivity (70% to 66.7%) and no change in precision (1.1%).

In reviews of surgical interventions, focusing the intervention terms in four reviews led to no change in sensitivity (81.1%) but an improvement in precision (from 1.4% to 1.7%). In five reviews focusing the population concept led to reductions in sensitivity (82.2% to 77.4%) and improvements in precision (1.7% to 3.6%). Focusing both concepts in four reviews led to reductions in sensitivity (81.1% to 75.2%) and improvements in precision (1.4% to 4%).

In the five reviews of “other” topics, focusing the intervention led to no change in sensitivity (81.3%) and improvements in precision (0.7% to 1.3%). Focusing the population (three reviews) led to no impact on sensitivity (100%) and improvements in precision (1% to 1.7%). Focusing both the intervention and population (four reviews) reduced sensitivity (82.1% to 50%) and improvements in precision (0.9% to 1.5%).

**Table 5: Performance of Strategies by Review Topic**

<b>Diagnostic Tests</b>						
	Original strategy (N = 6)	Intervention-focused strategy (N = 6)	Original strategy (N = 4)	Population-focused strategy (N = 4)	Original strategy (N = 4)	Intervention and population-focused strategy (N = 4)
Mean sensitivity	67.7%	65.3%	91.2%	91.2%	91.2%	91.2%
Mean precision	1.6%	1.2%	0.2%	0.3%	0.2%	0.4%
<b>Drug Treatments</b>						
	Original strategy (N = 10)	Intervention-focused strategy (N = 10)	Original strategy (N = 11)	Population-focused strategy (N = 11)	Original strategy (N = 9)	Intervention and population-focused strategy (N = 9)
Mean sensitivity	81.1%	81.1%	80.8%	77.4%	79%	78.5%
Mean precision	1%	1.5%	0.9%	1.1%	1.1%	1.9%

**Table 5: Performance of Strategies by Review Topic**

<b>Medical Devices</b>						
	Original strategy (N = 2)	Intervention-focused strategy (N = 2)	Original strategy (N = 3)	Population-focused strategy (N = 3)	Original strategy (N = 2)	Intervention and population-focused strategy (N = 2)
Mean sensitivity	60.2%	46.6%	60.2%	60.2%	60.2%	46.6%
Mean precision	0.5%	0.5%	1.3%	1.4%	0.5%	0.6%
<b>Mental Health</b>						
	Original strategy (N = 5)	Intervention-focused strategy (N = 5)	Original strategy (N = 5)	Population-focused strategy (N = 5)	Original strategy (N = 5)	Intervention and population-focused strategy (N = 5)
Mean sensitivity	45.1%	37.6%	45.1%	37.8%	45.1%	35%
Mean precision	0.9%	0.7%	0.9%	1.4%	0.9%	1%
<b>“Other”</b>						
	Original strategy (N = 5)	Intervention-focused strategy (N = 5)	Original strategy (N = 3)	Population-focused strategy (N = 3)	Original strategy (N = 4)	Intervention and population-focused strategy (N = 4)
Mean sensitivity	81.3%	81.3%	100%	100%	82.1%	50%
Mean precision	0.7%	1.3%	1%	1.7%	0.9%	1.5%
<b>Public Health</b>						
	Original strategy (N = 6)	Intervention-focused strategy (N = 6)	Original strategy (N = 5)	Population-focused strategy (N = 5)	Original strategy (N = 5)	Intervention and population-focused strategy (N = 5)
Mean sensitivity	71.6%	66.2%	66%	57.9%	66%	53.2%
Mean precision	0.4%	0.2%	0.4%	0.6%	0.4%	0.4%
<b>Screening</b>						
	Original strategy (N = 1)	Intervention-focused strategy (N = 1)	Original strategy (N = 1)	Population-focused strategy (N = 1)	Original strategy (N = 1)	Intervention and population-focused strategy (N = 1)
Mean sensitivity	70%	70%	70%	66.7%	70%	66.7%
Mean precision	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
<b>Surgical Procedures</b>						
	Original strategy (N = 4)	Intervention-focused strategy (N = 4)	Original strategy (N = 5)	Population-focused strategy (N = 5)	Original strategy (N = 4)	Intervention and population-focused strategy (N = 4)
Mean sensitivity	81.1%	81.1%	82.2%	77.4%	81.1%	75.2%
Mean precision	1.4%	1.7%	1.7%	3.6%	1.4%	4%

## 4.10 MEDLINE and Embase

We looked at the overlap between the numbers of included studies in Embase and the number of “genuine” Embase records, to try to gain a clearer picture of the Embase yield. We found that in 19 of 47 (40.4%) strategies, 90% or more of the included studies were represented by Embase records within Embase (Table 6) rather than MEDLINE records imported from MEDLINE.

**Table 6: Proportion of Genuine Embase Records Identified That Matched Included Studies**

	10% or less of included studies	Less than 25% of included studies	Less than 50% of included studies	50% or more of included studies	More than 75% of included studies	90% or more of included studies
Number of strategies	0	2	5	42	30	19

We ran the 50 MEDLINE original strategies provided by the review authors to assess their performance in MEDLINE. In three SRs, no relevant studies were available to be identified. Mean sensitivity in MEDLINE for the remaining 47 reviews was 77% (median 91.3%) and mean precision was 2% (median 0.8%).

We identified the number of relevant records in Embase (including MEDLINE) and in MEDLINE. In 24 of 50 reviews, there were more included records available to be found in Embase, including MEDLINE, than in MEDLINE. The number of additional studies ranged from 1 to 4.

We investigated if the SRs had employed different searches for Embase and MEDLINE. Of the 50 SRs, 19 (38%) reported different searches for Embase compared with MEDLINE. In some cases this involved the addition of a study design filter in one database but not in the other. There were differences in the proportions of review topics between the full sample and this subset; for example, there was a larger percentage of “other” topics. There were also differences in the proportions of review producers responsible for this subset; for example, there was a larger percentage of reviews from NIHR and JBI. The mean sensitivity for the 16 of 19 original searches in this subset of reviews that could find records in Embase was 58.4% compared with 68.5% in the overall sample. The mean sensitivity of the intervention-focused strategy (49.5%), population-focused strategy (48.2%), and intervention- and population-focused strategies combined (42.2%) were all much lower than the corresponding values for the overall sample. Mean precision was lower in the intervention-focused strategy (1%) and intervention- and population-focused (1.4%) strategies, but better in the population-focused strategies (1.7%) compared with the overall sample.

Finally, we explored whether the real loss of studies caused by focusing one or both concepts in the Embase strategies would be minimized because the studies would have been likely to have already been found by the MEDLINE strategies (assuming that the order in which searches had been conducted was MEDLINE followed by Embase) (Table 7).

Focusing the intervention Emtree terms resulted in the loss of no studies in 36/44 (82%) of reviews. In three reviews majoring the intervention led to the loss of a total of five studies and none of those studies would have been retrieved by the MEDLINE strategy. In two reviews, one study was lost by focusing the intervention Emtree terms, but both of the studies would have been found by the MEDLINE strategy. In one review three studies were lost by focusing the intervention Emtree terms, but two would have been found by the MEDLINE strategy. In one

review five studies were lost by focusing the intervention Emtree terms, but three would have been found by the MEDLINE strategy. In one review eight studies were lost by focusing the intervention Emtree terms, but seven would have been found by the MEDLINE strategy. In terms of total lost studies caused by focusing the intervention Emtree strategy 23 studies would have been lost, and 14 (61%) of these would have been retrieved by the MEDLINE strategies.

**Table 7: Were Studies Lost by Focusing Interventions Found Through a MEDLINE Search?**

	<b>Intervention: Emtree focused (N = 44 reviews)</b>	<b>Population: Emtree focused (N = 45 reviews)</b>	<b>Both concepts focused (N = 39 reviews)</b>
<b>REVIEWS</b>			
Number of reviews with no studies lost	36	32	26
Number of reviews with studies lost	8	13	13
Percentage of reviews with no lost studies	80%	71%	67%
Percentage of reviews with lost studies where all lost studies were already found in MEDLINE	25%	54%	38%
<b>STUDIES</b>			
Number of studies lost	23	31	36
Number of studies already identified in MEDLINE	14	18	22
Percentage of lost studies already identified in MEDLINE	61%	58%	61%

Focusing the population Emtree terms resulted in the loss of no studies in 32 of 45 (71%) reviews. In four reviews, majoring the intervention led to the loss of a total of seven studies and none of those studies would have been retrieved by the MEDLINE strategy. In four reviews, one study was lost by focusing the population Emtree terms, but all of the studies would have been found by the MEDLINE strategy. In two reviews, two studies were lost by focusing the population Emtree terms, but in both cases the studies would have been found by the MEDLINE strategy. In one review four studies were lost by focusing the population Emtree terms, but all four would have been found by the MEDLINE strategy. In two reviews, six studies were lost by focusing the population Emtree terms, and in both cases three of the studies would have been found by the MEDLINE strategy. In terms of total lost studies caused by focusing the population Emtree strategy, 31 studies would have been lost, and 18 (58%) of these would have been retrieved by the MEDLINE strategies.

Focusing both concepts in Embase resulted in the loss of no studies in 26 of 39 (67%) reviews. In four reviews focusing both concepts led to the loss of a total of seven studies and none of those studies would have been retrieved by the MEDLINE strategy. In two reviews, one study was lost by focusing both concepts, but all of the studies would have been found by the MEDLINE strategy. In two reviews, two studies were lost by focusing both concepts: in one case both studies would have been found by the MEDLINE strategy and in the other case one study would have been found by the MEDLINE strategy. In two reviews, three studies were lost by focusing both concepts: in one review all three studies would have been found by the MEDLINE strategy and in the other review two studies would have been found by the MEDLINE strategy. In one review, seven studies were lost by focusing both concepts and four studies would have been found by the MEDLINE strategy. In one review, nine studies were lost by focusing both concepts and seven studies would have been found by the MEDLINE strategy. In terms of total lost studies caused by focusing both concepts in the Embase strategy, 36 studies would have been lost and 22 (61%) of these would have been retrieved by the MEDLINE strategies.

## 5. DISCUSSION

### 5.1 Overview of results

Strategies designed by a range of organizations to search Embase to inform HTAs do not seem to be highly sensitive on the whole. Only 18 of 50 (36%) of strategies met the desired sensitivity level specified a priori in our study. The strategies also had poor precision; more than 80% of them fell below the suggested typical level of 2% to 3%.<sup>7</sup> However, the suggested level of 2% to 3% is derived from a study of search strategies for SRs. Precision levels for HTA searches might be somewhat lower. This analysis of 50 SRs of widely varying topics found that focusing the Emtree terms for the intervention, population, or both could achieve small improvements in precision, although not reaching the desired level of 2% to 3%. Moreover, focusing the Emtree terms in already suboptimal strategies increases the risk of losing relevant studies.

In a subset of the 17 most sensitive strategies, focusing any or both concepts led to reductions in sensitivity in one to three reviews. The least impact was achieved by focusing the intervention concept (reduced to 99% sensitivity) and was accompanied by small improvements in precision. However, the impact of the changes in the population, or both intervention and population concepts, took average sensitivity to below 95% accompanied by small improvement in precision. However, we note that in some contexts, such as when there are large numbers of records retrieved, seemingly small improvements in precision can translate into large savings in records needed to screen. Thus, the consideration of the value of small improvements of precision needs to be made within the context of the retrieval numbers of the specific search of interest.

Exploring the strategies in specific SR topics revealed that the performance of original strategies vary by topic. Conclusions are, however, hampered by small numbers in the topic groups. Original strategies for SRs of drug treatments and surgical treatments were the best performing. Of the drug treatment reviews, 75% had 100% sensitivity in the original strategies. Original strategies for other topics had less than optimal performance, which may reflect the known challenges of searching for topics such as diagnostic test accuracy studies. In some topics (such as drug treatment and “other” treatment), focusing the intervention Emtree terms seemed the safest approach resulting in the no or low percentage reductions in relevant studies retrieved, but in other topics (such as mental health and public health), focusing the intervention Emtree terms led to reductions in both sensitivity and precision. In the latter case we are likely to see a large impact on the performance measures from reducing the effectiveness of one strategy in one review.

Overall these findings suggest that focusing Emtree headings is likely to reduce already suboptimal sensitivity for only small gains in precision. If it can be ascertained that a strategy is highly sensitive then focusing the intervention Emtree terms may be a relatively conservative way to improve precision, but it is difficult to assess whether a strategy is sensitive during its development, except by testing for the retrieval of known relevant studies. Indeed, the impact of focusing the Emtree headings on sensitivity in many of the strategies we tested suggests that it is the Emtree headings that are retrieving relevant records rather than the text word searches. This suggests that the Emtree headings are improving the less sensitive text word searches.

We can clearly see in the scatter plot figures that there are differences in the strategies: there is one group of strategies that are highly sensitive and stand up well in terms of maintaining sensitivity when there are changes in the Emtree focus. There is another group with less than

optimal sensitivity and low precision that are affected detrimentally by the focusing of Emtree terms. There may be several explanations for this. One explanation could be differences in the searchers, perhaps in their experience or background, or organizational approach to searching. Alternatively, we may be seeing a systematic bias in designing Embase strategies where searchers are opting for a less sensitive approach because they assume they will find the majority of their relevant studies in MEDLINE or another primary database. Alternatively, we may be seeing searchers translating MEDLINE searches into Embase searches, rather than designing their Embase searches individually. We can, however, see that there is a subset of strategies where the authors have opted to search Embase differently to the MEDLINE search. A further difference may be that strategies for challenging topics such as diagnostic test accuracy reviews have lower performance than strategies for “easier” topics such as drug treatments.

We have conducted an investigation of a large number of reviews from a range of review organizations. In 2014 Duffy et al. presented a poster at the InterTASC Information Specialists' Subgroup meeting in Exeter, UK where they reported their investigation of focusing Emtree terms for four reviews.<sup>5</sup> In two reviews, the focusing resulted in loss of sensitivity (from 75% to 50% in one case and from 68% to 60% in the second). The authors felt that their findings were inconclusive and that more research was needed, and indeed there is very little published research on this topic. It is unclear from the poster how many concepts were focused in their searches, but we suggest that this larger investigation supports their findings that focusing may impact sensitivity.

The use of an a priori-defined criteria for quality searches was beneficial in placing our findings in context, especially in terms of what might be valuable improvements in precision. Only three of the original strategies we examined had precision within the 2% to 3% as suggested as average for an SR by Sampson et al.<sup>7</sup> This suggests that 2% to 3% may be optimistic, in both MEDLINE and Embase, since we have reviewed SRs and the strategies for the efficacy/safety searches performed as part of HTAs from a range of organizations that are dedicated to producing SRs and HTAs. It may be that Sampson et al.'s sample was different to the sample for this project. We note that in Sampson's study approximately 50% of the reviews were from Cochrane; whereas, the proportion is lower in our sample. However, there is little other evidence against which to benchmark precision. It may also be that precision is changing over time as search habits evolve, and that reporting practice as well as the volume of literature is changing. Our experience from this study is that many HTA searches are failing the available benchmark of precision. Even if Embase searches are being treated differently to the MEDLINE searches by their creators, the impact of treating Embase searches differently does not seem to be translated into worthwhile improvements in precision.

Duffy et al.<sup>5</sup> also suggest that the impact of reduced sensitivity in the Embase search may be lessened if other searches in other databases are sensitive and can compensate. They had yet to investigate this hypothesis. We have tried to investigate the impact of the searches for the Embase only records within Embase. We have also noted that the majority of the included studies in the 47 SRs analyzed were available to be found by the MEDLINE searches. However, despite being more sensitive than the Embase original strategies (and more precise), the average sensitivity of MEDLINE searches was only 77%. Thus, searching Embase adds between 1 and 4 additional studies (not found in MEDLINE) in 24 of 50 reviews, plus another chance to identify the records available to be found in MEDLINE and missed by the MEDLINE strategy. The challenge seems to be how to optimize the Embase searches to find the records that are unique to it and also those missed from MEDLINE. Alternatively, perhaps it would be

more efficient to make Embase searches more sensitive in order to undertake searches in Embase for both Embase and MEDLINE records.

## 5.2 Recommendations for practice

Search strategy developers who are confident that their strategies are highly sensitive might wish to use focused Emtree terms for the intervention concept of their search. Search strategy developers should use caution when considering focusing the population concept of their search. Caution should also be used when considering focusing Emtree terms in more than two concepts.

Search strategy developers constructing searches in topics other than drug treatment reviews should carry out sensitivity tests before focusing their strategies, since their strategies may already be less than optimal given the challenges of searching for more difficult-to-find topics.

## 5.3 Recommendations for research

We do not have enough data per review topic (e.g., diagnostic test accuracy reviews, for example) to evaluate if the focusing works better or worse for different topics. Larger samples are required to identify if there are significant differences by topic, and also by types of search and by originating organization.

We do not yet know the unique features of the highly sensitive strategies, so we are unable to provide concrete guidance on when a strategy is suitable for applying focused Emtree terms. Intuitively sensitive strategies are likely to be those with:

- a good range of synonyms, truncation, and related terms
- few concepts
- few limits
- no filters.

The next steps are to explore the features of the 17 highly sensitive strategies in this project to identify core features, which if met by search strategy developers, would maximize their chances of being able to use focused Emtree terms with the least amount of impact on the successful retrieval of relevant studies. Again, the need for larger samples would help to make conclusions more robust.

It would be helpful to test the relative performance of a single sensitive Embase search (with a top-up search of PubMed for those citations not yet in MEDLINE) compared with separate searches of MEDLINE and Embase. Is it possible that efficiency savings could be generated from only doing one highly sensitive search in Embase?

It would be important, in future research, to investigate the characteristics of the studies missed when focusing the subject headings in a search and to assess whether they would have been important to the review. In particular would leaving those studies out of the SR change anything in it; for example, would the point estimate of a meta-analysis change or the confidence interval change? Would missing studies by changing the strategy alter the conclusions of the review?

The scope of this project did not allow for a quality assessment of individual search strategies. In future projects, it would be useful to determine if the quality of a search strategy played a role in the performance of Embase searches that focus subject headings.

## 5.4 Limitations of the study

In theory all articles indexed by both Elsevier and MEDLINE are deduplicated and records from MEDLINE added to Embase have MEDLINE in the copyright (.cr) field in OvidSP. We have assumed that using “NOT MEDLINE.cr.” to remove MEDLINE-only records from Embase is an accurate tactic, but this cannot be verified.

The relative recall approach and our conclusions are based on the assumption that the original searches used in the SRs and HTAs were sensitive and of a sufficient quality. We have not quality assessed the original searches in terms of their fitness for purpose. The poor performance of many of the strategies that we tested suggest that many of them would not pass a quality assessment test. In fact, a 2006 study of MEDLINE search strategies from reviews in the Cochrane Library shows that errors in strategies are quite common, with 82.5% of reviews containing errors that could lower the recall of relevant studies.<sup>58</sup> Also at issue is the quality of the reporting of search strategies. A 2013 study has shown that the reporting of search strategies in SRs of adverse effects, for example, is inadequate, with only 9% of reviews reporting reproducible searches;<sup>59</sup> this represents an improvement compared with an earlier 2006 study finding less than 5% to be reproducible.<sup>60</sup> Alternatively, we might be seeing search strategy authors deciding to conduct less sensitive searches in Embase based on an expectation that the majority of studies have already been retrieved in their MEDLINE searches.

We note that we cannot replicate the searches at the date they were formerly undertaken, and since relevant records may have been added to the databases since the SR searches were carried out, the sensitivity of searches may be overestimated. Precision will certainly be worse today than at the time at which the searches were originally run, and is only presented in this research as a benchmark against which to measure changes effected by amending the search strategies. Date limiting is fairly straightforward in Embase by using the Date Delivered (dd) field, but in MEDLINE several date fields have been created for each record, making date limiting more problematic. Because this study compares Embase with MEDLINE searches, date limiting was not used.

For each review we reran the original MEDLINE search for the effects of interventions as reported in the SR in MEDLINE OvidSP. If the original strategies were run in PubMed or another interface to MEDLINE we converted the strategies as accurately as possible; but note, there is an inevitable impact on retrieval in PubMed, in particular if proximity operators were used in the original version.

Not all SRs offer an easy to identify list of included studies, and we noted discrepancies in some reviews between the number of included studies reported in the text and the tables. In those cases we used the list that was easiest to access. We also identified cases where multiple publications were reported; this means that we had the list of included records rather than studies. In those cases we searched for all the records since any record can be a clue to the existence of the study.

More than a fifth of the 50 selected SRs had only one concept available to test the impact of focusing the Emtree terms. This could have been for several reasons; in some cases the original search combined all the concept blocks with “OR” and in others the authors did not employ Emtree terms in all concepts. This means we have the most evidence for the impact of focusing the intervention concept, but less evidence for the impact of focusing the population concept or both concepts combined.

Due to time constraints we were unable to analyze all the reviews we had identified. This is a limitation of our study and may represent a source of bias in our results since fewer CADTH reports were sampled than for the other organizations. The shortfall in CADTH reviews is explained in section 4.1.

## **6 CONCLUSIONS**

Given the suboptimal performance of the original strategies, it seems unwise to weaken strategies further by using the focusing technique, unless search authors are confident that they are focusing a highly sensitive strategy. In the latter case, the safest approach would seem to be focusing Emtree terms for the intervention. Focusing both the population and the intervention Emtree terms is not advised due to the loss of sensitivity observed in this research. The challenge is in knowing at the outset if a search is already highly sensitive. Inexperienced searchers are advised to seek expert advice from an information specialist experienced in searching Embase and MEDLINE for the purposes of SRs and HTAs, as recommended by many guidance documents.

## 7. REFERENCES

1. Higgins JPT, Green S, editors. Cochrane handbook for systematic reviews of interventions [Internet]. Version 5.1.0. [Oxford (UK)]: The Cochrane Collaboration; 2011 Mar. [cited 2015 Mar 12] Available from: <http://www.cochrane-handbook.org>
2. Noel-Storr A. Update on the progress of the Embase search project [Internet]. Oxford (UK): The Cochrane Collaboration; 2014 [cited 2015 Mar 12]. Available from: <http://www.cochrane.org/news/news-events/internal-administrative-news/update-progress-embase-search-project>
3. Embase indexing guide 2012: a comprehensive guide to Embase indexing policy [Internet]. [Amsterdam]: Elsevier; 2012 Jan. [cited 2015 Mar 12]. Available from: [http://www.elsevier.com/\\_data/assets/pdf\\_file/0009/126873/Embase-indexing-guide-2012.pdf](http://www.elsevier.com/_data/assets/pdf_file/0009/126873/Embase-indexing-guide-2012.pdf)
4. McGill University Health Centre Libraries. MEDLINE vs Embase [Internet]. Montreal: MUHC Libraries; 2013 Sep 30 [cited 2015 Mar 12]. Available from: [http://www.muclibraries.ca/files/2013/10/embase-vs-medline\\_EN-FINAL.pdf](http://www.muclibraries.ca/files/2013/10/embase-vs-medline_EN-FINAL.pdf)
5. Duffy S, Ross J, Misso K, Noake C, Stirk L. Is it possible to focus Emtree without loss of sensitivity when searching Embase for systematic reviews? [Internet]. Poster presented at: InterTASC ISSG Conference; 2014 Jul 9; Exeter (UK). [cited 2015 Mar 12]. Available from: [https://medicine.exeter.ac.uk/media/universityofexeter/medicalschoollresearch/pentag/documents/Steven\\_Duffy\\_ISSG\\_Exeter\\_2014\\_poster\\_2.pdf](https://medicine.exeter.ac.uk/media/universityofexeter/medicalschoollresearch/pentag/documents/Steven_Duffy_ISSG_Exeter_2014_poster_2.pdf)
6. Sampson M, Zhang L, Morrison A, Barrowman NJ, Clifford TJ, Platt RW, et al. An alternative to the hand searching gold standard: validating methodological search filters using relative recall. *BMC Med Res Methodol*. 2006 Jul 18;6:33.
7. Sampson M, Tetzlaff J, Urquhart C. Precision of healthcare systematic review searches in a cross-sectional sample. *Res Synth Method*. 2011;2(2):119-25.
8. Klarenbach S, Padwal R, Wiebe N, Hazel M, Birch D, Manns B, Karmali S, Sharma A, Tonelli M. Bariatric surgery for severe obesity: systematic review and economic evaluation [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2010 (Technology report; no. 129). [cited 2015 Mar 12]. Available from: [http://www.cadth.ca/media/pdf/H0485\\_Bariatric\\_Surgery\\_for\\_Severe\\_Obesity\\_tr\\_e.pdf](http://www.cadth.ca/media/pdf/H0485_Bariatric_Surgery_for_Severe_Obesity_tr_e.pdf)
9. Canadian Agency for Drugs and Technologies in Health. Therapeutic review. Safety, effectiveness, and cost-effectiveness of new oral anticoagulants compared with warfarin in preventing stroke or other cardiovascular events in patients with atrial fibrillation [Internet]. Ottawa (ON): CADTH; 2012 Apr 9 [cited 2015 Mar 12]. Available from: [http://www.cadth.ca/media/pdf/NOAC\\_Therapeutic\\_Review\\_final\\_report.pdf](http://www.cadth.ca/media/pdf/NOAC_Therapeutic_Review_final_report.pdf)
10. Ho C, Tsakonas E, Tran K, Cimon K, Severn M, Mierzwinski-Urban M, Corcos J, Pautler S. Robot-assisted surgery compared with open surgery and laparoscopic surgery: clinical effectiveness and economic analyses [Internet]. Ottawa: Canadian Agency for Drugs and Technologies in Health; 2011 (Technology report no. 137). [cited 2015 Mar 12]. Available from: [http://www.cadth.ca/media/pdf/H0496\\_Surgical\\_robotics\\_e.pdf](http://www.cadth.ca/media/pdf/H0496_Surgical_robotics_e.pdf)
11. Owen J, Carroll C, Cooke J, Formby E, Hayter M, Hirst J, et al. School-linked sexual health services for young people (SSHYP): a survey and systematic review concerning current models, effectiveness, cost-effectiveness and research opportunities. *Health Technol Assess* 2010;14(30):1-255.
12. Czoski-Murray C, Lloyd JM, McCabe C, Claxton K, Oluboyede Y, Roberts J, et al. What is the value of routinely testing full blood count, electrolytes and urea, and pulmonary function tests before elective surgery in patients with no apparent clinical indication and in subgroups of patients with common comorbidities: a systematic review of the clinical and cost-effective literature. *Health Technol Assess* 2012;16(50):1-159.
13. Thompson CJ, Hoyle M, Green C, Liu Z, Welch K, Moxham T, et al. Bevacizumab, sorafenib tosylate and sunitinib for renal cell carcinoma: a systematic review and economic evaluation. *Health Technol Assess* 2010;14(2):1-207.

14. Mowatt G, Zhu S, Kilonzo M, Boachie C, Fraser C, Griffiths TR, et al. Systematic review of the clinical effectiveness and cost-effectiveness of photodynamic diagnosis and urine biomarkers (FISH, ImmunoCyt, NMP22) and cytology for the detection and follow-up of bladder cancer. *Health Technol Assess* 2010;14(4):1-356.
15. Main C, Moxham, T, Wyatt JC, Kay J, Anderson R, et al. Computerised decision support systems in order communication for diagnostic, screening or monitoring test ordering: systematic reviews of the effects and cost-effectiveness of systems. *Health Technol Assess* 2010;14(48):1-227.
16. Hartwell D, Jones J, Baxter L, Shepherd J. Peginterferon alfa and ribavirin for chronic hepatitis C in patients eligible for shortened treatment, re-treatment or in HCV/HIV co-infection: a systematic review and economic evaluation. *Health Technol Assess* 2011;15(17):1-210.
17. Waugh N, Royle P, Craigie I, Ho V, Pandit L, Ewings P, et al. Screening for cystic fibrosis-related diabetes: a systematic review. *Health Technol Assess* 2012;16(24):1-179.
18. Stevenson M, Lloyd-Jones M, Morgan MY, Wong R. Non-invasive diagnostic assessment tools for the detection of liver fibrosis in patients with suspected alcohol-related liver disease: a systematic review and economic evaluation. *Health Technol Assess* 2012;16(4):1-174.
19. Frampton GK, Harris P, Cooper K, Cooper T, Cleland J, Jones J, et al. Educational interventions for preventing vascular catheter bloodstream infections in critical care: evidence map, systematic review and economic evaluation. *Health Technol Assess* 2014;18(15):1-365.
20. Pavey T, Hoyle M, Ciani O, Crathorne L, Jones-Hughes T, Cooper C, et al. Dasatinib, nilotinib and standard-dose imatinib for the first-line treatment of chronic myeloid leukaemia: systematic reviews and economic analyses. *Health Technol Assess* 2012;16(42):1-277.
21. Pichora-Fuller MK, Santaguida P, Hammill A, Oremus M, Westerberg B, Ali U, et al. Evaluation and treatment of tinnitus: comparative effectiveness [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Aug. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0060204/>
22. Glacy J, Putnam K, Godfrey S, Falzon L, Mauger B, Samson D, et al. Treatments for seasonal allergic rhinitis [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Jul. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0058134/>
23. Dolor RJ, Patel MR, Melloni C, Chatterjee R, Heidenfelder BL, Musty MD, et al. Treatment strategies for women with coronary artery disease: future research needs: identification of future research needs from comparative effectiveness review no. 66 [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Feb. [cited 2015 Mar 12]. (AHRQ future research needs papers). Available from: <http://www.ncbi.nlm.nih.gov/books/NBK148780/>
24. Gartlehner G, Forneris CA, Brownley KA, Gaynes BN, Sonis J, Coker-Schwimmer E, et al. Interventions for the prevention of posttraumatic stress disorder (PTSD) in adults after exposure to psychological trauma [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Apr. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0055866/>
25. Bradley LA, Palomaki G, Gutman S, Samson DJ, Aronson N. PCA3 Testing for the diagnosis and management of prostate cancer [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Apr. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0055201/>
26. Forman-Hoffman V, Knauer S, McKeeman J, Zolotor A, Blanco R, Lloyd S, et al. Child and adolescent exposure to trauma: comparative effectiveness of interventions addressing trauma other than maltreatment or family violence [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Feb. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0053592/>
27. Soni NJ, Samson DJ, Galaydick JL, Vats V, Pitrak DL, Aronson N. Procalcitonin-guided antibiotic therapy [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Oct. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0050696/>

28. Wong KO, Bond K, Homik J, Ellsworth JE, Karkhaneh M, Ha C, et al. Antinuclear antibody, rheumatoid factor, and cyclic-citrullinated peptide tests for evaluating musculoskeletal complaints in children [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Mar. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0041714>
29. Gaudet L, Singh K, Weeks L, Skidmore B, Tsouros S, Tsertsvadze A, et al. Terbutaline pump for the prevention of preterm birth [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2011 Sep. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0033277>
30. Gaynes BN, Lux LJ, Lloyd SW, Hansen RA, Gartlehner G, Keener P, et al. Nonpharmacologic interventions for treatment-resistant depression in adults [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2011 Sep. [cited 2015 Mar 12]. (AHRQ comparative effectiveness reviews). Available from: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0016666>
31. McKoy JN, Hartmann KE, Jerome RN, Andrews JC, Penson DF. Future research needs for outcomes of weight gain in pregnancy [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2010 Nov. [cited 2015 Mar 12]. (AHRQ future research needs papers). Available from: <http://www.ncbi.nlm.nih.gov/books/NBK51337/>
32. Lopez O, Gollaher T, Riddle D. Cerebral oxygen desaturation monitored by intraoperative near-infrared spectroscopy and incidence of post-operative cognitive dysfunction: a systematic review. *JBI Library of Systematic Reviews* 2014;12(8):145-192.
33. Fernandez R, Arthur B, Fleming R, Perrin C. Effect of doll therapy in managing challenging behaviours in people with dementia: a systematic review. *JBI Library of Systematic Reviews* 2014;12(8):330-363.
34. Reid C, Hall J, Boys J, Lewis S, Chang A. Self management of haemodialysis for end stage renal disease: a systematic review. *JBI Library of Systematic Reviews* 2011;9(3):69-103.
35. McMillan M, Kralik D, Porritt K, Marshall H. Influenza vaccination during pregnancy: a systematic review of effectiveness and adverse events. *JBI Library of Systematic Reviews* 2014;12(6):251-381.
36. Aguilera-Martinez R, Ramis-Ortega E, Carratala-Munuera C, Fernandez-Medina JM, Saiz-Vinuesa MD, Barrado-Narvion MJ. Effectiveness of continuous enteral nutrition versus intermittent enteral nutrition in intensive care patients: a systematic review. *JBI Library of Systematic Reviews* 2014;12(1):281-317.
37. Martin S, Jordan Z, Simon Carney A. The effect of early oral feeding compared to standard oral feeding following total laryngectomy: a systematic review. *JBI Library of Systematic Reviews* 2013;11(11):140-182.
38. Collins CE, Burrows TL, Bray J, Asher R, Young M, Morgan PJ. Effectiveness of parent-centred interventions for the prevention and treatment of childhood overweight and obesity in community settings: a systematic review. *JBI Library of Systematic Reviews* 2013;11(9):180-257.
39. Larkin D, Lopez V, Aromataris E. Non-pharmacological interventions for cancer-related fatigue in men treated for prostate cancer: A systematic review. *JBI Library of Systematic Reviews* 2012;10(57):3764-3811.
40. Chau JPC, Lee DTF, Lo, SHS. Eye irrigation for patients with ocular chemical burns: a systematic review. *JBI Library of Systematic Reviews* 2010;8(12):470-519.
41. Leonardi-Bee J, Ellison T, Bath-Hextall F. Lifestyle factors of smoking, BMI and alcohol on the risk of non-melanoma skin cancer in adults: a systematic review. *JBI Library of Systematic Reviews* 2012;10(6):352-398.
42. Paplanus LM, Salmond SW, Jadotte YT, Viera DL. A systematic review of family witnessed resuscitation and family witnessed invasive procedures in adults in hospital settings internationally – part I: perspectives of patients and families. *JBI Library of Systematic Reviews* 2012;10(32):1883-2017.

43. Shah PS, Ohlsson A, Shah JP. Continuous negative extrathoracic pressure or continuous positive airway pressure compared to conventional ventilation for acute hypoxaemic respiratory failure in children. *Cochrane Database Syst Rev* 2013;(11):CD003699.
44. Su LL, Chong YS, Samuel M. Carbetocin for preventing postpartum haemorrhage. *Cochrane Database Syst Rev* 2012;(4):CD005457.
45. Seron P, Lanas F, Pardo Hernandez H, Bonfill Cosp X. Exercise for people with high cardiovascular risk. *Cochrane Database Syst Rev* 2014;(8):CD009387.
46. Hosking J, Macmillan A, Connor J, Bullen C, Ameratunga S. Organisational travel plans for improving health. *Cochrane Database Syst Rev* 2010;(3):CD005575.
47. Webster J, Alghamdi A. Use of plastic adhesive drapes during surgery for preventing surgical site infection. *Cochrane Database Syst Rev* 2013;(1):CD006353.
48. Roqué i Figuls M, Giné-Garriga M, Granados Rugeles C, Perrotta C. Chest physiotherapy for acute bronchiolitis in paediatric patients between 0 and 24 months old. *Cochrane Database Syst Rev* 2012;(2):CD004873.
49. Jull AB, Arroll B, Parag V, Waters J. Pentoxifylline for treating venous leg ulcers. *Cochrane Database Syst Rev* 2012;(12):CD001733.
50. Taylor K, Powell C, Hatt SR, Stewart C. Interventions for unilateral and bilateral refractive amblyopia. *Cochrane Database Syst Rev* 2012;(4):CD005137.
51. Handoll HHG, Ollivere BJ, Rollins KE. Interventions for treating proximal humeral fractures in adults. *Cochrane Database Syst Rev* 2012;(12):CD000434.
52. Lu D, Song H, Shi G. Anti-TNF- $\alpha$  treatment for pelvic pain associated with endometriosis. *Cochrane Database Syst Rev* 2013;(3):CD008088.
53. Edmonds ML, Milan SJ, Brenner BE, Camargo Jr CA, Rowe BH. Inhaled steroids for acute asthma following emergency department discharge. *Cochrane Database Syst Rev* 2012;(12):CD002316.
54. Kamel C, McGahan L, Mierzwinski-Urban M, Embil J. Preoperative skin antiseptic preparations and application techniques for preventing surgical site infections: a systematic review of the clinical evidence and guidelines [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2011. (Rapid response report: systematic review). [cited 2015 Mar 12]. Available from: [http://www.cadth.ca/media/pdf/htis/june-2011/M0025\\_Pre-Operative\\_Skin\\_Prep\\_Final.pdf](http://www.cadth.ca/media/pdf/htis/june-2011/M0025_Pre-Operative_Skin_Prep_Final.pdf)
55. Munday J, Kynoch K, Hines S. The effectiveness of information-sharing interventions to reduce anxiety in families waiting for surgical patients undergoing an elective surgical procedure: a systematic review. *JBI Library of Systematic Reviews* 2014;12(3):234-273.
56. Wong BB, Koh S, Hegney DG, He HG. The effectiveness of cabbage leaf application (treatment) on pain and hardness in breast engorgement and its effect on the duration of breastfeeding. *JBI Library of Systematic Reviews* 2012;10(20):1185-1213.
57. Fedorowicz Z, Carter B, de Souza RF, de Andrade Lima Chaves C, Nasser M, Sequeira-Byron P. Single crowns versus conventional fillings for the restoration of root filled teeth. *Cochrane Database Syst Rev* 2012;(5):CD009109.
58. Sampson M, McGowan J. Errors in search strategies were identified by type and frequency. *J Clin Epidemiol.* 2006 Oct;59(10):1057-63.
59. Golder S, Loke YK, Zorzela L. Some improvements are apparent in identifying adverse effects in systematic reviews from 1994 to 2011. *J Clin Epidemiol.* 2013 Mar;66(3):253-60.
60. Golder S, Loke Y, McIntosh HM. Poor reporting and inadequate searches were apparent in systematic reviews of adverse effects. *J Clin Epidemiol.* 2008 May;61(5):440-8.

# APPENDIX 1: SEARCH STRATEGIES USED TO IDENTIFY REPORTS OF SRS AND HTAS

Search date: October 14, 2014

## **CADTH**

HTA database: Results for: (canadian agency for drugs and technologies in health" OR CADTH) NOT (cdec OR cedac OR CDR OR summary of abstracts OR reference list) IN HTA FROM 2010 TO 2014.

330 citations retrieved.

## **Health Technology Assessment**

HTA database: Results for: (NIHR Health technology assessment) IN HTA FROM 2010 TO 2014.

308 citations retrieved.

## **AHRQ**

PubMed database: "Agency for Healthcare Research and Quality" OR AHRQ. Filters activated: Books and Documents, Publication date from 2010/01/01 to 2014/12/31.

349 citations retrieved.

## **Joanna Briggs Institute**

JBI EBM database. Searched via Ovid. Strategy: Embase.mp AND systematic review (publication type). Limited to 2010 onwards.

179 citations retrieved.

*Note: Since .mp searched the full-text in the JBI EBP database, it is possible to limit results to those specifically mentioning Embase.*

## **Cochrane Database of Systematic Reviews**

Cochrane Database of Systematic Reviews (Issue 10, October 2014). Searched via Wiley. Strategy: Embase [all text], Publication Year from 2010 to 2014. Limited to reviews only (no protocols).

3305 citations retrieved.

## APPENDIX 2: SEARCH STRATEGIES

Concepts highlighted in **Green are the intervention** (concept 1)

Concepts highlighted in **Pink are the population** (concept 2)

Terms not highlighted were run as written or translated as exactly as possible.

CADTH 4: Bariatric surgery for severe obesity: systematic review and economic evaluation.

**Embase search as printed in the systematic review:**

223 Randomized Controlled Trial/  
224 exp Randomization/  
225 Double Blind Procedure/  
226 or/223-225  
227 Clinical Trial/  
228 (clin\$ adj25 trial\$.mp.  
229 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj25 (blind\$ or mask\$)).mp.  
230 exp Placebo/  
231 (placebo\$ or random\$.mp.  
232 or/226-231  
233 exp animals/  
234 exp animal experimentation/  
235 exp models animal/  
236 nonhuman/  
237 exp vertebrate/  
238 or/233-237  
239 exp humans  
240 238 not 239  
241 232 not 240  
242 exp abdominal fat/  
243 (abdominal adj3 (fat or adipos\$)).tw.  
244 Abdominal obesity/  
245 adipos\$.tw.  
246 Body Fat Distribution/  
247 ((Fat or fatty or adipos\$) adj3 Distribution).tw.  
248 body fat patterning.tw.  
249 Body mass/  
250 (body mass ind\$ or BMI or body ban mass).tw.  
251 (obese or obesit\$).tw.  
252 Obesity/  
253 (overweight or over weight).tw.  
254 Morbid obesity/  
255 quetelet\$ ind\$.tw.  
256 ((skinfold or skin fold or skin) and (thickness or measurement)).tw.  
257 Skinfold Thickness/  
258 Waist-Hip Ratio/  
259 (waist hip ratio\$ or hip waist ratio\$).tw.  
260 or/242-259  
261 ballobes balloon.tw.  
262 banded gastroplast\$.tw.  
263 Bariatric surgery/  
264 (Bariatric adj4 (operation or surg\$ or procedure\$)).tw.  
265 biliopancreatic bypass/  
266 biliopancreatic diversion\$.tw.  
267 Duodenal Switch\$.tw.  
268 (Garren-Edwards Gastric Bubble or gegb).tw.

269 exp Gastrectomy/  
 270 Gastrectom\$.tw.  
 271 (gastric adj5 balloon\$.tw.  
 272 gastric banding/  
 273 gastric band\$.tw.  
 274 LAGB.tw.  
 275 (Swedish adj3 band\*).tw.  
 276 Lapband\$.tw.  
 277 Lap-band\$.tw.  
 278 Intra-gastric band\$.tw.  
 279 Laparoscopic adjustable band.tw.  
 280 Gastric belt\$.tw.  
 281 Gastric bubble\$.tw.  
 282 Gastric bypass\$.tw.  
 283 Long limb bypass\$.tw.  
 284 Gastric exclusion\$.tw.  
 285 Gastric partition\$.tw.  
 286 Gastric Resection\$.tw.  
 287 Gastric surg\$.tw.  
 288 Gastrogastrostomy.tw.  
 289 Gastroenterostomy/  
 290 Gastroenterostom\*.tw.  
 291 (Gastroileal bypass\$ or (Gastroileal surg\$ or Gastroileal operation\$) or (Gastroileal bypass\$ or Gastroileal surg\$ or Gastroileal operation\$)).tw.  
 292 Gastrojejunal Anastomosis.tw.  
 293 Gastrojejunal Fixation.tw.  
 294 Gastrojejunostomy/  
 295 (Gastrojejunostom\$ or Gastrojejunum Anastomosis).tw.  
 296 Gastroplasty/  
 297 (gastroplast\$ or Gastroresection\$ or Hemigastrectom\$ or ileojejunal bypass\$.tw.  
 298 Ileum Bypass/  
 299 intestine bypass/  
 300 (intestin\$ bypass\$ or ileum bypass\$ or Intra-gastric balloon\$ or Jejunogastric Anastomosis or Jejunoleac Bypass\$.tw.  
 301 jejunoleal bypass/  
 302 (jejunoleal bypass\$ or jejuno-ileal bypass\$ or (Jejunoleal Shunt\$ or jejuno-ileal shunt\$) or Malabsorptive bypass\$ or (Malabsorptive surg\$ or Malabsorptive operation\$)).tw.  
 303 (Obes\$ surg\$ or obes\$ operation\$ or pancreatobiliary Bypass\$ or Restrictive bypass\$.tw.  
 304 Roux y Anastomosis/  
 305 (((Roux-en-y or roux y) and (gastric bypass\$ or loop\$ or anastomos\$ or gastric bypass\$ or diversion\$)) or RYGBP or Stomach band\$.tw.  
 306 Stomach bypass/  
 307 (stomach bypass\$ or Stomach Extirpat\$ or Stomach Resection\$ or Stomach Transection\$ or Stomach stapling or Vertical band\$.tw.  
 308 or/261-307  
 309 260 and 308  
 310 exp Obesity, Morbid/su [Surgery]  
 311 or/309-310  
 312 311 and 241

CADTH 6: Safety, Effectiveness, and Cost- Effectiveness of New Oral Anticoagulants Compared with Warfarin in Preventing Stroke and Other Cardiovascular Events in Patients with Atrial Fibrillation.

### Embase search as printed in the systematic review:

1. exp review/
2. (literature adj3 review\$).ti,ab.
3. exp meta analysis/
4. exp "Systematic Review"/
5. or/1-4
6. (medline or medlars or embase or pubmed or cinahl or amed or psychlit or psychlit or psychinfo or psycinfo or scisearch or cochrane).ti,ab.
7. RETRACTED ARTICLE/
8. 6 or 7
9. 5 and 8
10. (systematic\$ adj2 (review\$ or overview)).ti,ab.
11. (meta?anal\$ or meta anal\$ or meta-anal\$ or metaanal\$ or metanaly\$).ti,ab.
12. 9 or 10 or 11
13. (random\$ or placebo\$ or single blind\$ or double blind\$ or triple blind\$).ti,ab.
14. RETRACTED ARTICLE/
15. or/13-14
16. (animal\$ not human\$).sh,hw.
17. (book or conference paper or editorial or letter or review).pt. not exp randomized controlled trial/
18. (random sampl\$ or random digit\$ or random effect\$ or random survey or random regression).ti,ab.  
Not exp randomized controlled trial/
19. 15 not (16 or 17 or 18)
20. exp heart atrium fibrillation/
21. ((atrial or atrium or auricular) adj3 (fibrillat\$ or flutter\$)).ti,ab.
22. 20 or 21
23. exp dabigatran etexilate/ or exp dabigatran/
24. (dabigatran or pradaxa or pradax or prazaxa).ti,ab.
25. exp rivaroxaban/
26. (rivaroxaban or xarelto).ti,ab.
27. BAY59-7939.mp.
28. exp edoxaban/
29. (edoxaban or lixiana).mp.
30. DU176b.mp.
31. exp apixaban/
32. (apixaban or eliquis).mp.
33. BMS-562247-01.mp.
34. ((factor adj3 Xa) or (Xa adj3 inhibitor\$) or (FXa adj3 inhibitor\$)).mp.
35. exp thrombin inhibitor/
36. or/23-35
37. 36 and 12
38. 36 and 19
39. exp cohort analysis/
40. exp longitudinal study/
41. exp prospective study/
42. exp follow up/
43. cohort\$.tw.
44. or/39-43
45. 36 and 44
46. 45 not (37 or 38)
47. (ae or si or to or co).fs.
48. (safe or safety).ti,ab.
49. side effect\$.ti,ab.
50. ((adverse or undesirable or harm\$ or serious or toxic) adj3 (effect\$ or reaction\$ or event\$ or outcome\$)).ti,ab.
51. exp adverse drug reaction/
52. exp drug toxicity/

53. exp intoxication/
54. exp drug safety/
55. exp drug monitoring/
56. exp drug hypersensitivity/
57. exp postmarketing surveillance/
58. exp drug surveillance program/
59. exp phase iv clinical trial/
60. (toxicity or complication\$ or noxious or tolerability).ti,ab.
61. exp postoperative complication/
62. exp Perioperative Complication/
63. or/47-62
64. 36 and 63
65. 64 not (37 or 38 or 45)
66. 65 and 22
67. 46 and 22
68. or/23-33
69. 63 and 68
70. 69 not (37 or 38 or 45)

CADTH 10 : Robot-Assisted Surgery Compared with Open Surgery and Laparoscopic Surgery: Clinical Effectiveness and Economic Analyses.

**Embase search as printed in the systematic review:**

- 1 Robotics/
- 2 Automation/ use mesz
- 3 Bionics/
- 4 robot\*.ti,ab.
- 5 robot\*.hw. use b9o89
- 6 ((remote adj3 manipulat\*) or (remote adj3 navigat\*)).ti,ab.
- 7 ((remote adj3 manipulat\*) or (remote adj3 navigat\*)).hw. use b9o89
- 8 (tele-manipulat\* or telemanipulat\* or telerobotic\* or tele-robotic\* or telesurger\* or tele-surger\* or telesurgical or tele-surgical or telepresence or (remote adj3 operation\*) or (remote adj3 surger\*) or (remote adj3 surgical procedure\*) or surgicaltreatment\*).ti,ab.
- 9 (tele-manipulat\* or telemanipulat\* or telerobotic\* or tele-robotic\* or telesurger\* or tele-surger\* or telesurgical or tele-surgical or telepresence or (remote adj3 operation\*) or (remote adj3 surger\*) or (remote adj3 surgical procedure\*) or surgicaltreatment\*).hw. use b9o89
- 10 (Da Vinci or davinci or (intuitive adj surgical)).ti,ab.
- 11 (Da Vinci or davinci or (intuitive adj surgical)).hw. use b9o89
- 12 or/1-11

**Concept: prostatectomy**

- 13 exp Prostatectomy/
- 14 exp prostate surgery/
- 15 prostatic neoplasms/su
- 16 exp prostate tumor/su
- 17 (prostatectom\* or prostatoseminovesiculectom\* or LRP or RRP).ti,ab.
- 18 (prostatectom\* or prostatoseminovesiculectom\* or LRP or RRP).hw. use b9o89
- 19 ((prostate or prostatic) adj3 (remov\* or excision\* or surger\* or operation\* or extirpation\* or procedure\* or adenectom\* or resection\*)).ti,ab.
- 20 ((prostate or prostatic) adj3 (remov\* or excision\* or surger\* or operation\* or extirpation\* or procedure\* or adenectom\* or resection\*)).hw. use b9o89
- 21 (TURP or TURPs or TUVp or TUVPs or VLAP or VLAPs or TUEVP or TUEVPs or TUIP or TUIPs or TUMPT or TUMPTs or TEVAP or TEVAPs or TUEVAP or TUEVAPs or HOLRP or HOLRPs or HOLEP or HOLEPs or TUNA or TUNAs).ti,ab.

- 22 (TURP or TURPs or TUVP or TUVPs or VLAP or VLAPs or TUEVP or TUEVPs or TUIP or TUIPs or TUMPT or TUMPTs or TEVAP or TEVAPs or TUEVAP or TUEVAPs or HOLRP or HOLRPs or HOLEP or HOLEPs or TUNA or TUNAs).hw. use b9o89
- 23 ((transurethral or trans-urethral or transurethra or trans-urethra) and (ablat\* or thermotherap\* or prostate\* or vaporesection\* or electrovapor\* or electroresection\* or vapor\* or coagulat\* or resection\*)).ti,ab.
- 24 ((transurethral or trans-urethral or transurethra or trans-urethra) and (ablat\* or thermotherap\* or prostate\* or vaporesection\* or electrovapor\* or electroresection\* or vapor\* or coagulat\* or resection\*)).hw. use b9o89
- 25 or/13-24

### Concept: hysterectomy

- 26 exp hysterectomy/
- 27 (hysterectom\* or historectom\* or panhysterectom\* or pan-hysterectom\* or panhistorectom\* or pan-historectom\* or colpohysterectom\* or colpohistorectom\* or colpo-hysterectom\* or colpo-historectom\*).ti,ab.
- 28 (hysterectom\* or historectom\* or panhysterectom\* or pan-hysterectom\* or panhistorectom\* or pan-historectom\* or colpohysterectom\* or colpohistorectom\* or colpo-hysterectom\* or colpo-historectom\*).hw. use b9o89
- 29 ((uterus or uteri or womb) adj3 (remov\* or excision\* or surger\* or operation\* or extirpation\* or amputation\* or adenectom\* or resection\*)).ti,ab.
- 30 ((uterus or uteri or womb) adj3 (remov\* or excision\* or surger\* or operation\* or extirpation\* or amputation\* or adenectom\* or resection\*)).hw. use b9o89
- 31 (TLH or LAVH or LSH or LAVHO).ti,ab.
- 32 (TLH or LAVH or LSH or LAVHO).hw. use b9o89
- 33 or/26-32

### Concept: nephrectomy

- 34 Nephrectomy/
- 35 exp Nephrectomy/
- 36 (nephrectom\* or nefrectom\* or heminephrect\* or heminefrect\* or hemi-nephrectom\* or heminefrectom\* or nephroureterectom\* or nefroureterectom\* or nephro-ureterectom\* or nefro-ureterectom\* or uninephrectom\* or uninefrectom\* or uni-nephrectom\* or uni-nefrectom\* or LLDN).ti,ab.
- 37 (nephrectom\* or nefrectom\* or heminephrect\* or heminefrect\* or hemi-nephrectom\* or heminefrectom\* or nephroureterectom\* or nefroureterectom\* or nephro-ureterectom\* or nefro-ureterectom\* or uninephrectom\* or uninefrectom\* or uni-nephrectom\* or uni-nefrectom\* or LLDN).hw. use b9o89
- 38 ((kidney\* or renal\* or nephro\* or nephri\* or nefro\* or nefri\*) adj3 (remov\* or excision\* or surger\* or operation\* or extirpation\* or amputation\* or adenectom\* or resection\*)).ti,ab.
- 39 ((kidney\* or renal\* or nephro\* or nephri\* or nefro\* or nefri\*) adj3 (remov\* or excision\* or surger\* or operation\* or extirpation\* or amputation\* or adenectom\* or resection\*)).hw. use b9o89
- 40 or/34-39

### Concept: cardiac surgery

- 41 exp Coronary Artery Bypass/
- 42 Coronary Artery Bypass Graft/
- 43 (CABG or bypass surger\* or coronary graft\* or TECABG or MIDCAB or OPCAB or endoscopic coronar\* or TECAB).ti,ab.
- 44 (CABG or bypass surger\* or coronary graft\* or TECABG or MIDCAB or OPCAB or endoscopic coronar\* or TECAB).hw. use b9o89
- 45 ((artery or coronary or aorticocoronar\* or aortico-coronar\* or surger\*) adj3 (bypass or shunt or anastomos\* or graft)).ti,ab.
- 46 ((artery or coronary or aorticocoronar\* or aortico-coronar\* or surger\*) adj3 (bypass or shunt or anastomos\* or graft)).hw. use b9o89
- 47 Mitral Valve/su

- 48 Mitral Valve Insufficiency/su  
 49 Mitral Valve Prolapse/  
 50 Mitral Valve Stenosis/  
 51 Mitral valve/su  
 52 mitral valve repair/  
 53 (MVR or mitral valvuloplast\*).ti,ab.  
 54 (MVR or mitral valvuloplast\*).hw. use b9o89  
 55 ((mitral valve or MV or mitral click-murmur syndrome\* or systolic click-murmur syndrome\* or mitral regurgitation or mitral incompetence or mitral insufficiency or mitral stenosis or mitral stenoses or left atrioventricular cardiac valve or left atrioventricular heart valve or left atrioventricular valve or bicuspid anterior cusp or bicuspid cardiac valve or bicuspid heart valve or bicuspid valve or bicuspid valvular anterior cusp or cuspis anterior valva mitralis or cuspis anterior valvae mitralis or mitral anterior cusp or mitral cardiac valve or mitral anterior cusp or mitral cardiac valve) adj3 (surger\* or surgical procedure\* or operation\* or repair\* or restor\* or reconstruct\*).ti,ab  
 56 ((mitral valve or MV or mitral click-murmur syndrome\* or systolic click-murmur syndrome\* or mitral regurgitation or mitral incompetence or mitral insufficiency or mitral stenosis or mitral stenoses or left atrioventricular cardiac valve or left atrioventricular heart valve or left atrioventricular valve or bicuspid anterior cusp or bicuspid cardiac valve or bicuspid heart valve or bicuspid valve or bicuspid valvular anterior cusp or cuspis anterior valva mitralis or cuspis anterior valvae mitralis or mitral anterior cusp or mitral cardiac valve or mitral anterior cusp or mitral cardiac valve) adj3 (surger\* or surgical procedure\* or operation\* or repair\* or restor\* or reconstruct\*).hw. use b9o89  
 57 Thoracic Surgery/  
 58 exp Cardiac Surgical Procedures/  
 59 exp Cardiovascular Surgical Procedures/  
 60 exp Thoracic Surgical Procedures/  
 61 exp Heart surgery/  
 62 cardiovascular surgery/  
 63 thorax surgery/  
 64 ((thoracic or thorax or heart or cardiac or cardia or cardiovascular or cardio-vascular or cardio or myocardial or myo-cardial or chest or cardiothoracic or cardio-thoracic or coronary or aortocoronary or aorto-coronary) adj3 (surger\* or surgical procedure\* or operation\* or resection\* or bypass or fontan or cardiomyoplast\* or cardio-myoplast\* or massage or angioplast\* or atherectom\*).ti,ab.  
 65 ((thoracic or thorax or heart or cardiac or cardia or cardiovascular or cardio-vascular or cardio or myocardial or myo-cardial or chest or cardiothoracic or cardio-thoracic or coronary or aortocoronary or aorto-coronary) adj3 (surger\* or surgical procedure\* or operation\* or resection\* or bypass or fontan or cardiomyoplast\* or cardio-myoplast\* or massage or angioplast\* or atherectom\*).hw. use b9o89  
 66 (cardiosurger\* or cardio-surger\* or pericardiocentesis or pericardietom\*).ti,ab.  
 67 (cardiosurger\* or cardio-surger\* or pericardiocentesis or pericardietom\*).hw. use b9o89  
 68 or/41-67  
 69 12 and (25 or 33 or 40 or 68)  
 70 (RALP or RALN or RALPN or RARP or RARRP or RLP).ti,ab.  
 71 (RALP or RALN or RALPN or RARP or RARRP or RLP).hw. use b9o89

**Results: robotic surgery and four indications (prostatectomy OR hysterectomy OR nephrectomy OR cardiac surgery)**

72 or/69-71

**Concept: Methodology filter: SRs, MAs, HTAs**

- 73 meta-analysis.pt.  
 74 meta-analysis/ or systematic review/ or meta-analysis as topic/ or exp technology assessment, biomedical/  
 75 ((systematic\* adj3 (review\* or overview\*)) or (methodologic\* adj3 (review\* or overview\*))).ti,ab.

- 76 ((quantitative adj3 (review\* or overview\* or synthes\*)) or (research adj3 (integrati\* or overview\*))).ti,ab.
- 77 ((integrative adj3 (review\* or overview\*)) or (collaborative adj3 (review\* or overview\*)) or (pool\* adj3 analy\*)).ti,ab.
- 78 (data synthes\* or data extraction\* or data abstraction\*).ti,ab.
- 79 (handsearch\* or hand search\*).ti,ab.
- 80 (mantel haenszel or peto or der simonian or dersimonian or fixed effect\* or latin square\*).ti,ab.
- 81 (met analy\* or metanaly\* or health technology assessment\* or HTA or HTAs).ti,ab.
- 82 (meta regression\* or metaregression\* or mega regression\*).ti,ab.
- 83 (meta-analy\* or metaanaly\* or systematic review\* or biomedical technology assessment\* or bio-medical technology assessment\*).mp,hw.
- 84 (medline or Cochrane or pubmed or medlars).ti,ab,hw.
- 85 (cochrane or health technology assessment or evidence report).jw.
- 86 (meta-analysis or systematic review).md.
- 87 or/73-86

### Results for robotic surgery, four indications and SRs/MAs/HTAs filter

88 72 and 87

### Concept: Methodology filter: RCTs

- 89 (Randomized Controlled Trial or Controlled Clinical Trial).pt.
- 90 Randomized Controlled Trial/
- 91 Randomized Controlled Trials as Topic/
- 92 Controlled Clinical Trial/
- 93 Controlled Clinical Trials as Topic/
- 94 Randomization/
- 95 Random Allocation/
- 96 Double-Blind Method/
- 97 Double Blind Procedure/
- 98 Double-Blind Studies/
- 99 Single-Blind Method/
- 100 Single Blind Procedure/
- 101 Single-Blind Studies/
- 102 Placebos/
- 103 Placebo/
- 104 Control Groups/
- 105 Control Group/
- 106 (random\* or sham or placebo\*).ti,ab,hw.
- 107 ((singl\* or doubl\*) adj (blind\* or dumm\* or mask\*)).ti,ab,hw.
- 108 ((tripl\* or trebl\*) adj (blind\* or dumm\* or mask\*)).ti,ab,hw.
- 109 (control\* adj3 (study or studies or trial\*)).ti,ab,hw.
- 110 (Nonrandom\* or non random\* or non-random\* or quasi-random\*).ti,ab,hw.
- 111 (allocated adj1 to).ti,ab,hw.
- 112 ((open label or open-label) adj5 (study or studies or trial\*)).ti,ab,hw.
- 113 or/89-112

### Results for robotic surgery, four indications and RCTs filter

114 72 and 113

### Concept: Methodology filter: observational studies

- 115 epidemiologic methods.sh.
- 116 epidemiologic studies.sh.
- 117 cohort studies/
- 118 cohort analysis/
- 119 longitudinal studies/
- 120 longitudinal study/

- 121 prospective studies/
- 122 prospective study/
- 123 follow-up studies/
- 124 follow up/
- 125 followup studies/
- 126 retrospective studies/
- 127 retrospective study/
- 128 case-control studies/
- 129 exp case control study/
- 130 cross-sectional study/
- 131 observational study/
- 132 quasi experimental methods/
- 133 quasi experimental study/
- 134 (observational adj3 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 135 (cohort adj7 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 136 (prospective adj7 (study or studies or design or analysis or analyses or cohort)).ti,ab,hw.
- 137 ((follow up or followup) adj7 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 138 ((longitudinal or longterm or (long adj term)) adj7 (study or studies or design or analysis or analyses or data or cohort)).ti,ab,hw.
- 139 (retrospective adj7 (study or studies or design or analysis or analyses or cohort or data or review)).ti,ab,hw.
- 140 ((case adj control) or (case adj comparison) or (case adj controlled)).ti,ab.
- 141 (case-referent adj3 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 142 (population adj3 (study or studies or analysis or analyses)).ti,ab.
- 143 (descriptive adj3 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 144 ((multidimensional or (multi adj dimensional)) adj3 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 145 (cross adj sectional adj7 (study or studies or design or research or analysis or analyses or survey or findings)).ti,ab,hw.
- 146 ((natural adj experiment) or (natural adj experiments)).ti,ab,hw.
- 147 (quasi adj (experiment or experiments or experimental)).ti,ab,hw.
- 148 ((non experiment or nonexperiment or non experimental or nonexperimental) adj3 (study or studies or design or analysis or analyses)).ti,ab,hw.
- 149 (prevalence adj3 (study or studies or analysis or analyses)).ti,ab,hw.
- 150 organizational case studies.sh.
- 151 case series.ti,ab,hw.
- 152 case reports.pt.
- 153 case report/
- 154 case study/
- 155 (case adj3 (report or reports or study or studies or histories)).ti,ab,hw.
- 156 or/115-155

**Results for robotic surgery, four indications and observational filter**

- 157 72 and 156

**Concept: Methodology filter: human studies**

- 158 exp animals/
- 159 exp animal experimentation/
- 160 exp models animal/
- 161 exp animal experiment/
- 162 nonhuman/
- 163 exp vertebrate/
- 164 animal.po.
- 165 or/158-164
- 166 exp humans/
- 167 exp human experiment/

168 human.po.  
169 or/166-168  
170 165 not 169

**Results for robotic surgery, four indications, SRs or RCT or Observational filter, and human filter**

171 (88 or 114 or 157) not 170

**Concept: Methodology filter: clinical practice guidelines**

172 Guidelines as topic/  
173 Guideline/  
174 Practice guideline/  
175 exp Consensus Development Conference/  
176 Consensus Development.sh.  
177 Health Planning Guidelines/  
178 Practice Guidelines as Topic/  
179 Clinical Protocols/  
180 (Guideline or Practice Guideline or Consensus Development Conference).pt.  
181 Standards.fs.  
182 Practice Guideline/  
183 Clinical Practice/  
184 Clinical Protocol/  
185 Health Care Planning/  
186 (guideline\* or standards or best practice).ti.  
187 (guideline\* or standards or best practice).hw. use b9o89  
188 (expert consensus or consensus statement or consensus conference\* or practice parameter\* or position statement\* or policy statement\* or CPG or CPGs).hw. use b9o89  
189 or/172-188

**Results for robotic surgery, four indications and CPG filter**

190 72 and 189  
191 171 or 190  
192 remove duplicates from 191  
193 limit 192 to english language  
194 limit 192 to French  
195 194 or 193

NIHR 378 : School-linked sexual health services for young people (SSHYP): a survey and systematic review concerning current models, effectiveness, cost-effectiveness and research opportunities.

**Embase search as printed in the systematic review:**

1. exp School/ (34564)  
2. exp High School/ or exp Middle School/ (3666)  
3. school\$.ab.ti. (69489)  
4. (secondary adj1 (school\$ or education)).ab.ti.  
(2468)  
5. (sbc or sbhc).ab.ti. (374)  
6. 1 or 2 or 3 or 4 or 5 (87317)  
7. (service\$ or clinic\$ or outreach\$).ab.ti.  
8. exp Sexually Transmitted Disease/ (26552)  
9. (sexually transmit\$ or STI or STD or pregnanc\$ or conception\$).ab.ti. (172714)  
10. ((sexual\$ or risk\$) adj2 (activ\$ or behav\$)).ab.ti. (24775)  
11. 8 or 9 or 10 (208639)  
12. 6 and 7 and 11 (1125)

NIHR 380: What is the value of routinely testing full blood count, electrolytes and urea, and pulmonary function tests before elective surgery in patients with no apparent clinical indication and in subgroups of patients with common comorbidities: a systematic review of the clinical and cost-effective literature

**Embase search as printed in the systematic review:**

1. Surgery/
2. Elective Surgery/
3. elective surgery.tw.
4. minor surgery/
5. minor surgery.tw.
6. intermediate surgery.tw.
7. ambulatory surgery/
8. ambulatory care/
9. day surgery.tw.
10. asymptomatic.tw.
11. preoperative.tw.
12. pre-operative.tw.
13. pre operative.tw.
14. or/1-13
15. diagnostic test/
16. Preoperative Care/
17. routine test\$.tw.
18. routine assessment\$.tw.
19. routine investigation\$.tw.
20. clinical chemistry/
21. risk assessment/
22. blood cell count/
23. full blood count.tw.
24. fbc.tw.
25. blood examination/
26. h?ematolog\$ test\$.tw.
27. Urea/
28. URINALYSIS/
29. Electrolyte/
30. urine test\$.tw.
31. blood test\$.tw.
32. u&e.tw.
33. (electrolytes and renal function).tw.
34. lung function test/
35. pulmonary function test\$.tw.
36. respiratory function test\$.tw.
37. spirometry/
38. spirometry.tw.
39. blood gas analysis/
40. blood gas analysis.tw.
41. pft.tw.
42. measurement of respiratory mechanics.tw.
43. measurement of transfer function.tw.
44. exercise test/
45. exercise test\$.tw.
46. respiratory system/
47. 44 or 45
48. 46 and 47
49. vitalograph.tw.
50. FEV1.tw.
51. vital capacity/

52. vital capacity.tw.
53. transfer function.tw.
54. lung diffusion capacity/
55. diffusing capacity.tw.
56. dlco.tw.
57. lung volume/
58. lung capacity.tw.
59. cardiopulmonary exercise test\$.tw.
60. cpx.tw.
61. maximum oxygen uptake.tw.
62. V02max.tw.
63. oxygen consumption/
64. or/15-43,48-63
65. exp SOCIOECONOMICS/
66. exp "Cost Benefit Analysis"/
67. exp "Cost Effectiveness Analysis"/
68. exp "Cost of Illness"/
69. exp "Cost Control"/
70. exp Economic Aspect/
71. exp Financial Management/
72. exp "Health Care Cost"/
73. exp Health Care Financing/
74. exp Health Economics/
75. exp "Hospital Cost"/
76. (financial or fiscal or finance or funding).tw.
77. exp "Cost Minimization Analysis"/
78. (cost adj estimate\$.mp.
79. (cost adj variable\$.mp.
80. (unit adj cost\$.mp.
81. or/65-80
82. 14 and 64 and 81

NIHR 385: Bevacizumab, sorafenib tosylate, sunitinib and temsirolimus for renal cell carcinoma: a systematic review and economic evaluation

#### Embase search as printed in the systematic review:

1. exp Carcinoma, Renal Cell/
2. (renal cell carcinoma\$or cell renal carcinoma\$or renal carcinoma\$ or kidney carcinoma\$ or kidney cell carcinoma\$or renal adenocarcinoma\$or kidney adenocarcinoma\$or adenocarcinoma\$renal or adenocarcinoma\$kidney\$.mp.
3. (hypernephroma\$or nephroid carcinoma\$or hypernephroid carcinoma\$or kidney hypernephroma\$or kidney pelvic carcinoma\$or kidney pyelocarcinoma\$or renal hypernephroma\$or grawitz tumor\$or renal cell neoplasm\$or renal cell cancer\$or renal tumor\$or carcinoma chromophobe cell kidney\$or chromophobe cell kidney carcinoma\$.mp.
4. exp kidney neoplasms/
5. (cancer\$adj2 kidney\$1).ti,ab.
6. (neoplasm\$1 adj2 kidney\$1).ti,ab.
7. (neoplasm\$1 adj2 renal).ti,ab.
8. (cancer\$adj2 renal).ti,ab.
9. (tumor\$1 adj2 kidney\$1).ti,ab.
10. (tumor\$1 adj2 renal).ti,ab.
11. or/1-10
12. (bevacizumab or avastin or sorafenib or nexavar or sunitinib or sutent or torisel or temsirolimus or"CCI-779").mp.
13. 11 and 12
14. limit 13 to humans

15. (editorial or letter).pt.
16. 14 not 15

NIHR 390: Systematic review of the clinical effectiveness and cost-effectiveness of photodynamic diagnosis and urine biomarkers (FISH, ImmunoCyt, NMP22) and cytology for the detection and follow-up of bladder cancer

**Embase search as printed in the systematic review:**

- 1 exp bladder cancer/ (45972)
- 2 hematuria/ (31112)
- 3 (bladder adj3 (cancer\$ or neoplasms\$ or carci\$)).tw. (42695)
- 4 (hematuria or haematuria).tw. (21784)
- 5 or/1-4 (92495)
- 6 exp \*bladder cancer/su (6491)
- 7 cystectomy/ (17082)
- 8 ((bladder adj3 resect\$) or cystectomy or turbt).tw. (17391)
- 9 or/6-8 (24739)
- 10 cystoscopy/ (14594)
- 11 cystoscop\$.tw. (11234)
- 12 (photo dynamic\$ or photodynamic\$ or fluorescence\$).tw. (268209)
- 13 (10 or 11) and 12 (583)
- 14 hypericin.tw. (1148)
- 15 548-04-9.m. (1567)
- 16 hexvix.tw. (144)
- 17 hexaminolevulinate.tw. (157)
- 18 (hexyl\$ adj3 aminolevulinate).tw. (39)
- 19 106-60-5.m. (6440)
- 20 5-ala.tw. (876)
- 21 5-aminolevulinic acid.tw. (2380)
- 22 5-aminolevulinic acid hexyl ester.tw,m. (6)
- 23 or/13-22 (9434)
- 24 (5 or 9) and 23 (887)
- 25 exp tumor marker/ or biological marker/ or disease marker/ (339323)
- 26 ((tumo?r or biological or molecular or histolog\$ or biochem\$ or genetic\$ or urine or disease) adj3 marker\$).tw. (110496)
- 27 5 and (25 or 26) (6212)
- 28 In Situ Hybridization, Fluorescence/ (47605)
- 29 fluorescence in situ hybridization.tw. (24009)
- 30 urovysion.tw. (286)
- 31 or/28-30 (51063)
- 32 5 and 31 (816)
- 33 nuclear proteins/ (20357)
- 34 (nuclear matrix protein 22 or nmp22).tw,m. (341)
- 35 or/33-34 (20610)
- 36 5 and 35 (403)
- 37 urine cytology/ (2660)
- 38 cancer cytodiagnosis/ (8794)
- 39 cell count/ (71301)
- 40 immunocyt\$.mp. or ucyt\$.tw. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (92582)
- 41 or/37-40 (172855)
- 42 5 and 41 (2510)
- 43 24 or 27 or 31 or 35 or 42 (79631)
- 44 (animals/ or nonhuman/) not humans/ (4696987)
- 45 43 not 44 (64872)
- 46 editorial/ or letter/ or note/ or case report/ (3664456)

- 47 45 not 46 (51829)
- 48 "sensitivity and specificity"/ (209802)
- 49 roc curve/ (24631)
- 50 receiver operating characteristic/ (45345)
- 51 predictive value of tests/ (62225)
- 52 diagnostic errors/ (43285)
- 53 diagnostic accuracy/ (186847)
- 54 diagnostic value/ (142259)
- 55 sensitivity.tw. (665923)
- 56 distinguish\$.tw. (226494)
- 57 differentiate.tw. (108130)
- 58 identif\$.tw. (2462414)
- 59 detect\$.tw. (2007313)
- 60 diagnos\$.tw. (2291058)
- 61 (predictive adj4 value\$.tw. (98691)
- 62 accura\$.tw. (604340)
- 63 comparison.tw. (913833)
- 64 or/48-63 (7190727)
- 65 47 and 64 (33191)
- 66 exp diagnostic errors/ (61645)
- 67 reproducibility of results/ (144641)
- 68 observer variation/ (16512)
- 69 exp reliability/ (111195)
- 70 diagnosis, differential/ (303464)
- 71 early diagnosis/ (72113)
- 72 (reliab\$ or reproduc\$).tw. (749342)
- 73 or/66-72 (1266489)
- 74 47 and 73 (4981)
- 75 prognosis/ (437582)
- 76 (predict\$ or prognosis or prognostic).tw. (1618483)
- 77 75 or 76 (1763451)
- 78 47 and 77 (11189)
- 79 24 or 65 or 74 or 78 (36580)

NIHR 416: Computerised decision support systems in order communication for diagnostic, screening or monitoring test ordering: systematic reviews of the effects and cost-effectiveness of systems

**Embase search as printed in the systematic review:**

- 1. (computer\* or microcomputer\* or electronic\* or automat\* or web).tw.
- 2. computer/or computer system/or microcomputer/
- 3. (remind\* or alert\* or notif\*).ti,ab.
- 4. (screen\* or monitor\* or feedback).ti,ab.
- 5. ((diagnos\* or screen\* or monitor\*) and (order\* or test\* or laborator\* or endoscop\* or imag\*)).tw.
- 6. (order\$and test\$).tw.
- 7. 1 or 2
- 8. 3 or 4 or 5 or 6
- 9. 7 and 8
- 10. unnecessary procedure/
- 11. reminder system/
- 12. computer assisted diagnosis/
- 13. computer assisted drug therapy/
- 14. clinical practice/
- 15. medical record/
- 16. laboratory/
- 17. medical information system/or medical record/
- 18. hospital information system/

19. electronic medical record/
20. information system/
21. "point of care testing"/
22. diagnostic approach route/
23. diagnostic procedure/
24. computer assisted therapy/
25. medical informatics/
26. medical order/
27. decision making/
28. (decision adj2 support).tw.
29. Feedback System/
30. 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29
31. 9 and 30
32. order\$communicat\$system\$.tw.
33. (decision adj2 support adj2 system\$.tw.
34. decision support system/
35. computerized physician order entry/
36. 32 or 33 or 34 or 35
37. artificial intelligence/
38. Artificial Neural Network/
39. (expert system\$ or neural network\$or artificial intellig\$or bayes\$.tw.
40. Expert System/
41. 37 or 38 or 39 or 40
42. 9 and 41
43. (CDSS or OCS or CPOE or (order adj entry)).tw.
44. (diagnos\$or screen\$or monitor\$.tw.
45. 43 and 44
46. 31 or 36 or 42 or 45
47. (book or editorial or letter or press or release).pt.
48. ((animal or nonhuman) not human).sh.
49. 47 or 48
50. 46 not 49
51. 50
52. limit 51 to (english language and yr="1974 –2008")

NIHR 426 : Peginterferon alfa and ribavirin for chronic hepatitis C in patients eligible for shortened treatment, re-treatment or in HCV/HIV co-infection: a systematic review and economic evaluation

#### Embase search as printed in the systematic review:

1. (hepatitis C or hcv).mp. (40,260)
2. exp Hepatitis C/or exp Hepatitis C virus/ (37,333)
3. 1 or 2 (40,260)
4. (peginterferon\$or peg-ifn or peg-interferon\$or (peg\$adj3 interferon\$) or (polyethylene glycol adj3 interferon\$) or Pegasys or pegintron or viraferonpeg).mp. (5786)
5. peginterferon/or peginterferon alpha2a/or peginterferon alpha2b/ (5285)
6. (interferon alpha or interferon alfa or roferon or intron or viraferon).ti,ab. (25,587)
7. exp Alpha Interferon/ (21,113)
8. Recombinant Alpha2a Interferon/ (1749)
9. Recombinant Alpha2b Interferon/ (2660)
10. interferon/or alpha2a interferon/or alpha2b interferon/or alpha interferon/ (36,974)
11. or/4-10 (58,971)
12. 3 and 11 (12,123)
13. limit 12 to (human and english language and yr="2007 - 2009") (2516)
14. (systematic\$adj2 review\$.mp. (35,802)
15. (systematic\$adj2 overview\$.mp. (341)

16. (meta analy\$or metaanaly\$).ti,ab,pt. (21,234)
17. exp meta analysis/ (31,882)
18. randomized controlled trial/ (139,490)
19. controlled clinical trial/ (61,251)
20. exp randomization/ (24,841)
21. exp double blind procedure/ (53,393)
22. exp single blind procedure/ (7234)
23. placebo\*.tw. (70,462)
24. random\*.tw. (295,710)
25. ((singl\$or doubl\$or tripl\$or trebl\$) adj5 (blind\$or mask\$)).tw. (55,235)
26. ((hand or manual or computer or electronic or database) adj2 search\*).ti,ab. (8649)
27. or/14-26 (410,504)
28. 13 and 27 (337)
29. (comment or editorial or letter).pt. (305,933)
30. 28 not 29 (334)

NIHR 443: Screening for cystic fibrosis-related diabetes: a systematic review

**Embase search as printed in the systematic review:**

1. exp Cystic Fibrosis/
2. exp Diabetes Mellitus/
3. (cystic fibrosis or cfrd).tw.
4. (diabet\* or glucose or hyperglycaemia or hyperglycaemia or postprandial or post-prandial or insulin or hypoglycemia or hypoglycaemia or IGT or OGTT or CGMS).tw.
5. 1 or 3
6. 2 or 4
7. 5 and 6.

NIHR 509: Non-invasive diagnostic assessment tools for the detection of liver fibrosis in patients with suspected alcohol-related liver disease

**Embase search as printed in the systematic review:**

1. (enhanced adj liver adj fibrosis).tw.
2. (elf adj test\$).tw.
3. (elf and diagnos\$).tw.
4. (elf and (fibros\*s or cirrhos\*s)).tw.
5. elf.tw.
6. exp liver cirrhosis/or exp liver diseases, alcoholic/
7. 5 and 6
8. 1 or 2 or 3 or 4 or 7
9. FibroTest.tw.
10. fibrosure.tw.
11. fibromax.tw.
12. FibroScan.tw.
13. ashtest.tw.
14. (transient adj elastograph\$).tw.
15. (elastograph\$ and liver).tw.
16. or/9-15
17. exp liver cirrhosis/or exp liver diseases, alcoholic/
18. (fibros\*s or cirrhos\*s).tw.
19. 17 or 18
20. Biological Markers/
21. (biomarker\$ or bio-marker\$).tw.
22. (marker\$ and (biologic\$ or biochemical or serum or direct or indirect)).tw.
23. Algorithms/
24. algorithm\$.tw.

25. (composite and blood).tw.
26. or/20-25
27. 19 and 26
28. Hyaluronic Acid/
29. ((hyaluronic adj acid) or (hyalauronate or hyaluronan)).tw.
30. 28 or 29
31. (procollagen or piinp or p3np or ppcp).tw.
32. ((tissue and inhibitor and metalloproteinase\$) or timps).tw.
33. 30 and 31 and 32
34. 30 or 31 or 32
35. 34 and 19
36. Alpha-Macroglobulins/
37. ((alpha and macroglobulin\$) or (alpha adj 2m)).tw.
38. 36 or 37
39. ((apolipoprotein\$ adj a1) or apoa1).tw.
40. Haptoglobins/
41. haptoglobin\$.tw.
42. 40 or 41
43. (bilirubin\$or hematoidin\$).tw.
44. (gamma adj glutamyl adj transpeptidase\$).tw.
45. (gamma adj glutamyltransferase\$).tw.
46. ((gamma adj gt) or ggt or ggtp).tw.
47. 44 or 45 or 46
48. 38 and 39 and 42 and 43 and 47
49. 38 or 39 or 42 or 43 or 47
50. 49 and 19
51. (alanine adj (aminotransferase\$or aminotransaminase\$)).tw.
52. (serum adj glutamic adj pyruvic adj transaminase\$).tw.
53. sgpt.tw.
54. 51 or 52 or 53
55. (aspartate adj (aminotransferase\$or aminotransaminase\$)).tw.
56. (serum adj glutamic adj oxaloacetic adj transaminase\$).tw.
57. sgot.tw.
58. 55 or 56 or 57
59. 38 and 39 and 42 and 43 and 47 and 54 and 58
60. 38 or 39 or 42 or 43 or 47 or 54 or 58
61. 60 and 19
62. exp "Sensitivity and Specificity"/
63. sensitivity.tw.
64. specificity.tw.
65. ((pre-test or pretest) adj probability).tw.
66. post-test probability.tw.
67. predictive value\$.tw.
68. likelihood ratio\$.tw.
69. or/62-68
70. 27 and 69
71. 35 and 69
72. 50 and 69
73. 61 and 69
74. 70 or 71 or 72 or 73
75. iqr.tw.
76. biopredictive.tw.
77. echosens.tw.
78. 75 or 76 or 77
79. 8 or 16 or 33 or 48 or 59 or 74 or 78

**Embase search as printed in the systematic review:**

1. exp intensive care/ (324,789)
2. exp intensive care unit/ (53,595)
3. ("acute care" or "critical care" or "critically ill" or "critical illness").tw. (52,785)
4. (high dependency adj1 (care or unit\*1)).tw. (469)
5. ("intensive care" or "intensive medical care").tw. (83,359)
6. (intensive adj therapy adj unit\*).tw. (556)
7. (ITU or ICU or CCU or CICU or CITU or SCBU).tw. (31,316)
8. ("level 2 care" or "level 3 care").tw. (24)
9. or/1-8 (407,797)
10. exp catheterization/ (100,116)
11. INTRAVENOUS CATHETER/ or ARTERY CATHETER/ or CATHETER/ or INDWELLING CATHETER/ or PERIPHERALLY INSERTED CENTRAL VENOUS CATHETER/ or CENTRAL VENOUS CATHETER/ or INTRAVASCULAR CATHETER/ (36,464)
12. (catheter\* adj5 (venous or intravenous or arterial or vascular or intravascular or central or indwelling or peripheral or peripherally)).tw. (28,927)
13. (tunnel\* adj5 (venous or intravenous or arterial or vascular or intravascular or central or indwelling or peripheral or peripherally)).tw. (727)
14. (device\* adj5 (venous or intravenous or arterial or vascular or intravascular or central or indwelling or peripheral or peripherally)).tw. (5087)
15. (CVC or PICC or JICC or SICC or SBCC or PVC or IVI).tw. (7571)
16. ("Porta-cath" or Portacath or Hickman\* or Broviac or Venflon or Groshong).tw. (1244)
17. ("implantable port" or "access port").tw. (514)
18. cannula\*.tw. (31,388)
19. or/10-18 (176,786)
20. catheter infection/ (6889)
21. ("CR-BSI" or "CR-BSIs" or CRBSI or CRBSIs or CABI or CABIs or CABSIs or CABSIs or CLABSIs or CLABSIs or CRI or CRIs or BSI or BSIs or "AC-CRI " or "AC-CRIs").tw. (4339)
22. (line adj3 (infection\* or sepsis or bacter?emia)).tw. (1112)
23. (catheter\* and blood\* and infection\*).tw. (4439)
24. (catheter\* and (sepsis or bacter?emia\*)).tw. (5609)
25. "catheter-related bloodstream infection".tw. (705)
26. "catheter-associated bloodstream infection".tw. (131)
27. or/20-26 (17,675)
28. 9 and 27 (4542)
29. exp INFECTION/ or GRAM POSITIVE INFECTION/ or STAPHYLOCOCCUS INFECTION/ or BACTERIAL INFECTION/ or GROUP A STREPTOCOCCAL INFECTION/ or ENTEROCOCCAL INFECTION/ or KLEBSIELLA INFECTION/ or HOSPITAL INFECTION/ or STREPTOCOCCUS INFECTION/ or GRAM NEGATIVE INFECTION/ or METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS INFECTION/ or GROUP B STREPTOCOCCAL INFECTION/ or DEVICE INFECTION/ or ENTEROBACTERIACEAE INFECTION/ or BLOODSTREAM INFECTION/ or CROSS INFECTION/ (2,002,322)
30. FUNGAL CONTAMINATION/ or BACTERIUM CONTAMINATION/ or VIRAL CONTAMINATION/ or MICROBIAL CONTAMINATION/ (13,226)
31. bacteremia/ or sepsis/ (86,693)
32. (infection\* or acinetobacter\* or asepsis or bacter?emia\* or bacteria\* or candida or coloni?ation or contaminat\* or cfu or colony or colonies or corynebacterium or escherichia or enterococc\* or enterobacter\* or fungi or fungus or fungal or fung?emia or klebsiella or met?icillin or microorganism\* or micro-organism\* or microbial\* or microbe\* or microbiologic\* or mycology or mycological or organism\* or nosocomial\* or pathogen\* or sepsis or septic or septic?emia or staphylococc\* or streptococc\*).tw. (2,124,000)
33. (MRSA or MSSA).tw. (12,771)
34. or/29-33 (3,293,446)

35. CLINICAL EDUCATION/ or NURSING EDUCATION/ or CONTINUING EDUCATION/ or EDUCATION PROGRAM/ or RESEARCH BASED NURSING EDUCATION/ or CONTINUING EDUCATION PROVIDER/ or INTERDISCIPLINARY EDUCATION/ or EMERGENCY MEDICAL SERVICES EDUCATION/ or MEDICAL EDUCATION/ or HEALTH EDUCATION/ or EDUCATION/ or "OUTCOME OF EDUCATION"/ (482,831)
36. IN SERVICE TRAINING/ or TRAINING/ or STAFF TRAINING/ (67,556)
37. (educat\* or awareness or bundle\* or collaborat\* or campaign\* or communicat\*).tw. (627,949) 38. (feedback or "feed back" or "feeding back" or course\* or instruct\* or inform\* or impart\* or knowledge or learn\* or "e-learn" or "e-learning" or lecture\*).tw. (1,706,178)
39. (module\* or modular or session\*).tw. (126,951)
40. ("self study" or re-educat\* or "self-educat").tw. (1752)
41. (assess\* or apprais\* or competenc\* or competent\* or curriculum\* or evaluat\* or seminar\* or test\* or teach\* or taught or train\* or simulat\* or refresh\* or tool\* or meeting\* or presentation\* or skill\* or drill\* or workshop\*).tw. (5,171,099)
42. (link\* adj2 (staff or nurs\*).tw. (427)
43. (preceptor\* or mentor\*).tw. (8258)
44. (component\* or "multi-component" or "multi-faceted" or "multi-modal" or initiative\* or intervention\*).tw. (1,069,468)
45. (session\* or strategy or strategies or initiative or program\* or package\*).tw. (1,023,638)
46. "blended learning".tw. (93)
47. "self-learn".tw. (438)
48. (shar\* adj3 practice\*).tw. (878)
49. (risk\* adj3 (reduc\* or management)).tw. (86,429)
50. ("scrub the hub" or "Matching Michigan" or "Michigan project" or "Michigan Intervention" or "NHS Venous Catheter Care" or EPIC or "EPIC-2" or "saving lives").tw. (2080)
51. (booklet\* or workbook\* or checklist\* or library or libraries or literature or questionnaire\* or sheet\* or pamphlet\* or poster\* or pictorial\* or verbal\* or video\* or audiovisual\* or podcast\* or telemedicine or teleconferenc\*).tw. (1,109,759)
52. (behavio?r\* adj2 chang\*).tw. (23,225)
53. (behavio?r adj2 alter\*).tw. (3549)
54. (chang\* adj5 (hygien\* or handwash\* or hand wash\* or disinfect\* or sterilisation or sterilization)).tw. (828)
55. (alterat\* adj5 (hygien\* or handwash\* or hand wash\* or disinfect\* or sterilisation or sterilization)).tw. (36)
56. (manag\* adj5 (contaminat\* or hygien\* or handwash\* or hand wash\* or disinfect\* or sterilisation or sterilization)).tw. (1241)
57. (precaution\* adj5 (hygien\* or handwash\* or hand wash\* or disinfect\* or sterilisation or sterilization)).tw. (424)
58. (behavio?r\* adj2 manag\*).tw. (3687)
59. (prevent\* adj5 (measure\* or control\*).tw. (54,004)
60. (risk\* adj (manage\* or assess\* or contain\*).tw. (35,159)
61. infection control practitioner/ (61)
62. (infection\* and prevent\*).tw. (87,720)
63. RISK REDUCTION/ or BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM/ or HIGH RISK BEHAVIOR/ or RISK ASSESSMENT/ or RISK MANAGEMENT/ (304,788)
64. or/35-63 (8,009,274)
65. 28 and 64 (3151)
66. (bloodstream or blood-stream or "blood stream").tw. (13,990)
67. 9 and 19 and 34 and 64 and 66 (759)
68. 65 or 67 (3182)
69. bacteremia/ or bloodstream infection/ or sepsis/ (87,784)
70. 9 and 19 and 64 and 69 (1376)
71. 68 or 70 (3460)
72. (comment or letter or editorial).pt. (1,078,117)
73. 71 not 72 (3396)
74. limit 73 to embase (2944)

NIHR 559: Dasatinib, nilotinib and standard-dose imatinib for the first-line treatment of chronic myeloid leukaemia: systematic reviews and economic analyses

**Embase search as printed in the systematic review:**

1. myeloid\$ leuk?emia\$.mp.
2. myelogenous\$ leuk?emia\$.mp.
3. myelocytic\$ leuk?emia\$.mp.
4. chronic myeloid leukemia/
5. (CML).tw.
6. myeloid leukemia/
7. major cytogenetic response.ti,ab.
8. major molecular response.ti,ab.
9. Or/1-8
10. Philadelphia 1 Chromosome/
11. (Philadelphia adj1 Chromosome).mp.
12. (PH1 or PH 1 adj3 Chromosome).mp.
13. Or/10-12
14. 9 OR 13
15. Nilotinib/
16. nilotinib.mp.
17. tassigna.mp.
18. (amn107 or amn-107 or (amn adj "107")).mp.
19. Or/15-18
20. dasatinib/
21. dasatinib.mp.
22. sprycel.mp.
23. (BMS354825 or BMS 354825 or BMS-354825).mp.
24. Or/20-23
25. 19 OR 24
26. 14 AND 25
27. limit 26 to English language
28. limit 27 to yr="2002 -Current"
29. ((animal\$ or nonhumans) not human\$).sh,hw.
30. 28 NOT 29

AHRQ 697: Evaluation and Treatment of Tinnitus: Comparative Effectiveness

**Embase search as printed in the systematic review:**

1. Tinnitus/ or tinnitus.ti.
2. limit 1 to english language
3. limit 2 to (book or book series or conference abstract or conference paper or editorial or letter or note)
4. 2 not 3
5. limit 4 to human

AHRQ 705: Treatments for Seasonal Allergic Rhinitis

**Embase search as printed in the systematic review:**

1. perennial rhinitis/
2. hay fever/
3. rhinitis/
4. (seasonal or allergic).tw.
5. 3 and 4
6. seasonal rhinitis.tw.
7. allergic rhinitis.tw.
8. (hay fever or hayfever).tw.
9. (sar or par).tw.

10. or/1-2,5-9
11. exp corticosteroid/ or corticosteroid\$.tw.
12. Betamethasone/ or (Betamethasone or Celestone).tw.
13. Cortisone/ or Cortone.tw.
14. Dexamethasone/ or (Dexamethasone or Baycadron or Hexadrol or Decadron or Dexium or Dexone or DexPak).tw.
15. Hydrocortisone/ or (Hydrocortisone or Cortef or Hydrocortone).tw.
16. Methylprednisolone/ or (Methylprednisolone or medrol).tw.
17. Prednisolone/ or (Prednisolone or asmaPred Plus or Millipred or PediaPred or Prelone or Veripred or Flo-Pred or Cotelone or Oraped or Prednoral).tw.
18. Prednisone/ or (Prednisone or Liquid Pred or Deltasone or Meticorten or Orasone or Prednicen or Sterapred or Prednicot).tw.
19. Triamcinolone/ or (triamcinolone or Aristocort).tw.
20. oral drug administration/ or oral\$.tw.
21. or/11-19
22. 20 and 21
23. Beclometasone/ or (Beclometasone or Beconase or Vancenase).tw.
24. exp corticosteroid/ or corticosteroid\$.tw.
25. Budesonide/ or (Budesonide or Rhinocort).tw.
26. Ciclesonide/ or (Ciclesonide or Omnaris).tw.
27. Dexamethasone/ or (Dexamethasone or Dexacort).tw.
28. Flunisolide/ or (Flunisolide or Nasalide or Nasarel).tw.
29. Fluticasone/ or (Fluticasone or Flonase or Veramyst).tw.
30. mometasone furoate/ or (Mometasone or Nasonex).tw.
31. Triamcinolone/ or (Triamcinolone or AllerNaze or Nasocort or Tri-nasal).tw.
32. intranasal drug administration/ or (nasal\$ or intranasal\$).tw.
33. or/23-31
34. 32 and 33
35. exp antihistaminic agent/ or antihistamine\$.tw.
36. Cetirizine/ or (Cetirizine or Zyrtec or Alleroff or Aller-tec).tw.
37. Loratadine/ or (Loratadine or Desloratadine or Clarinex or Claritin or Triaminic or Agistam or Alavert or Bactimicina allergy or Clear-atadine or Loradamed).tw.
38. Fexofenadine/ or (Fexofenadine or Allegra).tw.
39. Levocetirizine/ or (Levocetirizine or Xyzal).tw.
40. Brompheniramine/ or (Brompheniramine or Lodrane or Tridane or Bromaphen or Brovex or B-vex or Tanacof or Bidhist or Bromax or Respa or Brompsiro or Dimetane or Siltane or Vazol or Conex or J-Tan).tw.
41. Carbinoxamine/ or (Carboxine or Cordron or Histuss or Palgic or Peditax or Peditox or Arbinoxa).tw.
42. Chlorpheniramine/ or (Chlorpheniramine or Chlo-Amine or Chlor-Phen or Krafthist or Chlortan or Ed ChlorPed or P-Tann or Allerlief or Chlor-Al Rel or Myci Chlorped or Peditan or Ahist or Aller-Chlor or Chlor-Mal or Chlor-Phenit or Diabetic Tussin or Ed Chlor Tan or Ridramin or Teldrin or Uni-Cortrom).tw.
43. Clemastine/ or (Clemastine or Tavist or Allerhist\$ or Dayhist\$).tw.
44. Cyproheptadine/ or (Cyproheptadine or Periactin).tw.
45. Dexchlorpheniramine/ or (Dexchlorpheniramine or Polaramine).tw.
46. Diphenhydramine/ or (Diphenhydramine or Benadryl or Dytan or Kids-eeze or Allergia\$ or Benekraft or Diphenyl or Aler-Dryl or Altaryl or Antihist or Antituss or Beldin or Belix or Bromanate AF or Bydramine or Diphen or Diphenadryl or Diphenyl\$ or Dytuss or Elixsure or Hydramine or Nu-med or Parydyl or PediaCare or Scot-Tussin or Syladryl or Silaphen or Tusstat or Theraflu or Ben Tann or Dicopanor or Allermax or Banophen or Diphedryl or Diphenhist or Nervine or Paxidorm).tw.
47. Doxylamine/ or (Doxylamine or Aldex or Doxytex).tw.
48. Promethazine/ or (Promethazine or Phenergan or Pentazine or Promacot).tw.
49. Triprolidine/ or (Triprolidine or Tripohist or Zymine).tw.
50. Olopatadine/ or (Olopatadine or Patanase).tw.
51. Azelastine/ or (Azelastine or Astelin or Astepro).tw.
52. ipratropium bromide/ or (Ipratropium or Atrovent).tw.
53. cromoglycate disodium/ or (cromoglycate or Cromolyn or Nasalcrom).tw.

54. leukotriene receptor blocking agent/ or (Leukotriene Antagonist\$ or Montelukast or Singulair).tw.
55. Decongestive agent/ or Phenylephrine/ or (nasal decongestant\$ or Levmetamfetamine or vapo?r inhaler\$ or Naphazoline or Privine or Oxymetazoline or Afrin or (Allerest adj3 Nasal) or Dristan or Duramist plus or Four-Way or Mucinex Nasal or Nasin or Neo-Synephrine or Nostrilla or (NTZ adj3 Nasal) or Oxyfrin or Oxymeta or Sinarest or Zicam or Phenylephrine or (Alconeprin adj2 Decongestant) or Rhinal or 4-way or Sinex or Propylhexedrine or Benzedrex or Xylometazoline or Otrivin or tetrahydrozoline or tyzine).tw.
56. Pseudoephedrine/ or (oral decongestant\$ or Ah-chew\$ or Gilchew or Phenyl-T or Despec or Lusonal or Pseudoephedrine or Afrinol or Contac or Efidac or Suphedrine or Decofed or Elixsure or Ephed 60 or Kid Kare or Myfedrine.tw. or Q-Fed or Silfedrine or Superfed or Unified or Entex or Nasofed or Congest Aid or Sudophed or Cenafed or Congestaclear or Pseudocot or Pseudofed or Pseudotabs or Pseudoval or Ridafed or Seudotabs or Sudafed or Sudodrin or Sudogest or Sudrine).tw.
57. sodium chloride/ or (saline or Altamist or ENTsol or Little Noses or nasal Moist or Ocean or Pretz or Salinex or SaltAire or Deep Sea or Humist or Marine mist or sea Mist or Nasosol or Pediamist or Rhinaris or Sea Soft).tw.
58. (Accuhist or Actacin or Actagen or Actamine or Actedril or Acticon or Actifed or Alacol or Ala-Hist or Alenaze-D or Allan Tannate or Allent or Aller-Chlor or Allercon or AllerDur or Allerest or Allerfrim or Allerg or Altafed or Amerifed or Anamine or Anaplex or Andec or Andehist or Aphedrid or A-Phedrin or Aridex-D or Atridine or Atrogen or Atrohist or Benylin or B-Fedrine or Bi-Tann or BP Allergy or BPM Pseudo or Brexin or Brofed or Brom Tann or Bromadrine or Bromaline or Bromaphedrine or Bromaxefed or BROMDEC or Bromfed or Bromfenex or Bromhist\$ or BROMPHEN or C Tan D or Carbaxefed or CARBIC or Carbiset or Carbodec or Carbofed or Cardec or Centergy or Cetiri-d or Chemdec or Chlor Trimeton or Chlorafed\$ or Chloridine or Chlor-Mes or Chlorphedrin or Clorfed or Codimal\$ or Coldec or Colfed\$ or Cophene or CP Oral or CP Tannic or C-Phed Tannate or Curaler or Cydec or Dallery or D-Amine or Dayquil Allergy or Deconamine or Decongestamine or De-Congestine or Deconomed or Delsym or Desihist or Dexaphen or Dexophed or Dicel or Dimetapp or Diphentann or Disobrom or Disophrol or Dixaphedrine or Drexophed or Drixomed or Drixoral or D-Tann or Duomine or Duotan or Dura Ron or Durafed or Duralex or Dura-Tap or Duratuss or Dynahist or Ed A-Hist or Endafed or Entre-B or Ex?Dec or Fedahist or Hayfebrol or Hexafed or Hisdec or Histadec or HistaFed or Histalet or HistamaxD or Histatab or Hista-Tabs or Histex or Hydro-Tussin or lofed or Isophen-DF or Klerist-D or Kronofed-A or Lohist or Lortuss or Maldec or Maxichlor or Med-Hist or M-Hist or Mintex or Mooredec or NalDex or Nalfed or Nasohist or ND Clear or NeutraHist or Nohist or Norel LA or Novafed or Novahistine Elixir or Ny-Tannic or Orienta or Pediachlor or Pharmadrine or Phenabid or PHENAMETH or PHENTUSS or *Phenyl Chlor Tan* or *Phenylhistine* or *Prohist* or *Pseudoephedrine-BM* or *Pseubrom* or Pseuclor or QDall or Q-Tapp or R?Tann\$ or Relera or Rescon or Respahist or Rhinabid or RhinaHist or Ricobid or Ridifed or Rinade\$ or Rinate or Robitussin Night\$ or Rondamine or Rondec or Rondex or Rymed or Ryna Liquid or Rynatan or Semprex or Seradex or Shellcap or Sildec or Sinuhist or Sonahist or Suclor or SudaHist or Sudal or Sudo Chlor or Suphenamine or SuTan or Tanabid or Tanafed or Tanahist or Tekral or Time-Hist or Touro or Triafed or Triphed or Tri-Pseudo or Triptifed or Trisofed or Tri-Sudo or Trisudrine or Trynate or Ultrabrom or Vazobid or Vazotab or V-Hist or Vi-Sudo or X-Hist or XiraHist or Zinx Chlor\$ or Zotex).tw.
59. or/22,34-58
60. 10 and 59
61. limit 60 to randomized controlled trial
62. random\$.tw.
63. 60 and 62
64. 61 or 63
65. (animal\$ not human\$.sh,hw.
66. 64 not 65
67. limit 66 to english language
68. exp side effect/
69. side effect\$.tw.
70. undesirable effect\$.tw.
71. tolerability.tw.
72. exp toxicity/
73. (adverse adj2 (effect\$ or reaction\$ or event\$ or outcome\$)).ti.
74. exp adverse drug reaction/

75. or/69-74
76. 60 and 75
77. (animal\$ not human\$).sh,hw.
78. 76 not 77
79. limit 78 to english language
80. exp review/
81. (literature adj3 review\$).ti,ab.
82. exp meta analysis/
83. exp "Systematic Review"/
84. or/80-83
85. (medline or medlars or embase or pubmed or cinahl or amed or psychlit or psyclit or psychinfo or psycinfo or scisearch or cochrane).ti,ab.
86. RETRACTED ARTICLE/
87. 85 or 86
88. 84 and 87
89. (systematic\$ adj2 (review\$ or overview)).ti,ab.
90. (meta?anal\$ or meta anal\$ or meta-anal\$ or metaanal\$ or metanal\$).ti,ab.
91. or/88-90
92. 60 and 91
93. (animal\$ not human\$).sh,hw.
94. 92 not 93
95. limit 94 to english language

AHRQ 716: Treatment Strategies for Women With Coronary Artery Disease: Future Research Needs

**Embase search as printed in the systematic review:**

#1 'cardiovascular disease'/exp OR 'heart disease'/exp OR 'heart'/exp OR 'acute coronary syndrome'/exp OR 'heart infarction'/exp OR 'unstable angina pectoris'/exp OR 'cardiovascular diseases':ab OR 'heart diseases':ab OR heart:ab OR cardiovasc\*:ab OR cardiac\*:ab OR coronary:ab OR myocardial:ab OR 'acute coronary syndrome':ab OR 'myocardial infarction':ab OR 'unstable angina':ab OR 'cardiovascular diseases':ti OR 'heart diseases':ti OR heart:ti OR cardiovasc\*:ti OR cardiac\*:ti OR coronary:ti OR myocardial:ti OR 'acute coronary syndrome':ti OR 'myocardial infarction':ti OR 'unstable angina':ti

#2 'transluminal coronary angioplasty'/exp OR 'percutaneous coronary intervention'/exp OR 'stent'/exp OR 'balloon dilatation'/exp OR 'percutaneous transluminal angioplasty'/exp OR 'atherectomy'/exp OR 'percutaneous transluminal angioplasty':ti OR ptca:ti OR ('percutaneous coronary' NEXT/1 intervention\*):ti OR pci:ti OR stent\*:ti OR 'balloon angioplasty':ti OR 'balloon dilation':ti OR 'balloon dilatation':ti OR 'transluminal angioplasty':ti OR 'coronary atherectomy':ti OR 'percutaneous transluminal angioplasty':ab OR ptca:ab OR ('percutaneous coronary' NEXT/1 intervention\*):ab OR pci:ab OR stent\*:ab OR 'balloon angioplasty':ab OR 'balloon dilation':ab OR 'balloon dilatation':ab OR 'transluminal angioplasty':ab OR 'coronary atherectomy':ab OR 'coronary artery bypass graft'/exp OR 'heart muscle revascularization'/exp OR 'coronary artery bypass':ti OR cabg:ti OR 'aortocoronary bypass':ti OR 'coronary revascularization':ti OR 'myocardial revascularization':ti OR 'coronary artery bypass':ab OR cabg:ab OR 'aortocoronary bypass':ab OR 'coronary revascularization':ab OR 'myocardial revascularization':ab OR 'coronary artery recanalization'/exp

#3 'female'/exp OR female OR women OR woman OR females OR 'sex difference'/exp

#4 'randomized controlled trial'/exp OR 'crossover procedure'/exp OR 'double blind procedure'/exp OR 'single blind procedure'/exp OR random\* OR factorial\* OR crossover\* OR cross NEAR/1 over\* OR placebo\* OR doubl\* NEAR/1 blind\* OR singl\* NEAR/1 blind\* OR assign\* OR allocat\* OR volunteer\*

#5 #1 AND #2 AND #3 AND #4

#6 #5 (AND [embase]/lim NOT [medline]/lim)

Limits: Human, English, Publication Date: 2001- Present

AHRQ 751: Interventions for the Prevention of Posttraumatic Stress Disorder (PTSD) in Adults After Exposure to Psychological Trauma

**EMBASE search as printed in the systematic review:**

#1 'posttraumatic stress disorder'/exp 26,817

#2 'psychotherapy'/exp 174,672

#3 'drug therapy'/exp 1,526,816

#4 #2 OR #3 1,688,791

#5 #1 AND #4 5,638

#6 'prevention'/exp OR 'early intervention'/exp 934,844

#7 #5 AND #6 202

#8 'randomized controlled trial'/exp OR 'single blind procedure'/exp OR 'double blind procedure'/exp OR 'systematic review'/exp OR 'cohort analysis'/exp OR 'meta analysis'/exp OR 'comparative study'/exp OR 'case control study'/exp  
1,448,799

#9 #7 AND #8 37

AHRQ 753: PCA3 Testing for the Diagnosis and Management of Prostate Cancer

**Embase search as printed in the systematic review:**

'prostate cancer antigen 3, human' OR pca3 OR dd3 OR dd3pca3 OR 'dd3(pca3)' OR 'prostate cancer gene 3' OR 'prostate cancer antigen 3' OR progensa OR ('differential display code 3' AND ('prostate'/exp OR prostatic))

AND

'prostate'/exp OR prostatic

AND

Limits: Humans, English = 64

OR

'total psa' OR 'total prostate specific antigen' OR 'prostate specific antigen'/exp OR (psa AND ('prostate'/exp OR prostatic))

AND

'meta analysis'/exp OR 'systematic review'/exp OR 'metaanalysis'/exp

AND

Limits: Humans, English 258

OR

'psa velocity' OR 'prostate specific antigen velocity' OR 'percent free PSA' OR 'free prostate specific antigen' OR 'complexed psa' OR 'c-psa' OR 'complexed prostate specific antigen' OR (nomogram\* AND (prostatic OR 'prostate'/exp))

AND

'meta analysis'/exp OR 'systematic review'/exp OR 'metaanalysis' OR 'randomized clinical trial' OR 'randomised clinical trial' OR 'comparative trial' OR 'controlled trial'/exp OR random OR 'comparison'/exp

AND

'major clinical study'/de

AND

Limits: Humans, English =125

AHRQ 770: Child and Adolescent Exposure to Trauma: Comparative Effectiveness of Interventions Addressing Trauma Other Than Maltreatment or Family Violence

**EMBASE search as printed in the systematic review:**

#1 'posttraumatic stress disorder'/exp OR 'acute stress disorder'/exp 26,326

#2 'psychiatric treatment'/exp 251,511

#3 #1 AND #2 5,519

#4 #3 AND 'human'/de AND (1990:py OR 1991:py OR 1992:py OR 1993:py OR 1994:py OR 1995:py OR 1996:py OR 1997:py OR 1998:py OR 1999:py OR 2000:py OR 2001:py OR 2002:py OR 2003:py OR 2004:py OR 2005:py OR 2006:py OR 2007:py OR 2008:py OR 2009:py OR 2010:py OR 2011:py) AND ('article'/it OR 'review'/it)

4,154

#5 'adolescent'/exp OR 'child'/exp OR 'newborn'/exp 2,555,988

#6 #4 AND #5 673

AHRQ 801: Procalcitonin-Guided Antibiotic Therapy

**Embase search as printed in the systematic review:**

1. procalcitonin AND Limit: Humans NOT MEDLINE

2. 'sepsis'/exp OR 'septic' OR 'systemic inflammatory response syndrome'/exp OR 'copd'/exp OR 'chronic obstructive pulmonary disease'/exp OR 'febrile neutropenia'/exp OR 'postoperative infection'/exp OR 'postoperative infections'/exp OR 'postoperative complications'/exp OR 'post-surgical infection' OR 'post-surgical infections' OR 'critically ill'/exp OR 'icu' OR 'intensive care'/exp OR 'intensive care units'/exp AND Limit: Humans

3. 1 AND 2

4. 1 NOT 3

AHRQ 881: Antinuclear Antibody, Rheumatoid Factor, and Cyclic- Citrullinated Peptide Tests for Evaluating Musculoskeletal Complaints in Children

**Embase search as printed in the systematic review:**

1. cyclic citrullinated peptide/

2. ((anti adj ccp) or (citrullinated adj peptide\*)).mp.

3. ((citrulline adj antibod\*) or (anti-citrulline adj antibod\*)).ti,ab.

4. exp Antinuclear Antibody/

5. ((antinuclear adj antibod\*) or (antinuclear adj factor\*)).ti,ab.

6. (ana adj titer).ti,ab.

7. (ANA adj2 test\*).ti,ab.

8. (FANA adj2 test\*).ti,ab.

9. exp Rheumatoid Factor/

10. rheumatoid factor\*.ti,ab.

11. or/1-10

12. exp Systemic Lupus Erythematosus/

13. (JSLE or SLE or "lupus erythematosus").ti,ab.

14. (grow\* and (pain or pains)).ti,ab.

15. musculoskeletal diseases/ or arm/ or leg/ or extremities/

16. pain/di, et

17. 15 and 16

18. exp arthralgia/

19. arthralgia.ti,ab.

20. ((joint\* adj pain\*) or (limb\* adj pain\*)).ti,ab.

21. limp\*.ti,ab.

22. Fibromyalgia/

23. fibromyalgia.ti,ab.

24. benign.ti,ab.

25. exp Joint Instability/ or Joint hypermobility/

26. (joint adj (instability or hypermobility)).ti,ab.

27. 24 and (25 or 26)

28. Patellofemoral Pain Syndrome/
29. patellofemoral joint/ and pain/
30. (patellofemoral adj pain adj syndrome).ti,ab.
31. knee pain/ or ankle pain/
32. exp Synovitis/ or synovitis.mp.
33. "complex regional pain syndrome"/
34. or/12-23,27-33
35. Arthritis/
36. (\$arthritis or (\$articular adj arthritis)).ti,ab.
37. or/35-36
38. exp child/ or (adolesc\* or early or juvenile).ti,ab.
39. (JIA or JRA).ti,ab.
40. or/38-39
41. 37 and 40
42. exp Juvenile Rheumatoid Arthritis/
43. ((juvenile or early) adj (rheumatoid or idiopathic) adj arthritis).ti,ab.
44. or/41-43
45. incidence/ or prevalence/ or seasonal variation/
46. exp disease course/
47. natural history.ti,ab.
48. or/45-47
49. exp mass screening/ or screening/
50. exp "referral and consultation"/
51. (screen\* or refer\*).ti,ab.
52. or/49-51
53. Differential Diagnosis/
54. exp Reproducibility/
55. exp "sensitivity and specificity"/
56. Predictive Value of Tests/
57. serodiagnosis/
58. (di or bl or cl or im).fs.
59. exp Diagnostic Error/
60. "diagnostic techniques and procedures"/
61. diagnostic procedure/
62. early diagnosis/
63. Diagnostic Accuracy/
64. physical examination/
65. blood examination/
66. "Pain Assessment"/
67. or/53-66
68. (cost or costs or economic\*).ti,ab.
69. exp economic aspect/
70. cost-benefit analysis/
71. ec.fs
72. or/68-70
73. exp demography/ or geographic distribution/
74. age/
75. gender/ or sex difference/
76. infection/ or infection\*.ti,ab.
77. anxiety/ or (anxious\* or anxiety).ti,ab.
78. comorbidity/
79. or/73-78
80. exp newborn/
81. (Infant\* or infancy or Newborn\* or Baby\* or Babies or Neonat\* or Preterm\* or Prematur\* or Postmatur\*).mp.
82. exp Child/

83. (Child\* or Schoolchild\* or School age\* or Preschool\* or Kid or kids or Toddler\*).mp.
84. exp Adolescent/
85. Adoles\*.mp.
86. (Teen\* or Boy\* or Girl\*).mp.
87. (minors\* or juvenil\*).mp.
88. exp Adolescence/
89. (Pubert\* or Pubescen\* or Prepubescen\*).mp.
90. exp Pediatrics/
91. (Pediatric\* or Paediatric\* or Peadiatric\*).mp.
92. exp school/ or high school/ or kindergarten/ or middle school/ or nursery school/ or primary school/
93. (Nursery school\* or Kindergar\* or Primary school\* or Secondary school\* or Elementary school\* or High school\* or Highschool\*).mp.
94. or/80-93
95. (48 or 52) and 67 and 34 and 94
96. 11 and 94 and 67 and (34 or 44)
97. 11 and 94 and (34 or 44)
98. 11 and (67 or 52) and (34 or 44) and 94
99. 11 and 79 and 94
100. 11 and 79 and 67
101. 11 and 72 and (44 or 94)
102. 11 and 72 and (34 or 44) and 94 and 67
103. 11 and 94 and 67
104. or/95-103
105. adolescent/ and adult/
106. 104 not 105
107. humans/ and animals/
108. 106 not 107

AHRQ 917: Terbutaline Pump for the Prevention of Preterm Birth

**Embase search as printed in the systematic review:**

- 1 exp premature labor/ (12859)
- 2 (PTL or PTB or RPTL).ti,ab. (1981)
- 3 ((Premature\* or pre-mature\* or preterm or pre-term or early) adj5 (labor\* or labour\* or birth\* or deliver\*)).ti,ab. (24223)
- 4 ((Premature\* or pre-mature\* or preterm or pre-term or early) adj5 ((uterine or uterus) adj2 contract\*)).ti,ab. (243)
- 5 exp Tocolysis/ (2223)
- 6 (tocolysis or tocolytic\*).ti,ab. (2419)
- 7 1 or 2 or 3 or 4 or 5 or 6 (30904)
- 8 exp terbutaline/ (8346)
- 9 exp terbutaline sulfate/ (492)
- 10 (23031 25 6 or 23031 32 5).rn. (8627)
- 11 (Terbutalin\* or Brethaire or Brethine or Bricanyl or "BRN 2370513" or "EINECS 245-385-8" or "UNII-N8ONU3L3PG").ti,ab. (2721)
- 12 (Terbutalin\* or Brethaire or Brethine or Bricanyl).tn. (1416)
- 13 8 or 9 or 11 or 12 (8802)
- 14 exp subcutaneous drug administration/ (72002)
- 15 exp infusion pump/ (2755)
- 16 exp infusion/ (26593)
- 17 (subcutaneous\* or SubQ or sub-cutaneous\* or pump or pumps or infuse or infused or infuses or infusing or infusion\* or infuser\*).ti,ab. (285686)
- 18 ((home adj3 therapy) or (home adj3 therapies) or (home adj3 tocoyl\*) or (home-based adj3 therapy) or (home-based adj3 therapies) or (home-based adj3 tocoyl\*)).ti,ab. (1578)
- 19 ((maintenance adj3 therapy) or (maintenance adj3 therapies) or (maintenance adj3 therapeutic) or (maintenance adj3 treatment\*) or (maintenance adj3 tocoyl\*) or

(supportive adj3 therapy) or (supportive adj3 therapies) or (supportive adj3 treatment\*) or (supportive adj3 tocoyls\*) or (outpatient adj3 therapy) or (outpatient adj3 therapies) or (outpatient\* adj3 treatment\*) or (outpatient\* adj3 tocoyls\*).ti,ab. (23804)  
20 ((long-term adj therapy) or (long-term adj therapies) or (long-term adj therapeutic) or (long-term adj treatment\*) or (long-term adj management) or (long-term adj tocoyls\*) or (longterm adj therapy) or (longterm adj therapies) or (longterm adj therapeutic) or (longterm adj treatment\*) or (longterm adj management) or (longterm adj tocoyls\*).ti,ab. (21021)

21 14 or 15 or 16 or 17 or 18 or 19 or 20 (392514)

22 13 and 21 (1163)

23 7 and 22 (188)

24 from 23 keep 1-188 (188)

AHRQ 923: Nonpharmacologic Interventions for Treatment-Resistant Depression in Adults

**EMBASE search as printed in the systematic review:**

#1 Search "Depression"[Mesh] OR "Depressive Disorder"[Mesh] 110342

#2 Search #1 Limits: Entrez Date from 1980/01/01, Humans, English, All Adult: 19+ years 56274

#3 Search #2 Limits: Editorial, Letter, Case Reports 7200

#5 Search "Case Control Studies"[Mesh] 421177

#6 Search #2 AND #5 3156

#7 Search #3 OR #6 10272

#8 Search #2 NOT #7 46002

**Depression articles limited to English, Human, and Adults, with no editorials, letters, case reports or case-control studies.**

#9 Search "Socioenvironmental Therapy"[Mesh] OR "interpersonal psychotherapy"[tw] OR "ipt"[tw] OR "psychotherapy"[mesh] OR "Cognitive Therapy"[Mesh] OR "cognitive behavioral therapy"[tw] OR "cbt"[tw] 123383

#10 Search #8 AND #9 2910

#11 Search "Drug Resistance"[Mesh] OR refractory[tw] OR resistant[tw] 379438

#12 Search #10 AND #11 48

**48 Psychotherapy/CBT/Depression articles limited to the "refractory" terms.**

#13 Search "Electroconvulsive Therapy"[Mesh] OR "ect"[tw] OR "electroconvulsive therapy"[tw] 10514

#14 Search #8 AND #13 1112

#16 Search "Randomized Controlled Trial"[Publication Type] OR "Randomized Controlled Trials as Topic"[Mesh] OR "Single-Blind Method"[Mesh] OR "Double-Blind Method"[Mesh] OR "Random Allocation"[Mesh]

**These are the terms used for RCTs.**

392864

#17 Search #14 AND #16 203

**There are 203 RCTs about Depression and ECT.**

#18 Search "Longitudinal Studies"[Mesh] OR "Comparative Study "[Publication Type]) OR "Cohort Studies"[Mesh] OR "observational studies"[tw]  
1992678

#19 Search #14 AND #18 361

**There are 361 "observational studies" about Depression and ECT.**

#20 Search #17 OR #19 447

**Combining the RCTs and Observational studies for the ECT literature here.**

#21 Search "Transcranial Magnetic Stimulation"[Mesh] OR "(r)tms"[tw] 2864

#22 Search #8 AND #21 141

**141 TMS articles.**

#23 Search "Vagus Nerve Stimulation"[Mesh] OR "vagus nerve stimulation"[tw] 808

#24 Search #8 AND #23 37

**37 VNS articles.**

#25 Search #12 OR #20 OR #22 OR #24 649

AHRQ 972: Future Research Needs for Outcomes of Weight Gain in Pregnancy

**EMBASE search as printed in the systematic review:**

#1 exp weight gain/

#2 exp pregnancy/

#3 #1 AND #2

#4 exp pregnancy outcome/

#5 exp pregnancy complication/

#6 #4 OR #5

#7 #3 AND #6

#8 limit #7 to human and English language

#9 morphometrics/ or anthropometry/

#10 #3 AND #9

#11 limit #10 to human and English language

#12 #8 OR #11

#13 limit #12 to yr="2007-Current"

JB1 989: Cerebral oxygen desaturation monitored by intraoperative near-infrared spectroscopy and incidence of post-operative cognitive dysfunction: a systematic review

**EMBASE search as printed in the systematic review:**

Embase Search No.	Search Parameters	Results
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1	"cerebral oxygen saturation"	516
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2	"anesthesia"/exp OR anesthesia	399,540
---	--------------------------------	---------

3	"near infrared spectroscopy"/exp OR "near infrared spectroscopy"	10,316
---	--	--------

4	#1 AND #2 AND #3	97
---	------------------	----

5	Cognitive	306,775
---	-----------	---------

6	Neurologic	2,649,956
---	------------	-----------

7	#5 OR #6	2,833,351
---	----------	-----------

8	#4 AND #7	45
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JB1 990: Effect of doll therapy in managing challenging behaviors in people with dementia: a systematic review

### Embase search as printed in the systematic review:

1 dementia/ or Dementia.mp  
2 BPSD.mp.  
3 creutzfeldt.mp.  
4 lewy body.mp. or Lewy body/  
5 Complementary Therapies.mp. or exp alternative medicine/  
6 psychotherapy/  
7 doll.mp.  
8 toy.mp.  
9 (Behavioural and Psychological symptoms of dementia).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]  
10 5 or 6 or 7 or 8  
11 Alzheimers.mp. or Alzheimer disease/  
12 1 or 2 or 3 or 4 or 9 or 11  
13 10 and 12  
14 limit 13 to (human and english language)  
15

JB1 992: Self management of haemodialysis for End Stage Renal Disease: a systematic review

### EMBASE search as printed in the systematic review:

#1 "chronic kidney failure"  
#2 (chronic kidney failure OR chronic renal disease OR renal insufficiency or end stage renal disease or ESRD or end-stage renal disease): ti, ab  
#3 (#1 OR #2)  
#4 „renal replacement therapy"/exp  
#5 (haemodialysis OR hemodialysis OR "renal replacement therapy" OR rrt): ti,ab  
#6 (#4 OR #5)  
#7 exp „Behavior Therapy"/exp  
#8 exp „cognitive therapy"/exp  
#9 „relaxation training"  
#10 „patient counselling"  
#11 „diet therapy"  
#12 „patient education"  
#13 „psychoeducation"  
#14 „nutrition"/exp  
#15 (cognitive behavior\* r therapy or CBT or psychoeducation or counsel\* or quality of life therap\* or support\* therap\* or psychosocial or psychological intervention\* or psychological support\*)  
#16 ( #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15)  
#17 „self care"/exp  
#18 self-manage\* OR self manage\* OR self-care  
#19 „self concept"/exp  
#20 „daily life activity"/exp  
#21 „quality of life"  
#22 „psychological well being"  
#23 „adjustment"  
#24 (adjust\* OR emotional control OR anger or identity crisis)  
#25 „daily life activity"  
#26 „locus of control"  
#27 „depression"/exp

#28 „social isolation“/exp  
 #29 „self concept“/exp  
 #30 „helplessness“/  
 #31 (self care OR self-care OR self-manag\* OR self manag\* OR self-efficacy OR self efficacy OR independen\* OR ADL OR ADOL)  
 #32 (#17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31)  
 #33 (#3 AND #6 AND #16 AND #32)  
 #34 „patient compliance“/  
 #35 (complain\* OR adheren\* OR non-compliant OR non compliant OR non-adheren\* OR non adheren\*)  
 #36 (#34 OR #35)  
 #37 (#3 AND #6 AND #16 AND #36)

JBI 1003: Influenza vaccination during pregnancy: a systematic review of effectiveness and safety

**Embase search as printed in the systematic review:**

A	B	C
Influenza: exp	'influenza vaccine': exp	Pregnancy: exp
Flu: ab, ti	'swine influenza	Infant: exp, ab, ti
influenza*: ab, ti	vaccine': de	Fetus: exp, ab, ti
H1N1*: ab, ti	vaccin*: ab, ti	Pregnan*: ab, ti
	immuni*: ab, ti	Newborn: de, ab, ti
	safety: ab, ti	Fetal: ab, ti
	effectiveness: ab, ti	Foetus: ab, ti
	efficacy: ab, ti	Foetal: ab, ti
	adverse: ab, ti	Maternal: ab, ti
	innoculat*: ab, ti	

JBI 1019: The effectiveness of information-sharing interventions to reduce anxiety in families waiting for surgical patients undergoing an elective surgical procedure: a systematic review

**Embase search as printed in the systematic review:**

1. patient education (MH)/
2. medical information (MH)/
3. information service (MH)/
4. health education (MH)/
5. patient information (MH)/
6. inform\*.mp
7. interpersonal communication/
8. communicat\*.mp
9. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8
10. perioperative nursing (MH)/
11. operating room (MH)/
12. surgical patient (MH)/
13. surgery (MH)/
14. surgical nursing (MH)/
15. intraoperative period (MH)/
16. surg\*.mp
17. #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16
18. anxiety (MH)/
19. anticipatory anxiety (MH)/
20. State Trait Anxiety Inventory (MH)/
21. satisfaction (MH)/
22. personal satisfaction (MH)/

23. satisfact\*.mp
24. adaptive behavior (MH)/
25. coping behavior (MH)/
26. #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25
27. family (MH)/
28. family nursing (MH)/
29. family centered care (MH)/
30. family coping (MH)/
31. family functioning (MH)/
32. family health (MH)/
33. family stress (MH)/
34. #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33
35. #9 AND #17 AND #26 AND #34

JBI 1023: Effectiveness of continuous enteral nutrition versus intermittent enteral nutrition in intensive care patients: a systematic review

**EMBASE search as printed in the systematic review:**

- #1 "intensive care unit"/exp
- #2 "critical illness"/exp
- #3 "critical ill patient"/exp
- #4 "nose feeding"/exp
- #5 "nasogastric tube"/exp
- #6 "enteric feeding"/exp
- #7 "enteral feeding pump"/exp
- #8 "stomach intubation"/exp
- #9 "bolus injection"/exp
- #10 #1 OR #2 OR #3
- #11 #4 OR #5 OR #8
- #12 #6 OR #7 OR #9
- #13 #10 AND #11 AND #12
- #14 ((continuous AND enteral AND nutrition) OR (discontinuous AND enteral AND nutrition) OR (continuous AND feeding AND nutrition) OR (discontinuous AND feeding AND nutrition) OR (bolus AND enteral AND nutrition) OR (bolus AND feeding AND nutrition) OR (continuous AND pump AND feeding) OR (discontinuous AND pump AND feeding) OR (continuous AND enteral AND feeding) OR (discontinuous AND enteral AND feeding) OR (intermittent AND enteral AND nutrition) OR (intermittent AND enteral AND feeding) ) AND [humans]/lim AND [embase]/lim
- #15 ((Critical?? AND ill?) OR (close AND attention AND unit?) OR (intensive AND care AND unit?) OR (intensive AND care\*)) AND [humans]/lim AND [embase]/lim
- #16 ((naso gastric AND feeding) OR (naso gastric AND tube AND feeding) OR (nasogastric AND tube AND feeding) OR (nasogastric AND feeding) OR (nasojejunal AND feeding) OR (nasal AND cannula) OR (nasal AND tube) OR (nasoenteral AND tube) OR (gastric AND intubation) OR (nasogastric AND intubation)) AND [humans]/lim AND [embase]/lim
- #17 ((enteral AND feeding) OR ( enteral AND nutrition) OR (enteric AND nutrition) OR (intraintestinal AND feeding)) AND [humans]/lim AND [embase]/lim
- #18 #14 OR #17
- #19 #15 AND #16 AND #18
- #22 #13 OR #19

JBI 1028: The effect of early oral feeding compared with standard oral feeding following total laryngectomy: a systematic review

**Embase search as printed in the systematic review:**

1. laryngectomy/exp OR laryngectomy\*:ti OR laryngectomy\*:ab OR laryngopharyngec\*:ti OR laryngopharyngec\*:ab
2. 'foodintake'/exp
3. feed\*:ti OR feed\*:ab
4. oral\*:ti OR oral\*:ab
5. 'postoperative complication'/exp
6. 'skin fistula'/exp
7. 2 OR 3 OR 4
8. 5 OR 6
9. 1 AND 7
10. 1 AND 7 AND 8

Limits: humans, English language, date limited from database inception to 01/06/2012

JB1 1039: Effectiveness of parent-centered interventions for the prevention and treatment of childhood overweight and obesity in community settings: a systematic review

**Embase search as printed in the systematic review:**

- Search 1: parent.mp. or Parents/  
Search 2: Family Therapy/ or Family/ or Family Health/ or Single-Parent Family/ or family.mp.  
Search 3: Schools/  
Search 4: community.mp.  
Search 5: home.mp. Or Home Care Services/  
Search 6: Child, Preschool/  
Search 7: Diet/ or Food Habits/ or healthy eating.mp. or Feeding Behavior/  
Search 8: physical activity.mp.  
Search 9: Obesity/ or Overweight/ or Body Weight/  
Search 10: "Early Intervention (Education)"/ or Intervention Studies/  
Search 11: 6 or 4 or 3 or 5  
Search 12: 8 or 7 or 9  
Search 13: 1 or 2  
Search 14: 11 and 13 and 10 and 12

JB1 1076: Non-pharmacological interventions for cancer-related fatigue in men treated for prostate cancer: A systematic review.

**Embase search as printed in the systematic review:**

1. „Prostate cancer"/exp OR „prostate tumor"/exp OR „prostate tumour"/exp OR „prostate cancer patient":ti,ab OR „prostate neoplasm":ti,ab OR „prostate oncology":ti,ab OR „prostatic oncology":ti,ab OR „prostate carcinoma":ti,ab OR „prostatic carcinoma":ti,ab OR „prostate malignancy":ti,ab OR „prostatic malignancy":ti,ab (129 952)
2. „Cancer fatigue"/exp OR „quality of life"/exp OR „fatigue"/exp OR „cancer fatigue":ti,ab OR „cancer-related fatigue":ti,ab OR „prostate cancer fatigue":ti,ab OR „cancer lassitude":ti,ab OR „fatigue":ti,ab OR „quality of life":ti,ab OR „life quality":ti,ab OR exhaustion:ti,ab OR „lack of energy":ti,ab OR tiredness:ti,ab OR weakness:ti,ab OR lassitude:ti,ab OR weariness:ti,ab (396,220)
3. „Oncology nursing"/exp OR „Nursing care"/exp OR „Nursing intervention"/exp OR „Nursing management"/exp OR Nursing/exp OR „Cancer nursing":ti,ab OR „Oncologic nursing":ti,ab OR nurs\*:ti,ab OR „non-pharmacological":ti,ab (678 706)
4. „Cognitive therapy"/exp OR „Diet therapy"/exp OR „Kinesiotherapy"/exp OR „Therapy"/exp OR „Health education":ti,ab OR „Lifestyle modification":ti,ab OR support:ti,ab OR intervention\*:ti,ab OR „intervention nursing":ti,ab OR „nursing intervention":ti,ab OR therap\*:ti,ab OR „patient education":ti,ab OR „education of patient":ti,ab OR „patient teaching":ti,ab OR „self care":ti,ab OR „self management":ti,ab (8 336 432)
5. 1 AND 2 AND 3 AND 4 (341)
6. #1 AND #2 AND #3 AND #4 AND [English]/lim AND [1990-2012]/py (333)

**Embase search as printed in the systematic review:**

1. exp Eye/
2. exp Ophthalmology/
3. (eye\* or ocular\* or intraocular\* or cornea\* or ophthalm\* or sclera\* or stroma\* or epithel\* or conjunctiv\*).mp.
4. 1or2or3
5. (irrigat\* or lavage\* or flush\* or wash\* or drain\* or rins\* or shower\*).mp.
6. 4and5
7. exp Eye Drops/
8. ((eye\* or ocular\* or intraocular\* or ophthalm\*) adj3 (solution\* or agent\*)) or eyedrop\* or eye drop\*).ti,ab.
9. 6or7or8
10. exp Eye Burn/
11. exp Cornea Burn/
12. exp Eye Injury/
13. ((eye\* or ocular\* or intraocular\* or cornea\* or ophthalm\* or stroma\* or epithel\* or sclera\* or conjunctiv\*) adj3 (injur\* or burn or burns)).mp.
14. exp Acid/
15. exp Alkali/
16. exp Hydroxide/
17. (ammoni\* or lye\* or lime\* or caustic soda\* or bleach\* or cleanser\* or fertilizer\* or fertiliser\* or sodium hydroxide\* or potassium hydroxide\* or sulphur\* or hydroflu\* or acetic\* or chromic\* or hydrochl\*).mp.
18. 14or15or16or17
19. (burn\* or injur\* or splash\* or traum\* or emergen\* or exposure\* or accident\* or damag\*).mp. 20. 18 and 19
21. exp Chemical burn/
22. ((chemical\* or alkali\* or acid\*) adj3 burn\*).mp.
23. (10or11or12or13)and(20or21or22)
24. 9 and 23

**Embase search as printed in the systematic review:**

1. Clinical study/
2. Case control study/
3. Family study/
4. Longitudinal study/
5. Retrospective study/
6. Prospective study/
7. Randomized controlled trials/
8. 6 not 7
9. Cohort analysis/
10. (Cohort adj (study or studies)).mp.
11. (Case control adj (study or studies)).tw.
12. (follow up adj (study or studies)).tw.
13. (observational adj (study or studies)).tw.
14. (epidemiologic\$ adj (study or studies)).tw.
15. (cross sectional adj (study or studies)).tw.
16. Or/1-5, 8-15
17. Basal cell carcinoma/
18. Basal cell nevus syndrome/
19. Basal cell carcinoma\$.mp.
20. Basal cell cancer\$.mp.

21. Nodular BCC.mp.
22. Naevoid BCC.mp.
23. Gorlin syndrome.mp.
24. Basal cell Epithelioma\$.mp.
25. Basalioma\$.mp.
26. BCC.mp.
27. Or/17-26
28. Squamous cell carcinoma/
29. Bowen's disease/
30. Squamous cell cancer\$.mp.
31. Squamous cell carcinoma\$.mp.
32. Bowen's disease.mp.
33. Planocellular carcinoma\$.mp.
34. SCC.mp.
35. Or/28-34
36. Skin cancer/
37. Skin tumor/
38. NMSC.mp.
39. Non\$melanoma skin cancer\$.mp.
40. Skin cancer\$.mp.
41. Skin tumo\$.mp.
42. Or/36-41
43. Exp smoking/
44. Smokeless tobacco/
45. Tobacco smoke/
46. Tobacco/
47. Tobacco dependence/
48. Carbon monoxide/
49. Nicotine/
50. Cotinine/
51. Smok\$.mp.
52. (Smokeless adj tobacco).mp
53. Tobacco.mp.
54. Carbon monoxide.mp.
55. Nicotine.mp.
56. Cotinine.mp.
57. Cigarette\$.mp.
58. Chewing tobacco.mp.
59. Cigar\$.mp.
60. Snuff\$.mp.
61. Passive smoking\$.mp.
62. Second hand smok\$.mp.
63. Secondhand smok\$.mp.
64. Or/43-63
65. Drinking behavior/
66. Alcoholism/
67. Alcohol consumption/
68. Alcohol abuse/
69. Alcohol drinking.mp.
70. Alcohol.mp.
71. Alcohol consumption.mp.
72. Alcohol abuse.mp.
73. Or/65-72
74. Body mass/
75. Exp body weight/
76. Waist hip ratio/

77. Exp adipose tissue/
78. Exp body composition/
79. (waist adj hip adj ratio).mp.
80. BMI.mp.
81. Body weight\$.mp.
82. Body mass index.mp.
83. Body fat.mp.
84. Weight\$.mp.
85. Or/74-84
86. (16) and (27 or 35 or 42) and (64 or 73 or 85)
87. Exp lung neoplasms/
88. Exp esophageal neoplasms/
89. 86 not (87 or 88)

JB1 1096: The effectiveness of cabbage leaf application (treatment) on pain and hardness in breast engorgement and its effect on the duration of breastfeeding

**Embase search as printed in the systematic review:**

- 1 Cabbage/exp AND leaf AND engorgement
- 2 Cabbage/exp AND leaves AND engorgement
- 3 Cabbage/exp AND leaves AND breast/exp AND engorgement
- 4 Cabbage/exp AND leaves AND lactation disorder
- 8 Breast/exp engorgement AND treatment
- 9 Breast/exp engorgement AND Relief
- 10 Breast/exp engorgement AND Therapy
- 11 Cabbage/exp AND leaf AND Breastfeeding
- 12 Cabbage/exp AND leaf AND Duration of Breastfeeding
- 13 Breast/exp engorgement AND Postpartum women

JB1 1125: A Systematic Review of Family Witnessed Resuscitation and Family Witnessed Invasive Procedures in Adults in Hospital Settings Internationally – Part I: Perspectives of Patients and Families

**EMBASE search as printed in the systematic review:**

- 1 exp Patients' Rooms/ or exp Visitors to Patients/ or exp Family/ or family presence.mp. (899962)
- 2 (family or families).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (1555522)
- 3 relatives.mp. (87674)
- 4 (parent\* or mother\* or father\*).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (1088348)
- 5 (brother\* or sister\* or sibling\*).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (151188)
- 6 (witness\* or chaperone\*).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (75347)
- 7 or/1-6 (3006883)
- 8 exp Emergency Service, Hospital/ or exp Emergency Medical Services/ or emergency services.mp. (159236)
- 9 (emergency adj (room\* or ward\* or care or department)).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (117189)
- 10 exp Critical Care/ or exp Intensive Care Units/ or icu.mp. or Intensive Care/ (377777)
- 11 (critical care or intensive care\* or acute care or trauma room or trauma center).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (301433)
- 12 exp Trauma Centers/ (22746)
- 13 trauma unit\*.mp. (1117)
- 14 or/8-13 (683676)
- 15 7 and 14 (144087)
- 16 cpr.mp. or exp Cardiopulmonary Resuscitation/ (49680)
- 17 (cardiopulmonary resuscitation or code blue or mouth to mouth or life support).mp. [mp=ti, ot, ab, nm, hw, tc, id, sh, tn, dm, mf] (52780)
- 18 16 or 17 (77144)

19 15 and 18 (9573)  
20 limit 19 to english language (8722)  
21 limit 20 to human (8116)  
22 limit 21 to humans [Limit not valid in PsycINFO; records were retained] (8116)

Cochrane 1180: Continuous negative extrathoracic pressure or continuous positive airway pressure compared with conventional ventilation for acute hypoxaemic respiratory failure in children

**Embase search as printed in the systematic review:**

1 exp respiratory failure/ (64897)  
2 (respiratory insufficiency or respiratory failure).ab,ti. (38247)  
3 hypoxia/ or hypoxemia/ or anoxia/ or exp hypercapnia/ (117374)  
4 (hypoxia or hypoxem\$ or hypercapnia or anoxia or ahrf).ab,ti. (127264)  
5 or/1-4 (236373)  
6 exp lung ventilation/ (28445)  
7 (lung ventilation or pulmonary ventilation).ab,ti. (6325)  
8 exp artificial ventilation/ (126783)  
9 (respiratory therapy or artificial respiration).ab,ti. (3086)  
10 ventilator/ (16132)  
11 (negative pressure ventilator or negative pressure ventilators).ab,ti. (38)  
12 (positive pressure respiration or positive pressure ventilation).ab,ti. (5700)  
13 negative pressure ventilation.ab,ti. (280)  
14 (intermittent positive pressure breathing or intermittent positive pressure ventilation).ab,ti. (1800)  
15 positive airway pressure.ab,ti. (9469)  
16 continuous distending pressure.ab,ti. (61)  
17 continuous negative extrathoracic pressure.ab,ti. (35)  
18 (cdp or cpap or cnep or ppv).ab,ti. (27907)  
19 or/6-18 (183628)  
20 5 and 19 (34522)  
21 exp infant/ or exp child/ or exp adolescent/ or exp puberty/ or exp pediatrics/ (2791044)  
22 (infant\$ or infancy or newborn\$ or baby\$ or babies or neonat\$ or preterm\$ or premature\$ or child\$ or schoolchild\$ or school age or school ages or school aged or preschool\$ or kid or kids or toddler\$).ab,ti. (1872564)  
23 (adoles\$ or teen\$ or boy\$ or girl\$ or minor\$ or puberty\$ or pubescen\$ or pediatric\$ or paediatric\$ or kindergar\$ or highschool\$).ab,ti. (987015)  
24 ((nursery or primary or secondary or elementary or high) adj school\$).ab,ti. (49984)  
25 or/21-24 (3700548)  
26 20 and 25 (8434)  
27 exp randomized controlled trial/ or exp single blind procedure/ or exp double blind procedure/ or exp crossover procedure/ (403417)  
28 (random\$ or placebo\$ or factorial\$ or crossover\$ or cross over or cross-over or volunteer\$ or assign\$ or allocat\$ or ((singl\$ or doubl\$) adj blind\$)).ab,ti. (1405196)  
29 27 or 28 (1483313)  
30 26 and 29 (768)  
Cochrane 1667: Carbetocin for preventing postpartum haemorrhage

**Embase search as printed in the systematic review:**

1 (oxytocin and agonist\$)  
2 carbetocin  
3 exp Oxytocin/aa [Analogues & Derivatives]  
4 1 or 2 or 3  
5 exp Postpartum Hemorrhage/ or (postpartum hemorrhage or post partum hemorrhage or postpartum haemorrhage or post partum haemorrhage).ti,ab.  
6 exp Labor Stage, Third/  
7 exp Cesarean Section/  
8 5 or 6 or 7

**Embase search as printed in the systematic review:**

1. Heart Score.tw.
2. ETHRISK.tw.
3. (Framingham adj3 score).tw.
4. PROCAM.tw.
5. ASSIGN score.tw.
6. ((risk or score or calcul\*) adj5 (heart\* or cardio\* or cardia\* or isch?em\* or angina or coronary or infarct\* or cvd or stroke or strokes or myocard\* or cerebrovasc\*)).tw.
7. (new zealand adj2 risk calculator).tw.
8. HeartScore.tw.
9. (sheffield adj2 table).tw.
10. ASSIGN tool.tw.
11. or/1-10
12. diabetes mellitus/
13. (diabetes adj3 mellitus).tw.
14. hyperglycemia/
15. glucose intolerance/
16. glycaemia\*.tw.
17. hyperglyc?emia\*.tw.
18. exp smoking/
19. smoking cessation/
20. (smoke or smoking or smoker or smokers or smoked).tw.
21. ((cigar\* or tobacco or nicotin\*) adj2 consum\*).tw.
22. exp hypertension/
23. hypertensi\*.tw.
24. ((high or increased or elevated) adj2 blood pressure).tw.
25. exp blood pressure/
26. ((systolic or diastolic) adj blood pressure).tw.
27. dyslipidemia/
28. exp hyperlipidemia/
29. dyslipidemia\*.tw.
30. dyslipoproteinemia\*.tw.
31. hypercholesterolemia\*.tw.
32. hypercholesteremia\*.tw.
33. hyperlipidemia\*.tw.
34. hyperlipemia\*.tw.
35. lipidemia\*.tw.
36. lipemia\*.tw.
37. hyperlipoproteinemia\*.tw.
38. exp hyperlipoproteinemia/
39. hyperchylomicronemia\*.tw.
40. lipoproteinemia\*.tw.
41. hypertriglyceridemia\*.tw.
42. cholesterol/
43. cholesterol\*.tw.
44. high density lipoprotein cholesterol/
45. low density lipoprotein cholesterol/
46. exp triacylglycerol/
47. triglyceride\*.tw.
48. triacylglycerol\*.tw.
49. ((low or high) adj3 lipoprotein\*).tw.
50. body mass/

51. bmi.tw.
52. overweight.tw.
53. exp abdominal fat/
54. exp obesity/
55. obes\*.tw.
56. (weight adj2 (gain\* or chang\*)).tw.
57. (body mass adj (index or indexes or indices)).tw.
58. abdominal fat.tw.
59. quetelet\* index.tw.
60. ((high or increased) adj2 body weight).tw.
61. or/12-60
62. exp exercise/
63. exp kinesiotherapy/
64. exercise tolerance/
65. exercis\*.tw.
66. (physical adj3 activ\*).tw.
67. (fitness or fitter or fit).tw.
68. (physical adj3 train\*).tw.
69. ((aerobic or resistance) adj3 (train\* or activ\*)).tw.
70. (muscle\* adj3 (train\* or activ\*)).tw.
71. sport\*.tw.
72. sport/
73. (physical\* adj3 (fit\* or train\* or therap\* or activ\*)).tw.
74. (train\* adj3 (strength\* or aerobic or exercise\*)).tw.
75. ((exercise\* or fitness) adj3 (treatment or intervent\* or program\*)).tw.
76. fitness/
77. or/62-76
78. 11 and 61 and 77
79. random\$.tw.
80. factorial\$.tw.
81. crossover\$.tw.
82. cross over\$.tw.
83. cross-over\$.tw.
84. placebo\$.tw.
85. (doubl\$ adj blind\$).tw.
86. (singl\$ adj blind\$).tw.
87. assign\$.tw.
88. allocat\$.tw.
89. volunteer\$.tw.
90. crossover procedure/
91. double blind procedure/
92. randomized controlled trial/
93. single blind procedure/
94. 79 or 80 or 81 or 82 or 83 or 84 or 85 or 86 or 87 or 88 or 89 or 90 or 91 or 92 or 93
95. (animal/ or nonhuman/) not human/
96. 94 not 95
97. 78 and 96
98. limit 97 to embase

Cochrane 1729: Organisational travel plans for improving health

**Embase search as printed in the systematic review:**

1. (travel plan\$ or transport plan\$ or safe route\$ or safer route\$ or walking school bus\$ or walking bus\$ or ecological commut\$ or ecological transport\$ or mobility management plan\$ or travel to work or commuter plan\$ or travelsmart or walk to school).tw.
2. (Travel behaviour chang\$ or travel behavior chang\$).tw.

3. ((modal or mode) and (choice\$ or distribution\$ or selection\$ or shift\$ or split\$ or substitut\$ or switch\$ or transfer\$ or use\$ or chang\$ or modif\$)).tw.
4. (travel\$ or transportation\$).tw. or transportation/
5. 3 and 4
6. (Automobile\$ or auto use\$ or car or cars or mechani#ed transport\$ or motori#ed transport\$ or motorist\$ or personal transport\$ or road use\$ or motor vehic\$ or vkt\$ or vmt\$ or vehicle kilomet\$ or vehicle mile\$ or (driv\$ adj5 (school\$ or work\$))).tw. or motor vehicles/
7. (walk\$ or (cyclist\$ or cycling or bicycl\$ or bik\$) or (bus or buses or busing or bussing or (train or trains or rail or railway) or public transport\$) or (carshar\$ or carpool\$ or (car\$ adj shar\$) or (car\$ adj pool\$)) or (non-auto\$ or non-motori#ed) or (telework\$ or telecommut\$)).tw. or walking/ or bicycling/
8. 6 and 7
9. (active commut\$ or utilitarian walk\$ or utilitarian cycl\$ or green travel\$ or greener travel\$ or green transport\$ or greener transport\$ or ecological commut\$ or ecological transport\$ or ecotravel\$ or ecotransport\$ or ecocommut\$).tw. or (active transport\$.tw. not exp biological transport/ not exp carrier proteins/)
10. 8 or 9
11. RANDOMIZED CONTROLLED TRIAL.tw.
12. CONTROLLED CLINICAL TRIAL.tw.
13. RANDOMIZED CONTROLLED TRIALS.tw.
14. RANDOM ALLOCATION.tw.
15. DOUBLE BLIND METHOD.tw.
16. SINGLE BLIND METHOD.tw.
17. or/11-16
18. (ANIMALS not HUMAN).tw.
19. 17 not 18
20. CLINICAL TRIAL.tw.
21. exp CLINICAL TRIALS/
22. (clin\$ adj25 trial\$).ti,ab.
23. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj25 (blind\$ or mask\$)).ti,ab.
24. PLACEBOS.tw.
25. placebo\$.ti,ab.
26. random\$.ti,ab.
27. RESEARCH DESIGN.tw.
28. or/20-27
29. 28 not 18
30. 29 not 19
31. COMPARATIVE STUDY.tw.
32. exp EVALUATION STUDIES/
33. FOLLOW UP STUDIES.tw.
34. PROSPECTIVE STUDIES.tw.
35. (control\$ or prospectiv\$ or volunteer\$).ti,ab.
36. or/31-35
37. 36 not 18
38. 37 not (19 or 30)
39. 19 or 30 or 38
40. 10 and 39
41. 1 or 2 or 5 or 40

Cochrane 1840: Use of plastic adhesive drapes during surgery for preventing surgical site infection

**Embase search as printed in the systematic review:**

- 1 exp Surgical Wound Infection/
- 2 exp Surgical Wound Dehiscence/
- 3 exp Infection Control/
- 4 (surg\* adj5 infection\*).tw.
- 5 (surg\* adj5 wound\*).tw.

6 (surg\* adj5 site\*).tw.  
 7 (surg\* adj5 incision\*).tw.  
 8 (surg\* adj5 dehisc\*).tw.  
 9 (wound\* adj5 dehisc\*).tw.  
 10 wound complication\*.tw.  
 11 or/1-10  
 12 (plastic adj3 drape\*).tw.  
 13 (adhes\* adj3 drape\*).tw.  
 14 (skin adj3 drape\*).tw.  
 15 (incis\* adj3 drape\*).tw.  
 16 (iodophor adj3 drape\*).tw.  
 17 (iodine adj3 drape\*).tw.  
 18 (opside or steridrape or ioban).tw.  
 19 or/12-18  
 20 11 and 19

Cochrane 1963: Chest physiotherapy for acute bronchiolitis in paediatric patients between 0 and 24 months old

**EMBASE search as printed in the systematic review:**

#1 explode 'bronchiolitis-' / all subheadings in DEM,DER,DRM,DRR  
 #2 (bronchiolitis in ti) or (bronchiolitis in ab)  
 #3 explode 'Respiratory-syncytial-pneumovirus' / all subheadings in DEM,DER,DRM,DRR  
 #4 (respiratory syncytial virus\* or RSV) in ti  
 #5 #1 or #2 or #3 or #4  
 #6 explode 'physiotherapy-' / all subheadings in DEM,DER,DRM,DRR  
 #7 (physiotherapy in ti) or (physiotherapy in ab)  
 #8 explode 'postural-drainage' / all subheadings in DEM,DER,DRM,DRR  
 #9 (postural drainage in ti) or (postural drainage in ab)  
 #10 (chest percussion in ti) or (chest percussion in ab)  
 #11 explode 'vibration-' / all subheadings in DEM,DER,DRM,DRR  
 #12 (vibration in ti) or (vibration in ab)  
 #13 (chest shaking in ti) or (chest shaking in ab)  
 #14 (directed coughing in ti) or (directed coughing in ab)  
 #15 (forced exhalation in ti) or (forced exhalation in ab)  
 #16 explode 'breathing-exercise' / all subheadings in DEM,DER,DRM,DRR  
 #17 (breathing exercise\* in ti) or (breathing exercise\* in ab)  
 #18 #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17  
 #19 #5 and #18

Cochrane 2037: Pentoxifylline for treating venous leg ulcers

**Embase search as printed in the systematic review:**

1 exp Leg Ulcer/  
 2 (varicose ulcer\* or venous ulcer\* or leg ulcer\* or foot ulcer\* or (feet adj ulcer\*) or stasis ulcer\* or (lower extremit\* adj ulcer\*) or crural ulcer\* or ulcus cruris).ti,ab.  
 3 or/1-2  
 4 exp Pentoxifylline/  
 5 (pentoxifylline or oxpentifylline).ti,ab.  
 6 (trental or torental or techlon or tarontal or sipental or hemovas or harine or felxital or elorgan or ebisan or ceretal or azupentat or artal).ti,ab.  
 7 or/4-6  
 8 3 and 7

Cochrane 2079: Interventions for unilateral and bilateral refractive amblyopia

### Embase search as printed in the systematic review:

1 exp randomised controlled trial/  
2 exp randomisation/  
3 exp double blind procedure/  
4 exp single blind procedure/  
5 random\$.tw.  
6 or/1-5  
7 (animal or animal experiment).sh.  
8 human.sh.  
9 7 and 8  
10 7 not 9  
11 6 not 10  
12 exp clinical trial/  
13 (clin\$ adj3 trial\$.tw.  
14 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj3 (blind\$ or mask\$)).tw.  
15 exp placebo/  
16 placebo\$.tw.  
17 random\$.tw.  
18 exp experimental design/  
19 exp crossover procedure/  
20 exp control group/  
21 exp latin square design/  
22 or/12-21  
23 22 not 10  
24 23 not 11  
25 exp comparative study/  
26 exp evaluation/  
27 exp prospective study/  
28 (control\$ or prospectiv\$ or volunteer\$.tw.  
29 or/25-28  
30 29 not 10  
31 30 not (11 or 23)  
32 11 or 24 or 31  
33 exp amblyopia/  
34 exp refractive errors/  
35 exp anisometropia/  
36 amblyo\$.tw.  
37 anisometrop\$.tw.  
38 refract\$.tw.  
39 meridional.tw.  
40 or/33-39  
41 exp contact lenses/  
42 exp spectacles/  
43 ((optic\$ or vision\$ or visual\$) adj5 (occlus\$ or penalis\$ or stimulat\$)).tw.  
44 ((eyeglass\$ or glass\$ or spectacle\$) adj5 (occlus\$ or penalis\$ or stimulat\$)).tw.  
45 exp orthoptics/  
46 pleoptic\$.tw.  
47 or/41-46  
48 40 and 47  
49 32 and 48

Cochrane 2155: Interventions for treating proximal humeral fractures in adults

**Embase search as printed in the systematic review:**

- 1 Humerus Fracture/ (6698)
- 2 ((humer\$ or shoulder\$) adj10 (fract\$ or fixat\$)).tw. (7561)
- 3 or/1-2 (9937)
- 4 (proximal or neck\$1 or sub?capital).tw. (295789)
- 5 and/3-4 (2479)
- 6 exp Randomized Controlled Trial/ (296049)
- 7 exp Double Blind Procedure/ (102662)
- 8 exp Single Blind Procedure/ (14708)
- 9 exp Crossover Procedure/ (31692)
- 10 Controlled Study/ (3676250)
- 11 or/6-10 (3746256)
- 12 ((clinical or controlled or comparative or placebo or prospective\$ or randomi#ed) adj3 (trial or study)).tw. (581615)
- 13 (random\$ adj7 (allocat\$ or allot\$ or assign\$ or basis\$ or divid\$ or order\$)).tw. (141624)
- 14 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj7 (blind\$ or mask\$)).tw. (135740)
- 15 (cross?over\$ or (cross adj1 over\$)).tw. (58055)
- 16 ((allocat\$ or allot\$ or assign\$ or divid\$) adj3 (condition\$ or experiment\$ or intervention\$ or treatment\$ or therap\$ or control\$ or group\$)).tw. (177626)
- 17 or/12-16 (872189)
- 18 or/11,17 (4168319)
- 19 limit 18 to human (2510151)
- 20 and/5,19 (512)

Cochrane 2253: Anti-TNF-\_ treatment for pelvic pain associated with endometriosis

**Embase search as printed in the systematic review:**

- 1 Endometriosis/ (11245)
- 2 (pelv\* adj2 pain).tw. (3980)
- 3 adenomyosis.tw. (1043)
- 4 Endometrio\*.tw. (12428)
- 5 dyspareunia.tw. (1571)
- 6 dyschezia.tw. (83)
- 7 or/1-6 (19531)
- 8 exp Tumor Necrosis Factor-alpha/ (80752)
- 9 Tumor Necrosis Factor-alpha.tw. (34417)
- 10 Tumour Necrosis Factor-alpha.tw. (7601)
- 11 (anti tumour necrosis factor or anti tumor necrosis factor).tw. (1538)
- 12 (tumour necrosis factor antibod\* or tumor necrosis factor).tw. (54853)
- 13 (anti tumour necrosis factor antibod\* or anti tumor necrosis factor antibod\*).tw. (72)
- 14 (anti TNF or anti TNF alpha).tw. (3463)
- 15 (TNF antibod\* or TNF alpha antibod\*).tw. (1280)
- 16 (anti TNF antibod\* or anti TNF alpha antibod\*).tw. (983)
- 17 (infliximab\* or monoclonal antibody cA2 or Remicade\*).tw. (5711)
- 18 CDP571.tw. (41)
- 19 etanercept\*.tw. (2267)
- 20 (adalimumab\* or d2e7).tw. (1012)
- 21 onercept\*.tw. (32)
- 22 cachectin.tw. (371)
- 23 tnf superfamily.tw. (348)
- 24 or/8-23 (108553)
- 25 24 and 7 (317)
- 26 limit 25 to yr="2008 -Current" (56)
- 27 from 26 keep 1-56 (56)

Cochrane 2439: Single crowns versus conventional fillings for the restoration of root filled teeth

**Embase search as printed in the systematic review:**

1. exp Endodontics/
2. endodontic\$.mp.
3. (root adj6 (therap\$ or fill\$ or treat\$ or resect\$)).mp.
4. or/1-3
5. exp Tooth crown/
6. (crown\$ or "full cast\$").mp.
7. "indirect restor\$".mp.
8. or/5-7
9. Dental alloy/
10. exp Glass ionomer/
11. exp Resin/
12. (amalgam\$ or "glass ionomer\$" or cerment\$).mp.
13. "direct restor\$".mp.
14. (resin\$ or composite\$ or compomer\$ or fill\$).mp.
15. or/9-14
16. 4 and 8 and 15

The above subject search was linked to the Cochrane Oral Health Group filter for Embase via Ovid:

1. random\$.ti,ab.
2. factorial\$.ti,ab.
3. (crossover\$ or cross over\$ or cross-over\$).ti,ab.
4. placebo\$.ti,ab.
5. (doubl\$ adj blind\$).ti,ab.
6. (singl\$ adj blind\$).ti,ab.
7. assign\$.ti,ab.
8. allocat\$.ti,ab.
9. volunteer\$.ti,ab.
10. CROSSOVER PROCEDURE.sh.
11. DOUBLE-BLIND PROCEDURE.sh.
12. RANDOMIZED CONTROLLED TRIAL.sh.
13. SINGLE BLIND PROCEDURE.sh.
14. or/1-13
15. ANIMAL/ or NONHUMAN/ or ANIMAL EXPERIMENT/
16. HUMAN/
17. 16 and 15
18. 15 not 17
19. 14 not 18

Cochrane 2558: Inhaled steroids for acute asthma following emergency department discharge

**Embase search as printed in the systematic review:**

1. exp Asthma/
2. asthma\$.mp.
3. (antiasthma\$ or anti-asthma\$).mp.
4. Respiratory Sounds/
5. wheez\$.mp.
6. Bronchial Spasm/
7. bronchospas\$.mp.
8. (bronch\$ adj3 spasm\$).mp.
9. bronchoconstrict\$.mp.
10. exp Bronchoconstriction/
11. (bronch\$ adj3 constrict\$).mp.
12. Bronchial Hyperreactivity/
13. Respiratory Hypersensitivity/

14. ((bronchial\$ or respiratory or airway\$ or lung\$) adj3 (hypersensitiv\$ or hyperreactiv\$ or allerg\$ or insufficiency)).mp.
15. ((dust or mite\$) adj3 (allerg\$ or hypersensitiv\$)).mp.
16. or/1-15

#### Filter to identify RCTs

1. exp "clinical trial [publication type]"/
2. (randomized or randomised).ab,ti.
3. placebo.ab,ti.
4. dt.fs.
5. randomly.ab,ti.
6. trial.ab,ti.
7. groups.ab,ti.
8. or/1-7
9. Animals/
10. Humans/
11. 9 not (9 and 10)
12. 8 not 11

CADTH 64: Preoperative Skin Antiseptic Preparations and Application Techniques for Preventing Surgical Site Infections: A Systematic Review of the Clinical Evidence and Guidelines

#### Embase search as printed in the systematic review:

- 1 exp Preoperative Care/ or Preoperative Period/ or Perioperative Care/ or Perioperative Period/
- 2 (pre operative or preoperative or preop or pre op or perioperative or peri operative or periop or peri op or presurg\*).ti,ab.
- 3 ((pre or prior or before or peri or prep or prepare or preparing or preparation\* or hospitals in home or hospitals in the home) adj3 (operative or operation\* or procedur\* or surger\*)).ti,ab.
- 4 or/1-3

#### Concept: Skin preparation (concept & techniques)

- 5 exp Sterilization/ or instrument sterilization/ or exp Anti-Infective Agents, Local/ or exp topical antiinfective agent/ or exp Antisepsis/ or Surgical Wound Infection/pc or surgical infection/pc or exp disinfectants/ or exp detergents/ or detergent/ or soaps/ or soap/ or baths/ or bath/ or infection control/
- 6 (preparation\* or prepare or prepared or solution or wipes or shower\* or scrub\* or paint\* or bath or bathe or bathing or antiseptic\* or anti septic\* or antibacterial\* or anti bacterial\* or antimicrobial\* or antimicrobial\* or soap\* or lavage\* or gel or gels or steriliz\* or sterilis\* or disinfect\* or antisepsis or biocides or pads or swabs or detergent\* or washcloth\* or wash or cleans\* or bactericide or bactericidal or microbicide or microbicidal).ti,ab.
- 7 Chlorhexidine/ or exp alcohols/ or alcohol derivative/ or exp Iodophors/ or triclosan/ or Hexachlorophene/ or Benzalkonium Compounds/ or benzalkonium/ or povidone iodine/
- 8 (tubulicid or novalsan or chlorhexidine or providone iodine or CHG or "PVP I" or PVPI or betadine or Soluprep or Polyvinylpyrrolidone Iodine or Providine or Disadine or Isodine or Pharmadine or Alphadine or alcohol\* or iodophors or iodine or triclocarban or triclosan or irgasan or hexachlorophene or hexachlorophene or benzalkonium or asepsol or Osvan or LiquiDrape or cetrimide or savlon).ti,ab.
- 9 or/5-8

- 10 exp Skin/ or skin care/ or (skin or dermal or derma or dermis or epidermis or epidermal or cutaneous or cutis or topical or surgical site).ti,ab.
- 11 4 and 9 and 10
- 12 iodine povacrylex/ or (duraprep or dura prep or techni care or ChloroPrep or scrub care or scrubcare or Chlorascrub or Hibiclens or Chlorhex or avagard or bactoshield or betasept or dynahex or dyna hex or hibistat or povacrylex).ti,ab.

### Results for: Preoperative AND skin preparation

- 13 11 or 12

#### Concept : SR/MA/HTA filter

- 14 meta-analysis.pt.
- 15 meta-analysis/ or systematic review/ or meta-analysis as topic/ or exp technology assessment, biomedical/
- 16 ((systematic\* adj3 (review\* or overview\*)) or (methodologic\* adj3 (review\* or overview\*))).ti,ab.
- 17 ((quantitative adj3 (review\* or overview\* or synthes\*)) or (research adj3 (integrati\* or overview\*))).ti,ab.
- 18 ((integrative adj3 (review\* or overview\*)) or (collaborative adj3 (review\* or overview\*)) or (pool\* adj3 analy\*)).ti,ab.
- 19 (data synthes\* or data extraction\* or data abstraction\*).ti,ab.
- 20 (handsearch\* or hand search\*).ti,ab.
- 21 (mantel haenszel or peto or der simonian or dersimonian or fixed effect\* or latin square\*).ti,ab.
- 22 (met analy\* or metanaly\* or health technology assessment\* or HTA or HTAs).ti,ab.
- 23 (meta regression\* or metaregression\* or mega regression\*).ti,ab.
- 24 (meta-analy\* or metaanaly\* or systematic review\* or biomedical technology assessment\* or biomedical technology assessment\*).mp,hw.
- 25 (medline or Cochrane or pubmed or medlars).ti,ab,hw.
- 26 (cochrane or health technology assessment or evidence report).jw.
- 27 (meta-analysis or systematic review).md.
- 28 or/14-27

#### Concept: Guidelines (CPG) filter

- 29 exp clinical pathway/
- 30 exp clinical protocol/
- 31 exp consensus/
- 32 exp consensus development conference/
- 33 exp consensus development conferences as topic/
- 34 critical pathways/
- 35 exp guideline/
- 36 guidelines as topic/
- 37 exp practice guideline/
- 38 practice guidelines as topic/
- 39 health planning guidelines/
- 40 exp treatment guidelines/
- 41 guideline or practice guideline or consensus development conference or consensus development conference, NIH).pt.
- 42 (position statement\* or policy statement\* or practice parameter\* or best practice\*).ti,ab.
- 43 (standards or guideline or guidelines).ti.
- 44 ((practice or treatment\*) adj guideline\*).ab.
- 45 (CPG or CPGs).ti.
- 46 consensus\*.ti.
- 47 consensus\*.ab. /freq=2
- 48 ((critical or clinical or practice) adj2 (path or paths or pathway or pathways or protocol\*)).ti,ab.

- 49 recommendat\*.ti.
- 50 (care adj2 (standard or path or paths or pathway or pathways or map or maps or plan or plans)).ti,ab.
- 51 (algorithm\* adj2 (screening or examination or test or tested or testing or assessment\* or diagnosis or diagnoses or diagnosed or diagnosing)).ti,ab.
- 52 (algorithm\* adj2 (pharmacotherap\* or chemotherap\* or chemotreatment\* or therap\* or treatment\* or intervention\*)).ti,ab.
- 53 or/29-52

**Results for: Preoperative skin prep. AND (SR OR CPG filters)**

- 54 13 and (28 or 53)

**Concept: Clinical trials filter**

- 55 (Randomized Controlled Trial or Controlled Clinical Trial).pt.
- 56 (Clinical Trial or Clinical Trial, Phase II or Clinical Trial, Phase III or Clinical Trial, Phase IV).pt.
- 57 Multicenter Study.pt.
- 58 Randomized Controlled Trial/
- 59 Randomized Controlled Trials as Topic/
- 60 Controlled Clinical Trial/
- 61 Controlled Clinical Trials as Topic/
- 62 Clinical Trial/ or Phase 2 Clinical Trial/ or Phase 3 Clinical Trial/ or Phase 4 Clinical Trial/
- 63 Clinical Trials as Topic/ or Clinical Trials, Phase II as Topic/ or Clinical Trials, Phase III as Topic/ or Clinical Trials, Phase IV as Topic/
- 64 Multicenter Study/ or Multicenter Study as Topic/
- 65 Randomization/
- 66 Random Allocation/
- 67 Double-Blind Method/
- 68 Double Blind Procedure/
- 69 Double-Blind Studies/
- 70 Single-Blind Method/
- 71 Single Blind Procedure/
- 72 Single-Blind Studies/
- 73 Placebos/
- 74 Placebo/
- 75 Control Groups/
- 76 Control Group/
- 77 Cross-Over Studies/ or Crossover Procedure/
- 78 (random\* or sham or placebo\*).ti,ab,hw.
- 79 ((singl\* or doubl\*) adj (blind\* or dumm\* or mask\*)).ti,ab,hw.
- 80 ((tripl\* or trebl\*) adj (blind\* or dumm\* or mask\*)).ti,ab,hw.
- 81 (control\* adj3 (study or studies or trial\*)).ti,ab,hw.
- 82 (clinical adj3 (study or studies or trial\*)).ti,ab,hw.
- 83 (Nonrandom\* or non random\* or non-random\* or quasi-random\* or quasirandom\*).ti,ab,hw.
- 84 (phase adj3 (study or studies or trial\*)).ti,ab,hw.
- 85 ((crossover or cross-over) adj3 (study or studies or trial\*)).ti,ab,hw.
- 86 ((multicent\* or multi-cent\*) adj3 (study or studies or trial\*)).ti,ab,hw.
- 87 allocated.ti,ab,hw.
- 88 ((open label or open-label) adj5 (study or studies or trial\*)).ti,ab,hw.
- 89 trial.ti.
- 90 or/55-89
- 91 exp animals/
- 92 exp animal experimentation/
- 93 exp models animal/
- 94 exp animal experiment/
- 95 nonhuman/
- 96 exp vertebrate/

97 animal.po.  
98 or/91-97  
99 exp humans/  
100 exp human experiment/  
101 human.po.  
102 or/99-101  
103 98 not 102  
104 90 not 103

**Concept: Observational studies filter**

105 epidemiologic methods.sh.  
106 epidemiologic studies.sh.  
107 cohort studies/  
108 cohort analysis/  
109 longitudinal studies/  
110 longitudinal study/  
111 prospective studies/  
112 prospective study/  
113 follow-up studies/  
114 follow up/  
115 followup studies/  
116 retrospective studies/  
117 retrospective study/  
118 case-control studies/  
119 exp case control study/  
120 cross-sectional study/  
121 observational study/  
122 quasi experimental methods/  
123 quasi experimental study/  
124 (observational adj3 (study or studies or design or analysis or analyses)).ti,ab.  
125 (cohort adj7 (study or studies or design or analysis or analyses)).ti,ab.  
126 (prospective adj7 (study or studies or design or analysis or analyses or cohort)).ti,ab.  
127 ((follow up or followup) adj7 (study or studies or design or analysis or analyses)).ti,ab.  
128 ((longitudinal or longterm or (long adj term)) adj7 (study or studies or design or analysis or analyses or data or cohort)).ti,ab.  
129 (retrospective adj7 (study or studies or design or analysis or analyses or cohort or data or review)).ti,ab.  
130 ((case adj control) or (case adj comparison) or (case adj controlled)).ti,ab.  
131 (case-referent adj3 (study or studies or design or analysis or analyses)).ti,ab.  
132 (population adj3 (study or studies or analysis or analyses)).ti,ab.  
133 (descriptive adj3 (study or studies or design or analysis or analyses)).ti,ab.  
134 ((multidimensional or (multi adj dimensional)) adj3 (study or studies or design or analysis or analyses)).ti,ab.  
135 (cross adj sectional adj7 (study or studies or design or research or analysis or analyses or survey or findings)).ti,ab.  
136 ((natural adj experiment) or (natural adj experiments)).ti,ab.  
137 (quasi adj (experiment or experiments or experimental)).ti,ab.  
138 ((non experiment or nonexperiment or non experimental or nonexperimental) adj3 (study or studies or design or analysis or analyses)).ti,ab.  
139 (prevalence adj3 (study or studies or analysis or analyses)).ti,ab.  
140 case series.ti,ab.  
141 comparative study/  
142 (comparative adj3 (study or studies or design or analysis or analyses)).ti,ab.  
143 or/105-142  
144 exp animals/  
145 exp animal experimentation/

146 exp models animal/  
147 exp animal experiment/  
148 nonhuman/  
149 exp vertebrate/  
150 animal.po.  
151 or/144-150  
152 exp humans/  
153 exp human experiment/  
154 human.po.  
155 or/152-154  
156 151 not 155  
157 143 not 156