Online supplement 1 - Search strategy

We searched for primary studies in the following databases:

- MEDLINE
- Embase
- Cochrane Central
- ISI Web of Knowledge
- PubMed

In addition, we searched for systematic review articles in the same databases as well as in the Cochrane Database of Systematic Reviews, HTA and the Database of Abstracts of Reviews of Effects (DARE).

Search strategies:

Total search hits: 3450
56 references to animal studies were removed in EndNote for searches on mice, rats, rodents, dogs and animals in the title, summary and keywords.

Search hits after check for duplicates: 2446

**MEDLINE and Embase (co-search through Ovid)**

Date: 1 July 2014

Search hits
Embase 1980 to 2014 Week 26: 1492
Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE(R) and Ovid OLDMEDLINE(R) 1946 to Present: 1118

Search hits after duplicate check in Ovid
Embase 1980 to 2014 Week 26: 912
Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE(R) and Ovid OLDMEDLINE(R) 1946 to Present: 1059

1. diabetes mellitus/ use pmoz or *diabetes mellitus/ use emez or exp diabetes mellitus, type 1/ use pmoz or exp diabetes mellitus, type 2/ use pmoz
2. diabet*.tw.
3. 1 or 2
4. algorithms/ use pmoz or *algorithm/ use emez or algorithm*.tw.
5. Feedback/ use pmoz or *feedback system/ use emez or feedback.tw.
6. Benchmarking/ use pmoz or (benchmark* or bench-mark*).tw.
7. clinical audit/ use pmoz or medical audit/ use pmoz or *medical audit/ use emez or audit*.tw.
9. ((structured or standardi?ed or tailored or check list* or checklist* or questionnaire* or form or forms or protocol* or scheme*) adj3 (journal* or assessment* or health record* or patient
record* or medical history or medical interview* or patient interview* or anamnesis or patient control* or counseling)).tw.
10. ((structured or standard?ed or tailored or check list* or checklist* or questionnaire* or form or forms or protocol* or scheme*) adj2 ((medical or patient or clinical) adj2 (record* or transcript* or chart*)�).tw.
11. Decision Support Systems, Clinical/ use pmoz or *decision support system/ use emez or decision support system*.tw.
12. Decision Making, Computer-Assisted/ use pmoz
13. (follow up adj2 (module* or instrument* or protocol* or tool* or system*)).tw.
14. or/4-13
15. Reminder Systems/ use pmoz or *reminder system/ use emez or (reminder* or alert*).tw.
16. Checklist/ use pmoz or *checklist/ use emez
17. Medical informatics applications/ use pmoz
18. "quality of health care/ use pmoz or quality improvement/ use pmoz
19. or/15-18
20. medical history taking/ use pmoz or *anamnesis/ use emez or exp medical records/ use pmoz or exp *medical record/ use emez or risk assessment/ use pmoz or *risk assessment/ use emez or risk factors/ use pmoz or *risk factor/ use emez or (risk factor* or risk assessment*).tw.
21. 19 and 20
22. 14 or 21
23. (random* or rct or cct or clusterrandom* or (controlled adj2 (trial* or stud*)) or time series or (experimental adj2 (stud* or design))).mp. or trial.ti. or (multicenter adj2 (study or trial)).mp. or (before adj2 after adj stud*).mp.
24. (("effect of" or "effects of" or "effectiveness of").ti. and (study or trial).tw.) or control group*.tw.
25. or/23-24
26. 3 and 22 and 25
27. exp Primary Health Care/ use pmoz,emez
28. exp Community Health Services/ use pmoz or community care/ use emez
29. exp General Practice/ use pmoz,emez or general practitioner/ use emez
30. exp Ambulatory Care/ use pmoz,emez
31. Outpatients/ use pmoz or outpatient/ use emez or outpatient care/ use emez
32. (primary health* or primary care or primary diabetes care or primary diabetes healthcare or primary diabetes health care or community health* or community care or community diabetes care or community diabetes healthcare or community diabetes health care or general practic* or family practic* or family physician* or family doctor* or gp* or ambulatory care or ambulatory health* or outpatient* or out patient* or ambulatory management or ambulatory setting* or ambulatory diabetes care or ambulatory diabetes healthcare or ambulatory diabetes healthcare or ambulatory diabetes management).tw.
33. (diabetes adj2 (center* or centre* or clinic*)).tw.
34. or/27-33
35. 26 and 34
36. *algorithms/ use pmoz or algorithm*ti. or *Feedback/ use pmoz or feedback.ti. or *Benchmarking/ use pmoz or benchmark*ti. or bench-mark*titi. or *clinical audit/ use pmoz or *medical audit/ use pmoz or audit.titi. or *Decision Support Systems, Clinical/ use pmoz or *Decision Making, Computer-Assisted/ use pmoz
37. ((structured or standard?ed or tailored or check list* or checklist* or questionnaire* or form or forms or protocol* or scheme*) adj3 (journal* or assessment* or health record* or patient record* or medical history or medical interview* or patient interview* or anamnesis or patient control* or counseling)).ti.
38. ((structured or standardi?ed or tailored or check list* or checklist* or questionnaire* or form or forms or protocol* or scheme*) adj2 ((medical or patient or clinical) adj2 (record* or transcript* or chart*))).ti.
40. or/36-39
41. 3 and 40 and 25
42. 35 or 41
43. (systematic* review* or meta-analys*).mp.
44. 3 and 22 and 43
45. 3 and 40 and 43
46. 44 or 45
47. 42 or 46
48. remove duplicates from 47

Cochrane Library
Date: 1 July 2014
Search hits
Cochrane Database of Systematic Reviews: 10
DARE: 30
HTA: 19
Central: 381

#1 MeSH descriptor: [Diabetes Mellitus] explode all trees
#2 diabet*:ti,ab,kw
#3 #1 or #2
#4 MeSH descriptor: [Algorithms] explode all trees
#5 MeSH descriptor: [Feedback] this term only
#6 MeSH descriptor: [Benchmarking] explode all trees
#7 MeSH descriptor: [Clinical Audit] this term only
#8 MeSH descriptor: [Medical Audit] explode all trees
#9 MeSH descriptor: [Decision Support Systems, Clinical] explode all trees
#10 MeSH descriptor: [Decision Making, Computer-Assisted] this term only
#11 (algorithm* or feedback or benchmark* or bench-mark*):ti,ab,kw
#12 (structured near/2 care):ti,ab,kw
#13 ((structured or standardi?ed or tailored or (check next list*) or checklist* or questionnaire* or form or forms or protocol* or scheme*) near/3 (journal* or assessment* or (health next record*) or (patient next record*) or (medical next record*) or (medical next history) or (medical next interview*) or (patient next interview*) or anamnesis or (patient next control*) or counseling)):ti,ab,kw
#14 ((structured or standardi?ed or tailored or (check next list*) or checklist* or questionnaire* or form or forms or protocol* or scheme*) near/2 ((medical or patient or clinical) near/2 (record* or transcript* or chart*)):ti,ab,kw
#15 ("follow up" near/2 (module* or instrument* or protocol* or tool* or system*)):ti,ab,kw
#16 (decision next support next system*):ti,ab,kw
#17 #4 or #5 or #6 or #7 or #8 or #11 or #12 or #14 or #15 or #16
#18 MeSH descriptor: [Reminder Systems] explode all trees
#19 MeSH descriptor: [Checklist] explode all trees
#20 MeSH descriptor: [Medical Informatics Applications] this term only
A simple search was undertaken to find articles registered as ‘Epub ahead of print’, which are not registered in MEDLINE.
(algorithm* OR benchmark* OR feedback OR audit* OR "decision support" OR "structured journal" OR "structured care") AND (diabetes OR diabetic) AND (((random* OR controlled) AND (trial or study)) OR "time series" OR "systematic review" OR "meta-analysis") AND publisher[sc]

**ISI Web of Science Core Collection**

Date: 2 July 2014

Search hits: 939

# 28 #26 OR #23 OR #18 OR #15
  Refined by: Databases: (WOS)

# 27 #26 OR #23 OR #18 OR #15

# 26 #21 AND #16 AND #1

# 23 #21 AND #12 AND #1
  Refined by: Databases: (WOS)

# 22 #21 AND #12 AND #1

# 21 TITLE: (algorithm* or feedback or benchmark* or "bench-mark*" or audit* or "decision support system*")

# 18 #16 AND #7 AND #1
  Refined by: Databases: (WOS)

# 17 #16 AND #7 AND #1

# 16 TOPIC: ("systematic review*" or "meta-analyses")

# 15 #13 AND #12 AND #7 AND #1
  Refined by: Databases: (WOS)

# 14 #13 AND #12 AND #7 AND #1

# 13 TOPIC: ("primary health*" or "primary care" or "primary diabetes care" or "primary diabetes healthcare" or "primary diabetes health care" or "community health*" or "community care" or "community diabetes care" or "community diabetes healthcare" or "community diabetes health care" or "general practic*" or "family practic*" or "family physician*" or "family doctor*" or "ambulatory care" or "ambulatory health*" or outpatient* or "out-patient*" or "ambulatory management" or "ambulatory setting*" or "ambulatory diabetes care" or "ambulatory diabetes health care" or "ambulatory diabetes healthcare" or "ambulatory diabetes management")

# 12 #11 OR #10 OR #9 OR #8

# 11 TOPIC: ("control group")

# 10 TITLE: ("effect of" or "effects of" or "effectiveness of") AND TOPIC: (study or trial)

# 9 TITLE: (trial)

# 8 TOPIC: ((random* or rct or cct or clusterrandom* or (controlled near/2 (trial* or stud*)) or "time series" or (experimental near/2 (stud* or design))) or (multicenter near/2 (study or trial)) or (before near/2 after near/2 stud*))

# 7 #6 OR #5 OR #4 OR #3 OR #2

# 6 TOPIC: ("follow up" near/2 (module* or instrument* or protocol* or tool* or system*)))
# 5 TOPIC: ("decision support system*")
# 4 TOPIC: (((structured or standardized or tailored or "check list*" or "check-list*" or checklist* or questionnaire* or form or forms or protocol* or scheme*) near/2 ((medical or patient or clinical) near/2 (record* or transcript* or chart*)))
# 3 TOPIC: (((((structured or standardized or tailored or checklist* or "check list*" or "check-list*" or questionnaire* or form or forms or protocol* or scheme*) near/3 (journal* or assessment* or "health record*" or "patient record*" or "medical history" or "medical interview*" or "patient interview*" or anamnesis or "patient control*" or counseling)))
# 2 TOPIC: (algorithm* or feedback or benchmark* or audit or (structured near/2 care))
# 1 TOPIC: (diabet*)

Health Technology Assessment (HTA) and Database of Abstracts of Reviews of Effect (DARE)
Searched through the CRD Database
Date: 2 July 2014
Search hits: 112

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