

Diabetes in children and young people: diagnosis and management of type 1 and type 2 diabetes in children and young people

Search strategies

A.1 Diagnosis

Review question: What is the effectiveness of C-peptide and antibody tests to distinguish type 1 and type 2 diabetes?

The systematic review for this question was conducted by the guidance-producing centre for the guideline 'Type 1 diabetes in adults'.

Database(s): Ovid MEDLINE(R), Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily Update

#	Searches
1	Diabetes mellitus, type 1/
2	Diabetic ketoacidosis/
3	((diabet* or DM) adj4 (type 1 or type1 or type I or type one)).ti,ab.
4	(diabet* adj2 (autoimmun* or auto immun*)).ti,ab.
5	(LADA or MODY).ti,ab.
6	(diabet* adj2 (brittle or labile)).ti,ab.
7	(diabet* adj2 (sudden onset or maturity onset or juvenile or childhood)).ti,ab.
8	(diabet* adj3 (keto* or acido* or gastropare*)).ti,ab.
9	(dm1 or iddm or t1d* or dka).ti,ab.
10	((diabet* adj2 (insulin depend* or insulin deficien*)) not non insulin depend*).ti,ab.
11	diabetes mellitus.ti.
12	or/1-11
13	(pregnan* or gestation*).ti.
14	12 not 13
15	letter/
16	editorial/
17	news/
18	exp historical article/
19	Anecdotes as Topic/
20	comment/
21	case report/
22	(letter or comment*).ti.
23	or/15-22
24	23 not (randomized controlled trial/ or random*.ti,ab.)
25	animals/ not humans/
26	exp Animals, Laboratory/
27	exp Animal Experimentation/
28	exp Models, Animal/

29 exp Rodentia/
 30 (rat or rats or mouse or mice).ti.
 31 or/24-30
 32 14 not 31
 33 limit 32 to english language
 34 C-peptide/
 35 *Autoantibodies/
 36 Glutamate decarboxylase/
 37 Insulinoma/
 38 Glucose-6-phosphatase/
 39 C peptide*.ti,ab.
 40 ((islet cell or decarboxylase or glutamic or insulinoma) and (antibod* or anti bod*or
 autoantibod*)).ti,ab.
 41 zinc transporter 8.ti,ab.
 42 (islet adj5 (phosphatase or catalytic)).ti,ab.
 43 (IGRP* or ICA* or IA-2* or IA2* or ZnT8* or GAD*).ti,ab.
 44 or/34-43
 45 33 and 44
 46 (diagnos* or screen* or test*).ti,ab,hw.
 47 exp "sensitivity and specificity"/
 48 ROC Curve/
 49 Area Under Curve/
 50 Proportional Hazards Models/
 51 (ROC or AUC or (area and curve)).ti,ab.
 52 (sensitivity or specificity).ti,ab.
 53 gold standard.ab.
 54 (predictive value* or PPV or NPV).ti,ab.
 55 likelihood ratio*.ti,ab.
 56 or/46-55
 57 45 and 56
 58 randomized controlled trial.pt.
 59 controlled clinical trial.pt.
 60 randomi#ed.ab.
 61 placebo.ab.
 62 randomly.ab.
 63 Clinical Trials as topic.sh.
 64 trial*.ti.
 65 or/58-64
 66 Meta-Analysis/
 67 Meta-Analysis as Topic/
 68 (meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
 69 ((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
 70 (reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
 71 (search strategy or search criteria or systematic search or study selection or data extraction).ab.
 72 (search* adj4 literature).ab.
 73 (medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or
 cinahl or science citation index or bids or cancerlit).ab.
 74 cochrane.jw.

75 ((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
76 or/66-75
77 Epidemiologic studies/
78 exp case control studies/
79 exp cohort studies/
80 Cross-sectional studies/
81 case control.ti,ab.
82 ((follow up or observational or uncontrolled or non randomi#ed or nonrandomi#ed or
epidemiologic*) adj (study or studies)).ti,ab.
83 ((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or
analys*)).ti,ab.
84 (study and (participant* or patient* or subject* or group*)).ti,ab.
85 cohort*.ti,ab.
86 or/77-85
87 57 and (65 or 76 or 86)
88 (2003\$ or 2004\$ or 2005\$ or 2006\$ or 2007\$ or 2008\$ or 2009\$ or 2010\$ or 2011\$ or 2012\$ or
2013\$).ed,dc.
89 87 and 88

**Database(s): Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid
MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present**

Searches
1 Diabetes mellitus, type 1/
2 Diabetic ketoacidosis/
3 ((diabet* or DM) adj4 (type 1 or type1 or type I or type one)).ti,ab.
4 (diabet* adj2 (autoimmun* or auto immun*)).ti,ab.
5 (LADA or MODY).ti,ab.
6 (diabet* adj2 (brittle or labile)).ti,ab.
7 (diabet* adj2 (sudden onset or maturity onset or juvenile or childhood)).ti,ab.
8 (diabet* adj3 (keto* or acido* or gastropare*)).ti,ab.
9 (dm1 or iddm or t1d* or dka).ti,ab.
10 ((diabet* adj2 (insulin depend* or insulin deficien*)) not non insulin depend*).ti,ab.
11 diabetes mellitus.ti.
12 or/1-11
13 (pregnan* or gestation*).ti.
14 12 not 13
15 letter/
16 editorial/
17 news/
18 exp historical article/
19 Anecdotes as Topic/
20 comment/
21 case report/
22 (letter or comment*).ti.
23 or/15-22
24 23 not (randomized controlled trial/ or random*.ti,ab.)
25 animals/ not humans/
26 exp Animals, Laboratory/

27 exp Animal Experimentation/
 28 exp Models, Animal/
 29 exp Rodentia/
 30 (rat or rats or mouse or mice).ti.
 31 or/24-30
 32 14 not 31
 33 limit 32 to english language
 34 C-peptide/
 35 *Autoantibodies/
 36 Glutamate decarboxylase/
 37 Insulinoma/
 38 Glucose-6-phosphatase/
 39 C peptide*.ti,ab.
 40 ((islet cell or decarboxylase or glutamic or insulinoma) and (antibod* or anti bod* or
 autoantibod*)).ti,ab.
 41 zinc transporter 8.ti,ab.
 42 (islet adj5 (phosphatase or catalytic)).ti,ab.
 43 [or/34-43]
 44 [or/46-55]
 45 [or/58-64]
 46 [or/66-75]
 47 [or/77-85]
 48 Diabetes mellitus, type 1/
 49 Diabetic ketoacidosis/
 50 ((diabet* or DM) adj4 (type 1 or type1 or type I or type one)).ti,ab.
 51 (diabet* adj2 (autoimmun* or auto immun*)).ti,ab.
 52 (LADA or MODY).ti,ab.
 53 (diabet* adj2 (brittle or labile)).ti,ab.
 54 (diabet* adj2 (sudden onset or maturity onset or juvenile or childhood)).ti,ab.
 55 (diabet* adj3 (keto* or acido* or gastropare*)).ti,ab.
 56 (dm1 or iddm or t1d* or dka).ti,ab.
 57 ((diabet* adj2 (insulin depend* or insulin deficien*)) not non insulin depend*).ti,ab.
 58 diabetes mellitus.ti.
 59 or/48-58
 60 (pregnan* or gestation*).ti.
 61 59 not 60
 62 letter/
 63 editorial/
 64 news/
 65 exp historical article/
 66 Anecdotes as Topic/
 67 comment/
 68 case report/
 69 (letter or comment*).ti.
 70 or/62-69
 71 70 not (randomized controlled trial/ or random*.ti,ab.)
 72 animals/ not humans/
 73 exp Animals, Laboratory/

74 exp Animal Experimentation/
75 exp Models, Animal/
76 exp Rodentia/
77 (rat or rats or mouse or mice).ti.
78 or/71-77
79 61 not 78
80 limit 79 to english language
81 C-peptide/
82 *Autoantibodies/
83 Glutamate decarboxylase/
84 Insulinoma/
85 Glucose-6-phosphatase/
86 C peptide*.ti,ab.
87 ((islet cell or decarboxylase or glutamic or insulinoma) and (antibod* or anti bod*or
autoantibod*)).ti,ab.
88 zinc transporter 8.ti,ab.
89 (islet adj5 (phosphatase or catalytic)).ti,ab.
90 (IGRP* or ICA* or IA-2* or IA2* or ZnT8* or GAD*).ti,ab.
91 or/81-90
92 80 and 91
93 (diagnos* or screen* or test*).ti,ab,hw.
94 exp "sensitivity and specificity"/
95 ROC Curve/
96 Area Under Curve/
97 Proportional Hazards Models/
98 (ROC or AUC or (area and curve)).ti,ab.
99 (sensitivity or specificity).ti,ab.
100 gold standard.ab.
101 (predictive value* or PPV or NPV).ti,ab.
102 likelihood ratio*.ti,ab.
103 or/93-102
104 92 and 103
105 randomized controlled trial.pt.
106 controlled clinical trial.pt.
107 randomi#ed.ab.
108 placebo.ab.
109 randomly.ab.
110 Clinical Trials as topic.sh.
111 trial*.ti.
112 or/105-111
113 Meta-Analysis/
114 Meta-Analysis as Topic/
115 (meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
116 ((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
117 (reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
118 (search strategy or search criteria or systematic search or study selection or data extraction).ab.
119 (search* adj4 literature).ab.

- 120 (medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
- 121 cochrane.jw.
- 122 ((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
- 123 or/113-122
- 124 Epidemiologic studies/
- 125 exp case control studies/
- 126 exp cohort studies/
- 127 Cross-sectional studies/
- 128 case control.ti,ab.
- 129 ((follow up or observational or uncontrolled or non randomi#ed or nonrandomi#ed or epidemiologic*) adj (study or studies)).ti,ab.
- 130 ((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys*)).ti,ab.
- 131 (study and (participant* or patient* or subject* or group*)).ti,ab.
- 132 cohort*.ti,ab.
- 133 or/124-132
- 134 104 and (112 or 123 or 133)
- 135 (201402* or 201403* or 201404* or 201405* or 201406* or 201407* or 201408*).ed,dc.
- 136 134 and 135

Database(s): Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, Health Technology Assessment, Database of Abstracts of Reviews of Effects, NHS Economic Evaluation Database

- No. Search terms
- #1 MeSH descriptor: [Diabetes Mellitus, Type 1] explode all trees
- #2 MeSH descriptor: [Diabetic Ketoacidosis] this term only
- #3 ((diabet* or DM) near/4 ("type 1" or type1 or "type I" or "type one")):ti,ab
- #4 (diabet* near/2 (autoimmun* or "auto immun*")):ti,ab
- #5 (diabet* near/2 (brittle or labile)):ti,ab
- #6 (diabet* near/2 ("sudden onset" or "maturity onset" or juvenile or child*)):ti,ab
- #7 (diabet* near/3 (keto* or acido* or gastropare*)):ti,ab
- #8 (dm1 or iddm or t1d* or dka or LADA or MODY):ti,ab
- #9 (diabet* near/2 (insulin next depend*)):ti,ab
- #10 #9 and not "non insulin dependent"
- #11 diabetes mellitus:ti
- #12 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11
- #13 (pregnan* or gestation*):ti
- #14 #12 not #13
- #15 #14 from 2003 to 2012
- #16 MeSH descriptor: [C-Peptide] this term only
- #17 MeSH descriptor: [Autoantibodies] this term only
- #18 MeSH descriptor: [Glutamate Decarboxylase] this term only
- #19 MeSH descriptor: [Insulinoma] this term only
- #20 MeSH descriptor: [Glucose-6-Phosphatase] this term only
- #21 (C next (peptide or peptides)):ti,ab
- #22 ((“islet cell” or decarboxylase or glutamic or insulinoma) and (antibody or antibodies or “anti body” or “anti bodies” or autoantibody or autoantibodies)):ti,ab

- #23 ("zinc transporter 8"):ti,ab
- #24 (islet* and (phosphatase or catalytic)):ti,ab
- #25 (IGRP* or ICA* or "IA-2" or IA2* or ZnT8* or GAD*):ti,ab
- #26 #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25
- #27 #15 and #26
- #28 MeSH descriptor: [Diagnosis] explode all trees
- #29 (diagnos* or screen* or test*):ti,ab
- #30 MeSH descriptor: [Sensitivity and Specificity] explode all trees
- #31 MeSH descriptor: [Area Under Curve] this term only
- #32 MeSH descriptor: [Proportional Hazards Models] this term only
- #33 ((ROC or AUC) or (area and curve)):ti,ab
- #34 (sensitivity or specificity):ti,ab
- #35 "gold standard":ab
- #36 ("predictive value" or PPV or NPV):ti,ab
- #37 "likelihood ratio":ti,ab
- #38 #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37
- #39 #38 and #27

Database(s): Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, Health Technology Assessment, Database of Abstracts of Reviews of Effects, NHS Economic Evaluation Database

- No. Search terms
- #1 MeSH descriptor: [Diabetes Mellitus, Type 1] explode all trees
- #2 MeSH descriptor: [Diabetic Ketoacidosis] this term only
- #3 ((diabet* or DM) near/4 ("type 1" or type1 or "type I" or "type one")):ti,ab
- #4 (diabet* near/2 (autoimmun* or "auto immun*")):ti,ab
- #5 (diabet* near/2 (brittle or labile)):ti,ab
- #6 (diabet* near/2 ("sudden onset" or juvenile or child*)):ti,ab
- #7 (diabet* near/3 (keto* or acido* or gastropare*)):ti,ab
- #8 (dm1 or iddm or t1d* or dka or LADA):ti,ab
- #9 (diabet* near/2 (insulin next depend*)):ti,ab
- #10 #9 and not "non insulin dependent"
- #11 diabetes mellitus:ti
- #12 (#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #10 or #11)
- #13 (pregnan* or gestation*):ti
- #14 #12 not #13
- #15 MeSH descriptor: [C-Peptide] this term only
- #16 MeSH descriptor: [Autoantibodies] this term only
- #17 MeSH descriptor: [Glutamate Decarboxylase] this term only
- #18 MeSH descriptor: [Insulinoma] this term only
- #19 MeSH descriptor: [Glucose-6-Phosphatase] this term only
- #20 (C next (peptide or peptides)):ti,ab
- #21 (("islet cell" or decarboxylase or glutamic or insulinoma) and (antibody or antibodies or "anti body" or "anti bodies" or autoantibody or autoantibodies)):ti,ab
- #22 ("zinc transporter 8"):ti,ab
- #23 (islet* and (phosphatase or catalytic)):ti,ab
- #24 (IGRP* or ICA* or "IA-2" or IA2* or ZnT8* or GAD*):ti,ab
- #25 #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24

- #26 #14 and #25
- #27 MeSH descriptor: [Diagnosis] explode all trees
- #28 (diagnos* or screen* or test*):ti,ab
- #29 MeSH descriptor: [Sensitivity and Specificity] explode all trees
- #30 MeSH descriptor: [Area Under Curve] this term only
- #31 MeSH descriptor: [Proportional Hazards Models] this term only
- #32 ((ROC or AUC) or (area and curve)):ti,ab
- #33 (sensitivity or specificity):ti,ab
- #34 gold standard:ab
- #35 ("predictive value" or PPV or NPV):ti,ab
- #36 likelihood ratio:ti,ab
- #37 #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36
- #38 #26 and #37

Database(s): Embase

- | No. | Search terms |
|-----|--|
| 1 | Insulin dependent diabetes mellitus/ |
| 2 | Juvenile diabetes mellitus/ |
| 3 | Diabetic ketoacidosis/ |
| 4 | ((diabet* or DM) adj4 (type 1 or type1 or type I or type one)).ti,ab. |
| 5 | (diabet* adj2 (autoimmun* or auto immun*)).ti,ab. |
| 6 | (LADA or MODY).ti,ab. |
| 7 | (diabet* adj2 (brittle or labile)).ti,ab. |
| 8 | (diabet* adj2 (sudden onset or maturity onset or juvenile or childhood)).ti,ab. |
| 9 | (diabet* adj3 (keto* or acido* or gastropare*)).ti,ab. |
| 10 | (dm1 or iddm or t1d* or dka).ti,ab. |
| 11 | ((diabet* adj2 (insulin depend* or insulin deficien*)) not non insulin depend*).ti,ab. |
| 12 | diabetes mellitus.ti. |
| 13 | or/1-12 |
| 14 | (pregnan* or gestation*).ti. |
| 15 | 13 not 14 |
| 16 | letter.pt. or letter/ |
| 17 | note.pt. |
| 18 | editorial.pt. |
| 19 | case report/ or case study/ |
| 20 | (letter or comment*).ti. |
| 21 | or/16-20 |
| 22 | 21 not (randomized controlled trial/ or random*.ti,ab.) |
| 23 | animal/ not human/ |
| 24 | nonhuman/ |
| 25 | exp Animal Experiment/ |
| 26 | exp Experimental Animal/ |
| 27 | animal model/ |
| 28 | exp Rodent/ |
| 29 | (rat or rats or mouse or mice).ti. |
| 30 | or/22-29 |
| 31 | 15 not 30 |

32 (2003\$ or 2004\$ or 2005\$ or 2006\$ or 2007\$ or 2008\$ or 2009\$ or 2010\$ or 2011\$ or 2012\$ or 2013\$).em.

33 31 and 32

34 C peptide/

35 Glutamate decarboxylase 65 antibody/

36 Insulinoma/

37 *Autoantibody/

38 Glucose 6 phosphatase/

39 ((islet cell or decarboxylase or glutamic or insulinoma) and (antibod* or anti bod* or autoantibod*)).ti,ab.

40 zinc transporter 8.ti,ab.

41 (islet adj5 (phosphatase or catalytic)).ti,ab.

42 (IGRP* or ICA* or IA-2* or IA2* or ZnT8* or GAD*).ti,ab.

43 or/34-42

44 33 and 43

45 (diagnos* or screen* or test*).ti,ab,hw.

46 exp "sensitivity and specificity"/

47 Receiver operating characteristic/

48 Area under the curve/

49 Proportional hazards model/

50 (ROC or AUC or (area and curve)).ti,ab.

51 (sensitivity or specificity).ti,ab.

52 gold standard.ab.

53 (predictive value* or PPV or NPV).ti,ab.

54 likelihood ratio*.ti,ab.

55 or/45-54

56 44 and 55

57 random*.ti,ab.

58 factorial*.ti,ab.

59 (crossover* or cross over*).ti,ab.

60 ((doubl* or singl*) adj blind*).ti,ab.

61 (assign* or allocat* or volunteer* or placebo*).ti,ab.

62 crossover procedure/

63 single blind procedure/

64 randomized controlled trial/

65 double blind procedure/

66 or/57-65

67 Meta-Analysis/

68 Meta-Analysis as Topic/

69 (meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.

70 ((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.

71 (reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.

72 (search strategy or search criteria or systematic search or study selection or data extraction).ab.

73 (search* adj4 literature).ab.

74 (medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.

75 cochrane.jw.

76 ((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.

- 77 or/67-76
- 78 Clinical study/
- 79 exp case control study/
- 80 family study/
- 81 longitudinal study/
- 82 retrospective study/
- 83 prospective study/
- 84 cross-sectional study/
- 85 cohort analysis/
- 86 case control.ti,ab.
- 87 ((follow up or observational or uncontrolled or non randomi#ed or nonrandomi#ed or epidemiologic*) adj (study or studies)).ti,ab.
- 88 ((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys*)).ti,ab.
- 89 (study and (participant* or patient* or subject* or group*)).ti,ab.
- 90 cohort*.ti,ab.
- 91 or/78-90
- 92 56 and (66 or 77 or 91)
- 93 limit 92 to english language

Database(s): Embase

- # Searches
- 1 Insulin dependent diabetes mellitus/
- 2 Juvenile diabetes mellitus/
- 3 Diabetic ketoacidosis/
- 4 ((diabet* or DM) adj4 (type 1 or type1 or type I or type one)).ti,ab.
- 5 (diabet* adj2 (autoimmun* or auto immun*)).ti,ab.
- 6 (LADA or MODY).ti,ab.
- 7 (diabet* adj2 (brittle or labile)).ti,ab.
- 8 (diabet* adj2 (sudden onset or maturity onset or juvenile or childhood)).ti,ab.
- 9 (diabet* adj3 (keto* or acido* or gastropare*)).ti,ab.
- 10 (dm1 or iddm or t1d* or dka).ti,ab.
- 11 ((diabet* adj2 (insulin depend* or insulin deficien*)) not non insulin depend*).ti,ab.
- 12 diabetes mellitus.ti.
- 13 or/1-12
- 14 (pregnan* or gestation*).ti.
- 15 13 not 14
- 16 letter.pt. or letter/
- 17 note.pt.
- 18 editorial.pt.
- 19 case report/ or case study/
- 20 (letter or comment*).ti.
- 21 or/16-20
- 22 21 not (randomized controlled trial/ or random*.ti,ab.)
- 23 animal/ not human/
- 24 nonhuman/
- 25 exp Animal Experiment/
- 26 exp Experimental Animal/

27 animal model/
 28 exp Rodent/
 29 (rat or rats or mouse or mice).ti.
 30 or/22-29
 31 15 not 30
 32 ("201406" or "201407" or "201408" or "201409" or 20141* or 20142* or 20143*).em.
 33 31 and 32
 34 C peptide/
 35 Glutamate decarboxylase 65 antibody/
 36 Insulinoma/
 37 *Autoantibody/
 38 Glucose 6 phosphatase/
 39 ((islet cell or decarboxylase or glutamic or insulinoma) and (antibod* or anti bod*or
 autoantibod*)).ti,ab.
 40 zinc transporter 8.ti,ab.
 41 (islet adj5 (phosphatase or catalytic)).ti,ab.
 42 [or/34-42]
 43 [or/45-54]
 44 [or/57-65]
 45 [or/67-76]
 46 [or/78-90]
 47 [limit 92 to english language]
 48 Insulin dependent diabetes mellitus/
 49 Juvenile diabetes mellitus/
 50 Diabetic ketoacidosis/
 51 ((diabet* or DM) adj4 (type 1 or type1 or type I or type one)).ti,ab.
 52 (diabet* adj2 (autoimmun* or auto immun*)).ti,ab.
 53 (LADA or MODY).ti,ab.
 54 (diabet* adj2 (brittle or labile)).ti,ab.
 55 (diabet* adj2 (sudden onset or maturity onset or juvenile or childhood)).ti,ab.
 56 (diabet* adj3 (keto* or acido* or gastropare*)).ti,ab.
 57 (dm1 or iddm or t1d* or dka).ti,ab.
 58 ((diabet* adj2 (insulin depend* or insulin deficien*)) not non insulin depend*).ti,ab.
 59 diabetes mellitus.ti.
 60 or/48-59
 61 (pregnan* or gestation*).ti.
 62 60 not 61
 63 letter.pt. or letter/
 64 note.pt.
 65 editorial.pt.
 66 case report/ or case study/
 67 (letter or comment*).ti.
 68 or/63-67
 69 68 not (randomized controlled trial/ or random*.ti,ab.)
 70 animal/ not human/
 71 nonhuman/
 72 exp Animal Experiment/
 73 exp Experimental Animal/

74 animal model/
75 exp Rodent/
76 (rat or rats or mouse or mice).ti.
77 or/69-76
78 62 not 77
79 ("201406" or "201407" or "201408" or "201409" or 20141* or 20142* or 20143*).em.
80 78 and 79
81 C peptide/
82 Glutamate decarboxylase 65 antibody/
83 Insulinoma/
84 *Autoantibody/
85 Glucose 6 phosphatase/
86 ((islet cell or decarboxylase or glutamic or insulinoma) and (antibod* or anti bod*or
autoantibod*)).ti,ab.
87 zinc transporter 8.ti,ab.
88 (islet adj5 (phosphatase or catalytic)).ti,ab.
89 (IGRP* or ICA* or IA-2* or IA2* or ZnT8* or GAD*).ti,ab.
90 or/81-89
91 80 and 90
92 (diagnos* or screen* or test*).ti,ab,hw.
93 exp "sensitivity and specificity"/
94 Receiver operating characteristic/
95 Area under the curve/
96 Proportional hazards model/
97 (ROC or AUC or (area and curve)).ti,ab.
98 (sensitivity or specificity).ti,ab.
99 gold standard.ab.
100 (predictive value* or PPV or NPV).ti,ab.
101 likelihood ratio*.ti,ab.
102 or/92-101
103 91 and 102
104 random*.ti,ab.
105 factorial*.ti,ab.
106 (crossover* or cross over*).ti,ab.
107 ((doubl* or singl*) adj blind*).ti,ab.
108 (assign* or allocat* or volunteer* or placebo*).ti,ab.
109 crossover procedure/
110 single blind procedure/
111 randomized controlled trial/
112 double blind procedure/
113 or/104-112
114 Meta-Analysis/
115 Meta-Analysis as Topic/
116 (meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
117 ((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
118 (reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
119 (search strategy or search criteria or systematic search or study selection or data extraction).ab.
120 (search* adj4 literature).ab.

- 121 (medline or pubmed or cochrane or embase or psychlit or psychlit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
- 122 cochrane.jw.
- 123 ((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
- 124 or/114-123
- 125 Clinical study/
- 126 exp case control study/
- 127 family study/
- 128 longitudinal study/
- 129 retrospective study/
- 130 prospective study/
- 131 cross-sectional study/
- 132 cohort analysis/
- 133 case control.ti,ab.
- 134 ((follow up or observational or uncontrolled or non randomi#ed or nonrandomi#ed or epidemiologic*) adj (study or studies)).ti,ab.
- 135 ((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys*)).ti,ab.
- 136 (study and (participant* or patient* or subject* or group*)).ti,ab.
- 137 cohort*.ti,ab.
- 138 or/125-137
- 139 103 and (113 or 124 or 138)
- 140 limit 139 to english language

A.2 Type 1 diabetes – education

Review question: What is the effectiveness of structured education programmes in improving clinical and patient outcomes in children and young people with type 1 diabetes?

Ovid MEDLINE(R)

- # Searches
- 1 randomized controlled trial.pt.
- 2 controlled clinical trial.pt.
- 3 DOUBLE BLIND METHOD/
- 4 SINGLE BLIND METHOD/
- 5 RANDOM ALLOCATION/
- 6 RANDOMIZED CONTROLLED TRIALS AS TOPIC/
- 7 or/1-6
- 8 ((single or double or triple or treble) adj5 (blind\$ or mask\$)).tw,sh.
- 9 clinical trial.pt.
- 10 exp CLINICAL TRIAL/
- 11 exp CLINICAL TRIALS AS TOPIC/
- 12 (clinic\$ adj5 trial\$).tw,sh.
- 13 PLACEBOS/
- 14 placebo\$.tw,sh.
- 15 random\$.tw,sh.

16 or/8-15
17 or/7,16
18 META ANALYSIS/
19 META ANALYSIS AS TOPIC/
20 meta analysis.pt.
21 (metaanaly\$ or meta-analy\$ or (meta adj analy\$)).tw,sh.
22 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
23 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
24 or/18-23
25 review\$.pt.
26 (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or
psyclit or "web of science" or "science citation" or scisearch).tw.
27 ((hand or manual\$) adj2 search\$).tw.
28 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
database\$).tw,sh.
29 (pooling or pooled or mantel haenszel).tw,sh.
30 (peto or dersimonian or der simonian or fixed effect).tw,sh.
31 or/26-30
32 and/25,31
33 or/24,32
34 letter.pt.
35 case report.tw.
36 comment.pt.
37 editorial.pt.
38 historical article.pt.
39 or/34-38
40 17 not 39
41 33 not 39
42 or/40-41
43 ADOLESCENT/ or MINORS/
44 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
45 exp CHILD/
46 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
47 exp INFANT/
48 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
49 exp PEDIATRICS/ or exp PUBERTY/
50 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
51 or/43-50
52 exp DIABETES MELLITUS, TYPE 1/
53 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
54 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
55 or/52-54
56 and/51,55
57 PATIENT EDUCATION AS TOPIC/
58 PROBLEM SOLVING/
59 ed.fs.

- 60 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
61 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
62 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
63 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab.
64 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
65 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab.
66 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
67 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab.
68 or/57-67
69 and/56,68
70 and/42,69
71 limit 70 to english language
72 LETTER/
73 EDITORIAL/
74 NEWS/
75 exp HISTORICAL ARTICLE/
76 ANECDOTES AS TOPIC/
77 COMMENT/
78 CASE REPORT/
79 (letter or comment* or abstracts).ti.
80 or/72-79
81 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
82 80 not 81
83 ANIMALS/ not HUMANS/
84 exp ANIMALS, LABORATORY/
85 exp ANIMAL EXPERIMENTATION/
86 exp MODELS, ANIMAL/
87 exp RODENTIA/
88 (rat or rats or mouse or mice).ti.
89 or/82-88
90 71 not 89

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

- # Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.

4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or Tl or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
8 or/6-7
9 and/5,8
10 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
11 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
12 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$
or program? or programme or programmes)).ti,ab.
13 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
adj3 information).ti,ab.
14 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or
instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
15 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
cope or coping) adj3 information).ti,ab.
16 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6
(educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or
program? or programme or programmes)).ti,ab.
17 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3
information).ti,ab.
18 or/10-17
19 and/9,18
20 limit 19 to english language

Cochrane Central Register of Controlled Trials

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or Tl or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 and/9,13
15 PATIENT EDUCATION AS TOPIC/
16 PROBLEM SOLVING/

- 17 ed.fs.
- 18 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
- 19 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
- 20 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 21 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab.
- 22 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 23 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab.
- 24 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 25 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab.
- 26 or/15-25
- 27 and/14,26

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,ti,ab,jw,rw.
- 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,ti,ab,jw,rw.
- 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,ti,ab,jw,rw.
- 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,ti,ab,jw,rw.
- 5 or/1-4
- 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).kw,ti,ab.
- 7 (IDDM or T1D or T1D or DM1 or DMI).kw,ti,ab.
- 8 or/6-7
- 9 and/5,8
- 10 "PATIENT EDUCATION AS TOPIC".kw.
- 11 "PROBLEM SOLVING".kw.
- 12 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).tw,tx.
- 13 (problem-solving or "problem solving" or problem-based or "problem based").tw,tx.
- 14 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw,tx.
- 15 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).tw,tx.
- 16 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw,tx.

- 17 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).tw,tx.
- 18 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw,tx.
- 19 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).tw,tx.
- 20 or/10-19
- 21 and/9,20

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 1/
- 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
- 12 (IDDM or T1D or T1D or DM1 or DMI).tw.
- 13 or/10-12
- 14 and/9,13
- 15 PATIENT EDUCATION AS TOPIC/
- 16 PROBLEM SOLVING/
- 17 ed.fs.
- 18 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).tw.
- 19 (problem-solving or "problem solving" or problem-based or "problem based").tw.
- 20 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw.
- 21 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).tw.
- 22 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw.
- 23 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).tw.

- 24 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw.
- 25 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).tw.
- 26 or/15-25
- 27 and/14,26
- 28 limit 27 to english language

Embase

- # Searches
- 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
- 2 (clinic\$ adj5 trial\$).ti,ab,sh.
- 3 SINGLE BLIND PROCEDURE/
- 4 DOUBLE BLIND PROCEDURE/
- 5 RANDOM ALLOCATION/
- 6 CROSSOVER PROCEDURE/
- 7 PLACEBO/
- 8 placebo\$.ti,ab,sh.
- 9 random\$.ti,ab,sh.
- 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
- 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).ti,ab,sh.
- 12 randomi?ed control\$ trial\$.tw.
- 13 or/1-12
- 14 META ANALYSIS/
- 15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).ti,ab,sh.
- 16 (systematic\$ adj5 (review\$ or overview\$)).ti,sh,ab.
- 17 (methodologic\$ adj5 (review\$ or overview\$)).ti,ab,sh.
- 18 or/14-17
- 19 review.pt.
- 20 (medline or medlars or embase).ab.
- 21 (scisearch or science citation index).ab.
- 22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
- 23 ((hand or manual\$) adj2 search\$).tw.
- 24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online database\$).tw.
- 25 (pooling or pooled or mantel haenszel).tw.
- 26 (peto or dersimonian or "der simonian" or fixed effect).tw.
- 27 or/20-26
- 28 and/19,27
- 29 or/18,28
- 30 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
- 31 13 not 30
- 32 29 not 30
- 33 or/31-32
- 34 exp ADOLESCENT/
- 35 (adolescenc\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
- 36 exp CHILD/

37 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
38 exp INFANT/
39 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
40 exp PEDIATRICS/ or exp PUBERTY/
41 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
42 or/34-41
43 INSULIN DEPENDENT DIABETES MELLITUS/
44 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
45 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
46 or/43-45
47 JUVENILE DIABETES MELLITUS/
48 and/42,46
49 or/47-48
50 PATIENT EDUCATION/
51 DIABETES EDUCATION/
52 DIABETES EDUCATOR/
53 EDUCATION PROGRAM/
54 PROBLEM SOLVING/
55 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
56 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
57 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$
or program? or programme or programmes)).ti,ab.
58 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
adj3 information).ti,ab.
59 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or
instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
60 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
cope or coping) adj3 information).ti,ab.
61 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyco?emi\$ or "blood glucose" or "blood sugar") adj6
(educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or
program? or programme or programmes)).ti,ab.
62 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyco?emi\$ or "blood glucose" or "blood sugar") adj3
information).ti,ab.
63 or/50-62
64 and/49,63
65 and/33,64
66 conference abstract.pt.
67 letter.pt. or LETTER/
68 note.pt.
69 editorial.pt.
70 CASE REPORT/ or CASE STUDY/
71 (letter or comment* or abstracts).ti.
72 or/66-71
73 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.

74 72 not 73
 75 ANIMAL/ not HUMAN/
 76 NONHUMAN/
 77 exp ANIMAL EXPERIMENT/
 78 exp EXPERIMENTAL ANIMAL/
 79 ANIMAL MODEL/
 80 exp RODENT/
 81 (rat or rats or mouse or mice).ti.
 82 or/74-81
 83 65 not 82
 84 limit 83 to english language

PsycINFO

Searches
 1 LITERATURE REVIEW/
 2 EXPERIMENTAL DESIGN/
 3 RANDOM SAMPLING/
 4 META-ANALYSIS/
 5 exp TREATMENT/
 6 (random\$ or search\$ or control\$ or risk\$).tw.
 7 (meta-analys#s or metaanalys#s).ti.
 8 (systematic\$ adj (review\$ or overview\$)).ti.
 9 ((single or double or triple) adj (blind\$ or mask\$)).ti.
 10 rct.tw.
 11 or/1-10
 12 adolescen\$.ag.
 13 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,id,jw.
 14 (child\$ or school\$ or preschool\$).ag.
 15 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,id,jw.
 16 (infan\$ or neonat\$).ag.
 17 (infan\$ or neonat\$ or newborn\$ or baby or babies or p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,id,jw.
 18 or/12-17
 19 DIABETES MELLITUS/
 20 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab,id.
 21 (IDDM or T1D or TID or DM1 or DMI).ti,ab,id.
 22 or/19-21
 23 and/18,22
 24 CLIENT EDUCATION/
 25 EDUCATIONAL PROGRAMS/ or EDUCATIONAL THERAPY/
 26 PROBLEM SOLVING/
 27 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab,id.
 28 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab,id.
 29 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab,id.

- 30 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab,id.
- 31 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab,id.
- 32 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab,id.
- 33 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab,id.
- 34 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab,id.
- 35 or/24-34
- 36 and/23,35
- 37 and/11,36
- 38 limit 37 to english language

CINAHL with Full Text

- # Query Limiters/Expanders
- S31 S6 AND S29 Limiters - English Language; Exclude MEDLINE records
Search modes - Boolean/Phrase
- S30 S6 AND S29 Search modes - Boolean/Phrase
- S29 S16 AND S28 Search modes - Boolean/Phrase
- S28 S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27
Search modes - Boolean/Phrase
- S27 TI ((diabet* or insulin* or glyc#emi* or hypoglyc#emi* or "blood glucose" or "blood sugar") N3 information) OR AB ((diabet* or insulin* or glyc#emi* or hypoglyc#emi* or "blood glucose" or "blood sugar") N3 information) Search modes - Boolean/Phrase
- S26 TI ((diabet* or insulin* or glyc#emi* or hypoglyc#emi* or "blood glucose" or "blood sugar") N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes)) OR AB ((diabet* or insulin* or glyc#emi* or hypoglyc#emi* or "blood glucose" or "blood sugar") N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes))
Search modes - Boolean/Phrase
- S25 TI ((self-help or "self help" or self-care or "self care" or self-regulat* or "self regulat*" or self-monitor* or "self monitor*" or self-manag* or "self manag*" or self-efficacy or "self efficacy" or cope or coping) N3 information) OR AB ((self-help or "self help" or self-care or "self care" or self-regulat* or "self regulat*" or self-monitor* or "self monitor*" or self-manag* or "self manag*" or self-efficacy or "self efficacy" or cope or coping) N3 information) Search modes - Boolean/Phrase
- S24 TI ((self-help or "self help" or self-care or "self care" or self-regulat* or "self regulat*" or self-monitor* or "self monitor*" or self-manag* or "self manag*" or self-efficacy or "self efficacy" or cope or coping) N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes)) OR AB ((self-help or "self help" or self-care or "self care" or self-regulat* or "self regulat*" or self-monitor* or "self monitor*" or self-manag* or "self manag*" or self-efficacy or "self efficacy" or cope or coping) N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes)) Search modes - Boolean/Phrase

- S23 TI ((patient# or parent# or parental or child* or adolescen* or young or youth# or family* or families) N3 information) OR AB ((patient# or parent# or parental or child* or adolescen* or young or youth# or family* or families) N3 information) Search modes - Boolean/Phrase
- S22 TI ((patient# or parent# or parental or child* or adolescen* or young or youth# or family* or families) N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes)) OR AB ((patient# or parent# or parental or child* or adolescen* or young or youth# or family* or families) N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes)) Search modes - Boolean/Phrase
- S21 TI (problem-solving or "problem solving" or problem-based or "problem based") OR AB (problem-solving or "problem solving" or problem-based or "problem based") Search modes - Boolean/Phrase
- S20 TI ((educat* or training) N6 (intervention* or program# or programme or programmes)) OR AB ((educat* or training) N6 (intervention* or program# or programme or programmes)) Search modes - Boolean/Phrase
- S19 MW "ED" Search modes - Boolean/Phrase
- S18 (MH "Problem Solving+") Search modes - Boolean/Phrase
- S17 (MH "Patient Education") OR (MH "Diabetes Education") Search modes - Boolean/Phrase
- S16 S12 AND S15 Search modes - Boolean/Phrase
- S15 S13 OR S14 Search modes - Boolean/Phrase
- S14 TI (diabet* N5 ("type one" or "type 1" or "type I" or "insulin depend*" or juvenile or child* or earl* or labile or brittle or "sudden onset" or "auto immun*" or autoimmun* or "auto-immun*")) OR AB (diabet* N5 ("type one" or "type 1" or "type I" or "insulin depend*" or juvenile or child* or earl* or labile or brittle or "sudden onset" or "auto immun*" or autoimmun* or "auto-immun*")) Search modes - Boolean/Phrase
- S13 (MH "Diabetes Mellitus, Type 1+") Search modes - Boolean/Phrase
- S12 S7 OR S8 OR S9 OR S10 OR S11 Search modes - Boolean/Phrase
- S11 TI (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) OR AB (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) or SO (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) Search modes - Boolean/Phrase
- S10 TI (infan* or neonat* or newborn* or baby or babies) OR AB (infan* or neonat* or newborn* or baby or babies) OR SO (infan* or neonat* or newborn* or baby or babies) Search modes - Boolean/Phrase
- S9 TI (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR AB (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR SO (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) Search modes - Boolean/Phrase
- S8 TI (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR AB (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR SO (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) Search modes - Boolean/Phrase
- S7 (MH "Infant, Newborn+") OR (MH "Infant+") OR (MH "Child, Preschool") OR (MH "Child+") OR (MH "Adolescence+") Search modes - Boolean/Phrase
- S6 S1 OR S2 OR S3 OR S4 OR S5 Search modes - Boolean/Phrase
- S5 PT systematic review Search modes - Boolean/Phrase
- S4 PT review Search modes - Boolean/Phrase
- S3 TX meta-analysis OR "meta analysis" Search modes - Boolean/Phrase
- S2 TX random* Search modes - Boolean/Phrase

S1 (MH "Treatment Outcomes+") OR (MH "Experimental Studies+") Search modes - Boolean/Phrase

A.3 Type 1 diabetes – behavioural interventions

Review question: What is the effectiveness of behavioural interventions to improve outcomes in children and young people with type 1 diabetes?

Ovid MEDLINE(R)

Searches
1 randomized controlled trial.pt.
2 controlled clinical trial.pt.
3 DOUBLE BLIND METHOD/
4 SINGLE BLIND METHOD/
5 RANDOM ALLOCATION/
6 RANDOMIZED CONTROLLED TRIALS AS TOPIC/
7 or/1-6
8 ((single or double or triple or treble) adj5 (blind\$ or mask\$)).tw,sh.
9 clinical trial.pt.
10 exp CLINICAL TRIAL/
11 exp CLINICAL TRIALS AS TOPIC/
12 (clinic\$ adj5 trial\$).tw,sh.
13 PLACEBOS/
14 placebo\$.tw,sh.
15 random\$.tw,sh.
16 or/8-15
17 or/7,16
18 META ANALYSIS/
19 META ANALYSIS AS TOPIC/
20 meta analysis.pt.
21 (metaanaly\$ or meta-analy\$ or (meta adj analy\$)).tw,sh.
22 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
23 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
24 or/18-23
25 review\$.pt.
26 (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or psyclit or "web of science" or "science citation" or scisearch).tw.
27 ((hand or manual\$) adj2 search\$).tw.
28 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online database\$).tw,sh.
29 (pooling or pooled or mantel haenszel).tw,sh.
30 (peto or dersimonian or der simonian or fixed effect).tw,sh.
31 or/26-30
32 and/25,31
33 or/24,32
34 letter.pt.
35 case report.tw.

36 comment.pt.
37 editorial.pt.
38 historical article.pt.
39 or/34-38
40 17 not 39
41 33 not 39
42 or/40-41
43 ADOLESCENT/ or MINORS/
44 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
45 exp CHILD/
46 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
47 exp INFANT/
48 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
49 exp PEDIATRICS/ or exp PUBERTY/
50 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
51 or/43-50
52 exp DIABETES MELLITUS, TYPE 1/
53 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
54 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
55 or/52-54
56 and/51,55
57 BEHAVIOR THERAPY/
58 COGNITIVE THERAPY/
59 PSYCHOTHERAPY/
60 PSYCHOTHERAPY, GROUP/
61 FAMILY THERAPY/
62 (psychotherap\$ or BFST or CBT).ti,ab.
63 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
64 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or
modif\$)).ti,ab.
65 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or
teamwork\$ or team-work\$)).ti,ab.
66 COUNSELING/
67 MOTIVATIONAL INTERVIEWING/
68 MENTORS/
69 SOCIAL SUPPORT/
70 SELF-HELP GROUPS/
71 (motivation\$ or counsel?ing or mentor\$).ti,ab.
72 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
73 or/57-72
74 and/42,56,73
75 limit 74 to english language
76 LETTER/
77 EDITORIAL/
78 NEWS/
79 exp HISTORICAL ARTICLE/

80 ANECDOTES AS TOPIC/
 81 COMMENT/
 82 CASE REPORT/
 83 (letter or comment* or abstracts).ti.
 84 or/76-83
 85 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 86 84 not 85
 87 ANIMALS/ not HUMANS/
 88 exp ANIMALS, LABORATORY/
 89 exp ANIMAL EXPERIMENTATION/
 90 exp MODELS, ANIMAL/
 91 exp RODENTIA/
 92 (rat or rats or mouse or mice).ti.
 93 or/86-92
 94 75 not 93

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 or/6-7
 9 and/5,8
 10 (psychotherap\$ or BFST or CBT).ti,ab.
 11 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
 12 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).ti,ab.
 13 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).ti,ab.
 14 (motivation\$ or counsel?ing or mentor\$).ti,ab.
 15 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
 16 or/10-15
 17 and/9,16
 18 limit 17 to english language

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.

5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
 13 or/10-12
 14 and/9,13
 15 BEHAVIOR THERAPY/
 16 COGNITIVE THERAPY/
 17 PSYCHOTHERAPY/
 18 PSYCHOTHERAPY, GROUP/
 19 FAMILY THERAPY/
 20 (psychotherap\$ or BFST or CBT).ti,ab.
 21 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
 22 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or
 modif\$)).ti,ab.
 23 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or
 teamwork\$ or team-work\$)).ti,ab.
 24 COUNSELING/
 25 MOTIVATIONAL INTERVIEWING/
 26 MENTORS/
 27 SOCIAL SUPPORT/
 28 SELF-HELP GROUPS/
 29 (motivation\$ or counsel?ing or mentor\$).ti,ab.
 30 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
 31 or/15-30
 32 and/14,31

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,ti,ab,jw,rw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).kw,ti,ab,jw,rw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,ti,ab,jw,rw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,ti,ab,jw,rw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).kw,ti,ab.
 7 (IDDM or T1D or T1D or DM1 or DMI).kw,ti,ab.
 8 or/6-7
 9 and/5,8
 10 BEHAVIOR THERAPY.kw.
 11 COGNITIVE THERAPY.kw.

- 12 PSYCHOTHERAPY.kw.
- 13 PSYCHOTHERAPY, GROUP.kw.
- 14 FAMILY THERAPY.kw.
- 15 (psychotherap\$ or BFST or CBT).tw,tx.
- 16 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).tw,tx.
- 17 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).tw,tx.
- 18 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).tw,tx.
- 19 COUNSELING.kw.
- 20 MOTIVATIONAL INTERVIEWING.kw.
- 21 MENTORS.kw.
- 22 SOCIAL SUPPORT.kw.
- 23 SELF-HELP GROUPS.kw.
- 24 (motivation\$ or counsel?ing or mentor\$).tw,tx.
- 25 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).tw,tx.
- 26 or/10-25
- 27 and/9,26

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 1/
- 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
- 12 (IDDM or T1D or TID or DM1 or DMI).tw.
- 13 or/10-12
- 14 and/9,13
- 15 BEHAVIOR THERAPY/
- 16 COGNITIVE THERAPY/
- 17 PSYCHOTHERAPY/
- 18 PSYCHOTHERAPY, GROUP/
- 19 FAMILY THERAPY/
- 20 (psychotherap\$ or BFST or CBT).tw.
- 21 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).tw.
- 22 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).tw.
- 23 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).tw.

24 COUNSELING/
 25 MOTIVATIONAL INTERVIEWING/
 26 MENTORS/
 27 SOCIAL SUPPORT/
 28 SELF-HELP GROUPS/
 29 (motivation\$ or counsel?ing or mentor\$).tw.
 30 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).tw.
 31 or/15-30
 32 and/14,31
 33 limit 32 to english language

Embase 1974 to 2014 Week 13

Searches
 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
 2 (clinic\$ adj5 trial\$).ti,ab,sh.
 3 SINGLE BLIND PROCEDURE/
 4 DOUBLE BLIND PROCEDURE/
 5 RANDOM ALLOCATION/
 6 CROSSOVER PROCEDURE/
 7 PLACEBO/
 8 placebo\$.ti,ab,sh.
 9 random\$.ti,ab,sh.
 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).ti,ab,sh.
 12 randomi?ed control\$ trial\$.tw.
 13 or/1-12
 14 META ANALYSIS/
 15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).ti,ab,sh.
 16 (systematic\$ adj5 (review\$ or overview\$)).ti,sh,ab.
 17 (methodologic\$ adj5 (review\$ or overview\$)).ti,ab,sh.
 18 or/14-17
 19 review.pt.
 20 (medline or medlars or embase).ab.
 21 (scisearch or science citation index).ab.
 22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
 23 ((hand or manual\$) adj2 search\$).tw.
 24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
 database\$).tw.
 25 (pooling or pooled or mantel haenszel).tw.
 26 (peto or dersimonian or "der simonian" or fixed effect).tw.
 27 or/20-26
 28 and/19,27
 29 or/18,28
 30 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
 31 13 not 30
 32 29 not 30
 33 or/31-32
 34 exp ADOLESCENT/

35 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 36 exp CHILD/
 37 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 38 exp INFANT/
 39 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 40 exp PEDIATRICS/ or exp PUBERTY/
 41 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 42 or/34-41
 43 INSULIN DEPENDENT DIABETES MELLITUS/
 44 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 45 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 46 or/43-45
 47 JUVENILE DIABETES MELLITUS/
 48 and/42,46
 49 or/47-48
 50 BEHAVIOR THERAPY/
 51 BEHAVIOR MODIFICATION/
 52 COGNITIVE THERAPY/
 53 PSYCHOTHERAPY/
 54 FAMILY THERAPY/
 55 GROUP THERAPY/
 56 MOTIVATIONAL INTERVIEWING/
 57 (psychotherap\$ or BFST or CBT).ti,ab.
 58 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
 59 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or
 modif\$)).ti,ab.
 60 ((family\$ or families or parent\$) adj5 (intervention\$ or treatment\$ or therap\$ or team? or
 teamwork\$ or team-work\$)).ti,ab.
 61 COUNSELING/
 62 FAMILY COUNSELING/
 63 PARENT COUNSELING/
 64 PATIENT COUNSELING/
 65 PEER COUNSELING/
 66 TEACHER/
 67 SOCIAL SUPPORT/
 68 SUPPORT GROUP/
 69 SELF HELP/
 70 (motivation\$ or counsel?ing or mentor\$).ti,ab.
 71 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
 72 or/50-71
 73 and/33,49,72
 74 limit 73 to english language
 75 conference abstract.pt.
 76 letter.pt. or LETTER/
 77 note.pt.
 78 editorial.pt.

79 CASE REPORT/ or CASE STUDY/
 80 (letter or comment* or abstracts).ti.
 81 or/75-80
 82 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 83 81 not 82
 84 ANIMAL/ not HUMAN/
 85 NONHUMAN/
 86 exp ANIMAL EXPERIMENT/
 87 exp EXPERIMENTAL ANIMAL/
 88 ANIMAL MODEL/
 89 exp RODENT/
 90 (rat or rats or mouse or mice).ti.
 91 or/83-90
 92 74 not 91

PsycINFO 1967 to March Week 4 2014

Searches
 1 LITERATURE REVIEW/
 2 EXPERIMENTAL DESIGN/
 3 RANDOM SAMPLING/
 4 META-ANALYSIS/
 5 exp TREATMENT/
 6 (random\$ or search\$ or control\$ or risk\$).tw.
 7 (meta-analys#s or metaanalys#s).ti.
 8 (systematic\$ adj (review\$ or overview\$)).ti.
 9 ((single or double or triple) adj (blind\$ or mask\$)).ti.
 10 rct.tw.
 11 or/1-10
 12 adolescen\$.ag.
 13 (adolescenc\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,id,jw.
 14 (child\$ or school\$ or preschool\$).ag.
 15 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,id,jw.
 16 (infan\$ or neonat\$).ag.
 17 (infan\$ or neonat\$ or newborn\$ or baby or babies or p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,id,jw.
 18 or/12-17
 19 DIABETES MELLITUS/
 20 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab,id.
 21 (IDDM or T1D or TID or DM1 or DMI).ti,ab,id.
 22 or/19-21
 23 and/18,22
 24 BEHAVIOR THERAPY/
 25 COGNITIVE THERAPY/
 26 COGNITIVE BEHAVIOR THERAPY/
 27 PSYCHOTHERAPY/
 28 ADOLESCENT PSYCHOTHERAPY/

29 CHILD PSYCHOTHERAPY/
 30 GROUP PSYCHOTHERAPY/
 31 FAMILY THERAPY/
 32 FAMILY INTERVENTION/
 33 MOTIVATIONAL INTERVIEWING/
 34 (psychotherap\$ or BFST or CBT).ti,ab.
 35 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
 36 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or
 modif\$)).ti,ab.
 37 ((family\$ or families or parent\$) adj5 (intervention\$ or treatment\$ or therap\$ or team? or
 teamwork\$ or team-work\$)).ti,ab.
 38 COUNSELING/
 39 GROUP COUNSELING/
 40 PEER COUNSELING/
 41 MENTOR/
 42 SOCIAL SUPPORT/
 43 SUPPORT GROUPS/
 44 SELF HELP TECHNIQUES/
 45 (motivation\$ or counsel?ing or mentor\$).ti,ab.
 46 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
 47 or/24-46
 48 and/23,47
 49 and/11,48
 50 limit 49 to english language

CINAHL with Full Text

Query Limiters/Expanders
 S33 S6 AND S31 Limiters - English Language; Exclude MEDLINE records
 Search modes - Boolean/Phrase
 S32 S6 AND S31 Search modes - Boolean/Phrase
 S31 S16 AND S30 Search modes - Boolean/Phrase
 S30 S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR
 S28 OR S29 Search modes - Boolean/Phrase
 S29 TI ((peer or social* or "self help" or self-help) N3 (group# or support#)) OR AB ((peer or social* or
 "self help" or self-help) N3 (group# or support#)) Search modes - Boolean/Phrase
 S28 TI (motivation* or counsel#ing or mentor*) OR AB (motivation* or counsel#ing or mentor*)
 Search modes - Boolean/Phrase
 S27 (MH "Support Groups") Search modes - Boolean/Phrase
 S26 (MH "Mentorship") Search modes - Boolean/Phrase
 S25 (MH "Counseling") OR (MH "Peer Counseling") Search modes - Boolean/Phrase
 S24 TI ((family* or families or parent#) N5 (intervention* or treatment* or therap* or team# or
 teamwork* or team-work*)) OR AB ((family* or families or parent#) N5 (intervention* or treatment*
 or therap* or team# or teamwork* or team-work*)) Search modes - Boolean/Phrase
 S23 TI ((behavi* or motivation*) N5 (intervention* or treatment* or therap* or chang* or modif*)) OR
 AB ((behavi* or motivation*) N5 (intervention* or treatment* or therap* or chang* or modif*))
 Search modes - Boolean/Phrase
 S22 TI ((cogniti* or psycho*) N5 (intervention* or treatment* or therap*)) OR AB ((cogniti* or psycho*)
 N5 (intervention* or treatment* or therap*)) Search modes - Boolean/Phrase

- S21 TI (psychotherap* or BFST or CBT) OR AB (psychotherap* or BFST or CBT) Search modes - Boolean/Phrase
- S20 (MH "Motivational Interviewing") Search modes - Boolean/Phrase
- S19 (MH "Psychotherapy, Group") OR (MH "Family Therapy") Search modes - Boolean/Phrase
- S18 (MH "Psychotherapy") Search modes - Boolean/Phrase
- S17 (MH "Behavior Therapy+") OR (MH "Cognitive Therapy") Search modes - Boolean/Phrase
- S16 S12 AND S15 Search modes - Boolean/Phrase
- S15 S13 OR S14 Search modes - Boolean/Phrase
- S14 TI (diabet* N5 ("type one" or "type 1" or "type I" or "insulin depend*" or juvenile or child* or earl* or labile or brittle or "sudden onset" or "auto immun*" or autoimmun* or "auto-immun*)) OR AB (diabet* N5 ("type one" or "type 1" or "type I" or "insulin depend*" or juvenile or child* or earl* or labile or brittle or "sudden onset" or "auto immun*" or autoimmun* or "auto-immun*)) Search modes - Boolean/Phrase
- S13 (MH "Diabetes Mellitus, Type 1+") Search modes - Boolean/Phrase
- S12 S7 OR S8 OR S9 OR S10 OR S11 Search modes - Boolean/Phrase
- S11 TI (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) OR AB (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) or SO (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) Search modes - Boolean/Phrase
- S10 TI (infan* or neonat* or newborn* or baby or babies) OR AB (infan* or neonat* or newborn* or baby or babies) OR SO (infan* or neonat* or newborn* or baby or babies) Search modes - Boolean/Phrase
- S9 TI (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR AB (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR SO (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) Search modes - Boolean/Phrase
- S8 TI (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR AB (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR SO (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) Search modes - Boolean/Phrase
- S7 (MH "Infant, Newborn+") OR (MH "Infant+") OR (MH "Child, Preschool") OR (MH "Child+") OR (MH "Adolescence+") Search modes - Boolean/Phrase
- S6 S1 OR S2 OR S3 OR S4 OR S5 Search modes - Boolean/Phrase
- S5 PT systematic review Search modes - Boolean/Phrase
- S4 PT review Search modes - Boolean/Phrase
- S3 TX meta-analysis OR "meta analysis" Search modes - Boolean/Phrase
- S2 TX random* Search modes - Boolean/Phrase
- S1 (MH "Treatment Outcomes+") OR (MH "Experimental Studies+") Search modes - Boolean/Phrase

A.4 Type 1 diabetes – multiple daily injections

Review question: What is the effectiveness of multiple daily injections of insulin when compared with mixed insulin injections in improving glycaemic control in children and young people with type 1 diabetes?

Ovid MEDLINE(R)

```
#      Searches
1      ADOLESCENT/ or MINORS/
2      (adolescen$ or teen$ or youth$ or young or juvenile? or minors or highschool$).ti,ab,jw.
3      exp CHILD/
4      (child$ or schoolchild$ or "school age" or "school aged" or preschool$ or toddler$ or kid? or
kindergar$ or boy? or girl?).ti,ab,jw.
5      exp INFANT/
6      (infan$ or neonat$ or newborn$ or baby or babies).ti,ab,jw.
7      exp PEDIATRICS/ or exp PUBERTY/
8      (p?ediatric$ or pubert$ or prepubert$ or pubescen$ or prepubescen$).ti,ab,jw.
9      or/1-8
10     exp DIABETES MELLITUS, TYPE 1/
11     (diabet$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend$ or juvenile or child$
or earl$ or labile or brittle or sudden onset or auto immun$ or auto?immun$)).ti,ab.
12     (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13     or/10-12
14     and/9,13
15     exp INSULIN/ad, tu [Administration & Dosage, Therapeutic Use]
16     exp INSULINS/ad, tu [Administration & Dosage, Therapeutic Use]
17     (insulin$ or Hagedorn).kw.
18     or/15-17
19     exp DRUG ADMINISTRATION SCHEDULE/
20     DOSE-RESPONSE RELATIONSHIP, DRUG/
21     exp INJECTIONS, SUBCUTANEOUS/
22     ((insulin$ or inject$) adj (regim$ or schedul$)).ti,ab.
23     ((intensiv$ or conventional or flexib$ or basal$ or bolus$) adj3 (treatment? or therap$ or regime$
or manag$ or control$ or program$ or schedul$)).ti,ab.
24     ((multiple or prandial$ or preprandial$ or postprandial$ or meal$ or premeal$ or postmeal$ or
basal$ or bolus$) adj3 (inject$ or insulin$ or dose? or dosage?)).ti,ab.
25     ((mix$ or premix$ or freemix$ or self titrat$ or biphasic$) adj5 insulin$).ti,ab.
26     (MDI or FMDI).ti,ab.
27     or/19-26
28     and/14,18,27
29     limit 28 to english language
30     LETTER/
31     EDITORIAL/
32     NEWS/
33     exp HISTORICAL ARTICLE/
34     ANECDOTES AS TOPIC/
35     COMMENT/
```

36 CASE REPORT/
 37 (letter or comment* or abstracts).ti.
 38 or/30-37
 39 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 40 38 not 39
 41 ANIMALS/ not HUMANS/
 42 exp ANIMALS, LABORATORY/
 43 exp ANIMAL EXPERIMENTATION/
 44 exp MODELS, ANIMAL/
 45 exp RODENTIA/
 46 (rat or rats or mouse or mice).ti.
 47 or/40-46
 48 29 not 47

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 or/6-7
 9 ((insulin\$ or inject\$) adj (regim\$ or schedul\$)).ti,ab.
 10 ((intensiv\$ or conventional or flexib\$ or basal\$ or bolus\$) adj3 (treatment? or therap\$ or regime\$ or manag\$ or control\$ or program\$ or schedul\$)).ti,ab.
 11 ((multiple or prandial\$ or preprandial\$ or postprandial\$ or meal\$ or premeal\$ or postmeal\$ or basal\$ or bolus\$) adj3 (inject\$ or insulin\$ or dose? or dosage?)).ti,ab.
 12 ((mix\$ or premix\$ or freemix\$ or self titrat\$ or biphasic\$) adj5 insulin\$).ti,ab.
 13 (MDI or FMDI).ti,ab.
 14 or/9-13
 15 and/5,8,14

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8

10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
 13 or/10-12
 14 and/9,13
 15 exp INSULIN/ad, tu [Administration & Dosage, Therapeutic Use]
 16 exp INSULINS/ad, tu [Administration & Dosage, Therapeutic Use]
 17 (insulin\$ or Hagedorn).kw.
 18 or/15-17
 19 exp DRUG ADMINISTRATION SCHEDULE/
 20 DOSE-RESPONSE RELATIONSHIP, DRUG/
 21 exp INJECTIONS, SUBCUTANEOUS/
 22 ((insulin\$ or inject\$) adj (regim\$ or schedul\$)).ti,ab.
 23 ((intensiv\$ or conventional or flexib\$ or basal\$ or bolus\$) adj3 (treatment? or therap\$ or regime\$
 or manag\$ or control\$ or program\$ or schedul\$)).ti,ab.
 24 ((multiple or prandial\$ or preprandial\$ or postprandial\$ or meal\$ or premeal\$ or postmeal\$ or
 basal\$ or bolus\$) adj3 (inject\$ or insulin\$ or dose? or dosage?)).ti,ab.
 25 ((mix\$ or premix\$ or freemix\$ or self titrat\$ or biphasic\$) adj5 insulin\$).ti,ab.
 26 (MDI or FMDI).ti,ab.
 27 or/19-26
 28 and/14,18,27

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,ti,ab,jw,rw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).kw,ti,ab,jw,rw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,ti,ab,jw,rw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,ti,ab,jw,rw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).kw,ti,ab.
 7 (IDDM or T1D or T1D or DM1 or DMI).kw,ti,ab.
 8 or/6-7
 9 and/5,8
 10 INSULIN.kw.
 11 INSULINS.kw.
 12 (insulin\$ or Hagedorn).tw,tx.
 13 or/10-12
 14 DRUG ADMINISTRATION SCHEDULE.kw.
 15 DOSE-RESPONSE RELATIONSHIP, DRUG.kw.
 16 INJECTIONS, SUBCUTANEOUS.kw.
 17 ((insulin\$ or inject\$) adj (regim\$ or schedul\$)).tw,tx.
 18 ((intensiv\$ or conventional or flexib\$ or basal\$ or bolus\$) adj3 (treatment? or therap\$ or regime\$
 or manag\$ or control\$ or program\$ or schedul\$)).tw,tx.
 19 ((multiple or prandial\$ or preprandial\$ or postprandial\$ or meal\$ or premeal\$ or postmeal\$ or
 basal\$ or bolus\$) adj3 (inject\$ or insulin\$ or dose? or dosage?)).tw,tx.

20 ((mix\$ or premix\$ or freemix\$ or self titrat\$ or biphasic\$) adj5 insulin\$).tw,tx.
 21 (MDI or FMDI).tw,tx.
 22 or/14-21
 23 and/9,13,22

Health Technology Assessment

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
 12 (IDDM or T1D or TID or DM1 or DMI).tw.
 13 or/10-12
 14 and/9,13
 15 exp INSULIN/ad, tu [Administration & Dosage, Therapeutic Use]
 16 exp INSULINS/ad, tu [Administration & Dosage, Therapeutic Use]
 17 (insulin\$ or Hagedorn).tw.
 18 or/15-17
 19 exp DRUG ADMINISTRATION SCHEDULE/
 20 DOSE-RESPONSE RELATIONSHIP, DRUG/
 21 exp INJECTIONS, SUBCUTANEOUS/
 22 ((insulin\$ or inject\$) adj (regim\$ or schedul\$)).tw.
 23 ((intensiv\$ or conventional or flexib\$ or basal\$ or bolus\$) adj3 (treatment? or therap\$ or regime\$ or manag\$ or control\$ or program\$ or schedul\$)).tw.
 24 ((multiple or prandial\$ or preprandial\$ or postprandial\$ or meal\$ or premeal\$ or postmeal\$ or basal\$ or bolus\$) adj3 (inject\$ or insulin\$ or dose? or dosage?)).tw.
 25 ((mix\$ or premix\$ or freemix\$ or self titrat\$ or biphasic\$) adj5 insulin\$).tw.
 26 (MDI or FMDI).tw.
 27 or/19-26
 28 and/14,18,27

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/

6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9 or/1-8
10 INSULIN DEPENDENT DIABETES MELLITUS/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 JUVENILE DIABETES MELLITUS/
15 and/9,13
16 or/14-15
17 exp INSULIN DERIVATIVE/co, do, dt [Drug Combination, Drug Dose, Drug Therapy]
18 (insulin\$ or Hagedorn).kw.
19 or/17-18
20 INSULIN TREATMENT/
21 NEUTRAL INSULIN INJECTION/
22 DRUG ADMINISTRATION/
23 DOSE CALCULATION/
24 DRUG DOSE REGIMEN/
25 DOSAGE SCHEDULE COMPARISON/
26 exp INJECTION/
27 SUBCUTANEOUS DRUG ADMINISTRATION/
28 ((insulin\$ or inject\$) adj (regim\$ or schedul\$)).ti,ab.
29 ((intensiv\$ or conventional or flexib\$ or basal\$ or bolus\$) adj3 (treatment? or therap\$ or regime\$
or manag\$ or control\$ or program\$ or schedul\$)).ti,ab.
30 ((multiple or prandial\$ or preprandial\$ or postprandial\$ or meal\$ or premeal\$ or postmeal\$ or
basal\$ or bolus\$) adj3 (inject\$ or insulin\$ or dose? or dosage?)).ti,ab.
31 ((mix\$ or premix\$ or freemix\$ or self titrat\$ or biphasic\$) adj5 insulin\$).ti,ab.
32 (MDI or FMDI).ti,ab.
33 or/20-32
34 and/16,19,33
35 limit 34 to english language
36 conference abstract.pt.
37 letter.pt. or LETTER/
38 note.pt.
39 editorial.pt.
40 CASE REPORT/ or CASE STUDY/
41 (letter or comment* or abstracts).ti.
42 or/36-41
43 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
44 42 not 43
45 ANIMAL/ not HUMAN/
46 NONHUMAN/
47 exp ANIMAL EXPERIMENT/
48 exp EXPERIMENTAL ANIMAL/
49 ANIMAL MODEL/
50 exp RODENT/

51 (rat or rats or mouse or mice).ti.
52 or/44-51
53 35 not 52

A.5 Type 1 diabetes – HbA1c targets

Review question: What is the optimal haemoglobin A1c (HbA1c) target for children and young people with type 1 diabetes?

Ovid MEDLINE(R)

Searches
1 randomized controlled trial.pt.
2 controlled clinical trial.pt.
3 DOUBLE BLIND METHOD/
4 SINGLE BLIND METHOD/
5 RANDOM ALLOCATION/
6 or/1-5
7 ((single or double or triple or treble) adj5 (blind\$ or mask\$)).tw,sh.
8 clinical trial.pt.
9 exp CLINICAL TRIAL/
10 exp CLINICAL TRIALS AS TOPIC/
11 (clinic\$ adj5 trial\$).tw,sh.
12 PLACEBOS/
13 placebo\$.tw,sh.
14 random\$.tw,sh.
15 or/7-14
16 or/6-15
17 META ANALYSIS/
18 META ANALYSIS AS TOPIC/
19 meta analysis.pt.
20 (metaanaly\$ or meta-analy\$ or (meta adj analy\$)).tw,sh.
21 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
22 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
23 or/17-22
24 review\$.pt.
25 (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or
psyclit or "web of science" or "science citation" or scisearch).tw.
26 ((hand or manual\$) adj2 search\$).tw.
27 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
database\$).tw,sh.
28 (pooling or pooled or mantel haenszel).tw,sh.
29 (peto or dersimonian or der simonian or fixed effect).tw,sh.
30 or/25-29
31 and/24,30
32 exp CASE-CONTROL STUDIES/
33 (case\$ adj2 control\$).tw.

34 exp COHORT STUDIES/
35 cohort\$.tw.
36 or/32-35
37 letter.pt.
38 or/16,23,31,36
39 comparative study.pt.
40 or/38-39
41 ADOLESCENT/ or MINORS/
42 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
43 exp CHILD/
44 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
45 exp INFANT/
46 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
47 exp PEDIATRICS/ or exp PUBERTY/
48 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
49 or/41-48
50 exp DIABETES MELLITUS, TYPE 1/
51 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
52 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
53 or/50-52
54 HEMOGLOBIN A, GLYCOSYLATED/
55 (h?emoglobin? adj3 glycosylat\$).ti,ab.
56 (glycated adj3 h?emoglobin?).ti,ab.
57 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
58 "hemoglobin A1c protein, human".nm.
59 or/54-58
60 REFERENCE STANDARDS/ or REFERENCE VALUES/
61 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or
threshold?)).ti,ab.
62 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
63 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or
threshold?)).ti,ab.
64 or/60-63
65 and/49,53,59,64
66 and/40,65
67 LETTER/
68 EDITORIAL/
69 NEWS/
70 exp HISTORICAL ARTICLE/
71 ANECDOTES AS TOPIC/
72 COMMENT/
73 CASE REPORT/
74 (letter or comment* or abstracts).ti.
75 or/67-74
76 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
77 75 not 76

78 ANIMALS/ not HUMANS/
 79 exp ANIMALS, LABORATORY/
 80 exp ANIMAL EXPERIMENTATION/
 81 exp MODELS, ANIMAL/
 82 exp RODENTIA/
 83 (rat or rats or mouse or mice).ti.
 84 or/77-83
 85 66 not 84
 86 limit 85 to english language

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 or/6-7
 9 (h?emoglobin? adj3 glycosylat\$).ti,ab.
 10 (glycated adj3 h?emoglobin?).ti,ab.
 11 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
 12 or/9-11
 13 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
 14 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
 15 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
 16 or/13-15
 17 and/5,8,12,16

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/

11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
13 or/10-12
14 HEMOGLOBIN A, GLYCOSYLATED/
15 (h?emoglobin? adj3 glycosylat\$).ti,ab.
16 (glycated adj3 h?emoglobin?).ti,ab.
17 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
18 or/14-17
19 REFERENCE STANDARDS/ or REFERENCE VALUES/
20 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
21 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
22 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
23 or/19-22
24 and/9,13,18,23
25 limit 24 to yr="2013 -Current"

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
1 (ADOLESCENT or MINORS).kw.
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,jw,rw.
3 CHILD.kw.
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,tx,jw,rw.
5 INFANT.kw.
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,jw,rw.
7 (PEDIATRICS or PUBERTY).kw.
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,jw,rw.
9 or/1-8
10 DIABETES MELLITUS, TYPE 1.kw.
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw,tx.
12 (IDDM or T1D or T1D or DM1 or DMI).tw,tx.
13 or/10-12
14 HEMOGLOBIN A, GLYCOSYLATED.kw.
15 (h?emoglobin? adj3 glycosylat\$).tw,tx.
16 (glycated adj3 h?emoglobin?).tw,tx.
17 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).tw,tx.
18 or/14-17
19 (REFERENCE STANDARDS or REFERENCE VALUES).kw.
20 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or threshold?)).tw,tx.
21 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).tw,tx.
22 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold?)).tw,tx.
23 or/19-22

24 and/9,13,18,23

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 1/
- 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
- 12 (IDDM or T1D or TID or DM1 or DMI).tw.
- 13 or/10-12
- 14 HEMOGLOBIN A, GLYCOSYLATED/
- 15 (h?emoglobin? adj3 glycosylat\$).tw.
- 16 (glycated adj3 h?emoglobin?).tw.
- 17 (glycoh?emoglobin? or HbA1c or HbAlc or Hb A1c or Hb A1c).tw.
- 18 or/14-17
- 19 REFERENCE STANDARDS/ or REFERENCE VALUES/
- 20 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or threshold?)).tw.
- 21 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).tw.
- 22 ((normogly?emi\$ or euglyc?emi\$ or glyc?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold?)).tw.
- 23 or/19-22
- 24 and/9,13,18,23

Embase

- # Searches
- 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
- 2 (clinic\$ adj5 trial\$).tw,sh.
- 3 SINGLE BLIND PROCEDURE/
- 4 DOUBLE BLIND PROCEDURE/
- 5 RANDOM ALLOCATION/
- 6 CROSSOVER PROCEDURE/
- 7 PLACEBO/
- 8 placebo\$.tw,sh.
- 9 random\$.tw,sh.
- 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
- 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).tw,sh.
- 12 randomi?ed control\$ trial\$.tw.
- 13 or/1-12

14 META ANALYSIS/
15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).tw,sh.
16 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
17 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
18 or/14-17
19 review.pt.
20 (medline or medlars or embase).ab.
21 (scisearch or science citation index).ab.
22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
23 ((hand or manual\$) adj2 search\$).tw.
24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
database\$).tw.
25 (pooling or pooled or mantel haenszel).tw.
26 (peto or dersimonian or "der simonian" or fixed effect).tw.
27 or/20-26
28 and/19,27
29 exp CASE CONTROL STUDY/
30 RETROSPECTIVE STUDY/
31 (case\$ adj2 control\$).tw.
32 COHORT ANALYSIS/
33 LONGITUDINAL STUDY/
34 FOLLOW UP/
35 PROSPECTIVE STUDY/
36 cohort\$.tw.
37 or/29-36
38 or/13,18,28,37
39 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
40 38 not 39
41 COMPARATIVE STUDY/
42 (compar\$ adj3 stud\$).tw.
43 or/41-42
44 or/40,43
45 exp ADOLESCENT/
46 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
47 exp CHILD/
48 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
49 exp INFANT/
50 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
51 exp PEDIATRICS/ or exp PUBERTY/
52 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
53 or/45-52
54 INSULIN DEPENDENT DIABETES MELLITUS/
55 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
56 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
57 JUVENILE DIABETES MELLITUS/
58 or/54-57

59 HEMOGLOBIN A1c/
60 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
61 (h?emoglobin? adj3 glycosylat\$).ti,ab.
62 (glycated adj3 h?emoglobin?).ti,ab.
63 or/59-62
64 STANDARD/
65 REFERENCE VALUE/
66 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or
threshold?)).ti,ab.
67 or/64-66
68 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
69 ((normogly?emi\$ or euglyc?emi\$ or glyc?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or
threshold?)).ti,ab.
70 or/67-69
71 and/53,58,63,70
72 and/44,71
73 conference abstract.pt.
74 letter.pt. or LETTER/
75 note.pt.
76 editorial.pt.
77 CASE REPORT/ or CASE STUDY/
78 (letter or comment* or abstracts).ti.
79 or/73-78
80 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
81 79 not 80
82 ANIMAL/ not HUMAN/
83 NONHUMAN/
84 exp ANIMAL EXPERIMENT/
85 exp EXPERIMENTAL ANIMAL/
86 ANIMAL MODEL/
87 exp RODENT/
88 (rat or rats or mouse or mice).ti.
89 or/81-88
90 72 not 89
91 limit 90 to english language

A.6 Type 1 diabetes blood glucose targets

Review question: What are the optimal blood glucose targets for children and young people with type 1 diabetes?

Ovid MEDLINE(R)

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
3 exp CHILD/

4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 BLOOD GLUCOSE/
 15 BLOOD GLUCOSE SELF-MONITORING/
 16 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
 17 (F#G or P#G or R#G or BG or HMBG or SMBG or BGM).ti,ab.
 18 (normoglyc?emi\$ or euglyc?emi\$).ti,ab.
 19 (glyc?emi\$ adj3 (norm\$ or near?norm\$)).ti,ab.
 20 or/14-19
 21 REFERENCE STANDARDS/ or REFERENCE VALUES/
 22 GOALS/
 23 ((reference? or normal\$ or standard?) adj3 (value\$ or rang\$ or level\$ or threshold?)).ti,ab.
 24 target\$.ti.
 25 target\$.ab. /freq=2
 26 ((tight\$ or intens\$ or aggressive\$ or strict\$ or rigid\$ or liberal\$ or conventional\$ or regular or
 usual or routin\$ or standard?) adj3 (control\$ or target\$ or goal\$ or rang\$ or therap\$ or regime\$ or
 treatment? or interven\$ or manag\$ or monitor\$)).ti,ab.
 27 or/21-26
 28 and/20,27
 29 (("American Diabetic Association" or ADA or "Australasian P?ediatric Endocrine Group" or APEG
 or "International Society for P?ediatric and Adolescent Diabetes" or ISPAD) adj3 (value\$ or
 target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
 30 (glyc?emi\$ adj3 control\$ adj3 (target\$ or goal\$)).ti,ab.
 31 or/28-30
 32 TIME FACTORS/
 33 ((time or timing or prandial or preprandial or postprandial) adj3 (monitor\$ or test\$ or measur\$ or
 value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
 34 or/32-33
 35 and/20,34
 36 or/31,35
 37 and/9,13,36
 38 limit 37 to english language
 39 LETTER/
 40 EDITORIAL/
 41 NEWS/
 42 exp HISTORICAL ARTICLE/
 43 ANECDOTES AS TOPIC/
 44 COMMENT/
 45 CASE REPORT/

46 (letter or comment* or abstracts).ti.
 47 or/39-46
 48 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 49 47 not 48
 50 ANIMALS/ not HUMANS/
 51 exp ANIMALS, LABORATORY/
 52 exp ANIMAL EXPERIMENTATION/
 53 exp MODELS, ANIMAL/
 54 exp RODENTIA/
 55 (rat or rats or mouse or mice).ti.
 56 or/49-55
 57 38 not 56

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 or/6-7
 9 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
 10 (F#G or P#G or R#G or BG or HMBG or SMBG or BGM).ti,ab.
 11 (normoglyc?emi\$ or euglyc?emi\$).ti,ab.
 12 (glyc?emi\$ adj3 (norm\$ or near?norm\$)).ti,ab.
 13 or/9-12
 14 ((reference? or normal\$ or standard?) adj3 (value\$ or rang\$ or level\$ or threshold?)).ti,ab.
 15 target\$.ti.
 16 target\$.ab. /freq=2
 17 ((tight\$ or intens\$ or aggressive\$ or strict\$ or rigid\$ or liberal\$ or conventional\$ or regular or usual or routin\$ or standard?) adj3 (control\$ or target\$ or goal\$ or rang\$ or therap\$ or regime\$ or treatment? or interven\$ or manag\$ or monitor\$)).ti,ab.
 18 or/14-17
 19 and/13,18
 20 (("American Diabetic Association" or ADA or "Australasian P?ediatric Endocrine Group" or APEG or "International Society for P?ediatric and Adolescent Diabetes" or ISPAD) adj3 (value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
 21 (glyc?emi\$ adj3 control\$ adj3 (target\$ or goal\$)).ti,ab.
 22 or/19-21
 23 ((time or timing or prandial or preprandial or postprandial) adj3 (monitor\$ or test\$ or measur\$ or value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
 24 and/13,23
 25 or/22,24
 26 and/5,8,25

Cochrane Central Register of Controlled Trials

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 BLOOD GLUCOSE/
15 BLOOD GLUCOSE SELF-MONITORING/
16 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
17 (F#G or P#G or R#G or BG or HMBG or SMBG or BGM).ti,ab.
18 (normoglyc?emi\$ or euglyc?emi\$).ti,ab.
19 (glyc?emi\$ adj3 (norm\$ or near?norm\$)).ti,ab.
20 or/14-19
21 REFERENCE STANDARDS/ or REFERENCE VALUES/
22 GOALS/
23 ((reference? or normal\$ or standard?) adj3 (value\$ or rang\$ or level\$ or threshold?)).ti,ab.
24 target\$.ti.
25 target\$.ab. /freq=2
26 ((tight\$ or intens\$ or aggressive\$ or strict\$ or rigid\$ or liberal\$ or conventional\$ or regular or usual or routin\$ or standard?) adj3 (control\$ or target\$ or goal\$ or rang\$ or therap\$ or regime\$ or treatment? or interven\$ or manag\$ or monitor\$)).ti,ab.
27 or/21-26
28 and/20,27
29 (("American Diabetic Association" or ADA or "Australasian P?ediatric Endocrine Group" or APEG or "International Society for P?ediatric and Adolescent Diabetes" or ISPAD) adj3 (value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
30 (glyc?emi\$ adj3 control\$ adj3 (target\$ or goal\$)).ti,ab.
31 or/28-30
32 TIME FACTORS/
33 ((time or timing or prandial or preprandial or postprandial) adj3 (monitor\$ or test\$ or measur\$ or value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
34 or/32-33
35 and/20,34
36 or/31,35
37 and/9,13,36

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw.
 - 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,tx,kw.
 - 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw.
 - 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw.
 - 5 or/1-4
 - 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw,tx,kw.
 - 7 (IDDM or T1D or TID or DM1 or DMI).tw,tx.
 - 8 or/6-7
 - 9 ((blood or plasma) adj3 (glucose or sugar?)).tw,tx,kw.
 - 10 (F#G or P#G or R#G or BG or HMBG or SMBG or BGM).tw,tx.
 - 11 (normoglyc?emi\$ or euglyc?emi\$).tw,tx.
 - 12 (glyc?emi\$ adj3 (norm\$ or near?norm\$)).tw,tx.
 - 13 or/9-12
 - 14 (REFERENCE STANDARDS or REFERENCE VALUES).kw.
 - 15 GOALS.kw.
 - 16 ((reference? or normal\$ or standard?) adj3 (value\$ or rang\$ or level\$ or threshold?)).tw,tx.
 - 17 target\$.tw,tx,kw.
 - 18 ((tight\$ or intens\$ or aggressive\$ or strict\$ or rigid\$ or liberal\$ or conventional\$ or regular or usual or routin\$ or standard?) adj3 (control\$ or target\$ or goal\$ or rang\$ or therap\$ or regime\$ or treatment? or interven\$ or manag\$ or monitor\$)).tw,tx.
 - 19 or/14-18
 - 20 and/13,19
 - 21 (("American Diabetic Association" or ADA or "Australasian P?ediatric Endocrine Group" or APEG or "International Society for P?ediatric and Adolescent Diabetes" or ISPAD) adj3 (value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).tw,tx.
 - 22 (glyc?emi\$ adj3 control\$ adj3 (target\$ or goal\$)).tw,tx.
 - 23 or/20-22
 - 24 TIME.kw.
 - 25 ((time or timing or prandial or preprandial or postprandial) adj3 (monitor\$ or test\$ or measur\$ or value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).tw,tx.
 - 26 or/24-25
 - 27 and/13,26
 - 28 or/23,27
 - 29 and/5,8,28

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
 - 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw.
 - 3 exp CHILD/
 - 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw.
 - 5 exp INFANT/
 - 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw.

7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatic\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
 12 (IDDM or T1D or TID or DM1 or DMI).tw.
 13 or/10-12
 14 BLOOD GLUCOSE/
 15 BLOOD GLUCOSE SELF-MONITORING/
 16 ((blood or plasma) adj3 (glucose or sugar?)).tw.
 17 (F#G or P#G or R#G or BG or HMBG or SMBG or BGM).tw.
 18 (normoglyc?emi\$ or euglyc?emi\$).tw.
 19 (glyc?emi\$ adj3 (norm\$ or near?norm\$)).tw.
 20 or/14-19
 21 REFERENCE STANDARDS/ or REFERENCE VALUES/
 22 GOALS/
 23 ((reference? or normal\$ or standard?) adj3 (value\$ or rang\$ or level\$ or threshold?)).tw.
 24 target\$.tw.
 25 ((tight\$ or intens\$ or aggressive\$ or strict\$ or rigid\$ or liberal\$ or conventional\$ or regular or
 usual or routin\$ or standard?) adj3 (control\$ or target\$ or goal\$ or rang\$ or therap\$ or regime\$ or
 treatment? or interven\$ or manag\$ or monitor\$)).tw.
 26 or/21-25
 27 and/20,26
 28 (("American Diabetic Association" or ADA or "Australasian P?ediatic Endocrine Group" or APEG
 or "International Society for P?ediatic and Adolescent Diabetes" or ISPAD) adj3 (value\$ or
 target\$ or goal\$ or rang\$ or level\$ or threshold?)).tw.
 29 (glyc?emi\$ adj3 control\$ adj3 (target\$ or goal\$)).tw.
 30 or/27-29
 31 TIME FACTORS/
 32 ((time or timing or prandial or preprandial or postprandial) adj3 (monitor\$ or test\$ or measur\$ or
 value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).tw.
 33 or/31-32
 34 and/20,33
 35 or/30,34
 36 and/9,13,35

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp NEWBORN/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatic\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8

10 INSULIN DEPENDENT DIABETES MELLITUS/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 JUVENILE DIABETES MELLITUS/
15 and/9,13
16 or/14-15
17 GLUCOSE BLOOD LEVEL/
18 BLOOD GLUCOSE MONITORING/
19 GLYCEMIC CONTROL/
20 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
21 (F#G or P#G or R#G or BG or HMBG or SMBG or BGM).ti,ab.
22 (normoglyc?emi\$ or euglyc?emi\$).ti,ab.
23 (glyc?emi\$ adj3 (norm\$ or near?norm\$)).ti,ab.
24 or/17-23
25 STANDARD/
26 REFERENCE VALUE/ or NORMAL VALUE/
27 MOTIVATION/
28 ((reference? or normal\$ or standard?) adj3 (value\$ or rang\$ or level\$ or threshold?)).ti,ab.
29 target\$.ti.
30 target\$.ab. /freq=2
31 ((tight\$ or intens\$ or aggressive\$ or strict\$ or rigid\$ or liberal\$ or conventional\$ or regular or
usual or routin\$ or standard?) adj3 (control\$ or target\$ or goal\$ or rang\$ or therap\$ or regime\$ or
treatment? or interven\$ or manag\$ or monitor\$)).ti,ab.
32 or/25-31
33 and/24,32
34 (("American Diabetic Association" or ADA or "Australasian P?ediatric Endocrine Group" or APEG
or "International Society for P?ediatric and Adolescent Diabetes" or ISPAD) adj3 (value\$ or
target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
35 (glyc?emi\$ adj3 control\$ adj3 (target\$ or goal\$)).ti,ab.
36 or/33-35
37 TIME/
38 ((time or timing or prandial or preprandial or postprandial) adj3 (monitor\$ or test\$ or measur\$ or
value\$ or target\$ or goal\$ or rang\$ or level\$ or threshold?)).ti,ab.
39 or/37-38
40 and/24,39
41 or/36,40
42 and/16,41
43 limit 42 to english language
44 conference abstract.pt.
45 letter.pt. or LETTER/
46 note.pt.
47 editorial.pt.
48 CASE REPORT/ or CASE STUDY/
49 (letter or comment* or abstracts).ti.
50 or/44-49
51 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
52 50 not 51

53 ANIMAL/ not HUMAN/
 54 NONHUMAN/
 55 exp ANIMAL EXPERIMENT/
 56 exp EXPERIMENTAL ANIMAL/
 57 ANIMAL MODEL/
 58 exp RODENT/
 59 (rat or rats or mouse or mice).ti.
 60 or/52-59
 61 43 not 60

A.7 Type 1 diabetes – blood glucose monitoring

Review questions:

How frequently should finger-prick blood glucose testing be performed in children and young people with type 1 diabetes?

What is the effectiveness of finger-prick blood glucose testing compared with continuous glucose monitoring in children and young people with type 1 diabetes?

What is the effectiveness of continuous glucose monitoring performed intermittently compared with continuous glucose monitoring performed in real-time in children and young people with type 1 diabetes?

MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 and/9,13
 15 BLOOD GLUCOSE SELF-MONITORING/
 16 ((glucose or blood sugar\$ or insulin\$) adj3 (meter\$ or monitor\$ or sensor\$ or capillary)).ti,ab.
 17 (HBGM or SMBG or BGM or CGM or CGMS or glucometer or glucometer\$ or (glucose adj meter\$)).ti,ab.

18 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.
 19 or/15-18
 20 and/14,19
 21 limit 20 to english language
 22 LETTER/
 23 EDITORIAL/
 24 NEWS/
 25 exp HISTORICAL ARTICLE/
 26 ANECDOTES AS TOPIC/
 27 COMMENT/
 28 CASE REPORT/
 29 (letter or comment* or abstracts).ti.
 30 or/22-29
 31 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 32 30 not 31
 33 ANIMALS/ not HUMANS/
 34 exp ANIMALS, LABORATORY/
 35 exp ANIMAL EXPERIMENTATION/
 36 exp MODELS, ANIMAL/
 37 exp RODENTIA/
 38 (rat or rats or mouse or mice).ti.
 39 or/32-38
 40 21 not 39

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 or/6-7
 9 and/5,8
 10 ((glucose or blood sugar\$ or insulin\$) adj3 (meter\$ or monitor\$ or sensor\$ or capillary)).ti,ab.
 11 (HBGM or SMBG or BGM or CGM or CGMS or glucometer or glucosemeter\$ or (glucose adj meter\$)).ti,ab.
 12 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.
 13 or/10-12
 14 and/9,13
 15 limit 14 to english language

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/

2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 and/9,13
15 BLOOD GLUCOSE SELF-MONITORING/
16 ((glucose or blood sugar\$ or insulin\$) adj3 (meter\$ or monitor\$ or sensor\$ or capillary)).ti,ab.
17 (HBGM or SMBG or BGM or CGM or CGMS or glucometer or glucometer\$ or (glucose adj
meter\$)).ti,ab.
18 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.
19 or/15-18
20 and/14,19

Database of Abstracts of Reviews of Effects

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,ti,ab,jw,rw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).kw,ti,ab,jw,rw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,ti,ab,jw,rw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,ti,ab,jw,rw.
5 or/1-4
6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).kw,ti,ab.
7 (IDDM or T1D or TID or DM1 or DMI).kw,ti,ab.
8 or/6-7
9 and/5,8
10 ((glucose or blood sugar\$ or insulin) adj3 (meter\$ or monitor\$ or sensor\$ or capillary)).tw,tx,kw.
11 (HBGM or SMBG or BGM or CGM or CGMS or glucometer or glucometer\$ or (glucose adj
meter\$)).tw,tx.
12 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").tw,tx.
13 or/10-12
14 and/9,13

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/

2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
12 (IDDM or T1D or TID or DM1 or DMI).tw.
13 or/10-12
14 and/9,13
15 BLOOD GLUCOSE SELF-MONITORING/
16 ((glucose or blood sugar\$ or insulin) adj3 (meter\$ or monitor\$ or sensor\$ or capillary)).tw.
17 (HBGM or SMBG or BGM or CGM or CGMS or glucometer or glucometer\$ or (glucose adj
meter\$)).tw.
18 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").tw.
19 or/15-18
20 and/14,19

Embase

Searches
1 exp ADOLESCENT/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9 or/1-8
10 INSULIN DEPENDENT DIABETES MELLITUS/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 JUVENILE DIABETES MELLITUS/
15 and/9,13
16 or/14-15
17 BLOOD GLUCOSE MONITORING/
18 ((glucose or blood sugar\$ or insulin\$) adj3 (meter\$ or monitor\$ or sensor\$ or capillary)).ti,ab.
19 (HBGM or SMBG or BGM or CGM or CGMS or glucometer or glucometer\$ or (glucose adj
meter\$)).ti,ab.
20 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.

21 or/17-20
 22 and/16,21
 23 limit 22 to english language
 24 conference abstract.pt.
 25 letter.pt. or LETTER/
 26 note.pt.
 27 editorial.pt.
 28 CASE REPORT/ or CASE STUDY/
 29 (letter or comment* or abstracts).ti.
 30 or/24-29
 31 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 32 30 not 31
 33 ANIMAL/ not HUMAN/
 34 NONHUMAN/
 35 exp ANIMAL EXPERIMENT/
 36 exp EXPERIMENTAL ANIMAL/
 37 ANIMAL MODEL/
 38 exp RODENT/
 39 (rat or rats or mouse or mice).ti.
 40 or/32-39
 41 23 not 40

A.8 Type 1 diabetes – blood ketone monitoring

Review question: What is the effectiveness of blood ketone monitoring compared with urine ketone monitoring for the prevention of diabetic ketoacidosis?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 exp KETOSIS/
 14 (ketosis or ketoacid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 15 (DK or DKA).ti,ab.

16 or/10-15
 17 exp KETONES/
 18 HYDROXYBUTYRATES/
 19 (ketone? or acetone? or acetoacetate? or OHB or 3HB or betaOHB or BOHB or 3OHB or hydroxy
 but\$ or hydroxybut\$ or betahydroxybut\$ or 3hydroxybut\$).ti,ab.
 20 or/17-19
 21 and/9,16,20
 22 limit 21 to english language
 23 LETTER/
 24 EDITORIAL/
 25 NEWS/
 26 exp HISTORICAL ARTICLE/
 27 ANECDOTES AS TOPIC/
 28 COMMENT/
 29 CASE REPORT/
 30 (letter or comment* or abstracts).ti.
 31 or/23-30
 32 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 33 31 not 32
 34 ANIMALS/ not HUMANS/
 35 exp ANIMALS, LABORATORY/
 36 exp ANIMAL EXPERIMENTATION/
 37 exp MODELS, ANIMAL/
 38 exp RODENTIA/
 39 (rat or rats or mouse or mice).ti.
 40 or/33-39
 41 22 not 40

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
 8 (ketosis or ketoacid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 9 (DK or DKA).ti,ab.
 10 or/6-9
 11 (ketone? or acetone? or acetoacetate? or OHB or 3HB or betaOHB or BOHB or 3OHB or hydroxy
 but\$ or hydroxybut\$ or betahydroxybut\$ or 3hydroxybut\$).ti,ab.
 12 and/5,10-11

Cochrane Central Register of Controlled Trials

Searches

1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
15 (DK or DKA).ti,ab.
16 or/10-15
17 exp KETONES/
18 HYDROXYBUTYRATES/
19 (ketone? or acetone? or acetoacetate? or OHB or 3HB or betaOHB or BOHB or 3OHB or hydroxy
but\$ or hydroxybut\$ or betahydroxybut\$ or 3hydroxybut\$).ti,ab.
20 or/17-19
21 and/9,16,20

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw,tx,kw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw.
5 or/1-4
6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw,tx,kw.
7 (IDDM or T1D or TID or DM1 or DMI).tw,tx.
8 (ketosis or ketoacid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).tw,tx,kw.
9 (DK or DKA).tw,tx.
10 or/6-9
11 (ketone? or acetone? or acetoacetate? or OHB or 3HB or betaOHB or BOHB or 3OHB or hydroxy
but\$ or hydroxybut\$ or betahydroxybut\$ or 3hydroxybut\$).tw,tx,kw.
12 and/5,10-11

Embase

Searches
1 exp ADOLESCENT/

2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 KETOACIDOSIS/ or DIABETIC KETOACIDOSIS/
 14 KETONURIA/
 15 (ketosis or ketoacid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 16 (DK or DKA).ti,ab.
 17 or/10-16
 18 and/9,17
 19 JUVENILE DIABETES MELLITUS/
 20 or/18-19
 21 exp KETONE/
 22 3 HYDROXYBUTYRIC ACID/ or HYDROXYBUTYRIC ACID/
 23 (ketone? or acetone? or acetoacetate? or OHB or 3HB or betaOHB or BOHB or 3OHB or hydroxy
 but\$ or hydroxybut\$ or betahydroxybut\$ or 3hydroxybut\$).ti,ab.
 24 or/21-23
 25 and/20,24
 26 limit 25 to english language
 27 conference abstract.pt.
 28 letter.pt. or LETTER/
 29 note.pt.
 30 editorial.pt.
 31 CASE REPORT/ or CASE STUDY/
 32 (letter or comment* or abstracts).ti.
 33 or/27-32
 34 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 35 33 not 34
 36 ANIMAL/ not HUMAN/
 37 NONHUMAN/
 38 exp ANIMAL EXPERIMENT/
 39 exp EXPERIMENTAL ANIMAL/
 40 ANIMAL MODEL/
 41 exp RODENT/
 42 (rat or rats or mouse or mice).ti.
 43 or/35-42
 44 26 not 43

A.9 Type 1 diabetes – dietary advice

Review questions:

What is the effectiveness of dietetic advice using carbohydrate counting in maintaining glycaemic control in children and young people with type 1 diabetes?

What is the effectiveness of dietetic advice using glycaemic index in maintaining glycaemic control in children and young people with type 1 diabetes?

Ovid MEDLINE(R)

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# Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen$ or teen$ or youth$ or young or juvenile? or minors or highschool$).ti,ab,jw.
3 exp CHILD/
4 (child$ or schoolchild$ or "school age" or "school aged" or preschool$ or toddler$ or kid? or
kindergar$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan$ or neonat$ or newborn$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric$ or pubert$ or prepubert$ or pubescen$ or prepubescen$).ti,ab,jw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend$ or juvenile or child$
or earl$ or labile or brittle or sudden onset or auto immun$ or auto?immun$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 GLYCEMIC INDEX/
15 DIETARY CARBOHYDRATES/
16 (glyc?emic adj3 (index or indice? or load)).ti,ab.
17 ((carbohydrate? or CHO) adj3 (count$ or quant$ or exchang$ or diet$ or intake)).ti,ab.
18 (CHOx or GI).ti,ab.
19 or/14-18
20 and/9,13,19
21 limit 20 to english language
22 LETTER/
23 EDITORIAL/
24 NEWS/
25 exp HISTORICAL ARTICLE/
26 ANECDOTES AS TOPIC/
27 COMMENT/
28 CASE REPORT/
29 (letter or comment* or abstracts).ti.
30 or/22-29
31 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
32 30 not 31
33 ANIMALS/ not HUMANS/
```

34 exp ANIMALS, LABORATORY/
 35 exp ANIMAL EXPERIMENTATION/
 36 exp MODELS, ANIMAL/
 37 exp RODENTIA/
 38 (rat or rats or mouse or mice).ti.
 39 or/32-38
 40 21 not 39

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 or/6-7
 9 (glyc?emic adj3 (index or indice? or load)).ti,ab.
 10 ((carbohydrate? or CHO) adj3 (count\$ or quant\$ or exchang\$ or diet\$ or intake)).ti,ab.
 11 (CHOx or GI).ti,ab.
 12 or/9-11
 13 and/5,8,12
 14 limit 13 to english language

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 GLYCEMIC INDEX/
 15 DIETARY CARBOHYDRATES/
 16 (glyc?emic adj3 (index or indice? or load)).ti,ab.
 17 ((carbohydrate? or CHO) adj3 (count\$ or quant\$ or exchang\$ or diet\$ or intake)).ti,ab.

- 18 (CHOx or GI).ti,ab.
- 19 or/14-18
- 20 and/9,13,19

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,tw,tx,jw,rw.
- 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,tw,tx,jw,rw.
- 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,tw,tx,jw,rw.
- 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,tw,tx,jw,rw.
- 5 or/1-4
- 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).kw,tw,tx.
- 7 (IDDM or T1D or T1D or DM1 or DMI).kw,tw,tx.
- 8 or/6-7
- 9 (glyc?emic adj3 (index or indice? or load)).tw,tx,kw.
- 10 ((carbohydrate? or CHO) adj3 (count\$ or quant\$ or exchang\$ or diet\$ or intake)).tw,tx,kw.
- 11 (CHOx or GI).tw,tx.
- 12 or/9-11
- 13 and/5,8,12

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 1/
- 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
- 12 (IDDM or T1D or T1D or DM1 or DMI).tw.
- 13 or/10-12
- 14 GLYCEMIC INDEX/
- 15 DIETARY CARBOHYDRATES/
- 16 (glyc?emic adj3 (index or indice? or load)).tw.
- 17 ((carbohydrate? or CHO) adj3 (count\$ or quant\$ or exchang\$ or diet\$ or intake)).tw.
- 18 (CHOx or GI).tw.
- 19 or/14-18
- 20 and/9,13,19

Embase

Searches
1 exp ADOLESCENT/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9 or/1-8
10 INSULIN DEPENDENT DIABETES MELLITUS/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
13 or/10-12
14 JUVENILE DIABETES MELLITUS/
15 and/9,13
16 or/14-15
17 GLYCEMIC INDEX/
18 CARBOHYDRATE DIET/
19 exp CARBOHYDRATE INTAKE/
20 (glyc?emic adj3 (index or indice? or load)).ti,ab.
21 ((carbohydrate? or CHO) adj3 (count\$ or quant\$ or exchang\$ or diet\$ or intake)).ti,ab.
22 (CHOx or GI).ti,ab.
23 or/17-22
24 and/16,23
25 limit 24 to english language
26 conference abstract.pt.
27 letter.pt. or LETTER/
28 note.pt.
29 editorial.pt.
30 CASE REPORT/ or CASE STUDY/
31 (letter or comment* or abstracts).ti.
32 or/26-31
33 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
34 32 not 33
35 ANIMAL/ not HUMAN/
36 NONHUMAN/
37 exp ANIMAL EXPERIMENT/
38 exp EXPERIMENTAL ANIMAL/
39 ANIMAL MODEL/
40 exp RODENT/
41 (rat or rats or mouse or mice).ti.
42 or/34-41
43 25 not 42

PsycINFO

- # Searches
- 1 adolescen\$.ag.
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,id,jw.
- 3 (child\$ or school\$ or preschool\$).ag.
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,id,jw.
- 5 (infan\$ or neonat\$).ag.
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies or p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,id,jw.
- 7 or/1-6
- 8 DIABETES MELLITUS/
- 9 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab,id.
- 10 (IDDM or T1D or TID or DM1 or DMI).ti,ab,id.
- 11 or/8-10
- 12 DIETS/
- 13 exp CARBOHYDRATES/
- 14 (glyc?emic adj3 (index or indice? or load)).ti,ab,id.
- 15 ((carbohydrate? or CHO) adj3 (count\$ or quant\$ or exchang\$ or diet\$ or intake)).ti,ab,id.
- 16 (CHOx or GI).ti,ab,id.
- 17 or/12-16
- 18 and/7,11,17
- 19 limit 18 to english language
- 20 (book or dissertation abstract or encyclopedia).pt.
- 21 19 not 20

CINAHL with Full Text

- # Query Limiters/Expanders
- S21 S6 AND S9 AND S20 Limiters - English Language; Exclude MEDLINE records
Search modes - Boolean/Phrase
- S20 S16 OR S19 Search modes - Boolean/Phrase
- S19 S17 AND S18 Search modes - Boolean/Phrase
- S18 TI (count* or quant* or exchang* or diet* or intake) or AB (count* or quant* or exchang* or diet* or intake) Search modes - Boolean/Phrase
- S17 TI (carbohydrate* or CHO) or AB (carbohydrate* or CHO) Search modes - Boolean/Phrase
- S16 S10 OR S11 OR S12 OR S13 OR S14 OR S15 Search modes - Boolean/Phrase
- S15 TI (glycaemic load*) or AB (glycaemic load*) Search modes - Boolean/Phrase
- S14 TI (glycemic load*) or AB (glycemic load*) Search modes - Boolean/Phrase
- S13 AB (glycemic index) or AB (glycaemic index) Search modes - Boolean/Phrase
- S12 TI (glycemic index) or TI (glycaemic index) Search modes - Boolean/Phrase
- S11 (MH "Dietary Carbohydrates+") Search modes - Boolean/Phrase
- S10 (MH "Glycemic Load") OR (MH "Glycemic Index") Search modes - Boolean/Phrase
- S9 S7 OR S8 Search modes - Boolean/Phrase
- S8 TI (diabet* N5 ("type one" or "type 1" or "type I" or "insulin depend*" or juvenile or child* or earl* or labile or brittle or "sudden onset" or "auto immun*" or autoimmun* or "auto-immun*)) OR AB (diabet* N5 ("type one" or "type 1" or "type I" or "insulin depend*" or juvenile or child* or earl* or

- labile or brittle or "sudden onset" or "auto immun*" or autoimmun* or "auto-immun*")) Search modes - Boolean/Phrase
- S7 (MH "Diabetes Mellitus, Type 1+") Search modes - Boolean/Phrase
- S6 S1 OR S2 OR S3 OR S4 OR S5 Search modes - Boolean/Phrase
- S5 TI (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) OR AB (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) or SO (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) Search modes - Boolean/Phrase
- S4 TI (infan* or neonat* or newborn* or baby or babies) OR AB (infan* or neonat* or newborn* or baby or babies) OR SO (infan* or neonat* or newborn* or baby or babies) Search modes - Boolean/Phrase
- S3 TI (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR AB (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR SO (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) Search modes - Boolean/Phrase
- S2 TI (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR AB (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR SO (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) Search modes - Boolean/Phrase
- S1 (MH "Infant, Newborn+") OR (MH "Infant+") OR (MH "Child, Preschool") OR (MH "Child+") OR (MH "Adolescence+") Search modes - Boolean/Phrase

A.10 Type 1 and type 2 diabetes – diabetic ketoacidosis – symptoms and signs

Review question: What is the predictive value of symptoms, signs and biochemical abnormalities as indicators of diabetic ketoacidosis in children and young people?

Ovid MEDLINE(R)

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 DIABETIC KETOACIDOSIS/
- 11 (DK or DKA).ti,ab.
- 12 or/10-11
- 13 exp KETOSIS/

14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 POLYDIPSIA/
22 DRINKING BEHAVIOR/
23 THIRST/
24 (polyd#psi\$ or dehydrat\$ or ((excess\$ or frequen\$) adj3 (thirst\$ or fluid intake or drink\$))).ti,ab.
25 or/21-24
26 POLYURIA/
27 (polyuri\$ or ((excess\$ or frequen\$) adj3 (urin\$ or urine))).ti,ab.
28 or/26-27
29 WEIGHT LOSS/
30 (weight adj3 (loss or lost or reduc\$)).ti,ab.
31 or/29-30
32 DEHYDRATION/
33 (dehydrat\$ or rehydrat\$ or re hydrat\$ or hydration status).ti,ab.
34 or/32-33
35 NAUSEA/ or VOMITING/
36 (nausea or emesis or vomit\$).ti,ab.
37 or/35-36
38 ABDOMINAL PAIN/ or ABDOMEN, ACUTE/
39 ((abdom#n\$ adj3 pain\$) or acute abdomen).ti,ab.
40 or/38-39
41 DYSPNEA/
42 TACHYPNEA/
43 HYPERVENTILATION/
44 (respirat\$ adj (distress or rate)).ti,ab.
45 (breath\$ adj3 (difficult\$ or pattern\$ or abnormal\$ or dysfunction\$ or labo?r\$ or deep\$ or shallow\$
or rapid\$ or short\$ or effort\$)).ti,ab.
46 (gasping or kussmaul or dyspnea or tachypnea or breathless\$ or hyperventilat\$).ti,ab.
47 or/41-46
48 CONSCIOUSNESS DISORDERS/ or exp CONFUSION/
49 (conscious\$ or confus\$ or deliri\$ or mental state\$).ti,ab.
50 or/48-49
51 "SIGNS AND SYMPTOMS"/
52 (sign? or symptom? or indicat\$ or presentation).ti,ab.
53 ((clinical or physical or presenting) adj3 (feature? or finding? or factor? or manifest\$ or
aspect?)).ti,ab.
54 or/51-53
55 or/25,28,31,34,37,40,47,50,54
56 exp HYPERGLYCEMIA/
57 hyperglyc?emi\$.ti,ab.

58 ((high or elevat\$ or excess\$ or abnormal\$ or above or extreme\$) adj3 (blood glucose or blood sugar?)).ti,ab.

59 BLOOD GLUCOSE/an

60 (BGM or glucometer or glucometer\$ or (glucose adj meter\$)).ti,ab.

61 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.

62 or/56-61

63 exp KETOSIS/

64 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuria or hyperketonuria or keton?emi\$ or hyperketon?emi\$ or ketogenesis).ti,ab.

65 KETONES/

66 3-HYDROXYBUTYRIC ACID/

67 HYDROXYBUTYRATES/

68 or/65-67

69 URINALYSIS/

70 BLOOD CHEMICAL ANALYSIS/

71 or/69-70

72 and/68,71

73 KETONES/an, bl, ur [Analysis, Blood, Urine]

74 3-HYDROXYBUTYRIC ACID/an, bl, ur [Analysis, Blood, Urine]

75 HYDROXYBUTYRATES/an, bl, ur [Analysis, Blood, Urine]

76 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.

77 ((urine or urinary) adj3 (dipstick or dip test)).ti,ab.

78 or/63-64,72-77

79 ACIDOSIS/

80 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti,ab.

81 HYDROGEN-ION CONCENTRATION/

82 ACID-BASE EQUILIBRIUM/

83 ACID-BASE IMBALANCE/

84 BICARBONATES/

85 ELECTROLYTES/

86 or/81-85

87 BLOOD GAS ANALYSIS/

88 BLOOD CHEMICAL ANALYSIS/

89 or/87-88

90 and/86,89

91 HYDROGEN-ION CONCENTRATION/an, bl, ur [Analysis, Blood, Urine]

92 ACID-BASE EQUILIBRIUM/an, bl [Analysis, Blood]

93 ACID-BASE IMBALANCE/bl, ur [Blood, Urine]

94 BICARBONATES/an, bl, ur [Analysis, Blood, Urine]

95 ELECTROLYTES/an, bl, ur [Analysis, Blood, Urine]

96 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (acid base or pH or bicarbonate\$ or electrolyte\$)).ti,ab.

97 (blood gas or ABG or blood test\$).ti,ab.

98 or/79-80,90-97

99 (biochemical adj3 (variable? or measur\$ or marker? or parameter? or abnormal\$)).ti,ab.

100 or/62,78,98-99

101 or/55,100
 102 exp "SENSITIVITY AND SPECIFICITY"/
 103 exp BLOOD CHEMICAL ANALYSIS/
 104 URINALYSIS/
 105 (detect\$ or diagnos\$ or predict\$ or sensitiv\$ or accuracy or test\$).mp.
 106 or/102-105
 107 and/20,101,106
 108 limit 107 to english language
 109 LETTER/
 110 EDITORIAL/
 111 NEWS/
 112 exp HISTORICAL ARTICLE/
 113 ANECDOTES AS TOPIC/
 114 COMMENT/
 115 CASE REPORT/
 116 (letter or comment* or abstracts).ti.
 117 or/109-116
 118 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 119 117 not 118
 120 ANIMALS/ not HUMANS/
 121 exp ANIMALS, LABORATORY/
 122 exp ANIMAL EXPERIMENTATION/
 123 exp MODELS, ANIMAL/
 124 exp RODENTIA/
 125 (rat or rats or mouse or mice).ti.
 126 or/119-125
 127 108 not 126

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabetic ketoacidosis or DK or DKA).ti,ab.
 7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 8 diabet\$.mp.
 9 and/7-8
 10 5 and (6 or 9)
 11 (polyd#psi\$ or dehydrat\$ or ((excess\$ or frequen\$) adj3 (thirst\$ or fluid intake or drink\$))).ti,ab.
 12 (polyuri\$ or ((excess\$ or frequen\$) adj3 (urinat\$ or urine))).ti,ab.
 13 (weight adj3 (loss or lost or reduc\$)).ti,ab.
 14 (dehydrat\$ or rehydrat\$ or re hydrat\$ or hydration status).ti,ab.

- 15 (nausea or emesis or vomit\$.ti,ab.
16 ((abdom#n\$ adj3 pain\$) or acute abdomen).ti,ab.
17 (respirat\$ adj (distress or rate)).ti,ab.
18 (breath\$ adj3 (difficult\$ or pattern\$ or abnormal\$ or dysfunction\$ or labo?r\$ or deep\$ or shallow\$ or rapid\$ or short\$ or effort\$)).ti,ab.
19 (gasping or kussmaul or dyspnea or tchypnea or breathless\$ or hyperventilat\$).ti,ab.
20 (conscious\$ or confus\$ or deliri\$ or mental state\$).ti,ab.
21 (sign? or symptom? or indicat\$ or presentation).ti,ab.
22 ((clinical or physical or presenting) adj3 (feature? or finding? or factor? or manifest\$ or aspect?)).ti,ab.
23 or/11-22
24 hyperglyc?emi\$.ti,ab.
25 ((high or elevat\$ or excess\$ or abnormal\$ or above or extreme\$) adj3 (blood glucose or blood sugar?)).ti,ab.
26 (BGM or glucometer or glucometer\$ or (glucose adj meter\$)).ti,ab.
27 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.
28 or/24-27
29 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuria or hyperketonuria or keton?emi\$ or hyperketon?emi\$ or ketogenesis).ti,ab.
30 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.
31 ((urine or urinary) adj3 (dipstick or dip test)).ti,ab.
32 or/29-31
33 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti,ab.
34 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (acid base or pH or bicarbonate\$ or electrolyte\$)).ti,ab.
35 (blood gas or ABG or blood test\$).ti,ab.
36 or/33-35
37 (biochemical adj3 (variable? or measur\$ or marker? or parameter? or abnormal\$)).ti,ab.
38 or/23,28,32,36-37
39 (detect\$ or diagnos\$ or predict\$ or sensitiv\$ or accuracy or test\$).mp.
40 and/10,38-39

Cochrane Central Register of Controlled Trials

- # Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).ti,ab,jw.
9 or/1-8

10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).ti,ab.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 POLYDIPSIA/
22 DRINKING BEHAVIOR/
23 THIRST/
24 (polyd#psi\$ or dehydrat\$ or ((excess\$ or frequen\$) adj3 (thirst\$ or fluid intake or drink\$))).ti,ab.
25 or/21-24
26 POLYURIA/
27 (polyuri\$ or ((excess\$ or frequen\$) adj3 (urin\$ or urine))).ti,ab.
28 or/26-27
29 WEIGHT LOSS/
30 (weight adj3 (loss or lost or reduc\$)).ti,ab.
31 or/29-30
32 DEHYDRATION/
33 (dehydrat\$ or rehydrat\$ or re hydrat\$ or hydration status).ti,ab.
34 or/32-33
35 NAUSEA/ or VOMITING/
36 (nausea or emesis or vomit\$).ti,ab.
37 or/35-36
38 ABDOMINAL PAIN/ or ABDOMEN, ACUTE/
39 ((abdom#n\$ adj3 pain\$) or acute abdomen).ti,ab.
40 or/38-39
41 DYSPNEA/
42 TACHYPNEA/
43 HYPERVENTILATION/
44 (respirat\$ adj (distress or rate)).ti,ab.
45 (breath\$ adj3 (difficult\$ or pattern\$ or abnormal\$ or dysfunction\$ or labo?r\$ or deep\$ or shallow\$
or rapid\$ or short\$ or effort\$)).ti,ab.
46 (gasping or kussmaul or dyspnea or tchypnea or breathless\$ or hyperventilat\$).ti,ab.
47 or/41-46
48 CONSCIOUSNESS DISORDERS/ or exp CONFUSION/
49 (conscious\$ or confus\$ or deliri\$ or mental state\$).ti,ab.
50 or/48-49
51 "SIGNS AND SYMPTOMS"/
52 (sign? or symptom? or indicat\$ or presentation).ti,ab.
53 ((clinical or physical or presenting) adj3 (feature? or finding? or factor? or manifest\$ or
aspect?)).ti,ab.
54 or/51-53

55 or/25,28,31,34,37,40,47,50,54
56 exp HYPERGLYCEMIA/
57 hyperglyc?emi\$.ti,ab.
58 ((high or elevat\$ or excess\$ or abnormal\$ or above or extreme\$) adj3 (blood glucose or blood
sugar?)).ti,ab.
59 BLOOD GLUCOSE/an
60 (BGM or glucometer or glucosemeter\$ or (glucose adj meter\$)).ti,ab.
61 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.
62 or/56-61
63 exp KETOSIS/
64 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuria or hyperketonuria or keton?emi\$ or
hyperketon?emi\$ or ketogenesis).ti,ab.
65 KETONES/
66 3-HYDROXYBUTYRIC ACID/
67 HYDROXYBUTYRATES/
68 or/65-67
69 URINALYSIS/
70 BLOOD CHEMICAL ANALYSIS/
71 or/69-70
72 and/68,71
73 KETONES/an, bl, ur [Analysis, Blood, Urine]
74 3-HYDROXYBUTYRIC ACID/an, bl, ur [Analysis, Blood, Urine]
75 HYDROXYBUTYRATES/an, bl, ur [Analysis, Blood, Urine]
76 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (ketone? or hydroxy butyr\$ or
hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-
hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3
OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.
77 ((urine or urinary) adj3 (dipstick or dip test)).ti,ab.
78 or/63-64,72-77
79 ACIDOSIS/
80 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti,ab.
81 HYDROGEN-ION CONCENTRATION/
82 ACID-BASE EQUILIBRIUM/
83 ACID-BASE IMBALANCE/
84 BICARBONATES/
85 ELECTROLYTES/
86 or/81-85
87 BLOOD GAS ANALYSIS/
88 BLOOD CHEMICAL ANALYSIS/
89 or/87-88
90 and/86,89
91 HYDROGEN-ION CONCENTRATION/an, bl, ur [Analysis, Blood, Urine]
92 ACID-BASE EQUILIBRIUM/an, bl [Analysis, Blood]
93 ACID-BASE IMBALANCE/bl, ur [Blood, Urine]
94 BICARBONATES/an, bl, ur [Analysis, Blood, Urine]
95 ELECTROLYTES/an, bl, ur [Analysis, Blood, Urine]
96 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (acid base or pH or
bicarbonate\$ or electrolyte\$)).ti,ab.
97 (blood gas or ABG or blood test\$).ti,ab.

- 98 or/79-80,90-97
- 99 (biochemical adj3 (variable? or measur\$ or marker? or parameter? or abnormal\$)).ti,ab.
- 100 or/62,78,98-99
- 101 55 or 100
- 102 20 and 101
- 103 exp "SENSITIVITY AND SPECIFICITY"/
- 104 exp BLOOD CHEMICAL ANALYSIS/
- 105 URINALYSIS/
- 106 (detect\$ or diagnos\$ or predict\$ or sensitiv\$ or accuracy or test\$).mp.
- 107 or/103-106
- 108 102 and 107

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).kw,tw,tx,jw,rw.
- 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,tw,tx,jw,rw.
- 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,tw,tx,jw,rw.
- 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).kw,tw,tx,jw,rw.
- 5 or/1-4
- 6 (diabetic ketoacidosis or DK or DKA).kw,tw,tx.
- 7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).kw,tw,tx.
- 8 diabet\$.kw,tw,tx.
- 9 and/7-8
- 10 5 and (6 or 9)
- 11 POLYDIPSIA.kw.
- 12 DRINKING BEHAVIOR.kw.
- 13 THIRST.kw.
- 14 (polyd#psi\$ or dehydrat\$ or ((excess\$ or frequen\$) adj3 (thirst\$ or fluid intake or drink\$))).tw,tx.
- 15 or/11-14
- 16 POLYURIA.kw.
- 17 (polyuri\$ or ((excess\$ or frequen\$) adj3 (urin\$ or urine))).tw,tx.
- 18 or/16-17
- 19 WEIGHT LOSS.kw.
- 20 (weight adj3 (loss or lost or reduc\$)).tw,tx.
- 21 or/19-20
- 22 DEHYDRATION.kw.
- 23 (dehydrat\$ or rehydrat\$ or re hydrat\$ or hydration status).tw,tx.
- 24 or/22-23
- 25 (NAUSEA or VOMITING).kw.
- 26 (nausea or emesis or vomit\$).tw,tx.
- 27 or/25-26
- 28 (ABDOMINAL PAIN or ABDOMEN, ACUTE).kw.
- 29 ((abdom#n\$ adj3 pain\$) or acute abdomen).tw,tx.

30 or/28-29
31 DYSYPNEA.kw.
32 TACHYPNEA.kw.
33 HYPERVENTILATION.kw.
34 (respirat\$ adj (distress or rate)).tw,tx.
35 (breath\$ adj3 (difficult\$ or pattern\$ or abnormal\$ or dysfunction\$ or labo?r\$ or deep\$ or shallow\$
or rapid\$ or short\$ or effort\$)).tw,tx.
36 (gasping or kussmaul or dyspnea or tachypnea or breathless\$ or hyperventilat\$).tw,tx.
37 or/31-36
38 (CONSCIOUSNESS DISORDERS or CONFUSION or DELIRIUM).kw.
39 (conscious\$ or confus\$ or deliri\$ or mental state\$).tw,tx.
40 or/38-39
41 "SIGNS AND SYMPTOMS".kw.
42 (sign? or symptom? or indicat\$ or presentation).tw,tx.
43 ((clinical or physical or presenting) adj3 (feature? or finding? or factor? or manifest\$ or
aspect?)).tw,tx.
44 or/41-43
45 or/15,18,21,24,27,30,37,40,44
46 (HYPERGLYCEMIA or GLUCOSE INTOLERANCE).kw.
47 hyperglyc?emi\$.tw,tx.
48 ((high or elevat\$ or excess\$ or abnormal\$ or above or extreme\$) adj3 (blood glucose or blood
sugar?)).tw,tx.
49 (BGM or glucometer or glucometer\$ or (glucose adj meter\$)).tw,tx.
50 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").tw,tx.
51 or/46-50
52 (KETOSIS or DIABETIC KETOACIDOSIS).kw.
53 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuria or hyperketonuria or keton?emi\$ or
hyperketon?emi\$ or ketogenesis).tw,tx.
54 KETONES.kw.
55 3-HYDROXYBUTYRIC ACID.kw.
56 HYDROXYBUTYRATES.kw.
57 or/54-56
58 URINALYSIS.kw.
59 BLOOD CHEMICAL ANALYSIS.kw.
60 or/58-59
61 and/57,60
62 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (ketone? or hydroxy butyr\$ or
hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-
hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3
OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).tw,tx.
63 ((urine or urinary) adj3 (dipstick or dip test)).tw,tx.
64 or/52-53,61-63
65 ACIDOSIS.kw.
66 (acidosis or (blood? adj3 acid\$) or acid?emi\$).tw,tx.
67 HYDROGEN-ION CONCENTRATION.kw.
68 ACID-BASE EQUILIBRIUM.kw.
69 ACID-BASE IMBALANCE.kw.
70 BICARBONATES.kw.
71 ELECTROLYTES.kw.

72 or/67-71
73 BLOOD GAS ANALYSIS.kw.
74 BLOOD CHEMICAL ANALYSIS.kw.
75 or/73-74
76 and/72,75
77 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (acid base or pH or bicarbonate\$ or electrolyte\$)).tw,tx.
78 (blood gas or ABG or blood test\$).tw,tx.
79 or/65-66,76-78
80 (biochemical adj3 (variable? or measur\$ or marker? or parameter? or abnormal\$)).tw,tx.
81 or/51,64,79-80
82 or/45,81
83 "SENSITIVITY AND SPECIFICITY".kw.
84 "PREDICTIVE VALUE OF TESTS".kw.
85 BLOOD CHEMICAL ANALYSIS.kw.
86 BLOOD GAS ANALYSIS.kw.
87 URINALYSIS.kw.
88 (detect\$ or diagnos\$ or predict\$ or sensitiv\$ or accuracy or test\$).mp.
89 or/83-88
90 and/10,82,89

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).tw,jx,rw.
9 or/1-8
10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).tw.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).tw.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 POLYDIPSIA/

22 DRINKING BEHAVIOR/
 23 THIRST/
 24 (polyd#psi\$ or dehydrat\$ or ((excess\$ or frequen\$) adj3 (thirst\$ or fluid intake or drink\$)).tw.
 25 or/21-24
 26 POLYURIA/
 27 (polyuri\$ or ((excess\$ or frequen\$) adj3 (urin\$ or urine))).tw.
 28 or/26-27
 29 WEIGHT LOSS/
 30 (weight adj3 (loss or lost or reduc\$)).tw.
 31 or/29-30
 32 DEHYDRATION/
 33 (dehydrat\$ or rehydrat\$ or re hydrat\$ or hydration status).tw.
 34 or/32-33
 35 NAUSEA/ or VOMITING/
 36 (nausea or emesis or vomit\$).tw.
 37 or/35-36
 38 ABDOMINAL PAIN/ or ABDOMEN, ACUTE/
 39 ((abdom#n\$ adj3 pain\$) or acute abdomen).tw.
 40 or/38-39
 41 DYSPNEA/
 42 TACHYPNEA/
 43 HYPERVENTILATION/
 44 (respirat\$ adj (distress or rate)).tw.
 45 (breath\$ adj3 (difficult\$ or pattern\$ or abnormal\$ or dysfunction\$ or labo?r\$ or deep\$ or shallow\$
 or rapid\$ or short\$ or effort\$)).tw.
 46 (gasping or kussmaul or dyspnea or tachypnea or breathless\$ or hyperventilat\$).tw.
 47 or/41-46
 48 CONSCIOUSNESS DISORDERS/ or exp CONFUSION/
 49 (conscious\$ or confus\$ or deliri\$ or mental state\$).tw.
 50 or/48-49
 51 "SIGNS AND SYMPTOMS"/
 52 (sign? or symptom? or indicat\$ or presentation).tw.
 53 ((clinical or physical or presenting) adj3 (feature? or finding? or factor? or manifest\$ or
 aspect?)).tw.
 54 or/51-53
 55 or/25,28,31,34,37,40,47,50,54
 56 exp HYPERGLYCEMIA/
 57 hyperglyc?emi\$.tw.
 58 ((high or elevat\$ or excess\$ or abnormal\$ or above or extreme\$) adj3 (blood glucose or blood
 sugar?)).tw.
 59 BLOOD GLUCOSE/an
 60 (BGM or glucometer or glucometer\$ or (glucose adj meter\$)).tw.
 61 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").tw.
 62 or/56-61
 63 exp KETOSIS/
 64 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuria or hyperketonuria or keton?emi\$ or
 hyperketon?emi\$ or ketogenesis).tw.
 65 KETONES/

66 3-HYDROXYBUTYRIC ACID/
67 HYDROXYBUTYRATES/
68 or/65-67
69 URINALYSIS/
70 BLOOD CHEMICAL ANALYSIS/
71 or/69-70
72 and/68,71
73 KETONES/an, bl, ur [Analysis, Blood, Urine]
74 3-HYDROXYBUTYRIC ACID/an, bl, ur [Analysis, Blood, Urine]
75 HYDROXYBUTYRATES/an, bl, ur [Analysis, Blood, Urine]
76 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (ketone? or hydroxy butyr\$ or
hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-
hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3
OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).tw.
77 ((urine or urinary) adj3 (dipstick or dip test)).tw.
78 or/63-64,72-77
79 ACIDOSIS/
80 (acidosis or (blood? adj3 acid\$) or acid?emi\$).tw.
81 HYDROGEN-ION CONCENTRATION/
82 ACID-BASE EQUILIBRIUM/
83 ACID-BASE IMBALANCE/
84 BICARBONATES/
85 ELECTROLYTES/
86 or/81-85
87 BLOOD GAS ANALYSIS/
88 BLOOD CHEMICAL ANALYSIS/
89 or/87-88
90 and/86,89
91 HYDROGEN-ION CONCENTRATION/an, bl, ur [Analysis, Blood, Urine]
92 ACID-BASE EQUILIBRIUM/an, bl [Analysis, Blood]
93 ACID-BASE IMBALANCE/bl, ur [Blood, Urine]
94 BICARBONATES/an, bl, ur [Analysis, Blood, Urine]
95 ELECTROLYTES/an, bl, ur [Analysis, Blood, Urine]
96 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (acid base or pH or
bicarbonate\$ or electrolyte\$)).tw.
97 (blood gas or ABG or blood test\$).tw.
98 or/79-80,90-97
99 (biochemical adj3 (variable? or measur\$ or marker? or parameter? or abnormal\$)).tw.
100 or/62,78,98-99
101 55 or 100
102 20 and 101
103 exp "SENSITIVITY AND SPECIFICITY"/
104 exp BLOOD CHEMICAL ANALYSIS/
105 URINALYSIS/
106 (detect\$ or diagnos\$ or predict\$ or sensitiv\$ or accuracy or test\$).mp.
107 or/103-106
108 102 and 107

Embase

Searches
1 exp ADOLESCENT/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9 or/1-8
10 KETOACIDOSIS/
11 KETONURIA/
12 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
13 or/10-12
14 exp DIABETES MELLITUS/
15 diabet\$.mp.
16 or/14-15
17 and/13,16
18 DIABETIC KETOACIDOSIS/
19 (DK or DKA).ti,ab.
20 or/18-19
21 9 and (17 or 20)
22 POLYDIPSIA/
23 THIRST/
24 (polyd#psi\$ or dehydrat\$ or ((excess\$ or frequen\$) adj3 (thirst\$ or fluid intake or drink\$))).ti,ab.
25 or/22-24
26 POLYURIA/
27 (polyuri\$ or ((excess\$ or frequen\$) adj3 (urin\$ or urine))).ti,ab.
28 or/26-27
29 WEIGHT REDUCTION/
30 (weight adj3 (loss or lost or reduc\$)).ti,ab.
31 or/29-30
32 DEHYDRATION/
33 (dehydrat\$ or rehydrat\$ or re hydrat\$ or hydration status).ti,ab.
34 or/32-33
35 NAUSEA/ or VOMITING/
36 (nausea or emesis or vomit\$).ti,ab.
37 or/35-36
38 exp ABDOMINAL PAIN/ or ACUTE ABDOMEN/
39 ((abdom#n\$ adj3 pain\$) or acute abdomen).ti,ab.
40 or/38-39
41 DYSPNEA/ or TACHYPNEA/ or HYPERVENTILATION/
42 (respirat\$ adj (distress or rate)).ti,ab.
43 (breath\$ adj3 (difficult\$ or pattern\$ or abnormal\$ or dysfunction\$ or labo?r\$ or deep\$ or shallow\$ or rapid\$ or short\$ or effort\$)).ti,ab.

44 (gasping or kussmaul or dyspnea or tachypnea or breathless\$ or hyperventilat\$).ti,ab.
45 or/41-44
46 CONSCIOUSNESS LEVEL/
47 CONFUSION/ or DELIRIUM/
48 (conscious\$ or confus\$ or deliri\$ or mental state\$).ti,ab.
49 or/46-48
50 PHYSICAL DISEASE BY BODY FUNCTION/
51 (sign? or symptom? or indicat\$ or presentation).ti,ab.
52 ((clinical or physical or presenting) adj3 (feature? or finding? or factor? or manifest\$ or aspect?)).ti,ab.
53 or/50-52
54 or/25,28,31,34,37,40,45,49,53
55 HYPERGLYCEMIA/
56 hyperglyc?emi\$.ti,ab.
57 ((high or elevat\$ or excess\$ or abnormal\$ or above or extreme\$) adj3 (blood glucose or blood sugar?)).ti,ab.
58 GLUCOSE BLOOD LEVEL/
59 BLOOD GLUCOSE MONITORING/
60 BLOOD GLUCOSE METER/
61 (BGM or glucometer or glucometer\$ or (glucose adj meter\$)).ti,ab.
62 (finger prick or finger-prick or fingerstick or finger-stick or "finger stick").ti,ab.
63 or/55-62
64 KETOACIDOSIS/
65 KETONEMIA/
66 KETONURIA/
67 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuria or hyperketonuria or keton?emi\$ or hyperketon?emi\$ or ketogenesis).ti,ab.
68 KETONE/
69 KETONE BODY/
70 3-HYDROXYBUTYRIC ACID/
71 HYDROXYBUTYRIC ACID/
72 or/68-71
73 URINALYSIS/ or BLOOD ANALYSIS/ or BLOOD CHEMISTRY/
74 and/72-73
75 KETONE/an [Drug Analysis]
76 KETONE BODY/an [Drug Analysis]
77 3-HYDROXYBUTYRIC ACID/an [Drug Analysis]
78 HYDROXYBUTYRIC ACID/an [Drug Analysis]
79 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.
80 ((urine or urinary) adj3 (dipstick or dip test)).ti,ab.
81 or/64-67,74-80
82 ACIDOSIS/
83 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti,ab.
84 ACID BASE BALANCE/
85 BLOOD pH/
86 BICARBONATE/

87 ELECTROLYTE/
 88 or/84-87
 89 BLOOD ANALYSIS/ or BLOOD CHEMISTRY/ or BLOOD GAS ANALYSIS/
 90 and/88-89
 91 BICARBONATE BLOOD LEVEL/
 92 exp ELECTROLYTE BLOOD LEVEL/
 93 ACID BASE BALANCE/an [Drug Analysis]
 94 BICARBONATE/an [Drug Analysis]
 95 ELECTROLYTE/an [Drug Analysis]
 96 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (acid base or pH or
 bicarbonate\$ or electrolyte\$)).ti,ab.
 97 (blood gas or ABG or blood test\$).ti,ab.
 98 or/82-83,90-97
 99 (biochemical adj3 (variable? or measur\$ or marker? or parameter? or abnormal\$)).ti,ab.
 100 or/63,81,98-99
 101 or/54,100
 102 "SENSITIVITY AND SPECIFICITY"/
 103 DIAGNOSTIC ACCURACY/
 104 DIAGNOSTIC TEST/
 105 DIAGNOSTIC VALUE/
 106 PREDICTIVE VALUE/
 107 (detect\$ or diagnos\$ or predict\$ or sensitiv\$ or specificity).tw.
 108 or/102-107
 109 and/21,101,108
 110 limit 109 to english language
 111 conference abstract.pt.
 112 letter.pt. or LETTER/
 113 note.pt.
 114 editorial.pt.
 115 CASE REPORT/ or CASE STUDY/
 116 (letter or comment* or abstracts).ti.
 117 or/111-116
 118 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 119 117 not 118
 120 ANIMAL/ not HUMAN/
 121 NONHUMAN/
 122 exp ANIMAL EXPERIMENT/
 123 exp EXPERIMENTAL ANIMAL/
 124 ANIMAL MODEL/
 125 exp RODENT/
 126 (rat or rats or mouse or mice).ti.
 127 or/119-126
 128 110 not 127

A.11 Type 1 and type 2 diabetes – diabetic ketoacidosis – assessments, monitoring and investigations

Review questions:

What routine assessments and investigations should be used to guide management in children and young people who present with diabetic ketoacidosis?

Which of the following should be performed as clinical monitoring during treatment of diabetic ketoacidosis in children and young people:

- **general observations (for example, heart and respiratory rate and blood pressure)**
- **body weight**
- **hydration status**
- **fluid balance**
- **neurological observations**
- **electrocardiographic (ECG) monitoring?**

Which of the following laboratory investigations should be performed to monitor children and young people during treatment for diabetic ketoacidosis:

- **blood glucose**
- **blood or urine ketones**
- **serum urea or electrolytes**
- **acid/base status?**

Ovid MEDLINE(R)

- # Searches
- 1 ADOLESCENT/ or MINORS/
(adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
- 3 exp CHILD/
(child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/

6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre
pubescen\$).ti,ab,jw.
9 or/1-8
10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).ti,ab.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 exp VITAL SIGNS/
22 SYMPTOM ASSESSMENT/
23 exp AIRWAY MANAGEMENT/
24 exp INTUBATION/
25 exp NEUROLOGIC EXAMINATION/
26 BLOOD PRESSURE DETERMINATION/
27 exp CONFUSION/
28 CONSCIOUSNESS DISORDERS/
29 GLASGOW COMA SCALE/
30 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ti.
31 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ab. /freq=2
32 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ti.
33 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ab. /freq=2
34 or/21-33
35 and/20,34
36 exp BODY WEIGHT CHANGES/
37 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ti.
38 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ab. /freq=2
39 or/36-38
40 and/20,39
41 DEHYDRATION/
42 (dehydrat\$ or hydration status or rehydrate\$ or re hydrat\$).ti,ab.

43 WATER-ELECTROLYTE BALANCE/
44 WATER-ELECTROLYTE IMBALANCE/
45 exp FLUID THERAPY/
46 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
balance? or imbalance?)).ti.
47 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
balance? or imbalance?)).ab. /freq=2
48 (volume adj3 expan\$).ti,ab.
49 OLIGURIA/
50 ((urine or urinary) adj3 (reduc\$ or decreas\$ or drop\$ or fall\$ or produc\$ or output\$)).ti,ab.
51 REGIONAL BLOOD FLOW/ and (FINGERS/bs or CAPILLARIES/ph)
52 capillary refill\$.ti,ab.
53 SKIN/
54 (skin turgor or skin colo?r or pinch test).ti,ab.
55 EYE/
56 sunken eye?.ti,ab.
57 exp LOWER EXTREMITY/
58 exp UPPER EXTREMITY/
59 (cold adj3 (extremit\$ or limb? or hand? or finger? or foot or feet or toe?)).ti,ab.
60 MOUTH MUCOSA/
61 (mucosa or mucous membrane?).ti,ab.
62 or/41-61
63 and/20,62
64 ELECTROCARDIOGRAPHY/
65 (electrocardio\$ or ECG).ti,ab.
66 or/64-65
67 and/20,66
68 or/35,40,63,67
69 CLINICAL LABORATORY TECHNIQUES/
70 BLOOD GAS ANALYSIS/
71 URINALYSIS/
72 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ti.
73 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ab. /freq=2
74 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).ti.
75 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).ab. /freq=2
76 or/69-75
77 and/20,76
78 BLOOD GLUCOSE/an [Analysis]
79 GLUCOSE TOLERANCE TEST/
80 (OGTT or FPG or fasting plasma glucose).ti,ab.
81 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (glucose or blood sugar\$)).ti.

82 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (glucose or blood sugar\$)).ab. /freq=2

83 or/78-82

84 and/20,83

85 KETONES/an, bl, ur [Analysis, Blood, Urine]

86 exp KETONE BODIES/an, bl, ur [Analysis, Blood, Urine]

87 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (ketone? or hydroxy butyr\$ or
hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-
hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3
OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.

88 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta
hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$
or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB"
or "3-HB" or 3HB)).ti,ab.

89 or/85-88

90 POINT-OF-CARE SYSTEMS/
91 (near patient or bedside or bed side or point of care).ti,ab.

92 or/89-91

93 and/20,92

94 PLASMA/ and OSMOLAR CONCENTRATION/
95 ((plasma or serum or blood) adj3 (osmola\$ or tonicity)).ti,ab.

96 HYDROGEN-ION CONCENTRATION/
97 ACID-BASE EQUILIBRIUM/
98 ACID-BASE IMBALANCE/
99 BICARBONATES/an, bl, ur [Analysis, Blood, Urine]

100 ELECTROLYTES/an, bl, ur [Analysis, Blood, Urine]

101 SODIUM/an, bl, ur [Analysis, Blood, Urine]

102 POTASSIUM/an, bl, ur [Analysis, Blood, Urine]

103 exp CHLORIDES/an, bl, ur [Analysis, Blood, Urine]

104 UREA/an, bl, ur [Analysis, Blood, Urine]

105 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (acid base or pH or electrolyte\$
or sodium or potassium or chloride? or bicarbonate\$ or urea)).ti,ab.

106 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (acid base or pH or bicarbonate\$ or electrolyte\$ or urea)).ti,ab.

107 (blood gas or ABG).ti,ab.

108 or/94-107

109 and/20,108

110 or/77,84,93,109

111 or/68,110

112 *HYPOVOLEMIA/
113 *HYPOGLYCEMIA/
114 *HYPOKALEMIA/
115 *HYPONATREMIA/
116 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ti.
117 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ab. /freq=2

118 *ACIDOSIS/
119 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti.
120 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ab. /freq=2

121 *BRAIN EDEMA/
122 ((cerebral or brain) adj3 (oedema? or edema?)).ti.
123 ((cerebral or brain) adj3 (oedema? or edema?)).ab. /freq=2
124 *VENOUS THROMBOSIS/
125 (DVT or deep vein thrombo\$).ti.
126 (DVT or deep vein thrombo\$).ab. /freq=2
127 exp *RESPIRATORY ASPIRATION/
128 exp *PNEUMONIA, ASPIRATION/
129 aspiration.ti. or aspiration.ab. /freq=2
130 or/112-129
131 exp "SENSITIVITY AND SPECIFICITY"/
132 ((pre test or pretest or post test or posttest) adj probability).ti,ab.
133 (predictive value\$ or PPV or NPV).ti,ab.
134 likelihood ratio\$.ti,ab.
135 LIKELIHOOD FUNCTIONS/
136 (ROC curve\$ or AUC).ti,ab.
137 (detect\$ or diagnos\$ or predict\$ or accuracy or test\$).ti,ab.
138 di.xs.
139 or/131-138
140 and/20,130,139
141 or/111,140
142 LETTER/
143 EDITORIAL/
144 NEWS/
145 exp HISTORICAL ARTICLE/
146 ANECDOTES AS TOPIC/
147 COMMENT/
148 CASE REPORT/
149 (letter or comment* or abstracts).ti.
150 or/142-149
151 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
152 150 not 151
153 ANIMALS/ not HUMANS/
154 exp ANIMALS, LABORATORY/
155 exp ANIMAL EXPERIMENTATION/
156 exp MODELS, ANIMAL/
157 exp RODENTIA/
158 (rat or rats or mouse or mice).ti.
159 or/152-158
160 141 not 159
161 limit 160 to english language

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.

3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre
pubescen\$).ti,ab,jw.
5 or/1-4
6 (diabetic ketoacidosis or DK or DKA).ti,ab.
7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
8 diabet\$.mp.
9 and/7-8
10 5 and (6 or 9)
11 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ti.
12 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ab. /freq=2
13 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ti.
14 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ab. /freq=2
15 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ti.
16 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ab. /freq=2
17 (dehydrat\$ or hydration status or rehydrate\$ or re hydrat\$).ti,ab.
18 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
balance? or imbalance?)).ti.
19 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
balance? or imbalance?)).ab. /freq=2
20 (volume adj3 expan\$).ti,ab.
21 ((urine or urinary) adj3 (reduc\$ or decreas\$ or drop\$ or fall\$ or produc\$ or output\$)).ti,ab.
22 capillary refill\$.ti,ab.
23 (skin turgor or skin colo?r or pinch test).ti,ab.
24 sunken eye?.ti,ab.
25 (cold adj3 (extremit\$ or limb? or hand? or finger? or foot or feet or toe?)).ti,ab.
26 (mucosa or mucous membrane?).ti,ab.
27 (electrocardio\$ or ECG).ti,ab.
28 or/11-27
29 and/10,28
30 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ti.
31 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ab. /freq=2
32 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).ti.
33 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).ab. /freq=2

34 (OGTT or FPG or fasting plasma glucose).ti,ab.
35 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).ti.
36 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).ab. /freq=2
37 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.
38 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.
39 (near patient or bedside or bed side or point of care).ti,ab.
40 ((plasma or serum or blood) adj3 (osmola\$ or tonicity)).ti,ab.
41 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (acid base or pH or electrolyte\$ or sodium or potassium or chloride? or bicarbonate\$ or urea)).ti,ab.
42 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (acid base or pH or bicarbonate\$ or electrolyte\$ or urea)).ti,ab.
43 (blood gas or ABG).ti,ab.
44 or/30-43
45 and/10,44
46 or/29,45
47 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ti.
48 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ab. /freq=2
49 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti.
50 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ab. /freq=2
51 ((cerebral or brain) adj3 (oedema? or edema?)).ti.
52 ((cerebral or brain) adj3 (oedema? or edema?)).ab. /freq=2
53 (DVT or deep vein thrombo\$).ti.
54 (DVT or deep vein thrombo\$).ab. /freq=2
55 aspiration.ti. or aspiration.ab. /freq=2
56 or/47-55
57 ((pre test or pretest or post test or posttest) adj probability).ti,ab.
58 (predictive value\$ or PPV or NPV).ti,ab.
59 likelihood ratio\$.ti,ab.
60 (ROC curve\$ or AUC).ti,ab.
61 (detect\$ or diagnos\$ or predict\$ or accuracy or test\$).ti,ab.
62 or/57-61
63 and/10,56,62
64 or/46,63

Cochrane Central Register of Controlled Trials

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescenc\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
3 exp CHILD/

4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$
or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.

5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.

7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre
pubescen\$).ti,ab,jw.

9 or/1-8
10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).ti,ab.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.

15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 exp VITAL SIGNS/
22 SYMPTOM ASSESSMENT/
23 exp AIRWAY MANAGEMENT/
24 exp INTUBATION/
25 exp NEUROLOGIC EXAMINATION/
26 BLOOD PRESSURE DETERMINATION/
27 exp CONFUSION/
28 CONSCIOUSNESS DISORDERS/
29 GLASGOW COMA SCALE/
30 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ti.
31 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ab. /freq=2
32 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ti.
33 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ab. /freq=2
34 or/21-33
35 and/20,34
36 exp BODY WEIGHT CHANGES/
37 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ti.
38 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ab. /freq=2
39 or/36-38
40 and/20,39

41 DEHYDRATION/
42 (dehydrat\$ or hydration status or rehydrate\$ or re hydrat\$).ti,ab.
43 WATER-ELECTROLYTE BALANCE/
44 WATER-ELECTROLYTE IMBALANCE/
45 exp FLUID THERAPY/
46 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
balance? or imbalance?)).ti.
47 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
balance? or imbalance?)).ab. /freq=2
48 (volume adj3 expans\$).ti,ab.
49 OLIGURIA/
50 ((urine or urinary) adj3 (reduc\$ or decreas\$ or drop\$ or fall\$ or produc\$ or output\$)).ti,ab.
51 REGIONAL BLOOD FLOW/ and (FINGERS/bs or CAPILLARIES/ph)
52 capillary refill\$.ti,ab.
53 SKIN/
54 (skin turgor or skin colo?r or pinch test).ti,ab.
55 EYE/
56 sunken eye?.ti,ab.
57 exp LOWER EXTREMITY/
58 exp UPPER EXTREMITY/
59 (cold adj3 (extremit\$ or limb? or hand? or finger? or foot or feet or toe?)).ti,ab.
60 MOUTH MUCOSA/
61 (mucosa or mucous membrane?).ti,ab.
62 or/41-61
63 and/20,62
64 ELECTROCARDIOGRAPHY/
65 (electrocardio\$ or ECG).ti,ab.
66 or/64-65
67 and/20,66
68 or/35,40,63,67
69 CLINICAL LABORATORY TECHNIQUES/
70 BLOOD GAS ANALYSIS/
71 URINALYSIS/
72 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ti.
73 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ab. /freq=2
74 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).ti.
75 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).ab. /freq=2
76 or/69-75
77 and/20,76
78 BLOOD GLUCOSE/an [Analysis]
79 GLUCOSE TOLERANCE TEST/
80 (OGTT or FPG or fasting plasma glucose).ti,ab.

81 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).ti.

82 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).ab. /freq=2

83 or/78-82

84 and/20,83

85 KETONES/an, bl, ur [Analysis, Blood, Urine]

86 exp KETONE BODIES/an, bl, ur [Analysis, Blood, Urine]

87 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.

88 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.

89 or/85-88

90 POINT-OF-CARE SYSTEMS/

91 (near patient or bedside or bed side or point of care).ti,ab.

92 or/89-91

93 and/20,92

94 PLASMA/ and OSMOLAR CONCENTRATION/

95 ((plasma or serum or blood) adj3 (osmola\$ or tonicity)).ti,ab.

96 HYDROGEN-ION CONCENTRATION/

97 ACID-BASE EQUILIBRIUM/

98 ACID-BASE IMBALANCE/

99 BICARBONATES/an, bl, ur [Analysis, Blood, Urine]

100 ELECTROLYTES/an, bl, ur [Analysis, Blood, Urine]

101 SODIUM/an, bl, ur [Analysis, Blood, Urine]

102 POTASSIUM/an, bl, ur [Analysis, Blood, Urine]

103 exp CHLORIDES/an, bl, ur [Analysis, Blood, Urine]

104 UREA/an, bl, ur [Analysis, Blood, Urine]

105 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (acid base or pH or electrolyte\$ or sodium or potassium or chloride? or bicarbonate\$ or urea)).ti,ab.

106 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (acid base or pH or bicarbonate\$ or electrolyte\$ or urea)).ti,ab.

107 (blood gas or ABG).ti,ab.

108 or/94-107

109 and/20,108

110 or/77,84,93,109

111 or/68,110

112 *HYPOVOLEMIA/

113 *HYPOGLYCEMIA/

114 *HYPOKALEMIA/

115 *HYPONATREMIA/

116 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ti.

117 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ab. /freq=2

118 *ACIDOSIS/

119 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti.
 120 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ab. /freq=2
 121 *BRAIN EDEMA/
 122 ((cerebral or brain) adj3 (oedema? or edema?)).ti.
 123 ((cerebral or brain) adj3 (oedema? or edema?)).ab. /freq=2
 124 *VENOUS THROMBOSIS/
 125 (DVT or deep vein thrombo\$).ti.
 126 (DVT or deep vein thrombo\$).ab. /freq=2
 127 exp *RESPIRATORY ASPIRATION/
 128 exp *PNEUMONIA, ASPIRATION/
 129 aspiration.ti. or aspiration.ab. /freq=2
 130 or/112-129
 131 exp "SENSITIVITY AND SPECIFICITY"/
 132 ((pre test or pretest or post test or posttest) adj probability).ti,ab.
 133 (predictive value\$ or PPV or NPV).ti,ab.
 134 likelihood ratio\$.ti,ab.
 135 LIKELIHOOD FUNCTIONS/
 136 (ROC curve\$ or AUC).ti,ab.
 137 (detect\$ or diagnos\$ or predict\$ or accuracy or test\$).ti,ab.
 138 di.xs.
 139 or/131-138
 140 and/20,130,139
 141 or/111,140

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).tw,kw,tx,jw,rw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,kw,tx,jw,rw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,kw,tx,jw,rw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).tw,kw,tx,jw,rw.
 5 or/1-4
 6 (diabetic ketoacidosis or DK or DKA).tw,kw,tx.
 7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).tw,kw,tx.
 8 diabet\$.tw,kw,tx.
 9 and/7-8
 10 5 and (6 or 9)
 11 SYMPTOM ASSESSMENT.kw.
 12 INTUBATION.kw.
 13 (NEUROLOGIC EXAMINATION or REFLEX).kw.
 14 BLOOD PRESSURE DETERMINATION.kw.
 15 CONSCIOUSNESS DISORDERS.kw.
 16 GLASGOW COMA SCALE.kw.

17 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).tw,tx.

18 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$ or reflex\$ or pupil).tw,kw,tx.

19 or/11-18

20 and/10,19

21 (BODY WEIGHT CHANGES or WEIGHT GAIN or WEIGHT LOSS).kw.

22 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or lose or lost or loss\$ or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).tw,tx.

23 or/21-22

24 and/10,23

25 (dehydrat\$ or hydration status or rehydrate\$ or re hydrat\$).tw,kw,tx.

26 WATER-ELECTROLYTE BALANCE.kw.

27 WATER-ELECTROLYTE IMBALANCE.kw.

28 (FLUID THERAPY or HYPODERMOCLYSIS).kw.

29 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or balance? or imbalance?)).tw,tx.

30 (volume adj3 expan\$).tw,tx.

31 OLIGURIA.kw.

32 ((urine or urinary) adj3 (reduc\$ or decreas\$ or drop\$ or fall\$ or produc\$ or output\$)).tw,tx.

33 (REGIONAL BLOOD FLOW and (FINGERS or CAPILLARIES)).kw.

34 capillary refill\$.tw,tx.

35 SKIN.kw.

36 (skin turgor or skin colo?r or pinch test).tw,tx.

37 EYE.kw.

38 sunken eye?.tw,tx.

39 (LOWER EXTREMITY or FOOT or TOES).kw.

40 (UPPER EXTREMITY or HAND or FINGERS).kw.

41 (cold adj3 (extremit\$ or limb? or hand? or finger? or foot or feet or toe?)).tw,tx.

42 MOUTH MUCOSA.kw.

43 (mucosa or mucous membrane?).tw,tx.

44 or/25-43

45 and/10,44

46 ELECTROCARDIOGRAPHY.kw.

47 (electrocardio\$ or ECG).tw,tx.

48 or/46-47

49 and/10,48

50 or/20,24,45,49

51 CLINICAL LABORATORY TECHNIQUES.kw.

52 BLOOD GAS ANALYSIS.kw.

53 URINALYSIS.kw.

54 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).tw,tx.

55 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).tw,tx.

56 or/51-55

57 and/10,56
58 BLOOD GLUCOSE.kw.
59 GLUCOSE TOLERANCE TEST.kw.
60 (OGTT or FPG or fasting plasma glucose).tw,tx.
61 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).tw,tx.
62 or/58-61
63 and/10,62
64 KETONES.kw.
65 (KETONE BODIES or 3-HYDROXYBUTYRIC ACID or HYDROXYBUTYRATES or ACETOACETATES or ACETONE).kw.
66 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).tw,tx.
67 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).tw,tx.
68 or/64-67
69 POINT-OF-CARE SYSTEMS.kw.
70 (near patient or bedside or bed side or point of care).tw,tx.
71 or/68-70
72 and/10,71
73 (PLASMA and OSMOLAR CONCENTRATION).kw.
74 ((plasma or serum or blood) adj3 (osmola\$ or tonicity)).tw,tx.
75 HYDROGEN-ION CONCENTRATION.kw.
76 ACID-BASE EQUILIBRIUM.kw.
77 ACID-BASE IMBALANCE.kw.
78 BICARBONATES.kw.
79 ELECTROLYTES.kw.
80 SODIUM.kw.
81 POTASSIUM.kw.
82 (CHLORIDES or SODIUM CHLORIDE or POTASSIUM CHLORIDE).kw.
83 UREA.kw.
84 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (acid base or pH or electrolyte\$ or sodium or potassium or chloride? or bicarbonate\$ or urea)).tw,tx.
85 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (acid base or pH or bicarbonate\$ or electrolyte\$ or urea)).tw,tx.
86 (blood gas or ABG).tw,tx.
87 or/73-86
88 and/10,87
89 or/57,63,72,88
90 or/50,89
91 HYPOVOLEMIA.kw.
92 HYPOGLYCEMIA.kw.
93 HYPOKALEMIA.kw.
94 HYPONATREMIA.kw.

95 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).tw,tx.
96 ACIDOSIS.kw.
97 (acidosis or (blood? adj3 acid\$) or acid?emi\$).tw,tx.
98 BRAIN EDEMA.kw.
99 ((cerebral or brain) adj3 (oedema? or edema?)).tw,tx.
100 VENOUS THROMBOSIS.kw.
101 (DVT or deep vein thrombo\$).tw,tx.
102 aspiration.tw,kw,tx.
103 or/91-102
104 ("SENSITIVITY AND SPECIFICITY" or "PREDICTIVE VALUE OF TESTS").kw.
105 ((pre test or pretest or post test or posttest) adj probability).tw,tx.
106 (predictive value\$ or PPV or NPV).tw,tx.
107 likelihood ratio\$.tw,tx.
108 LIKELIHOOD FUNCTIONS.kw.
109 (ROC curve\$ or AUC).tw,tx.
110 (detect\$ or diagnos\$ or predict\$ or accuracy or test\$).tw,tx.
111 or/104-110
112 and/10,103,111
113 or/90,112

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).tw,jx,rw.
9 or/1-8
10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).tw.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).tw.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 exp VITAL SIGNS/
22 SYMPTOM ASSESSMENT/

23 exp AIRWAY MANAGEMENT/
 24 exp INTUBATION/
 25 exp NEUROLOGIC EXAMINATION/
 26 BLOOD PRESSURE DETERMINATION/
 27 exp CONFUSION/
 28 CONSCIOUSNESS DISORDERS/
 29 GLASGOW COMA SCALE/
 30 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
 31 investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).tw.
 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
 airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
 glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
 or reflex\$ or pupil).tw.
 32 or/21-31
 33 and/20,32
 34 exp BODY WEIGHT CHANGES/
 35 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$
 or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).tw.
 36 or/34-35
 37 and/20,36
 38 DEHYDRATION/
 39 (dehydrat\$ or hydration status or rehydrate\$ or re hydrat\$).tw.
 40 WATER-ELECTROLYTE BALANCE/
 41 WATER-ELECTROLYTE IMBALANCE/
 42 exp FLUID THERAPY/
 43 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or
 44 balance? or imbalance?)).tw.
 (volume adj3 expan\$).tw.
 45 OLIGURIA/
 46 ((urine or urinary) adj3 (reduc\$ or decreas\$ or drop\$ or fall\$ or produc\$ or output\$)).tw.
 47 REGIONAL BLOOD FLOW/ and (FINGERS/bs or CAPILLARIES/ph)
 48 capillary refill\$.tw.
 49 SKIN/
 50 (skin turgor or skin colo?r or pinch test).tw.
 51 EYE/
 52 sunken eye?.tw.
 53 exp LOWER EXTREMITY/
 54 exp UPPER EXTREMITY/
 55 (cold adj3 (extremit\$ or limb? or hand? or finger? or foot or feet or toe?)).tw.
 56 MOUTH MUCOSA/
 57 (mucosa or mucous membrane?).tw.
 58 or/38-57
 59 and/20,58
 60 ELECTROCARDIOGRAPHY/
 61 (electrocardio\$ or ECG).tw.
 62 or/60-61
 63 and/20,62
 64 or/33,37,59,63
 65 CLINICAL LABORATORY TECHNIQUES/

66 BLOOD GAS ANALYSIS/
67 URINALYSIS/
68 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or
assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).tw.
69 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or
observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or
monitor\$)).tw.
70 or/65-69
71 and/20,70
72 BLOOD GLUCOSE/an [Analysis]
73 GLUCOSE TOLERANCE TEST/
74 (OGTT or FPG or fasting plasma glucose).tw.
75 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (glucose or blood sugar\$)).tw.
76 or/72-75
77 and/20,76
78 KETONES/an, bl, ur [Analysis, Blood, Urine]
79 exp KETONE BODIES/an, bl, ur [Analysis, Blood, Urine]
80 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (ketone? or hydroxy butyr\$ or
hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-
hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3
OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).tw.
81 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta
hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$
or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB"
or "3-HB" or 3HB)).tw.
82 or/78-81
83 POINT-OF-CARE SYSTEMS/
84 (near patient or bedside or bed side or point of care).tw.
85 or/82-84
86 and/20,85
87 PLASMA/ and OSMOLAR CONCENTRATION/
88 ((plasma or serum or blood) adj3 (osmola\$ or tonicity)).tw.
89 HYDROGEN-ION CONCENTRATION/
90 ACID-BASE EQUILIBRIUM/
91 ACID-BASE IMBALANCE/
92 BICARBONATES/an, bl, ur [Analysis, Blood, Urine]
93 ELECTROLYTES/an, bl, ur [Analysis, Blood, Urine]
94 SODIUM/an, bl, ur [Analysis, Blood, Urine]
95 POTASSIUM/an, bl, ur [Analysis, Blood, Urine]
96 exp CHLORIDES/an, bl, ur [Analysis, Blood, Urine]
97 UREA/an, bl, ur [Analysis, Blood, Urine]
98 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (acid base or pH or electrolyte\$
or sodium or potassium or chloride? or bicarbonate\$ or urea)).tw.
99 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or
status or level? or check\$) adj5 (acid base or pH or bicarbonate\$ or electrolyte\$ or urea)).tw.
100 (blood gas or ABG).tw.
101 or/87-100
102 and/20,101

103 or/71,77,86,102
 104 or/64,103
 105 *HYPOVOLEMIA/
 106 *HYPOGLYCEMIA/
 107 *HYPOKALEMIA/
 108 *HYPONATREMIA/
 109 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).tw.
 110 *ACIDOSIS/
 111 (acidosis or (blood? adj3 acid\$) or acid?emi\$).tw.
 112 *BRAIN EDEMA/
 113 ((cerebral or brain) adj3 (oedema? or edema?)).tw.
 114 *VENOUS THROMBOSIS/
 115 (DVT or deep vein thrombo\$).tw.
 116 exp *RESPIRATORY ASPIRATION/
 117 exp *PNEUMONIA, ASPIRATION/
 118 aspiration.tw.
 119 or/105-118
 120 exp "SENSITIVITY AND SPECIFICITY"/
 121 ((pre test or pretest or post test or posttest) adj probability).tw.
 122 (predictive value\$ or PPV or NPV).tw.
 123 likelihood ratio\$.tw.
 124 LIKELIHOOD FUNCTIONS/
 125 (ROC curve\$ or AUC).tw.
 126 (detect\$ or diagnos\$ or predict\$ or accuracy or test\$).tw.
 127 di.xs.
 128 or/120-127
 129 and/20,119,128
 130 or/104,129

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 NON INSULIN DEPENDENT DIABETES MELLITUS/

15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.

16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.

17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.

18 or/14-17

19 JUVENILE DIABETES MELLITUS/
or/13,18-19

21 KETOACIDOSIS/
KETONURIA/
(ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.

24 or/21-23
and/20,24

26 DIABETIC KETOACIDOSIS/
(DK or DKA).ti,ab.

28 or/26-27
9 and (25 or 28)

30 VITAL SIGN/
CLINICAL OBSERVATION/
CLINICAL ASSESSMENT/
PATIENT ASSESSMENT/
SYMPTOM ASSESSMENT/
BODY TEMPERATURE MEASUREMENT/
BLOOD PRESSURE MEASUREMENT/
BLOOD PRESSURE MONITORING/
HEART RATE/
PULSE RATE/
BREATHING RATE/
RESPIRATION CONTROL/
exp RESPIRATORY TRACT INTUBATION/
STOMACH INTUBATION/
CONSCIOUSNESS LEVEL/
CONSCIOUSNESS DISORDER/
exp CONFUSION/
exp DELIRIUM/
NEUROLOGIC EXAMINATION/
GLASGOW COMA SCALE/
((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ti.

51 ((clinical or physical or physiolog\$ or neurologic\$) adj3 (observ\$ or indication? or indicator? or
investigat\$ or assess\$ or status or sign? or symptom? or characteristic? or monitor\$)).ab. /freq=2

52 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ti.

53 (vital sign? or pulse? or heart rate? or blood pressure? or circulation? or respirat\$ or breathing or
airway or nasogastric tube or nasogastric intubat\$ or NG tube or temperature or conscious\$ or
glasgow coma or GCS or alert\$ or confusion or confused or delirium or delirious or mental stat\$
or reflex\$ or pupil).ab. /freq=2

54 or/30-53
55 and/29,54
56 WEIGHT CHANGE/
57 WEIGHT FLUCTUATION/
58 WEIGHT GAIN/
59 WEIGHT REDUCTION/
60 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$ or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ti.
61 (body weight or (weight adj3 (gain\$ or increas\$ or raise or raising or rising or lose or lost or loss\$ or decreas\$ or drop\$ or fall\$ or chang\$ or fluctuat\$))).ab. /freq=2
62 or/56-61
63 and/29,62
64 DEHYDRATION/
65 (dehydrat\$ or hydration status or rehydrate\$ or re hydrat\$).ti,ab.
66 FLUID BALANCE/
67 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or balance? or imbalance?)).ti.
68 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj3 (volume? or balance? or imbalance?)).ab. /freq=2
69 (volume adj3 expans\$).ti,ab.
70 OLIGURIA/
71 URINE OUTPUT/
72 ((urine or urinary) adj3 (reduc\$ or decreas\$ or drop\$ or fall\$ or produc\$ or output\$)).ti,ab.
73 CAPILLARY FLOW/
74 capillary refill\$.ti,ab.
75 SKIN TURGOR/
76 (skin turgor or skin colo?r or pinch test).ti,ab.
77 EYE/
78 sunken eye?.ti,ab.
79 COLD LIMB/
80 (cold adj3 (extremit\$ or limb? or hand? or finger? or foot or feet or toe?)).ti,ab.
81 MUCOSAL DRYNESS/
82 (mucosa or mucous membrane?).ti,ab.
83 or/64-82
84 and/29,83
85 ELECTROCARDIOGRAPHY/
86 (electrocardio\$ or ECG).ti,ab.
87 or/85-86
88 and/29,87
89 or/55,63,84,88
90 exp *LABORATORY DIAGNOSIS/
91 exp *BLOOD GAS ANALYSIS/
92 *URINALYSIS/
93 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ti.
94 (laboratory adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ab. /freq=2

95 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ti.

96 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj3 (parameter? or value? or observ\$ or indication? or indicator? or investigat\$ or assess\$ or evaluat\$ or analys\$ or test? or monitor\$)).ab. /freq=2

97 or/90-96

98 and/29,97

99 BLOOD GLUCOSE MONITORING/
100 GLUCOSE BLOOD LEVEL/
101 exp GLUCOSE TOLERANCE TEST/
102 (OGTT or FPG or fasting plasma glucose).ti,ab.

103 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).ti.

104 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (glucose or blood sugar\$)).ab. /freq=2

105 or/99-104

106 and/29,105

107 KETONE/an [Drug Analysis]
108 KETONE BODY/an [Drug Analysis]
109 3-HYDROXYBUTYRIC ACID/an [Drug Analysis]
110 HYDROXYBUTYRIC ACID/an [Drug Analysis]

111 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.

112 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or surveillance or status or level? or check\$) adj5 (ketone? or hydroxy butyr\$ or hydroxybutyr\$ or beta hydroxybutyr\$ or betahydroxybutyr\$ or "3 hydroxybutyr\$" or "3-hydroxybutyr\$" or 3hydroxybutyr\$ or OHB or beta OHB or betaOHB or B OHB or BOHB or "3 OHB" or "3-OHB" or 3OHB or "3 HB" or "3-HB" or 3HB)).ti,ab.

113 "POINT OF CARE TESTING"/
114 (near patient or bedside or bed side or point of care).ti,ab.
115 or/107-114
116 and/29,115
117 exp OSMOLALITY/
118 ((plasma or serum or blood) adj3 (osmola\$ or tonicity)).ti,ab.

119 BLOOD pH/
120 ACID BASE BALANCE/
121 BICARBONATE BLOOD LEVEL/
122 exp ELECTROLYTE BLOOD LEVEL/
123 exp URINE LEVEL/
124 UREA BLOOD LEVEL/
125 ((capillar\$ or blood\$ or plasma or serum or urine or urinary) adj5 (acid base or pH or electrolyte\$ or sodium or potassium or chloride? or bicarbonate\$ or urea)).ti,ab.

126 ((monitor\$ or measur\$ or test\$ or screen\$ or determin\$ or assess\$ or evaluat\$ or surveillance or status or level? or check\$) adj5 (acid base or pH or bicarbonate\$ or electrolyte\$ or urea)).ti,ab.

127 (blood gas or ABG).ti,ab.
128 or/117-127
129 and/29,128

130 or/98,106,116,129
131 or/89,130
132 exp *HYPOVOLEMIA/
133 *HYPOGLYCAEMIA/
134 *HYPOKALEMIA/
135 *HYPONATREMIA/
136 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ti.
137 (hypovol?emi\$ or olig?emi\$ or hypoglyc?emi\$ or hypokal?emi\$ or hyponatr?emi\$).ab. /freq=2
138 *ACIDOSIS/
139 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ti.
140 (acidosis or (blood? adj3 acid\$) or acid?emi\$).ab. /freq=2
141 *BRAIN EDEMA/
142 ((cerebral or brain) adj3 (oedema? or edema?)).ti.
143 ((cerebral or brain) adj3 (oedema? or edema?)).ab. /freq=2
144 *DEEP VEIN THROMBOSIS/
145 (DVT or deep vein thrombo\$).ti.
146 (DVT or deep vein thrombo\$).ab. /freq=2
147 *PULMONARY ASPIRATION/
148 *ASPIRATION PNEUMONIA/
149 aspiration.ti. or aspiration.ab. /freq=2
150 or/132-149
151 "SENSITIVITY AND SPECIFICITY"/
152 PREDICTIVE VALUE/
153 DIAGNOSTIC VALUE/
154 DIAGNOSTIC ACCURACY/
155 ((pre test or pretest or post test or posttest) adj probability).ti,ab.
156 (predictive value\$ or PPV or NPV).ti,ab.
157 likelihood ratio\$.ti,ab.
158 di.fs.
159 or/151-158
160 and/29,150,159
161 or/131,160
162 conference abstract.pt.
163 letter.pt. or LETTER/
164 note.pt.
165 editorial.pt.
166 CASE REPORT/ or CASE STUDY/
167 (letter or comment* or abstracts).ti.
168 or/162-167
169 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
170 168 not 169
171 ANIMAL/ not HUMAN/
172 NONHUMAN/
173 exp ANIMAL EXPERIMENT/
174 exp EXPERIMENTAL ANIMAL/
175 ANIMAL MODEL/
176 exp RODENT/
177 (rat or rats or mouse or mice).ti.

- 178 or/170-177
- 179 161 not 178
- 180 limit 179 to english language

A.12 Type 1 and type 2 diabetes – diabetic ketoacidosis – fluids

Review questions:

What is the appropriate route of administration for fluids in children and young people with diabetic ketoacidosis?

At what rate should children and young people with diabetic ketoacidosis be rehydrated?

What is the optimal fluid composition (including glucose, potassium and bicarbonate additives) for rehydrating children and young people with diabetic ketoacidosis?

Ovid MEDLINE(R)

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescens\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 DIABETIC KETOACIDOSIS/
- 11 (DK or DKA).ti,ab.
- 12 or/10-11
- 13 exp KETOSIS/
- 14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
- 15 or/13-14
- 16 exp DIABETES MELLITUS/
- 17 diabet\$.mp.
- 18 or/16-17
- 19 and/15,18
- 20 9 and (12 or 19)
- 21 exp FLUID THERAPY/
- 22 REHYDRATION SOLUTIONS/
- 23 WATER-ELECTROLYTE BALANCE/

24 WATER-ELECTROLYTE IMBALANCE/
 25 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj5 (manag\$ or
 regimen? or resuscit\$ or infusion? or administrat\$ or replac\$ or balanc\$ or imbalanc\$)).ti,ab.
 26 or/21-25
 27 and/20,26
 28 DRUG ADMINISTRATION ROUTES/
 29 ADMINISTRATION, ORAL/
 30 ADMINISTRATION, INTRAVENOUS/
 31 INFUSIONS, INTRAVENOUS/
 32 INFUSIONS, INTRAOSSEOUS/
 33 exp INFUSIONS, SUBCUTANEOUS/
 34 INFUSION PUMP/
 35 INTUBATION, GASTROINTESTINAL/
 36 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (route? or intravenous\$ or oral or orally or mouth or subcutan\$ or hypodermocl\$
 or intraosse\$ or intra osse\$ or intraperiton\$ or intra periton\$ or gavage or nasogastric or naso
 gastric or rectal or proctocl\$)).ti,ab.
 37 (fluid bolus or two bag or ORT).ti,ab.
 38 or/28-37
 39 and/20,38
 40 TIME FACTORS/
 41 DRUG ADMINISTRATION SCHEDULE/
 42 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (rate? or variable rate? or fixed rate? or volume or fast or faster or quickly or
 quicker or quick or rapid\$ or slow or slowly or slower or gradual\$ or earlier or early or later or
 late)).ti,ab.
 43 or/40-42
 44 and/20,43
 45 SODIUM/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 46 exp CHLORIDES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 47 GLUCOSE/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 48 GLUCOSE SOLUTION, HYPERTONIC/ad, tu, th [Administration & Dosage, Therapeutic Use,
 Therapy]
 49 SALINE SOLUTION, HYPERTONIC/ad, tu, th [Administration & Dosage, Therapeutic Use,
 Therapy]
 50 exp BICARBONATES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 51 POTASSIUM/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 52 PHOSPHATES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 53 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (chloride? or sodium chloride? or potassium chloride? or saline? or NaCl or KCl
 or glucose or dextrose or hydrogen carbonate? or bicarbonate? or carbonic acid or potassium or
 phosphate? or orthophosphate? or ortho phosphate?)).ti,ab.
 54 or/45-53
 55 and/20,54
 56 or/27,39,44,55
 57 LETTER/
 58 EDITORIAL/
 59 NEWS/
 60 exp HISTORICAL ARTICLE/

61 ANECDOTES AS TOPIC/
62 COMMENT/
63 CASE REPORT/
64 (letter or comment* or abstracts).ti.
65 or/57-64
66 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
67 65 not 66
68 ANIMALS/ not HUMANS/
69 exp ANIMALS, LABORATORY/
70 exp ANIMAL EXPERIMENTATION/
71 exp MODELS, ANIMAL/
72 exp RODENTIA/
73 (rat or rats or mouse or mice).ti.
74 or/67-73
75 56 not 74
76 limit 75 to english language

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).ti,ab,jw.
5 or/1-4
6 (diabetic ketoacidosis or DK or DKA).ti,ab.
7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
8 diabet\$.mp.
9 and/7-8
10 5 and (6 or 9)
11 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj5 (manag\$ or regimen? or resuscit\$ or infusion? or administrat\$ or replac\$ or balanc\$ or imbalanc\$)).ti,ab.
12 and/10-11
13 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or resuscitat\$) adj5 (route? or intravenous\$ or oral or orally or mouth or subcutan\$ or hypodermocl\$ or intraosse\$ or intra osse\$ or intraperiton\$ or intra periton\$ or gavage or nasogastric or nasogastric or rectal or proctocl\$)).ti,ab.
14 (fluid bolus or two bag or ORT).ti,ab.
15 or/13-14
16 and/10,15
17 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or resuscitat\$) adj5 (rate? or variable rate? or fixed rate? or volume or fast or faster or quickly or quicker or quick or rapid\$ or slow or slowly or slower or gradual\$ or earlier or early or later or late)).ti,ab.
18 and/10,17

- 19 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or resuscitat\$) adj5 (chloride? or sodium chloride? or potassium chloride? or saline? or NaCl or KCl or glucose or dextrose or hydrogen carbonate? or bicarbonate? or carbonic acid or potassium or phosphate? or orthophosphate? or ortho phosphate?)).ti,ab.
- 20 and/10,19
- 21 or/12,16,18,20
- 22 limit 21 to english language

Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 DIABETIC KETOACIDOSIS/
- 11 (DK or DKA).ti,ab.
- 12 or/10-11
- 13 exp KETOSIS/
- 14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
- 15 or/13-14
- 16 exp DIABETES MELLITUS/
- 17 diabet\$.mp.
- 18 or/16-17
- 19 and/15,18
- 20 9 and (12 or 19)
- 21 exp FLUID THERAPY/
- 22 REHYDRATION SOLUTIONS/
- 23 WATER-ELECTROLYTE BALANCE/
- 24 WATER-ELECTROLYTE IMBALANCE/
- 25 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj5 (manag\$ or regimen? or resuscit\$ or infusion? or administrat\$ or replac\$ or balanc\$ or imbalanc\$)).ti,ab.
- 26 or/21-25
- 27 and/20,26
- 28 DRUG ADMINISTRATION ROUTES/
- 29 ADMINISTRATION, ORAL/
- 30 ADMINISTRATION, INTRAVENOUS/
- 31 INFUSIONS, INTRAVENOUS/
- 32 INFUSIONS, INTRAOSSEOUS/
- 33 exp INFUSIONS, SUBCUTANEOUS/
- 34 INFUSION PUMP/

35 INTUBATION, GASTROINTESTINAL/
36 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
resuscitat\$) adj5 (route? or intravenous\$ or oral or orally or mouth or subcutan\$ or hypodermocl\$
or intraosse\$ or intra osse\$ or intraperiton\$ or intra periton\$ or gavage or nasogastric or naso
gastric or rectal or proctocl\$)).ti,ab.
37 (fluid bolus or two bag or ORT).ti,ab.
38 or/28-37
39 and/20,38
40 TIME FACTORS/
41 DRUG ADMINISTRATION SCHEDULE/
42 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
resuscitat\$) adj5 (rate? or variable rate? or fixed rate? or volume or fast or faster or quickly or
quicker or quick or rapid\$ or slow or slowly or slower or gradual\$ or earlier or early or later or
late)).ti,ab.
43 or/40-42
44 and/20,43
45 SODIUM/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
46 exp CHLORIDES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
47 GLUCOSE/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
48 GLUCOSE SOLUTION, HYPERTONIC/ad, tu, th [Administration & Dosage, Therapeutic Use,
Therapy]
49 SALINE SOLUTION, HYPERTONIC/ad, tu, th [Administration & Dosage, Therapeutic Use,
Therapy]
50 exp BICARBONATES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
51 POTASSIUM/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
52 PHOSPHATES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
53 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
resuscitat\$) adj5 (chloride? or sodium chloride? or potassium chloride? or saline? or NaCl or KCl
or glucose or dextrose or hydrogen carbonate? or bicarbonate? or carbonic acid or potassium or
phosphate? or orthophosphate? or ortho phosphate?)).ti,ab.
54 or/45-53
55 and/20,54
56 or/27,39,44,55

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high
school\$).kw,tw,tx,jw,rw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$
or kid? or kindergar\$ or boy? or girl?).kw,tw,tx,jw,rw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,tw,tx,jw,rw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre
pubescen\$).kw,tw,tx,jw,rw.
5 or/1-4
6 (diabetic ketoacidosis or DK or DKA).kw,tw,tx.
7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).kw,tw,tx.
8 diabet\$.kw,tw,tx.
9 and/7-8

10 5 and (6 or 9)
11 (FLUID THERAPY or HYPODERMOCLYSIS).kw.
12 REHYDRATION SOLUTIONS.kw.
13 WATER-ELECTROLYTE BALANCE.kw.
14 WATER-ELECTROLYTE IMBALANCE.kw.
15 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj5 (manag\$ or
16 regimen? or resuscit\$ or infusion? or administrat\$ or replac\$ or balanc\$ or imbalanc\$)).tw,tx.
17 or/11-15
18 and/10,16
19 DRUG ADMINISTRATION ROUTES.kw.
20 ADMINISTRATION, ORAL.kw.
21 ADMINISTRATION, INTRAVENOUS.kw.
22 INFUSIONS, INTRAVENOUS.kw.
23 INFUSIONS, INTRAOSSEOUS.kw.
24 INFUSIONS, SUBCUTANEOUS.kw.
25 INFUSION PUMP.kw.
26 INTUBATION, GASTROINTESTINAL.kw.
27 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
28 resuscitat\$) adj5 (route? or intravenous\$ or oral or orally or mouth or subcutan\$ or hypodermocl\$
29 or intraosse\$ or intra osse\$ or intraperiton\$ or intra periton\$ or gavage or nasogastric or naso
30 gastric or rectal or proctocl\$)).tw,tx.
31 (fluid bolus or two bag or ORT).tw,tx.
32 or/18-27
33 and/10,28
34 TIME FACTORS.kw.
35 DRUG ADMINISTRATION SCHEDULE.kw.
36 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
37 resuscitat\$) adj5 (rate? or variable rate? or fixed rate? or volume or fast or faster or quickly or
38 quicker or quick or rapid\$ or slow or slowly or slower or gradual\$ or earlier or early or later or
39 late)).tw,tx.
40 or/30-32
41 and/10,33
42 SODIUM.kw.
43 CHLORIDE?.kw.
44 GLUCOSE.kw.
45 GLUCOSE SOLUTION, HYPERTONIC.kw.
46 SALINE SOLUTION, HYPERTONIC.kw.
47 BICARBONATE?.kw.
48 POTASSIUM.kw.
49 PHOSPHATES.kw.
50 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
51 resuscitat\$) adj5 (chloride? or sodium chloride? or potassium chloride? or saline? or NaCl or KCl
52 or glucose or dextrose or hydrogen carbonate? or bicarbonate? or carbonic acid or potassium or
53 phosphate? or orthophosphate? or ortho phosphate?)).tw,tx.
54 or/35-43
55 and/10,44
56 or/17,29,34,45

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$ or high school\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or pre school\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pre pubert\$ or pubescen\$ or prepubescen\$ or pre pubescen\$).tw,jx,rw.
9 or/1-8
10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).tw.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).tw.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 exp FLUID THERAPY/
22 REHYDRATION SOLUTIONS/
23 WATER-ELECTROLYTE BALANCE/
24 WATER-ELECTROLYTE IMBALANCE/
25 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj5 (manag\$ or regimen? or resuscit\$ or infusion? or administrat\$ or replac\$ or balanc\$ or imbalanc\$)).tw.
26 or/21-25
27 and/20,26
28 DRUG ADMINISTRATION ROUTES/
29 ADMINISTRATION, ORAL/
30 ADMINISTRATION, INTRAVENOUS/
31 INFUSIONS, INTRAVENOUS/
32 INFUSIONS, INTRAOSSEOUS/
33 exp INFUSIONS, SUBCUTANEOUS/
34 INFUSION PUMP/
35 INTUBATION, GASTROINTESTINAL/
36 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or resuscitat\$) adj5 (route? or intravenous\$ or oral or orally or mouth or subcutan\$ or hypodermocl\$ or intraosse\$ or intra osse\$ or intraperiton\$ or intra periton\$ or gavage or nasogastric or nasogastric or rectal or proctocl\$)).tw.
37 (fluid bolus or two bag or ORT).tw.
38 or/28-37
39 and/20,38

40 TIME FACTORS/
 41 DRUG ADMINISTRATION SCHEDULE/
 42 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (rate? or variable rate? or fixed rate? or volume or fast or faster or quickly or
 quicker or quick or rapid\$ or slow or slowly or slower or gradual\$ or earlier or early or later or
 late)).tw.
 43 or/40-42
 44 and/20,43
 45 SODIUM/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 46 exp CHLORIDES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 47 GLUCOSE/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 48 GLUCOSE SOLUTION, HYPERTONIC/ad, tu, th [Administration & Dosage, Therapeutic Use,
 Therapy]
 49 SALINE SOLUTION, HYPERTONIC/ad, tu, th [Administration & Dosage, Therapeutic Use,
 Therapy]
 50 exp BICARBONATES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 51 POTASSIUM/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 52 PHOSPHATES/ad, tu, th [Administration & Dosage, Therapeutic Use, Therapy]
 53 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (chloride? or sodium chloride? or potassium chloride? or saline? or NaCl or KCl
 or glucose or dextrose or hydrogen carbonate? or bicarbonate? or carbonic acid or potassium or
 phosphate? or orthophosphate? or ortho phosphate?)).tw.
 54 or/45-53
 55 and/20,54
 56 or/27,39,44,55

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 NON INSULIN DEPENDENT DIABETES MELLITUS/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 18 or/14-17

19 JUVENILE DIABETES MELLITUS/
 20 or/13,18-19
 21 KETOACIDOSIS/
 22 KETONURIA/
 23 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
 ketogenesis).ti,ab.
 24 or/21-23
 25 and/20,24
 26 DIABETIC KETOACIDOSIS/
 27 (DK or DKA).ti,ab.
 28 or/26-27
 29 9 and (25 or 28)
 30 FLUID THERAPY/
 31 FLUID RESUSCITATION/
 32 exp REHYDRATION/
 33 exp ELECTROLYTE BALANCE/
 34 exp ELECTROLYTE DISTURBANCE/
 35 ((fluid? or solution? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$) adj5 (manag\$ or
 regimen? or resuscit\$ or infusion? or administrat\$ or replac\$ or balanc\$ or imbalanc\$)).ti,ab.
 36 or/30-35
 37 and/29,36
 38 DRUG ADMINISTRATION ROUTE/
 39 INTRAVENOUS ADMINISTRATION/
 40 INTRAGASTRIC DRUG ADMINISTRATION/
 41 INTRAOSSEOUS DRUG ADMINISTRATION/
 42 INTRAPERITONEAL DRUG ADMINISTRATION/
 43 SUBCUTANEOUS DRUG ADMINISTRATION/
 44 STOMACH INTUBATION/
 45 ORAL REHYDRATION THERAPY/
 46 ORAL REHYDRATION SOLUTION/
 47 INFUSION SYSTEM/
 48 INFUSION PUMP/
 49 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (route? or intravenous\$ or oral or orally or mouth or subcutan\$ or hypodermocl\$
 or intraosse\$ or intra osse\$ or intraperiton\$ or intra periton\$ or gavage or nasogastric or naso
 gastric or rectal or proctocl\$)).ti,ab.
 50 (fluid bolus or two bag or ORT).ti,ab.
 51 or/38-50
 52 and/29,51
 53 INFUSION RATE/
 54 DRUG DOSE REGIMEN/
 55 DRUG ADMINISTRATION/
 56 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or
 resuscitat\$) adj5 (rate? or variable rate? or fixed rate? or volume or fast or faster or quickly or
 quicker or quick or rapid\$ or slow or slowly or slower or gradual\$ or earlier or early or later or
 late)).ti,ab.
 57 or/53-56
 58 and/29,57

59 INFUSION FLUID/ad, dt, ig, os, iv, po, pa, sc [Drug Administration, Drug Therapy, Intragastric Drug Administration, Intraosseous Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Subcutaneous Drug Administration]

60 SODIUM/ad, dt, ip, iv, po, pa, sc, th [Drug Administration, Drug Therapy, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Subcutaneous Drug Administration, Therapy]

61 CHLORIDE/ad, dt, ip, iv, po, pa, sc, th [Drug Administration, Drug Therapy, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Subcutaneous Drug Administration, Therapy]

62 SODIUM CHLORIDE/ad, dt, dl, ig, os, ip, iv, po, pa, rc, sc, th [Drug Administration, Drug Therapy, Intradermal Drug Administration, Intragastric Drug Administration, Intraosseous Drug Administration, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Rectal Drug Administration, Subcutaneous Drug Administration, Therapy]

63 GLUCOSE/ad, dt, ig, os, ip, iv, po, pa, rc, sc, th [Drug Administration, Drug Therapy, Intragastric Drug Administration, Intraosseous Drug Administration, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Rectal Drug Administration, Subcutaneous Drug Administration, Therapy]

64 GLUCOSE INFUSION/

65 BICARBONATE/ad, dt, ig, os, ip, iv, po, pa, rc, sc, th [Drug Administration, Drug Therapy, Intragastric Drug Administration, Intraosseous Drug Administration, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Rectal Drug Administration, Subcutaneous Drug Administration, Therapy]

66 POTASSIUM/ad, dt, ig, os, ip, iv, po, pa, rc, sc, th [Drug Administration, Drug Therapy, Intragastric Drug Administration, Intraosseous Drug Administration, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Rectal Drug Administration, Subcutaneous Drug Administration, Therapy]

67 PHOSPHATE/ad, dt, ig, ip, iv, po, pa, rc, th [Drug Administration, Drug Therapy, Intragastric Drug Administration, Intraperitoneal Drug Administration, Intravenous Drug Administration, Oral Drug Administration, Parenteral Drug Administration, Rectal Drug Administration, Therapy]

68 exp ELECTROLYTE BLOOD LEVEL/

69 BICARBONATE BLOOD LEVEL/

70 GLUCOSE BLOOD LEVEL/

71 PHOSPHATE BLOOD LEVEL/

72 ((fluid? or solution? or infusion? or electrolyte? or hydrat\$ or rehydrat\$ or re hydrat\$ or resuscitat\$) adj5 (chloride? or sodium chloride? or potassium chloride? or saline? or NaCl or KCl or glucose or dextrose or hydrogen carbonate? or bicarbonate? or carbonic acid? or potassium or phosphate? or orthophosphate? or ortho phosphate?)).ti,ab.

73 or/59-72

74 and/29,73

75 or/37,52,58,74

76 conference abstract.pt.

77 letter.pt. or LETTER/

78 note.pt.

79 editorial.pt.

80 CASE REPORT/ or CASE STUDY/

81 (letter or comment* or abstracts).ti.

82 or/76-81

83 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.

84 82 not 83

85 ANIMAL/ not HUMAN/

86 NONHUMAN/
 87 exp ANIMAL EXPERIMENT/
 88 exp EXPERIMENTAL ANIMAL/
 89 ANIMAL MODEL/
 90 exp RODENT/
 91 (rat or rats or mouse or mice).ti.
 92 or/84-91
 93 75 not 92
 94 limit 93 to english language

A.13 Type 1 and type 2 diabetes – diabetic ketoacidosis intravenous osmotic agents

Review question: What is the effectiveness of intravenous osmotic agents in the management of cerebral oedema associated with diabetic ketoacidosis?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 DIABETIC KETOACIDOSIS/
 11 (DK or DKA).ti,ab.
 12 or/10-11
 13 exp KETOSIS/
 14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 15 or/13-14
 16 exp DIABETES MELLITUS/
 17 diabet\$.mp.
 18 or/16-17
 19 and/15,18
 20 9 and (12 or 19)
 21 BRAIN EDEMA/
 22 ((brain or cerebral) adj3 (edema? or oedema? or swell\$)).ti,ab.
 23 INTRACRANIAL PRESSURE/
 24 INTRACRANIAL HYPERTENSION/
 25 ((intracranial or intracerebral or subarachnoid or "sub arachnoid") adj3 (pressure or hypertens\$)).ti,ab.
 26 ICP.ti,ab.

27 or/21-26
 28 DIURETICS, OSMOTIC/
 29 osmotherap\$.ti,ab.
 30 (osmo\$ adj3 (therap\$ or agent? or solution? or serum or plasma or blood)).ti,ab.
 31 SALINE SOLUTION, HYPERTONIC/
 32 SODIUM CHLORIDE/
 33 (hyperton\$ adj3 (saline or solution?)).ti,ab.
 34 (saline or sodium chloride or NaCl).ti,ab.
 35 MANNITOL/
 36 (mannitol or viaflo or viaflex).ti,ab.
 37 or/28-36
 38 and/20,27,37
 39 limit 38 to english language
 40 LETTER/
 41 EDITORIAL/
 42 NEWS/
 43 exp HISTORICAL ARTICLE/
 44 ANECDOTES AS TOPIC/
 45 COMMENT/
 46 CASE REPORT/
 47 (letter or comment* or abstracts).ti.
 48 or/40-47
 49 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 50 48 not 49
 51 ANIMALS/ not HUMANS/
 52 exp ANIMALS, LABORATORY/
 53 exp ANIMAL EXPERIMENTATION/
 54 exp MODELS, ANIMAL/
 55 exp RODENTIA/
 56 (rat or rats or mouse or mice).ti.
 57 or/50-56
 58 39 not 57

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (DK or DKA).ti,ab.
 7 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 8 diabet\$.mp.
 9 and/7-8
 10 5 and (6 or 9)
 11 ((brain or cerebral) adj3 (edema? or oedema? or swell\$)).ti,ab.

- 12 ((intracranial or intracerebral or subarachnoid or "sub arachnoid") adj3 (pressure or hypertens\$)).ti,ab.
- 13 ICP.ti,ab.
- 14 or/11-13
- 15 osmotherap\$.ti,ab.
- 16 (osmo\$ adj3 (therap\$ or agent? or solution? or serum or plasma or blood)).ti,ab.
- 17 (hyperton\$ adj3 (saline or solution?)).ti,ab.
- 18 (saline or sodium chloride or NaCl).ti,ab.
- 19 (mannitol or viaflo or viaflex).ti,ab.
- 20 or/15-19
- 21 and/10,14,20
- 22 limit 21 to english language

Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 DIABETIC KETOACIDOSIS/
- 11 (DK or DKA).ti,ab.
- 12 or/10-11
- 13 exp KETOSIS/
- 14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
- 15 or/13-14
- 16 exp DIABETES MELLITUS/
- 17 diabet\$.mp.
- 18 or/16-17
- 19 and/15,18
- 20 9 and (12 or 19)
- 21 BRAIN EDEMA/
- 22 ((brain or cerebral) adj3 (edema? or oedema? or swell\$)).ti,ab.
- 23 INTRACRANIAL PRESSURE/
- 24 INTRACRANIAL HYPERTENSION/
- 25 ((intracranial or intracerebral or subarachnoid or "sub arachnoid") adj3 (pressure or hypertens\$)).ti,ab.
- 26 ICP.ti,ab.
- 27 or/21-26
- 28 DIURETICS, OSMOTIC/
- 29 osmotherap\$.ti,ab.
- 30 (osmo\$ adj3 (therap\$ or agent? or solution? or serum or plasma or blood)).ti,ab.

31 SALINE SOLUTION, HYPERTONIC/
 32 SODIUM CHLORIDE/
 33 (hyperton\$ adj3 (saline or solution?)).ti,ab.
 34 (saline or sodium chloride or NaCl).ti,ab.
 35 MANNITOL/
 36 (mannitol or viaflo or viaflex).ti,ab.
 37 or/28-36
 38 and/20,27,37

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,tx,kw,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw,jw.
 5 or/1-4
 6 DIABETIC KETOACIDOSIS.kw.
 7 (DK or DKA).tw,tx.
 8 or/6-7
 9 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).tw,tx,kw.
 10 diabet\$.tw,tx,kw.
 11 and/9-10
 12 5 and (8 or 11)
 13 ((brain or cerebral) adj3 (edema? or oedema? or swell\$)).tw,tx,kw.
 14 ((intracranial or intracerebral or subarachnoid or "sub arachnoid") adj3 (pressure or hypertens\$)).tw,tx,kw.
 15 ICP.tw,tx.
 16 or/13-15
 17 DIURETICS, OSMOTIC.kw.
 18 osmotherap\$.tw,tx.
 19 (osmo\$ adj3 (therap\$ or agent? or solution? or serum or plasma or blood)).tw,tx.
 20 (hyperton\$ adj3 (saline or solution?)).tw,tx,kw.
 21 (saline or sodium chloride or NaCl).tw,tx,kw.
 22 (mannitol or viaflo or viaflex).tw,tx,kw.
 23 or/17-22
 24 and/12,16,23

Health Technology Assessment

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx.
 5 exp INFANT/

6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx.
9 or/1-8
10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).tw.
12 or/10-11
13 exp KETOSIS/
14 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).tw.
15 or/13-14
16 exp DIABETES MELLITUS/
17 diabet\$.mp.
18 or/16-17
19 and/15,18
20 9 and (12 or 19)
21 BRAIN EDEMA/
22 ((brain or cerebral) adj3 (edema? or oedema? or swell\$)).tw.
23 INTRACRANIAL PRESSURE/
24 INTRACRANIAL HYPERTENSION/
25 ((intracranial or intracerebral or subarachnoid or "sub arachnoid") adj3 (pressure or
hypertens\$)).tw.
26 ICP.tw.
27 or/21-26
28 DIURETICS, OSMOTIC/
29 osmotherap\$.tw.
30 (osmo\$ adj3 (therap\$ or agent? or solution? or serum or plasma or blood)).tw.
31 SALINE SOLUTION, HYPERTONIC/
32 SODIUM CHLORIDE/
33 (hyperton\$ adj3 (saline or solution?)).tw.
34 (saline or sodium chloride or NaCl).tw.
35 MANNITOL/
36 (mannitol or viaflo or viaflex).tw.
37 or/28-36
38 and/20,27,37

Embase

Searches
1 exp ADOLESCENT/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9 or/1-8

10 DIABETIC KETOACIDOSIS/
11 (DK or DKA).ti,ab.
12 or/10-11
13 KETOACIDOSIS/
14 KETONURIA/
15 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
16 or/13-15
17 exp DIABETES MELLITUS/
18 diabet\$.mp.
19 or/17-18
20 and/16,19
21 9 and (12 or 20)
22 BRAIN EDEMA/
23 ((brain or cerebral) adj3 (edema? or oedema? or swell\$)).ti,ab.
24 INTRACRANIAL PRESSURE/
25 INTRACRANIAL HYPERTENSION/
26 ((intracranial or intracerebral or subarachnoid or "sub arachnoid") adj3 (pressure or
hypertens\$)).ti,ab.
27 ICP.ti,ab.
28 or/22-27
29 exp OSMOTIC AGENT/
30 osmotherap\$.ti,ab.
31 (osmo\$ adj3 (therap\$ or agent? or solution? or serum or plasma or blood)).ti,ab.
32 HYPERTONIC SOLUTION/
33 SODIUM CHLORIDE/
34 (hyperton\$ adj3 (saline or solution?)).ti,ab.
35 (saline or sodium chloride or NaCl).ti,ab.
36 MANNITOL/
37 (mannitol or viaflo or viaflex).ti,ab.
38 or/29-37
39 and/21,28,38
40 limit 39 to english language
41 conference abstract.pt.
42 letter.pt. or LETTER/
43 note.pt.
44 editorial.pt.
45 CASE REPORT/ or CASE STUDY/
46 (letter or comment* or abstracts).ti.
47 or/41-46
48 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
49 47 not 48
50 ANIMAL/ not HUMAN/
51 NONHUMAN/
52 exp ANIMAL EXPERIMENT/
53 exp EXPERIMENTAL ANIMAL/
54 ANIMAL MODEL/
55 exp RODENT/

56 (rat or rats or mouse or mice).ti.
57 or/49-56
58 40 not 57

A.14 Type 1 and type 2 diabetes – diabetic ketoacidosis – insulin

Review questions:

When should intravenous insulin therapy be started and stopped in children and young people with diabetic ketoacidosis?

How should the dosage of insulin be calculated for children and young people with diabetic ketoacidosis?

Ovid MEDLINE(R)

Searches
1 randomized controlled trial.pt.
2 controlled clinical trial.pt.
3 DOUBLE BLIND METHOD/
4 SINGLE BLIND METHOD/
5 RANDOM ALLOCATION/
6 RANDOMIZED CONTROLLED TRIALS AS TOPIC/
7 or/1-6
8 ((single or double or triple or treble) adj5 (blind\$ or mask\$)).tw,sh.
9 clinical trial.pt.
10 exp CLINICAL TRIAL/
11 exp CLINICAL TRIALS AS TOPIC/
12 (clinic\$ adj5 trial\$).tw,sh.
13 PLACEBOS/
14 placebo\$.tw,sh.
15 random\$.tw,sh.
16 or/8-15
17 or/7,16
18 META ANALYSIS/
19 META ANALYSIS AS TOPIC/
20 meta analysis.pt.
21 (metaanaly\$ or meta-analy\$ or (meta adj analy\$)).tw,sh.
22 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
23 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
24 or/18-23
25 review\$.pt.
26 (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or psyclit or "web of science" or "science citation" or scisearch).tw.
27 ((hand or manual\$) adj2 search\$).tw.
28 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online database\$).tw,sh.
29 (pooling or pooled or mantel haenszel).tw,sh.

30 (peto or dersimonian or der simonian or fixed effect).tw,sh.
31 or/26-30
32 and/25,31
33 exp CASE-CONTROL STUDIES/
34 (case\$ adj2 control\$).tw.
35 exp COHORT STUDIES/
36 cohort\$.tw.
37 or/33-36
38 or/17,24,32,37
39 letter.pt.
40 comment.pt.
41 editorial.pt.
42 historical article.pt.
43 or/39-42
44 38 not 43
45 ADOLESCENT/ or MINORS/
46 (adolescens\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
47 exp CHILD/
48 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
49 exp INFANT/
50 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
51 exp PEDIATRICS/ or exp PUBERTY/
52 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
53 or/45-52
54 exp KETOSIS/
55 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
56 (DK or DKA).ti,ab.
57 or/54-56
58 exp DIABETES MELLITUS/
59 diabet\$.mp.
60 or/58-59
61 and/53,57,60
62 exp INSULINS/
63 INSULIN INFUSION SYSTEMS/
64 or/62-63
65 exp DRUG ADMINISTRATION SCHEDULE/
66 TIME FACTORS/
67 DOSE-RESPONSE RELATIONSHIP, DRUG/
68 DRUG DOSAGE CALCULATIONS/
69 or/65-68
70 and/64,69
71 exp INSULINS/ad [Administration & Dosage]
72 (insulin\$ adj5 (early or earli\$ or delay\$ or start? or starting or stop? or stopping or intermittent\$ or
time or timing)).ti,ab.
73 (insulin\$ adj5 (high-dose? or high-dosage? or low-dose or low-dosage? or dose? or dosage? or
bolus\$ or priming or loading)).ti,ab.

74 or/70-73
75 and/61,74
76 and/44,75
77 LETTER/
78 EDITORIAL/
79 NEWS/
80 exp HISTORICAL ARTICLE/
81 ANECDOTES AS TOPIC/
82 COMMENT/
83 CASE REPORT/
84 (letter or comment* or abstracts).ti.
85 or/77-84
86 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
87 85 not 86
88 ANIMALS/ not HUMANS/
89 exp ANIMALS, LABORATORY/
90 exp ANIMAL EXPERIMENTATION/
91 exp MODELS, ANIMAL/
92 exp RODENTIA/
93 (rat or rats or mouse or mice).ti.
94 or/87-93
95 76 not 94
96 limit 95 to english language

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
7 (DK or DKA).ti,ab.
8 or/6-7
9 diabet\$.mp.
10 and/5,8-9
11 (insulin\$ adj5 (early or earli\$ or delay\$ or start? or starting or stop? or stopping or intermittent\$ or time or timing)).ti,ab.
12 (insulin\$ adj5 (high-dose? or high-dosage? or low-dose or low-dosage? or dose? or dosage? or bolus\$ or priming or loading)).ti,ab.
13 or/11-12
14 and/10,13

Cochrane Central Register of Controlled Trials

Searches
1 ADOLESCENT/ or MINORS/

2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
9 or/1-8
10 exp KETOSIS/
11 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
12 (DK or DKA).ti,ab.
13 or/10-12
14 exp DIABETES MELLITUS/
15 diabet\$.mp.
16 or/14-15
17 and/9,13,16
18 exp INSULINS/
19 INSULIN INFUSION SYSTEMS/
20 or/18-19
21 exp DRUG ADMINISTRATION SCHEDULE/
22 TIME FACTORS/
23 DOSE-RESPONSE RELATIONSHIP, DRUG/
24 DRUG DOSAGE CALCULATIONS/
25 or/21-24
26 and/20,25
27 exp INSULINS/ad [Administration & Dosage]
28 (insulin\$ adj5 (early or earli\$ or delay\$ or start? or starting or stop? or stopping or intermittent\$ or
time or timing)).ti,ab.
29 (insulin\$ adj5 (high-dose? or high-dosage? or low-dose or low-dosage? or dose? or dosage? or
bolus\$ or priming or loading)).ti,ab.
30 or/26-29
31 and/17,30

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,tw,tx,jw,rw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw,tx,kw,jw,rw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw,jw,rw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw,jw,rw.
5 or/1-4
6 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).tw,tx,kw.
7 (DK or DKA).tw,tx.
8 or/6-7

9 diabet\$.tw,tx,kw.
 10 and/5,8-9
 11 insulin\$.tw,tx,kw.
 12 TIME FACTORS.kw.
 13 DOSE-RESPONSE.kw.
 14 DRUG DOSAGE CALCULATIONS.kw.
 15 or/12-14
 16 and/11,15
 17 (insulin\$ adj5 (early or earli\$ or delay\$ or start? or starting or stop? or stopping or intermittent\$ or
 time or timing)).tw,tx.
 18 (insulin\$ adj5 (high-dose? or high-dosage? or low-dose or low-dosage? or dose? or dosage? or
 bolus\$ or priming or loading)).tw,tx.
 19 or/16-18
 20 and/10,19

NHS Economic Evaluation Database

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).tw,jx,rw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
 9 or/1-8
 10 DIABETIC KETOACIDOSIS/
 11 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
 ketogenesis).tw.
 12 (DK or DKA).tw.
 13 or/10-12
 14 exp DIABETES MELLITUS/
 15 diabet\$.mp.
 16 or/14-15
 17 and/9,13,16
 18 exp INSULIN/
 19 INSULIN INFUSION SYSTEMS/
 20 or/18-19
 21 exp DRUG ADMINISTRATION SCHEDULE/
 22 TIME FACTORS/
 23 DOSE-RESPONSE RELATIONSHIP, DRUG/
 24 DRUG DOSAGE CALCULATIONS/
 25 or/21-24
 26 and/20,25
 27 (insulin\$ adj5 (early or earli\$ or delay\$ or start? or starting or stop? or stopping or intermittent\$ or
 time or timing)).tw.

28 (insulin\$ adj5 (high-dose? or high-dosage? or low-dose or low-dosage? or dose? or dosage? or
 29 bolus\$ or priming or loading)).tw.
 29 or/26-28
 30 and/17,29

Embase

Searches
 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
 2 (clinic\$ adj5 trial\$.tw,sh.
 3 SINGLE BLIND PROCEDURE/
 4 DOUBLE BLIND PROCEDURE/
 5 RANDOM ALLOCATION/
 6 CROSSOVER PROCEDURE/
 7 PLACEBO/
 8 placebo\$.tw,sh.
 9 random\$.tw,sh.
 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).tw,sh.
 12 randomi?ed control\$ trial\$.tw.
 13 or/1-12
 14 META ANALYSIS/
 15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).tw,sh.
 16 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
 17 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
 18 or/14-17
 19 review.pt.
 20 (medline or medlars or embase).ab.
 21 (scisearch or science citation index).ab.
 22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
 23 ((hand or manual\$) adj2 search\$).tw.
 24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
 database\$).tw.
 25 (pooling or pooled or mantel haenszel).tw.
 26 (peto or dersimonian or "der simonian" or fixed effect).tw.
 27 or/20-26
 28 and/19,27
 29 exp CASE CONTROL STUDY/
 30 RETROSPECTIVE STUDY/
 31 (case\$ adj2 control\$).tw.
 32 COHORT ANALYSIS/
 33 LONGITUDINAL STUDY/
 34 FOLLOW UP/
 35 PROSPECTIVE STUDY/
 36 cohort\$.tw.
 37 or/29-36
 38 or/13,18,28,37
 39 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
 40 38 not 39

41 exp ADOLESCENT/
 42 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 43 exp CHILD/
 44 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 45 exp INFANT/
 46 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 47 exp PEDIATRICS/ or exp PUBERTY/
 48 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 49 or/41-48
 50 KETOACIDOSIS/ or DIABETIC KETOACIDOSIS/
 51 KETONURIA/
 52 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
 ketogenesis).ti,ab.
 53 (DK or DKA).ti,ab.
 54 or/50-53
 55 exp DIABETES MELLITUS/
 56 diabet\$.mp.
 57 or/55-56
 58 and/49,54,57
 59 exp INSULIN DERIVATIVE/
 60 INSULIN TREATMENT/ or INSULIN INFUSION/
 61 or/59-60
 62 DRUG DOSE/ or DOSE CALCULATION/ or DOSAGE SCHEDULE COMPARISON/ or DRUG
 DOSE COMPARISON/ or DRUG DOSE ESCALATION/ or DRUG DOSE INCREASE/ or DRUG
 DOSE INTENSIFICATION/ or DRUG DOSE REDUCTION/ or DRUG DOSE REGIMEN/ or
 LOADING DRUG DOSE/ or LOW DRUG DOSE/ or MAINTENANCE DRUG DOSE/ or OPTIMAL
 DRUG DOSE/
 63 EARLY INTERVENTION/
 64 TREATMENT DURATION/
 65 THERAPY DELAY/
 66 or/62-65
 67 and/61,66
 68 exp INSULIN DERIVATIVE/do, iv [Drug Dose, Intravenous Drug Administration]
 69 (insulin\$ adj5 (high-dose? or high-dosage? or low-dose or low-dosage? or dose? or dosage? or
 bolus\$ or priming or loading)).ti,ab.
 70 (insulin\$ adj5 (early or earli\$ or delay\$ or start? or starting or stop? or stopping or time or
 timing)).ti,ab.
 71 or/67-70
 72 and/58,71
 73 and/40,72
 74 conference abstract.pt.
 75 letter.pt. or LETTER/
 76 note.pt.
 77 editorial.pt.
 78 CASE REPORT/ or CASE STUDY/
 79 (letter or comment* or abstracts).ti.
 80 or/74-79
 81 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.

82 80 not 81
 83 ANIMAL/ not HUMAN/
 84 NONHUMAN/
 85 exp ANIMAL EXPERIMENT/
 86 exp EXPERIMENTAL ANIMAL/
 87 ANIMAL MODEL/
 88 exp RODENT/
 89 (rat or rats or mouse or mice).ti.
 90 or/82-89
 91 73 not 90
 92 limit 91 to english language

A.15 Type 1 and type 2 diabetes – diabetic ketoacidosis – anticoagulant prophylaxis

Review question: What is the effectiveness of routine anticoagulant prophylaxis to prevent venous thrombosis in children and young people with diabetic ketoacidosis?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp KETOSIS/
 11 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
 12 (DK or DKA).ti,ab.
 13 or/10-12
 14 exp DIABETES MELLITUS/
 15 diabet\$.mp.
 16 or/14-15
 17 and/9,13,16
 18 exp ANTICOAGULANTS/
 19 exp FIBRINOLYTIC AGENTS/
 20 exp THROMBOLYTIC THERAPY/
 21 ASPIRIN/
 22 DICUMAROL/
 23 WARFARIN/
 24 exp HEPARIN/

25 (anticoagula\$ or aspirin\$ or dalteparin\$ or nadroparin\$ or enoxaparin\$ or dic?umarol or fragmin\$
 or heparin\$ or UFH or LMWH or warfarin\$ or fibrinoly\$).ti,ab,nm.
 26 or/18-25
 27 exp "EMBOLISM AND THROMBOSIS"/
 28 exp HEMORRHAGE/
 29 (mo or ut or ae or co).fs.
 30 PATIENT SATISFACTION/
 31 (thromboprophyla\$ or thrombus\$ or thrombi or thrombotic\$ or thrombolic\$ or thromboly\$ or
 thromboemboli\$ or thrombocyt\$ or thrombos\$ or emboli\$ or bleed\$ or h?emorrag\$ or adverse or
 complication? or mortalit\$ or utili#ation or satisfaction or satisfied).ti,ab.
 32 or/27-31
 33 and/17,26,32
 34 LETTER/
 35 EDITORIAL/
 36 NEWS/
 37 exp HISTORICAL ARTICLE/
 38 ANECDOTES AS TOPIC/
 39 COMMENT/
 40 CASE REPORT/
 41 (letter or comment* or abstracts).ti.
 42 or/34-41
 43 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 44 42 not 43
 45 ANIMALS/ not HUMANS/
 46 exp ANIMALS, LABORATORY/
 47 exp ANIMAL EXPERIMENTATION/
 48 exp MODELS, ANIMAL/
 49 exp RODENTIA/
 50 (rat or rats or mouse or mice).ti.
 51 or/44-50
 52 33 not 51

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
 ketogenesis).ti,ab.
 7 (DK or DKA).ti,ab.
 8 or/6-7
 9 diabet\$.mp.
 10 and/5,8-9
 11 (anticoagula\$ or aspirin\$ or dalteparin\$ or nadroparin\$ or enoxaparin\$ or dic?umarol or fragmin\$
 or heparin\$ or UFH or LMWH or warfarin\$ or fibrinoly\$).ti,ab.

- 12 (thromboprophyla\$ or thrombus\$ or thrombi or thrombotic\$ or thrombolic\$ or thromboly\$ or thromboemboli\$ or thrombocyt\$ or thrombos\$ or emboli\$ or bleed\$ or h?emorrag\$ or adverse or complication? or mortalit\$ or utili#ation or satisfaction or satisfied).ti,ab.
- 13 and/10-12

Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 exp KETOSIS/
- 11 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).ti,ab.
- 12 (DK or DKA).ti,ab.
- 13 or/10-12
- 14 exp DIABETES MELLITUS/
- 15 diabet\$.mp.
- 16 or/14-15
- 17 and/9,13,16
- 18 exp ANTICOAGULANTS/
- 19 exp FIBRINOLYTIC AGENTS/
- 20 exp THROMBOLYTIC THERAPY/
- 21 ASPIRIN/
- 22 DICUMAROL/
- 23 WARFARIN/
- 24 exp HEPARIN/
- 25 (anticoagula\$ or aspirin\$ or dalteparin\$ or nadroparin\$ or enoxaparin\$ or dic?umarol or fragmin\$ or heparin\$ or UFH or LMWH or warfarin\$ or fibrinoly\$).ti,ab.
- 26 or/18-25
- 27 exp "EMBOLISM AND THROMBOSIS"/
- 28 exp HEMORRHAGE/
- 29 (mo or ut or ae or co).fs.
- 30 PATIENT SATISFACTION/
- 31 (thromboprophyla\$ or thrombus\$ or thrombi or thrombotic\$ or thrombolic\$ or thromboly\$ or thromboemboli\$ or thrombocyt\$ or thrombos\$ or emboli\$ or bleed\$ or h?emorrag\$ or adverse or complication? or mortalit\$ or utili#ation or satisfaction or satisfied).ti,ab.
- 32 or/27-31
- 33 and/17,26,32

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,tw,tx,jw,rw.
 - 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,tw,tx,jw,rw.
 - 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,tw,tx,jw,rw.
 - 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,tw,tx,jw,rw.
 - 5 or/1-4
 - 6 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or ketogenesis).kw,tw,tx.
 - 7 (DK or DKA).kw,tw,tx.
 - 8 or/6-7
 - 9 diabet\$.kw,tw,tx.
 - 10 and/5,8-9
 - 11 ANTICOAGULANT\$.kw.
 - 12 FIBRINOLYTIC\$.kw.
 - 13 (THROMBOL\$ or HIRUDIN).kw.
 - 14 ASPIRIN.kw.
 - 15 DICUMAROL.kw.
 - 16 WARFARIN.kw.
 - 17 HEPARIN\$.kw.
 - 18 (anticoagula\$ or aspirin\$ or dalteparin\$ or nadroparin\$ or enoxaparin\$ or dic?umarol or fragmin\$ or heparin\$ or UFH or LMWH or warfarin\$ or fibrinoly\$).tw,tx.
 - 19 or/11-18
 - 20 (EMBOLI\$ or THROMBO\$).kw.
 - 21 HEMORRHAGE.kw.
 - 22 SATISFACTION.kw.
 - 23 (thromboprophyla\$ or thrombus\$ or thrombi or thrombotic\$ or thrombolic\$ or thromboly\$ or thromboemboli\$ or thrombocyt\$ or thrombos\$ or emboli\$ or bleed\$ or h?emorrag\$ or adverse or complication? or mortalit\$ or utili#ation or satisfaction or satisfied).tw,tx.
 - 24 or/20-23
 - 25 and/10,19,24

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
 - 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
 - 3 exp CHILD/
 - 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
 - 5 exp INFANT/
 - 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
 - 7 exp PEDIATRICS/ or exp PUBERTY/
 - 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
 - 9 or/1-8
 - 10 exp KETOSIS/

11 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
 ketogenesis).tw.
 12 (DK or DKA).tw.
 13 or/10-12
 14 exp DIABETES MELLITUS/
 15 diabet\$.mp.
 16 or/14-15
 17 and/9,13,16
 18 exp ANTICOAGULANTS/
 19 exp FIBRINOLYTIC AGENTS/
 20 exp THROMBOLYTIC THERAPY/
 21 ASPIRIN/
 22 DICUMAROL/
 23 WARFARIN/
 24 exp HEPARIN/
 25 (anticoagula\$ or aspirin\$ or dalteparin\$ or nadroparin\$ or enoxaparin\$ or dic?umarol or fragmin\$
 or heparin\$ or UFH or LMWH or warfarin\$ or fibrinoly\$).tw.
 26 or/18-25
 27 exp "EMBOLISM AND THROMBOSIS"/
 28 exp HEMORRHAGE/
 29 (mo or ut or ae or co).fs.
 30 PATIENT SATISFACTION/
 31 (thromboprophyla\$ or thrombus\$ or thrombi or thrombotic\$ or thrombolic\$ or thromboly\$ or
 thromboemboli\$ or thrombocyt\$ or thrombos\$ or emboli\$ or bleed\$ or h?emorrag\$ or adverse or
 complication? or mortalit\$ or utili#ation or satisfaction or satisfied).tw.
 32 or/27-31
 33 and/17,26,32

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescens\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 NON INSULIN DEPENDENT DIABETES MELLITUS/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.

17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
18 or/14-17
19 or/13,18
20 JUVENILE DIABETES MELLITUS/
21 and/9,19
22 or/20-21
23 KETOACIDOSIS/ or DIABETIC KETOACIDOSIS/
24 KETONURIA/
25 (ketosis or ketoacid\$ or keto acid\$ or ketotic or ketonuri\$ or keton?emi\$ or hyperketon\$ or
ketogenesis).ti,ab.
26 (DK or DKA).ti,ab.
27 or/23-26
28 and/22,27
29 exp ANTICOAGULANT AGENT/
30 ANTICOAGULANT THERAPY/
31 FIBRINOLYTIC AGENT/
32 FIBRINOLYTIC THERAPY/
33 EMBOLISM PREVENTION/
34 THROMBOSIS PREVENTION/
35 ACETYLSALICYLIC ACID/
36 DICOUMAROL/
37 WARFARIN/
38 exp HEPARIN DERIVATIVE/
39 (anticoagula\$ or aspirin\$ or dalteparin\$ or nadroparin\$ or enoxaparin\$ or dic?umarol or fragmin\$
or heparin\$ or UFH or LMWH or warfarin\$ or fibrinoly\$).ti,ab,rn.
40 or/29-39
41 exp THROMBOEMBOLISM/
42 exp THROMBOCYTOPENIA/
43 exp BLEEDING/
44 ADVERSE DRUG REACTION/
45 exp COMPLICATION/
46 MORTALITY/
47 HEALTH CARE UTILIZATION/
48 PATIENT SATISFACTION/
49 (thromboprophyla\$ or thrombus\$ or thrombi or thrombotic\$ or thrombolic\$ or thromboly\$ or
thromboemboli\$ or thrombocyt\$ or thrombos\$ or emboli\$ or bleed\$ or h?emorrag\$ or adverse or
complication? or mortalit\$ or utili#ation or satisfaction or satisfied).ti,ab.
50 or/41-49
51 and/28,40,50
52 conference abstract.pt.
53 letter.pt. or LETTER/
54 note.pt.
55 editorial.pt.
56 CASE REPORT/ or CASE STUDY/
57 (letter or comment* or abstracts).ti.
58 or/52-57
59 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
60 58 not 59

61 ANIMAL/ not HUMAN/
 62 NONHUMAN/
 63 exp ANIMAL EXPERIMENT/
 64 exp EXPERIMENTAL ANIMAL/
 65 ANIMAL MODEL/
 66 exp RODENT/
 67 (rat or rats or mouse or mice).ti.
 68 or/60-67
 69 51 not 68

A.16 Type 1 and type 2 diabetes – retinopathy

Review questions:

What is the optimal monitoring strategy for identifying retinopathy in children and young people with type 1 diabetes?

What is the optimal monitoring strategy for identifying retinopathy in children and young people with type 2 diabetes?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 exp DIABETES MELLITUS, TYPE 2/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 18 or/14-17
 19 or/13,18
 20 DIABETIC RETINOPATHY/
 21 (diabet\$ adj3 retinopath\$).ti,ab.
 22 or/20-21

23 RETINAL DISEASES/
24 retinopath\$.ti,ab.
25 or/23-24
26 DIAGNOSTIC TECHNIQUES, OPHTHALMOLOGICAL/
27 exp OPHTHALMOSCOPY/
28 FUNDUS OCULI/
29 RETINA/ or RETINAL VESSELS/
30 PHOTOGRAPHY/
31 and/29-30
32 ((retina\$ or fundus or ocul\$ or eye?) adj3 (photograph\$ or exam\$)).ti,ab.
33 (op?thalmoscop\$ or retinoscop\$).ti,ab.
34 fundus oculi.ti,ab.
35 or/26-28,31-34
36 MASS SCREENING/
37 VISION SCREENING/
38 exp POPULATION SURVEILLANCE/
39 (undiagnos\$ or estimate\$).ti.
40 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
41 or/36-40
42 SEVERITY OF ILLNESS INDEX/
43 INTERNATIONAL CLASSIFICATION OF DISEASES/
44 CLASSIFICATION/
45 (retinopath\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging)).ti,ab.
46 or/42-45
47 exp EYE HEMORRHAGE/
48 h?emorrhag\$.ti,ab.
49 exp ANEURYSM/
50 (microaneurysm? or micro aneurysm?).ti,ab.
51 "EXUDATES AND TRANSUDATES"/
52 exp EYE/
53 and/51-52
54 SUBRETINAL FLUID/
55 exudate?.ti,ab.
56 PAPILLEDEMA/
57 EDEMA/
58 exp EYE/
59 and/57-58
60 (papill?edem\$ or papillitis or choked dis??).ti,ab.
61 ((retina\$ or optic dis?? or optic nerve?) adj (edema? or oedema?)).ti,ab.
62 RETINAL NEOVASCULARIZATION/
63 NEOVASCULARIZATION, PATHOLOGIC/ or VASCULAR MALFORMATIONS/
64 exp EYE/ or RETINAL VESSELS/
65 and/63-64
66 exp RETINAL VESSELS/pa, pp [Pathology, Physiopathology]
67 neovascular\$.ti,ab.
68 (new adj2 vessel adj2 form\$).ti,ab.
69 ((venous or vascular or microvascular or fibrovascular) adj3 (abnormal\$ or malform\$ or loop\$ or
bead\$ or reduplicat\$ or duplicat\$ or proliferat\$)).ti,ab.

70 (IRMA or ((intraretinal or intra retinal) adj microvascular adj abnormal\$)).ti,ab.
71 *MACULAR DEGENERATION/
72 MACULAR EDEMA/
73 (macular adj (degenerat\$ or dysfunction\$)).ti,ab.
74 (maculopath\$ or macular edema? or macular oedema? or CSME or CSMO).ti,ab.
75 exp OCULAR HYPERTENSION/
76 (glaucoma? or ((ocular or intraocular or eye) adj3 (hypertensi\$ or pressur\$))).ti,ab.
77 OPTIC NEUROPATHY, ISCHEMIC/
78 (optic adj3 (isch?emi\$ or neuropath\$)).ti,ab.
79 cotton wool spot?.ti,ab.
80 RETINAL DETACHMENT/
81 ((retina\$ or preretina\$) adj3 (detach\$ or tear\$ or scar\$ or thick\$ or lesion? or manifest\$ or fibrosis)).ti,ab.
82 VISION DISORDERS/
83 SCOTOMA/
84 VISION, LOW/
85 (scotoma? or blind spot? or floater? or musca volitante?).ti,ab.
86 ((reduc\$ or impair\$ or subnormal or sub-normal or suboptimal or sub-optimal or diminish\$ or low or blur\$) adj3 (vision or visual or acuity)).ti,ab.
87 or/47-50,53-56,59-62,65-86
88 PREVALENCE/
89 INCIDENCE/
90 CROSS-SECTIONAL STUDIES/
91 exp MODELS, STATISTICAL/
92 LIFE TABLES/
93 exp RISK/
94 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
95 or/88-94
96 AGE FACTORS/
97 AGE DISTRIBUTION/
98 AGE OF ONSET/
99 TIME TO TREATMENT/
100 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
101 (disease adj3 (duration or onset)).ti,ab.
102 or/96-101
103 DIABETIC RETINOPATHY/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
104 22 and (35 or 41 or 46 or 95 or 102)
105 19 and 25 and (35 or 41 or 46 or 95 or 102)
106 19 and 87 and (95 or 102)
107 or/103-106
108 and/9,107
109 limit 108 to english language
110 LETTER/
111 EDITORIAL/
112 NEWS/
113 exp HISTORICAL ARTICLE/
114 ANECDOTES AS TOPIC/

115 COMMENT/
 116 (letter or comment* or abstracts).ti.
 117 or/110-116
 118 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 119 117 not 118
 120 ANIMALS/ not HUMANS/
 121 exp ANIMALS, LABORATORY/
 122 exp ANIMAL EXPERIMENTATION/
 123 exp MODELS, ANIMAL/
 124 exp RODENTIA/
 125 (rat or rats or mouse or mice).ti.
 126 or/119-125
 127 109 not 126

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 8 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 9 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 10 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 11 or/6-10
 12 (diabet\$ adj3 retinopath\$).ti,ab.
 13 retinopath\$.ti,ab.
 14 ((retina\$ or fundus or ocul\$ or eye?) adj3 (photograph\$ or exam\$)).ti,ab.
 15 (op?thalmoscop\$ or retinoscop\$).ti,ab.
 16 fundus oculi.ti,ab.
 17 or/14-16
 18 (undiagnos\$ or estimate\$).ti.
 19 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 20 or/18-19
 21 (retinopath\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging)).ti,ab.
 22 h?emorrhag\$.ti,ab.
 23 (microaneurysm? or micro aneurysm?).ti,ab.
 24 exudate?.ti,ab.
 25 (papill?edem\$ or papillitis or choked dis??).ti,ab.
 26 ((retina\$ or optic dis?? or optic nerve?) adj (edema? or oedema?)).ti,ab.
 27 neovascular\$.ti,ab.
 28 (new adj2 vessel adj2 form\$).ti,ab.

- 29 ((venous or vascular or microvascular or fibrovascular) adj3 (abnormal\$ or malform\$ or loop\$ or bead\$ or reduplicat\$ or duplicat\$ or proliferat\$)).ti,ab.
- 30 (IRMA or ((intraretinal or intra retinal) adj microvascular adj abnormal\$)).ti,ab.
- 31 (macular adj (degenerat\$ or dysfunction\$)).ti,ab.
- 32 (maculopath\$ or macular edema? or macular oedema? or CSME or CSMO).ti,ab.
- 33 (glaucoma? or ((ocular or intraocular or eye) adj3 (hypertensi\$ or pressur\$))).ti,ab.
- 34 (optic adj3 (isch?emi\$ or neuropath\$)).ti,ab.
- 35 cotton wool spot?.ti,ab.
- 36 ((retina\$ or preretina\$) adj3 (detach\$ or tear\$ or scar\$ or thick\$ or lesion? or manifest\$ or fibrosis)).ti,ab.
- 37 (scotoma? or blind spot? or floater? or musca volitante?).ti,ab.
- 38 ((reduc\$ or impair\$ or subnormal or sub-normal or suboptimal or sub-optimal or diminish\$ or low or blur\$) adj3 (vision or visual or acuity)).ti,ab.
- 39 or/22-38
- 40 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
- 41 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
- 42 (disease adj3 (duration or onset)).ti,ab.
- 43 or/41-42
- 44 12 and (17 or 20 or 21 or 40 or 43)
- 45 11 and 13 and (17 or 20 or 21 or 40 or 43)
- 46 11 and 39 and (40 or 43)
- 47 or/44-46
- 48 and/5,47

Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 1/
- 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
- 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
- 13 or/10-12
- 14 exp DIABETES MELLITUS, TYPE 2/
- 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
- 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
- 17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
- 18 or/14-17
- 19 or/13,18

20 DIABETIC RETINOPATHY/
 21 (diabet\$ adj3 retinopath\$.ti,ab.
 22 or/20-21
 23 RETINAL DISEASES/
 24 retinopath\$.ti,ab.
 25 or/23-24
 26 DIAGNOSTIC TECHNIQUES, OPHTHALMOLOGICAL/
 27 exp OPHTHALMOSCOPY/
 28 FUNDUS OCULI/
 29 RETINA/ or RETINAL VESSELS/
 30 PHOTOGRAPHY/
 31 and/29-30
 32 ((retina\$ or fundus or ocul\$ or eye?) adj3 (photograph\$ or exam\$)).ti,ab.
 33 (op?thalmoscop\$ or retinoscop\$).ti,ab.
 34 fundus oculi.ti,ab.
 35 or/26-28,31-34
 36 MASS SCREENING/
 37 VISION SCREENING/
 38 exp POPULATION SURVEILLANCE/
 39 (undiagnos\$ or estimate\$).ti.
 40 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 41 or/36-40
 42 SEVERITY OF ILLNESS INDEX/
 43 INTERNATIONAL CLASSIFICATION OF DISEASES/
 44 CLASSIFICATION/
 45 (retinopath\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging)).ti,ab.
 46 or/42-45
 47 exp EYE HEMORRHAGE/
 48 h?emorrhag\$.ti,ab.
 49 exp ANEURYSM/
 50 (microaneurysm? or micro aneurysm?).ti,ab.
 51 "EXUDATES AND TRANSUDATES"/
 52 exp EYE/
 53 and/51-52
 54 SUBRETINAL FLUID/
 55 exudate?.ti,ab.
 56 PAPILLEDEMA/
 57 EDEMA/
 58 exp EYE/
 59 and/57-58
 60 (papill?edem\$ or papillitis or choked dis??).ti,ab.
 61 ((retina\$ or optic dis?? or optic nerve?) adj (edema? or oedema?)).ti,ab.
 62 RETINAL NEOVASCULARIZATION/
 63 NEOVASCULARIZATION, PATHOLOGIC/ or VASCULAR MALFORMATIONS/
 64 exp EYE/ or RETINAL VESSELS/
 65 and/63-64
 66 exp RETINAL VESSELS/pa, pp [Pathology, Physiopathology]
 67 neovascular\$.ti,ab.

68 (new adj2 vessel adj2 form\$).ti,ab.
69 ((venous or vascular or microvascular or fibrovascular) adj3 (abnormal\$ or malform\$ or loop\$ or bead\$ or reduplicat\$ or duplicat\$ or proliferat\$)).ti,ab.
70 (IRMA or ((intra retinal or intra retinal) adj microvascular adj abnormal\$)).ti,ab.
71 *MACULAR DEGENERATION/
72 MACULAR EDEMA/
73 (macular adj (degenerat\$ or dysfunction\$)).ti,ab.
74 (maculopath\$ or macular edema? or macular oedema? or CSME or CSMO).ti,ab.
75 exp OCULAR HYPERTENSION/
76 (glaucoma? or ((ocular or intraocular or eye) adj3 (hypertensi\$ or pressur\$))).ti,ab.
77 OPTIC NEUROPATHY, ISCHEMIC/
78 (optic adj3 (isch?emi\$ or neuropath\$)).ti,ab.
79 cotton wool spot?.ti,ab.
80 RETINAL DETACHMENT/
81 ((retina\$ or preretina\$) adj3 (detach\$ or tear\$ or scar\$ or thick\$ or lesion? or manifest\$ or fibrosis)).ti,ab.
82 VISION DISORDERS/
83 SCOTOMA/
84 VISION, LOW/
85 (scotoma? or blind spot? or floater? or musca volitante?).ti,ab.
86 ((reduc\$ or impair\$ or subnormal or sub-normal or suboptimal or sub-optimal or diminish\$ or low or blur\$) adj3 (vision or visual or acuity)).ti,ab.
87 or/47-50,53-56,59-62,65-86
88 PREVALENCE/
89 INCIDENCE/
90 CROSS-SECTIONAL STUDIES/
91 exp MODELS, STATISTICAL/
92 LIFE TABLES/
93 exp RISK/
94 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
95 or/88-94
96 AGE FACTORS/
97 AGE DISTRIBUTION/
98 AGE OF ONSET/
99 TIME TO TREATMENT/
100 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
101 (disease adj3 (duration or onset)).ti,ab.
102 or/96-101
103 DIABETIC RETINOPATHY/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
104 22 and (35 or 41 or 46 or 95 or 102)
105 19 and 25 and (35 or 41 or 46 or 95 or 102)
106 19 and 87 and (95 or 102)
107 or/103-106
108 and/9,107

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw,jw,rw.
 - 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,tx,kw,jw,rw.
 - 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw,jw,rw.
 - 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw,jw,rw.
 - 5 or/1-4
 - 6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw,tx,kw.
 - 7 (IDDM or T1D or TID or DM1 or DMI).tw,tx.
 - 8 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.
 - 9 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx,kw.
 - 10 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
 - 11 or/6-10
 - 12 (diabet\$ adj3 retinopath\$).tw,tx,kw.
 - 13 RETINAL DISEASES.kw.
 - 14 retinopath\$.tw,tx,kw.
 - 15 or/13-14
 - 16 DIAGNOSTIC TECHNIQUES, OPHTHALMOLOGICAL.kw.
 - 17 ((retina\$ or fundus or ocul\$ or eye?) adj3 (photograph\$ or exam\$)).tw,tx,kw.
 - 18 (op?thalmoscop\$ or retinoscop\$).tw,tx,kw.
 - 19 fundus oculi.tw,tx,kw.
 - 20 or/16-19
 - 21 SCREENING.kw.
 - 22 SURVEILLANCE.kw.
 - 23 (undiagnos\$ or estimate\$).ti.
 - 24 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 - 25 or/21-24
 - 26 SEVERITY OF ILLNESS INDEX.kw.
 - 27 DISEASE SEVERITY.kw.
 - 28 DISEASE COURSE.kw.
 - 29 STAGING.kw.
 - 30 INTERNATIONAL CLASSIFICATION OF DISEASES.kw.
 - 31 RATING SCALE.kw.
 - 32 CLASSIFICATION.kw.
 - 33 (retinopath\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging)).tw,tx.
 - 34 or/26-33
 - 35 h?emorrhag\$.tw,tx,kw.
 - 36 ANEURYSM.kw.
 - 37 (microaneurysm? or micro aneurysm?).tw,tx,kw.
 - 38 SUBRETINAL FLUID.kw.
 - 39 exudate?.tw,tx,kw.
 - 40 (papill?edem\$ or papillitis or choked dis??).tw,tx,kw.
 - 41 ((retina\$ or optic dis?? or optic nerve?) adj (edema? or oedema?)).tw,tx,kw.
 - 42 neovascular\$.tw,tx,kw.

- 43 (new adj2 vessel adj2 form\$).tw,tx.
 44 ((venous or vascular or microvascular or fibrovascular) adj3 (abnormal\$ or malform\$ or loop\$ or bead\$ or reduplicat\$ or duplicat\$ or proliferat\$)).tw,tx,kw.
 45 (IRMA or ((intraretinal or intra retinal) adj microvascular adj abnormal\$)).tw,tx.
 46 (macular adj (degenerat\$ or dysfunction\$)).tw,tx,kw.
 47 (maculopath\$ or macular edema? or macular oedema? or CSME or CSMO).tw,tx,kw.
 48 (glaucoma? or ((ocular or intraocular or eye) adj3 (hypertensi\$ or pressur\$))).tw,tx,kw.
 49 (optic adj3 (isch?emi\$ or neuropath\$)).tw,tx,kw.
 50 cotton wool spot?.tw,tx.
 51 ((retina\$ or preretina\$) adj3 (detach\$ or tear\$ or scar\$ or thick\$ or lesion? or manifest\$ or fibrosis)).tw,tx,kw.
 52 (VISION DISORDERS or VISUAL DISORDER).kw.
 53 (scotoma? or blind spot? or floater? or musca volitante?).tw,tx,kw.
 54 ((reduc\$ or impair\$ or subnormal or sub-normal or suboptimal or sub-optimal or diminish\$ or low or blur\$) adj3 (vision or visual or acuity)).tw,tx,kw.
 55 or/35-54
 56 PREVALENCE.kw.
 57 INCIDENCE.kw.
 58 CROSS-SECTIONAL STUDIES.kw.
 59 MODELS, STATISTICAL.kw.
 60 LIFE TABLE\$.kw.
 61 RISK.kw.
 62 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 63 or/56-62
 64 AGE.kw.
 65 TIME TO TREATMENT.kw.
 66 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw,tx,kw.
 67 (disease adj3 (duration or onset)).tw,tx,kw.
 68 or/64-67
 69 12 and (20 or 25 or 34 or 63 or 68)
 70 11 and 15 and (20 or 25 or 34 or 63 or 68)
 71 11 and 55 and (63 or 68)
 72 or/69-71
 73 and/5,72

Health Technology Assessment

- # Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jw,rw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jw,rw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jw,rw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/

11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
12 (IDDM or T1D or TID or DM1 or DMI).tw.
13 or/10-12
14 exp DIABETES MELLITUS, TYPE 2/
15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
17 (NIDDM or T2D or TIID or DM2 or DMII).tw.
18 or/14-17
19 or/13,18
20 DIABETIC RETINOPATHY/
21 (diabet\$ adj3 retinopath\$).tw.
22 or/20-21
23 RETINAL DISEASES/
24 retinopath\$.tw.
25 or/23-24
26 DIAGNOSTIC TECHNIQUES, OPHTHALMOLOGICAL/
27 exp OPHTHALMOSCOPY/
28 FUNDUS OCULI/
29 RETINA/ or RETINAL VESSELS/
30 PHOTOGRAPHY/
31 and/29-30
32 ((retina\$ or fundus or ocul\$ or eye?) adj3 (photograph\$ or exam\$)).tw.
33 (op?thalmoscop\$ or retinoscop\$).tw.
34 fundus oculi.tw.
35 or/26-28,31-34
36 MASS SCREENING/
37 VISION SCREENING/
38 exp POPULATION SURVEILLANCE/
39 (undiagnos\$ or estimate\$).ti.
40 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
41 or/36-40
42 SEVERITY OF ILLNESS INDEX/
43 INTERNATIONAL CLASSIFICATION OF DISEASES/
44 CLASSIFICATION/
45 (retinopath\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging)).tw.
46 or/42-45
47 exp EYE HEMORRHAGE/
48 h?emorrhag\$.tw.
49 exp ANEURYSM/
50 (microaneurysm? or micro aneurysm?).tw.
51 "EXUDATES AND TRANSUDATES"/
52 exp EYE/
53 and/51-52
54 SUBRETINAL FLUID/
55 exudate?.tw.
56 PAPILLEDEMA/

57 EDEMA/
58 exp EYE/
59 and/57-58
60 (papill?edem\$ or papillitis or choked dis??).tw.
61 ((retina\$ or optic dis?? or optic nerve?) adj (edema? or oedema?)).tw.
62 RETINAL NEOVASCULARIZATION/
63 NEOVASCULARIZATION, PATHOLOGIC/ or VASCULAR MALFORMATIONS/
64 exp EYE/ or RETINAL VESSELS/
65 and/63-64
66 exp RETINAL VESSELS/pa, pp [Pathology, Physiopathology]
67 neovascular\$.tw.
68 (new adj2 vessel adj2 form\$).tw.
69 ((venous or vascular or microvascular or fibrovascular) adj3 (abnormal\$ or malform\$ or loop\$ or
bead\$ or reduplicat\$ or duplicat\$ or proliferat\$)).tw.
70 (IRMA or ((intra retinal or intra retinal) adj microvascular adj abnormal\$)).tw.
71 MACULAR DEGENERATION/
72 MACULAR EDEMA/
73 (macular adj (degenerat\$ or dysfunction\$)).tw.
74 (maculopath\$ or macular edema? or macular oedema? or CSME or CSMO).tw.
75 exp OCULAR HYPERTENSION/
76 (glaucoma? or ((ocular or intraocular or eye) adj3 (hypertensi\$ or pressur\$))).tw.
77 OPTIC NEUROPATHY, ISCHEMIC/
78 (optic adj3 (isch?emi\$ or neuropath\$)).tw.
79 cotton wool spot?.tw.
80 RETINAL DETACHMENT/
81 ((retina\$ or preretina\$) adj3 (detach\$ or tear\$ or scar\$ or thick\$ or lesion? or manifest\$ or
fibrosis)).tw.
82 VISION DISORDERS/
83 SCOTOMA/
84 VISION, LOW/
85 (scotoma? or blind spot? or floater? or musca volitante?).tw.
86 ((reduc\$ or impair\$ or subnormal or sub-normal or suboptimal or sub-optimal or diminish\$ or low
or blur\$) adj3 (vision or visual or acuity)).tw.
87 or/47-50,53-56,59-62,65-86
88 PREVALENCE/
89 INCIDENCE/
90 CROSS-SECTIONAL STUDIES/
91 exp MODELS, STATISTICAL/
92 LIFE TABLES/
93 exp RISK/
94 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
95 or/88-94
96 AGE FACTORS/
97 AGE DISTRIBUTION/
98 AGE OF ONSET/
99 TIME TO TREATMENT/
100 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw.
101 (disease adj3 (duration or onset)).tw.

102 or/96-101
 103 DIABETIC RETINOPATHY/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
 104 22 and (35 or 41 or 46 or 95 or 102)
 105 19 and 25 and (35 or 41 or 46 or 95 or 102)
 106 19 and 87 and (95 or 102)
 107 or/103-106
 108 and/9,107

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 NON INSULIN DEPENDENT DIABETES MELLITUS/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 18 or/14-17
 19 or/13,18
 20 JUVENILE DIABETES MELLITUS/
 21 DIABETIC RETINOPATHY/
 22 (diabet\$ adj3 retinopath\$).ti,ab.
 23 or/21-22
 24 RETINOPATHY/
 25 PROLIFERATIVE RETINOPATHY/
 26 retinopath\$.ti,ab.
 27 or/24-26
 28 EYE PHOTOGRAPHY/
 29 exp RETINA EXAMINATION/
 30 OPHTHALMOSCOPY/
 31 RETINA/ or exp RETINA BLOOD VESSEL/
 32 PHOTOGRAPHY/
 33 and/31-32
 34 exp OPHTHALMIC CAMERA/

35 ((retina\$ or fundus or ocul\$ or eye?) adj3 (photograph\$ or exam\$)).ti,ab.
36 (op?thalmoscop\$ or retinoscop\$).ti,ab.
37 fundus oculi.ti,ab.
38 or/28-30,33-37
39 SCREENING/
40 MASS SCREENING/
41 SCREENING TEST/
42 RESCREENING/
43 exp DISEASE SURVEILLANCE/
44 (undiagnos\$ or estimate\$).ti.
45 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
46 or/39-45
47 SEVERITY OF ILLNESS INDEX/
48 DISEASE SEVERITY/
49 STAGING/
50 exp INTERNATIONAL CLASSIFICATION OF DISEASES/
51 RATING SCALE/
52 CLASSIFICATION/
53 DISEASE CLASSIFICATION/
54 (retinopath\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging)).ti,ab.
55 or/47-54
56 exp INTRAOCULAR HEMORRHAGE/
57 h?emorrhag\$.ti,ab.
58 MICROANEURYSM/
59 (microaneurysm? or micro aneurysm?).ti,ab.
60 RETINA EXUDATE/
61 SUBRETINAL FLUID/
62 exudate?.ti,ab.
63 PAPILLEDEMA/
64 RETINAL EDEMA/
65 (papill?edem\$ or papillitis or choked dis??).ti,ab.
66 ((retina\$ or optic dis?? or optic nerve?) adj (edema? or oedema?)).ti,ab.
67 RETINA NEOVASCULARIZATION/
68 "NEOVASCULARIZATION (PATHOLOGY)"/
69 RETINA/ or exp RETINA BLOOD VESSEL/
70 and/68-69
71 neovascular\$.ti,ab.
72 (new adj2 vessel adj2 form\$).ti,ab.
73 ((venous or vascular or microvascular or fibrovascular) adj3 (abnormal\$ or malform\$ or loop\$ or
bead\$ or reduplicat\$ or duplicat\$ or proliferat\$)).ti,ab.
74 (IRMA or ((intra retinal or intra retinal) adj microvascular adj abnormal\$)).ti,ab.
75 RETINA DEGENERATION/
76 RETINA MACULA DEGENERATION/
77 RETINA MACULOPATHY/
78 exp MACULAR EDEMA/
79 (macular adj (degenerat\$ or dysfunction\$)).ti,ab.
80 (maculopath\$ or macular edema? or macular oedema? or CSME or CSMO).ti,ab.
81 exp GLAUCOMA/

82 (glaucoma? or ((ocular or intraocular or eye) adj3 (hypertensi\$ or pressur\$))).ti,ab.
83 exp ISCHEMIC OPTIC NEUROPATHY/
84 (optic adj3 (isch?emi\$ or neuropath\$)).ti,ab.
85 cotton wool spot?.ti,ab.
86 RETINA DETACHMENT/
87 RETINA TEAR/
88 ((retina\$ or preretina\$) adj3 (detach\$ or tear\$ or scar\$ or thick\$ or lesion? or manifest\$ or fibrosis)).ti,ab.
89 VISUAL DISORDER/
90 VISUAL IMPAIRMENT/
91 SCOTOMA/
92 VITREOUS FLOATERS/
93 (scotoma? or blind spot? or floater? or musca volitante?).ti,ab.
94 ((reduc\$ or impair\$ or subnormal or sub-normal or suboptimal or sub-optimal or diminish\$ or low or blur\$) adj3 (vision or visual or acuity)).ti,ab.
95 or/56-67,70-94
96 PREVALENCE/
97 INCIDENCE/
98 STATISTICAL MODEL/
99 LIFE TABLE/
100 exp RISK/
101 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
102 or/96-101
103 AGE/
104 AGE DISTRIBUTION/
105 ONSET AGE/
106 DISEASE DURATION/
107 TIME TO TREATMENT/
108 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
109 (disease adj3 (duration or onset)).ti,ab.
110 or/103-109
111 DIABETIC RETINOPATHY/di, ep, pc [Diagnosis, Epidemiology, Prevention]
112 23 and (38 or 46 or 55 or 102 or 110)
113 19 and 27 and (38 or 46 or 55 or 102 or 110)
114 19 and 95 and (102 or 110)
115 or/111-114
116 and/9,115
117 20 and 23 and (38 or 46 or 55 or 102 or 110)
118 20 and 27 and (38 or 46 or 55 or 102 or 110)
119 20 and 95 and (102 or 110)
120 or/116-119
121 limit 120 to english language
122 conference abstract.pt.
123 letter.pt. or LETTER/
124 note.pt.
125 editorial.pt.
126 (letter or comment* or abstracts).ti.
127 or/122-126

128 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 129 127 not 128
 130 ANIMAL/ not HUMAN/
 131 NONHUMAN/
 132 exp ANIMAL EXPERIMENT/
 133 exp EXPERIMENTAL ANIMAL/
 134 ANIMAL MODEL/
 135 exp RODENT/
 136 (rat or rats or mouse or mice).ti.
 137 or/129-136
 138 121 not 137

A.17 Type 1 and type 2 diabetes – nephropathy

Review questions:

What is the optimal monitoring strategy for identifying nephropathy in children and young people with type 1 diabetes?

What is the optimal monitoring strategy for identifying nephropathy in children and young people with type 2 diabetes?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
 13 or/10-12
 14 exp DIABETES MELLITUS, TYPE 2/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 18 or/14-17
 19 or/13,18
 20 DIABETIC NEPHROPATHIES/

21 nephropath\$.ti,ab.
 22 glomerulosclerosis.ti,ab.
 23 (Kimmelstie?l Wilson adj (syndrome? or disease?)).ti,ab.
 24 ALBUMINURIA/
 25 PROTEINURIA/
 26 SERUM ALBUMIN/
 27 CREATININE/bl, ur [Blood, Urine]
 28 (albuminuri\$ or microalbuminuri\$ or proteinuri\$).ti,ab.
 29 ((albumin\$ or creatinine\$) adj3 (serum or sera or blood or urin\$ or ratio or concentration?)).ti,ab.
 30 exp RENAL INSUFFICIENCY, CHRONIC/
 31 ((kidney? or renal) adj3 (fail\$ or insufficien\$ or disease?)).ti,ab.
 32 or/20-31
 33 SEVERITY OF ILLNESS INDEX/
 34 DISEASE PROGRESSION/
 35 INTERNATIONAL CLASSIFICATION OF DISEASES/
 36 CLASSIFICATION/
 37 or/33-36
 38 or/20-28
 39 and/37-38
 40 ((nephropath\$ or microalbuminuria or proteinuria) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or progress\$ or degree\$)).ti,ab.
 41 or/39-40
 42 MASS SCREENING/
 43 exp POPULATION SURVEILLANCE/
 44 (undiagnos\$ or estimate\$).ti.
 45 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 46 or/42-45
 47 PREVALENCE/
 48 INCIDENCE/
 49 CROSS-SECTIONAL STUDIES/
 50 exp MODELS, STATISTICAL/
 51 LIFE TABLES/
 52 exp RISK/
 53 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 54 or/47-53
 55 AGE FACTORS/
 56 AGE DISTRIBUTION/
 57 AGE OF ONSET/
 58 TIME TO TREATMENT/
 59 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
 60 (disease adj3 (duration or onset)).ti,ab.
 61 or/55-60
 62 ALBUMINURIA/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
 63 32 and (46 or 54 or 61)
 64 or/41,62-63
 65 and/19,64
 66 DIABETIC NEPHROPATHIES/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]

67 or/65-66
68 and/9,67
69 limit 68 to english language
70 LETTER/
71 EDITORIAL/
72 NEWS/
73 exp HISTORICAL ARTICLE/
74 ANECDOTES AS TOPIC/
75 COMMENT/
76 (letter or comment* or abstracts).ti.
77 or/70-76
78 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
79 77 not 78
80 ANIMALS/ not HUMANS/
81 exp ANIMALS, LABORATORY/
82 exp ANIMAL EXPERIMENTATION/
83 exp MODELS, ANIMAL/
84 exp RODENTIA/
85 (rat or rats or mouse or mice).ti.
86 or/79-85
87 69 not 86

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
7 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
8 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
9 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
10 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
11 or/6-10
12 nephropath\$.ti,ab.
13 glomerulosclerosis.ti,ab.
14 (Kimmelstie?l Wilson adj (syndrome? or disease?)).ti,ab.
15 (albuminuri\$ or microalbuminuri\$ or proteinuri\$).ti,ab.
16 ((albumin\$ or creatinine\$) adj3 (serum or sera or blood or urin\$ or ratio or concentration?)).ti,ab.
17 ((kidney? or renal) adj3 (fail\$ or insufficien\$ or disease?)).ti,ab.
18 or/12-17
19 ((nephropath\$ or microalbuminuria or proteinuria) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or progress\$ or degree\$)).ti,ab.
20 (undiagnos\$ or estimate\$).ti.

21 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 22 or/20-21
 23 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 24 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
 25 (disease adj3 (duration or onset)).ti,ab.
 26 or/24-25
 27 18 and (22 or 23 or 26)
 28 or/19,27
 29 and/5,11,28

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 1/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 13 or/10-12
 14 exp DIABETES MELLITUS, TYPE 2/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 18 or/14-17
 19 or/13,18
 20 DIABETIC NEPHROPATHIES/
 21 nephropath\$.ti,ab.
 22 glomerulosclerosis.ti,ab.
 23 (Kimmelstie?l Wilson adj (syndrome? or disease?)).ti,ab.
 24 ALBUMINURIA/
 25 PROTEINURIA/
 26 SERUM ALBUMIN/
 27 CREATININE/bl, ur [Blood, Urine]
 28 (albuminuri\$ or microalbuminuri\$ or proteinuri\$).ti,ab.
 29 ((albumin\$ or creatinine\$) adj3 (serum or sera or blood or urin\$ or ratio or concentration?)).ti,ab.
 30 exp RENAL INSUFFICIENCY, CHRONIC/
 31 ((kidney? or renal) adj3 (fail\$ or insufficien\$ or disease?)).ti,ab.
 32 or/20-31
 33 SEVERITY OF ILLNESS INDEX/

34 DISEASE PROGRESSION/
 35 INTERNATIONAL CLASSIFICATION OF DISEASES/
 36 CLASSIFICATION/
 37 or/33-36
 38 or/20-28
 39 and/37-38
 40 ((nephropath\$ or microalbuminuria or proteinuria) adj3 (grad\$ or sever\$ or classif\$ or index\$ or
 indice? or stage\$ or staging or progress\$ or degree\$)).ti,ab.
 41 or/39-40
 42 MASS SCREENING/
 43 exp POPULATION SURVEILLANCE/
 44 (undiagnos\$ or estimate\$).ti.
 45 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 46 or/42-45
 47 PREVALENCE/
 48 INCIDENCE/
 49 CROSS-SECTIONAL STUDIES/
 50 exp MODELS, STATISTICAL/
 51 LIFE TABLES/
 52 exp RISK/
 53 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 54 or/47-53
 55 AGE FACTORS/
 56 AGE DISTRIBUTION/
 57 AGE OF ONSET/
 58 TIME TO TREATMENT/
 59 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
 60 (disease adj3 (duration or onset)).ti,ab.
 61 or/55-60
 62 ALBUMINURIA/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
 63 32 and (46 or 54 or 61)
 64 or/41,62-63
 65 and/19,64
 66 DIABETIC NEPHROPATHIES/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention
 & Control]
 67 or/65-66
 68 and/9,67

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw,jw,rw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).tw,tx,kw,jw,rw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw,jw,rw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw,jw,rw.
 5 or/1-4

6 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw,tx,kw.
7 (IDDM or T1D or T1D or DM1 or DMI).tw,tx.
8 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.
9 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx,kw.
10 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
11 or/6-10
12 nephropath\$.tw,tx,kw.
13 glomerulosclerosis.tw,tx.
14 (Kimmelstie?l Wilson adj (syndrome? or disease?)).tw,tx.
15 (albuminuri\$ or microalbuminuri\$ or proteinuri\$).tw,tx,kw.
16 ((albumin\$ or creatinine\$) adj3 (serum or sera or blood or urin\$ or ratio or
concentration?)).tw,tx,kw.
17 ((kidney? or renal) adj3 (fail\$ or insufficien\$ or disease?)).tw,tx,kw.
18 or/12-17
19 SEVERITY OF ILLNESS INDEX.kw.
20 (DISEASE PROGRESSION or DISEASE COURSE).kw.
21 INTERNATIONAL CLASSIFICATION OF DISEASES.kw.
22 RATING SCALE.kw.
23 CLASSIFICATION.kw.
24 or/19-23
25 or/12-15
26 and/24-25
27 ((nephropath\$ or microalbuminuria or proteinuria) adj3 (grad\$ or sever\$ or classif\$ or index\$ or
indice? or stage\$ or staging or progress\$ or degree\$)).tw,tx.
28 or/26-27
29 (SCREENING or RESCREENING).kw.
30 SURVEILLANCE.kw.
31 (undiagnos\$ or estimate\$).ti.
32 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
33 or/29-32
34 PREVALENCE.kw.
35 INCIDENCE.kw.
36 (MODELS, STATISTICAL or STATISTICAL MODEL).kw.
37 LIFE TABLE?.kw.
38 RISK.kw.
39 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
40 or/34-39
41 AGE.kw.
42 TIME TO TREATMENT.kw.
43 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw,tx,kw.
44 (disease adj3 (duration or onset)).tw,tx,kw.
45 or/41-44
46 18 and (33 or 40 or 45)
47 or/28,46
48 and/5,11,47

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw,jw,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jw,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jw,rw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
12 (IDDM or T1D or TID or DM1 or DMI).tw.
13 or/10-12
14 exp DIABETES MELLITUS, TYPE 2/
15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
17 (NIDDM or T2D or TIID or DM2 or DMII).tw.
18 or/14-17
19 or/13,18
20 DIABETIC NEPHROPATHIES/
21 nephropath\$.tw.
22 glomerulosclerosis.tw.
23 (Kimmelstie?l Wilson adj (syndrome? or disease?)).tw.
24 ALBUMINURIA/
25 PROTEINURIA/
26 SERUM ALBUMIN/
27 CREATININE/bl, ur [Blood, Urine]
28 (albuminuri\$ or microalbuminuri\$ or proteinuri\$).tw.
29 ((albumin\$ or creatinine\$) adj3 (serum or sera or blood or urin\$ or ratio or concentration?)).tw.
30 exp RENAL INSUFFICIENCY, CHRONIC/
31 ((kidney? or renal) adj3 (fail\$ or insufficien\$ or disease?)).tw.
32 or/20-31
33 SEVERITY OF ILLNESS INDEX/
34 DISEASE PROGRESSION/
35 INTERNATIONAL CLASSIFICATION OF DISEASES/
36 CLASSIFICATION/
37 or/33-36
38 or/20-28
39 and/37-38
40 ((nephropath\$ or microalbuminuria or proteinuria) adj3 (grad\$ or sever\$ or classif\$ or index\$ or
indice? or stage\$ or staging or progress\$ or degree\$)).tw.
41 or/39-40
42 MASS SCREENING/

43 exp POPULATION SURVEILLANCE/
 44 (undiagnos\$ or estimate\$).ti.
 45 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 46 or/42-45
 47 PREVALENCE/
 48 INCIDENCE/
 49 CROSS-SECTIONAL STUDIES/
 50 exp MODELS, STATISTICAL/
 51 LIFE TABLES/
 52 exp RISK/
 53 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 54 or/47-53
 55 AGE FACTORS/
 56 AGE DISTRIBUTION/
 57 AGE OF ONSET/
 58 TIME TO TREATMENT/
 59 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw.
 60 (disease adj3 (duration or onset)).tw.
 61 or/55-60
 62 ALBUMINURIA/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
 63 32 and (46 or 54 or 61)
 64 or/41,62-63
 65 and/19,64
 66 DIABETIC NEPHROPATHIES/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention
 & Control]
 67 or/65-66
 68 and/9,67

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or T1 or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 12 (IDDM or T1D or T1D or DM1 or DMI).ti,ab.
 13 or/10-12
 14 NON INSULIN DEPENDENT DIABETES MELLITUS/
 15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.

16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
17 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
18 or/14-17
19 or/13,18
20 and/9,19
21 JUVENILE DIABETES MELLITUS/
22 or/20-21
23 DIABETIC NEPHROPATHY/
24 nephropath\$.ti,ab.
25 glomerulosclerosis.ti,ab.
26 (Kimmelstie?l Wilson adj (syndrome? or disease?)).ti,ab.
27 exp ALBUMINURIA/
28 PROTEINURIA/
29 PROTEIN URINE LEVEL/
30 SERUM ALBUMIN/
31 ALBUMIN BLOOD LEVEL/
32 CREATININE URINE LEVEL/
33 CREATININE BLOOD LEVEL/
34 (albuminuri\$ or microalbuminuri\$ or proteinuri\$).ti,ab.
35 ((albumin\$ or creatinine\$) adj3 (serum or sera or blood or urin\$ or ratio or concentration?)).ti,ab.
36 KIDNEY DISEASE/
37 KIDNEY FAILURE/
38 CHRONIC KIDNEY FAILURE/
39 ((kidney? or renal) adj3 (fail\$ or insufficien\$ or disease?)).ti,ab.
40 or/23-39
41 SEVERITY OF ILLNESS INDEX/
42 DISEASE SEVERITY/
43 DISEASE COURSE/
44 STAGING/
45 exp INTERNATIONAL CLASSIFICATION OF DISEASES/
46 RATING SCALE/
47 CLASSIFICATION/
48 DISEASE CLASSIFICATION/
49 or/41-48
50 or/23-34
51 and/49-50
52 ((nephropath\$ or microalbuminuria or proteinuria) adj3 (grad\$ or sever\$ or classif\$ or index\$ or
53 indice? or stage\$ or staging or progress\$ or degree\$)).ti,ab.
54 or/51-52
55 SCREENING/
56 MASS SCREENING/
57 SCREENING TEST/
58 RESCREENING/
59 exp DISEASE SURVEILLANCE/
60 (undiagnos\$ or estimate\$).ti.
61 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
62 or/54-60
63 PREVALENCE/

63 INCIDENCE/
64 STATISTICAL MODEL/
65 LIFE TABLE/
66 exp RISK/
67 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
68 or/62-67
69 AGE/
70 AGE DISTRIBUTION/
71 ONSET AGE/
72 DISEASE DURATION/
73 TIME TO TREATMENT/
74 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
75 (disease adj3 (duration or onset)).ti,ab.
76 or/69-75
77 MICROALBUMINURIA/di, ep, pc [Diagnosis, Epidemiology, Prevention]
78 40 and (61 or 68 or 76)
79 or/53,77-78
80 and/22,79
81 DIABETIC NEPHROPATHY/di, ep, pc [Diagnosis, Epidemiology, Prevention]
82 and/9,81
83 or/80,82
84 limit 83 to english language
85 conference abstract.pt.
86 letter.pt. or LETTER/
87 note.pt.
88 editorial.pt.
89 (letter or comment* or abstracts).ti.
90 or/85-89
91 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
92 90 not 91
93 ANIMAL/ not HUMAN/
94 NONHUMAN/
95 exp ANIMAL EXPERIMENT/
96 exp EXPERIMENTAL ANIMAL/
97 ANIMAL MODEL/
98 exp RODENT/
99 (rat or rats or mouse or mice).ti.
100 or/92-99
101 84 not 100

A.18 Type 2 diabetes – education

Review question: What is the effectiveness of structured education programmes in improving clinical and patient outcomes in children and young people with type 2 diabetes?

Database(s): Ovid MEDLINE(R)

```
#      Searches
1      randomized controlled trial.pt.
2      controlled clinical trial.pt.
3      DOUBLE BLIND METHOD/
4      SINGLE BLIND METHOD/
5      RANDOM ALLOCATION/
6      RANDOMIZED CONTROLLED TRIALS AS TOPIC/
7      or/1-6
8      ((single or double or triple or treble) adj5 (blind$ or mask$)).tw,sh.
9      clinical trial.pt.
10     exp CLINICAL TRIAL/
11     exp CLINICAL TRIALS AS TOPIC/
12     (clinic$ adj5 trial$).tw,sh.
13     PLACEBOS/
14     placebo$.tw,sh.
15     random$.tw,sh.
16     or/8-15
17     or/7,16
18     META ANALYSIS/
19     META ANALYSIS AS TOPIC/
20     meta analysis.pt.
21     (metaanaly$ or meta-analy$ or (meta adj analy$)).tw,sh.
22     (systematic$ adj5 (review$ or overview$)).tw,sh.
23     (methodologic$ adj5 (review$ or overview$)).tw,sh.
24     or/18-23
25     review$.pt.
26     (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or
27     psyclit or "web of science" or "science citation" or scisearch).tw.
28     ((hand or manual$) adj2 search$).tw.
29     (electronic database$ or bibliographic database$ or computeri?ed database$ or online
30     database$).tw,sh.
31     (pooling or pooled or mantel haenszel).tw,sh.
32     (peto or dersimonian or der simonian or fixed effect).tw,sh.
33     or/26-30
34     and/25,31
35     or/24,32
36     letter.pt.
37     case report.tw.
38     comment.pt.
39     editorial.pt.
```

38 historical article.pt.
39 or/34-38
40 17 not 39
41 33 not 39
42 or/40-41
43 ADOLESCENT/ or MINORS/
44 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
45 exp CHILD/
46 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
47 exp INFANT/
48 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
49 exp PEDIATRICS/ or exp PUBERTY/
50 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
51 or/43-50
52 exp DIABETES MELLITUS, TYPE 2/
53 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
54 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
55 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
56 or/52-55
57 PATIENT EDUCATION AS TOPIC/
58 PROBLEM SOLVING/
59 ed.fs.
60 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
61 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
62 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$
or program? or programme or programmes)).ti,ab.
63 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
adj3 information).ti,ab.
64 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or
instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
65 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
cope or coping) adj3 information).ti,ab.
66 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyco?emi\$ or "blood glucose" or "blood sugar") adj6
(educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or
program? or programme or programmes)).ti,ab.
67 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyco?emi\$ or "blood glucose" or "blood sugar") adj3
information).ti,ab.
68 or/57-67
69 and/51,56,68
70 limit 69 to english language
71 LETTER/
72 EDITORIAL/
73 NEWS/
74 exp HISTORICAL ARTICLE/

75 ANECDOTES AS TOPIC/
76 COMMENT/
77 CASE REPORT/
78 (letter or comment* or abstracts).ti.
79 or/71-78
80 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
81 79 not 80
82 ANIMALS/ not HUMANS/
83 exp ANIMALS, LABORATORY/
84 exp ANIMAL EXPERIMENTATION/
85 exp MODELS, ANIMAL/
86 exp RODENTIA/
87 (rat or rats or mouse or mice).ti.
88 or/81-87
89 70 not 88
90 and/42,89

Database(s): Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
11 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
12 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
13 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab.
14 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
15 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab.
16 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyco?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
17 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyco?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab.

- 18 or/10-17
- 19 and/5,9,18
- 20 limit 19 to english language

Database(s): EBM Reviews - Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 2/
- 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
- 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
- 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
- 14 or/10-13
- 15 PATIENT EDUCATION AS TOPIC/
- 16 PROBLEM SOLVING/
- 17 ed.fs.
- 18 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
- 19 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.
- 20 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 21 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab.
- 22 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 23 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab.
- 24 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 25 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab.
- 26 or/15-25

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,tw,tx,jw,rw.
 - 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,tw,tx,jw,rw.
 - 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,tw,tx,jw,rw.
 - 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,tw,tx,jw,rw.
 - 5 or/1-4
 - 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).kw,tw,tx.
 - 7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).kw,tw,tx.
 - 8 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
 - 9 or/6-8
 - 10 PATIENT EDUCATION AS TOPIC.kw.
 - 11 PROBLEM SOLVING.kw.
 - 12 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).tw,tx.
 - 13 (problem-solving or "problem solving" or problem-based or "problem based").tw,tx.
 - 14 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw,tx.
 - 15 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).tw,tx.
 - 16 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw,tx.
 - 17 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).tw,tx.
 - 18 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).tw,tx.
 - 19 ((diabet\$ or insulin\$ or glyco?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).tw,tx.
 - 20 or/10-19
 - 21 and/5,9,20

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
 - 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
 - 3 exp CHILD/
 - 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
 - 5 exp INFANT/
 - 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.

7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
 13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
 14 or/10-13
 15 PATIENT EDUCATION AS TOPIC/
 16 PROBLEM SOLVING/
 17 ed.fs.
 18 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).tw.
 19 (problem-solving or "problem solving" or problem-based or "problem based").tw.
 20 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
 adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$
 or program? or programme or programmes)).tw.
 21 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families)
 adj3 information).tw.
 22 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
 monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
 cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or
 instruct\$ or learn\$ or program? or programme or programmes)).tw.
 23 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-
 monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or
 cope or coping) adj3 information).tw.
 24 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6
 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or
 program? or programme or programmes)).tw.
 25 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3
 information).tw.
 26 or/15-25
 27 and/9,14,26

Embase

Searches
 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
 2 (clinic\$ adj5 trial\$).ti,ab,sh.
 3 SINGLE BLIND PROCEDURE/
 4 DOUBLE BLIND PROCEDURE/
 5 RANDOM ALLOCATION/
 6 CROSSOVER PROCEDURE/
 7 PLACEBO/
 8 placebo\$.ti,ab,sh.
 9 random\$.ti,ab,sh.
 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).ti,ab,sh.
 12 randomi?ed control\$ trial\$.tw.
 13 or/1-12

14 META ANALYSIS/
15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).ti,ab,sh.
16 (systematic\$ adj5 (review\$ or overview\$)).ti,sh,ab.
17 (methodologic\$ adj5 (review\$ or overview\$)).ti,ab,sh.
18 or/14-17
19 review.pt.
20 (medline or medlars or embase).ab.
21 (scisearch or science citation index).ab.
22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
23 ((hand or manual\$) adj2 search\$).tw.
24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
database\$).tw.
25 (pooling or pooled or mantel haenszel).tw.
26 (peto or dersimonian or "der simonian" or fixed effect).tw.
27 or/20-26
28 and/19,27
29 or/18,28
30 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
31 13 not 30
32 29 not 30
33 or/31-32
34 exp ADOLESCENT/
35 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
36 exp CHILD/
37 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
38 exp INFANT/
39 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
40 exp PEDIATRICS/ or exp PUBERTY/
41 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
42 or/34-41
43 NON INSULIN DEPENDENT DIABETES MELLITUS/
44 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
45 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
46 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
47 or/43-46
48 JUVENILE DIABETES MELLITUS/
49 and/42,47
50 or/48-49
51 PATIENT EDUCATION/
52 DIABETES EDUCATION/
53 DIABETES EDUCATOR/
54 EDUCATION PROGRAM/
55 PROBLEM SOLVING/
56 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab.
57 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab.

- 58 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 59 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab.
- 60 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 61 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab.
- 62 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab.
- 63 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab.
- 64 or/51-63
- 65 and/50,64
- 66 limit 65 to english language
- 67 conference abstract.pt.
- 68 letter.pt. or LETTER/
- 69 note.pt.
- 70 editorial.pt.
- 71 CASE REPORT/ or CASE STUDY/
- 72 (letter or comment* or abstracts).ti.
- 73 or/67-72
- 74 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
- 75 73 not 74
- 76 ANIMAL/ not HUMAN/
- 77 NONHUMAN/
- 78 exp ANIMAL EXPERIMENT/
- 79 exp EXPERIMENTAL ANIMAL/
- 80 ANIMAL MODEL/
- 81 exp RODENT/
- 82 (rat or rats or mouse or mice).ti.
- 83 or/75-82
- 84 66 not 83
- 85 and/33,84

PsycINFO

- # Searches
- 1 LITERATURE REVIEW/
- 2 EXPERIMENTAL DESIGN/
- 3 RANDOM SAMPLING/
- 4 META-ANALYSIS/
- 5 exp TREATMENT/
- 6 (random\$ or search\$ or control\$ or risk\$).tw.
- 7 (meta-analys#s or metaanalys#s).ti.

8 (systematic\$ adj (review\$ or overview\$)).ti.
9 ((single or double or triple) adj (blind\$ or mask\$)).ti.
10 rct.tw.
11 or/1-10
12 adolescen\$.ag.
13 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,id,jw.
14 (child\$ or school\$ or preschool\$).ag.
15 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,id,jw.
16 (infan\$ or neonat\$).ag.
17 (infan\$ or neonat\$ or newborn\$ or baby or babies or p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,id,jw.
18 or/12-17
19 DIABETES MELLITUS/
20 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab,id.
21 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab,id.
22 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab,id.
23 BLOOD SUGAR/
24 or/19-23
25 EDUCATIONAL THERAPY/
26 CLIENT EDUCATION/
27 EDUCATIONAL PROGRAMS/
28 PROBLEM SOLVING/
29 ((educat\$ or training) adj6 (intervention\$ or program? or programme or programmes)).ti,ab,id.
30 (problem-solving or "problem solving" or problem-based or "problem based").ti,ab,id.
31 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab,id.
32 ((patient? or parent? or parental or child\$ or adolescen\$ or young or youth? or family\$ or families) adj3 information).ti,ab,id.
33 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab,id.
34 ((self-help or "self help" or self-care or "self care" or self-regulat\$ or "self regulat\$" or self-monitor\$ or "self monitor\$" or self-manag\$ or "self manag\$" or self-efficacy or "self efficacy" or cope or coping) adj3 information).ti,ab,id.
35 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj6 (educat\$ or train\$ or teach\$ or knowledge or aware\$ or skill\$ or advi?e or instruct\$ or learn\$ or program? or programme or programmes)).ti,ab,id.
36 ((diabet\$ or insulin\$ or glyc?emi\$ or hypoglyc?emi\$ or "blood glucose" or "blood sugar") adj3 information).ti,ab,id.
37 or/25-36
38 and/18,24,37
39 and/11,38
40 limit 39 to english language

CINAHL with Full Text

Query Limiters/Expanders

- S36 S6 AND S34 Limiters - English Language; Exclude MEDLINE records
Search modes - Boolean/Phrase
- S35 S6 AND S34 Search modes - Boolean/Phrase
- S34 S21 AND S33 Search modes - Boolean/Phrase
- S33 S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32
Search modes - Boolean/Phrase
- S32 TI ((diabet* or insulin* or glyco#emi* or hypoglyco#emi* or "blood glucose" or "blood sugar") N3
information) OR AB ((diabet* or insulin* or glyco#emi* or hypoglyco#emi* or "blood glucose" or
"blood sugar") N3 information) Search modes - Boolean/Phrase
- S31 TI ((diabet* or insulin* or glyco#emi* or hypoglyco#emi* or "blood glucose" or "blood sugar") N6
(educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or
program# or programme or programmes)) OR AB ((diabet* or insulin* or glyco#emi* or
hypoglyco#emi* or "blood glucose" or "blood sugar") N6 (educat* or train* or teach* or knowledge
or aware* or skill* or advi#e or instruct* or learn* or program# or programme or programmes))
Search modes - Boolean/Phrase
- S30 TI ((self-help or "self help" or self-care or "self care" or self-regulat* or "self regulat*" or self-
monitor* or "self monitor*" or self-manag* or "self manag*" or self-efficacy or "self efficacy" or
cope or coping) N3 information) OR AB ((self-help or "self help" or self-care or "self care" or self-
regulat* or "self regulat*" or self-monitor* or "self monitor*" or self-manag* or "self manag*" or self-
efficacy or "self efficacy" or cope or coping) N3 information) Search modes -
Boolean/Phrase
- S29 TI ((self-help or "self help" or self-care or "self care" or self-regulat* or "self regulat*" or self-
monitor* or "self monitor*" or self-manag* or "self manag*" or self-efficacy or "self efficacy" or
cope or coping) N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or
instruct* or learn* or program# or programme or programmes)) OR AB ((self-help or "self help" or
self-care or "self care" or self-regulat* or "self regulat*" or self-monitor* or "self monitor*" or self-
manag* or "self manag*" or self-efficacy or "self efficacy" or cope or coping) N6 (educat* or train*
or teach* or knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or
programme or programmes)) Search modes - Boolean/Phrase
- S28 TI ((patient# or parent# or parental or child* or adolescen* or young or youth# or family* or
families) N3 information) OR AB ((patient# or parent# or parental or child* or adolescen* or young
or youth# or family* or families) N3 information) Search modes - Boolean/Phrase
- S27 TI ((patient# or parent# or parental or child* or adolescen* or young or youth# or family* or
families) N6 (educat* or train* or teach* or knowledge or aware* or skill* or advi#e or instruct* or
learn* or program# or programme or programmes)) OR AB ((patient# or parent# or parental or
child* or adolescen* or young or youth# or family* or families) N6 (educat* or train* or teach* or
knowledge or aware* or skill* or advi#e or instruct* or learn* or program# or programme or
programmes)) Search modes - Boolean/Phrase
- S26 TI (problem-solving or "problem solving" or problem-based or "problem based") OR AB (problem-
solving or "problem solving" or problem-based or "problem based") Search modes -
Boolean/Phrase
- S25 TI ((educat* or training) N6 (intervention* or program# or programme or programmes)) OR AB
((educat* or training) N6 (intervention* or program# or programme or programmes)) Search
modes - Boolean/Phrase
- S24 MW "ED" Search modes - Boolean/Phrase
- S23 (MH "Problem Solving+") Search modes - Boolean/Phrase
- S22 (MH "Patient Education") OR (MH "Diabetes Education") Search modes -
Boolean/Phrase
- S21 S12 AND S20 Search modes - Boolean/Phrase
- S20 S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 Search modes - Boolean/Phrase
- S19 AB (NIDDM or T2D or TIID or DM2 or DMII) Search modes - Boolean/Phrase
- S18 TI (NIDDM or T2D or TIID or DM2 or DMII) Search modes - Boolean/Phrase

- S17 AB (diabet* adj5 non insulin or non-insulin) Search modes - Boolean/Phrase
- S16 TI (diabet* adj5 non insulin or non-insulin) Search modes - Boolean/Phrase
- S15 AB (diabet* N5 "type two" or "type 2" or "type II" or T2 or slow or late or stable or ketosis resistant or keto resist* or keto-resist* or non keto* or non-keto*) Search modes - Boolean/Phrase
- S14 TI (diabet* N5 "type two" or "type 2" or "type II" or T2 or slow or late or stable or ketosis resistant or keto resist* or keto-resist* or non keto* or non-keto*) Search modes - Boolean/Phrase
- S13 (MH "Diabetes Mellitus, Type 2") Search modes - Boolean/Phrase
- S12 S7 OR S8 OR S9 OR S10 OR S11 Search modes - Boolean/Phrase
- S11 TI (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) OR AB (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) or SO (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) Search modes - Boolean/Phrase
- S10 TI (infan* or neonat* or newborn* or baby or babies) OR AB (infan* or neonat* or newborn* or baby or babies) OR SO (infan* or neonat* or newborn* or baby or babies) Search modes - Boolean/Phrase
- S9 TI (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR AB (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR SO (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) Search modes - Boolean/Phrase
- S8 TI (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR AB (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR SO (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) Search modes - Boolean/Phrase
- S7 (MH "Infant, Newborn+") OR (MH "Infant+") OR (MH "Child, Preschool") OR (MH "Child+") OR (MH "Adolescence+") Search modes - Boolean/Phrase
- S6 S1 OR S2 OR S3 OR S4 OR S5 Search modes - Boolean/Phrase
- S5 PT systematic review Search modes - Boolean/Phrase
- S4 PT review Search modes - Boolean/Phrase
- S3 TX meta-analysis OR "meta analysis" Search modes - Boolean/Phrase
- S2 TX random* Search modes - Boolean/Phrase
- S1 (MH "Treatment Outcomes+") OR (MH "Experimental Studies+") Search modes - Boolean/Phrase

A.19 Type 2 diabetes – behavioural interventions

Review questions:

What is the effectiveness of behavioural interventions to promote engagement with clinical services in children and young people with type 2 diabetes?

What is the effectiveness of behavioural interventions to improve outcomes in children and young people with type 2 diabetes?

Ovid MEDLINE(R)

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.

3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
14 or/10-13
15 and/9,14
16 BEHAVIOR THERAPY/
17 COGNITIVE THERAPY/
18 PSYCHOTHERAPY/
19 PSYCHOTHERAPY, GROUP/
20 FAMILY THERAPY/
21 (psychotherap\$ or BFST or CBT).ti,ab.
22 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
23 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or
modif\$)).ti,ab.
24 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or
teamwork\$ or team-work\$)).ti,ab.
25 COUNSELING/
26 MOTIVATIONAL INTERVIEWING/
27 MENTORS/
28 SOCIAL SUPPORT/
29 SELF-HELP GROUPS/
30 (motivation\$ or counsel?ing or mentor\$).ti,ab.
31 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
32 or/16-31
33 and/15,32
34 limit 33 to english language
35 LETTER/
36 EDITORIAL/
37 NEWS/
38 exp HISTORICAL ARTICLE/
39 ANECDOTES AS TOPIC/
40 COMMENT/
41 CASE REPORT/
42 (letter or comment* or abstracts).ti.
43 or/35-42
44 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
45 43 not 44
46 ANIMALS/ not HUMANS/

47 exp ANIMALS, LABORATORY/
 48 exp ANIMAL EXPERIMENTATION/
 49 exp MODELS, ANIMAL/
 50 exp RODENTIA/
 51 (rat or rats or mouse or mice).ti.
 52 or/45-51
 53 34 not 52

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 5 or/1-4
 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 9 or/6-8
 10 and/5,9
 11 (psychotherap\$ or BFST or CBT).ti,ab.
 12 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
 13 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).ti,ab.
 14 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).ti,ab.
 15 (motivation\$ or counsel?ing or mentor\$).ti,ab.
 16 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
 17 or/11-16
 18 and/10,17
 19 limit 18 to english language

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/

11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
14 or/10-13
15 and/9,14
16 BEHAVIOR THERAPY/
17 COGNITIVE THERAPY/
18 PSYCHOTHERAPY/
19 PSYCHOTHERAPY, GROUP/
20 FAMILY THERAPY/
21 (psychotherap\$ or BFST or CBT).ti,ab.
22 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
23 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).ti,ab.
24 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).ti,ab.
25 COUNSELING/
26 MOTIVATIONAL INTERVIEWING/
27 MENTORS/
28 SOCIAL SUPPORT/
29 SELF-HELP GROUPS/
30 (motivation\$ or counsel?ing or mentor\$).ti,ab.
31 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
32 or/16-31
33 and/15,32

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,ti,ab,jw,rw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,ti,ab,jw,rw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,ti,ab,jw,rw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,ti,ab,jw,rw.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab,kw.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab,kw.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 GROUP THERAPY.kw.
11 (psychotherap\$ or BFST or CBT).tw,tx,kw.
12 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).tw,tx,kw.
13 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).tw,tx,kw.
14 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).tw,tx,kw.
15 TEACHER.kw.

16 SUPPORT GROUP.kw.
 17 SELF HELP.kw.
 18 (motivation\$ or counsel?ing or mentor\$).tw,tx,kw.
 19 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).tw,tx,kw.
 20 or/10-19
 21 and/5,9,20

Health Technology Assessment

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
 13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
 14 or/10-13
 15 BEHAVIOR THERAPY/
 16 COGNITIVE THERAPY/
 17 PSYCHOTHERAPY/
 18 PSYCHOTHERAPY, GROUP/
 19 FAMILY THERAPY/
 20 (psychotherap\$ or BFST or CBT).tw.
 21 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).tw.
 22 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).tw.
 23 ((family\$ or families or parent?) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).tw.
 24 COUNSELING/
 25 MOTIVATIONAL INTERVIEWING/
 26 MENTORS/
 27 SOCIAL SUPPORT/
 28 SELF-HELP GROUPS/
 29 (motivation\$ or counsel?ing or mentor\$).tw.
 30 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).tw.
 31 or/15-30
 32 and/9,14,31

Embase

Searches

1 exp ADOLESCENT/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9 or/1-8
10 NON INSULIN DEPENDENT DIABETES MELLITUS/
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
14 or/10-13
15 JUVENILE DIABETES MELLITUS/
16 and/9,14
17 or/15-16
18 BEHAVIOR THERAPY/
19 BEHAVIOR MODIFICATION/
20 COGNITIVE THERAPY/
21 PSYCHOTHERAPY/
22 FAMILY THERAPY/
23 GROUP THERAPY/
24 MOTIVATIONAL INTERVIEWING/
25 (psychotherap\$ or BFST or CBT).ti,ab.
26 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
27 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or
modif\$)).ti,ab.
28 ((family\$ or families or parent\$) adj5 (intervention\$ or treatment\$ or therap\$ or team? or
teamwork\$ or team-work\$)).ti,ab.
29 COUNSELING/
30 FAMILY COUNSELING/
31 PARENT COUNSELING/
32 PATIENT COUNSELING/
33 PEER COUNSELING/
34 TEACHER/
35 SOCIAL SUPPORT/
36 SUPPORT GROUP/
37 SELF HELP/
38 (motivation\$ or counsel?ing or mentor\$).ti,ab.
39 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
40 or/18-39
41 and/17,40
42 limit 41 to english language
43 conference abstract.pt.
44 letter.pt. or LETTER/

45 note.pt.
 46 editorial.pt.
 47 CASE REPORT/ or CASE STUDY/
 48 (letter or comment* or abstracts).ti.
 49 or/43-48
 50 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 51 49 not 50
 52 ANIMAL/ not HUMAN/
 53 NONHUMAN/
 54 exp ANIMAL EXPERIMENT/
 55 exp EXPERIMENTAL ANIMAL/
 56 ANIMAL MODEL/
 57 exp RODENT/
 58 (rat or rats or mouse or mice).ti.
 59 or/51-58
 60 42 not 59

PsycINFO

Searches
 1 adolescen\$.ag.
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,id,jw.
 3 (child\$ or school\$ or preschool\$).ag.
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,id,jw.
 5 (infan\$ or neonat\$).ag.
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies or p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,id,jw.
 7 or/1-6
 8 DIABETES MELLITUS/
 9 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab,id.
 10 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab,id.
 11 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab,id.
 12 or/8-11
 13 BEHAVIOR THERAPY/
 14 COGNITIVE THERAPY/
 15 COGNITIVE BEHAVIOR THERAPY/
 16 PSYCHOTHERAPY/
 17 ADOLESCENT PSYCHOTHERAPY/
 18 CHILD PSYCHOTHERAPY/
 19 GROUP PSYCHOTHERAPY/
 20 FAMILY THERAPY/
 21 FAMILY INTERVENTION/
 22 MOTIVATIONAL INTERVIEWING/
 23 (psychotherap\$ or BFST or CBT).ti,ab.
 24 ((cogniti\$ or psycho\$) adj5 (intervention\$ or treatment\$ or therap\$)).ti,ab.
 25 ((behavio?r\$ or motivation\$) adj5 (intervention\$ or treatment\$ or therap\$ or chang\$ or modif\$)).ti,ab.

- 26 ((family\$ or families or parent\$) adj5 (intervention\$ or treatment\$ or therap\$ or team? or teamwork\$ or team-work\$)).ti,ab.
- 27 COUNSELING/
- 28 GROUP COUNSELING/
- 29 PEER COUNSELING/
- 30 MENTOR/
- 31 SOCIAL SUPPORT/
- 32 SUPPORT GROUPS/
- 33 SELF HELP TECHNIQUES/
- 34 (motivation\$ or counsel?ing or mentor\$).ti,ab.
- 35 ((peer or social\$ or self help or self-help) adj3 (group? or support?)).ti,ab.
- 36 or/13-35
- 37 and/7,12,36
- 38 limit 37 to english language
- 39 limit 38 to yr="2013 -Current"

CINAHL with Full Text

- # Query Limiters/Expanders
- S24 S6 AND S9 AND S23 Limiters - English Language; Exclude MEDLINE records
Search modes - Boolean/Phrase
- S23 S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 Search modes - Boolean/Phrase
- S22 TI ((peer or social* or "self help" or self-help) N3 (group# or support#)) OR AB ((peer or social* or "self help" or self-help) N3 (group# or support#)) Search modes - Boolean/Phrase
- S21 TI (motivation* or counsel#ing or mentor*) OR AB (motivation* or counsel#ing or mentor*)
Search modes - Boolean/Phrase
- S20 (MH "Support Groups") Search modes - Boolean/Phrase
- S19 (MH "Mentorship") Search modes - Boolean/Phrase
- S18 (MH "Counseling") OR (MH "Peer Counseling") Search modes - Boolean/Phrase
- S17 TI ((family* or families or parent#) N5 (intervention* or treatment* or therap* or team# or teamwork* or team-work*)) OR AB ((family* or families or parent#) N5 (intervention* or treatment* or therap* or team# or teamwork* or team-work*)) Search modes - Boolean/Phrase
- S16 TI ((behavio#r* or motivation*) N5 (intervention* or treatment* or therap* or chang* or modif*)) OR AB ((behavio#r* or motivation*) N5 (intervention* or treatment* or therap* or chang* or modif*))
Search modes - Boolean/Phrase
- S15 TI ((cogniti* or psycho*) N5 (intervention* or treatment* or therap*)) OR AB ((cogniti* or psycho*) N5 (intervention* or treatment* or therap*)) Search modes - Boolean/Phrase
- S14 TI (psychotherap* or BFST or CBT) OR AB (psychotherap* or BFST or CBT) Search modes - Boolean/Phrase
- S13 (MH "Motivational Interviewing") Search modes - Boolean/Phrase
- S12 (MH "Psychotherapy, Group") OR (MH "Family Therapy") Search modes - Boolean/Phrase
- S11 (MH "Psychotherapy") Search modes - Boolean/Phrase
- S10 (MH "Behavior Therapy+") OR (MH "Cognitive Therapy") Search modes - Boolean/Phrase
- S9 S7 OR S8 Search modes - Boolean/Phrase
- S8 TI (diabet* N5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)) OR AB (diabet* N5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or

- stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)) Search modes - Boolean/Phrase
- S7 (MH "Diabetes Mellitus, Type 2") Search modes - Boolean/Phrase
- S6 S1 OR S2 OR S3 OR S4 OR S5 Search modes - Boolean/Phrase
- S5 TI (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) OR AB (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) or SO (pediatric* or paediatric* or pubert* or prepubert* or pre-pubert* or pubescen* or prepubescen* or pre-pubescen*) Search modes - Boolean/Phrase
- S4 TI (infan* or neonat* or newborn* or baby or babies) OR AB (infan* or neonat* or newborn* or baby or babies) OR SO (infan* or neonat* or newborn* or baby or babies) Search modes - Boolean/Phrase
- S3 TI (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR AB (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) OR SO (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid# or kindergar* or boy# or girl#) Search modes - Boolean/Phrase
- S2 TI (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR AB (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) OR SO (adolescen* or teen* or youth* or young or juvenile# or minors or highschool*) Search modes - Boolean/Phrase
- S1 (MH "Infant, Newborn+") OR (MH "Infant+") OR (MH "Child, Preschool") OR (MH "Child+") OR (MH "Adolescence+") Search modes - Boolean/Phrase

A.20 Type 2 diabetes – dietary advice

Review question: What is the effectiveness of dietetic advice to optimise glycaemic control in children and young people with type 2 diabetes?

Ovid MEDLINE(R)

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 2/
- 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
- 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
- 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
- 14 or/10-13
- 15 exp DIET THERAPY/
- 16 NUTRITION THERAPY/

17 dh.fs.
18 or/15-17
19 exp FOOD HABITS/
20 exp DIET/
21 DIETETICS/
22 (diet\$ or nutrition\$ or food or feed\$).ti,ab.
23 or/19-22
24 HEMOGLOBIN A, GLYCOSYLATED/
25 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
26 (glycoh?emoglobin? or HbA1c or HbAlc or HbA 1c or HbA lc or Hb A1c or Hb Alc).ti,ab.
27 "hemoglobin A1c protein, human".nm.
28 BLOOD GLUCOSE/
29 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
30 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.
31 exp HYPERGLYCEMIA/
32 hyperglyc?emi\$.ti,ab.
33 REMISSION INDUCTION/
34 remission?.ti,ab.
35 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
36 or/24-35
37 and/23,36
38 or/18,37
39 and/9,14,38
40 limit 39 to english language
41 LETTER/
42 EDITORIAL/
43 NEWS/
44 exp HISTORICAL ARTICLE/
45 ANECDOTES AS TOPIC/
46 COMMENT/
47 CASE REPORT/
48 (letter or comment* or abstracts).ti.
49 or/41-48
50 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
51 49 not 50
52 ANIMALS/ not HUMANS/
53 exp ANIMALS, LABORATORY/
54 exp ANIMAL EXPERIMENTATION/
55 exp MODELS, ANIMAL/
56 exp RODENTIA/
57 (rat or rats or mouse or mice).ti.
58 or/51-57
59 40 not 58

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.

2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 (diet\$ or nutrition\$ or food or feed\$).ti,ab.
11 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
12 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
13 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
14 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.
15 hyperglyc?emi\$.ti,ab.
16 remission?.ti,ab.
17 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
18 or/11-17
19 and/5,9-10,18
20 limit 19 to english language

Cochrane Central Register of Controlled Trials

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
14 or/10-13
15 exp DIET THERAPY/
16 NUTRITION THERAPY/
17 dh.fs.
18 or/15-17
19 exp FOOD HABITS/
20 exp DIET/
21 DIETETICS/
22 (diet\$ or nutrition\$ or food or feed\$).ti,ab.

23 or/19-22
 24 HEMOGLOBIN A, GLYCOSYLATED/
 25 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
 26 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
 27 ["hemoglobin A1c protein, human".nm.]
 28 BLOOD GLUCOSE/
 29 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
 30 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.
 31 exp HYPERGLYCEMIA/
 32 hyperglyc?emi\$.ti,ab.
 33 REMISSION INDUCTION/
 34 remission?.ti,ab.
 35 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
 36 or/24-35
 37 and/23,36
 38 or/18,37
 39 and/9,14,38

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).kw,tw,tx,jw,rw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).kw,tw,tx,jw,rw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).kw,tw,tx,jw,rw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).kw,tw,tx,jw,rw.
 5 or/1-4
 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.
 7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx,kw.
 8 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
 9 or/6-8
 10 DIET THERAPY.kw.
 11 NUTRITION THERAPY.kw.
 12 or/10-11
 13 (diet\$ or nutrition\$ or food or feed\$).tw,tx,kw.
 14 (h?emoglobin? adj3 (glyc\$ or A1?)).tw,tx,kw.
 15 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).tw,tx,kw.
 16 ((blood or plasma) adj3 (glucose or sugar?)).tw,tx,kw.
 17 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).tw,tx,kw.
 18 hyperglyc?emi\$.tw,tx,kw.
 19 remission?.tw,tx,kw.
 20 ((revers\$ or regress\$) adj5 diabet\$).tw,tx.
 21 or/14-20
 22 and/13,21
 23 or/12,22
 24 and/5,9,23

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
14 or/10-13
15 exp DIET THERAPY/
16 NUTRITION THERAPY/
17 dh.fs.
18 or/15-17
19 exp FOOD HABITS/
20 exp DIET/
21 DIETETICS/
22 (diet\$ or nutrition\$ or food or feed\$).tw.
23 or/19-22
24 HEMOGLOBIN A, GLYCOSYLATED/
25 (h?emoglobin? adj3 (glyc\$ or A1?)).tw.
26 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).tw.
27 BLOOD GLUCOSE/
28 ((blood or plasma) adj3 (glucose or sugar?)).tw.
29 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).tw.
30 exp HYPERGLYCEMIA/
31 hyperglyc?emi\$.tw.
32 REMISSION INDUCTION/
33 remission?.tw.
34 ((revers\$ or regress\$) adj5 diabet\$).tw.
35 or/24-34
36 and/23,35
37 or/18,36
38 and/9,14,37

Embase

Searches
1 exp ADOLESCENT/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
3 exp CHILD/

4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 NON INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 JUVENILE DIABETES MELLITUS/
 16 and/9,14
 17 or/15-16
 18 exp DIET THERAPY/
 19 exp FEEDING BEHAVIOR/
 20 exp DIET/ or DIETARY COMPLIANCE/
 21 DIETETICS/
 22 (diet\$ or nutrition\$ or food or feed\$).ti,ab.
 23 or/19-22
 24 HEMOGLOBIN A1C/
 25 GLYCOSYLATED HEMOGLOBIN/
 26 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
 27 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
 28 GLUCOSE BLOOD LEVEL/
 29 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
 30 GLYCEMIC CONTROL/
 31 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.
 32 HYPERGLYCEMIA/
 33 hyperglyc?emi\$.ti,ab.
 34 REMISSION/ or DISEASE CLEARANCE/
 35 remission?.ti,ab.
 36 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
 37 or/24-36
 38 and/23,37
 39 or/18,38
 40 and/17,39
 41 limit 40 to english language
 42 conference abstract.pt.
 43 letter.pt. or LETTER/
 44 note.pt.
 45 editorial.pt.
 46 CASE REPORT/ or CASE STUDY/
 47 (letter or comment* or abstracts).ti.
 48 or/42-47
 49 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.

50 48 not 49
 51 ANIMAL/ not HUMAN/
 52 NONHUMAN/
 53 exp ANIMAL EXPERIMENT/
 54 exp EXPERIMENTAL ANIMAL/
 55 ANIMAL MODEL/
 56 exp RODENT/
 57 (rat or rats or mouse or mice).ti.
 58 or/50-57
 59 41 not 58

PsycINFO

Searches
 1 adolescen\$.ag.
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,id,jw.
 3 (child\$ or school\$ or preschool\$).ag.
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,id,jw.
 5 (infan\$ or neonat\$).ag.
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies or p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,id,jw.
 7 or/1-6
 8 DIABETES MELLITUS/
 9 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab,id.
 10 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab,id.
 11 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab,id.
 12 or/8-11
 13 DIETS/ or DIETARY RESTRAINT/ or EATING BEHAVIOUR/ or WEIGHT CONTROL/
 14 (diet\$ or nutrition\$ or food or feed\$).ti,ab,id.
 15 or/13-14
 16 BLOOD SUGAR/
 17 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab,id.
 18 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab,id.
 19 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab,id.
 20 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab,id.
 21 HYPERGLYCEMIA/
 22 hyperglyc?emi\$.ti,ab,id.
 23 exp "REMISSION (DISORDERS)"/
 24 remission?.ti,ab,id.
 25 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
 26 or/16-25
 27 and/7,12,15,26
 28 limit 27 to english language
 29 (book or dissertation abstract or encyclopedia).pt.
 30 28 not 29

A.21 Type 2 diabetes – weight loss

Review question: Does weight loss in children and young people with type 2 diabetes who are overweight or obese improve glycaemic control as measured by HbA1c?

Ovid MEDLINE(R)

```
# Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen$ or teen$ or youth$ or young or juvenile? or minors or highschool$).ti,ab,jw.
3 exp CHILD/
4 (child$ or schoolchild$ or "school age" or "school aged" or preschool$ or toddler$ or kid? or
  kindergar$ or boy? or girl?).ti,ab,jw.
5 exp INFANT/
6 (infan$ or neonat$ or newborn$ or baby or babies).ti,ab,jw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric$ or pubert$ or prepubert$ or pubescen$ or prepubescen$).ti,ab,jw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/
11 (diabet$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur$ or adult$ or slow or late or
  stable or ketosis resistant or keto resist$ or keto?resist$ or non keto$ or non?keto$)).ti,ab.
12 (diabet$ adj5 ((non insulin or non?insulin) adj2 depend$)).ti,ab.
13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
14 or/10-13
15 exp OVERWEIGHT/
16 exp OBESITY/
17 (obes$ or overweight or over weight).ti,ab.
18 or/15-17
19 exp BODY WEIGHT CHANGES/
20 ((weight or BMI or body mass index) adj3 (gain$ or los# or lose? or losing or chang$ or r#se? or
  rising or raise? or f#II$ or drop$ or up or down or reduc$ or increas$ or control$ or maintain$ or
  maintenance)).ti,ab.
21 SERVING SIZE/
22 PORTION SIZE/
23 ((serving? or portion?) adj3 (size? or sizing)).ti,ab.
24 or/19-23
25 HEMOGLOBIN A, GLYCOSYLATED/
26 (h?emoglobin? adj3 (glyc$ or A1?)).ti,ab.
27 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
28 "hemoglobin A1c protein, human".nm.
29 BLOOD GLUCOSE/
30 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
31 (glyc?emi$ adj3 (control$ or parameter$ or status$)).ti,ab.
32 exp HYPERGLYCEMIA/
33 hyperglyc?emi$.ti,ab.
34 exp HYPOGLYCEMIA/
35 hypoglyc?emi$.ti,ab.
```

36 REMISSION INDUCTION/
37 remission?.ti,ab.
38 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
39 or/25-38
40 and/9,14,18,24,39
41 limit 40 to english language
42 LETTER/
43 EDITORIAL/
44 NEWS/
45 exp HISTORICAL ARTICLE/
46 ANECDOTES AS TOPIC/
47 COMMENT/
48 (letter or comment* or abstracts).ti.
49 or/42-48
50 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
51 49 not 50
52 ANIMALS/ not HUMANS/
53 exp ANIMALS, LABORATORY/
54 exp ANIMAL EXPERIMENTATION/
55 exp MODELS, ANIMAL/
56 exp RODENTIA/
57 (rat or rats or mouse or mice).ti.
58 or/51-57
59 41 not 58

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 (obes\$ or overweight or over weight).ti,ab.
11 ((weight or BMI or body mass index) adj3 (gain\$ or los# or lose? or losing or chang\$ or r#se? or rising or raise? or f#II\$ or drop\$ or up or down or reduc\$ or increas\$ or control\$ or maintain\$ or maintenance)).ti,ab.
12 ((serving? or portion?) adj3 (size? or sizing)).ti,ab.
13 or/11-12
14 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
15 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
16 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
17 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.

18 hyperglyc?emi\$.ti,ab.
 19 hypoglyc?emi\$.ti,ab.
 20 remission?.ti,ab.
 21 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
 22 or/14-21
 23 and/5,9-10,13,22

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 exp OVERWEIGHT/
 16 exp OBESITY/
 17 (obes\$ or overweight or over weight).ti,ab.
 18 or/15-17
 19 exp BODY WEIGHT CHANGES/
 20 ((weight or BMI or body mass index) adj3 (gain\$ or los# or lose? or losing or chang\$ or r#se? or rising or raise? or f#II\$ or drop\$ or up or down or reduc\$ or increas\$ or control\$ or maintain\$ or maintenance)).ti,ab.
 21 SERVING SIZE/
 22 PORTION SIZE/
 23 ((serving? or portion?) adj3 (size? or sizing)).ti,ab.
 24 or/19-23
 25 HEMOGLOBIN A, GLYCOSYLATED/
 26 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
 27 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
 28 BLOOD GLUCOSE/
 29 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
 30 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.
 31 exp HYPERGLYCEMIA/
 32 hyperglyc?emi\$.ti,ab.
 33 exp HYPOGLYCEMIA/
 34 hypoglyc?emi\$.ti,ab.
 35 REMISSION INDUCTION/

- 36 remission?.ti,ab.
- 37 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
- 38 or/25-37
- 39 and/9,14,18,24,38

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw.
- 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,tx,kw.
- 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw.
- 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw.
- 5 or/1-4
- 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.
- 7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx,kw.
- 8 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
- 9 or/6-8
- 10 (obes\$ or overweight or over weight).tw,tx,kw.
- 11 ((weight or BMI or body mass index) adj3 (gain\$ or los# or lose? or losing or chang\$ or r#se? or rising or raise? or #II\$ or drop\$ or up or down or reduc\$ or increas\$ or control\$ or maintain\$ or maintenance)).tw,tx,kw.
- 12 (portion? or serv?).tw,tx,kw.
- 13 or/11-12
- 14 (h?emoglobin? adj3 (glyc\$ or A1?)).tw,tx,kw.
- 15 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c or Hb A1c).tw,tx.
- 16 ((blood or plasma) adj3 (glucose or sugar?)).tw,tx,kw.
- 17 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).tw,tx,kw.
- 18 hyperglyc?emi\$.tw,tx,kw.
- 19 hypoglyc?emi\$.tw,tx,kw.
- 20 remission?.tw,tx,kw.
- 21 ((revers\$ or regress\$) adj5 diabet\$).tw,tx.
- 22 or/14-21
- 23 and/5,9-10,13,22

Health Technology Assessment

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw.
- 9 or/1-8

10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
 13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
 14 or/10-13
 15 exp OVERWEIGHT/
 16 exp OBESITY/
 17 (obes\$ or overweight or over weight).tw.
 18 or/15-17
 19 exp BODY WEIGHT CHANGES/
 20 (portion? or serv?).tw.
 21 ((weight or BMI or body mass index) adj3 (gain\$ or los# or lose? or losing or chang\$ or r#se? or
 rising or raise? or #II\$ or drop\$ or up or down or reduc\$ or increas\$ or control\$ or maintain\$ or
 maintenance)).tw.
 22 or/19-20
 23 HEMOGLOBIN A, GLYCOSYLATED/
 24 (h?emoglobin? adj3 (glyc\$ or A1?)).tw.
 25 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).tw.
 26 BLOOD GLUCOSE/
 27 ((blood or plasma) adj3 (glucose or sugar?)).tw.
 28 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).tw.
 29 exp HYPERGLYCEMIA/
 30 hyperglyc?emi\$.tw.
 31 exp HYPOGLYCEMIA/
 32 hypoglyc?emi\$.tw.
 33 REMISSION INDUCTION/
 34 remission?.tw.
 35 ((revers\$ or regress\$) adj5 diabet\$).tw.
 36 or/23-35
 37 and/9,14,18,22,36

Embase 1974 to 2014 April 03

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 NON INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.

13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
14 or/10-13
15 JUVENILE DIABETES MELLITUS/
16 and/9,14
17 or/15-16
18 exp OBESITY/
19 (obes\$ or overweight or over weight).ti,ab.
20 or/18-19
21 WEIGHT CHANGE/ or WEIGHT CONTROL/ or WEIGHT GAIN/ or WEIGHT REDUCTION/
22 ((weight or BMI or body mass index) adj3 (gain\$ or los# or lose? or losing or chang\$ or r#se? or
rising or raise? or f#ll\$ or drop\$ or up or down or reduc\$ or increas\$ or control\$ or maintain\$ or
maintenance)).ti,ab.
23 ((serving? or portion?) adj3 (size? or sizing)).ti,ab.
24 or/21-23
25 HEMOGLOBIN A1C/
26 GLYCOSYLATED HEMOGLOBIN/
27 (h?emoglobin? adj3 (glyc\$ or A1?)).ti,ab.
28 (glycoh?emoglobin? or HbA1c or HbA1c or HbA 1c or HbA 1c or Hb A1c or Hb A1c).ti,ab.
29 GLUCOSE BLOOD LEVEL/
30 ((blood or plasma) adj3 (glucose or sugar?)).ti,ab.
31 GLYCEMIC CONTROL/
32 (glyc?emi\$ adj3 (control\$ or parameter\$ or status\$)).ti,ab.
33 HYPERGLYCEMIA/
34 hyperglyc?emi\$.ti,ab.
35 HYPOGLYCEMIA/
36 hypoglyc?emi\$.ti,ab.
37 REMISSION/
38 remission?.ti,ab.
39 ((revers\$ or regress\$) adj5 diabet\$).ti,ab.
40 or/25-39
41 and/17,20,24,40
42 limit 41 to english language
43 conference abstract.pt.
44 letter.pt. or LETTER/
45 note.pt.
46 editorial.pt.
47 (letter or comment* or abstracts).ti.
48 or/43-47
49 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
50 48 not 49
51 ANIMAL/ not HUMAN/
52 NONHUMAN/
53 exp ANIMAL EXPERIMENT/
54 exp EXPERIMENTAL ANIMAL/
55 ANIMAL MODEL/
56 exp RODENT/
57 (rat or rats or mouse or mice).ti.
58 or/50-57

A.22 Type 2 diabetes – metformin

Review question: What is the effectiveness of metformin in improving glycaemic control in children and young people with type 2 diabetes when compared with usual care or placebo?

Ovid MEDLINE(R)

Searches

1 randomized controlled trial.pt.

2 controlled clinical trial.pt.

3 DOUBLE BLIND METHOD/
4 SINGLE BLIND METHOD/
5 RANDOM ALLOCATION/
6 or/1-5
7 ((single or double or triple or treble) adj5 (blind\$ or mask\$)).tw,sh.
8 clinical trial.pt.
9 exp CLINICAL TRIAL/
10 exp CLINICAL TRIALS AS TOPIC/
11 (clinic\$ adj5 trial\$).tw,sh.
12 PLACEBOS/
13 placebo\$.tw,sh.
14 random\$.tw,sh.
15 or/7-14
16 or/6,15
17 META ANALYSIS/
18 META ANALYSIS AS TOPIC/
19 meta analysis.pt.
20 (metaanaly\$ or meta-analy\$ or (meta adj analy\$)).tw,sh.
21 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
22 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
23 or/17-22
24 review\$.pt.
25 (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or
psyclit or "web of science" or "science citation" or scisearch).tw.
26 ((hand or manual\$) adj2 search\$).tw.
27 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
database\$).tw,sh.
28 (pooling or pooled or mantel haenszel).tw,sh.
29 (peto or dersimonian or der simonian or fixed effect).tw,sh.
30 or/25-29
31 and/24,30
32 or/16,23,31
33 letter.pt.
34 case report.tw.
35 comment.pt.

36 editorial.pt.
 37 historical article.pt.
 38 or/33-37
 39 32 not 38
 40 ADOLESCENT/ or MINORS/
 41 (adolescens\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 42 exp CHILD/
 43 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jw.
 44 exp INFANT/
 45 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 46 exp PEDIATRICS/ or exp PUBERTY/
 47 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 48 or/40-47
 49 exp DIABETES MELLITUS, TYPE 2/
 50 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 51 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 52 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 53 or/49-52
 54 METFORMIN/
 55 (metformin or glucophage or glucient or metsol or bolamyn or metabet).ti,ab.
 56 or/54-55
 57 and/48,53,56
 58 and/39,57
 59 limit 58 to english language
 60 LETTER/
 61 EDITORIAL/
 62 NEWS/
 63 exp HISTORICAL ARTICLE/
 64 ANECDOTES AS TOPIC/
 65 COMMENT/
 66 CASE REPORT/
 67 (letter or comment* or abstracts).ti.
 68 or/60-67
 69 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 70 68 not 69
 71 ANIMALS/ not HUMANS/
 72 exp ANIMALS, LABORATORY/
 73 exp ANIMAL EXPERIMENTATION/
 74 exp MODELS, ANIMAL/
 75 exp RODENTIA/
 76 (rat or rats or mouse or mice).ti.
 77 or/70-76
 78 59 not 77

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches

1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
 5 or/1-4
 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 9 or/6-8
 10 (metformin or glucophage or glucient or metsol or bolamyn or metabet).ti,ab.
 11 and/5,9-10

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,kw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,kw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,kw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,kw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab,kw.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab,kw.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 METFORMIN/
 16 (metformin or glucophage or glucient or metsol or bolamyn or metabet).ti,ab,kw.
 17 or/15-16
 18 and/9,14,17

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).tw,tx,kw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw.
 5 or/1-4
 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.

7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab,kw.
 8 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
 9 or/6-8
 10 (metformin or glucophage or glucient or metsol or bolamyn or metabet).tw,tx,kw.
 11 and/5,9-10

Health Technology Assessment

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
 13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
 14 or/10-13
 15 METFORMIN/
 16 (metformin or glucophage or glucient or metsol or bolamyn or metabet).tw.
 17 or/15-16
 18 and/9,14,17

Embase

Searches
 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
 2 (clinic\$ adj5 trial\$).ti,ab,sh.
 3 SINGLE BLIND PROCEDURE/
 4 DOUBLE BLIND PROCEDURE/
 5 RANDOM ALLOCATION/
 6 CROSSOVER PROCEDURE/
 7 PLACEBO/
 8 placebo\$.ti,ab,sh.
 9 random\$.ti,ab,sh.
 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).ti,ab,sh.
 12 randomi?ed control\$ trial\$.tw.
 13 or/1-12
 14 META ANALYSIS/
 15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).ti,ab,sh.
 16 (systematic\$ adj5 (review\$ or overview\$)).ti,sh,ab.
 17 (methodologic\$ adj5 (review\$ or overview\$)).ti,ab,sh.

18 or/14-17
19 review.pt.
20 (medline or medlars or embase).ab.
21 (scisearch or science citation index).ab.
22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
23 ((hand or manual\$) adj2 search\$).tw.
24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
database\$).tw.
25 (pooling or pooled or mantel haenszel).tw.
26 (peto or dersimonian or "der simonian" or fixed effect).tw.
27 or/20-26
28 and/19,27
29 or/18,28
30 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
31 13 not 30
32 29 not 30
33 or/31-32
34 exp ADOLESCENT/
35 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
36 exp INFANT/
37 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
38 exp NEWBORN/
39 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
40 exp PEDIATRICS/ or exp PUBERTY/
41 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
42 or/34-41
43 NON INSULIN DEPENDENT DIABETES MELLITUS/
44 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
45 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
46 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
47 or/43-46
48 JUVENILE DIABETES MELLITUS/
49 and/42,47
50 or/48-49
51 METFORMIN/
52 (metformin or glucophage or glucient or metsol or bolamyn or metabet).ti,ab.
53 or/51-52
54 and/50,53
55 limit 54 to english language
56 conference abstract.pt.
57 letter.pt. or LETTER/
58 note.pt.
59 editorial.pt.
60 CASE REPORT/ or CASE STUDY/
61 (letter or comment* or abstracts).ti.
62 or/56-61

63 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 64 62 not 63
 65 ANIMAL/ not HUMAN/
 66 NONHUMAN/
 67 exp ANIMAL EXPERIMENT/
 68 exp EXPERIMENTAL ANIMAL/
 69 ANIMAL MODEL/
 70 exp RODENT/
 71 (rat or rats or mouse or mice).ti.
 72 or/64-71
 73 55 not 72
 74 and/33,73

A.23 Type 2 diabetes – HbA1c targets

Review question: What is the optimal HbA1c target for children and young people with type 2 diabetes?

Ovid MEDLINE(R)

Searches
 1 randomized controlled trial.pt.
 2 controlled clinical trial.pt.
 3 DOUBLE BLIND METHOD/
 4 SINGLE BLIND METHOD/
 5 RANDOM ALLOCATION/
 6 or/1-5
 7 ((single or double or triple or treble) adj5 (blind\$ or mask\$)).tw,sh.
 8 clinical trial.pt.
 9 exp CLINICAL TRIAL/
 10 exp CLINICAL TRIALS AS TOPIC/
 11 (clinic\$ adj5 trial\$).tw,sh.
 12 PLACEBOS/
 13 placebo\$.tw,sh.
 14 random\$.tw,sh.
 15 or/7-14
 16 or/6,15
 17 META ANALYSIS/
 18 META ANALYSIS AS TOPIC/
 19 meta analysis.pt.
 20 (metaanaly\$ or meta-analy\$ or (meta adj analy\$)).tw,sh.
 21 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
 22 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
 23 or/17-22
 24 review\$.pt.

25 (medline or medlars or embase or cinahl or cochrane or psycinfo or psychinfo or psychlit or
 psyclit or "web of science" or "science citation" or scisearch).tw.
 26 ((hand or manual\$) adj2 search\$).tw.
 27 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
 database\$).tw,sh.
 28 (pooling or pooled or mantel haenszel).tw,sh.
 29 (peto or dersimonian or der simonian or fixed effect).tw,sh.
 30 or/25-29
 31 and/24,30
 32 exp CASE-CONTROL STUDIES/
 33 (case\$ adj2 control\$).tw.
 34 exp COHORT STUDIES/
 35 cohort\$.tw.
 36 or/32-35
 37 comparative study.pt.
 38 (compar\$ adj3 stud\$).tw.
 39 or/37-38
 40 or/16,23,31,36,39
 41 ADOLESCENT/ or MINORS/
 42 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 43 exp CHILD/
 44 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jw.
 45 exp INFANT/
 46 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 47 exp PEDIATRICS/ or exp PUBERTY/
 48 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 49 or/41-48
 50 exp DIABETES MELLITUS, TYPE 2/
 51 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 52 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 53 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 54 or/50-53
 55 and/49,54
 56 HEMOGLOBIN A, GLYCOSYLATED/
 57 (h?emoglobin? adj3 glycosylat\$).ti,ab.
 58 (glycated adj3 h?emoglobin?).ti,ab.
 59 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
 60 "hemoglobin A1c protein, human".nm.
 61 or/56-60
 62 and/55,61
 63 REFERENCE STANDARDS/ or REFERENCE VALUES/
 64 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or
 threshold?)).ti,ab.
 65 or/63-64
 66 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
 67 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or
 threshold?)).ti,ab.

68 or/65-67
69 and/62,68
70 and/55,69
71 LETTER/
72 EDITORIAL/
73 NEWS/
74 exp HISTORICAL ARTICLE/
75 ANECDOTES AS TOPIC/
76 COMMENT/
77 CASE REPORT/
78 (letter or comment* or abstracts).ti.
79 or/71-78
80 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
81 79 not 80
82 ANIMALS/ not HUMANS/
83 exp ANIMALS, LABORATORY/
84 exp ANIMAL EXPERIMENTATION/
85 exp MODELS, ANIMAL/
86 exp RODENTIA/
87 (rat or rats or mouse or mice).ti.
88 or/81-87
89 70 not 88
90 limit 89 to english language

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$ or mellitus)).ti,ab.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 (h?emoglobin? adj3 glycosylat\$).ti,ab.
11 (glycated adj3 h?emoglobin?).ti,ab.
12 (glycoh?emoglobin? or HbA1c or HbAlc or Hb A1c or Hb A1c).ti,ab.
13 or/10-12
14 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
15 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.

- 16 ((normogly?emi\$ or euglyc?emi\$ or glyc?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
- 17 or/14-16
- 18 and/5,9,13,17

Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
- 5 exp INFANT/
- 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
- 7 exp PEDIATRICS/ or exp PUBERTY/
- 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
- 9 or/1-8
- 10 exp DIABETES MELLITUS, TYPE 2/
- 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
- 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
- 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
- 14 or/10-13
- 15 and/9,14
- 16 HEMOGLOBIN A, GLYCOSYLATED/
- 17 (h?emoglobin? adj3 glycosylat\$).ti,ab.
- 18 (glycated adj3 h?emoglobin?).ti,ab.
- 19 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
- 20 or/16-19
- 21 REFERENCE STANDARDS/ or REFERENCE VALUES/
- 22 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
- 23 or/21-22
- 24 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
- 25 ((normogly?emi\$ or euglyc?emi\$ or glyc?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold?)).ti,ab.
- 26 or/23-25
- 27 and/20,26
- 28 and/15,27

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

- # Searches
- 1 (ADOLESCENT or MINORS).kw.
- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx.
- 3 CHILD.kw.
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,tx.

5 INFANT.kw.
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx.
7 (PEDIATRICS or PUBERTY).kw.
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx.
9 or/1-8
10 DIABETES MELLITUS, TYPE 2.kw.
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx.
13 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
14 or/10-13
15 and/9,14
16 HEMOGLOBIN A, GLYCOSYLATED.kw.
17 (h?emoglobin? adj3 glycosylat\$).tw,tx.
18 (glycated adj3 h?emoglobin?).tw,tx.
19 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).tw,tx.
20 or/16-19
21 (REFERENCE STANDARDS or REFERENCE VALUES).kw.
22 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or
threshold?)).tw,tx.
23 or/21-22
24 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).tw,tx.
25 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or
threshold?)).tw,tx.
26 or/23-25
27 and/20,26
28 and/15,27

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
14 or/10-13
15 and/9,14
16 HEMOGLOBIN A, GLYCOSYLATED/

17 (h?emoglobin? adj3 glycosylat\$).tw.
 18 (glycated adj3 h?emoglobin?).tw.
 19 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).tw.
 20 or/16-19
 21 REFERENCE STANDARDS/ or REFERENCE VALUES/
 22 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or
 threshold?)).tw.
 23 or/21-22
 24 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).tw.
 25 ((normogly?emi\$ or euglyc?emi\$ or glyco?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or
 threshold?)).tw.
 26 or/23-25
 27 and/20,26
 28 and/15,27

Embase

Searches
 1 CLINICAL TRIAL/ or "CLINICAL TRIAL (TOPIC)"/
 2 (clinic\$ adj5 trial\$).tw,sh.
 3 SINGLE BLIND PROCEDURE/
 4 DOUBLE BLIND PROCEDURE/
 5 RANDOM ALLOCATION/
 6 CROSSOVER PROCEDURE/
 7 PLACEBO/
 8 placebo\$.tw,sh.
 9 random\$.tw,sh.
 10 RANDOMIZED CONTROLLED TRIAL/ or "RANDOMIZED CONTROLLED TRIAL (TOPIC)"/
 11 ((single or double or triple or treble) adj (blind\$ or mask\$)).tw,sh.
 12 randomi?ed control\$ trial\$.tw.
 13 or/1-12
 14 META ANALYSIS/
 15 ((meta adj analy\$) or metaanalys\$ or meta-analy\$).tw,sh.
 16 (systematic\$ adj5 (review\$ or overview\$)).tw,sh.
 17 (methodologic\$ adj5 (review\$ or overview\$)).tw,sh.
 18 or/14-17
 19 review.pt.
 20 (medline or medlars or embase).ab.
 21 (scisearch or science citation index).ab.
 22 (psychlit or psyclit or psychinfo or psycinfo or cinahl or cochrane).ab.
 23 ((hand or manual\$) adj2 search\$).tw.
 24 (electronic database\$ or bibliographic database\$ or computeri?ed database\$ or online
 database\$).tw.
 25 (pooling or pooled or mantel haenszel).tw.
 26 (peto or dersimonian or "der simonian" or fixed effect).tw.
 27 or/20-26
 28 and/19,27
 29 exp CASE CONTROL STUDY/
 30 RETROSPECTIVE STUDY/

31 (case\$ adj2 control\$.tw.
32 COHORT ANALYSIS/
33 LONGITUDINAL STUDY/
34 FOLLOW UP/
35 PROSPECTIVE STUDY/
36 cohort\$.tw.
37 or/29-36
38 or/13,18,28,37
39 (book or conference paper or editorial or letter or note or proceeding or short survey).pt.
40 38 not 39
41 COMPARATIVE STUDY/
42 (compar\$ adj3 stud\$.tw.
43 or/41-42
44 or/40,43
45 exp ADOLESCENT/
46 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$.ti,ab,jx.
47 exp CHILD/
48 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jx.
49 exp INFANT/
50 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
51 exp PEDIATRICS/ or exp PUBERTY/
52 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$.ti,ab,jx,ec.
53 or/45-52
54 NON INSULIN DEPENDENT DIABETES MELLITUS/
55 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
56 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
57 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
58 or/54-57
59 JUVENILE DIABETES MELLITUS/
60 and/53,58
61 or/59-60
62 HEMOGLOBIN A1c/
63 (glycoh?emoglobin? or HbA1c or HbA1c or Hb A1c or Hb A1c).ti,ab.
64 (h?emoglobin? adj3 glycosylat\$.ti,ab.
65 (glycated adj3 h?emoglobin?).ti,ab.
66 or/62-65
67 and/61,66
68 STANDARD/
69 REFERENCE VALUE/
70 ((reference? or normal\$ or standard?) adj3 (value? or target\$ or rang\$ or level\$ or
threshold?)).ti,ab.
71 or/68-70
72 ((F#G or BG) adj3 (value\$ or target\$ or rang\$ or level\$ or threshold\$)).ti,ab.
73 ((normogly?emi\$ or euglyc?emi\$ or glyc?emi\$) adj3 (value\$ or target\$ or rang\$ or level\$ or
threshold?)).ti,ab.
74 or/71-73

75 and/67,74
 76 and/44,75
 77 conference abstract.pt.
 78 letter.pt. or LETTER/
 79 note.pt.
 80 editorial.pt.
 81 CASE REPORT/ or CASE STUDY/
 82 (letter or comment* or abstracts).ti.
 83 or/77-82
 84 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 85 83 not 84
 86 ANIMAL/ not HUMAN/
 87 NONHUMAN/
 88 exp ANIMAL EXPERIMENT/
 89 exp EXPERIMENTAL ANIMAL/
 90 ANIMAL MODEL/
 91 exp RODENT/
 92 (rat or rats or mouse or mice).ti.
 93 or/85-92
 94 76 not 93
 95 limit 94 to english language

A.24 Type 2 diabetes – hypertension

Review question: What is the optimal monitoring strategy for identifying hypertension in children and young people with type 2 diabetes?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 HYPERTENSION/
 16 PREHYPERTENSION/

17 (hypertens\$ or prehypertens\$).ti,ab.
18 ((high or elevat\$ or increas\$) adj3 blood pressur\$).ti,ab.
19 or/15-18
20 BLOOD PRESSURE/
21 exp BLOOD PRESSURE DETERMINATION/
22 ((blood or systol\$ or diastol\$ or arterial) adj3 pressur\$).ti,ab.
23 or/20-22
24 SEVERITY OF ILLNESS INDEX/
25 DISEASE PROGRESSION/
26 INTERNATIONAL CLASSIFICATION OF DISEASES/
27 CLASSIFICATION/
28 ((hypertens\$ or prehypertens\$) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).ti,ab.
29 or/24-28
30 MASS SCREENING/
31 exp POPULATION SURVEILLANCE/
32 (undiagnos\$ or estimate\$).ti.
33 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
34 or/30-33
35 PREVALENCE/
36 INCIDENCE/
37 exp COHORT STUDIES/
38 CROSS-SECTIONAL STUDIES/
39 exp MODELS, STATISTICAL/
40 LIFE TABLES/
41 exp RISK/
42 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
43 or/35-42
44 AGE FACTORS/
45 AGE DISTRIBUTION/
46 AGE OF ONSET/
47 TIME TO TREATMENT/
48 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
49 (disease adj3 (duration or onset)).ti,ab.
50 or/44-49
51 19 and (23 or 29 or 34 or 43 or 50)
52 *HYPERTENSION/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
53 *PREHYPERTENSION/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
54 or/51-53
55 and/9,14,54
56 *DIABETIC ANGIOPATHIES/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
57 and/9,56
58 *DIABETES MELLITUS, TYPE 2/co, ep [Complications, Epidemiology]
59 *DIABETES COMPLICATIONS/ep [Epidemiology]
60 or/58-59
61 9 and (35 or 36) and 60

62 (diabet\$ adj10 (characteristic? or feature? or presentation? or complication? or comorbidit\$)).ti.
63 9 and 14 and (43 or 50) and 62
64 or/55,57,61,63
65 limit 64 to english language
66 LETTER/
67 EDITORIAL/
68 NEWS/
69 exp HISTORICAL ARTICLE/
70 ANECDOTES AS TOPIC/
71 COMMENT/
72 (letter or comment* or abstracts).ti.
73 or/66-72
74 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
75 73 not 74
76 ANIMALS/ not HUMANS/
77 exp ANIMALS, LABORATORY/
78 exp ANIMAL EXPERIMENTATION/
79 exp MODELS, ANIMAL/
80 exp RODENTIA/
81 (rat or rats or mouse or mice).ti.
82 or/75-81
83 65 not 82
84 limit 83 to yr="2013 -Current"

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 (hypertens\$ or prehypertens\$).ti,ab.
11 ((high or elevat\$ or increas\$) adj3 blood pressur\$).ti,ab.
12 or/10-11
13 ((blood or systol\$ or diastol\$ or arterial) adj3 pressur\$).ti,ab.
14 ((hypertens\$ or prehypertens\$) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).ti,ab.
15 (undiagnos\$ or estimate\$).ti.
16 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
17 or/15-16
18 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
19 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.

20 (disease adj3 (duration or onset)).ti,ab.
 21 or/19-20
 22 12 and (13 or 14 or 17 or 18 or 21)
 23 and/5,9,22
 24 (diabet\$ adj10 (characteristic? or feature? or presentation? or complication? or comorbidit\$)).ti.
 25 5 and 9 and (18 or 21) and 24
 26 or/23,25

Cochrane Central Register of Controlled Trials

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescens\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 HYPERTENSION/
 16 PREHYPERTENSION/
 17 (hypertens\$ or prehypertens\$).ti,ab.
 18 ((high or elevat\$ or increas\$) adj3 blood pressur\$).ti,ab.
 19 or/15-18
 20 BLOOD PRESSURE/
 21 exp BLOOD PRESSURE DETERMINATION/
 22 ((blood or systol\$ or diastol\$ or arterial) adj3 pressur\$).ti,ab.
 23 or/20-22
 24 SEVERITY OF ILLNESS INDEX/
 25 DISEASE PROGRESSION/
 26 INTERNATIONAL CLASSIFICATION OF DISEASES/
 27 CLASSIFICATION/
 28 ((hypertens\$ or prehypertens\$) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).ti,ab.
 29 or/24-28
 30 MASS SCREENING/
 31 exp POPULATION SURVEILLANCE/
 32 (undiagnos\$ or estimate\$).ti.
 33 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
 34 or/30-33
 35 PREVALENCE/

36 INCIDENCE/
 37 exp COHORT STUDIES/
 38 CROSS-SECTIONAL STUDIES/
 39 exp MODELS, STATISTICAL/
 40 LIFE TABLES/
 41 exp RISK/
 42 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 43 or/35-42
 44 AGE FACTORS/
 45 AGE DISTRIBUTION/
 46 AGE OF ONSET/
 47 TIME TO TREATMENT/
 48 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
 49 (disease adj3 (duration or onset)).ti,ab.
 50 or/44-49
 51 19 and (23 or 29 or 34 or 43 or 50)
 52 *HYPERTENSION/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
 53 *PREHYPERTENSION/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention &
 Control]
 54 or/51-53
 55 and/9,14,54
 56 *DIABETIC ANGIOPATHIES/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention &
 Control]
 57 and/9,56
 58 *DIABETES MELLITUS, TYPE 2/co, ep [Complications, Epidemiology]
 59 *DIABETES COMPLICATIONS/ep [Epidemiology]
 60 or/58-59
 61 9 and (35 or 36) and 60
 62 (diabet\$ adj10 (characteristic? or feature? or presentation? or complication? or comorbidit\$)).ti.
 63 9 and 14 and (43 or 50) and 62
 64 or/55,57,61,63

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
 1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw,jw,rw.
 2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).tw,tx,kw,jw,rw.
 3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw,jw,rw.
 4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw,jw,rw.
 5 or/1-4
 6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.
 7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx,kw.
 8 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
 9 or/6-8
 10 (hypertens\$ or prehypertens\$).tw,tx,kw.
 11 ((high or elevat\$ or increas\$) adj3 blood pressur\$).tw,tx.

12 or/10-11
13 ((blood or systol\$ or diastol\$ or arterial) adj3 pressur\$).tw,tx,kw.
14 SEVERITY OF ILLNESS INDEX.kw.
15 (DISEASE PROGRESSION or DISEASE SEVERITY or DISEASE COURSE).kw.
16 STAGING.kw.
17 INTERNATIONAL CLASSIFICATION OF DISEASES.kw.
18 RATING SCALE.kw.
19 CLASSIFICATION.kw.
20 ((hypertens\$ or prehypertens\$) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).tw,tx.
21 or/14-20
22 RESCREENING.kw.
23 (undiagnos\$ or estimate\$).ti.
24 (screen\$ or surveill\$ or predict\$ or detect\$).ti,kw.
25 or/22-24
26 CROSS-SECTIONAL STUD\$.kw.
27 LONGITUDINAL STUD\$.kw.
28 COHORT.kw.
29 LIFE TABLE?.kw.
30 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti,kw.
31 or/26-30
32 AGE.kw.
33 TIME TO TREATMENT.kw.
34 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw,tx,kw.
35 (disease adj3 (duration or onset)).tw,tx,kw.
36 or/32-35
37 12 and (13 or 21 or 25 or 31 or 36)
38 and/5,9,37
39 (diabet\$ adj10 (characteristic? or feature? or presentation? or complication? or comorbidit\$)).ti.
40 5 and 9 and (31 or 36) and 39
41 or/38,40

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/
11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.

13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
14 or/10-13
15 HYPERTENSION/
16 PREHYPERTENSION/
17 (hypertens\$ or prehypertens\$).tw.
18 ((high or elevat\$ or increas\$) adj3 blood pressur\$).tw.
19 or/15-18
20 BLOOD PRESSURE/
21 exp BLOOD PRESSURE DETERMINATION/
22 ((blood or systol\$ or diastol\$ or arterial) adj3 pressur\$).tw.
23 or/20-22
24 SEVERITY OF ILLNESS INDEX/
25 DISEASE PROGRESSION/
26 INTERNATIONAL CLASSIFICATION OF DISEASES/
27 CLASSIFICATION/
28 ((hypertens\$ or prehypertens\$) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or
staging or defin\$)).tw.
29 or/24-28
30 MASS SCREENING/
31 exp POPULATION SURVEILLANCE/
32 (undiagnos\$ or estimate\$).ti.
33 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
34 or/30-33
35 PREVALENCE/
36 INCIDENCE/
37 exp COHORT STUDIES/
38 CROSS-SECTIONAL STUDIES/
39 exp MODELS, STATISTICAL/
40 LIFE TABLES/
41 exp RISK/
42 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
43 or/35-42
44 AGE FACTORS/
45 AGE DISTRIBUTION/
46 AGE OF ONSET/
47 TIME TO TREATMENT/
48 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw.
49 (disease adj3 (duration or onset)).tw.
50 or/44-49
51 19 and (23 or 29 or 34 or 43 or 50)
52 HYPERTENSION/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention & Control]
53 PREHYPERTENSION/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention &
Control]
54 or/51-53
55 and/9,14,54
56 DIABETIC ANGIOPATHIES/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention &
Control]
57 and/9,56

58 DIABETES MELLITUS, TYPE 2/co, ep [Complications, Epidemiology]
 59 DIABETES COMPLICATIONS/ep [Epidemiology]
 60 or/58-59
 61 9 and (35 or 36) and 60
 62 (diabet\$ adj10 (characteristic? or feature? or presentation? or complication? or comorbidit\$)).ti.
 63 9 and 14 and (43 or 50) and 62
 64 or/55,57,61,63

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 NON INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 and/9,14
 16 JUVENILE DIABETES MELLITUS/
 17 or/15-16
 18 HYPERTENSION/
 19 DIABETIC HYPERTENSION/
 20 PREHYPERTENSION/
 21 (hypertens\$ or prehypertens\$).ti,ab.
 22 ((high or elevat\$ or increas\$) adj3 blood pressur\$).ti,ab.
 23 or/18-22
 24 exp BLOOD PRESSURE/
 25 exp BLOOD PRESSURE MEASUREMENT/
 26 ((blood or systol\$ or diastol\$ or arterial) adj3 pressur\$).ti,ab.
 27 or/24-26
 28 SEVERITY OF ILLNESS INDEX/
 29 DISEASE SEVERITY/
 30 DISEASE COURSE/
 31 STAGING/
 32 exp INTERNATIONAL CLASSIFICATION OF DISEASES/
 33 RATING SCALE/
 34 CLASSIFICATION/
 35 DISEASE CLASSIFICATION/

36 ((hypertens\$ or prehypertens\$) adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or
staging or defin\$)).ti,ab.
37 or/28-36
38 SCREENING/
39 MASS SCREENING/
40 SCREENING TEST/
41 RESCREENING/
42 exp DISEASE SURVEILLANCE/
43 (undiagnos\$ or estimate\$).ti.
44 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
45 or/38-44
46 PREVALENCE/
47 INCIDENCE/
48 CROSS-SECTIONAL STUDY/
49 LONGITUDINAL STUDY/
50 COHORT ANALYSIS/
51 STATISTICAL MODEL/
52 LIFE TABLE/
53 exp RISK/
54 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
55 or/46-54
56 AGE/
57 AGE DISTRIBUTION/
58 ONSET AGE/
59 DISEASE DURATION/
60 TIME TO TREATMENT/
61 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
62 (disease adj3 (duration or onset)).ti,ab.
63 or/56-62
64 23 and (27 or 37 or 45 or 55 or 63)
65 *HYPERTENSION/di, ep, pc [Diagnosis, Epidemiology, Prevention]
66 *PREHYPERTENSION/di, ep, pc [Diagnosis, Epidemiology, Prevention]
67 or/64-66
68 and/17,67
69 DIABETIC HYPERTENSION/di, ep, pc [Diagnosis, Epidemiology, Prevention]
70 and/9,69
71 *NON INSULIN DEPENDENT DIABETES MELLITUS/co, ep [Complication, Epidemiology]
72 9 and (46 or 47) and 71
73 (diabet\$ adj10 (characteristic? or feature? or presentation? or complication? or comorbidit\$)).ti.
74 17 and (55 or 63) and 73
75 or/68,70,72,74
76 limit 75 to english language
77 conference abstract.pt.
78 letter.pt. or LETTER/
79 note.pt.
80 editorial.pt.
81 (letter or comment* or abstracts).ti.
82 or/77-81

83 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 84 82 not 83
 85 ANIMAL/ not HUMAN/
 86 NONHUMAN/
 87 exp ANIMAL EXPERIMENT/
 88 exp EXPERIMENTAL ANIMAL/
 89 ANIMAL MODEL/
 90 exp RODENT/
 91 (rat or rats or mouse or mice).ti.
 92 or/84-91
 93 76 not 92

A.25 Type 2 diabetes – dyslipidaemia

Review question: What is the optimal monitoring strategy for identifying hypertension in children and young people with type 2 diabetes?

Ovid MEDLINE(R)

Searches
 1 ADOLESCENT/ or MINORS/
 2 (adolescens\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx.
 9 or/1-8
 10 exp DIABETES MELLITUS, TYPE 2/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 exp DYSLIPIDEMIAS/
 16 (d#slip\$ or hyp??lip\$ or hyp??alip\$ or hyp??betalip\$ or hyp??cholester\$ or hyp??triglycerid\$ or hyp??triacy?glycerol\$).ti,ab.
 17 or/15-16
 18 LIPIDS/bl [Blood]
 19 CHOLESTEROL/an, bl [Analysis, Blood]
 20 CHOLESTEROL, HDL/an, bl [Analysis, Blood]
 21 CHOLESTEROL, LDL/an, bl [Analysis, Blood]
 22 LIPOPROTEINS/an, bl [Analysis, Blood]
 23 LIPOPROTEINS, HDL/an, bl [Analysis, Blood]
 24 LIPOPROTEINS, LDL/an, bl [Analysis, Blood]
 25 exp TRIGLYCERIDES/an, bl [Analysis, Blood]

26 (cholester\$ or epicholester\$ or lipoprotein? or lipid?).ti,ab.
27 (alphalip\$ or alpha lipoprotein\$ or HDL cholester\$).ti,ab.
28 (betalip\$ or beta lipoprotein\$ or LDL cholester\$).ti,ab.
29 (triglyceride? or triacy?glycerol?).ti,ab.
30 ((HDL or LDL) adj3 cholester\$ adj3 ratio?).ti,ab.
31 or/18-30
32 PREVALENCE/
33 INCIDENCE/
34 exp COHORT STUDIES/
35 CROSS-SECTIONAL STUDIES/
36 exp MODELS, STATISTICAL/
37 LIFE TABLES/
38 exp RISK/
39 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
40 or/32-39
41 MASS SCREENING/
42 exp POPULATION SURVEILLANCE/
43 (undiagnos\$ or estimate\$).ti.
44 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
45 or/41-44
46 SEVERITY OF ILLNESS INDEX/
47 DISEASE PROGRESSION/
48 INTERNATIONAL CLASSIFICATION OF DISEASES/
49 CLASSIFICATION/
50 (d#slip\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or
defin\$)).ti,ab.
51 or/46-50
52 AGE FACTORS/
53 AGE DISTRIBUTION/
54 AGE OF ONSET/
55 TIME TO TREATMENT/
56 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
57 (disease adj3 (duration or onset)).ti,ab.
58 or/52-57
59 17 and (31 or 40 or 45 or 51 or 58)
60 exp *DYSLIPIDEMIAS/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention &
Control]
61 or/59-60
62 and/9,14,61
63 DIABETES COMPLICATIONS/
64 and/9,14,31,63
65 (DIABETES MELLITUS, TYPE 2/ and COMORBIDITY/) or DIABETES MELLITUS, TYPE 2/co
[Complications]
66 and/9,31,65
67 or/62,64,66
68 limit 67 to english language
69 LETTER/
70 EDITORIAL/

71 NEWS/
72 exp HISTORICAL ARTICLE/
73 ANECDOTES AS TOPIC/
74 COMMENT/
75 (letter or comment* or abstracts).ti.
76 or/69-75
77 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
78 76 not 77
79 ANIMALS/ not HUMANS/
80 exp ANIMALS, LABORATORY/
81 exp ANIMAL EXPERIMENTATION/
82 exp MODELS, ANIMAL/
83 exp RODENTIA/
84 (rat or rats or mouse or mice).ti.
85 or/78-84
86 68 not 85

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
8 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
9 or/6-8
10 (d#slip\$ or hyp??lip\$ or hyp??alphilip\$ or hyp??betalip\$ or hyp??cholester\$ or hyp??triglycerid\$ or hyp??triacy?glycerol\$).ti,ab.
11 (cholester\$ or epicholester\$ or lipoprotein? or lipid?).ti,ab.
12 (alphilip\$ or alpha lipoprotein\$ or HDL cholester\$).ti,ab.
13 (betalip\$ or beta lipoprotein\$ or LDL cholester\$).ti,ab.
14 (triglyceride? or triacy?glycerol?).ti,ab.
15 ((HDL or LDL) adj3 cholester\$ adj3 ratio?).ti,ab.
16 or/11-15
17 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
18 (undiagnos\$ or estimate\$).ti.
19 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
20 or/18-19
21 (d#slip\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).ti,ab.
22 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
23 (disease adj3 (duration or onset)).ti,ab.
24 or/22-23
25 10 and (16 or 17 or 20 or 21 or 24)

EBM Reviews - Cochrane Central Register of Controlled Trials

- # Searches
- 1 ADOLESCENT/ or MINORS/
 - 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
 - 3 exp CHILD/
 - 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jw.
 - 5 exp INFANT/
 - 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
 - 7 exp PEDIATRICS/ or exp PUBERTY/
 - 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
 - 9 or/1-8
 - 10 exp DIABETES MELLITUS, TYPE 2/
 - 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 - 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 - 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 - 14 or/10-13
 - 15 exp DYSLIPIDEMIAS/
 - 16 (d#slip\$ or hyp??lip\$ or hyp??alhalip\$ or hyp??betalip\$ or hyp??cholester\$ or hyp??triglycerid\$ or hyp??triacy?glycerol\$).ti,ab.
 - 17 or/15-16
 - 18 LIPIDS/bl [Blood]
 - 19 CHOLESTEROL/an, bl [Analysis, Blood]
 - 20 CHOLESTEROL, HDL/an, bl [Analysis, Blood]
 - 21 CHOLESTEROL, LDL/an, bl [Analysis, Blood]
 - 22 LIPOPROTEINS/an, bl [Analysis, Blood]
 - 23 LIPOPROTEINS, HDL/an, bl [Analysis, Blood]
 - 24 LIPOPROTEINS, LDL/an, bl [Analysis, Blood]
 - 25 exp TRIGLYCERIDES/an, bl [Analysis, Blood]
 - 26 (cholester\$ or epicholester\$ or lipoprotein? or lipid?).ti,ab.
 - 27 (alhalip\$ or alpha lipoprotein\$ or HDL cholester\$).ti,ab.
 - 28 (betalip\$ or beta lipoprotein\$ or LDL cholester\$).ti,ab.
 - 29 (triglyceride? or triacy?glycerol?).ti,ab.
 - 30 ((HDL or LDL) adj3 cholester\$ adj3 ratio?).ti,ab.
 - 31 or/18-30
 - 32 PREVALENCE/
 - 33 INCIDENCE/
 - 34 exp COHORT STUDIES/
 - 35 CROSS-SECTIONAL STUDIES/
 - 36 exp MODELS, STATISTICAL/
 - 37 LIFE TABLES/
 - 38 exp RISK/
 - 39 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
 - 40 or/32-39
 - 41 MASS SCREENING/

42 exp POPULATION SURVEILLANCE/
43 (undiagnos\$ or estimate\$).ti.
44 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
45 or/41-44
46 SEVERITY OF ILLNESS INDEX/
47 DISEASE PROGRESSION/
48 INTERNATIONAL CLASSIFICATION OF DISEASES/
49 CLASSIFICATION/
50 (d#slip\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or
defin\$)).ti,ab.
51 or/46-50
52 AGE FACTORS/
53 AGE DISTRIBUTION/
54 AGE OF ONSET/
55 TIME TO TREATMENT/
56 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
57 (disease adj3 (duration or onset)).ti,ab.
58 or/52-57
59 17 and (31 or 40 or 45 or 51 or 58)
60 exp *DYSLIPIDEMIAS/cl, di, ep, pc [Classification, Diagnosis, Epidemiology, Prevention &
Control]
61 or/59-60
62 and/9,14,61
63 DIABETES COMPLICATIONS/
64 and/9,14,31,63
65 (DIABETES MELLITUS, TYPE 2/ and COMORBIDITY/) or DIABETES MELLITUS, TYPE 2/co
[Complications]
66 and/9,31,65
67 or/62,64,66

Cochrane Database of Systematic Reviews, EBM Reviews - Database of Abstracts of Reviews of Effects

Searches
1 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,tx,kw,jw,rw.
2 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).tw,tx,kw,jw,rw.
3 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,tx,kw,jw,rw.
4 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,tx,kw,jw,rw.
5 or/1-4
6 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw,tx,kw.
7 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw,tx,kw.
8 (NIDDM or T2D or TIID or DM2 or DMII).tw,tx.
9 or/6-8
10 (d#slip\$ or hyp??lip\$ or hyp??alphalip\$ or hyp??betalip\$ or hyp??cholester\$ or hyp??triglycerid\$
or hyp??triacy?glycerol\$).tw,tx,kw.
11 (cholester\$ or epicholester\$ or lipoprotein? or lipid?).tw,tx,kw.
12 (alphalip\$ or alpha lipoprotein\$ or HDL cholester\$).tw,tx,kw.

13 (betalip\$ or beta lipoprotein\$ or LDL cholester\$).tw,tx,kw.
14 (triglyceride? or triacy?glycerol?).tw,tx,kw.
15 ((HDL or LDL) adj3 cholester\$ adj3 ratio?).tw,tx.
16 or/11-15
17 LIFE TABLE\$.kw.
18 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti,kw.
19 or/17-18
20 RESCREENING.kw.
21 (undiagnos\$ or estimate\$).ti.
22 (screen\$ or surveill\$ or predict\$ or detect\$).ti,kw.
23 or/20-22
24 SEVERITY OF ILLNESS INDEX.kw.
25 (DISEASE PROGRESSION or DISEASE COURSE or DISEASE SEVERITY).kw.
26 STAGING.kw.
27 INTERNATIONAL CLASSIFICATION OF DISEASES.kw.
28 RATING SCALE.kw.
29 CLASSIFICATION.kw.
30 (d#slip\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).tw,tx.
31 or/24-30
32 AGE.kw.
33 TIME TO TREATMENT.kw.
34 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw,tx,kw.
35 (disease adj3 (duration or onset)).tw,tx,kw.
36 or/32-35
37 10 and (16 or 19 or 23 or 31 or 36)
38 DIABETES COMPLICATIONS.kw.
39 and/16,38
40 or/37,39
41 and/5,9,40
42 (COMORBIDITY and (DIABETES MELLITUS, TYPE 2 or NON INSULIN DEPENDENT DIABETES MELLITUS)).kw.
43 and/5,16,42
44 or/41,43

Health Technology Assessment

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw,jx,rw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw,jx,rw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw,jx,rw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw,jx,rw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 2/

11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
13 (NIDDM or T2D or TIID or DM2 or DMII).tw.
14 or/10-13
15 exp DYSLIPIDEMIAS/
16 (d#slip\$ or hyp??lip\$ or hyp??alipalip\$ or hyp??betalip\$ or hyp??cholester\$ or hyp??triglycerid\$
or hyp??triacy?glycerol\$).tw.
17 or/15-16
18 LIPIDS/
19 CHOLESTEROL/
20 CHOLESTEROL, HDL/
21 CHOLESTEROL, LDL/
22 LIPOPROTEINS/
23 LIPOPROTEINS, HDL/
24 LIPOPROTEINS, LDL/
25 exp TRIGLYCERIDES/
26 (cholester\$ or epicholester\$ or lipoprotein? or lipid?).tw.
27 (alipalip\$ or alpha lipoprotein\$ or HDL cholester\$).tw.
28 (betalip\$ or beta lipoprotein\$ or LDL cholester\$).tw.
29 (triglyceride? or triacy?glycerol?).tw.
30 ((HDL or LDL) adj3 cholester\$ adj3 ratio?).tw.
31 or/18-30
32 PREVALENCE/
33 INCIDENCE/
34 exp COHORT STUDIES/
35 CROSS-SECTIONAL STUDIES/
36 exp MODELS, STATISTICAL/
37 LIFE TABLES/
38 exp RISK/
39 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
40 or/32-39
41 MASS SCREENING/
42 exp POPULATION SURVEILLANCE/
43 (undiagnos\$ or estimate\$).ti.
44 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
45 or/41-44
46 SEVERITY OF ILLNESS INDEX/
47 DISEASE PROGRESSION/
48 INTERNATIONAL CLASSIFICATION OF DISEASES/
49 CLASSIFICATION/
50 (d#slip\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or defin\$)).tw.
51 or/46-50
52 AGE FACTORS/
53 AGE DISTRIBUTION/
54 AGE OF ONSET/
55 TIME TO TREATMENT/
56 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).tw.

57 (disease adj3 (duration or onset)).tw.
 58 or/52-57
 59 17 and (31 or 40 or 45 or 51 or 58)
 60 DIABETES COMPLICATIONS/
 61 and/31,60
 62 or/59,61
 63 and/9,14,62
 64 DIABETES MELLITUS, TYPE 2/ and COMORBIDITY/
 65 and/9,31,64
 66 or/63,65

Embase

Searches
 1 exp ADOLESCENT/
 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
 3 exp CHILD/
 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
 5 exp INFANT/
 6 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
 7 exp PEDIATRICS/ or exp PUBERTY/
 8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
 9 or/1-8
 10 NON INSULIN DEPENDENT DIABETES MELLITUS/
 11 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 12 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 13 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 14 or/10-13
 15 JUVENILE DIABETES MELLITUS/
 16 and/9,14
 17 or/15-16
 18 exp "DISORDERS OF CHOLESTEROL METABOLISM"/
 19 "DISORDERS OF LIPID METABOLISM"/
 20 exp "DISORDERS OF LIPOPROTEIN METABOLISM"/
 21 DYSLIPIDEMIA/
 22 exp HYPERLIPIDEMIA/
 23 HYPOLIPEMIA/
 24 (d#slip\$ or hyp??lip\$ or hyp??alipalip\$ or hyp??betalip\$ or hyp??cholester\$ or hyp??triglycerid\$ or hyp??triacyl?glycerol\$).ti,ab.
 25 or/18-24
 26 exp LIPID BLOOD LEVEL/ or LIPID/ec [Endogenous Compound]
 27 CHOLESTEROL/an, ec [Drug Analysis, Endogenous Compound]
 28 HIGH DENSITY LIPOPROTEIN CHOLESTEROL/an, ec [Drug Analysis, Endogenous Compound]
 29 LOW DENSITY LIPOPROTEIN CHOLESTEROL/an, ec [Drug Analysis, Endogenous Compound]
 30 LIPOPROTEIN/an, ec [Drug Analysis, Endogenous Compound]
 31 HIGH DENSITY LIPOPROTEIN/an, ec [Drug Analysis, Endogenous Compound]
 32 LOW DENSITY LIPOPROTEIN/an, ec [Drug Analysis, Endogenous Compound]

33 TRIACYLGLYCEROL/an, ec [Drug Analysis, Endogenous Compound]
34 (cholester\$ or epicholester\$ or lipoprotein? or lipid?).ti,ab.
35 (alphalip\$ or alpha lipoprotein\$ or HDL cholester\$).ti,ab.
36 (betalip\$ or beta lipoprotein\$ or LDL cholester\$).ti,ab.
37 (triglyceride? or triacy?glycerol?).ti,ab.
38 ((HDL or LDL) adj3 cholester\$ adj3 ratio?).ti,ab.
39 or/26-38
40 PREVALENCE/
41 INCIDENCE/
42 STATISTICAL MODEL/
43 LIFE TABLE/
44 exp RISK/
45 (prevalen\$ or incidence? or model\$ or risk\$ or rate?).ti.
46 or/40-45
47 SCREENING/
48 MASS SCREENING/
49 SCREENING TEST/
50 RESCREENING/
51 exp DISEASE SURVEILLANCE/
52 (undiagnos\$ or estimate\$).ti.
53 (screen\$ or surveill\$ or predict\$ or detect\$).ti.
54 or/47-53
55 SEVERITY OF ILLNESS INDEX/
56 DISEASE SEVERITY/
57 DISEASE COURSE/
58 STAGING/
59 exp INTERNATIONAL CLASSIFICATION OF DISEASES/
60 RATING SCALE/
61 CLASSIFICATION/
62 DISEASE CLASSIFICATION/
63 (d#slip\$ adj3 (grad\$ or sever\$ or classif\$ or index\$ or indice? or stage\$ or staging or
defin\$)).ti,ab.
64 or/55-63
65 AGE/
66 AGE DISTRIBUTION/
67 ONSET AGE/
68 DISEASE DURATION/
69 TIME TO TREATMENT/
70 (age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
71 (disease adj3 (duration or onset)).ti,ab.
72 or/65-71
73 25 and (39 or 46 or 54 or 64 or 72)
74 exp *"DISORDERS OF CHOLESTEROL METABOLISM"/di, ep, pc [Diagnosis, Epidemiology,
Prevention]
75 *"DISORDERS OF LIPID METABOLISM"/di, ep, pc [Diagnosis, Epidemiology, Prevention]
76 exp *"DISORDERS OF LIPOPROTEIN METABOLISM"/di, ep, pc [Diagnosis, Epidemiology,
Prevention]
77 *DYSLIPIDEMIA/di, ep, pc [Diagnosis, Epidemiology, Prevention]

78 exp *HYPERLIPIDEMIA/di, ep, pc [Diagnosis, Epidemiology, Prevention]
 79 *HYPOLIPEMIA/di, ep, pc [Diagnosis, Epidemiology, Prevention]
 80 or/73-79
 81 and/17,80
 82 (NON INSULIN DEPENDENT DIABETES MELLITUS/ and COMORBIDITY/) or NON INSULIN
 DEPENDENT DIABETES MELLITUS/co [Complication]
 83 and/9,39,82
 84 or/81,83
 85 limit 84 to english language
 86 conference abstract.pt.
 87 letter.pt. or LETTER/
 88 note.pt.
 89 editorial.pt.
 90 (letter or comment* or abstracts).ti.
 91 or/86-90
 92 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 93 91 not 92
 94 ANIMAL/ not HUMAN/
 95 NONHUMAN/
 96 exp ANIMAL EXPERIMENT/
 97 exp EXPERIMENTAL ANIMAL/
 98 ANIMAL MODEL/
 99 exp RODENT/
 100 (rat or rats or mouse or mice).ti.
 101 or/93-100
 102 85 not 101

A.26 Health economics

Ovid MEDLINE(R)

Searches
 1 ECONOMICS/
 2 VALUE OF LIFE/
 3 exp "COSTS AND COST ANALYSIS"/
 4 exp ECONOMICS, HOSPITAL/
 5 exp ECONOMICS, MEDICAL/
 6 exp RESOURCE ALLOCATION/
 7 ECONOMICS, NURSING/
 8 ECONOMICS, PHARMACEUTICAL/
 9 exp "FEES AND CHARGES"/
 10 exp BUDGETS/
 11 budget*.ti,ab.
 12 cost*.ti,ab.
 13 (economic* or pharmaco?economic*).ti,ab.
 14 (price* or pricing*).ti,ab.
 15 (financ* or fee or fees or expenditure* or saving*).ti,ab.
 16 (value adj2 (money or monetary)).ti,ab.

17 resourc* allocat*.ti,ab.
18 (fund or funds or funding* or funded).ti,ab.
19 (ration or rations or rationing* or rationed).ti,ab.
20 ec.fs.
21 or/1-20
22 ADOLESCENT/ or MINORS/
23 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw.
24 exp CHILD/
25 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
kindergar\$ or boy? or girl?).ti,ab,jw.
26 exp INFANT/
27 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw.
28 exp PEDIATRICS/ or exp PUBERTY/
29 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw.
30 or/22-29
31 exp DIABETES MELLITUS, TYPE 1/
32 (diabet\$ adj5 ("type one" or "type 1" or "type II" or T1 or TI or insulin depend\$ or juvenile or child\$
or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
33 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
34 or/31-33
35 exp DIABETES MELLITUS, TYPE 2/
36 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
37 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
38 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
39 or/35-38
40 or/34,39
41 and/30,40
42 limit 41 to english language
43 LETTER/
44 EDITORIAL/
45 NEWS/
46 exp HISTORICAL ARTICLE/
47 ANECDOTES AS TOPIC/
48 COMMENT/
49 CASE REPORT/
50 (letter or comment* or abstracts).ti.
51 or/43-50
52 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
53 51 not 52
54 ANIMALS/ not HUMANS/
55 exp ANIMALS, LABORATORY/
56 exp ANIMAL EXPERIMENTATION/
57 exp MODELS, ANIMAL/
58 exp RODENTIA/
59 (rat or rats or mouse or mice).ti.
60 or/53-59
61 42 not 60

Cochrane Central Register of Controlled Trials

Searches

1 ECONOMICS/
2 VALUE OF LIFE/
3 exp "COSTS AND COST ANALYSIS"/
4 exp ECONOMICS, HOSPITAL/
5 exp ECONOMICS, MEDICAL/
6 exp RESOURCE ALLOCATION/
7 ECONOMICS, NURSING/
8 ECONOMICS, PHARMACEUTICAL/
9 exp "FEES AND CHARGES"/
10 exp BUDGETS/
11 budget*.ti,ab.
12 cost*.ti,ab.
13 (economic* or pharmaco?economic*).ti,ab.
14 (price* or pricing*).ti,ab.
15 (financ* or fee or fees or expenditure* or saving*).ti,ab.
16 (value adj2 (money or monetary)).ti,ab.
17 resourc* allocat*.ti,ab.
18 (fund or funds or funding* or funded).ti,ab.
19 (ration or rations or rationing* or rationed).ti,ab.
20 ec.fs.
21 or/1-20
22 ADOLESCENT/ or MINORS/
23 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
24 exp CHILD/
25 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
26 exp INFANT/
27 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
28 exp PEDIATRICS/ or exp PUBERTY/
29 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
30 or/22-29
31 exp DIABETES MELLITUS, TYPE 1/
32 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
33 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
34 or/31-33
35 exp DIABETES MELLITUS, TYPE 2/
36 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
37 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
38 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
39 or/35-38
40 or/34,39
41 and/30,40

Health Technology Assessment, EBM Reviews - NHS Economic Evaluation Database

Searches
1 ADOLESCENT/ or MINORS/
2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).tw.
3 exp CHILD/
4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).tw.
5 exp INFANT/
6 (infan\$ or neonat\$ or newborn\$ or baby or babies).tw.
7 exp PEDIATRICS/ or exp PUBERTY/
8 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).tw.
9 or/1-8
10 exp DIABETES MELLITUS, TYPE 1/
11 (diabet\$ adj5 ("type one" or "type 1" or "type II" or T1 or TI or insulin depend\$ or juvenile or child\$ or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).tw.
12 (IDDM or T1D or T1D or DM1 or DMI).tw.
13 or/10-12
14 exp DIABETES MELLITUS, TYPE 2/
15 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).tw.
16 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).tw.
17 (NIDDM or T2D or TIID or DM2 or DMII).tw.
18 or/14-17
19 or/13,18
20 and/9,19

Embase

Searches
1 HEALTH ECONOMICS/
2 exp ECONOMIC EVALUATION/
3 exp HEALTH CARE COST/
4 exp FEE/
5 BUDGET/
6 FUNDING/
7 RESOURCE ALLOCATION/
8 budget*.ti,ab.
9 cost*.ti,ab.
10 (economic* or pharmaco?economic*).ti,ab.
11 (price* or pricing*).ti,ab.
12 (financ* or fee or fees or expenditure* or saving*).ti,ab.
13 (value adj2 (money or monetary)).ti,ab.
14 resourc* allocat*.ti,ab.
15 (fund or funds or funding* or funded).ti,ab.
16 (ration or rations or rationing* or rationed).ti,ab.
17 or/1-16
18 exp ADOLESCENT/
19 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.

20 exp CHILD/
 21 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or
 kindergar\$ or boy? or girl?).ti,ab,jx.
 22 exp NEWBORN/
 23 (infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
 24 exp PEDIATRICS/ or exp PUBERTY/
 25 (p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,ec.
 26 or/18-25
 27 INSULIN DEPENDENT DIABETES MELLITUS/
 28 (diabet\$ adj5 ("type one" or "type 1" or "type I" or T1 or TI or insulin depend\$ or juvenile or child\$
 or earl\$ or labile or brittle or sudden onset or auto immun\$ or auto?immun\$)).ti,ab.
 29 (IDDM or T1D or TID or DM1 or DMI).ti,ab.
 30 or/27-29
 31 NON INSULIN DEPENDENT DIABETES MELLITUS/
 32 (diabet\$ adj5 ("type two" or "type 2" or "type II" or T2 or TII or matur\$ or adult\$ or slow or late or
 stable or ketosis resistant or keto resist\$ or keto?resist\$ or non keto\$ or non?keto\$)).ti,ab.
 33 (diabet\$ adj5 ((non insulin or non?insulin) adj2 depend\$)).ti,ab.
 34 (NIDDM or T2D or TIID or DM2 or DMII).ti,ab.
 35 or/31-34
 36 or/30,35
 37 JUVENILE DIABETES MELLITUS/
 38 and/26,36
 39 or/37-38
 40 limit 39 to english language
 41 conference abstract.pt.
 42 letter.pt. or LETTER/
 43 note.pt.
 44 editorial.pt.
 45 CASE REPORT/ or CASE STUDY/
 46 (letter or comment* or abstracts).ti.
 47 or/41-46
 48 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
 49 47 not 48
 50 ANIMAL/ not HUMAN/
 51 NONHUMAN/
 52 exp ANIMAL EXPERIMENT/
 53 exp EXPERIMENTAL ANIMAL/
 54 ANIMAL MODEL/
 55 exp RODENT/
 56 (rat or rats or mouse or mice).ti.
 57 or/49-56
 58 40 not 57
 59 and/17,58