APPENDIX 11: CLINICAL EVIDENCE – METHODOLOGY CHECKLISTS

Abbreviations

BPRS	Brief Psychiatric Rating Scale
BVC	Brøset Violence Checklist
CAMHS	child and adolescent mental health services
n	number of participants
NIMH	National Institute for Mental Health
OAS	Overt Aggression Scale
PA	physical aggression
PANSS	Positive and Negative Syndrome Scale
ROB	risk of bias
RQ	review question

1.1 METHODOLOGY CHECKLIST: REVIEWS

1.1.1 Campbell 2012

Study ID	Campbell 2012		
Guideline topic:	Review question no. RQ 2.9 and 3.1 [CAMHS]		
Checklist completed by:	Rebecca Gate		
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:			
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes		
The review collects the type of studies you consider relevant to the guideline review question	Yes		
The literature search is sufficiently rigorous to identify all the relevant studies	Yes		
Study quality is assessed and reported	Yes		
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes		
Comments about the method	A comprehensive literature review was conducted using multiple electronic databases; clearly described methods and research question		

1.1.2 De Hert 2011

Study ID	De Hert 2011		
Guideline topic:	Review question no. RQ 4.3 and 4.5 [CAMHS]		
Checklist completed by:	Rebecca Gate		
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:			
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes		
The review collects the type of studies you consider relevant to the guideline review question	Yes		
The literature search is sufficiently rigorous to identify all the relevant studies	Yes		
Study quality is assessed and reported	Yes		
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes		
Comments about the method	A comprehensive literature review was conducted using multiple electronic databases; clearly described methods and research question		

1.1.3 Ahmed 2011

Study ID	Ahmed 2011		
Guideline topic:	Review question no. RQ 4.7 and 4.8		
Checklist completed by:	Rebecca Gate		
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:			
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes		
The review collects the type of studies you consider relevant to the guideline review question	Yes		
The literature search is sufficiently rigorous to identify all the relevant studies	Yes		
Study quality is assessed and reported	Yes		
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes		
Comments about the method	A comprehensive literature review was conducted using multiple electronic databases; clearly described methods and research question		

1.1.4 Gillies 2013

Study ID	Gillies 2013		
Guideline topic:	Review question no: RQ 4.7 and 4.8		
Checklist completed by:	Rebecca Gate		
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:			
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes		
The review collects the type of studies you consider relevant to the guideline review question	Yes		
The literature search is sufficiently rigorous to identify all the relevant studies	Yes		
Study quality is assessed and reported	Yes		
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes		
Comments about the method	A comprehensive literature review was conducted using multiple electronic databases; clearly described methods and research question		

1.1.5 Huf 2009

Study ID	Huf 2009		
Guideline topic:	Review question no.: RQ 4.7 and 4.8		
Checklist completed by:	Rebecca Gate		
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:			
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes		
The review collects the type of studies you consider relevant to the guideline review question	Yes		
The literature search is sufficiently rigorous to identify all the relevant studies	Yes		
Study quality is assessed and reported	Yes		
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes		
Comments about the method	A comprehensive literature review was conducted using multiple electronic databases; clearly described methods and research question		

1.1.6 Powney 2012

Study ID	Powney 2012		
Guideline topic:	Review question no: RQ 4.7 and 4.8		
Checklist completed by:	Rebecca Gate		
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:			
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes		
The review collects the type of studies you consider relevant to the guideline review question	Yes		
The literature search is sufficiently rigorous to identify all the relevant studies	Yes		
Study quality is assessed and reported	Yes		
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes		
Comments about the method	A comprehensive literature review was conducted using multiple electronic databases; clearly described methods and research question		

1.2 METHODOLOGY CHECKLIST: RISK FACTOR STUDIES (ADULTS)

1.2.1 Amore 2008

Bibliographic reference: Amore M, Menchetti M, Tonti C, Scarlatti F, Lundgren E, Esposito W, et al. Predictors of violent behavior among acute psychiatric patients: clinical study. Psychiatry & Clinical Neurosciences. 2008;62:247-55.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Inpatients referred to acute inpatient ward	Applicable for inpatient setting	Low
Quality: Loss to follow-up	Differential rates not reported – Some subjects dropped out because could not speak Italian (n=20), were discharged early (n=19), did not give consent (n=17) or could not get reliable information (n=15)	Rates of dropout may have been different for violent compared with non-violent patients	Unclear
Quality of risk factor assessment	Medical records and patient interviews	Possibility of cross referencing may give good assessment	Low
Quality of outcome assessment	Overt Aggression Scale (OAS)	Standardised checklists that staff trained to use	Low
Adjusting for confounders	History of physical aggression (PA), PA in month before hospitalisation, verbal or against-object aggression in the month before admission, high scores on BPRS clusters (hostility–suspiciousness, thought disturbance, activation), age and gender	Examined factors potentially related and adjusted for all	Low
Appropriate statistical analysis	Logistic regression	Present adjusted odds ratios	Low
Funding	Not reported		

1.2.2 Chang 2004

Bibliographic reference: Chang J. & Lee C. (2004) Risk factors for aggressive behaviour among psychiatric inpatients. Psychiatric Services55, 1305–1307.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Inpatients referred to acute inpatient ward	Applicable for inpatient setting	Low
Quality: Loss to follow-up	Low rate of refusal (3 people)	Low risk of differential attrition	Low
Quality of risk factor assessment	Information collected by psychiatrists, social workers and nurses	Not blinded but reasonably objective measures	Low
Quality of outcome assessment	OAS	Standardised checklists	Low
Adjusting for confounders	Demographic variables and 6 risk factors (not reported what)	Results for adjusted findings only presented for duration of hospitalisation and earlier onset of psychotic disease. Other results unadjusted	Unclear
Appropriate statistical analysis	Logistic regression but most results for this not reported	For most results raw data (number of participants or means with and without violence for each risk factor) presented	High
Funding	National Cheng Kung University Hospital in Taiwan		

1.2.3 Cheung 1996

Bibliographic reference: Cheung P, Schweitzer I, Tuckwell V, Crowley K. A prospective study of aggression among psychiatric patients in rehabilitation wards. Australian and New Zealand Journal of Psychiatry. 1996;30:257-62.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Mixed population of different ward settings	Data reported separately for different types of ward	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Psychiatrist on each ward provided data. Random sample of 20 patients interviewed by investigators to check diagnosis		Low
Quality of outcome assessment	Staff Overt Aggression Scale Revised, staff trained to use it	Standardised checklist with training	Low
Adjusting for confounders	Adjusted for age, gender, duration of admission and diagnosis	May not have adjusted for everything that needed to (did not adjust for history of violence)	Unclear
Appropriate statistical analysis	Multiple logistic regression	Present adjusted odds ratios	Low
Funding	Not reported		

1.2.4 Ehmann 2001

Bibliographic reference: Ehmann TS, Smith GN, Yamamoto A, McCarthy N, Ross D, Au TM, et al. Violence in treatment resistant psychotic inpatients. The Journal of Nervous and Mental Disease. 2001;189:716-21.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Treatment resistant patients or patients with diagnostic ambiguity in locked unit	Unclear if these types of patients will be typical	Unclear
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Data was collected'	Does not specify method	Unclear
Quality of outcome assessment	OAS completed by nurses and used Official hospital incident reports – monitored for an average 24.1 weeks	Not clear what training given or how comprehensive measurement was	Unclear
Adjusting for confounders	History of Violence, Diagnosis, Alcohol Abuse, and Total PANSS	For adjusted values, may not be comprehensive adjustments	Unclear
Appropriate statistical analysis	t tests or χ^2, logistic regressions	Unadjusted high ROB	Adjusted Low
Funding	Not reported		

1.2.5 Hodgins 2011

Bibliographic reference: Hodgins S, Riaz M. Violence and phases of illness: differential risk and predictors. European Psychiatry. 2011;26:518-24.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Over half had been previously convicted for violent crimes	May be a particularly severe population, more so than typical patients in psychiatric wards	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	From patient and collateral interviews and medical files	Possibility of cross referencing may give good assessment	Low
Quality of outcome assessment	Participants and a collateral that had been in regular contact with the participant in the preceding 6 months provided information at the 2 interviews.		Low
Adjusting for confounders	All significant variables adjusted for	It was the only significant variable in the analysis so only 1 adjusted for. But other variables may have been important but just confounded so did not appear to have an effect	Low
Appropriate statistical analysis	Logistic regression	Not applicable	Adjusted Low
Funding	Not reported		

1.2.6 Kay 1988

Bibliographic reference: Kay SR, Wolkenfeld F, Murrill LM. Profiles of aggression among psychiatric patients: II. Covariates and predictors. The Journal of Nervous and Mental Disease. 1988;176:547-57.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Only patients who had been in ward for >3 month as refractory to treatment	Unclear if these types of patients will be typical	Unclear
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Not reported for demographics. For scales, administered by trained and blind examiners	Unclear for demographics, low for scales	Unclear/Low
Quality of outcome assessment	Violent scales used at 3 month follow-up to assess previous violence	Does not measure violence throughout follow-up	Unclear
Adjusting for confounders	Anger, length of illness, age hostility	It was the only significant variable in the analysis, so only 1 adjusted for. However, other variables may have been important but just confounded, so did not appear to have an effect	Unclear
Appropriate statistical analysis	Multiple regression analysis	Not applicable	Adjusted Low
Funding	Not reported		

1.2.7 Ketelsen 2007

Bibliographic reference: Ketelsen R, Zechert C, Driessen M, Schulz M. Characteristics of aggression in a German psychiatric hospital and predictors of patients at risk. Journal of Psychiatric and Mental Health Nursing. 2007;14:92-99.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Patients admitted to the hospital.	Unclear whether these patients are typical (majority have substance related disorders and not mental illnesses)	Unclear
Quality: Loss to follow-up	Dropout not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	From patient hospital records	Not enough information on method reported	Unclear
Quality of outcome assessment	Staff Observation of Aggression Scale – staff were trained on using the scale for the year prior to study	Standardised checklist with training	Low
Adjusting for confounders	A range of demographic and diagnostic factors	Variables entered using the step-forward Wald procedure	High
Appropriate statistical analysis	Logistic regression	Present adjusted odds ratios	Low
Funding	Not reported		

1.2.8 Kho1998

Bibliographic reference: Kho K, Sensky T, Mortimer A, Corcos C. Prospective study into factors associated with aggressive incidents in psychiatric acute admission wards. The British Journal of Psychiatry. 1998;172:38-43.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Inpatient ward	Applicable for inpatient setting	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Not reported	Assume from records	Unclear
Quality of outcome assessment	Once a week, 2 nurses independently scored each patient's behaviour using the Modified OAS. Global weekly aggression score calculated		Low
Adjusting for confounders	Gender, age, ethnic group, diagnosis, ward type (locked versus open), and interactions between gender and ethnic group and between gender and diagnosis		Unclear
Appropriate statistical analysis	Logistic regression	Not applicable	Adjusted Low
Funding	Hounslow and Spelthorne Community and Mental Health NHS Trust		

1.2.9 Oulis 1996

Bibliographic reference: Oulis P, Lykouras L, Dascalopoulou E, Psarros C. Aggression among psychiatric inpatients in Greece. Psychopathology. 1996;29:174-80.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Inpatient ward	Applicable for inpatient setting	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	From patient interviews, observations and nursing staff reports.	Aggression Risk Profile completed	Low
Quality of outcome assessment	Modified OAS	Standardised checklist with training	Low
Adjusting for confounders	A range of diagnostic and personality factors – unclear if demographic variables were considered.	May not have adjusted for everything that needed to	Unclear
Appropriate statistical analysis	Kruskal-Wallis, chi-square and multiple regression analysis	Unadjusted high ROB	Adjusted Low
Funding	Not reported		

1.2.10 Palmstierna 1990

Bibliographic reference: Palmstierna T, Wistedt B. Risk factors for aggressive behaviour are of limited value in predicting the violent behaviour of acute involuntarily admitted patients. Acta Psychiatrica Scandinavica. 1990;81:152-55.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Inpatient ward	Applicable for inpatient setting	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Data from patient records, reports from police and relative obtained within 5 days of admission to measure risk factors	Not direct interviews	Unclear
Quality of outcome assessment	Staff OAS for up to 28 days after admission		Low
Adjusting for confounders	Significant risk factors and sex and age		Unclear
Appropriate statistical analysis	Logistic regression	Not reported	Adjusted Low
Funding	Swedish work environment fund		

1.2.11 UK700

Bibliographic reference: Thomas S, Leese M, Walsh E, McCrone P, Moran P, Burns T, et al. A comparison of statistical models in predicting violence in psychotic illness. Comprehensive Psychiatry. 2005;46:296-303. Dean K, Walsh E, Moran P, Tyrer P, Creed F, Byford S, et al. Violence in women with psychosis in the community: prospective study. British Journal of Psychiatry. 2006;188:264-70.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Adults with psychosis having mental health services (assume in the community)	Applicable for community setting	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	From patient and collateral interviews and medical files		Low
Quality of outcome assessment	The outcome of physical assault (violence) was ascertained from 3 sources (case notes, interviews with patients, and interviews with case managers)		Low
Adjusting for confounders	Gender, age, marital status, independent living, history of homelessness, non-white ethnicity, past special needs education, previous >3 mouths in hospital, history of violence, previous suicide attempt, threat/control-override delusions, victim of violence, personality disorder, drug use in past year	Lots of adjustments	Low
Appropriate statistical analysis	Logistic regression	Not reported	Adjusted Low
Funding	ST was funded by a UK Department of Health Research Training Fellowship. The UK700 trial was funded by grants from the UK Department of Health and NHS R&D Programme		

1.2.12Watts 2003

Bibliographic reference: Watts D, Leese M, Thomas S, Atakan Z, Wykes T. The prediction of violence in acute psychiatric units. International Journal of Forensic Mental Health. 2003;2:173-80.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Inpatient ward	Applicable for inpatient setting	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Questionnaires/measures, not reported for demographic information		Low
Quality of outcome assessment	Overt aggression scale		Low
Adjusting for confounders	Adjustments made based on a range of demographic and diagnostic factors	Factors were selected based on existing literature	Low
Appropriate statistical analysis	Logistic regression	Not reported	Adjusted low
Funding	Not reported		

1.2.13 Yesavage 1984

Bibliographic reference: Yesavage JA. Correlates of dangerous behavior by schizophrenics in hospital. Journal of Psychiatric Research. 1984;18:225-31.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Psychiatric inpatients	a reasonable proportion may have fought in Vietnam	Unclear
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Plasma measurement and interviews		Low
Quality of outcome assessment	Modification of scale developed by Lion[1] used to measure number of days on which danger-related behaviours during first 8 days.	Done from routine nursing staff reports – unclear if the scale was used at the time or just applied retrospectively to the nursing reports	Unclear
Adjusting for confounders	age, race, duration of illness, Thiothixene serum level, Prior violence, Schizophrenia factor on BPRS, combat in Vietnam, childhood discipline	adjusted for significant variables and key demographics	Low
Appropriate statistical analysis	Logistic regression	Not reported	Adjusted Low
Funding	Medical Research Service of the Veteran's Administration and by NIMH Specialized Research Center grant MH 30854.		

[1] Werner PD, Yesavage JA, Becker JMB, Brunsting DW, Issacs JA. Hostile words and assaultive behaviour on an acute inpatient unit. Journal of Nervous and Mental Disease. 1983;171:385-87.

1.3 METHODOLOGY CHECKLIST: RISK FACTOR STUDIES (CHILDREN AND YOUNG PEOPLE)

1.3.1 Dean 2008

Bibliographic reference: Dean AJ, Duke SG, Scott J, Bor W, George M, McDermott BM. Physical aggression during admission to a child and adolescent inpatient unit: Predictors and impact on clinical outcomes. Australian and New Zealand Journal of Psychiatry. 2008;42:536-43.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Children and adolescents admitted to psychiatric ward (most 'exhibited complex psychopathology')	Applicable	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	From medical files and Clinicians also completed the Health of the Nation Outcome Scales for Children and Adolescents	No direct contact with participants – from ward records	Unclear
Quality of outcome assessment	Recorded in designated register	No clear how well aggression was documented and whether enough detail was reported	Unclear
Adjusting for confounders	Age, gender, history of aggression, pervasive developmental disorder, attention deficit hyperactivity disorder/disruptive behaviour disorder, mood/suicide ideation, self-harm, medications at presentation		Low
Appropriate statistical analysis	t tests or χ^2, Logistic regressions		Low
Funding	Not reported		

1.3.2 Stafford 2003

Bibliographic reference: Stafford E, Cornell DG. Psychopathy scores predict adolescent inpatient aggression. Assessment. 2003;10:102-12.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Adolescent inpatients, mostly with CMHD	Applicable	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Patient interviews		Low
Quality of outcome assessment	OAS on a weekly basis by case managers	Blind to psychopathology scores	Low
Adjusting for confounders	Age, sex, socioeconomic status and length of stay		Low
Appropriate statistical analysis	Logistic regression		Low
Funding	Not reported		

1.3.3 Tompsett 2011

Bibliographic reference: Tompsett CJ, Domoff S, Boxer P. Prediction of restraints among youth in a psychiatric hospital: application of translational action research. Journal of Clinical Psychology. 2011;67:368-82.			
	Note	**Comment**	**Risk of bias**
Quality: Generalisability	Primarily adolescents with bipolar and then any other mood disorder	Applicable	Low
Quality: Loss to follow-up	Not reported	Cannot tell if differential attrition	Unclear
Quality of risk factor assessment	Risk assessment checklist completed by therapist early on in treatment		Low
Quality of outcome assessment	From database kept by hospital staff	Not clear if any different to standard procedure	Unclear
Adjusting for confounders	Family risk indicators, history of maltreatment, history of exposure to violence, body mass index, intellectual functioning		Low
Appropriate statistical analysis	Logistic regression		Low
Funding	Not reported		

1.4 METHODOLOGY CHECKLIST: PREDICTION STUDIES (ADULTS)

	Patient selection	Patient generalisability	Index test (IT)		IT generalisability	Reference standard (RS)	RS generalisability	Flow and timing
Study ID	**ROB**	**ROB**	**Describe test/s**	**ROB**	**ROB**	**ROB**	**ROB**	**ROB**
Abderhalden 2004	Low	Low	BVC – Nurses marked presence or absence of 6 behaviours on BVC at the end of every shift.	Unclear	Low	High	Low	Low
Abderhalden 2006	Low	Low	BVC – Nurses marked presence or absence of 6 behaviours on BVC. Not blinded in validation sample	Unclear	Low	High	Low	Low
Abderhalden 2006	Low	Low	BVC- Visual Analog Scale – Not blinded in validation sample	Unclear	Low	High	Low	Low
Abderhalden 2006	Low	Low	Visual Analog Scale – Subjective assessment by nurses of risk of patient violence. Not blinded in validation sample	Unclear	Low	High	Low	Low
Almvik 2003	Low	Low	BVC Done in first 2.5 hours of each shift	Low	Low	High	Low	Low
McNiel 2000	Unclear	Low	Clinical judgement	Unclear	Low	High	Low	Unclear
Yao 2012	Low	Low	Chinese version of the V-RISK-10 (Violence Risk Screening 10). Heavy tobacco use was added to the scoring instructions under item 3.	Low	Low	High	Low	Unclear

1.5 METHODOLOGY CHECKLIST: PREDICTION STUDIES (CHILDREN AND YOUNG PEOPLE)

	Patient selection	Patient generalisability	Index test (IT)		IT generalisability	Reference standard (RS)	RS generalisability	Flow and timing
Study ID	**ROB**	**ROB**	**Describe test/s**	**ROB**	**ROB**	**ROB**	**ROB**	**ROB**
Barzman 2011	Low	Low	Brief Rating of Aggression by Children and Adolescents–Preliminary Version (BRACHA 0.8) used on admission	Unclear	Low	High	Low	Low

1.6 METHODOLOGY CHECKLIST: COHORT STUDIES

1.6.1 Ashcraft 2008

Bibliographic reference: Ashcraft L, Anthony W. Eliminating seclusion and restraint in recovery-oriented crisis services. Psychiatric Services. 2008;59:1198-202.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.7 and 2.8				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders		No		
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design; sequence generation and allocation is not applicable.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied				Not applicable
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: unclear Cohort design assessing reductions in seclusion and restraint following intervention. Unclear description of care provided during control arm. Participants and care providers were non-blind.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)				Not applicable
C2	a. How many participants did not complete treatment in each group? Not reported				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)				Not applicable
C3	a. For how many participants in each group were no outcome data available? Not reported				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)				Not applicable
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: No outcome data reported for the control arm					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Outcome was assessed using chart records (unclear). Non-blind participants and investigators.					

1.6.2 Azeem 2011

Bibliographic reference: Azeem MW, Aujla A, Rammerth M, Binsfeld G, Jones RB. Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and adolescent psychiatric hospital. Journal of Child and Adolescent Psychiatric Nursing. 2011;24:11-15.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.7 and 2.8 (CAMHS)				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders		No		
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes			
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Cohort design; sequence generation and allocation is not applicable. Pre and post group were noted to be comparable in terms of admissions, discharges and patient census.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: unclear Cohort design assessing reductions in seclusion and restraint following intervention. Unclear description of care provided during the pre-condition. Participants and care providers were non-blind.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)				Not applicable
C2	a. How many participants did not complete treatment in each group? Not reported				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)				Not applicable
C3	a. For how many participants in each group were no outcome data available? Not reported				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)				Not applicable
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Reporting of outcome data was unclear for both pre and post condition (use of restraint and seclusion was reported in a standard form for the period of a month before and following the intervention)					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up			Unclear	
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome	Yes			
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Appropriateness of follow-up unclear (1 time-point/ 1 month). Non-blind investigators and participants					

1.6.3 Bjorkdahl 2013

Bibliographic reference: Bjorkdahl A, Hansebo G, Palmstierna T. The influence of staff training on the violence prevention and management climate in psychiatric inpatient units. Journal of Psychiatric & Mental Health Nursing. 2013;20:396-404.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.8				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. Group equivalence unclear: Both staff and service user groups were considered as independent groups yet a relatively low staff turnover rate. Higher number of wards prior to training; nature of wards and comparability not reported.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Unclear reporting of pre-intervention condition and comparability. Non-blind participants and care providers					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)				Not applicable
C2	a. How many participants did not complete treatment in each group? Unknown				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? Unclear				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Questionnaires were administered to staff and patients and returned anonymously. Number of distributed questionnaires were not reported – unclear dropout levels.					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up				Not applicable
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome		No		
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Outcome measure was designed for the current study (without prior testing on a development sample) – robustness questionable changed in analysis to a dichotomous scale. Non-blind investigators and participants.					

1.6.4 Feeney 2007

Bibliographic reference: Feeney L, Kavanagh A, Kelly BD, Mooney M. Moving to a purpose built acute psychiatric unit on a general hospital site--does the new environment produce change for the better? Irish Medical Journal. 2007;100:391-93.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.6				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. No statistically significant differences noted in group demographics, however, reports only considered from 1 hospital at baseline (2 psychiatric hospitals were combined into the new ward).					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Favour intervention. Unclear reporting of both pre and post conditions; staff from both hospitals were combined, unclear if roles and management changed within new service. Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)			Unclear	
C2	a. How many participants did not complete treatment in each group? Not applicable				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? Not applicable				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear risk of bias				
Likely direction of effect: Study used retrospective chart analysis; unclear if attrition rates were reported.					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up				Not applicable
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
		High risk			
Likely direction of effect: Unclear risk of bias for assessing outcomes – study used a retrospective chart analysis with non-blind researchers. Non-blind participants and care providers.					

1.6.5 Georgieva 2012

Bibliographic reference: Georgieva I, Mulder C, Wierdsma A. Patients' preference and experiences of forced medication and seclusion. Psychiatric Quarterly. 2012;83:1-13.					
Guideline topic: Violence and aggression	**Review question:** RQ 4.3 and 4.5				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders		No		
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. Unclear group comparability at baseline (differed significantly in terms of gender and diagnosis)					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Unclear reporting of care received that is, duration or rates of restrictive intervention. Non-blind participants and care providers					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)			Unclear	
C2	a. How many participants did not complete treatment in each group? Unknown				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)				Not applicable
C3	a. For how many participants in each group were no outcome data available? Unclear				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)				Not applicable
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Unclear attrition rate: percentages noted to vary across measures as a result of incomplete clinical files					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up				Not applicable
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear risk				
Likely direction of effect: New questionnaire developed for study unclear validity and reliability. Non-blind participants and care providers.					

1.6.6 Gerdtz 2013

Bibliographic reference: Gerdtz MF, Daniel C, Dearie V, Prematunga R, Bamert M, Duxbury J. The outcome of a rapid training program on nurses' attitudes regarding the prevention of aggression in emergency departments: a multi-site evaluation. International Journal of Nursing Studies. 2013;50:1434-45..					
Guideline topic: Violence and aggression	**Review question:** RQ 2.8, 4.1 and 4.5				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)				Not applicable
C2	a. How many participants did not complete treatment in each group? 196 (0.29)				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)		No		
C3	a. For how many participants in each group were no outcome data available? 196 (0.29)				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Matched pairs were only considered in the analysis; of 196 who did not complete post-questionnaires compared with completers, there was a significant difference with respect to number of years of experience as a registered nurse.					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome	Yes			
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Non-blind participants and care providers.					

1.6.7 Laker 2010

Bibliographic reference: Laker C, Gray R, Flach C. Case study evaluating the impact of de-escalation and physical intervention training. Journal of Psychiatric & Mental Health Nursing. 2010;17:222-28.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.8				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders	Yes			
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes			
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. Analysis allowed for covariates; 3 service users were included in both pre and post groups; no significant difference in baseline demographics.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Unclear reporting of care received. Non-blind participants and care administrators.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? Not applicable				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes			
C3	a. For how many participants in each group were no outcome data available? Not applicable				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Unclear reporting of dropout rates Analysis used logistic regression, exposure (as such length of follow-up) standardised					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Outcome assessed by reports – unclear validity and reliability. Non-blind participants and care providers.					

1.6.8 Lee 2012

Bibliographic reference: Lee S, Gray R, Gournay K. Comparing the outcomes of the application of C&R (general service) and SCIP in the management of disturbed behaviour in mental health care. Journal of Mental Health. 2012;21:307-17.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.8				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders		No		
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. Comparability of groups at baseline unclear whilst the wards were described as 'similar' no information was provided on demographics etc.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Unclear reporting of intervention and control ward conditions. Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? Unknown				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? Unclear				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: No information reported for attrition rates.					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Unclear survival rates – check. Non-blind participants and investigators.					

1.6.9 Papageorgiou 2004

Bibliographic reference: Papageorgiou A, Janmohamed A, King M, Davidson O, Dawson J. Advance directives for patients compulsorily admitted to hospital with serious mental disorders: directive content and feedback from patients and professionals. Journal of Mental Health. 2004;13:379-88.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.9 and 3.1 [CMHS]				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)			Unclear	
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear risk of bias				
Likely direction of effect: Allocation and attempts to balance comparison groups not reported for the experimental arm, following the original RCT.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Comparability of care unclear. Non-blind.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? 2				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? 2				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: 2 individuals were lost at follow-up, unclear reporting of attrition loss (that is, which group)					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome	Yes			
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Investigators were non-blind. Attempts were made to increase reliability of reporting (inter-rater reliability).					

1.6.10 Srebnik 2008

Bibliographic reference: Srebnik DS, Rutherford LT, Peto T, Russo J, Zick E, Jaffe C, et al. The content and clinical utility of psychiatric advance directives. Psychiatric Services. 2005;56:592-98.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.9 and 3.1				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders		No		
A3	The groups were comparable at baseline, including all major confounding and prognostic factors				Not applicable
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied				Not applicable
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? 27				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? 27				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Twenty-seven individuals was excluded, unclear reporting of attrition loss (that is, which group)					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Content and clinical utility of ratings in comparison to narrative reports unclear. Investigators non-blind.					

1.6.11 Steinert 2008

Bibliographic reference: Steinert T, Eisele F, Goeser U, Tschoeke S, Uhlmann C, Schmid P. Successful interventions on an organisational level to reduce violence and coercive interventions in in-patients with adjustment disorders and personality disorders. Clinical Practice and Epidemiology in Mental Health. 2008;4:27.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.6, 2.7				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. Marginal differences noted between pre-intervention and post groups.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation			Unclear	
B3	Individuals administering care were kept 'blind' to treatment allocation			Unclear	
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Unclear reporting of intervention and control ward conditions. Staff members reported as being 'unaware' of study; no reporting of blinding					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? 57 (pre) 22 (post)				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes			
C3	a. For how many participants in each group were no outcome data available? 57, 22				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)	Yes			
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
Low risk of bias	Unclear/unknown risk	High risk of bias			
Likely direction of effect: No systematic differences reported for missing data.					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Limitations in quality noted in relation to outcome measure.					

1.6.12 Swanson 2008

Bibliographic reference: Swanson JW, Swartz MS, Elbogen EB, Van Dorn RA, Wagner H, Moser LA, et al. Psychiatric advance directives and reduction of coercive crisis interventions. Journal of Mental Health. 2008;17:255-67.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.9 and 3.1 [CMHS]				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders	Yes			
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear bias				
Likely direction of effect: Cohort design (non-controlled); sequence generation and allocation is not applicable. Unclear reporting of baseline demographics for both groups. Significant differences in baseline PAD completion and CCI outcome; potential for bias was addressed in multivariable regression analysis.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Unclear reporting of intervention and control ward conditions. Non-blind participants or care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? Unclear				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? Not reported				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
		High risk of bias			
Likely direction of effect: Intervention Systematic differences between attrition rates in comparison groups noted at 6 months (higher retention rates for PAD completers)					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome	Yes			
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Non-blind investigators.					

1.6.13 Vaaler 2005

Bibliographic reference: Vaaler AE, Morken G, Linaker OM. Effects of different interior decorations in the seclusion area of a psychiatric acute ward. Nordic Journal of Psychiatry. 2005;59:19-24.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.6				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes			
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear risk of bias				
Likely direction of effect: Quasi-random sequence generation used based on alternation between next available seclusion rooms No significant differences noted in baseline demographics or reasons for seclusion.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes			
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Care appeared equivocal. Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? 1				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? 1				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: 1 individual was excluded, unclear reporting of attrition loss (that is, which group)					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Patient preference scale administered immediately following seclusion, authors noted 'substantial symptom pressure'.					

1.6.14 Van der Schaaf 2013

Bibliographic reference: van der Schaaf PS, Dusseldorp E, Keuning FM, Janssen WA, Noorthoorn EO. Impact of the physical environment of psychiatric wards on the use of seclusion. British Journal of Psychiatry. 2013;202:142-49.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.6				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)				Not applicable
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders	Yes			
A3	The groups were comparable at baseline, including all major confounding and prognostic factors			Unclear	
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear risk of bias				
Likely direction of effect: Sequence generation and allocation not applicable. Attempts were made to account for patient, staff and general demographics in analysis – unclear if significant differences in baseline demographics.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation				Not applicable
B3	Individuals administering care were kept 'blind' to treatment allocation				Not applicable
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Unclear comparability of admission and non-admission wards. Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)				Not applicable
C2	a. How many participants did not complete treatment in each group? Unclear				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)				Not applicable
C3	a. For how many participants in each group were no outcome data available? Unclear				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)				Not applicable
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Unclear reporting of attrition bias					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome			Unclear	
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: While attempts were made to improve the reliability of outcome reporting (such as a second rater), the validity of the outcomes was questionable given the range of outcomes reported by the authors. Investigators were non-blind.					

1.6.15 Whitecross 2013

Bibliographic reference: Whitecross F, Seeary A, Lee S. Measuring the impacts of seclusion on psychiatry inpatients and the effectiveness of a pilot single-session post-seclusion counselling intervention. International Journal of Mental Health Nursing. 2013;22:512-21.					
Guideline topic: Violence and aggression	**Review question:** RQ 2.6				
Checklist completed by: Rebecca Gate					
		Circle or highlight 1 option for each question:			
A. Selection bias (systematic differences between the comparison groups)					
A1	The method of allocation to treatment groups was unrelated to potential confounding factors (that is, the reason for participant allocation to treatment groups is not expected to affect the outcome[s] under study)		No		
A2	Attempts were made within the design or analysis to balance the comparison groups for potential confounders			Unclear	
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes			
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?					
	Unclear risk of bias				
Likely direction of effect: Quasi-random sequence generation used based on alternation between wards. No significant differences noted in baseline demographics or reasons for seclusion.					
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)					
B1	The comparison groups received the same care apart from the intervention(s) studied			Unclear	
B2	Participants receiving care were kept 'blind' to treatment allocation		No		
B3	Individuals administering care were kept 'blind' to treatment allocation		No		
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?					
		High risk			
Likely direction of effect: Care appeared equivocal. It is unclear if the difference noted in levels of seclusion between the wards resulted from the intervention or from general differences in ward care. Non-blind participants and care providers.					

C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)					
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes			
C2	a. How many participants did not complete treatment in each group? 1				
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)			Unclear	
C3	a. For how many participants in each group were no outcome data available? 1				
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available)			Unclear	
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: 1 individual was excluded, unclear reporting of attrition loss (that is, which group)					
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)					
D1	The study had an appropriate length of follow-up	Yes			
D2	The study used a precise definition of outcome	Yes			
D3	A valid and reliable method was used to determine the outcome			Unclear	
D4	Investigators were kept 'blind' to participants' exposure to the intervention		No		
D5	Investigators were kept 'blind' to other important confounding and prognostic factors		No		
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?					
	Unclear/unknown risk				
Likely direction of effect: Limitations noted on the IES-R scale. Investigators non-blind.					

1.7 METHODOLOGY CHECKLIST: QUALITATIVE STUDIES

1.7.1 Sutton 2013

Bibliographic reference: Sutton D, Wilson M, Van Kessel K, Vanderpyl J. Optimizing arousal to manage aggression: a pilot study of sensory modulation. International Journal of Mental Health Nursing. 2013;22:500-11.	
Guidance topic: Violence and aggression	**Key research question/aim:** RQ 2.7 and 2.8
Checklist completed by: Rebecca Gate	
Section 1: theoretical approach	
Is a qualitative approach appropriate? *For example:* • Does the research question seek to understand processes or structures, or illuminate subjective experiences or meanings? • Could a quantitative approach better have addressed the research question?	Yes The study is a qualitative exploration of the acceptability and implementation of a new sensory modulation room.
Is the study clear in what it seeks to do? *For example:* • Is the purpose of the study discussed – aims/objectives/research question(s)? • Is there adequate/appropriate reference to the literature? • Are underpinning values/assumptions/theory discussed?	Unclear While a brief explanation is offered of the underpinning theory, the aims and research questions of the study are only briefly outlined.
Section 2: study design	
2.1 How defensible/rigorous is the research design/methodology? *For example:* • Is the design appropriate to the research question? • Is a rationale given for using a qualitative approach? • Are there clear accounts of the rationale/justification for the sampling, data collection and data analysis techniques used? • Is the selection of cases/sampling strategy theoretically justified?	Unclear Use of a qualitative design and sampling strategy is not clearly justified. Data analysis techniques are fully described.

Section 3: data collection	
3.1 How well was the data collection carried out? *For example:* • Are the data collection methods clearly described? • Were the appropriate data collected to address the research question? • Was the data collection and record keeping systematic?	Clear Data collection was appropriately described, all interviews were audio-recorded and then transcribed in a systematic manner.
Section 4: validity	
4.1 Is the role of the researcher clearly described? *For example:* • Has the relationship between the researcher and the participants been adequately considered? • Does the paper describe how the research was explained and presented to the participants?	No Role of researcher and relationship to the participants was not reported.
4.2 Is the context clearly described? *For example:* • Are the characteristics of the participants and settings clearly defined? • Were observations made in a sufficient variety of circumstances? • Was context bias considered?	Unclear Context and characteristics of participants were briefly described. Bias was noted, but not addressed.
4.3 Were the methods reliable? *For example:* • Were data collected by more than 1 method? • Is there justification for triangulation, or for not triangulating? • Do the methods investigate what they claim to?	No 1 research method was used, no attempts at triangulation were made.
Section 5: analysis	
5.1 Is the data analysis sufficiently rigorous? *For example:* • Is the procedure explicit – is it clear how the data were analysed to arrive at the results? • How systematic is the analysis – is the procedure reliable/dependable? • Is it clear how the themes and concepts were derived from the data?	Reasonably clear Procedure for deriving themes and concepts was explicit and described to some extent.

5.2 Are the data 'rich'? *For example:* • How well are the contexts of the data described? • Has the diversity of perspective and content been explored? • How well have the detail and depth been demonstrated? • Are responses compared and contrasted across groups/sites?	Unclear While attempts were made to make the sample representative – no participants were available from CAMHS service and all participants were volunteers. Responses did not appear to be sufficiently compared and contrasted.
5.3 Is the analysis reliable? *For example:* • Did more than 1 researcher theme and code transcripts/data? • If so, how were differences resolved? • Did participants feed back on the transcripts/data? (if possible and relevant) • Were negative/discrepant results addressed or ignored?	Unclear 3 researchers conducted coding. No information was reported on the process for resolving differences; participants were not asked for feed back on their transcripts.
5.4 Are the findings convincing? *For example:* • Are the findings clearly presented? • Are the findings internally coherent? • Are extracts from the original data included? • Are the data appropriately referenced? • Is the reporting clear and coherent?	Convincing Findings are clearly presented and argument is supported with appropriately referenced data.
5.5 Are the findings relevant to the aims of the study?	Yes
5.6 Are the conclusions adequate? *For example:* • How clear are the links between data, interpretation and conclusions? • Are the conclusions plausible and coherent? • Have alternative explanations been explored and discounted? • Does this study enhance understanding of the research subject? • Are the implications of the research clearly defined? • Is there adequate discussion of any limitations encountered?	Adequate Links between data and conclusions are adequate; implications and limitations of research are discussed briefly. Alternative explanations are not fully discussed.
Section 6: ethics	

6.1 How clear and coherent is the reporting of ethical considerations? *For example:* • Have ethical issues been taken into consideration? • Are ethical issues discussed adequately – do they address consent and anonymity? • Have the consequences of the research been considered; for example, raising expectations, changing behaviour? • Was the study approved by an ethics committee?	Unclear Informed consent noted, no further description.

1.8 METHODOLOGY CHECKLIST: RANDOMISED CONTROLLED TRIALS

Rapid tranquillisation

	Sequence generation	Allocation concealment	Blinding (performance and detection bias)			Missing outcome data (cases not included in analysis)	Selective outcome reporting		Other bias	Funding
			Particip-ants	Providers	Outcome Assessors		Trial registration no.			
Alexander 2004	L	L	H	H	U	U		L	U	Intramural research grants from Fluid Research Fund (Christian Medical College, Vellore) and Cochrane Schizophrenia Group general fund
Allen 2011b	U	U	U	U	U	L	NCT 00369577	H	H	Alexza Pharmaceuticals, Inc.
Baldacara 2011	L	U	L	L	L	U		U	U	N/R
Battaglia 1997	L	U	L	L	L	U		U	U	A grant from Wyeth-Ayerst Research (now Pfizer)
Battaglia 2002	U	U	L	L	L	H		L	H	N/R
Bieniek 1998	L	U	U	U	U	L		U	U	N/R
Breier 2001	U	L	L	L	L	H		U	H	Trial sponsored by drug company
Bristol Myers 2004	U	U	U	U	U	L		H	H	Conducted by drug company (Bristol-Myers Squibb)
Bristol-Myers 2004f	U	L	U	U	U	H		H	H	N/R
Bristol-Myers 2005b	U	U	H	H	L	U		H	H	N/R

Brook 1998a	L	U	H	H	H	L		H	H	Sponsored by drug company
Chan 2013	U	L	L	L	U	U	ACTRN 12607000591459	L	U	The study was supported by the Morson Taylor Research Award 2007 and a project grant from the National Health and Medical Research Council, Australia.
Chouinard 1993	U	U	L	L	L	L		U	H	N/R
Dorevitch 1999	L	U	U	U	U	L		U	U	N/R
Eli 2004	U	U	U	U	U	H		H	H	Sponsored by the manufacturers of olanzapine.
Fitzgerald 1969	U	U	L	L	U	U		U	U	No clear interested funding.
Foster 1997	U	U	U	U	U	U		U	U	A grant from the National Alliance for Research on Schizophrenia and Depression
Fruensgaard 1977	U	U	L	L	L	L		L	U	N/R
Garza-Trevino 1989	U	U	H	H	H	U		U	U	N/R
Guo 2007	U	U	H	H	H	L		H	U	N/R
Han 2005	U	U	U	U	U	U		H	U	N/R
Higashima 2004										N/R
Hsu 2010	U	U	U	U	L	L		H	U	N/R
Huf 2007	L	L	H	H	H	L		L	U	N/R
Hwang 2012	L	U	U	U	U	U	NCT 00797277	U	U	N/R
Katagiri 2013	U	U	U	U	U	L	NCT 00970281	L	U	Trial carried out by drug company
Kewala 1984	U	U	U	U	U	L		U	H	Grant from Roerig

Kwentus 2012	L	U	L	L	U	L	NCT 00721955	U	U	Alexza Pharmaceuticals, Inc.
Lerner 1979	U	H	U	U	U	H		U	U	A grant from the Gralnick Foundation, H Point Hospital, Port Chester, NY
Lesem 2011	L	L	L	L	U	L	NCT 00628589	U	H	Alexza Pharmaceuticals, Inc.
Li 2006	U	U	U	U	U	L		U	U	N/R
Man 1973	H	U	U	U	U	H		L	H	N/R
Meehan 2001	U	U	U	U	U	L		U	H	Study sponsored by Eli Lilly and Company – Lilly Resesarch Laboratories, Lilly Corporate Center, Indianapolis, Indiana
NCT00316238	U	U	U	U	U	L	NCT 00316238		H	Trial sponsored by drug company (Eli Lilly)
NCT00640510	U	U	L	L	L		NCT 00640510			
Nobay 2004	L	L	L	L	L	L		L	H	N/R
Paprocki 1977	U	U	L	L	U	U		L	H	N/R
Qu 1999	U	U	U	U	U	U		U	U	N/R
Raveendran 2007	L	L	H	H	H	U		U	U	N/R
Reschke 1974	U	U	U	U	U	L		L	U	N/R
Resnick 1984	U	L	L	L	U	L		L	H	N/R
Ritter 1972	U	U	L	L	U	L		H	U	N/R
Salzman 1991	U	U	H	U	U	H		U	U	Wyeth Laboratories
Shu 2010	U	U	H	H	L	U		U	H	Sponsored by drug company
Simeon 1975	U	U	L	L	U	L		H	U	N/R
Stotsky 1977	U	U	L	L	L	L		L	H	Sponsored by drug company
Subramaney 1998	U	U	U	U	U	L		U	U	N/R
Taymeeyapradit 2002	U	U	H	H	U	L		L	U	N/R

TREC 2003	L	L	H	H	H	L		L	L	Jointly funded by Fundação Oswaldo Cruz, the Cochrane Schizophrenia Group, the British Council, CAPES (Coordenação de Aperfeiçoamento de Pessoal deNível Superior) and FAPERJ (Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro)
Tuason 1986	U	U	U	H	L	H		H	U	N/R
Veser 2006	U	U	U	U	U	H		U	U	Funded by a grant from Janssen Pharmaceutica
Wang 2004	L	U	H	H	H	H		L	U	N/R
Wright 2001	U	L	U	U	U	U		U	U	Trial sponsored by manufactures of olanzapine intramuscular
Yang 2003	U	U	U	U	U	L		H	U	N/R
Zimbroff 2007	U	U	U	L	U	L		H	H	DL Zimbroff has received research grants from Bristol-Myers Squibb Company
Note. **H = high; L = low; N/R = not reported; U = unclear.**										

Non-pharmacological interventions

	Sequence generation	Allocation concealment	Blinding (performance and detection bias)			Missing outcome data (cases not included in analysis)	Selective outcome reporting		Other bias	Funding
			Participants	Providers	Outcome Assessors		Trial registration no.			
Barrett 2013	L	L	H	H	U	L	ISRCTN11501328	U	L	Medical Research Council, National Institute for Health Research
Bergk 2011	L	U	H	H	U	L		U	H	N/R
Bowers	L	L	U	L	L	U		U	L	National Institute of of Health Research
Huf 2012	L	L	H	H	H	L		U	L	National Institute of Quality Control in Health – Oswaldo Cruz Foundation, University Hospital Clementino Fraga Filho – Federal University of Rio de Janeiro and Instituto Philippe Pinel.
Putkonen 2013	U	U	H	H	U	U		U	L	National Institutes of Health and Welfare
Ruchlewska 2014	L	U	H	L	U	L	7.109	U	L	Dutch organisation for heath research and development (ZonMw) and BavoEuropoort
Swanson 2006	L	U	H	H	L	L		U	L	NIMH and Independent Research Scientist Career Award

***Note*. H = high; L = low; N/R = not reported; U = unclear.**