Topic	Prediction, identification and assessment
Review question	What familial biological and environmental factors are associated with the development of attachment difficulties in children and young people?
Objectives	To identify familial biological and environmental risk factors
Population	Children and young people (aged 0–18 years) with attachment difficulties. Including those who as a result of attachment difficulties: warrant health care intervention have functional impairment Setting for environmental and genetic risk factors • Children in the family home • Children in care • Children who are adopted Strata: • Pre-school (≤4 years) • primary school (>4 to 11 years) • secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home Exclude risk factors: • gender • low birth weight infants • irritable babies
Risk factors may include	Children with the following: Gene expression, for example: • 7-repeat allele on the dopamine D4 receptor (DRD4) gene • -521 C/T promoter polymorphisms • Serotonin transporter gene (5-HTTLPR, ss/sl vs. II genotype) Environmental risk factor examples: • children who have been or are at risk of being maltreated • children with disabilities (learning/physical) • parents in prison • adolescent mothers • frightening or fearful behaviour by the caregiver • marital discord

Topic	Prediction, identification and assessment
	• parents with unresolved and early loss or trauma • parents who have mental health (i.e. depression/substance misuse) problems • families at social disadvantage (e.g. living in poverty) • parents who have been in care themselves and/or have attachment difficulties • parents who had been maltreated • parents have substance abuse disorder (alcohol or drugs)
Comparison	Children not exposed to risk factor
Critical outcomes	Association between risk factor and attachment difficulties
Important, but not critical outcomes	Association between risk factors and the following: • behavioural, cognitive, educational and social functioning. • wellbeing and quality of life • developmental status • criminal outcomes • parenting attitudes/behaviour • placement stability
Study design	Individual patient data meta-analysis Systematic reviews RCTs Observational non-RCT studies Environmental In order to determine whether a particular factor accurately predicts attachment difficulties or attachment disorder, large-scale prospective studies are required that clearly define the risk factor under question and assesses attachment difficulties using a well-validated diagnostic tool. The study must have adjusted for potential confounders. Results from a univariate analysis will not be included. It is important to note that studies that use a simple correlational design simply show that there is a link between factor and outcome but cannot establish whether the factor plays any causal role in the onset of the disorder.
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No

Topic	Prediction, identification and assessment
Minimum sample size	N=20 for primary studies only.
Study setting	• For environmental risk factors: in family home and in-care including adoption. • For genetic risk factors, any setting will be included..
Search strategy	The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts Types of studies to be included: IPD, SR, RCT, observational studies Studies will be restricted to English language only Conference abstracts will be excluded unless there are no other studies available for a particular outcome or question
Searching other resources	
The review strategy	Reviews Cochrane reviews will be quality assessed and presented if deemed relevant and important. Data analysis For genetic risk factors Where appropriate, meta-analysis using a random-effects model will be used to combine results from similar studies. Alternatively, a narrative synthesis will be used. For environmental risk factors Results from risk factor studies are often not combined because different confounders are used. The adjusted numbers reported in the paper will be used. Unadjusted data will not be used. The data will be presented in text as either: • adjusted OR, RR, HR (dichotomous variables) • adjusted regression r2 or β (continuous variables) <u>For observational cohort studies</u>, the quality of the outcome starts at very low quality and will be upgraded if the studies included one of the following: • for continuous outcomes the sample size was ≥400 and for dichotomous outcomes the sample size was ≥300 events. • they adjusted the outcome for confounders • no risk of bias or indirectness based on the criteria of: 1) generalizability of the population, 2) the degree of missing data, 3) if the outcome was measured using a valid or reliable

<table>
<tr><th>Topic</th><th>Prediction, identification and assessment</th></tr>
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tool, 4) if the risk factor was measured adequately, and 5) appropriate statistics were used.

<u>For systematic reviews</u> the quality will be assessed using the following criteria:

how relevant the data was for the review
studies are relevant to the guideline
literature search is rigorous
study quality is assessed
adequate description of the methods

<u>For cross-sectional studies:</u> included in the genetic risk factor reviews the outcome will be downgraded if:

they did not adjust for confounders
heterogeneity was detected
imprecision (see definition)
indirectness in population.
The data was upgraded if: they adjusted for confounders, the effect size was RR>2 or <0.5 or very large RR >5 or <0.2 or a dose response was detected.

Criteria for clinical evidence statements.
Imprecise= 95% CI crosses both line of no effect and measure of appreciable benefit or harm (SMD -0.5/0.5 or RR 0.75/1.25)
Clinical effectiveness= SMD > 0.2, RR <0.75 or >1.25 (but check absolute numbers for anything below)
<table>
<tr><th>Statement</th><th>Precision criteria</th><th>Effect size criteria</th></tr>
<tr><td>No effect</td><td>precise</td><td>RR less than -75/1.25
SMD less than -0.2/0.2</td></tr>
<tr><td>Inconclusive</td><td>imprecise</td><td>RR less than -0.75/1.25
SMD less than -0.2/0.2</td></tr>
<tr><td>Effective but imprecise</td><td>imprecise</td><td>RR greater than 0.75/1.25
SMD greater than -0.2/0.2</td></tr>
<tr><td>Effective but effect size too small to be clinically effective</td><td>precise</td><td>RR less than -75/1.25
SMD less than -0.2/0.2</td></tr>
<tr><td>Effective</td><td>precise</td><td>RR greater than 0.75/1.25
SMD greater than -0.2/0.2</td></tr>
</table>
</td></tr>
</table>

Topic	Prediction, identification and assessment
Heterogeneity (sensitivity analysis and subgroups)	If heterogeneity is found, it will first be explored by preforming a sensitivity analysis eliminating papers that have a high risk of bias. If heterogeneity is still present, the influence of the following subgroups will be considered: • Category of attachment problem (disorganized, insecure anxious ambivalent, insecure anxious-avoidant, attachment disorder- reactive attachment inhibited, reactive attachment disinhibited)

2

Topic	Prediction, identification and assessment
Review question	What process features for taking children and young people into local authority care are associated with an increased or decreased risk of developing or worsening attachment difficulties?
Objectives	To identify process risk factors that are typically not modifiable.
Population	Children and young people (aged 0–18 years) with attachment difficulties. Including those who as a result of attachment difficulties: • warrant health care intervention • have functional impairment **Settings** 1. adopted, including those adopted from abroad 2. looked after children in the care system 3. on the edge of care **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home
Risk factors to consider:	**Examples of process risk factors:** **On edge of care:** • age of placement • taking child's wishes into account **In foster care** • contact with parents

	• geographical distance from parents (same school, visit grandparents) • placement breakdown (placement stability) • cultural match • taking child's wishes into account • placing siblings together • training of foster carers **Adopted** • cultural match
Intervention	• Children exposed to risk factor
Comparison	• Children not exposed to risk factor
Critical outcomes	• Association between risk factor and attachment difficulties or placement stability.
Important, but not critical outcomes	• Association between risk factors and the following: o behavioural, cognitive, educational and social functioning. o wellbeing and quality of life o developmental status o criminal outcomes o parenting attitudes/behaviour
Study design	• Individual patient data meta-analysis • Systematic reviews • Observational non-RCT studies (prospective, retrospective or cross-sectional studies) • Note. RCTs were included if they provided a multiple regression analysis looking at predictors of any relevant outcomes In order to determine whether a particular factor accurately predicts insecure/disorganised attachment or attachment disorder, large-scale prospective studies are required which clearly define the risk factor under question and assess attachment difficulties using a well-validated diagnostic tool. It is important to note that studies that use a simple correlational design simply show that there is a link between factor and outcome but can not establish whether the factor plays any causal role in the onset of the disorder.
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No
Minimum sample size	N=20 for primary studies.
Study setting	• A range of community settings including fostering, residential and kinship care settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings.

	• Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: IPD, SR, RCT, observational studies • Types of studies to be included: RCT, prospective cohort, case-study, cross-sectional • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
Searching other resources	
The review strategy	**Reviews** Cochrane reviews will be quality assessed and presented if deemed relevant and important. **Data analysis** Results from risk factor studies are often not combined because different confounders are used. The adjusted numbers reported in the paper will be used. Unadjusted data will not be used. The data will be presented in forest plots or in text as either: <u>Adjusted risk factors</u> • adjusted OR, RR, HR (dichotomous variables) • adjusted regression r^2 or β (continuous variables) <u>For observational cohort studies</u>, the quality of the outcome starts at very low quality and will be upgraded if the studies included one of the following: • for continuous outcomes the sample size was ≥400 and for dichotomous outcomes the sample size was ≥300 events. • they adjusted the outcome for confounders • no risk of bias or indirectness based on the criteria of: 1) generalizability of the population, 2) the degree of missing data, 3) if the outcome was measured using a valid or reliable tool, 4) if the risk factor was measured adequately, and 5) appropriate statistics were used. <u>For systematic reviews t</u>he quality will be assessed using the following criteria: • how relevant the data was for the review • studies are relevant to the guideline • literature search is rigorous

	• study quality is assessed • adequate description of the methods
Heterogeneity (sensitivity analysis and subgroups)	Heterogeneity will be explored by comparing confounders used in the analysis.

3

Topic	**Prediction, identification and assessment**
Review question	What features of arrangements made for children and young people in each looked-after setting (residential, fostering, kinship care, adoption), secure and education setting are associated with an increase or decrease in the risk of developing or worsening attachment difficulties?
Objectives	To identify arrangement risk factors that may be considered modifiable.
Population	Children and young people (aged 0–18 years) with attachment difficulties. Including those who as a result of attachment difficulties: • warrant health care intervention • have functional impairment **Settings** 1. adopted, including those adopted from abroad 2. looked after children in the care system 3. On the edge of care **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home
Risk factors may include	**Example risk factors** **Foster care** • duration of care • disabilities addressed • children who are returning to live with their parents. • educational disruption • contact with and continuity of social worker • consistency of care by same carer. • stigma of being in care **Adopted** • If adopted vs. foster
Intervention	• Children exposed to risk factor
Comparison	• Children not exposed to risk factor

Critical outcomes	○ Association between risk factor and attachment difficulties and placement stability
Important, but not critical outcomes	• Association between risk factors and the following: ○ behavioural, cognitive, educational and social functioning. ○ wellbeing and quality of life ○ developmental status ○ criminal outcomes ○ parenting attitudes/behaviour
Study design	• Individual patient data meta-analysis • Systematic reviews • Observational non-RCT studies (prospective, retrospective or cross-sectional studies) • Note. RCTs were included if they provided a multiple regression analysis looking at predictors of any relevant outcomes In order to determine whether a particular factor accurately predicts insecure/disorganised attachment or attachment disorder, large-scale prospective studies are required which clearly define the risk factor under question and assess attachment difficulties using a well-validated diagnostic tool. It is important to note that studies that use a simple correlational design simply show that there is a link between factor and outcome but cannot establish whether the factor plays any causal role in the onset of the disorder.
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No
Minimum sample size	N=20 for primary studies only.
Study setting	• A range of community settings including fostering, residential and kinship care settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: IPD, SR, RCT, observational studies • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
Searching other resources	

The review strategy	**Reviews** Cochrane reviews will be quality assessed and presented if deemed relevant and important. **Data analysis** Results from risk factor studies are often not combined because different confounders are used. . The adjusted numbers reported in the paper will be used. Unadjusted data will not be used. The data will be presented in forest plots or in text as either: <u>Adjusted risk factors</u> • adjusted OR, RR, HR (dichotomous variables) • adjusted regression r^2 or β (continuous variables) <u>For observational cohort studies</u>, the quality of the outcome starts at very low quality and will be upgraded if the studies included one of the following: • for continuous outcomes the sample size was ≥400 and for dichotomous outcomes the sample size was ≥300 events. • they adjusted the outcome for confounders • no risk of bias or indirectness based on the criteria of: 1) generalizability of the population, 2) the degree of missing data, 3) if the outcome was measured using a valid or reliable tool, 4) if the risk factor was measured adequately, and 5) appropriate statistics were used. <u>For systematic reviews t</u>he quality will be assessed using the following criteria: • how relevant the data was for the review • studies are relevant to the guideline • literature search is rigorous • study quality is assessed • adequate description of the methods
Heterogeneity (sensitivity analysis and subgroups)	Heterogeneity will be explored by comparing confounders used in the analysis.

Topic	**Prediction, identification and assessment**

Review question	What measurements/tools can be used to predict children and young people at risk of developing attachment difficulties? How valid and reliable are they?
Objectives	To identify valid and reliable tools to predict attachment difficulties
Population	Infants, children and young people (aged 0–18 years) who are at risk of having attachment difficulties. Children at high risk of attachment difficulties may include those exposed to the following risk factors: • children who are or likely to be maltreated (i.e. abuse or neglect) • children who have parents/carers with mental health problems • children who have parents/carers who have been in care themselves • children who parents/carers have substance abuse disorder (alcohol or drugs) • children with disabilities (learning/physical) • are identified by social care services as being at high risk and have had a Core Assessment. **Settings** • adopted, including those adopted from abroad • looked after children in the care system • on the edge of care **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home
Intervention	• Tools for detecting/predicting attachment difficulties the review will assess the validity and reliability of maternal sensitivity tools. **Including** • Ainsworth sensitivity scale (Ainsworth et al., 1974) • CARE-Index (Crittenden, 2001) • Maternal Behaviour Q-Sort (MBQS; Pederson & Moran, 1995
Comparison	• Reference tool
Critical outcomes	• **Sensitivity (Se)**: the proportion of true positives of all cases diagnosed with maternal sensitivity in the population • **Specificity (Sp):** the proportion of true negatives of all cases not-diagnosed with maternal sensitivity in the population.
Important, but not critical outcomes	**VALIDITY** • Concurrent validity, convergent validity, construct validity, content validity, predictive and discriminant validity.

	RELIABIITY • Inter-rater reliability. Intra-rater reliability, test re-test reliability, internal consistency
Study design	RCT Cohort Cross-sectional
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No
Minimum sample size	N=20
Study setting	• A range of community settings including fostering, residential and kinship care settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCT, cohort, cross-sectional • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
Searching other resources	
The review strategy	Forest plots of sensitivity and specificity with their 95% confidence intervals will be presented side-by-side for individual studies using RevMan5 software. To show visually any heterogeneity in study results, sensitivity and specificity will be plotted for each study in receiver operating characteristics (ROC) space in RevMan5. A ROC plot shows true positive rate (i.e. sensitivity) as a function of false positive rate (i.e. 1 – specificity). When data from 5 or more studies are available, a diagnostic meta-analysis will be carried out. To show the differences between study results, pairs of sensitivity and specificity will be plotted for each study on one receiver operating characteristics (ROC) curve in Microsoft EXCEL software. Study results will be pooled using the bivariate method for the direct estimation of summary sensitivity and specificity using a random effects approach (in WinBUGS® software). This model also assesses the variability by incorporating the precision by which sensitivity and specificity have been measured in each study. A confidence ellipse is shown in the graph that indicates the confidence

	region around the summary sensitivity / specificity point. A summary ROC curve is also presented. Note: If there is a variation in thresholds across studies, a summary ROC curve is appropriate to summarise the data. If there is a common threshold across studies, a summary estimate point is best used. From the WinBUGS® output we report the summary estimate of sensitivity and specificity (plus their 95% confidence intervals) as well as between study variation measured as logit sensitivity and specificity as well as correlations between the two measures of variation. The summary diagnostic odds ratio with its 95% confidence interval is also reported. If data cannot be meta-analysed a narrative of results will be included. For prognostic studies, the quality of the data (typically from cross-sectional or cohort studies) will be assessed based on a modified QUADAS checklist that included the following: • potential risks of bias in recruiting the sample population, i.e. if it is unclear what exclusion criteria was used or if they matched cases with controls. • used an indirect population • if the tools or outcomes were poorly described in the paper or if a pre-specified threshold was not used • if interpreter was blind to other results • time between tests is appropriate. For systematic reviews the quality will be assessed using the following criteria: • how relevant the data was for the review • studies are relevant to the guideline • literature search is rigorous • study quality is assessed • adequate description of the methods.
Heterogeneity (sensitivity analysis and subgroups)	If heterogeneity is found, it will be explored by preforming a sensitivity analysis eliminating papers that have a high risk of bias.

Topic	**Prediction, identification and assessment**
Review question	What measurements/tools can be used to identify/assess attachment difficulties in children and young people? How valid and reliable are they?
Objectives	To identify valid and reliable tools to identify/assess attachment difficulties

Population	Infants, children and young people (aged 0–18 years) with attachment difficulties. **Settings** • adopted, including those adopted from abroad • looked after children in the care system • on the edge of care **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home

Intervention	Example of tools that may be considered for measuring attachment difficulties
	• Attachment Q-sort
	• Strange Situation Procedure
	• Cassidy and Marvin Preschool Attachment Coding System
	  • Child attachment interview (CAI)
	  • Preschool Assessment of Attachment (PAA) Spieker & Crittenden (2010)
	  • MCAST
	  • Story Stem assessment ((Saul Hillman – Anna Freud saul.hillman@annafreud.org has details)
	  • School-age Assessment of Attachment (SAA) Crittenden et al (2010)

Comparison	• Reference tool.
Critical outcomes	• **Sensitivity (Se)**: the proportion of true positives of all cases diagnosed with attachment difficulties in the population • **Specificity (Sp):** the proportion of true negatives of all cases not-diagnosed with attachment difficulties in the population.
Important, but not critical outcomes	**VALIDITY** • Concurrent validity, convergent validity, construct validity, content validity, predictive and discriminant validity. . **RELIABIITY** • Inter-rater reliability. Intra-rater reliability, test re-test reliability, internal consistency
Study design	• RCTs • cohort • Cross-sectional
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No

Minimum sample size	N=20
Study setting	• A range of community settings including fostering, residential and kinship care settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCT, cohort, cross-sectional • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
Searching other resources	
The review strategy	Forest plots of sensitivity and specificity with their 95% confidence intervals will be presented side-by-side for individual studies using RevMan5 software. To show visually any heterogeneity in study results, sensitivity and specificity will be plotted for each study in receiver operating characteristics (ROC) space in RevMan5. A ROC plot shows true positive rate (i.e. sensitivity) as a function of false positive rate (i.e. 1 – specificity). When data from 5 or more studies are available, a diagnostic meta-analysis will be carried out. To show the differences between study results, pairs of sensitivity and specificity will be plotted for each study on one receiver operating characteristics (ROC) curve in Microsoft EXCEL software. Study results will be pooled using the bivariate method for the direct estimation of summary sensitivity and specificity using a random effects approach (in WinBUGS® software). This model also assesses the variability by incorporating the precision by which sensitivity and specificity have been measured in each study. A confidence ellipse is shown in the graph that indicates the confidence region around the summary sensitivity / specificity point. A summary ROC curve is also presented. Note: If there is a variation in thresholds across studies, a summary ROC curve is appropriate to summarise the data. If there is a common threshold across studies, a summary estimate point is best used. From the WinBUGS® output we report the summary estimate of sensitivity and specificity (plus their 95% confidence intervals) as well as between study variation measured as logit sensitivity and specificity as well as correlations between the two measures of variation. The summary diagnostic odds ratio with its 95% confidence interval is also reported.

	For diagnostic studies, the quality of the data (typically from cross-sectional or cohort studies) will be assessed based on a modified QUADAS checklist that included the following: • potential risks of bias in recruiting the sample population, i.e. if it is unclear what exclusion criteria was used or if they matched cases with controls. • used an indirect population • if the tools or outcomes were poorly described in the paper or if a pre-specified threshold was not used • if interpreter was blind to other results • time between tests is appropriate. For systematic reviews the quality will be assessed using the following criteria: • how relevant the data was for the review • studies are relevant to the guideline • literature search is rigorous • study quality is assessed • adequate description of the methods
Heterogeneity (sensitivity analysis and subgroups)	If heterogeneity is found, it will be explored by preforming a sensitivity analysis eliminating papers that have a high risk of bias.

6

Topic	**Prevention of attachment disorders and problems**
Review question	What interventions are effective in the prevention of attachment difficulties in children and young people on the edge of care? What are the adverse effects associated with the each intervention?
Objectives	To identify effective interventions for promoting attachment between children and young people and their parents

Population	Children and young people (aged 0–18 years) at risk of developing attachment difficulties and are at on the edge of care. Children on the edge of care are defined as those who:
	• are exposed to risk factors that are likely to bring them to the edge of care. Risk factors may include one or more of the following- children who have:
	  • been or are at risk of being maltreated
	  • parents who have mental health/substance misuse problems
	  • parents who have been in care themselves
	  • parents who have attachment difficulties
	  • families at social disadvantage (e.g. living in poverty)

	• parents in prison • adolescent mothers • experienced domestic abuse • are identified by social care services as being at high risk and have had a Core Assessment. **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home • children in care or who are adopted.
Intervention	• Videofeedback (including Attachment based interventions) • Parent Training, Education and Support • Parent Sensitivity and Behaviour Training • Multidimensional Treatment Programme • Home Visiting • Psychotherapy • Cognitive Behavioural Therapy • Counselling **Focus may be:** • child focused • parent focused • parent-child based
Comparison	• Usual care (includes waiting list or no intervention) • Or another intervention
Exclude	**Exclude**: • any intervention where the risk of the child going into care cannot be attributed to the parent. i.e. children with conduct disorder/behavioural problems and whose parents do not display any of the risk factors. • any intervention where the child has attachment difficulties but there is **no risk of them going into care** (i.e. their parents do not display any of the risk factors). • any interventions where the aim of study is not to improve attachment (i.e. interventions for mental health problems in the mother e.g. CBT for postnatal depression, that may include outcomes of mother-infant relationship) • interventions that do not target an at risk population and aims at improving mother-infant attachment in low birth weight/irritable/preterm infants (which can include kangaroo care/skin-to-skin contact). • any study where they do not measure one or more of the critical outcomes
Critical outcomes	• attachment (secure, insecure, disorganised) • maternal sensitivity • maternal responsiveness

	• placements breakdown
Important, but not critical outcomes	• behavioural, cognitive, educational and social functioning. • wellbeing and quality of life • developmental status • criminal outcomes • parenting attitudes/behaviour
Study design	• Systematic reviews • RCTs
Include unpublished data	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date	No. We will only be contacting authors for missing data that are published within the last 10 years.
Minimum sample size	N=20
Study setting	• A range of community settings including fostering, residential, kinship care and adoption settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCTs, systematic reviews. • Studies will be restricted to English language only • Conference abstracts will be excluded unless there are no other studies available for a particular outcome or question
Search status	SR, RCT — **Started** ☐ **Completed** ☒ Status
Search dates	SR: 1998 to March 2014 RCT: Inception to March 2014
Searching other resources	

The review strategy	**Reviews** Cochrane reviews will be quality assessed and presented if deemed relevant and important. If other reviews are found, the GDG will assess their quality, completeness, and applicability to the NHS and to the scope of the guideline. If the GDG agree that a systematic review appropriately addresses a review question, we will search for studies conducted or published since the review was conducted. If new studies could change the conclusions, we will update the review and conduct a new analysis. If new studies could not change the conclusions of an existing review, the GDG will use the existing review to inform their recommendations. **Data analysis** Where appropriate, meta-analysis will be used to combine results from similar studies. Alternatively, a narrative synthesis will be used. Therapeutic approaches based on similar theories will be grouped together where possible. <u>For randomised controlled trials</u> For risk of bias, outcomes will be downgraded if the randomisation and/or allocation concealment methods are unclear or inadequate. Outcomes will also be downgrade if no attempts are made to blind the assessors or participants in some way, i.e. by either not knowing the aim of the study or the result from other tests. Outcomes will also downgraded if there is considerable missing data (see below). <u>Handling missing data</u>: • if information on missing participants cannot be retrieved, their data was excluded from both the numerator and denominator when calculating the relative risk in the trial. This is known as complete case analysis or available case analysis. • outcomes were downgraded if there was a dropout of more than 20%, or if there was a difference of >20% between the groups. <u>For heterogeneity</u>: outcomes will be downgraded once if I^2>50%, twice if I^2 >80% <u>For imprecision</u>: outcomes will be downgraded if: Step 1: If the 95% CI is imprecise i.e. crosses 0.75 or 1.25 (dichotomous) or -0.5 or 0.5 (for continuous). Outcomes were downgrade one or two levels depending on how many lines it crosses. Step 2: If the clinical decision threshold is <u>not</u> crossed, consider whether the criterion for Optimal Information Size is met, if not downgrade one level for the following. • for dichotomous outcomes: <300 events • for continuous outcomes: <400 participants

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For clinical effectiveness the following criteria was used:

SMD <0.2 too small to likely show an effect
SMD 0.2 small effect
SMD 0.5 moderate effect
SMD 0.8 large effect

RR <0.75 or >1.25 clinical benefit
Anything less (RR >0.75 and <1.25), the absolute numbers were looked at to make a decision on whether there may be a clinical effect.

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If heterogeneity is found, it will first be explored by preforming a sensitivity analysis eliminating papers that have a high risk of bias.

If heterogeneity is still present, the influence of the following subgroups will be considered:

Duration of treatment
Different tools that measure the same or similar outcomes

</td></tr>
<tr><td>Notes</td><td>
For studies in children with behavioural problems, studies will be included if the parent's insensitivity is suspected to be the cause of the child's difficulties. i.e. the intervention aims to treat the relationship that is thought to be the cause of the child's disturbance in the first place.

For studies that a ≥3 armed trial, the interventions will be considered separately relative to the control arm.

A particular focus will be made on children who have been maltreated since they are high risk of going into care.
</td></tr>
</table>

Topic	**Prevention of attachment disorders and problems**
Review question	What interventions are effective in the prevention of attachment difficulties in children and young people being looked-after? What are the adverse effects associated with each intervention?

Objectives	To identify effective interventions to prevent attachment difficulties in children in the early stages of being looked after.
Population	Infants, children and young people (aged 0–18 years) who are being looked after. **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home • at high risk of being looked after • adopted children
Intervention	• Video feedback (including Attachment based interventions) • Parent Training, Education and Support • Parent Sensitivity and Behavioural Training • Multidimensional Treatment Programme • Foster care with parental support • Home Visiting • Psychotherapy • Cognitive Behavioural Therapy **Focus may be:** • **child focused** • **parent focused** (e.g., Developmental Education for Families; Family group conferencing therapy) • **parent-child based** (e.g., Infant-parent psychotherapy, Toddler-Parent Psychotherapy)
Comparison	• Usual care
Critical outcomes	• disorganised attachment and/ or attachment difficulties • maternal sensitivity • maternal responsiveness • placement breakdown
Important, but not critical outcomes	• behavioural, cognitive, educational and social functioning. • wellbeing and quality of life • developmental status • criminal outcomes • parenting attitude/knowledge/behaviour (these are measure outcomes at the level of the parent rather than the interaction – correct me if that seems wrong - include parental commitment here) • parenting stress/mental well-being (these are all the measures of the parent's wellbeing).
Study design	**Hierarchy of evidence** • Systematic reviews (Cochrane review Macdonald 2007) • RCTs Note: Only include papers that measure one or more of the critical outcomes

	Note: In contrast to those children at risk of going into care, the foster/adoptive parents may not be insensitive or a contributing cause of the child's attachment disorder, but nevertheless the child has not developed a selective attachment relationship to them.
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No
Minimum sample size	N=20
Study setting	• A range of community settings including fostering, residential, kinship care and adoption settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCT, systematic reviews • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
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Search dates	SR: 1998 to January 2014 RCT: Inception to January 2014
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Search status	SR, RCT — **Started** ☐ **Completed** ☒ Status
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	RCT	Inception to January 2014
The review strategy	**Reviews** Cochrane reviews will be quality assessed and presented if deemed relevant and important. If other reviews are found, the GDG will assess their quality, completeness, and applicability to the NHS and to the scope of the guideline. If the GDG agree that a systematic review appropriately addresses a review question, we will search for studies conducted or published since the review was conducted. If new studies could change the conclusions, we will update the review and conduct a new analysis. If new studies could not change the conclusions of an existing review, the GDG will use the existing review to inform their recommendations. **Data analysis** Where appropriate, meta-analysis will be used to combine results from similar studies. Alternatively, a narrative synthesis will be used. Therapeutic approaches based on similar theories will be grouped together where possible. Different tools that measure the same or similar outcomes will also be grouped together where possible. <u>For randomised controlled trials</u> For risk of bias, outcomes will be downgraded if the randomisation and/or allocation concealment methods are unclear or inadequate. Outcomes will also be downgrade if no attempts are made to blind the assessors or participants in some way, i.e. by either not knowing the aim of the study or the result from other tests. Outcomes will also downgraded if there is considerable missing data (see below). <u>Handling missing data</u>: • if information on missing participants cannot be retrieved, their data was excluded from both the numerator and denominator when calculating the relative risk in the trial. This is known as complete case analysis or available case analysis. • outcomes were downgraded if there was a dropout of more than 20%, or if there was a difference of >20% between the groups. <u>For heterogeneity</u>: outcomes will be downgraded once if I^2>50%, twice if I^2 >80% <u>For imprecision</u>: outcomes will be downgraded if: Step 1: If the 95% CI is imprecise i.e. crosses 0.75 or 1.25 (dichotomous) or -0.5 or 0.5 (for continuous). Outcomes were downgrade one or two levels depending on how many lines it crosses. Step 2: If the clinical decision threshold is <u>not</u> crossed, consider whether the criterion for Optimal Information Size is met, if not downgrade one

level for the following.

- for dichotomous outcomes: <300 events
- for continuous outcomes: <400 participants

For clinical effectiveness the following criteria was used:

- SMD <0.2 too small to likely show an effect
- SMD 0.2 small effect
- SMD 0.5 moderate effect
- SMD 0.8 large effect

- RR <0.75 or >1.25 clinical benefit
  Anything less, the absolute numbers were looked at to make a decision on whether there may be a clinical effect

For evidence statements

Statement	Precision criteria	Effect size criteria
No effect	precise	RR less than -75/1.25 SMD less than -0.2/0.2
Inconclusive	imprecise	RR less than -0.75/1.25 SMD less than -0.2/0.2
Effective but imprecise	imprecise	RR greater than 0.75/1.25 SMD greater than -0.2/0.2
Effective but effect size too small to be clinically effective	precise	RR less than -75/1.25 SMD less than -0.2/0.2
Effective	precise	RR greater than 0.75/1.25 SMD greater than -0.2/0.2

Heterogeneity (sensitivity analysis and subgroups)	If heterogeneity is found, it will first be explored by preforming a sensitivity analysis eliminating papers that have a high risk of bias. If heterogeneity is still present, the influence of the following subgroups will be considered: • Duration of treatment

Topic	Prevention of attachment disorders and problems
Review question	What interventions are effective in the prevention of attachment difficulties in children and young people who have been adopted from care? What are the adverse effects associated with each intervention?
Objectives	To identify effective interventions to prevent attachment difficulties in children who have been adopted from care.
Population	Infants, children and young people (aged 0–18 years) who have been adopted from care. **Strata:** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary

	school (>11 to 18 years)
Exclude	• Children and young people with attachment difficulties and are not looked after, or who are adopted from outside of the care system • at high risk of being looked after (commonly, infants, children or young people who are being considered for care proceedings or are subject to them) • in the early stages of care
Intervention	• Video feedback (including Attachment based interventions) • Parent Training, Education and Support • Parent Sensitivity and Behavioural Training • Multidimensional Treatment Programme • Home Visiting • Psychotherapy • Cognitive Behavioural Therapy **Focus may be:** • child focused • parent focused • parent-child based
Comparison	• Usual care
Critical outcomes	• attachment difficulties or attachment disorder • maternal sensitivity • maternal responsiveness • placement breakdown
Important, but not critical outcomes	• behavioural, cognitive, educational and social functioning. • wellbeing and quality of life • developmental status • criminal outcomes • parenting attitude/knowledge/behaviour • parenting stress/mental well being
Study design	**Hierarchy of evidence** • Systematic reviews (Cochrane review Macdonald 2007) • RCTs Note: Only include papers that measure one or more of the critical outcomes Note: In contrast to those children at risk of going into care, the foster/adoptive parents may not be insensitive or a contributing cause of the child's attachment disorder, but nevertheless the child has not developed a selective attachment relationship to them
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No
Minimum sample size	N=20
Study setting	• A range of community settings including fostering, residential and kinship care settings.

	• Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCT, systematic reviews • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
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also be downgrade if no attempts are made to blind the assessors or participants in some way, i.e. by either not knowing the aim of the study or the result from other tests. Outcomes will also downgraded if there is considerable missing data (see below).

Handling missing data:

- if information on missing participants cannot be retrieved, their data was excluded from both the numerator and denominator when calculating the relative risk in the trial. This is known as complete case analysis or available case analysis.
- outcomes were downgraded if there was a dropout of more than 20%, or if there was a difference of >20% between the groups.

For heterogeneity: outcomes will be downgraded once if I^2>50%, twice if I^2 >80%

For imprecision: outcomes will be downgraded if:

Step 1: If the 95% CI is imprecise i.e. crosses 0.75 or 1.25 (dichotomous) or -0.5 or 0.5 (for continuous). Outcomes were downgrade one or two levels depending on how many lines it crosses.

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- for dichotomous outcomes: <300 events
- for continuous outcomes: <400 participants

For clinical effectiveness the following criteria was used:

- SMD <0.2 too small to likely show an effect
- SMD 0.2 small effect
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Effective but effect size too small to be clinically effective	precise	RR less than -75/1.25 SMD less than -0.2/0.2
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Heterogeneity (sensitivity analysis and subgroups)	If heterogeneity is found, it will first be explored by preforming a sensitivity analysis eliminating papers that have a high risk of bias. If heterogeneity is still present, the influence of the following subgroups will be considered: • Duration of treatment		

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Topic	**Treatment of disorganised attachment and attachment disorders**
Review question	What psychological interventions are effective in the management of children and young people with attachment difficulties? What are the adverse effects associated with each intervention?
Objectives	To identify effective psychological interventions to treat attachment difficulties.
Population	Infants, children and young people (aged 0–18 years) with attachment difficulties, including those:. • Adopted from care • Looked after children and young people • Children on the edge of care **Strata** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home
Intervention	• Video feedback (including Attachment based interventions) • Parent Training, Education and Support • Parent Sensitivity and Behavioural Training • Multidimensional Treatment Programme • Foster care with parental support • Home Visiting • Psychotherapy • Cognitive Behavioural Therapy
Comparison	• Usual care
Critical outcomes	• attachment difficulties or attachment disorder • maternal sensitivity • maternal responsiveness • placement breakdown
Important, but not critical outcomes	• behavioural, cognitive, educational and social functioning. • wellbeing and quality of life • developmental status • criminal outcomes

	• parenting attitude/knowledge/behaviour • parenting stress/mental well being
Study design	**Hierarchy of evidence** • Systematic reviews (Cochrane review Macdonald 2007) • RCTs Note: Only include papers that have measured one or more of the critical outcomes
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Restriction by date?	No
Minimum sample size	N=20
Study setting	• A range of community settings including fostering, residential and kinship care settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings such as teacher training, support staff, contact arrangement, the number of key workers
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCT, systematic reviews • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
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12

Topic	**Treatment of disorganised attachment and attachment disorders**
Review question	What pharmacological interventions are effective in the treatment of children and young people with attachment difficulties? What are the adverse effects associated with each intervention?
Objectives	To identify effective pharmacological interventions to treat attachment difficulties.
Population	Infants, children and young people (aged 0–18 years) with insecure/disorganised attachment or attachment disorder **Strata** • Pre-school (≤4 years), primary school (>4 to 11 years), secondary school (>11 to 18 years)
Exclude	• children and young people who are adopted from outside of the care system exclude • children who are looked after on a planned temporary basis and subsequently return home
Intervention	○ Pharmacological intervention ○ May include: Fluoxetine, Seroxat, Methylphenidate, Melatonin, Oxytocin.

	Recipients may include: ○ Carer ○ Child ○ Carer and child
Comparison	• Placebo • Or one of the other comparisons
Critical outcomes	• attachment difficulties or attachment disorder • maternal sensitivity • maternal responsiveness • placement breakdown
Important, but not critical outcomes	• behavioural, cognitive, educational and social functioning. • wellbeing and quality of life • developmental status • criminal outcomes • parenting attitude/knowledge/behaviour • parenting stress/mental well being
Study design	**Hierarchy of evidence** • Systematic reviews • RCTs
Include unpublished data?	Unpublished data will only be included where a full study report is available with sufficient detail to properly assess the risk of bias. Authors of unpublished evidence will be asked for permission to use such data, and will be informed that summary data from the study and the study's characteristics will be published in the full guideline
Restriction by date?	No
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Study setting	• A range of community settings including fostering, residential and kinship care settings. • Looked after under Section 20 of Children's Act. • Primary care settings. • Secondary care settings. • Secure settings • All educational settings
Search strategy	• The databases to be searched include: CENTRAL, Embase, MEDLINE, PsycINFO, Social Care Online, ChildData, PsycInfo, ASSIA, British Education Index and Social Services Abstracts • Types of studies to be included: RCT, systematic reviews • Studies will be restricted to English language only • Abstracts will be excluded unless there are no other studies available for a particular outcome or question
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