

Appendix A

Search Strategy 1

Ovid

Database(s): Embase 1988 to 2017 Week 41, EBM Reviews - Cochrane Central Register of Controlled Trials September 2017, EBM Reviews - Cochrane Database of Systematic Reviews 2005 to October 11, 2017, Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Search Strategy:

#	Searches	Results
1	*noninvasive ventilation/ or exp *positive-pressure respiration/ (BiPAP or BPAP or CPAP or "noninvasive positive pressure ventilation" or "non-	29857
2	invasive positive pressure ventilation" or "noninvasive ventilation" or "non- invasive ventilation" or NPPV or "Positive Airway Pressure*" or "positive end- expiratory pressure*").ti.	25411
3	1 or 2	38037
4	*Amyotrophic Lateral Sclerosis/	31897
5	*Bronchiectasis/	9157
6	*Cystic Fibrosis/	63983
7	*Hypercapnia/	7855
8	*Hypoventilation/	1991
9	*Idiopathic Pulmonary Fibrosis/	4848
10	*Lung Diseases, Interstitial/	9590
11	*Pulmonary Fibrosis/	17843
12	*Idiopathic Pulmonary Fibrosis/	4848
13	*Kyphosis/	5811
14	*Obesity/	256788
15	*Respiratory Insufficiency/	25610
16	*Scoliosis/	20526
17	*Spinal Cord Injuries/	41566
18	*Obesity Hypoventilation Syndrome/	991
19	*respiratory failure/	29488
20	*Lung Diseases, Obstructive/	44536
21	*Pulmonary Disease, Chronic Obstructive/	39781
22	*Neuromuscular Diseases/	11071
23	*Motor Neuron Disease/	7062
24	*Muscular Atrophy, Spinal/	5210
25	*Muscular Diseases/	21214
26	*Muscular Disorders, Atrophic/	5388

27	*Myopathies, Structural, Congenital/	5491
28	*Myositis/	10762
29	*Myotonic Disorders/ ("Amyotrophic lateral sclerosis" or "Atrophic Muscular Disorder*" or Bronchiectasis or "Chronic Obstructive Pulmonary Disease*" or "congenital structural myopath*" or "Cystic Fibrosis" or hypercapnia or hypoventilation or 30 "Interstitial Lung Disease*" or kyphosis or "Motor Neuron Disease*" or "Muscular Disease*" or Myositis or "Myotonic Disorder*" or "Neuromuscular Disease*" or Obesity or "obstructive lung disease*" or "Pulmonary fibrosis" or "respiratory failure" or "respiratory insufficiency" or scoliosis or "Spinal Cord Injur*" or "Spinal Muscular Atrophy" or "structural congenital myopath*").ti.	431575
31	or/4-30	748406
32	3 and 31 limit 32 to ("all adult (19 plus years)" or "young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 33 to 64 years)" or "middle aged (45 plus years)" or "all aged (65 and over)" or "aged (80 and over)") [Limit not valid in Embase,CCTR,CDSR; records were retained]	7365
34	limit 33 to (adult <18 to 64 years> or aged <65+ years>) [Limit not valid in CCTR,CDSR,Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]	5428
35	limit 32 to ("all infant (birth to 23 months)" or "all child (0 to 18 years)" or "newborn infant (birth to 1 month)" or "infant (1 to 23 months)" or "preschool child (2 to 5 years)" or "child (6 to 12 years)" or "adolescent (13 to 18 years)") [Limit not valid in Embase,CCTR,CDSR; records were retained]	3713
36	limit 35 to (embryo or infant or child or preschool child <1 to 6 years> or school child <7 to 12 years> or adolescent <13 to 17 years>) [Limit not valid in CCTR,CDSR,Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]	3991
37	36 not 34	985
38	32 not 37	381
39	exp Guideline/ or exp Practice Guideline/	6984
40	exp meta analysis/	460832
41	exp Meta-Analysis as Topic/	226461
42	exp "systematic review"/	54869
43	exp controlled study/	150940
44	exp Randomized Controlled Trial/	5963423
45	exp triple blind procedure/	955267
46	exp Double-Blind Method/	176
47	exp Single-Blind Method/	413708
48	exp latin square design/	73097
49	exp comparative study/	344
		2883571

50 exp Cohort Studies/	2276613
51 exp longitudinal study/	347564
52 exp retrospective study/	1286719
53 exp prospective study/	978255
54 exp population research/	86750
55 exp observational study/	173744
56 clinical study/	108981
57 exp Evaluation Studies/	286274
58 exp quantitative study/	39840
59 exp validation studies/	158895
60 exp quasi experimental study/	4325
61 exp field study/	7951
62 in vivo study/	281996
63 exp panel study/	697
64 exp prevention study/	3306
65 exp replication study/	1714
66 exp Feasibility Studies/	150283
67 exp trend study/	21725
68 exp correlational study/	26940
69 exp case-control studies/	1097656
70 exp confidence interval/	166287
71 exp regression analysis/	790679
72 exp proportional hazards model/	150688
((evidence adj based) or (meta adj analys*) or (systematic* adj3 review*) or "consensus development" or guideline* or "position statement*" or (control* adj3 study) or (control* adj3 trial) or (randomized adj3 study) or (randomized adj3 trial) or (randomised adj3 study) or (randomised adj3 trial) or "pragmatic clinical trial" or (random* adj1 allocat*) or (doubl* adj blind*) or (doubl* adj mask*) or (singl* adj blind*) or (singl* adj mask*) or (tripl* adj blind*) or (tripl* adj mask*) or (trebl* adj blind*) or (trebl* adj mask*) or "latin square" or placebo* or nocebo* or multivariate or "comparative study" or "comparative survey" or "comparative analysis" or (intervention* adj2 study) or (intervention* adj2 trial) or crossover or "cross-over" or cohort* or "longitudinal study" or "longitudinal survey" or "longitudinal analysis" or "longitudinal evaluation" or longitudinal* or ((retrospective or "ex post facto") adj3 (study or survey or analysis or design)) or retrospectiv* or "prospective study" or "prospective survey" or "prospective analysis" or prospectiv* or (population adj3 (stud* or survey* or analys* or research)) or "concurrent study" or "concurrent survey" or "concurrent analysis" or "incidence study" or "incidence survey" or "incidence analysis" or (("follow-up" or followup) adj (stud* or survey or analysis)) or ((observation or observational) adj (study or survey or analysis)) or "clinical study" or "clinical trial" or "evaluation	19844960

study" or "evaluation survey" or "evaluation analysis" or "quantitative study" or "quantitative analys*" or "numerical study" or "validation study" or "validation survey" or "validation analysis" or "quasi experimental study" or "quasi experimental analysis" or "quasiexperimental study" or "quasiexperimental analysis" or "field study" or "field survey" or "field analysis" or "in vivo study" or "in vivo analysis" or "panel study" or "panel survey" or "panel analysis" or ((prevention or preventive) adj3 (trial or study or analysis or survey)) or "replication study" or "replication analysis " or "replication trial" or "feasibility study" or "feasibility analysis" or "trend study" or "trend survey" or "trend analysis" or ((correlation* adj2 study) or (correlation* adj2 analys*)) or "case control study" or "case base study" or "case referent study" or "case referent study" or "case referent study" or "case compeer study" or "case comparison study" or "matched case control" or "multicenter study" or "multi-center study" or "odds ratio" or "confidence interval" or (hazard* adj (model* or analys* or regression or ratio or ratios)) or "Cox model" or "Cox multivariate analyses" or "Cox multivariate analysis" or "Cox regression" or "Cox survival analyses" or "Cox survival analysis" or "Cox survival model" or "change analysis" or ((study or trial or random* or control*) and compar*).mp,pt.

74 or/39-73	20280837
75 38 and 74	4092
76 limit 75 to (editorial or erratum or letter or note or addresses or autobiography or bibliography or biography or blogs or comment or dictionary or directory or interactive tutorial or interview or lectures or legal cases or legislation or news or newspaper article or overall or patient education handout or periodical index or portraits or published erratum or video-audio media or webcasts) [Limit not valid in Embase,CCTR,CDSR,Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]	208
77 from 76 keep 130-138	9
78 (75 not 76) or 77	3893
79 limit 78 to yr="1995 -Current"	3603
80 remove duplicates from 79	2447

Scopus

- 1 TITLE(BiPAP or BPAP or CPAP or "noninvasive positive pressure ventilation" or "non-invasive positive pressure ventilation" or "noninvasive ventilation" or "non-invasive ventilation" or NPPV or "Positive Airway Pressure*" or "positive end-expiratory pressure*")
- 2 TITLE("Amyotrophic lateral sclerosis" or "Atrophic Muscular Disorder*" or Bronchiectasis or "Chronic Obstructive Pulmonary Disease*" or "congenital structural myopath*" or "Cystic Fibrosis" or hypercapnia or hypoventilation or "Interstitial Lung Disease*" or kyphosis or "Motor Neuron Disease*" or "Muscular Disease*" or Myositis or "Myotonic Disorder*" or "Neuromuscular Disease*" or Obesity or "obstructive lung disease*" or "Pulmonary fibrosis" or "respiratory failure" or "respiratory insufficiency" or scoliosis or "Spinal Cord Injur*" or "Spinal Muscular Atrophy" or "structural congenital myopath*")
- 3 TITLE-ABS-KEY((evidence W/1 based) or (meta W/1 analys*) or (systematic* W/3 review*) or "consensus development" or guideline* or "position statement*" or (control* W/3 study) or (control* W/3 trial) or (randomized W/3 study) or (randomized W/3 trial) or (randomised W/3 study) or (randomised W/3 trial) or "pragmatic clinical trial" or (random* W/1 allocat*) or (doubl* W/1 blind*) or (doubl* W/1 mask*) or (singl* W/1 blind*) or (singl* W/1 mask*) or (tripl* W/1 blind*) or (tripl* W/1 mask*) or (trebl* W/1 blind*) or (trebl* W/1 mask*) or "latin square" or placebo* or nocebo* or multivariate or "comparative study" or "comparative survey" or "comparative analysis" or (intervention* W/2 study) or (intervention* W/2 trial) or crossover or "cross-over" or cohort* or "longitudinal study" or "longitudinal survey" or "longitudinal analysis" or "longitudinal evaluation" or longitudinal* or ((retrospective or "ex post facto") W/3 (study or survey or analysis or design)) or retrospectiv* or "prospective study" or "prospective survey" or "prospective analysis" or prospectiv* or (population W/3 (stud* or survey* or analys* or research)) or "concurrent study" or "concurrent survey" or "concurrent analysis" or "incidence study" or "incidence survey" or "incidence analysis" or (("follow-up" or followup) W/1 (stud* or survey or analysis)) or ((observation or observational) W/1 (study or survey or analysis)) or "clinical study" or "clinical trial" or "evaluation study" or "evaluation survey" or "evaluation analysis" or "quantitative study" or "quantitative analys*" or "numerical study" or "validation study" or "validation survey" or "validation analysis" or "quasi experimental study" or "quasi experimental analysis" or "quasiexperimental study" or "quasiexperimental analysis" or "field study" or "field survey" or "field analysis" or "in vivo study" or "in vivo analysis" or "panel study" or "panel survey" or "panel analysis" or ((prevention or preventive) W/3 (trial or study or analysis or survey)) or "replication study" or "replication analysis" or "replication trial" or "feasibility study" or "feasibility analysis" or "trend study" or "trend survey" or "trend analysis" or ((correlation* W/2 study) or (correlation* W/2 analys*)) or "case control study" or "case base study" or "case referrent study" or "case referent study" or "case referent study" or "case compeer study" or "case comparison study" or "matched case control" or "multicenter study" or "multi-center study" or "odds ratio" or "confidence interval" or (hazard* W/1 (model* or analys* or regression or ratio or ratios)) or "Cox model" or "Cox multivariate analyses" or "Cox multivariate analysis" or "Cox regression" or "Cox survival analyses" or "Cox survival analysis" or "Cox survival model" or "change analysis" or ((study or trial or random* or control*) and compar*))
- 4 PUBYEAR AFT 1994
- 5 1 and 2 and 3 and 4
- 6 TITLE-ABS-KEY(newborn* or neonat* or infant* or toddler* or child* or adolescent* or paediatric* or pediatric* or girl or girls or boy or boys or teen or teens or teenager* or preschooler* or "pre-schooler*" or preteen or preteens or "pre-teen" or "pre-teens" or youth or

youths) AND NOT TITLE-ABS-KEY(adult or adults or "middle age" or "middle aged" OR elderly OR geriatric* OR "old people" OR "old person*" OR "older people" OR "older person*" OR "very old")

7 5 and not 6

8 DOCTYPE(le) OR DOCTYPE(ed) OR DOCTYPE(bk) OR DOCTYPE(er) OR DOCTYPE(no) OR DOCTYPE(sh)

9 7 and not 8

10 PMID(0*) OR PMID(1*) OR PMID(2*) OR PMID(3*) OR PMID(4*) OR PMID(5*) OR PMID(6*) OR PMID(7*) OR PMID(8*) OR PMID(9*)

11 9 and not 10

National Guidelines Clearinghouse

("Amyotrophic lateral sclerosis" or "Atrophic Muscular Disorder*" or Bronchiectasis or "Chronic Obstructive Pulmonary Disease*" or "congenital structural myopath*" or "Cystic Fibrosis" or hypercapnia or hypoventilation or "Interstitial Lung Disease*" or kyphosis or "Motor Neuron Disease*" or "Muscular Disease*" or Myositis or "Myotonic Disorder*" or "Neuromuscular Disease*" or Obesity or "obstructive lung disease*" or "Pulmonary fibrosis" or "respiratory failure" or "respiratory insufficiency" or scoliosis or "Spinal Cord Injur*" or "Spinal Muscular Atrophy" or "structural congenital myopath*") AND (BiPAP OR BPAP OR CPAP OR "noninvasive positive pressure ventilation" OR "non-invasive positive pressure ventilation" OR "noninvasive ventilation" OR "non-invasive ventilation" OR NPPV OR "Positive Airway Pressure*" OR "positive end-expiratory pressure*")

Limited to Adults

All limited to Adults

("Amyotrophic lateral sclerosis" or "Atrophic Muscular Disorder*" or Bronchiectasis or "Chronic Obstructive Pulmonary Disease*" or "congenital structural myopath*" or "Cystic Fibrosis" or hypercapnia or hypoventilation or "Interstitial Lung Disease*") AND (BiPAP or BPAP or CPAP or "noninvasive positive pressure ventilation" or "non-invasive positive pressure ventilation" or NPPV or "Positive Airway Pressure*" or "positive end-expiratory pressure*")

(kyphosis or "Motor Neuron Disease*" or "Muscular Disease*" or Myositis or "Myotonic Disorder*" or "Neuromuscular Disease*" or Obesity or "obstructive lung disease*" or "Pulmonary fibrosis" or "respiratory failure" or "respiratory insufficiency") AND (BiPAP or BPAP or CPAP or "noninvasive positive pressure ventilation" or "non-invasive positive pressure ventilation" or NPPV or "Positive Airway Pressure*" or "positive end-expiratory pressure*")

(scoliosis or "Spinal Cord Injur*" or "Spinal Muscular Atrophy" or "structural congenital myopath*") AND (BiPAP or BPAP or CPAP or "noninvasive positive pressure ventilation" or "non-invasive positive pressure ventilation" or NPPV or "Positive Airway Pressure*" or "positive end-expiratory pressure*")

Search Strategy 2

Ovid

Database(s): Embase 1988 to 2017 Week 41, EBM Reviews - Cochrane Central Register of Controlled Trials September 2017, EBM Reviews - Cochrane Database of Systematic Reviews 2005 to October 11, 2017, Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present
Search Strategy:

#	Searches	Results
1	exp Home Care Services/ (((domestic or home or domiciliary) adj3 (residence or residences or setting or	103410
2	settings or care or nurs* or help or service* or treatment* or therap* or "respiratory care" or "respiratory treatment*" or "respiratory therap*" or "respiratory service*" or "respiratory assist*" or ventilat*)) or "assisted living" or homecare).ti,ab,hw,kw.	217932
3	"nursing home*".ti,ab,hw,kw.	93090
4	(1 or 2) not 3	157550
5	exp Respiration, Artificial/ (((facial or face or nasal) adj3 mask*) or ((respiration* or respiratory or breathing) adj3 (assist* or controlled or mechanical)) or "artificial respiration*" or BiPAP or CPAP or "Fluidic Breathing Assister" or HMV or IPPB or IPPV or NIAV or NIV	227712
6	or NPPV or "Oxygen Regulator*" or PAP or PAV or "Portable Oxygen" or "Positive Airway Pressure*" or "positive end-expiratory pressure*" or "positive pressure*" or respirator or respirators or "Respiratory insufficiency" or Tracheostom* or ventilation or ventilator*).ti,ab,hw,kw.	560939
7	5 or 6	581628
8	4 and 7	7074
9	limit 8 to ("all adult (19 plus years)" or "young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45 plus years)" or "all aged (65 and over)" or "aged (80 and over)") [Limit not valid in Embase,CCTR,CDSR; records were retained]	5541
10	limit 9 to (adult <18 to 64 years> or aged <65+ years>) [Limit not valid in CCTR,CDSR,Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]	2869
11	limit 8 to ("all infant (birth to 23 months)" or "all child (0 to 18 years)" or "newborn infant (birth to 1 month)" or "infant (1 to 23 months)" or "preschool child (2 to 5 years)" or "child (6 to 12 years)" or "adolescent (13 to 18 years)") [Limit not valid in Embase,CCTR,CDSR; records were retained]	5092
12	limit 11 to (embryo or infant or child or preschool child <1 to 6 years> or school child <7 to 12 years> or adolescent <13 to 17 years>) [Limit not valid in CCTR,CDSR,Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]	1839

13 12 not 10	1151
14 8 not 13	5923
15 exp Guideline/ or exp Practice Guideline/	460813
16 exp meta analysis/	226262
17 exp Meta-Analysis as Topic/	54850
18 exp "systematic review"/	150940
19 exp controlled study/	5963423
20 exp Randomized Controlled Trial/	954864
21 exp triple blind procedure/	176
22 exp Double-Blind Method/	413595
23 exp Single-Blind Method/	73073
24 exp latin square design/	344
25 exp comparative study/	2882943
26 exp Cohort Studies/	2274617
27 exp longitudinal study/	347374
28 exp retrospective study/	1285773
29 exp prospective study/	977682
30 exp population research/	86750
31 exp observational study/	173529
32 clinical study/	108976
33 exp Evaluation Studies/	286098
34 exp quantitative study/	39840
35 exp validation studies/	158763
36 exp quasi experimental study/	4323
37 exp field study/	7950
38 in vivo study/	281996
39 exp panel study/	697
40 exp prevention study/	3306
41 exp replication study/	1714
42 exp Feasibility Studies/	150190
43 exp trend study/	21725
44 exp correlational study/	26940
45 exp case-control studies/	1096450
46 exp confidence interval/	166269
47 exp regression analysis/	790181
48 exp proportional hazards model/	150544
49 ((evidence adj based) or (meta adj analys*) or (systematic* adj3 review*) or "consensus development" or guideline* or "position statement*" or (control* adj3	19833017

study) or (control* adj3 trial) or (randomized adj3 study) or (randomized adj3 trial) or (randomised adj3 study) or (randomised adj3 trial) or "pragmatic clinical trial" or (random* adj1 allocat*) or (doubl* adj blind*) or (doubl* adj mask*) or (singl* adj blind*) or (singl* adj mask*) or (tripl* adj blind*) or (tripl* adj mask*) or (trebl* adj blind*) or (trebl* adj mask*) or "latin square" or placebo* or nocebo* or multivariate or "comparative study" or "comparative survey" or "comparative analysis" or (intervention* adj2 study) or (intervention* adj2 trial) or crossover or "cross-over" or cohort* or "longitudinal study" or "longitudinal survey" or "longitudinal analysis" or "longitudinal evaluation" or longitudinal* or ((retrospective or "ex post facto") adj3 (study or survey or analysis or design)) or retrospectiv* or "prospective study" or "prospective survey" or "prospective analysis" or prospectiv* or (population adj3 (stud* or survey* or analys* or research)) or "concurrent study" or "concurrent survey" or "concurrent analysis" or "incidence study" or "incidence survey" or "incidence analysis" or (("follow-up" or followup) adj (stud* or survey or analysis)) or ((observation or observational) adj (study or survey or analysis)) or "clinical study" or "clinical trial" or "evaluation study" or "evaluation survey" or "evaluation analysis" or "quantitative study" or "quantitative analys*" or "numerical study" or "validation study" or "validation survey" or "validation analysis" or "quasi experimental study" or "quasi experimental analysis" or "quasiexperimental study" or "quasiexperimental analysis" or "field study" or "field survey" or "field analysis" or "in vivo study" or "in vivo analysis" or "panel study" or "panel survey" or "panel analysis" or ((prevention or preventive) adj3 (trial or study or analysis or survey)) or "replication study" or "replication analysis " or "replication trial" or "feasibility study" or "feasibility analysis" or "trend study" or "trend survey" or "trend analysis" or ((correlation* adj2 study) or (correlation* adj2 analys*)) or "case control study" or "case base study" or "case referrent study" or "case referent study" or "case referent study" or "case compeer study" or "case comparison study" or "matched case control" or "multicenter study" or "multi-center study" or "odds ratio" or "confidence interval" or (hazard* adj (model* or analys* or regression or ratio or ratios)) or "Cox model" or "Cox multivariate analyses" or "Cox multivariate analysis" or "Cox regression" or "Cox survival analyses" or "Cox survival analysis" or "Cox survival model" or "change analysis" or ((study or trial or random* or control*) and compar*).mp,pt.

50 or/15-49 20268644

51 14 and 50 3044

limit 51 to (editorial or erratum or letter or note or addresses or autobiography or bibliography or biography or blogs or comment or dictionary or directory or interactive tutorial or interview or lectures or legal cases or legislation or news or newspaper article or overall or patient education handout or periodical index or portraits or published erratum or video-audio media or webcasts) [Limit not valid in Embase,CCTR,CDSR,Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]

52 59

53 from 52 keep 45-48 4

54 (51 not 52) or 53

2989

55 remove duplicates from 54

2152

Scopus

- 1 TITLE-ABS-KEY(((domestic or home or domiciliary) W/3 (residence or residences or setting or settings or care or nurs* or help or service* or treatment* or therap* or "respiratory care" or "respiratory treatment*" or "respiratory therap*" or "respiratory service*" or "respiratory assist*" or ventilat*)) OR "assisted living" OR homecare or HMV)
- 2 TITLE-ABS-KEY(((facial or face or nasal) W/3 mask*) OR ((respiration* or respiratory or breathing) W/3 (assist* or controlled or mechanical)) OR "artificial respiration*" OR BiPAP OR CPAP OR "Fluidic Breathing Assister" OR HMV OR IPPB OR IPPV OR NIAV OR NIV OR NPPV OR "Oxygen Regulator*" OR PAP OR PAV OR "Portable Oxygen" OR "Positive Airway Pressure*" OR "positive end-expiratory pressure*" OR "positive pressure*" OR respirator OR respirators OR "Respiratory insufficiency" OR Tracheostom* OR ventilation OR ventilator*)
- 3 TITLE-ABS-KEY((evidence W/1 based) or (meta W/1 analys*) or (systematic* W/3 review*) or "consensus development" or guideline* or "position statement*" or (control* W/3 study) or (control* W/3 trial) or (randomized W/3 study) or (randomized W/3 trial) or (randomised W/3 study) or (randomised W/3 trial) or "pragmatic clinical trial" or (random* W/1 allocat*) or (doubl* W/1 blind*) or (doubl* W/1 mask*) or (singl* W/1 blind*) or (singl* W/1 mask*) or (tripl* W/1 blind*) or (tripl* W/1 mask*) or (trebl* W/1 blind*) or (trebl* W/1 mask*) or "latin square" or placebo* or nocebo* or multivariate or "comparative study" or "comparative survey" or "comparative analysis" or (intervention* W/2 study) or (intervention* W/2 trial) or crossover or "cross-over" or cohort* or "longitudinal study" or "longitudinal survey" or "longitudinal analysis" or "longitudinal evaluation" or longitudinal* or ((retrospective or "ex post facto") W/3 (study or survey or analysis or design)) or retrospectiv* or "prospective study" or "prospective survey" or "prospective analysis" or prospectiv* or (population W/3 (stud* or survey* or analys* or research)) or "concurrent study" or "concurrent survey" or "concurrent analysis" or "incidence study" or "incidence survey" or "incidence analysis" or (("follow-up" or followup) W/1 (stud* or survey or analysis)) or ((observation or observational) W/1 (study or survey or analysis)) or "clinical study" or "clinical trial" or "evaluation study" or "evaluation survey" or "evaluation analysis" or "quantitative study" or "quantitative analys*" or "numerical study" or "validation study" or "validation survey" or "validation analysis" or "quasi experimental study" or "quasi experimental analysis" or "quasiexperimental study" or "quasiexperimental analysis" or "field study" or "field survey" or "field analysis" or "in vivo study" or "in vivo analysis" or "panel study" or "panel survey" or "panel analysis" or ((prevention or preventive) W/3 (trial or study or analysis or survey)) or "replication study" or "replication analysis" or "replication trial" or "feasibility study" or "feasibility analysis" or "trend study" or "trend survey" or "trend analysis" or ((correlation* W/2 study) or (correlation* W/2 analys*)) or "case control study" or "case base study" or "case referent study" or "case referent study" or "case referent study" or "case compeer study" or "case comparison study" or "matched case control" or "multicenter study" or "multi-center study" or "odds ratio" or "confidence interval" or (hazard* W/1 (model* or analys* or regression or ratio or ratios)) or "Cox model" or "Cox multivariate analyses" or "Cox multivariate analysis" or "Cox regression" or "Cox survival analyses" or "Cox survival analysis" or "Cox survival model" or "change analysis" or ((study or trial or random* or control*) and compar*))
- 4 1 and 2 and 3
- 5 TITLE-ABS-KEY(newborn* or neonat* or infant* or toddler* or child* or adolescent* or paediatric* or pediatric* or girl or girls or boy or boys or teen or teens or teenager* or preschooler* or "pre-schooler*" or preteen or preteens or "pre-teen" or "pre-teens" or youth or youths) AND NOT TITLE-ABS-KEY(adult or adults or "middle age" or "middle aged" OR elderly OR

geriatric* OR "old people" OR "old person*" OR "older people" OR "older person*" OR "very old")

6 4 and not 5

7 DOCTYPE(le) OR DOCTYPE(ed) OR DOCTYPE(bk) OR DOCTYPE(er) OR DOCTYPE(no) OR DOCTYPE(sh)

8 6 and not 7

9 PMID(0*) OR PMID(1*) OR PMID(2*) OR PMID(3*) OR PMID(4*) OR PMID(5*) OR PMID(6*) OR PMID(7*) OR PMID(8*) OR PMID(9*)

10 8 and not 9

National Guidelines Clearinghouse

((home OR domestic OR domiciliary or homecare or "assisted living" or HMV) AND (BiPAP OR CPAP OR "face mask*" OR "facial mask*" OR "Fluidic Breathing Assister" OR HMV OR IPPB OR IPPV OR "nasal mask*" OR NIAV OR NIV OR NPPV OR "Oxygen Regulator*" OR PAP OR PAV OR "Portable Oxygen" OR "Positive Airway Pressure*" OR "positive end-expiratory pressure*" OR "positive pressure*" OR respirat* OR Tracheostom* OR ventilat*)) NOT "nursing home*"

ClinicalTrials.gov

All limited to Adults

((domestic OR home OR domiciliary OR homecare OR "assisted living") NOT "nursing home")
AND ((facial OR face OR nasal) AND mask*)

((domestic OR home OR domiciliary OR homecare OR "assisted living") NOT "nursing home")
AND ((respiration* OR respiratory OR breathing) AND (assist* OR controlled OR mechanical))

((domestic OR home OR domiciliary OR homecare OR "assisted living") NOT "nursing home")
AND ("artificial respiration*" OR BiPAP OR CPAP OR "Fluidic Breathing Assister" OR HMV OR IPPB)

((domestic OR home OR domiciliary OR homecare OR "assisted living") NOT "nursing home")
AND (IPPV OR NIAV OR NIV OR NPPV OR "Oxygen Regulator*" OR PAP OR PAV OR "Portable Oxygen")

((domestic OR home OR domiciliary OR homecare OR "assisted living") NOT "nursing home")
AND ("Positive Airway Pressure*" OR "positive end-expiratory pressure*" OR "positive pressure*" OR
respirator)

((domestic OR home OR domiciliary OR homecare OR "assisted living") NOT "nursing home")
AND (respirators OR "Respiratory insufficiency" OR Tracheostom* OR ventilation OR ventilator*)