

Bedwetting (enuresis) - Management

Scenario: Assessment of bedwetting (enuresis)

How should I assess a child who is bedwetting?

- A child may present with primary bedwetting without daytime symptoms, primary bedwetting with daytime symptoms, or secondary bedwetting. These have different causes, and require different assessments and management.
- To determine the type of bedwetting the child has, ask:
 - Are there any daytime symptoms, such as urgency, frequency, daytime wetting, abdominal straining or poor urinary stream, pain passing urine, or passing urine infrequently (fewer than four times a day)?
 - Has the child previously been dry at night without assistance for 6 months?
- [Assess for bedwetting without daytime symptoms](#) if the child wets the bed and has no daytime symptoms.
- [Assess for bedwetting with daytime symptoms](#) if the child wets the bed and also has daytime symptoms.
- [Assess for secondary bedwetting](#) if the child has previously been dry at night without assistance for 6 months and has begun to wet the bed again.

How should I assess a child with primary bedwetting without daytime symptoms?

- **Ask how old the child is** — bedwetting is considered to be normal in children younger than 5 years of age.
 - For children younger than 5 years of age:
 - Ask the parents whether daytime toilet training has been attempted, and if not why not.
 - Consider assessing for constipation — undiagnosed chronic constipation is a common cause of wetting and soiling in younger children.
- **Determine the reason for the consultation**, for example ask whether short-term treatment (for a sleepover or school trip) or long-term treatment is required.
- **Assess the pattern of bedwetting** — frequent bedwetting is less likely to resolve spontaneously than infrequent bedwetting. Ask:
 - How many nights a week does bedwetting occur?
 - How many times a night does bedwetting occur?
 - Does there seem to be a large amount of urine?
 - At what times of night does the bedwetting occur?
 - Does the child wake up after bedwetting?
- **Assess the child's fluid intake throughout the day, and ask whether the child or the parents or carers are restricting fluids.**
 - Inadequate fluid intake may mask an underlying bladder problem, such as overactive bladder disorder, and may impede the development of an adequate bladder capacity.

- **Consider asking the parents or carer to keep a diary of the child's fluid intake, bedwetting, and toileting patterns for 2 weeks.**
- This may also involve weighing nappies or pull ups to understand how much urine the child is passing at night, compared with during the day.
- **Assess whether the child and parents or carers are willing or able to take part in behavioural interventions, such as using an enuresis alarm.**
- Ask whether the parents are finding it difficult to cope with the burden of bedwetting, or if they are expressing anger, negativity, or blame towards the child, and if they need support.
- **Assess the home situation.** Ask if:
 - There is easy access to the toilet at night.
 - The child shares a bedroom — this may affect the decision to use an alarm.
- **Include the child in the assessment (where appropriate);** ask:
 - Whether the child thinks there is a problem.
 - What the child thinks is the main problem.
 - What the child hopes the treatment will achieve.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Assessment

- Recommendations on how to assess a child with bedwetting were based on the expert opinion of the NICE guideline development group (GDG). The GDG identified 34 studies that looked at different methods for assessing bedwetting. Most of these studies were small cohort studies or case series in children in secondary or tertiary referral centres. The GDG considered the evidence identified to be of poor quality and were unable to use it to guide decision making.
- The NICE GDG stated that an important part of the clinical assessment is an assessment of the interest of the child in the treatment, and whether the child and family would be able to take part in behavioural interventions, such as use of an enuresis alarm. This is because treatment with an alarm requires training and a high level of commitment. This can be an added burden for some children and parents, particularly if the parents report feeling angry towards the child. Alarm treatment may be too onerous for some families.

Keeping a diary

- The recommendation to keep a diary for 2 weeks is based on expert consensus opinion from the NICE GDG.
- NICE recommends considering keeping a diary of symptoms because, in order to make a good assessment, healthcare professionals need to understand the symptoms experienced by the child, and the child's drinking and toileting behaviour. This recommendation is based on consensus expert opinion of the NICE GDG. It is thought that:

- Parents or carers are often not aware of their child's drinking and toileting behaviour when the child spends a lot of their time outside the home. A diary may help the child and family recognize the problem and monitor progress.
- When the child is managed in pull ups or nappies, it can sometimes be useful to weigh these to inform an understanding of how much urine the child is passing at night, compared with how much they pass when urinating during the day.

How should I assess a child with bedwetting who has daytime symptoms?

- **If the child is younger than 5 years of age:**

- Ask the parents whether daytime toilet training has been attempted, and if not, why.

- **Assess the pattern of daytime symptoms, ask if:**

- Daytime symptoms occur only in some situations.
- The child avoids toilets at school or other settings.
- The child goes to the toilet more or less frequently than his or her peers.

- **Assess the child's fluid intake throughout the day and ask whether the child or the parents or carers are restricting fluids.**

- Inadequate fluid intake may mask an underlying bladder problem, such as overactive bladder disorder, and may impede the development of an adequate bladder capacity.

- **Consider asking the parents or carers to keep a diary of the child's fluid intake, daytime symptoms, bedwetting, and toileting patterns for 2 weeks.**

- This may also involve weighing nappies or pull ups to understand how much urine the child is passing at night, compared with how much they pass during the day.
- Keeping a diary for 2 days is usually adequate to understand the pattern of daytime wetting, however keeping a diary for 2 weeks is generally required to establish the pattern of bedwetting.

- **Assess the child for:**

- Chronic constipation — undiagnosed chronic constipation is a common cause of wetting and soiling in younger children.
- For more information, see the CKS topic on [Constipation in children](#).
- Chronic urinary tract infections.
- For more information, see the CKS topic on [Urinary tract infection - children](#).
- Chronic emotional problems.

- **Include the child in the assessment (where appropriate); ask:**

- Whether the child thinks there is a problem.
- What the child thinks is the main problem.
- What the child hopes the treatment will achieve.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Assessment

- Recommendations on how to assess the child with bedwetting were based on the expert opinion of the guideline development group (GDG). The NICE GDG identified 34 studies that looked at different methods for assessing bedwetting. Most of these studies were small cohort studies or case series in children in secondary or tertiary referral centres. The GDG considered the evidence identified to be of poor quality and were unable to use it to guide decision making.
- Primary bedwetting with daytime symptoms is usually caused by disorders of the lower urinary tract, such as an overactive bladder, but may also be caused by congenital malformations or neurological disorders [[Glazener and Evans, 2004](#)].
- Primary bedwetting with daytime symptoms is occasionally caused by chronic constipation, chronic urinary tract infections, or chronic emotional problems.

Keeping a diary

- NICE recommend considering keeping a diary of symptoms because, in order to make a good assessment, healthcare professionals need to understand the symptoms experienced by the child, and the child's drinking and toileting behaviour. This recommendation is based on consensus expert opinion of the NICE GDG. It is thought that:
 - Parents or carers are often not aware of their child's drinking and toileting behaviour when children spend a lot of their time outside the home. A diary may help the child and family recognize the problem and monitor progress.
 - When the child is managed in pull ups or nappies, it can sometimes be useful to weigh these to inform an understanding of how much urine the child is passing at night, compared with how much they pass when urinating during the day.
- The recommendation to keep a diary for between 2 days and 2 weeks is based on expert consensus opinion from the NICE GDG.

How do I assess a child who has been previously dry for 6 months (secondary bedwetting)?

- **Ask when bedwetting started** — bedwetting that has started in the last few days or weeks may be a presentation of a systemic illness (for example urinary tract infection), or a change in the child's environment (for example bullying or abuse).
- **Assess for an [underlying cause](#)** which may have triggered bedwetting.
 - **Constipation (and/or soiling)** — a common comorbidity than can cause bedwetting. Note that frequent soiling is usually secondary to underlying faecal impaction and constipation, but may relate to emotional distress and states.
 - **Diabetes.**
 - **Urinary tract infection.**
 - **Behavioural problems and emotional problems** — these may be a cause or a consequence of bedwetting.
 - **Family problems** — a difficult or stressful environment may be a trigger for bedwetting.

- **Assess pattern of bedwetting, ask:**
 - How many nights a week does bedwetting occur?
 - How many times a night does bedwetting occur?
 - Does there seem to be a large amount of urine?
 - At what times of night does the bedwetting occur?
 - Does the child wake up after bedwetting?
- **Consider asking the parents or carers to keep a diary of the child's fluid intake, bedwetting, and toileting patterns.**
 - It is thought that keeping a diary for 2 weeks is generally required to establish the pattern of bedwetting.
- **Include the child in the assessment (where appropriate); ask:**
 - Whether the child thinks there is a problem.
 - What the child thinks is the main problem.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)]

Assessment

- Recommendations on how to assess a child with bedwetting were based on the expert opinion of the guideline development group (GDG). The NICE GDG identified 34 studies that looked at different methods for assessing bedwetting. Most of these studies were small cohort studies or case series in children in secondary or tertiary referral centres. The GDG considered the evidence identified to be of poor quality and were unable to use it to guide decision making.
- The NICE GDG stated that although most children with bedwetting will not have an underlying systemic illness it is important that these are considered especially if bedwetting has started recently.

Keeping a diary

- NICE recommend considering keeping a diary of symptoms because, in order to make a good assessment, healthcare professionals need to understand the symptoms experienced by the child, and the child's drinking and toileting behaviour. This recommendation is based on consensus expert opinion of the NICE GDG. It is thought that:
 - Parents or carers are often not aware of their child's drinking and toileting behaviour when the child spends a lot of their time outside the home. A diary may help the child and family recognize the problem and monitor progress.
 - When the child is managed in pull ups or nappies it can sometimes be useful to weigh these to inform an understanding of how much urine the child is passing at night, compared with how much they pass when urinating during the day.
- The recommendation to keep a diary from between 2 days and 2 weeks is based on expert consensus opinion from the NICE guideline development group.

[When should I consider the possibility of child maltreatment?](#)

▪ **Consider the possibility of child maltreatment if:**

- The child is reported to be deliberately bedwetting.
 - Parents or carers are seen or reported to punish the child for bedwetting, despite professional advice that the symptom is involuntary.
 - The child has secondary daytime wetting or secondary bedwetting that persists despite adequate assessment and management, unless there is a medical explanation (for example urinary tract infection) or a clearly identified stressful situation that is not part of maltreatment (for example bereavement, parental separation).
- For information on how to manage suspected maltreatment, see the National Institute for Health and Clinical Excellence guidance on [When to suspect child maltreatment \(pdf\)](#).

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)], and the NICE guideline on *When to suspect child maltreatment* [[NICE, 2009](#)].

What investigations should I do?

- Consider performing urinalysis if:
- Bedwetting started in the past few days or weeks.
 - The child has daytime symptoms.
 - The child has any signs of ill health.
 - There are a history, symptoms, or signs suggestive of urinary tract infections.
 - There are a history, symptoms, or signs suggestive of diabetes mellitus.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- The recommendation on when to perform urinalysis is based on the expert opinion of the guideline development group.
- The NICE guideline development group found no evidence to support the use of urinalysis in children with bedwetting and stated that this was not necessarily worthwhile.

Bedwetting (enuresis) - Management
Scenario: Primary bedwetting (without daytime symptoms)

[How should I approach the management of bedwetting without daytime symptoms?](#)

- Give all children and their parents or carers [general advice](#) on bedwetting and advice on [lifting and waking](#), and address any issues concerning excessive or insufficient [fluid intake, diet, and toileting patterns](#).
- **Children younger than 5 years of age**
 - Reassure the parents or carers that many children younger than 5 years of age wet the bed, and this usually resolves without treatment — reassurance may be all that is required.
 - Ensure easy access to the toilet at night — consider a potty by the side of the bed if the toilet is not easily accessible.
 - Encourage the child to empty their bladder before sleep.
 - If the child has been toilet trained by day for longer than 6 months, consider a trial of at least 2 nights in a row without nappies or pull ups (appropriate waterproof mattress protection will be required). Consider a longer trial in children:
 - Who are older.
 - Who achieve a reduction in wetness.
 - Whose family circumstances allow the trial to continue.
 - If the child has some dry nights, consider a trial of *positive* [reward systems](#) alone.
 - If the child wakes at night, advise the parents or carers to take him or her to the toilet.
- **Children older than 5 years of age**
 - **If bedwetting is infrequent** (less than twice a week), reassure the parents or carers that bedwetting may resolve without treatment and offer the option of a wait-and-see approach.
 - **If long-term treatment is required**, offer treatment with an [enuresis alarm](#) (first-line treatment) in combination with positive [reward systems](#) (for example star charts).
 - Desmopressin is less preferred but may be considered if the child, parents, or carers do not want to use an alarm or are unable to use an alarm.
 - **If rapid or short-term control of bedwetting is required** (for example for sleepovers or school trips), offer treatment with desmopressin.
- **Offer information and details of [support groups](#)** to children being treated for bedwetting and their parents or carers.
- **If bedwetting [recurs](#) after being treated successfully**, consider:
 - Restarting treatments which have been previously successful.
 - Offering combination treatment with desmopressin and an enuresis alarm.
- **Seek specialist advice before initiating tricyclic antidepressants (such as imipramine) or antimuscarinics (such as oxybutynin).**
- Tricyclic antidepressants and antimuscarinics may be initiated in secondary or primary care following an assessment by a healthcare professional with expertise in managing bedwetting.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Children younger than 5 years of age

- NICE found no trial evidence that assessed the management of bedwetting in children younger than 5 years of age. The recommendations regarding the management of children younger than 5 years of age are based on expert opinion from the NICE guideline development group (GDG).

Daytime toilet training

- NICE states that some children who wet the bed at 5 years of age may not have been toilet trained during the day and have not learnt to hold on or to react to the feeling of bladder fullness.

Trial without pull ups or nappies

- The recommendation to use a trial without pull ups or nappies is based on expert opinion from the NICE GDG. The GDG felt that children (including those with behavioural or attention difficulties) in pull ups or nappies may be considered for a trial *without* pull ups or nappies if they are toilet trained by day.

Positive reward systems alone

- The recommendation to use positive reward systems alone is based on expert opinion from the NICE GDG.

Wait-and-see approach

- CKS recommends considering a wait-and-see approach for older children with infrequent bedwetting, as this more likely to resolve without treatment than frequent bedwetting; reassurance may be all that is required.

Enuresis alarms

- The NICE GDG found low-quality evidence from randomized controlled trials that enuresis alarms were effective for treating bedwetting (effectiveness was defined as 14 dry nights or a mean reduction in the number of wet nights at the end of treatment).
- NICE recommends treatment with an enuresis alarm as a first-line option because, although NICE found that there was no significant difference between desmopressin and enuresis alarms, they also found that bedwetting was more likely to recur in children treated with desmopressin when desmopressin treatment was stopped. Enuresis alarms are thought to develop a conditioned response of waking in response to full bladder, which is more likely to continue after stopping alarm treatment.

Desmopressin

- The NICE GDG found very-low-quality to moderate-quality evidence from randomized controlled trials that desmopressin was effective for treating bedwetting (effectiveness was defined as 14-dry nights or a mean reduction in the number of wet nights at the end of treatment).
- NICE recommends using desmopressin as a first-line option in children who require a rapid response or short-term control of bedwetting (for example for sleepovers or school trips) because it has a faster response rate than an enuresis alarm.
- It may take a few weeks for the child to respond to an enuresis alarm, whereas children treated with desmopressin usually respond rapidly.
- Desmopressin is not licensed for use in children younger than 5 years of age.

What advice should I provide for bedwetting?

- Offer:
 - [General advice](#), such as reassurance (for example that bedwetting is not the child's fault and that almost all children become dry given time).
 - [Advice on fluid intake, diet, and toileting patterns](#).
 - [Advice on lifting and waking](#).
 - [Advice on reward systems](#).

What general advice can I give to parents and carers regarding bedwetting?

- **Explain to the child and their parents or carers** that bedwetting:
 - Is not the child's fault and the child should not be punished, as this has the potential for humiliating the child and reducing their self esteem.
 - Occurs because the volume of urine produced at night exceeds the capacity of the bladder to hold it, and the sensation of a full bladder does not wake the child.
- **Reassure the the child and their parents or carers that almost all children (99%) become dry given time** (however this could be when they are in their late teens) even without treatment, and that bedwetting resolves as children get older because they:
 - Develop an increased bladder capacity, *and/or*
 - Produce less urine at night, *and/or*
 - Learn to wake to the sensation of a full bladder.
- **Advise** that:
 - There should be easy access to a toilet.
 - A waterproof mattress and duvet cover, absorbent quilted sheets, and bed pads can be used.
 - Parents and carers should take a neutral attitude to bedwetting and minimize the child's embarrassment.
 - Older children may prefer to change their bedding themselves during the night to avoid household disruption and embarrassment. If they wish to do this, ensure clean bedding and garments are readily available.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

What advice can I give on fluid intake, diet, and toileting patterns?

- **Fluid intake** — advise children and their parents or carers:
 - That *adequate* daily fluid intake is important in the management of bedwetting. Recommended adequate daily fluid intake from drinks are:
 - At 4–8 years of age — 1000–1400 mL (girls); 1000–1400 mL (boys).
 - At 9–13 years of age — 1200–2100 mL (girls); 1400–2300 mL (boys).
 - At 14–18 years of age — 1400–2500 mL (girls); 2100–3200 mL (boys).
 - To avoid caffeine-based drinks (such as colas, coffee, and tea) before going to bed.

- **Diet**

- Advise the child and their parents or carers to ensure that the child eats a healthy diet, and not to restrict their diet as a form of treatment for bedwetting in children.

- **Toilet patterns**

- Encourage the child to use the toilet to pass urine at regular intervals during the day and before sleep (between four and seven times in total).

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Fluid intake

- The recommendation that children should have an adequate fluid intake is based on expert consensus opinion of the NICE guideline development group (GDG). NICE found no evidence that fluid restriction was effective for treating bedwetting and state that it is important to discuss adequate fluid intake with the parents or carers because:
 - If fluids are restricted, the presence or absence of daytime symptoms may not be apparent.
 - If the child drinks adequate fluids during the day, this may prevent them from needing to drink larger amounts nearer bedtime.
- The recommendations regarding how much fluid to drink each day is based on published guidance on adequate fluid intake [[IOM, 2004](#)] and expert opinion from the NICE GDG.
- The NICE GDG noted there was no evidence on the effect of fizzy drinks. The GDG were concerned that many children might be drinking caffeine-containing drinks (which are diuretic) and that these might not be helpful in general or specifically for urinary symptoms. The GDG felt this was a good opportunity to reiterate these messages.

Diet

- NICE found no evidence that restricting the child's diet is effective for treating bedwetting and recommends that it is important to make sure the child is eating healthily.

Toileting patterns

- The recommendation that passing urine four to seven times in a day is normal was based on expert opinion from the NICE GDG. The GDG extrapolated this frequency from the International Children's Continence Society (ICCS) criteria. The ICCS suggests that less than three times per day is abnormal and more than eight times per day is abnormal. The guideline development group felt these figures were too extreme and that four to seven times a day was more reasonable.

What advice can I give regarding lifting and waking?

- **Advise** that:
 - Neither lifting or waking the child during the night (at regular times or randomly) promotes long-term dryness.
 - Waking (at regular times or randomly) may be useful as a practical measure in the short term only.

- Self-instigated waking (for example using an alarm clock) may be useful for young people with bedwetting that has not responded to treatment.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Lifting

- NICE found no evidence on lifting and advise that lifting does not promote long-term dryness.

Waking

- NICE found very-low-quality evidence that waking was effective for treating bedwetting. However, these trials had many methodological weaknesses (small numbers, wide confidence intervals, inadequate power to show a difference in the treatment effects, high drop-out rates, comparator treatments which were not equivalent) and were difficult to interpret.
- The recommendation to use waking as a short-term, practical measure is based on expert opinion from the NICE GDG.
- The recommendation that self-instigated waking may be used in young people is also based on expert opinion from the NICE GDG. They state that some young people successfully use waking to ensure dry nights, and should not be dissuaded from this.
- The GDG recommends that lifting without waking was potentially counterproductive, as the child does not learn to recognize the sensation of a full bladder.

What advice can I give on reward systems?

- **Positive reward systems may be offered to children** who have some dry nights and to children using an enuresis alarm. They should be adapted to the age of the child.
- **Advise that rewards may be given** for:
 - Drinking recommended levels of fluid during the day.
 - Using the toilet before going to bed.
 - Engaging in management (for example taking medication or helping to change sheets).
- Do not recommend reward systems that penalise the child or remove previously gained rewards.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- The recommendation to use reward systems is based on evidence from randomized controlled trials. NICE identified 10 RCTs that assessed the effectiveness of rewards systems, however most of these studies were of low- or very-low-quality evidence. Of these studies:
 - One trial found that star charts were more effective than unstructured play therapy. This trial suggested that it is not just the interaction with the child which causes dryness, but the focus on bedwetting behaviours which leads to success.

- Three trials found that dry bed training with an enuresis alarm, cognitive behaviour therapy, enuresis alarm and stop-start training gave fewer wet nights; however there was no difference for 14 dry nights and drop-out rates.
- The NICE guideline development group states that reward systems are easier to implement than other treatments such as dry bed training with an enuresis alarm, cognitive behavioural therapy, enuresis alarm, and stop-start training.
- The recommendation to use reward systems alone in children who are able to achieve some dry nights is based on expert opinion of the NICE guideline development group.

Enuresis alarms

- This section contains information on:
 - [When to use an enuresis alarm.](#)
 - [Obtaining an enuresis alarm.](#)
 - [Using an enuresis alarm.](#)
 - [Advice on enuresis alarms.](#)

When should I consider treatment with an enuresis alarm?

- **Enuresis alarms are generally considered as a first-line treatment** unless:
 - The child or parents and carers do not want to use one.
 - The child wets the bed (infrequently) less than once or twice a week.
 - Parents or carers have emotional difficulty coping with the burden of bedwetting.
 - Parents or carers express anger, negativity, or blame towards the child.
 - The child is younger than 7 years of age and is not able to use an alarm.
 - The decision to use an alarm in a child younger than 7 years of age is based on the child's maturity, their understanding of the alarm, and their motivation.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- The NICE guideline development group (GDG) found low-quality evidence from randomized controlled trials that enuresis alarms were effective for treating bedwetting (effectiveness was defined as 14 consecutive dry nights, or a mean reduction in the number of wet nights at the end of treatment).
- NICE recommends treatment with an enuresis alarm as a first-line option because, although they found that there was no significant difference between desmopressin and enuresis alarms, they also found that bedwetting was more likely to recur in children treated with desmopressin when desmopressin treatment was stopped. Enuresis alarms are thought to develop a conditioned response of waking in response to a full bladder which is more likely to continue after stopping alarm treatment.
- Enuresis alarms may not be suitable for all families because they require considerable effort and perseverance from the child and family.

- The NICE GDG considered that it was important that families were motivated to use an alarm, and that in families already struggling to cope with bedwetting the introduction of an alarm may result in punishment of the child.
- Infrequent bedwetting is more likely to resolve than frequent bedwetting.

Children younger than 7 years of age

- The recommendation that enuresis alarms may be considered in children 5–7 years of age is based on expert opinion from the NICE GDG. The NICE GDG felt that although children in this age group may not require treatment, they should not be denied treatment with an enuresis alarm if they are mature enough and motivated enough to cope with using one.
- Treatment is generally not considered for children younger than 5 years of age as bedwetting is considered to be normal in this age group.

What types of enuresis alarms are available and how can I obtain them?

- **An enuresis alarm has a sensor pad which senses wetness.** The sensor is linked to an alarm which wakes the child if it becomes wet. Several types of enuresis alarms are available:
 - **Pad-and-bell alarms**, where the sensor pad is positioned under a draw sheet beneath the child in the bed.
 - **Body-worn alarms**, where a tiny sensor is attached to the child's pants for example between two pairs of tightly fitting underpants and the alarm is worn on the pyjama top.
 - **Vibrating alarms** (suitable for children with hearing impairment).
- **Alarms can be borrowed from the local enuresis adviser, or can be bought** privately from ERIC (Education and Resources for Improving Childhood Continence, telephone 0845 370 8008, www.eric.org.uk).
- The cost of enuresis alarms vary, but in general prices range from £50–£100 (enuresis alarms cannot be prescribed on the NHS).

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

How should an enuresis alarm be used?

- Ensure that the child and their parents or carers are aware that enuresis alarms may take several weeks (or months) to have any effect, and that they require a high level of commitment from the child and the parents or carers. Alarms are most effective when used by experienced practitioners with frequent follow up every 3–4 weeks.
 - For more information see [Advice \(enuresis alarms\)](#).
- **Advise the parents or carers to use a positive [reward system](#)** (such as a star chart) to reward desired behaviour in combination with an enuresis alarm.
- **Assess the child's response after 4 weeks:**
 - **If there is a response** — continue using the alarm until there have been a minimum of 14 consecutive dry nights, and then discontinue treatment.

- **If there is a partial response** — continue using the alarm for 3 months. If the child is not dry for 14 consecutive nights after 3 months, consider stopping treatment.
- Continue treatment only if the child's bedwetting is continuing to improve and the child and parents or carers are motivated to continue.
- **If there are no signs of an early response** — stop treatment.
- Signs of an early response include smaller wet patches, waking to the alarm, the alarm going off later and fewer times per night, and fewer wet nights.
- **If bedwetting does not respond to initial alarm treatment**, consider offering:
 - Combination treatment with an alarm and [desmopressin](#), *or*
 - Desmopressin alone if the child parents or carers do not want to continue using an enuresis alarm.
- **If there is a partial response to combination treatment** of an alarm and desmopressin, consider offering desmopressin alone.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Reward systems

- The recommendation to use a reward system in combination with an enuresis alarm is based on evidence from one very-low-quality randomized controlled trial and expert opinion from the NICE guideline development group (GDG).

Assessment at 4 weeks

- The recommendation to assess the effectiveness of the enuresis alarm at 4 weeks is based on expert opinion from the NICE GDG. The GDG did not find any evidence to guide this decision and this recommendation was based on the clinical experience of the GDG.

Length of treatment with an alarm

- The recommendation to stop treatment in children who have not responded at 4 weeks is based on expert opinion from the GDG. The GDG stated that it may be advisable to stop at this stage, as child may respond when older. If the child carries on with treatment it may engender negativity about the alarm in the child and their family.
- The recommendation to continue using the alarm until a minimum of 14 consecutive nights of dryness has been achieved is based on the clinical experience of the GDG. The GDG stated that it is important to use the alarm until 14 consecutive dry nights are achieved, to reduce the likelihood of recurrence of bedwetting.
- The recommendation to continue treatment with an enuresis alarm for at least 3 months (if there has been a partial response) is based on expert opinion from the GDG. Enuresis alarms may take several weeks to have an effect, however the GDG felt that it was not appropriate to continue beyond 3 months if the child was not continuing to improve.

Failure of enuresis alarms

- NICE bases the recommendation to use combination treatment with an enuresis alarm and desmopressin when alarm treatment has failed on one small observational study and a health economics assessment.
- NICE states that although there is evidence that combination treatment is effective, some children and parents or carers may not wish to continue treatment with an enuresis alarm if it has failed and they may prefer using desmopressin alone.

What advice can I give parents or carers regarding enuresis alarms?

- **Explain that:**
 - **The aims of alarm treatment are to train the child to:**
 - Recognize the need to pass urine.
 - Wake to go to the toilet or hold on.
 - Learn over time to hold on or to wake spontaneously, and stop wetting the bed.
- **Advise the parents or carers that:**
 - **Alarms have a high long-term success rate**, but they may not suit all families because using an alarm involves a significant commitment from the child and carers:
 - The child and the parents or carers will require training on how to use the alarm.
 - The alarm can disrupt sleep.
 - The parents or carers may need to help the child to wake to the alarm.
 - A record of the child's progress should be kept (for example if and when the child wakes and how wet the child and bed are).
 - **A positive rewards system (such as a star chart) should be used with enuresis alarms to reward desired behaviour.** Behaviour that should be rewarded includes:
 - Waking up when the alarm goes off.
 - Going to the toilet after the alarm has gone off.
 - Returning to bed and resetting the alarm.
 - **It may take a few weeks for the early signs of a response to the alarm to occur.** Signs of a response include:
 - Smaller wet patches.
 - Waking to the alarm.
 - The alarm going off later and fewer times per night.
 - Fewer wet nights.
 - **Dry nights may take weeks to achieve and may be a late sign of response to the alarm.**
 - If the child relapses following response to alarm treatment, start using the alarm again. There is no need to consult a healthcare professional.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- The NICE guideline development group considered that it was important to give parents as much information and advice as possible if they were considering using an enuresis alarm. Enuresis alarms can be difficult for a child and parent or carers to use and families may need considerable advice and support. Information that the guideline development group considered essential was:
 - How to use the alarm.
 - What to expect from treatment.
 - The signs of response to look out for.
 - Information about dealing with problems with the alarm and how to return it.
 - Offering and agreeing appropriate support.

Desmopressin

- This section contains information on:
 - [When to prescribe desmopressin](#).
 - Managing children taking [desmopressin short-term](#) (for example for sleepovers or school trips).
 - Managing children taking [desmopressin long-term](#).
 - [Advice on taking desmopressin](#).

When should I consider prescribing desmopressin?

- **Consider prescribing desmopressin** if:
 - A rapid onset in improvement or a short-term improvement is required (for example for sleepovers or school trips).
 - The child or parents or carers are unable to use an alarm or do not want to use an alarm as first-line treatment.
 - This includes children 5–7 years of age, who may not be considered mature enough to use an enuresis alarm.
 - The child or parents and carers are currently using an alarm and want to stop.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- The NICE guideline development group (GDG) found very-low-quality to moderate-quality evidence from randomized controlled trials, that desmopressin was effective for treating bedwetting (effectiveness was defined as 14 consecutive dry nights or a mean reduction in the number of wet nights at the end of treatment).
- NICE recommends an enuresis alarm as a first-line option — there is no significant difference between desmopressin and an enuresis alarm for treating bedwetting; however bedwetting is more likely to recur when desmopressin treatment is stopped.
- Desmopressin is recommended first-line for children who require a rapid response or short-term control of bedwetting (for example for sleepovers or school trips) because it has a faster response rate than enuresis alarms.

- It may take a few weeks for the child to respond to an enuresis alarm, whereas children treated with desmopressin usually respond rapidly.

Use of desmopressin in children younger than 7 years of age

- The recommendation to consider treatment with desmopressin in children 5–7 years of age is based on a one very-low-quality randomized controlled trial. This trial found that children 6.6 years of age (mean age) who received a short course of desmopressin had a reduced number of wet nights during treatment. There was no difference with regards to achieving 14 consecutive dry nights. The NICE GDG concluded that desmopressin could be used in children between 5 and 7 years of age, particularly if short-term treatment was necessary.
- Treatment for bedwetting is generally not considered for children younger than 5 years of age, as bedwetting is considered to be normal in younger children and usually resolves without treatment.
- Desmopressin is not licensed in children younger than 5 years of age.

How should I manage a child taking desmopressin long-term?

- Give [advice](#) on how desmopressin works, and explain that there is usually a rapid response to treatment.
- **Prescribe a low dose of oral desmopressin** (Desmotabs[®] 200 micrograms or sublingual DesmoMelt[®] 120 micrograms) initially, at bedtime.
- Consider advising the parents to increase the dose of desmopressin (to Desmotabs[®] 400 micrograms or DesmoMelt[®] 240 micrograms) if complete dryness has not been achieved after 1–2 weeks of treatment with low-dose desmopressin.
- **Assess the response 4 weeks after starting treatment.**
- **If there are signs of a response** (smaller wet patches, fewer wetting episodes per night, fewer wet nights) continue treatment for 3 months.
- Stop desmopressin after 3 months for 1 week to check whether dryness has been achieved (repeated courses may be used).
- **If there is a partial response to desmopressin** consider:
 - Increasing the dose of desmopressin (if this has not already been done).
 - Advising the child to take desmopressin 1–2 hours before bedtime.
 - Continuing treatment for another 6 months — bedwetting may improve for up to 6 months after starting treatment.
- **If there are no signs of a response** consider:
 - Stopping treatment with desmopressin, *or*
 - Continuing desmopressin treatment and recommending that it is taken 1–2 hours before bedtime (ensure the child can comply with a fluid restriction for 1 hour before desmopressin is taken).
- **Review medication regularly if desmopressin is being used long term.**
- *Do not* routinely measure weight, serum electrolytes, blood pressure, and urine osmolality.
- **Seek specialist advice if desmopressin is being considered for children** with:
 - Sickle cell disease — the concentrating ability of the kidneys may be lost in children with sickle cell disease, resulting in high urine output.

- Cystic fibrosis — case reports recommend caution because of altered handling of electrolytes.
- Behavioural, attentional, and emotional disorders — the child may not be able to comply with fluid restrictions.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Dose and timing of desmopressin

- The information on the dose of desmopressin is based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)], and information published from the manufacturers [[ABPI Medicines Compendium, 2008](#); [ABPI Medicines Compendium, 2009](#)].
- The recommendation to start desmopressin at lower doses and increase to a maximum dose is based on expert opinion from the NICE guideline development group (GDG) because some children will achieve benefit on lower doses.
- The recommendations to take desmopressin 1–2 hours earlier if there has been no response or a partial response is based on the experience of the GDG and the pharmacokinetics of desmopressin.

Sustaining treatment for up to 6 months (partial response)

- The recommendation to continue treatment in children who have partially responded for up to 6 months is based on one good-quality randomized controlled trial. This compared tablet desmopressin with tablet desmopressin combined with oxybutynin and found no significant difference after 6 months' treatment; however, the number of children responding to treatment in both groups continued to increase at 1 month, 3 months, and 6 months after treatment.

Monitoring

- The NICE GDG considered that there was no evidence of need to monitor weight, serum electrolytes, blood pressure, and urine osmolality in children being treated with desmopressin. They considered that this idea of monitoring children on desmopressin may have arisen because of the other clinical conditions for which desmopressin may be used.

Nasal desmopressin

- Nasal desmopressin is no longer licensed for treating primary bedwetting because a significantly higher incidence of symptomatic hyponatraemia has been reported compared with oral desmopressin [[MHRA, 2007](#)].

How should I manage desmopressin for short-term use?

- **For short-term use (such as school trips or sleepovers):**
 - Give [advice](#) on how desmopressin works, and explain that there is usually a rapid response to treatment.
 - **Prescribe a low dose of oral desmopressin** (Desmotabs[®] 200 micrograms or sublingual DesmoMelt[®] 120 micrograms) initially, at bedtime.

- **If there is a response** to desmopressin, continue short-term treatment.
- **If there is no response** consider advising the parents to increase the dose of desmopressin (Desmotabs® 400 micrograms or DesmoMelt® 240 micrograms).
- **Consider starting a trial of desmopressin at least 1 week before the school trip or sleepover** to determine the effectiveness of treatment.
- **Seek specialist advice if desmopressin is being considered for children** with:
 - Sick cell disease — the concentrating ability of the kidneys may be lost in children with sickle cell disease, resulting in high urine output.
 - Cystic fibrosis — case reports recommend caution because of altered handling of electrolytes.
 - Behavioural, attentional, and emotional disorders — the child may not be able to comply with fluid restrictions.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Dose and timing of desmopressin

- The information on the dose of desmopressin is based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)], and information published from the manufacturers [[ABPI Medicines Compendium, 2008](#); [ABPI Medicines Compendium, 2009](#)].
- The recommendation to start desmopressin at lower doses and increase to a maximum dose is based on expert opinion from the NICE guideline development group because some children will achieve benefit on lower doses.

Nasal desmopressin

- Nasal desmopressin is no longer licensed for treating primary bedwetting because a significantly higher incidence of symptomatic hyponatraemia has been reported compared with oral desmopressin [[MHRA, 2007](#)].

What advice can I give parents or carers regarding desmopressin?

- **Advise** that:
 - Desmopressin works by reducing the amount of urine the body produces at night. This mimics the action of the body's own naturally occurring antidiuretic hormone (ADH). In most children levels of ADH rise overnight and reduce the volume of water excreted by the kidneys compared with during the daytime.
 - Many children, but not all, will experience a reduction in wetness.
 - Desmopressin should be taken at bedtime, and fluid intake should be restricted to sips only, from 1 hour before taking desmopressin until 8 hours afterwards (a total of one regular glass of water may be drunk in this time).
 - Fluid restriction is required to avoid the potential for fluid overload and hyponatraemia (low sodium levels in the blood) which could be a serious adverse effect.
 - Many children, but not all, will relapse when treatment is withdrawn.

- If the child relapses, repeated courses may be used.
- There is no evidence of adverse effects if desmopressin is used long term.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- The advice recommended is based on the expert opinion of the NICE guideline development group. This covers the areas that are considered important when advising children and families.

How should I manage children who have been successful treated and start to wet the bed again?

- **For children who have been treated successfully with an alarm and start wetting the bed again:**

- Restart alarm treatment, *or*
- If there is more than one recurrence of bedwetting, offer combination treatment with an alarm and desmopressin.

- **For children that have responded well to desmopressin but experience recurrences when treatment is withdrawn** consider:

- Prescribing another course of desmopressin (repeated courses may be used).
- Withdraw desmopressin treatment at regular intervals (for 1 week every 3 months) to check whether dryness has been achieved.
- Gradually withdrawing desmopressin rather than stopping it suddenly.
- A suitable withdrawal regimen used in clinical trials was an increase of 'no-medication days' over an 8-week period.
- Using an enuresis alarm instead of restarting desmopressin, if an alarm is now considered appropriate and the child, parents or carers want to try one.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Managing recurrences

- These recommendations are based on expert opinion of the NICE guideline development group (GDG). The NICE GDG used their professional experience and health economic assessment to make these recommendations. No trial evidence was identified to guide recommendations.

Repeated courses of desmopressin

- CKS were unable to make a recommendation regarding the number of courses of desmopressin that may be tried before referral should be considered, as there was no consensus among CKS reviewers.

Gradual withdrawal from desmopressin

- NICE found evidence from two observational studies which showed that slow withdrawal of desmopressin might reduce relapse. These studies used the following withdrawal schedules:
 - A gradual reduction of dosage by 10 micrograms every 4 weeks.
 - An increase in 'no-medication days' over an 8-week period.
- The NICE GDG felt that there was no strong evidence for either approach and the method of withdrawal should be up to the healthcare professional and the child's family.

What sources of support are available?

- **Sources of support** which may be helpful include:
 - [ERIC](#) (Education and Resources for Improving Childhood Continence) — this is a national charity which provides information and support on bedwetting, daytime wetting, and soiling to children, parents, young people, and professionals. ERIC has a range of free leaflets and information packs for children, parents, and professionals, including a *Guide for parents on bedwetting*, and also sells a range of bedding protection and enuresis alarms.
 - [The Bladder and Bowel Foundation \(B&BF\)](#) — is a charity which provides information and support for all types of bladder and bowel related problems, for patients, their families, carers, and healthcare professionals.
 - www.bedwetting.co.uk — this provides information and support to parents and carers.

Basis for recommendation

- The National Institute for Health and Clinical Excellence (NICE) recommends that children and parents should receive details about support groups, but does not specifically state which ones. The support groups listed here are ones identified by CKS.

Which treatments are not recommended?

Treatments which are no longer recommended

- Bladder training (interruption of urinary stream).
- Retention control training (infrequent passing of urine during the day).
- Dry bed training.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Bladder training and retention control training

- Bladder training and retention control training are not recommended because:
 - Only very-poor-quality trials were identified for bladder training and retention control training and the NICE guideline development group (GDG) did not believe that the evidence for the interventions was sufficient to recommend their use ahead of other treatments.
 - Although there was no evidence of harms from these studies the NICE GDG felt that interrupting voiding or encouraging infrequent urination may promote voiding dysfunction.

Dry bed training

- Dry bed training is not recommended because there is very-poor-quality evidence to support its use and because, as part of dry bed training, the child may be punished.
- Punishments may include the child being told they were wet and parents or carers informing visitors to the house they were trying to become dry, sleep loss even when dry (being woken to check if they were dry), and reprimanding. The NICE GDG felt this was inappropriate and did not recommend dry bed training.

When should refer I a child who has primary bedwetting without daytime symptoms?

- If bedwetting has not responded to at least two complete courses of treatment with either an alarm or desmopressin (this may be one course of each treatment, or two of the same), refer to secondary care, an enuresis clinic, or a community paediatrician, depending on local protocols and availability.
- Further assessment is required for factors that may be associated with a poor response, such as an overactive bladder, an underlying disease, or social and emotional factors.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

Referral

- NICE states that children with primary bedwetting (without daytime symptoms) should be referred if symptoms have not responded to courses of treatment with an alarm and or desmopressin, because these children may require further assessment of factors that may be associated with a poor response, such as an overactive bladder, an underlying disease, or social and emotional factors. However they do not state how many courses may be tried before referral is considered.
- Most CKS expert reviewers felt that no more than two courses of treatment should be tried before referral, because repeated failed attempts reduce the future success of treatment.

Prescriptions

For information on contraindications, cautions, drug interactions, and adverse effects, see the electronic Medicines Compendium (eMC) (<http://emc.medicines.org.uk>), or the British National Formulary (BNF) (www.bnf.org).

Desmopressin

Age from 5 to 18 years

Desmopressin tablets: 200micrograms at bedtime

Desmopressin 200microgram tablets
Take one tablet at bedtime when required.
Supply 30 tablets.

Age: from 5 years to 18 years
NHS cost: £33.68
Licensed use: yes
Black triangle

Patient information: Desmopressin reduces the amount of urine produced at night-time. To avoid the body becoming overloaded with fluid, drink no more than one mug of liquid from 1-2

hours before taking the medicine to eight hours afterwards. Only drink enough to satisfy thirst. Avoid drinks that contain caffeine such as tea, coffee, hot chocolate, and cola. Stop desmopressin during any episodes of vomiting and/or diarrhoea.

Desmopressin tablets: 400mcg at night (if 200mcg insufficient)

Desmopressin 200microgram tablets
Take two tablets at bedtime when required.
Supply 60 tablets.

Age: from 5 years to 18 years
NHS cost: £67.36
Licensed use: yes
Black triangle

Patient information: Desmopressin reduces the amount of urine produced at night-time. To avoid the body becoming overloaded with fluid, drink no more than one mug of liquid from 1-2 hours before taking the medicine to eight hours afterwards. Only drink enough to satisfy thirst. Avoid drinks that contain caffeine such as tea, coffee, hot chocolate, and cola. Stop desmopressin during any episodes of vomiting and/or diarrhoea.

Desmopressin melt tabs: 120 micrograms at bedtime

Desmopressin 120microgram oral lyophilisates sugar free
Place one tablet under the tongue at bedtime when required. Allow the tablet to dissolve under the tongue, do not swallow it whole or chew it.
Supply 30 tablets.

Age: from 5 years to 18 years
NHS cost: £30.34
Licensed use: yes
Black triangle

Patient information: Desmopressin reduces the amount of urine produced at night-time. To avoid the body becoming overloaded with fluid, drink no more than one mug of liquid from 1-2 hours before taking the medicine to eight hours afterwards. Only drink enough to satisfy thirst. Avoid drinks that contain caffeine such as tea, coffee, hot chocolate and cola. Stop desmopressin during any episodes of vomiting and/or diarrhoea.

Desmopressin melt tabs: 240mcg at night (if 120mcg insufficient)

Desmopressin 240microgram oral lyophilisates sugar free
Place one tablet under the tongue at bedtime when required. Allow the tablet to dissolve under the tongue, do not swallow it whole or chew it.
Supply 30 tablets.

Age: from 5 years to 18 years
NHS cost: £60.68
Licensed use: yes
Black triangle

Patient information: Desmopressin reduces the amount of urine produced at night-time. To avoid the body becoming overloaded with fluid, drink no more than one mug of liquid from 1-2 hours before taking the medicine to eight hours afterwards. Only drink enough to satisfy thirst. Avoid drinks that contain caffeine such as tea, coffee, hot chocolate and cola. Stop desmopressin during any episodes of vomiting and/or diarrhoea.

Bedwetting (enuresis) - Management

Scenario: Primary bedwetting (with daytime symptoms)

How should I manage children with primary bedwetting and daytime symptoms?

- Refer all children with primary bedwetting and daytime symptoms (urgency, frequency, daytime wetting, abdominal straining or poor urinary stream, pain passing urine, or passing urine fewer than four times a day) to secondary care or an enuresis clinic (if available) for further investigations and assessment.
- Consider referring younger children (older than 2 years of age) who are struggling to not wet themselves during the day as well as during the night, despite awareness of toileting needs and showing appropriate toileting behaviour.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- Referral for further investigations and assessment is recommended because bedwetting with daytime symptoms is usually caused by disorders of the lower urinary tract [[Glazener and Evans, 2004](#)].
 - A bladder disorder, such as an overactive bladder or an underlying urological disease.
 - Congenital malformations or neurological disorders.

How should I manage children with primary bedwetting and daytime symptoms?

- Refer all children with primary bedwetting and daytime symptoms (urgency, frequency, daytime wetting, abdominal straining or poor urinary stream, pain passing urine, or passing urine fewer than four times a day) to secondary care or an enuresis clinic (if available) for further investigations and assessment.
- Consider referring younger children (older than 2 years of age) who are struggling to not wet themselves during the day as well as during the night, despite awareness of toileting needs and showing appropriate toileting behaviour.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

- Referral for further investigations and assessment is recommended because bedwetting with daytime symptoms is usually caused by disorders of the lower urinary tract [[Glazener and Evans, 2004](#)].
 - A bladder disorder, such as an overactive bladder or an underlying urological disease.
 - Congenital malformations or neurological disorders.

Bedwetting (enuresis) - Management

Scenario: Secondary bedwetting

How should I manage a child who has secondary bedwetting (previously been dry at night for 6 months)?

- Manage the following underlying causes of secondary bedwetting in primary care:
 - **Urinary tract infections** — for further information see the CKS topic on [Urinary tract infection - children](#).
 - **Constipation** — for further information see the CKS topic on [Constipation](#).
- In general, all other children with secondary bedwetting require referral to a paediatrician or an enuresis clinic.
 - For more information see [Referral](#).

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].

When should I refer a child who has secondary bedwetting (previously been dry at night for 6 months)?

- **Refer to a paediatrician or an enuresis clinic** children with an underlying cause which has been identified but which is generally not managed in primary care, for example:
 - **Diabetes** — refer immediately (same day) to a multidisciplinary paediatric diabetes care team.
 - For more information see, the CKS topic on [Diabetes - type 1](#).
 - **Recurrent urinary tract infection** — refer to a paediatric specialist.
 - For more information see, the CKS topic on [Urinary tract infection - children](#).
 - **Psychological problems** (behavioural or emotional problems).
 - **Family problems** (vulnerable child or family).
 - **Developmental, attention, or learning difficulties**.
 - **Known or suspected physical or neurological problems**.
- Refer the child to an enuresis clinic or equivalent when an underlying cause cannot be clearly identified.

Basis for recommendation

These recommendations are based on guidance issued by the National Institute for Health and Clinical Excellence (NICE), *Nocturnal enuresis — the management of bedwetting in children and young people* [[National Clinical Guideline Centre, 2010](#)].