

**APPENDIX B**

**NICE Nocturnal Enuresis / Bedwetting Guideline: Key clinical Questions and Search Strategies**

***Background link between the scope and questions***

Questions listed have been developed in relation to the clinical areas covered in the NICE NE guideline scope. Each question has been written to cover a specific dimension of an area in the scope. The questions have been developed by the technical team in consultation with the clinical advisor who has provided guidance on wording and clinical relevance of the specific questions.

The questions are structured according to the PICO format, i.e. they consist of the **population, intervention(s), comparison(s), and outcome(s)** of interest to the guideline developers. The purpose of formatting questions in this style is so that structured literature searches of relevant electronic databases (e.g. Medline, Embase, CINAHL) can be developed by information scientists in order to identify relevant research studies.

Each question is essentially a topic for an individual systematic review conducted during the development phase of the guideline. Questions shaded in grey are to be combined and those in light blue are confirmed.

<b><i>Clinical Question</i></b>	<b><i>Type of Study</i></b>	<b><i>Population</i></b>	<b><i>Intervention</i></b>	<b><i>Comparator</i></b>	<b><i>Proposed Outcome</i></b>
<b>Assessment</b>					
What are the <b>core elements of initial clinical history and examination</b> , in the evaluation of children and young people under 19 years old who have nocturnal enuresis (bedwetting) ?  <b>General evidence review on assessment.</b>	Non-RCT studies	Children and young people under 19 years old who have nocturnal enuresis (bedwetting) Sub group to include patients with:  Special needs (learning disabilities, emotional and ADHD)	History taking and examination	None	Excluding secondary causes  Establish pattern of wetting to include:  Overactive bladder  Constipation
What are the <b>core</b>	Non-RCT studies	Children and young people under 19 years old who have nocturnal	Laboratory urine / blood tests	None	Excluding secondary causes

APPENDIX B- NICE Nocturnal Enuresis / Bedwetting Guideline: Key clinical Questions and Search Strategies

<p><b>laboratory urine / blood tests</b> in the evaluation of children and young people under 19 years old who have nocturnal enuresis (bedwetting) ? <b>General evidence review on assessment</b></p>		<p>enuresis (bedwetting)</p>		<p>Other diagnostic tool</p>	<p>Establish pattern of wetting to include  Overactive bladder</p>
<p>What is the incremental benefit and cost effectiveness of <b>radiological examination</b> , in the evaluation of children and young people under 19 years old who have nocturnal enuresis (bedwetting) ? <b>General evidence review on assessment</b></p>	<p>Non-RCT studies</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Therapy resistant children</p> <p>Daytime symptoms</p> <p>UTI</p> <p>Constipation</p>	<p>Radiological examinations (e.g. ultrasound)</p>	<p>None</p> <p>Other diagnostic tool</p>	<p>Excluding secondary causes</p> <p>Establish pattern of wetting to include</p> <p>Overactive bladder</p>
<p>What are the core <b>elements of bladder diaries and other assessment tools</b>, in the evaluation of children and young</p>	<p>Non-RCT studies</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p>	<p>Bladder diaries and other tools</p>	<p>None</p> <p>Other diagnostic tool</p>	<p>Excluding secondary causes</p> <p>Establish pattern of wetting to include</p> <p>Overactive bladder</p>

APPENDIX B- NICE Nocturnal Enuresis / Bedwetting Guideline: Key clinical Questions and Search Strategies

<p>people under 19 years old who have nocturnal enuresis?</p> <p><b>General evidence review on assessment</b></p>					
<p>How should a <b>psychological assessment</b> be conducted, in the evaluation of children and young people under 19 years old who have nocturnal enuresis (bedwetting) ?</p> <p><b>General evidence review on assessment</b></p>	<p>Non-RCT studies</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p>	<p>Psychological assessment</p>	<p>None</p> <p>Other diagnostic tool</p>	<p>Excluding secondary causes</p> <p>Establish pattern of wetting to include</p> <p>Overactive bladder</p>
<p><b>Support and follow up/ relapse prevention</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>				
<p>What is the clinical and cost effectiveness of <b>support and follow</b></p>	<p>RCT for general NE population</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p>	<p>Support and follow up for patients</p>	<p>No support or follow up</p>	<p>Continued success</p> <p>Relapse prevention</p> <p>Psychological effects(self-esteem,</p>

<p>up care for children and young people under 19 years old who have nocturnal enuresis (bedwetting) ?</p> <p><b>No evidence identified</b></p>	<p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>	<p>Day time symptoms</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and ADHD)</p> <p>Severe wetting (6-7 nights a week)</p> <p>Previously successful and with subsequent relapse</p>			<p>self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop out</p>
<p>What is the clinical and cost effectiveness of <b>support and follow up care for the parents and carers of children and young people</b> under 19 years old who have nocturnal enuresis (bedwetting) ?</p> <p><b>No evidence identified</b></p>	<p>RCT for general NE population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p>Day time symptoms</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and ADHD)</p> <p>Severe wetting (6-7 nights a week)</p> <p>Previously successful and with subsequent relapse</p>	<p>Support and follow up for parents and carers</p> <p>Support groups</p>	<p>No support or follow up</p>	<p>Continued success</p> <p>Relapse prevention</p> <p>Psychological effects(self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop out</p>
<p>What is the clinical and cost effectiveness of <b>relapse prevention strategies for children and young people</b> under 19 years old who have nocturnal enuresis (bedwetting) ?</p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p>Day time symptoms</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and ADHD)</p> <p>Severe wetting (6-7 nights a week)</p> <p>Previously successful and with subsequent relapse</p>	<p>Relapse prevention strategies ( e.g. follow-up, over-learning specifically to alarms, intermittent use, sudden or slow withdrawal)</p> <p>Drug or alarm</p>	<p>No relapse prevention strategies</p>	<p>Continued success</p> <p>Relapse prevention</p> <p>Psychological effects(self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop out</p>

APPENDIX B- NICE Nocturnal Enuresis / Bedwetting Guideline: Key clinical Questions and Search Strategies

<p><b>No evidence identified</b></p>						
<p>What is the clinical and cost effectiveness of <b>treating relapses in previously successful in children and young people</b> under 19 years old who have nocturnal enuresis (bedwetting) ?</p> <p><b>No evidence identified</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>	<p>General NE (bedwetting) population</p>				
<p>What is clinical and cost effectiveness of <b>additional investigation and treatment in children</b> who have not responded to an adequate trial of both desmopressin and or alarms?</p>	<p>RCT for general NE population (bedwetting)</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting) who have been unsuccessful in previous treatments</p> <p>Sub groups to include patients with:</p> <p>Day time symptoms</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and ADHD)</p> <p>Severe wetting (6-7 nights a week)</p>	<p>Psychological assessments</p> <p>Radiological investigations</p> <p>Treatment for second time-query any other treatments</p>		<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>	
<p><b>Patient Choice</b></p>						<p>To consider special needs children</p>
<p>In children and</p>	<p><b>Survey,</b></p>	<p>Children and young</p>	<p>Patient and</p>	<p>Patient</p>	<p>Reduction/change in</p>	<p>Looking for</p>

APPENDIX B- NICE Nocturnal Enuresis / Bedwetting Guideline: Key clinical Questions and Search Strategies

<p>young people with nocturnal enuresis (bedwetting), how does <b>patient or parent/carer choice over treatment</b> intervention influence treatment outcomes?</p> <p><b>Evidence Review</b></p>	<p><b>Interviews</b></p>	<p>people under 19 years old who have nocturnal enuresis (bedwetting) Sub groups to include patients with:</p> <p>Day time wetting, urinary urgency and frequency</p> <p>No day time symptoms (monosymptomatic NE)</p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>	<p>carer choice</p>	<p>choice compared to parent/carer choice compared to clinician choice</p>	<p>number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>	<p>patient preference trials, otherwise extrapolations, narrative etc.</p>
<p><b>Family Impact</b></p>						
<p>What is the <b>family impact</b> of children and young people aged under 19 who have Nocturnal Enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>Surveys, Interviews</p>	<p>All groups</p>				
<p><b>Under 5 Year olds</b></p>						
<p>What are the <b>predictive, prevention, and</b></p>	<p>RCT for general NE</p>	<p>General NE (bedwetting)population</p>				

<p><b>treatment options for 5-7 year olds?</b></p> <p><b>Evidence Review</b></p>	<p>(bedwetting)population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Bladder dysfunction</p>									
<p><b>Complex behavioural</b></p>						<p>What is the clinical and cost effectiveness of <b>dry bed training</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>RCT for general NE (bedwetting)population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data.</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p>Day time wetting, urinary urgency and frequency</p> <p>No day time symptoms (monosymptomatic NE)</p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Constipation</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional</p>	<p>Dry bed training</p> <p>Core components: -regular waking -drinking -with or without alarm</p> <p>(will need to further define but from Cochrane reviews: waking each hour, cleanliness training, positive practice)</p> <p>Full spectrum training (alarm with retention control, overlearning, cleanliness training)</p>	<p>No treatment</p> <p>Alarms</p> <p>Other treatment</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>

		<p>and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			
<b>Simple behavioural</b>					
<p>What is the clinical and cost effectiveness of <b>bladder training / retention control training</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting) Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p>	<p>Daytime bladder training</p> <p>Retention control training</p>	<p>No treatment</p> <p>Other treatment</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>



		<p>Constipation</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			
<p>What is the clinical and cost effectiveness of <b>fluid and dietary advice</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of</p>	<p>Night time fluid restriction</p> <p>Increasing day time fluids</p> <p>Diet advice</p> <p>Diet or food restriction</p>	<p>No treatment</p> <p>Other treatment</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>

		<p>dilute urine in the first 1/3 of the night.</p> <p>Constipation</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			
<p>What is the clinical and cost effectiveness of <b>star charts and other reward systems</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of</p>	<p>Star charts and other reward systems</p>	<p>No treatment</p> <p>Other treatment</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p> <p>Behaviour changes</p>

		<p>dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			
<b>Alarms</b>					
<p>What is the clinical and cost effectiveness of <b>alarms</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p>	<p>Alarm alone (body worn, bed, vibrating, wireless, voice recorded, multi-tone, bell and pad)</p>	<p>No treatment;</p> <p>Alarm and drugs (Desmopressin, Imipramine, amitriptyline, nortriptaline, anticholinergic oxybutinin, long-acting tolterodine)</p> <p>Drugs (Desmopressin, Imipramine, amitriptyline, nortriptaline, anticholinergic oxybutinin, long-acting tolterodine)</p> <p>Other treatment; Alarm with behavioural treatment (dry bed training)</p> <p>Complementary therapies</p> <p>Standard advice/care</p> <p>Alarm and support</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events (sleep disruption, false alarms, drop-outs)</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p>

		<p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			Drop-outs
<b>Drugs</b>					
<p>What is the clinical and cost effectiveness of <b>desmopressin (nasal, tablets and melts)</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis</p> <p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time</b></p>	<p>Desmopressin</p> <p>Nasal, tablets and melts (N.B. nasal not licensed for NE but much evidence from this area)</p>	<p>No treatment</p> <p>Other treatment (alarm, desmo combined with anticholinergic-oxibutinin, alarm combined with desmopressin, imipromine)</p> <p>Placebo</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events (fluid retention, constipation)</p> <p>Psychological effects</p>

		<p><b>symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Children with sickle cell disease</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			<p>(self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
<p>What is the clinical and cost effectiveness of <b>desmopressin (nasal, tablets and melts)</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>(High versus Low</b></p>	<p>Additional Searches- Non-RCT studies (CCT, cohort level)</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting) Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptoma</b></p>	<p>Desmopressin</p> <p>Nasal, tablets and melts (N.B. nasal not licensed for NE but much evidence from this area)</p>	<p>No treatment</p> <p>Other treatment (alarm, desmo combined with anticholinergic- oxibutinin, alarm combined with desmopressin, imipromine</p> <p>Placebo</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events (fluid retention, constipation)</p>

<p><b>Dosages)</b></p> <p><b>Evidence Review</b></p>		<p><b>tic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Children with sickle cell disease</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			<p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
<p>What is the clinical and cost effectiveness of <b>tricyclic drugs</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary</b></p>	<p>Tricyclic drugs – Imipramine, amitriptyline, nortriptyline.</p>	<p>No treatment</p> <p>Other treatment</p> <p>Placebo</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p>

<p><b>Evidence Review</b></p>		<p><b>urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Children with sickle cell disease</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			<p>Adverse events (fluid retention, constipation)</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
<p>What is the clinical and cost effectiveness of <b>anticholinergic drugs</b> for children and young people under 19 years old who have nocturnal enuresis</p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level)</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p>	<p>Oxybutinin (licensed)</p> <p>Long-acting Tolterodine (not licensed) is in the BNF for children</p>	<p>No treatment</p> <p>Other treatment</p> <p>Placebo</p> <p>Combination</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p>

<p>(bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>for subgroup data</p>	<p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Children with sickle cell disease</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			<p>Dry for 2 consecutive years?</p> <p>Adverse events (fluid retention, constipation)</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
<p>What is the clinical and cost effectiveness of <b>dose escalation in oxybutinin</b> for children and young people</p>	<p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p>	<p>Oxybutinin (licensed) is in the BNF for children</p>	<p>No treatment</p> <p>Other treatment</p> <p>Placebo</p> <p>Combination</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive</p>



<p>under 19 years old who have nocturnal enuresis (bedwetting)</p> <p><b>Evidence Review</b></p>		<p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Children with sickle cell disease</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			<p>months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events (fluid retention, constipation)</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
--	--	---	--	--	---

<p>What is the clinical and cost effectiveness of <b>dose escalation in imipramine</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p><b>Evidence Review</b></p>	<p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting) Sub groups to include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Children with sickle cell disease</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with</p>	<p>Imipramine</p>	<p>No treatment</p> <p>Other treatment</p> <p>Placebo</p> <p>Combination</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events (fluid retention, constipation)</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
--	--	--	-------------------	--	--

		subsequent relapse			
<b>Education / psychological interventions</b>					
<p>What is the clinical and cost effectiveness of <b>educational/information interventions</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p> <p>What are the <b>educational needs</b> of children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p> <p><b>No evidence identified.</b></p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p>Special needs (learning disabilities, emotional and ADHD)</p>			
<p>What is the clinical and cost effectiveness of <b>psychological interventions</b> for children and young people under 19 years old who have nocturnal enuresis (bedwetting)?</p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level) for subgroup data</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p> <p><b>Day time wetting, urinary</b></p>			

<p><b>Evidence Review</b></p>		<p><b>urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>			
<p><b>Alternative interventions</b></p>					
<p>What is the clinical and cost effectiveness of alternative interventions for children and young people under 19 years</p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to</p>	<p>Acupuncture</p> <p>Hypnotherapy</p> <p>Chiropractic</p> <p>Homeopathy</p>	<p>No treatment</p> <p>Other treatment</p> <p>Placebo / sham acupuncture</p>	<p>Reduction/change in number of wet nights</p> <p>Dry for 14 consecutive nights</p> <p>Dry for 6 consecutive months (continuing</p>

<p>old who have nocturnal enuresis (bedwetting)?</p> <p><b>Evidence Review</b></p>	<p>studies (CCT, cohort level) for subgroup data</p>	<p>include patients with:</p> <p><b>Day time wetting, urinary urgency and frequency (polissymptomatic)</b></p> <p><b>No day time symptoms (monosymptomatic NE)</b></p> <p>Nocturnal Poliuria- large amounts of dilute urine in the first 1/3 of the night.</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and behavioural e.g. ADHD)</p> <p>Secondary onset</p> <p>Severe wetting (6-7 nights a week)</p> <p>Family history</p> <p>Previously successful with alarm and with subsequent relapse</p>	<p>Cranial osteopathy</p> <p>Reflexology</p>		<p>success)</p> <p>Dry for 2 consecutive years?</p> <p>Adverse events</p> <p>Psychological effects (self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p> <p>Drop-outs</p>
<p>What is the clinical and cost effectiveness of the treatment for children and young people aged under 19 years of age who have nocturnal enuresis</p>	<p>RCT for general NE (bedwetting) population</p> <p>Non-RCT studies (CCT, cohort level)</p>	<p>Children and young people under 19 years old who have nocturnal enuresis (bedwetting)</p> <p>Sub groups to include patients with:</p>	<p>Drug, alarm or any other intervention listed under the KCQs</p>	<p>No treatment</p> <p>Other treatment</p>	<p>Continued success</p> <p>Response/ partial response</p> <p>Psychological effects(self-esteem, self-concept, PinQ)</p> <p>Quality of life measure</p>

APPENDIX B- NICE Nocturnal Enuresis / Bedwetting Guideline: Key clinical Questions and Search Strategies

<p>(bedwetting) and <b>who do not respond to initial treatment with desmopressin and / or enuresis alarms)?</b></p> <p><b>Evidence Review</b></p>	<p>for subgroup data.</p>	<p>Day time symptoms</p> <p>Young (under 7 years)</p> <p>Special needs (learning disabilities, emotional and ADHD)</p> <p>Severe wetting (6-7 nights a week)</p> <p>Previously successful and with subsequent relapse</p>			<p>Drop out</p>
---	---------------------------	---	--	--	-----------------

## Nocturnal enuresis (bedwetting) search strategies

The strategies were developed for use on the OVID interface and Search 2 via NLH . The following databases were searched: Cochrane Database of Systematic Reviews (CDSR), Database of Abstracts of Reviews of Effects (DARE), Health Technology Assessment Database (HTA), MEDLINE, EMBASE, CENTRAL, CINAHL and PsycINFO .

The Economic literature was searched using an economic and quality of life filter developed by SchARR for Medline and EMBASE. The following were searched: NHS Economic Evaluations Database (NHSEED), MEDLINE, and EMBASE.

Searches were conducted for systematic reviews and randomised controlled trials using search filters developed by the Centre for Reviews and Dissemination, SIGN and Cochrane Collaboration. Additional searches were undertaken for studies of other designs.

Copies of all the search strategies are available on request from the National Clinical Guidelines Centre.

CENTRAL database via Cochrane Library Issue 4 2008

Searched 14/10/08 update 13/11/09

#1 MeSH descriptor Nocturnal Enuresis explode all trees

#2 (betwett\* or (bed near/2 wett\*)):ti,ab

#3 (nocturna\* near/2 (enuresis or enuretic\* or incontinence)):ti,ab

#4 (night\* near/2 (enuresis or enuretic\* or incontinence)):ti,ab

#5 (sleep near/2 (enuresis or enuretic\* or incontinence)):ti,ab

#6 (enuresis near/1 nocturna):ti,ab

#7 (child\* near/1 enuresis):ti,ab

#8 MeSH descriptor Enuresis, this term only

#9 MeSH descriptor Pediatrics, this term only

#10 MeSH descriptor Adolescent, this term only

#11 (child\* or pediatric\* or paediatric\* or boy\* or girl\* or juvenile\* or teen\* or adolescen\* or youth\*):ti,ab

#12 child\*:kw

#13 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7)

#14 (#9 OR #10 OR #11 OR #12)

#15 (#8 AND #14)

#16 (#13 OR #15)

DARE database 1995-2008 & HTA Database 1995-2008

Via CRD Databases <http://www.crd.york.ac.uk/CRDWeb/>

Searched 13/10/08, update 13/11/09

# 1 enuresis

# 2 MeSH Enuresis EXPLODE

# 3 bedwet\*

# 4 bed NEAR wet\*

# 5 night\* NEAR incontinence

# 6 sleep\* NEAR incontinence

# 7 enuretic\*

# 8 nocturnal NEAR incontinence

# 9 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8

Database: Ovid MEDLINE(R) <1950 to present

Via Ovid SP searched 13/10/08, 26/02/09

Update search: 15/12/09



## 1.1 Search Strategy:

---

- 1 Nocturnal Enuresis/
- 2 (bedwett\$ or (bed adj2 wett\$)).ti,ab.
- 3 (enuresis adj nocturna).ti,ab.
- 4 (nocturna\$ adj2 (enuresis or enuretic\$ or incontinence)).ti,ab.
- 5 (night\$ adj2 (enuresis or enuretic\$ or incontinence)).ti,ab.
- 6 (sleep adj2 (enuresis or enuretic\$ or incontinence)).ti,ab.
- 7 (child\$ adj enuresis).ti,ab.
- 8 or/1-7
- 9 Enuresis/
- 10 exp child/
- 11 pediatrics/
- 12 adolescent/
- 13 (child\$ or pediatric\$ or paediatric\$ or boy\$ or girl\$ or juvenile\$ or teen\$ or adolescen\$ or youth\$).ti,ab.
- 14 or/10-13
- 15 9 and 14
- 16 8 or 15

Database: EMBASE <1980 to present

Searched 13/10/08 and 26/02/09

update search: 15/12/09

Search Strategy:

---

- 1 Nocturnal Enuresis/

- 2 (bed wett\$ or (bed adj2 wett\$)).ti,ab.
- 3 enuresis nocturna.ti,ab.
- 4 (nocturna\$ adj2 (enuresis or enuretic\$ or incontinence)).ti,ab.
- 5 (night\$ adj2 (enuresis or enureetic\$ or incontinence)).ti,ab.
- 6 (sleep adj2 (enuresis or enuretic\$ or incontinence)).ti,ab.
- 7 (child\$ adj enuresis).ti,ab.
- 8 or/1-7
- 9 ENURESIS/
- 10 Child/
- 11 pediatrics/
- 12 Adolescent/
- 13 juvenile/
- 14 (child\$ or pediatric\$ or paediatric\$ or boy\$ or girl\$ or juvenile\$ or teen\$ or adolescen\$ or youth\$).ti,ab.
- 15 or/10-14
- 16 9 and 15
- 17 8 or 16

Cinahl 1982-present via NLH Search 2

Searched 14/10/08, 26/2/09

Update search 13/11/09

## **1.2 Search History:**

2. CINAHL; (enuresis ADJ nocturna).ti,ab; .
6. CINAHL; (child\* ADJ enuresis).ti,ab;
7. CINAHL; (nocturna adj2 enuresis).ti,ab;
8. CINAHL; (nocturna\* adj2 enuresis).ti,ab; .

9. CINAHL; (nocturna\* adj2 enuretic\*).ti,ab;
10. CINAHL; (nocturna\* adj2 incontinence\*).ti,ab;
11. CINAHL; (sleep adj2 enuresis).ti,ab;
12. CINAHL; (sleep adj2 enuret\*).ti,ab;
13. CINAHL; (sleep adj2 incontinence\*).ti,ab;
14. CINAHL; (night\* adj2 enuresis).ti,ab;
15. CINAHL; (night\* adj2 enuret\*).ti,ab;
16. CINAHL; (night\* adj2 incontinence).ti,ab;
17. CINAHL; (bedwett\*).ti,ab;
19. CINAHL; (bed adj1 wett\*).ti,ab; .
20. CINAHL; 2 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 19;
21. CINAHL; ENURESIS/;
22. CINAHL; exp CHILD/;
23. CINAHL; PEDIATRICS/;
24. CINAHL; ADOLESCENCE/;
25. CINAHL; (child\* OR pediatric\* OR paediatric\*).ti,ab;
26. CINAHL; (boy\* OR girl\* OR juvenile\*).ti,ab;
27. CINAHL; (adolescen\* OR teen\* OR youth\*).ti,ab;
28. CINAHL; 22 OR 23 OR 24 OR 25 OR 26 OR 27;
29. CINAHL; 21 AND 28;
30. CINAHL; 20 OR 29;

PsycINFO 1802-present via NLH Search 2

Searched 14/10/08, 26/02/09

Update search 13/11/09

Search History:

1. PsycINFO, (bedwett\*).ti,ab;
3. PsycINFO, (bed adj2 wett\*).ti,ab;
4. PsycINFO, (enuresis ADJ nocturna).ti,ab;
5. PsycINFO, (nocturna\* adj2 enuresis).ti,ab;
6. PsycINFO, (nocturna\* adj2 enuret\*).ti,ab;
7. PsycINFO, (nocturna\* adj2 incontinence).ti,ab;
8. PsycINFO, (night\* adj2 incontinence).ti,ab; .
9. PsycINFO, (night\* adj2 enuret\*).ti,ab;
10. PsycINFO (night\* adj2 enuresis).ti,ab;
11. PsycINFO, (sleep adj2 enuresis).ti,ab; .
12. PsycINFO, (sleep adj2 enuret\*).ti,ab;
13. PsycINFO, (sleep adj2 incontinence).ti,ab;
14. PsycINFO, (child\* adj1 enuresis).ti,ab;
15. PsycINFO, 1 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14;