###### NIHR HS&DR 16/53/17 Supplementary Material file 1

## Detail of search strategies

**Academic databases searched for published studies. February 2018 and April 2019**

|  |
| --- |
| British Nursing Index (ProQuest) 1992 - Feb 2018 |
| British Nursing Index (HDAS via ProQuest) 1992 – April 2019 |
| CINAHL (EBSCO) 1981- present |
| Cochrane Central, Register of Controlled Trials (Wiley): Issue 1 of 12, January 2018 |
| Cochrane Central Register of Controlled Trials (Wiley): Issue 4 of 12, April 2019 |
| Cochrane Database of Systematic Reviews (Wiley): Issue 2 of 12, February 2018 |
| Cochrane Database of Systematic Reviews (Wiley): Issue 4 of 12, April 2019 |
| Database of Abstracts of Reviews of Effect (Wiley): Issue 2 of 4, April 2015 |
| Embase Classic+Embase (Ovid) 1947 to 2019 April 16 |
| Health Technology Assessment Database (Wiley): Issue 4 of 4, October 2016 |
| HTA Canadian and International (CRD, University of York) |
| Ovid MEDLINE(R) 1946 to April Week 1 2019, Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily to April 16, 2019 |
| NHS Economic Evaluation Database (Wiley): Issue 2 of 4, April 2015 |
| PubMed (NLM) 1946 – present |

**British Nursing Index (ProQuest) 1992 – present. Searched 13/02/2018**

S1 MAINSUBJECT.EXACT.EXPLODE("Seclusion and Restraint") 785

S2 MAINSUBJECT.EXACT("Psychiatric Disorders : Drug Therapy") OR MAINSUBJECT.EXACT("Psychiatric Patients") 4350

S3 S1 AND S2 142

S4 ti(Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\* or (restric\* AND (practice\* or intervention\*)) OR (physical\* AND (immobili\* or isolation)) OR ((involuntary or forced) AND (medic\* or sedat\* or drug? or treatment?)) ) AND ti(psyc\* OR schizo\* OR mental\* OR agitat\*) 90

S5 ab((Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\* or (restric\* AND (practice\* or intervention\*)) OR (physical\* AND (immobili\* or isolation)) OR ((involuntary or forced) AND (medic\* or sedat\* or drug? or treatment?)) ) ) AND ab((psyc\* OR schizo\* OR mental\* OR agitat\*) 821

S6 su((Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\* or (restric\* AND (practice\* or intervention\*)) OR (physical\* AND (immobili\* or isolation)) OR ((involuntary or forced) AND (medic\* or sedat\* or drug? or treatment?)) ) ) AND su((psyc\* OR schizo\* OR mental\* OR agitat\*) 486

S7 S3 OR S4 OR S5 OR S6 1196

S8 (S3 OR S4 OR S5 OR S6) AND pd(19990101-20181231) 974

**British Nursing Index 1992 to present (Provided by Proquest Via HDAS). Searched 24/04/2019**

1 "PHYSICAL RESTRAINTS"/ (982)

2 "MENTAL DISORDERS"/ (16,154)

3 "PSYCHIATRIC-MENTAL HEALTH NURSING"/ (8,235)

4 (2 OR 3) (22,699)

5 (1 AND 4) (244)

6 (Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\*).ti,ab (3,105)

7 (restric\* AND (practice\* OR intervention\*)).ti,ab (2,122)

8 (physical\* AND (immobili\* OR isolation)).ti,ab (479)

9 ((involuntary OR forced) AND (medic\* OR sedat\* OR drug? OR treatment?)).ti,ab (1,040)

10 (6 OR 7 OR 8 OR 9) (6,574)

11 (psyc\* OR schizo\* OR mental\* OR agitat\*).ti,ab (46,035)

12 (10 AND 11) (1,095)

13 (5 OR 12) (1,247)

14 (5 OR 12) [DT 1999-2019] (1,200)

**CINAHL (EBSCO) 1981- present. Searched 24/04/2019**

(same strategy used for February 2018 search)

S72 S66 NOT S71 Limiters - Published Date: 19990101-20191231 4,553

S71 S67 OR S68 OR S69 OR S70 586,011

S70 ((MH "Animals+") NOT (MH "Human")) OR ((DH "Animals+") NOT (DH "Human")) OR ((MM "Animals+") NOT (MM "Human")) 72,893

S69 ((MH "Adolescence+") OR (MH "Child+") OR (MH "Minors (Legal)")) NOT (MH "Adult+") 510,592

S68 ((DH "Adolescence+") OR (DH "Child+") OR (DH "Minors (Legal)")) NOT (DH "Adult+") 273

S67 ((MM "Adolescence+") OR (MM "Child+") OR (MM "Minors (Legal)")) NOT (M "Adult+") 30,720

S66 S45 OR S65 5,491

S65 S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 74

S64 TX "european violence in psychiatry research group" 3

S63 TX eviprg 3

S62 TX "restraint reduction network" 1

S61 TX "Br#set Violence Checklist\*" 19

S60 TX "Proactive Management of Integrated Service\* and Environment\*" 288

S59 TX ("Positive and Safe" N1 (team# or plan#)) 1

S58 TX "ReSTRAIN YOURSELF" 0

S57 TX "manag\* of actual or potential aggress\*" 3

S56 TX (MAPA N5 (aggress\* or cris#s)) 5

S55 TX (MAPA N1 (training or intervention or program\*)) 1

S54 TX (CALM N1 (training or intervention or program\*)).tw. 317

S53 TX (CALM and (cris#s N6 manag\*)) 10

S52 TX "crisis and aggression limitation and management" 1

S51 TX ("Creating Safety" N5 training) 426

S50 TX "People are and feel safe" 2

S49 TX "Roadmap to seclusion" 1

S48 TX "six core strategies" 11

S47 TX "*No Force First*" 2

S46 TX *Safewards* 21

S45 S33 AND S44 5,441

S44 S37 OR S43 365,289

S43 S41 AND S42 99,303

S42 (MH "Mental Disorders+") 484,440

S41 S38 OR S39 OR S40 1,418,134

S40 (MH "Hospitals+") 100,580

S39 TX (inpatient\* or ward\* or hospital\*) 1,413,116

S38 (MH "Inpatients") 74,787

S37 S34 OR S35 OR S36 308,006

S36 TX ((psyc\* or schizo\* or mental\* or agitat\*) N5 (patient\* or inpatient\* or ward\* or unit\* or hospital\* or center\* or centre\* or department#)) 295,939

S35 (MH "Psychiatric Nursing+") 18,686

S34 (MH "Hospitals, Psychiatric") 5,271

S33 S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR 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 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 26,433

S32 TX (de-briefing or debriefing) 2,268

S31 TX (one-to-one N2 nurs\*) 354

S30 TX (Aggress\* N5 (prevent\* or manag\*) N5 training) 84

S29 TX (Violence N5 (prevent\* or manag\*) N5 training) 162

S28 TX (patient# N3 isolation) 3,292

S27 TX (physical\* N3 immobili\*) 82

S26 TX (lock\* N3 room#) 122

S25 TX (lock\* N3 ward#) 71

S24 TX (lock\* N3 door\*) 162

S23 TX solitary confinement 51

S22 TX (forced N3 sedat\*) 4

S21 TX (forced N3 treatment#) 131

S20 TX (forced N3 drug#) 518

S19 TX (forced N3 medic\*) 144

S18 TX (involuntary N3 drug#) 30

S17 TX (involuntary N3 sedat\*) 5

S16 TX (involuntary N3 medic\*) 48

S15 TX (compulsion or compulsivity) 1,193

S14 TX (prn or "pro re nata") 1,628

S13 TX (rapid\* N2 tranq\*) 57

S12 TX safety plan# 880

S11 TX safety huddle# 77

S10 TX ((comfort or safe or sensory) N2 room#) 132

S9 TX ("calm down" or "soft word#" or "talk down") 90

S8 TX de-escalat\* 887

S7 TX (restric\* N2 (practice\* or intervention\*)) 1,313

S6 TX (seclusion or seclude\*) 1,118

S5 TX restrain\* 9,801

S4 TX (coercive or coercion or coerced) 3,548

S3 (MH "Coercion") 1,785

S2 (MH "Patient Isolation+") 2,234

S1 (MH "Restraint, Physical") 3,861

Cochrane Central Register of Controlled Trials (Wiley): Issue 4 of 12, April 2019. Searched 17/04/2019

(same strategy used for February 2018 search)

#1 MeSH descriptor: [Restraint, Physical] explode all trees 233

#2 MeSH descriptor: [Patient Isolation] explode all trees 52

#3 MeSH descriptor: [Coercion] explode all trees 65

#4 (coercive or coercion or coerced):ti,ab,kw (Word variations have been searched) 321

#5 (restric\* near/2 (practice\* or intervention\*)):ti,ab,kw (Word variations have been searched) 259

#6 de-escalat\*:ti,ab,kw (Word variations have been searched) 411

#7 ("calm down" or "soft word?" or "talk down"):ti,ab,kw (Word variations have been searched) 33

#8 ((comfort or safe or sensory) near/2 room?):ti,ab,kw (Word variations have been searched) 42

#9 safety huddle?:ti,ab,kw (Word variations have been searched) 3

#10 safety plan?:ti,ab,kw (Word variations have been searched) 11584

#11 (rapid\* near/2 tranq\*):ti,ab,kw 44

#12 (prn or "pro re nata"):ti,ab,kw 1027

#13 (compulsion or compulsivity):ti,ab,kw 328

#14 ((involuntary or forced) near/3 (medic\* or sedat\* or drug? or treatment?)):ti,ab,kw 2981

#15 (solitary confinement):ti,ab,kw 4

#16 (lock\* near/3 (door\* or ward? or room?)):ti,ab,kw 56

#17 (physical\* near/3 immobili\*):ti,ab,kw 24

#18 (patient? adj3 isolation):ti,ab,kw 0

#19 ((Violence or Aggress\*) near/5 (prevent\* or manag\*) near/5 training):ti,ab,kw 30

#20 (one-to-one near/2 nurs\*):ti,ab,kw 13

#21 (de-briefing or debriefing):ti,ab,kw 424

#22 {Trust, #1-`#21-`#21}gou 17703

#23 MeSH descriptor: [Psychiatric Department, Hospital] explode all trees 95

#24 MeSH descriptor: [Hospitals, Psychiatric] explode all trees 235

#25 MeSH descriptor: [Psychiatric Nursing] explode all trees 180

#26 ((psyc\* or schizo\* or mental\* or agitat\*) near/5 (patient\* or inpatient\* or ward\* or unit\* or hospital\* or center\* or centre\* or department?)):ti,ab,kw 31275

#27 232-#26-#26 31368

#28 MeSH descriptor: [Inpatients] explode all trees 863

#29 (inpatient\* or ward\* or hospital\*):ti,ab,kw 163740

#30 MeSH descriptor: [Hospitals] explode all trees 3388

#31 {or #28-#30} 163950

#32 MeSH descriptor: [Mental Disorders] explode all trees 63799

#33 MeSH descriptor: [Mentally Ill Persons] explode all trees 46

#34 {or #32-#33} 63816

#35 (#31 and #34) 7571

#36 (#27 or #35) 36026

#37 (#22 and #36) 587

#38 *Safewards*:ti,ab,kw 5

#39 "*No Force First*":ti,ab,kw 0

#40 "six core strategies":ti,ab,kw 1

#41 "Roadmap to seclusion":ti,ab,kw 0

#42 "People are and feel safe":ti,ab,kw 0

#43 ("Creating Safety" near/5 training):ti,ab,kw 0

#44 "crisis and aggression limitation and management":ti,ab,kw 0

#45 (CALM and (cris?s near/6 manag\*)):ti,ab,kw 0

#46 (CALM adj(training or intervention or program\*)):ti,ab,kw 0

#47 (MAPA adj(training or intervention or program\*)):ti,ab,kw 0

#48 (MAPA near/5 (aggress\* or cris?s)):ti,ab,kw 0

#49 "manag\* of actual or potential aggress\*":ti,ab,kw 0

#50 "ReSTRAIN YOURSELF":ti,ab,kw 0

#51 ("Positive and Safe" near/2 (team? or plan?)):ti,ab,kw 0

#52 "Proactive Management of Integrated Service\* and Environment\*":ti,ab,kw 0

#53 "Br#set Violence Checklist\*":ti,ab,kw 0

#54 {or #38-#53} 6

#55 "restraint reduction network":ti,ab,kw 0

#56 eviprg:ti,ab,kw 0

#57 "european violence in psychiatry research group":ti,ab,kw 0

#58 {or #55-#57} 0

#59 (#37 or #54 or #58) 590

**Cochrane Database of Systematic Reviews (Wiley): Issue 4 of 12, April 2019** and Cochrane Database of Systematic Reviews (Wiley): Issue 2 of 12, February 2018.

(Same strategy as Cochrane Central Register of Controlled Trials (Wiley): Issue 4 of 12, April 2019.)

Database of Abstracts of Reviews of Effect (Wiley): Issue 2 of 4, April 2015. Searched 13/02/2018

(Same strategy as Cochrane Central Register of Controlled Trials (Wiley): Issue 4 of 12, April 2019.)

Embase Classic+Embase (Ovid) 1947 to 2019 April 16. Searched 17/04/2019

(same strategy used for February 2018 search)

1 patient isolation/ (507)

2 \*persuasive communication/ (3171)

3 (coercive or coercion or coerced).tw,kw. (6435)

4 restrain\*.tw,kw. (50810)

5 (seclusion or seclude\*).tw,kw. (2032)

6 (restric\* adj2 (practice\* or intervention\*)).tw,kw. (1560)

7 de-escalat\*.tw,kw. (3437)

8 ("calm down" or "soft word?" or "talk down").tw,kw. (142)

9 ((comfort or safe or sensory) adj2 room?).tw,kw. (158)

10 safety huddle?.tw,kw. (69)

11 safety plan?.tw,kw. (434)

12 (rapid\* adj2 tranq\*).tw,kw. (190)

13 (prn or "pro re nata").tw,kw. (3436)

14 (compulsion or compulsivity).tw,kw. (3249)

15 (involuntary adj3 medic\*).tw,kw. (204)

16 (involuntary adj3 sedat\*).tw,kw. (12)

17 (involuntary adj3 drug?).tw,kw. (77)

18 (forced adj3 medic\*).tw,kf. (349)

19 (forced adj3 treatment?).tw,kw. (730)

20 (forced adj3 drug?).tw,kw. (273)

21 (forced adj3 sedat\*).tw,kw. (11)

22 solitary confinement.tw,kw. (117)

23 (lock\* adj3 door\*).tw,kw. (246)

24 (lock\* adj3 ward?).tw,kw. (175)

25 (lock\* adj3 room?).tw,kw. (156)

26 (physical\* adj3 immobili\*).tw,kw. (678)

27 (patient? adj3 isolation).tw,kw. (4776)

28 (Violence adj5 (prevent\* or manag\*) adj5 training).tw,kw. (135)

29 (Aggress\* adj5 (prevent\* or manag\*) adj5 training).tw,kw. (107)

30 (one-to-one adj2 nurs\*).tw,kw. (209)

31 (de-briefing or debriefing).tw,kw. (4871)

32 or/1-31 [Restraint Coercion or de escalation Practices] (85377)

33 \*psychiatric department/ (3098)

34 exp \*mental hospital/ (14957)

35 exp \*psychiatric nursing/ (11291)

36 ((psyc\* or schizo\* or mental\* or agitat\*) adj5 (patient\* or inpatient\* or ward\* or unit\* or hospital\* or center\* or centre\* or department?)).tw,kw. (289302)

37 or/33-36 (305450)

38 \*hospital patient/ (23971)

39 (inpatient\* or ward\* or hospital\*).tw,kw. (1932316)

40 \*hospital/ (86911)

41 or/38-40 (1961098)

42 exp \*mental disease/ (1354361)

43 \*mental patient/ (9266)

44 or/42-43 (1361555)

45 and/41,44 (110236)

46 or/37,45 [Mental health inpatients] (366203)

47 and/32,46 [Restraint and Mental health inpatients] (5196)

48 *Safewards*.tw. (14)

49 "*No Force First*".tw. (1)

50 "six core strategies".tw. (16)

51 "Roadmap to seclusion".tw. (0)

52 "People are and feel safe".tw. (0)

53 ("Creating Safety" adj5 training).tw. (1)

54 "crisis and aggression limitation and management".tw. (0)

55 (CALM and (cris#s adj6 manag\*)).tw. (10)

56 (CALM adj (training or intervention or program\*)).tw. (26)

57 (MAPA adj (training or intervention or program\*)).tw. (0)

58 (MAPA adj5 (aggress\* or cris#s)).tw. (0)

59 "manag\* of actual or potential aggress\*".tw,kw. (0)

60 "ReSTRAIN YOURSELF".tw. (3)

61 ("Positive and Safe" adj (team? or plan?)).tw. (0)

62 "Proactive Management of Integrated Service\* and Environment\*".tw. (2)

63 "Br#set Violence Checklist\*".tw. (31)

64 or/48-63 [Restraint reduction programmes] (104)

65 "restraint reduction network".tw. (0)

66 eviprg.tw. (2)

67 "european violence in psychiatry research group".tw. (3)

68 or/65-67 [Restain reduction Organisations] (3)

69 47 or 64 or 68 [Restraint and Mental Health] (5274)

70 exp juvenile/ not exp adult/ (2393304)

71 exp animals/ not exp human/ (5202523)

72 exp nonhuman/ not exp human/ (4349095)

73 exp experimental animal/ (646824)

74 exp veterinary medicine/ (42600)

75 animal experiment/ (2351981)

76 or/70-75 (9545430)

77 69 not 76 [Restraint and Mental health NOT animal or child studies] (4823)

78 limit 77 to yr="1999 -Current" (3757)

Health Technology Assessment Database (Wiley): Issue 4 of 4, October 2016. Searched 13/02/2018

(Same strategy as Cochrane Central Register of Controlled Trials (Wiley): Issue 4 of 12, April 2019.)

HTA Canadian and International (CRD, University of York). Searched 24/04/2019.

1 MeSH DESCRIPTOR Restraint, Physical EXPLODE ALL TREES IN HTA 6

2 MeSH DESCRIPTOR Patient Isolation EXPLODE ALL TREES IN HTA 6

3 MeSH DESCRIPTOR Coercion EXPLODE ALL TREES IN HTA 1

4 ((coercive or coercion or coerced)) IN HTA 4

5 ((restric\* and (practice\* or intervention\*))) IN HTA 126

6 (de-escalat\*) IN HTA 1

7 (("calm down" or "soft word?" or "talk down")) IN HTA 0

8 (((comfort or safe or sensory) and room?)) IN HTA 8

9 (safety huddle?) IN HTA 0

10 (safety huddle\*) IN HTA 0

11 (safety plan?) IN HTA 0

12 ((rapid\* and tranq\*)) IN HTA 1

13 ((prn or "pro re nata")) IN HTA 2

14 ((compulsion or compulsivity)) IN HTA 2

15 (((involuntary or forced) and (medic\* or sedat\* or drug? or treatment?))) IN HTA 29

16 ((solitary confinement)) IN HTA 0

17 ((lock\* and (door\* or ward? or room?))) IN HTA 0

18 ((physical\* near/3 immobili\*)) IN HTA 0

19 ((patient? adj3 isolation)) IN HTA 9

20 (((Violence or Aggress\*) and (prevent\* or manag\*) and training)) IN HTA 8

21 ((one-to-one and nurs\*)) IN HTA 2

22 ((de-briefing or debriefing)) IN HTA 3

23 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 199

24 MeSH DESCRIPTOR Psychiatric Department, Hospital EXPLODE ALL TREES IN HTA 3

25 MeSH DESCRIPTOR Hospitals, Psychiatric EXPLODE ALL TREES IN HTA 4

26 MeSH DESCRIPTOR Psychiatric Nursing EXPLODE ALL TREES IN HTA 4

27 (((psyc\* or schizo\* or mental\* or agitat\*) and (patient\* or inpatient\* or ward\* or unit\* or hospital\* or center\* or centre\* or department?))) IN HTA 706

28 #24 OR #25 OR #26 OR #27 706

29 MeSH DESCRIPTOR Inpatients EXPLODE ALL TREES IN HTA 47

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to April 16, 2019. Searched 17/04/2019

(same strategy used for February 2018 search)

1 Restraint, Physical/ (11498)

2 Patient Isolation/ (3691)

3 coercion/ (4395)

4 Involuntary treatment/ (21)

5 "Involuntary Treatment, Psychiatric"/ (32)

6 (coercive or coercion or coerced).tw,kw. (5784)

7 restrain\*.tw,kf. (40883)

8 (seclusion or seclude\*).tw,kf. (1637)

9 (restric\* adj2 (practice\* or intervention\*)).tw,kf. (1174)

10 de-escalat\*.tw,kf. (1793)

11 ("calm down" or "soft word?" or "talk down").tw,kf. (86)

12 ((comfort or safe or sensory) adj2 room?).tw,kf. (116)

13 safety huddle?.tw,kf. (26)

14 safety plan?.tw,kw. (304)

15 (rapid\* adj2 tranq\*).tw,kf. (128)

16 (prn or "pro re nata").tw,kf. (2028)

17 (compulsion or compulsivity).tw,kf. (1864)

18 (involuntary adj3 medic\*).tw,kf. (146)

19 (involuntary adj3 sedat\*).tw,kf. (12)

20 (involuntary adj3 drug?).tw,kf. (58)

21 (forced adj3 medic\*).tw,kf. (254)

22 (forced adj3 drug?).tw,kf. (170)

23 (forced adj3 treatment?).tw,kf. (496)

24 (forced adj3 sedat\*).tw,kf. (10)

25 solitary confinement.tw,kf. (104)

26 (lock\* adj3 door\*).tw,kf. (176)

27 (lock\* adj3 ward?).tw,kf. (130)

28 (lock\* adj3 room?).tw,kf. (112)

29 (physical\* adj3 immobili\*).tw,kf. (493)

30 (patient? adj3 isolation).tw,kf. (2783)

31 (Violence adj5 (prevent\* or manag\*) adj5 training).tw,kf. (119)

32 (Aggress\* adj5 (prevent\* or manag\*) adj5 training).tw,kf. (87)

33 (one-to-one adj2 nurs\*).tw,kf. (146)

34 (de-briefing or debriefing).tw,kf. (3037)

35 or/1-34 [Restraint Coercion or de escalation Practices] (72774)

36 Psychiatric Department, Hospital/ (6545)

37 Hospitals, Psychiatric/ (24748)

38 Psychiatric Nursing/ (17089)

39 ((psyc\* or schizo\* or mental\* or agitat\*) adj5 (patient\* or inpatient\* or ward\* or unit\* or hospital\* or center\* or centre\* or department?)).tw,kw. (193431)

40 36 or 37 or 38 or 39 (220036)

41 Inpatients/ (19430)

42 (inpatient\* or ward\* or hospital\*).tw,kf. (1249473)

43 Hospitals/ (74414)

44 or/41-43 (1271594)

45 exp Mental Disorders/ (1168215)

46 Mentally Ill Persons/ (5989)

47 45 or 46 (1171206)

48 44 and 47 (86854)

49 40 or 48 [Mental health inpatients] (267828)

50 35 and 49 [Restraint and Mental health inpatients] (4311)

51 *Safewards*.tw. (17)

52 "*No Force First*".tw. (1)

53 "six core strategies".tw. (17)

54 "Roadmap to seclusion".tw. (0)

55 "People are and feel safe".tw. (0)

56 ("Creating Safety" adj5 training).tw. (1)

57 "crisis and aggression limitation and management".tw. (1)

58 (CALM and (cris#s adj6 manag\*)).tw. (6)

59 (CALM adj (training or intervention or program\*)).tw. (23)

60 (MAPA adj (training or intervention or program\*)).tw. (0)

61 (MAPA adj5 (aggress\* or cris#s)).tw. (0)

62 "manag\* of actual or potential aggress\*".tw,kw. (0)

63 "ReSTRAIN YOURSELF".tw. (3)

64 ("Positive and Safe" adj (team? or plan?)).tw. (0)

65 "Proactive Management of Integrated Service\* and Environment\*".tw. (2)

66 "Br#set Violence Checklist\*".tw. (29)

67 or/51-66 [Restraint reduction programmes] (98)

68 "restraint reduction network".tw. (0)

69 eviprg.tw. (2)

70 "european violence in psychiatry research group".tw. (3)

71 or/68-70 [Restain reduction Organisations] (3)

72 50 or 67 or 71 [Restraint and Mental Health] (4382)

73 (exp Child/ or Adolescent/ or exp Infant/) not exp Adult/ (1795784)

74 exp Animals/ not exp Humans/ (4570659)

75 72 not (73 or 74) [Restraint and Mental health NOT animal or child studies] (4093)

76 limit 75 to yr="1999 -Current" (2982)

NHS Economic Evaluation Database (Wiley): Issue 2 of 4, April 2015. Searched 13/02/2018

(Same strategy as Cochrane Central Register of Controlled Trials (Wiley): Issue 4 of 12, April 2019.)

PubMed (NLM) 1946 – present. Searched 24/04/2019

(same strategy used for February 2018 search)

Search ((((((((("Restraint, Physical"[Mesh]) OR "Patient Isolation"[Mesh]) OR "Coercion"[Mesh]) OR (((Restrain\* or coercion or coerced or coercive or seclusion or seclude\* or de-escalat\* or (restric\* and (practice\* or intervention\*)) or (physical\* and (immobili\* or isolation)) or ((involuntary or forced) and (medic\* or sedat\* or drug? or treatment?)) ))))) AND (((((("Psychiatric Department, Hospital"[Mesh]) OR "Hospitals, Psychiatric"[Mesh]) OR "Psychiatric Nursing"[Mesh]) OR "Mental Disorders"[Mesh]) OR "Mentally Ill Persons"[Mesh]) OR (((psyc\*[Title/Abstract] or schizo\*[Title/Abstract] or mental\*[Title/Abstract] or agitat\*[Title/Abstract])) AND (diseas\*[Title/Abstract] or disorder\*[Title/Abstract] or illness\*[Title/Abstract] or patient\*[Title/Abstract] or inpatient\*[Title/Abstract] or ward\*[Title/Abstract] or unit\*[Title/Abstract] or hospital\*[Title/Abstract] or center\*[Title/Abstract] or centre\*[Title/Abstract] or department?[Title/Abstract]))))) NOT (((((("Child"[Mesh] or "Adolescent"[Mesh] or "Infant"[Mesh]) not "Adult"[Mesh]))) OR (("Animals"[Mesh] not "Humans"[Mesh])))))) AND (((pubstatusaheadofprint or publisher[sb] or pubmednotmedline[sb]) or inprocess[sb])) Filters: Publication date from 1999/01/01 to 2019/12/31 1228

###### Grey literature resource search strategies

**Search strategies for databases and registers containing unpublished studies (April 2018)**

|  |
| --- |
| ClinicalTrials.gov (U.S. NIH) |
| Dissertations & Theses A&I (ProQuest) 1743 – present (searched April 2018 and February 2019) |
| Evidence Search (NICE) |
| International Clinical Trials Registry Platform (WHO) |
| OpenGrey (INIST-CNRS) |

ClinicalTrials.gov (U.S. NIH). Searched 06/04/2018

Seven searches conducted:

1. Title: reduce OR reduction OR reducing OR minimizing OR eliminate OR eliminating OR Prevent OR Prevention OR Preventing OR manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy OR Plan)

AND

Other terms: (coercive OR coercion OR coerced OR restrain OR restraint OR Restrained OR seclusion OR seclude) AND (psychological OR schizophrenia OR mental OR agitated OR agitation) 28

1. Title: reduce OR reduction OR reducing OR minimizing OR eliminate OR eliminating OR Prevent OR Prevention OR Preventing OR manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy OR Plan

AND

Other terms: (restrictive OR “involuntary medicine” OR “involuntary sedation” OR “involuntary drug”) AND (psychological OR schizophrenia OR mental OR agitated OR agitation) 11

1. Title: reduce OR reduction OR reducing OR minimizing OR eliminate OR eliminating OR Prevent OR Prevention OR Preventing OR manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy OR Plan

AND

Other terms: (“forced medicine” OR “forced drug” OR “forced treatment” OR “forced sedation” OR confinement) AND (psychological OR schizophrenia OR mental OR agitated OR agitation) 33

1. Title: reduce OR reduction OR reducing OR minimizing OR eliminate OR eliminating OR Prevent OR Prevention OR Preventing OR manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy OR Plan

AND

Other terms: ("locked door" OR "rapid tranquilization" OR “locked ward” OR “locked room” OR “physical immobilization” OR “patient isolation”) AND (psychological OR schizophrenia OR mental OR agitated OR agitation) 27

1. Other terms: (de-escalation OR "calm down" OR "soft word" OR "talk down" OR “comfort room” OR “quiet room”) AND (psychological OR schizophrenia OR mental OR agitated OR agitation) 34
2. Other terms: (psychological OR schizophrenia OR mental OR agitated OR agitation) AND

Intervention: (“safe room” or “sensory room” OR “safety huddle” OR “safety plan” OR “crisis plan” OR “violence prevention”) 90

1. Other terms: (psychological OR schizophrenia OR mental OR agitated OR agitation)

AND

Intervention: ( “violence management” OR “aggression prevention” OR “aggression preventing” OR one-to-one OR de-briefing or debriefing) 68

Dissertations & Theses A&I (ProQuest) 1743 – present. Searched 17/04/2019

(same strategy used for February 2018 search)

S5 s1 or s2 or s3Limits 1999- 1,426

S4 s1 or s2 or s3 9

S3 ab(Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\* or (restric\* AND (practice\* or intervention\*)) OR (physical\* AND (immobili\* or isolation)) OR ((involuntary or forced) AND (medic\* or sedat\* or drug? or treatment?)) ) AND ab(psyc\* OR schizo\* OR mental\* OR agitat\*) 2

S2 su(Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\* or (restric\* AND (practice\* or intervention\*)) OR (physical\* AND (immobili\* or isolation)) OR ((involuntary or forced) AND (medic\* or sedat\* or drug? or treatment?)) ) AND su(psyc\* OR schizo\* OR mental\* OR agitat\*) 75

S1 ti(Restrain\* OR coercion OR coerced OR coercive OR seclusion OR seclude\* OR de-escalat\* or (restric\* AND (practice\* or intervention\*)) OR (physical\* AND (immobili\* or isolation)) OR ((involuntary or forced) AND (medic\* or sedat\* or drug? or treatment?)) ) AND ti(psyc\* OR schizo\* OR mental\* OR agitat\*) 41

Evidence Search (NICE). Searched 24/04/2018

(psychological OR schizophrenia OR mental) AND (coercion OR restraint OR restrain OR coercive OR seclusion OR seclusive OR restrictive) AND (reduc\* or eliminate\* or minim\* or prevent\*) 779

All results downloaded except those from Secondary Evidence and Primary Research filters (i.e. published research).

International Clinical Trials Registry Platform (WHO). Searched 06/04/2018

Seven searches conducted:

1. Title: (reduc\* OR minimi\* OR eliminate\* OR Prevent\* OR manual\* OR guideline\* OR Programme\* OR polic\* OR train\* OR standard\* OR Scheme\* OR Strateg\* OR Plan\*) AND (coerc\* OR restrain\* OR seclu\*) 37
2. Title: (reduc\* OR minimi\* OR eliminate\* OR Prevent\* OR manual\* OR guideline\* OR Programme\* OR polic\* OR train\* OR standard\* OR Scheme\* OR Strateg\* OR Plan\*) AND (restrictive OR "involuntary medicine" OR "involuntary sedation" OR "involuntary drug") 26
3. Title: (reduc\* OR minimi\* OR eliminate\* OR Prevent\* OR manual\* OR guideline\* OR Programme\* OR polic\* OR train\* OR standard\* OR Scheme\* OR Strateg\* OR Plan\*) AND (“forced medicine” OR “forced drug” OR “forced treatment” OR “forced sedation” OR confinement) 7
4. Title: (reduc\* OR minimi\* OR eliminate\* OR Prevent\* OR manual\* OR guideline\* OR Programme\* OR polic\* OR train\* OR standard\* OR Scheme\* OR Strateg\* OR Plan\*) AND ("locked door" OR "rapid tranquilization" OR “locked ward” OR “locked room” OR “physical immobilization” OR “patient isolation”) 1
5. (de-escalation OR "calm down" OR "soft word" OR "talk down" OR “comfort room” OR “quiet room”) AND (psycho\* OR schizophren\* OR mental\* OR agitat\*) 1
6. (“safe room” or “sensory room” OR “safety huddle” OR “safety plan” OR “crisis plan” OR “violence prevention”) AND (psycho\* OR schizophren\* OR mental\* OR agitat\*) 7
7. ( “violence management” OR “aggression prevention” OR “aggression preventing” OR one-to-one OR de-briefing or debriefing) AND (psycho\* OR schizophren\* OR mental\* OR agitat\*) 2

OpenGrey (INIST-CNRS). Searched 23/04/2018

(psychological OR schizophrenia OR mental OR agitated OR agitation ) AND (coercion OR restraint OR restrain OR coercive OR seclusion OR seclusive OR restrictive) 50

Web search strategies

The internet was searched for resources in two stages to identify documented interventions or programmes available via the web: (1) individual website searches and (2) search engine Google searches.

2.2.1 Website Searches

The following websites were searched on 19th – 20th April 2018 using the search terms “coercive”, “coercion”, “restrain”, “restraint”, “seclusion”, “restrictive”. Where possible, relevant website sections (e.g. training programmes or reports) were searched rather than the entire website.

|  |
| --- |
| 1. Mental Health Organisations (number of records downloaded)   1. European Violence in Psychiatry Group (EViPRG) http://eviprg.eu/  2. Mental Welfare Commission for Scotland https://www.mwcscot.org.uk/ (4) 3. National Mental Health Consumer and Carer Forum https://nmhccf.org.au/ (3) 4. Crisis Prevention Institute https://www.crisisprevention.com/ (9) 5. Safe crisis Management https://www.safecrisismanagement.com/default.aspx (3) 6. Scotland IHUB http://ihub.scot/ (3) |
| 1. Health care organisations (number of records downloaded)   National:  1. Substance Abuse and Mental Health Services Administration’s (SAMHSA) (USA) https://www.samhsa.gov/ (12)  2. National Association of State Mental Health Program Directors (USA) https://www.nasmhpd.org/ (18) 3. Canadian Mental Health Commission https://www.mentalhealthcommission.ca/English/ (0) 4. Depression and Bipolar Support Alliance (DBSA) http://www.dbsalliance.org/site/PageServer?pagename=home (3) Regional: 1. Seclusion and Restraint Reduction Leadership Group(Texas)  http://tnoys.org/srr-leadership-group/ (2) |
| C) Societies/Colleges (number of records downloaded)  Psychiatrists 1. The World Association of Social Psychiatry (WASP) http://www.waspsocialpsychiatry.com/  https://coercioninpsychiatry.com/references/ (0) 2. European Psychiatric Association http://www.europsy.net/ (0) 3. American Psychiatric Association https://www.psychiatry.org/ (7)  Nurses 1. International Society of Psychiatric Mental Health Nurses http://www.ispn-psych.org/ (4)  2. MHNA - Mental Health Nurses Association (UK) http://www.unitetheunion.org/how-we-help/list-of-sectors/healthsector/healthsectoryourprofession/mhna/ (1) 3. American Psychiatric Nurses Association (APNA) https://www.apna.org/i4a/pages/index.cfm?pageid=1 (8) 4. Australian College of Mental Health Nurses http://www.acmhn.org/ (4) |
| D) Charities (number of records downloaded)  1. Rethink https://www.rethink.org/ (1)  2. MIND https://www.mind.org.uk/ (4)  3. Mental Health Foundation https://www.mentalhealth.org.uk/statistics (0)  4. National Alliance on Mental Illness https://www.nami.org/ (1)  5. Mental Health Australia https://mhaustralia.org(0) |
| E) National Government Health Departments (number of records downloaded)  1. Department of Health (UK) https://www.gov.uk (4) 2. Australian Government. Department of Health https://agedcare.health.gov.au (8) 3. The U.S. Department of Health and Human Services (HHS) https://www.hhs.gov/  4. Ministry of Health. New Zealand https://www.health.govt.nz/ (2) |
| F) Health Care Quality Agencies (number of records downloaded)  1. NICE Quality Standard https://www.nice.org.uk/standards-and-indicators (5) 2. Care Quality Commision (UK) http://www.cqc.org.uk/ (5) 3. NHS Improvement https://improvement.nhs.uk/ (1) 4. Agency for Healthcare Research and quality (AHRQ) https://www.ahrq.gov/ (15) 5. Australian Commission on safety and quality in Health care https://www.safetyandquality.gov.au/ (0) 6. Health Quality Ontario http://www.hqontario.ca/ (4) 7. Health Quality & Safety Commission New Zealand https://www.hqsc.govt.nz/ (1) |
| G) Training Providers(number of records downloaded)1. Skills for Health (UK) http://www.skillsforhealth.org.uk/ (1) 2. Crisis Prevention Institute https://www.crisisprevention.com/ (3)  3. Restraint reduction network http://restraintreductionnetwork.org/ (4) 4. Dynamicintervention http://www.dynamicintervention.co.uk/health-care-courses (2) 5. The Challenging Behaviour Foundation, UK http://www.challengingbehaviour.org.uk/ (0) 6. Royal College of Nursing https://www.rcn.org.uk/ (3)  7. CALM https://www.calmtraining.co.uk/ (1)  8. BILD http://www.bild.org.uk/ (3)  9. Caring Solutions http://www.caringsolutionsukltd.com/ (0) 10. Centre for Mental Health https://www.centreformentalhealth.org.uk/ (0)  11. Scottish Association for Mental Health | SAMH https://www.samh.org.uk/ (0) 12. Support in mind Scotland https://www.supportinmindscotland.org.uk/ (0) |

2.2.2 Google searches

Searches were run in the Google search engine (Advanced Search Interface) on 23rd April 2018 to find web-based resources (PDFs) hosted on national health service websites. Comparable health systems to the UK NHS were chosen by selecting the top 30 national health systems according to the Legal Prosperity Index http://www.prosperity.com/rankings. Three searches were conducted per country:

1 allintitle: seclusion

site: [country domain]

filetype:pdf  
2 allintitle: restraint

site: [country domain]

filetype:pdf  
3 allintitle: coercion

site: [country domain]

filetype:pdf

Country domains used and numbers of potentially relevant PDFs found were:

1. Luxemburg .lu 1
2. Singapore .sg 0
3. Switzerland .ch 2
4. Japan .jp 0
5. Austria .at 0
6. Sweden .se 0
7. Norway .no 1
8. Netherlands .nl 3
9. Hong Kong .hk 3
10. Australia .au 6
11. Belgium .be 1
12. Germany .de 1
13. Qatar .qa 1
14. Finland .fi 3
15. South Korea .kr 0
16. Spain .es 0
17. New Zealand nz 7
18. France .fr 1
19. United Kingdom .uk 9
20. Iceland .is 0
21. Denmark dk 1
22. Israel .il 0
23. Malta .mt 0
24. Canada .ca 17
25. United Arab Emirates ae 0
26. Czech Republic .cz 0
27. Ireland .ie 4
28. Bahrain .bh 0
29. Oman .om 0
30. United States .us or .gov

To ensure a more complete coverage of UK NHS interventions or programmes with resources available on the web we ran the following two searches in Google Advanced Search Interface on 24th April 2018:

1. allintitle: (seclusion OR restraint OR restrain OR coercion OR coercive OR restrictive OR "rapid tranquilization") AND (manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy)

site:NHS.UK 19

1. allintitle: (seclusion OR restraint OR restrain OR coercion OR coercive OR restrictive OR "rapid tranquilization" OR violence) AND (manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy)

site:NHS.UK 148

For all the website and google searches listed, the first 8 pages of search results were screened where the searches identified more than 8 pages of results.

E-mail request

Request for information to the jiscmail mailing lists LIS-MEDICAL, CLIN-LIB, MENTAL-HEALTH-LIBRARIES

Sent 13/03/2018

Good afternoon,

The Academic Unit for Health Economics (AUHE) is working on a systematic review on reducing coercive interventions in mental health service users. One of the aims of this systematic review is to identify the major number of interventions, training packets for health professionals, guidelines, programmes, standards, policies or any document reporting the practices to minimise the use of restraint, seclusion or any coercive interventions in mental health service users.

Please, let us know if you are aware of any document related with this subject. We will be very grateful for your help and we will acknowledge your collaboration in the final report. Please, send your comments to: [TEXT REDACTED]

Thank you for your help in advance.  
Best wishes,   
[TEXT REDACTED]

Social media search strategies

YouTube **https://www.youtube.com/?gl=GB&hl=en-GB** Searched 02/07/2018

Two searches:

1. (seclusion OR restraint) AND reduction AND (mental or Psychiatry) AND (manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy) Filtered to “Long Duration >20 mins” 68
2. (seclusion OR restraint) AND reduction AND (mental or Psychiatry) AND (manual OR guideline OR Programme OR policy OR training OR standard OR Scheme OR Strategy) Filtered to “Features - HD “ 127

54 unique links to videos downloaded.

Facebook **https://en-gb.facebook.com/** Searched 02/07/2018

Two searches:

1. Seclusion reduction
2. Restraint reduction

Downloaded links to webpages from the “Pages”, “Public Publications”, “Links” and “Videos” sections

39 of 93 identified links to webpages were downloaded.

Twitter **https://twitter.com/** Searched 02/07/2018

Four searches

#restraintreduction (6 tweets with links downloaded)

#seclusionreduction (none relevant)

#training #restraint (none relevant)

#training #seclusion (none relevant)