

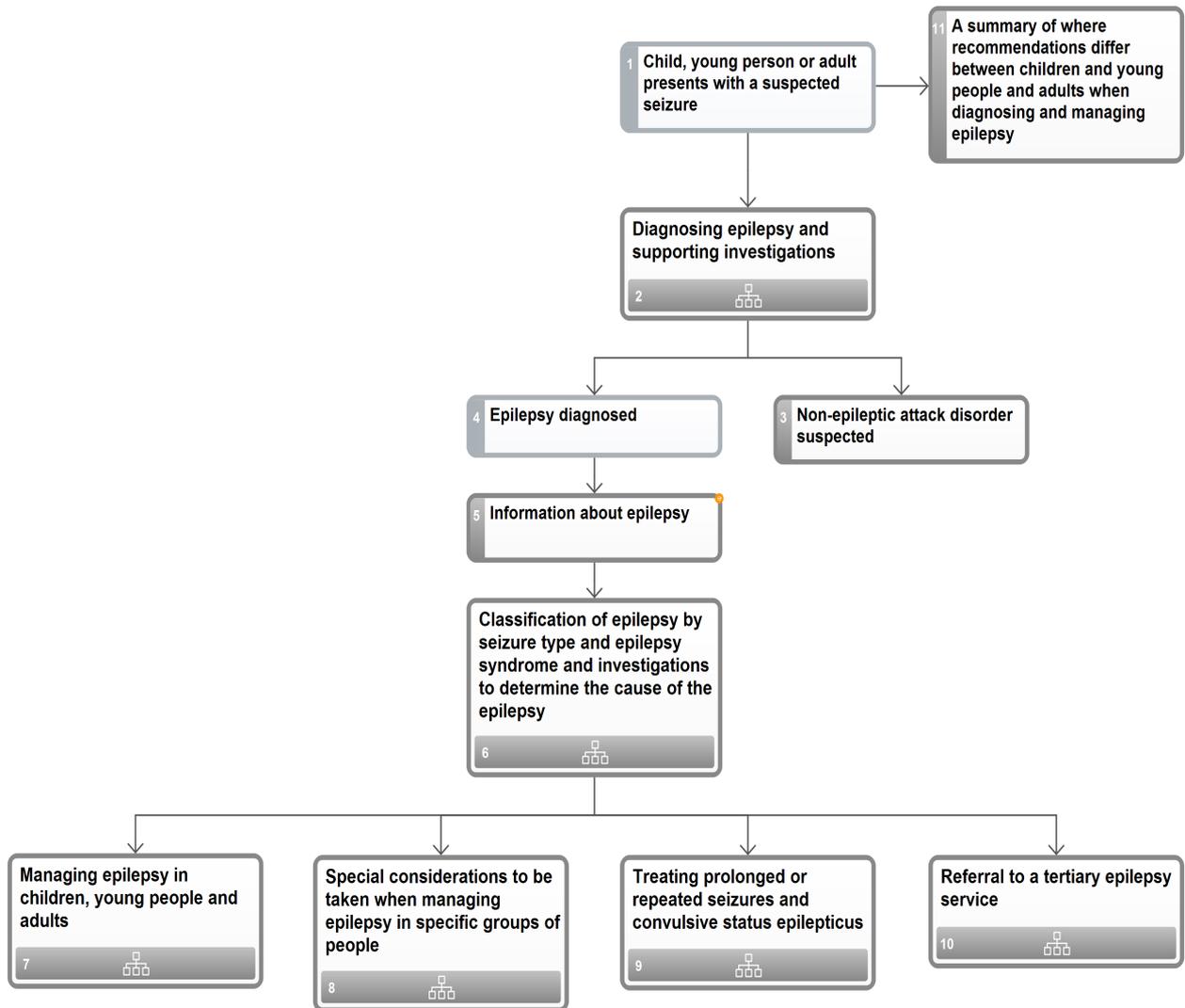
Epilepsy overview

A NICE pathway brings together all NICE guidance, quality standards and materials to support implementation on a specific topic area. The pathways are interactive and designed to be used online. This pdf version gives you a single pathway diagram and uses numbering to link the boxes in the diagram to the associated recommendations.

To view the online version of this pathway visit:

<http://pathways.nice.org.uk/pathways/epilepsy>

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1 Child, young person or adult presents with a suspected seizure

No additional information

2 Diagnosing epilepsy and supporting investigations

[See Epilepsy / Diagnosing epilepsy and supporting investigations](#)

3 Non-epileptic attack disorder suspected

Where non-epileptic attack disorder is suspected, refer to psychological or psychiatric services for further investigation and treatment.

Using EEG to evaluate non-epileptic attack disorder

Provocation by suggestion may be used in the evaluation of non-epileptic attack disorder. However, it has a limited role and may lead to false-positive results in some people.

For other recommendations on using electroencephalogram (EEG) when investigating epilepsy, see [EEG](#) in this pathway.

4 Epilepsy diagnosed

No additional information

5 Information about epilepsy**Giving information about epilepsy**

Everyone providing care or treatment for children, young people and adults with epilepsy should be able to provide essential information.

Provide information in formats, languages and ways that are suited to the child, young person or adult's requirements. Consideration should be given to developmental age, gender, culture and stage of life of the person.

Healthcare professionals have a responsibility to educate others about epilepsy so as to reduce the stigma associated with it. Provide information about epilepsy to all people who come into contact with children, young people and adults with epilepsy, including school staff, social care professionals and others.

Information to provide

Give to the person and their families and/or carers, and ensure access to sources of, information about (where appropriate):

- epilepsy in general
- diagnosis and treatment options (see also [diagnosis](#) and [treatment](#) in this pathway)
- medication and side effects (see also [anti-epileptic drugs](#) in this pathway)
- seizure type(s), triggers and seizure control
- management and self-care
- risk management
- first aid, safety and injury prevention at home and at school or work
- psychological issues
- social security benefits and social services
- insurance issues
- education and healthcare at school
- employment and independent living for adults
- importance of disclosing epilepsy at work, if relevant (if further information or clarification is needed, voluntary organisations should be contacted)
- road safety and driving
- prognosis
- sudden death in epilepsy (SUDEP; see below)
- status epilepticus (see also [status epilepticus](#) in this pathway)
- lifestyle, leisure and social issues (including recreational drugs, alcohol, sexual activity and sleep deprivation)
- family planning and pregnancy (see also [special considerations for women and girls with epilepsy](#) in this pathway)
- voluntary organisations, such as support groups and charitable organisations, and how to contact them.

When to give information about epilepsy

The time at which this information should be given will depend on the certainty of the diagnosis, and the need for confirmatory investigations.

Give appropriate information before important decisions are made (for example, regarding pregnancy or employment).

Discuss the possibility of having seizures, and provide information on epilepsy before seizures occur, for those at high risk of developing seizures (such as after severe brain injury), with a learning disability, or who have a strong family history of epilepsy. For more information on people with learning disabilities, see [people with learning disabilities](#) in this pathway.

Set aside adequate time in the consultation to provide information – revisit in subsequent consultations.

Use checklists to remind children, young people and adults, and healthcare professionals, about information that should be discussed during consultations.

Ensure that the child, young person or adult with epilepsy and their family and/or carers as appropriate knows how to contact a named individual when information is needed. This named individual should be a member of the healthcare team and be responsible for ensuring that the information needs of the child, young person or adult and/or their family and/or carers are met.

If children, young people and adults, and families and/or carers, have not already found high-quality information from voluntary organisations and other sources, inform them of different sources (using the Internet, if appropriate: see, for example, the website of the [Joint Epilepsy Council of the UK and Ireland](#)).

Providing information about sudden unexpected death in epilepsy (SUDEP)

Include information on sudden unexpected death in epilepsy (SUDEP) in literature on epilepsy to show why preventing seizures is important. Include tailored information on the person's relative risk of SUDEP as part of the counselling checklist.

The risk of SUDEP can be minimised by:

- optimising seizure control
- being aware of the potential consequences of nocturnal seizures.

Take account of the small but definite risk of SUDEP when tailoring information and discussions.

Where families and/or carers have been affected by SUDEP, contact them to offer condolences, invite them to discuss the death, and offer referral to bereavement counselling and a SUDEP support group.

Quality standards

The following quality statements are relevant to this part of the pathway.

4. Epilepsy care plan (children and young people)
4. Epilepsy care plan (adults)

6 Classification of epilepsy by seizure type and epilepsy syndrome and investigations to determine the cause of the epilepsy

[See Epilepsy / Classification of epilepsy by seizure type and epilepsy syndrome and investigations to determine the cause of the epilepsy](#)

7 Managing epilepsy in children, young people and adults

[See Epilepsy / Managing epilepsy in children, young people and adults](#)

8 Special considerations to be taken when managing epilepsy in specific groups of people

[See Epilepsy / Special considerations to be taken when managing epilepsy in specific groups of people](#)

9 Treating prolonged or repeated seizures and convulsive status epilepticus

[See Epilepsy / Treating prolonged or repeated seizures and convulsive status epilepticus](#)

10 Referral to a tertiary epilepsy service

[See Epilepsy / Referral to a tertiary epilepsy service](#)

11 A summary of where recommendations differ between children and young people and adults when diagnosing and managing epilepsy

For differences in the recommendations between children and young people, and adults, at different points of this pathway, see:

- [Differences in recommendations for helping people to cope with epilepsy](#)
- [Differences in recommendations for what to do after a first seizure](#)
- [Differences in recommendations when diagnosing epilepsy](#)
- [Recommendations on where to perform investigations for children](#)
- [Differences in recommendations for using an EEG when diagnosing epilepsy](#)
- [Differences in recommendations for using an ECG when diagnosing epilepsy](#)
- [Differences in recommendations for the use of neuroimaging when investigating the cause of epilepsy](#)
- [Differences in recommendations for the use of blood tests and other investigations when investigating the cause of epilepsy](#)
- [Differences in recommendations when starting treatment with AEDs](#)
- [Differences in recommendations for continuing treatment with AEDs](#)
- [Differences in recommendations for the use of psychological interventions](#)
- [Differences in recommendations for the use of the ketogenic diet](#)
- [Differences in recommendations for treating refractory convulsive status epilepticus](#)
- [Recommendations for referral to tertiary care that are specific for children](#)
- [Differences in recommendations for conducting a review](#)

Licensing indications

Detailed below are the anti-epileptic drugs (AEDs) that have been recommended in this pathway but that do not currently have licensed indications for these seizures types or syndromes or particular populations.

Seizure type/ syndrome	Drug	Details of licensing
Treatment of refractory focal seizures	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Eslicarbazepine acetate	At the time of publication, eslicarbazepine acetate did not have UK marketing authorisation for use in children younger than 18 years. It was not recommended owing to a lack of data on safety and efficacy (SPC).
	Gabapentin	At the time of publication, gabapentin did not have UK marketing authorisation for use in children younger than 6 years and at doses over 50 mg/kg daily in children younger than 12 years (BNFC). The use of gabapentin was not recommended in children younger than 6 years owing to the lack of sufficient supporting data (SPC).
	Pregabalin	At the time of publication, pregabalin did not have UK marketing authorisation for use in children (BNF).

		Pregabalin was not recommended for use in children younger than 12 years and adolescents (12–17 years) owing to insufficient data on safety and efficacy (SPC).
	Zonisamide	At the time of publication, zonisamide did not have UK marketing authorisation for use in children younger than 18 years owing to insufficient data on safety and efficacy (SPC).
GTC	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Oxcarbazepine	At the time of publication, oxcarbazepine did not have UK marketing authorisation for GTC seizures (BNF). It had authorisation for focal seizures with or without secondary GTC seizures (BNF).
Absence seizures	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10

		days each month, just before and during menstruation), and cluster seizures (BNFC).
	Lamotrigine	At the time of publication, lamotrigine had UK marketing authorisation for monotherapy of typical absence seizures for those aged 2–12 years only. There was not authorisation outside of this age range (BNF).
	Levetiracetam	At the time of publication, levetiracetam did not have UK marketing authorisation for use in absence seizures. It had authorisation for monotherapy and adjunctive treatment of focal seizures with or without secondary generalisation and adjunctive therapy of myoclonic seizures in patients with JME and GTC seizures (BNF).
	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for use in absence seizures. It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox–Gastaut syndrome (BNF).
	Zonisamide	At the time of publication, zonisamide did not have UK marketing authorisation for use in absence seizures. It had authorisation for adjunctive therapy for adult patients with refractory focal seizures, with or without secondary generalisation (BNF).
Myoclonic seizures	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for

		epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Levetiracetam	At the time of publication, levetiracetam did not have UK marketing authorisation for monotherapy use in myoclonic seizures. It had authorisation for monotherapy and adjunctive treatment of focal seizures with or without secondary generalisation and adjunctive therapy of myoclonic seizures in patients with JME and GTC seizures (BNF).
	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for use in myoclonic seizures. It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox–Gastaut syndrome (BNF).
	Zonisamide	At the time of publication, zonisamide did not have UK marketing authorisation for use in myoclonic seizures. It had authorisation for use in adjunctive treatment of refractory focal seizures with or without secondary generalisation (BNF).
Tonic or atonic seizures	Lamotrigine	At the time of publication, lamotrigine did not have UK marketing authorisation for use in tonic or atonic seizures. It had authorisation for monotherapy and adjunctive treatment of focal seizures, GTC seizures and seizures associated with Lennox–Gastaut syndrome. It also had authorisation for monotherapy of typical absence seizures for children aged 2–12 years (BNF, BNFC).

Infantile spasms	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for use in tonic or atonic seizures. It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox–Gastaut syndrome (BNF).
	ACTH (tetracosactide)	At the time of publication, ACTH (tetracosactide) did not have UK marketing authorisation for infantile spasms. Depot ampoules are not recommended in infants and children younger than 3 years owing to the presence of benzyl alcohol in the formulation (SPC).
Lennox–Gastaut syndrome	Felbamate	At the time of publication, felbamate did not have UK marketing authorisation. There was no SPC available.
Dravet syndrome	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children under 3 years of age (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for use in Dravet syndrome. It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox–Gastaut syndrome (BNF).

BECTS/ Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type)	Carbamazepine	At the time of publication, carbamazepine did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for focal and GTC seizures (BNF).
	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Eslicarbazepine acetate	At the time of publication, eslicarbazepine acetate did not have UK marketing authorisation for use in children younger than 18 years. It was not recommended owing to a lack of data on safety and efficacy (SPC).
	Gabapentin	At the time of publication, gabapentin did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for use in focal seizures with and without secondary generalisation (BNF) but it did not have UK marketing authorisation for use in children younger than 6 years and at doses over 50 mg/kg daily in children younger than 12 years (BNFC). The use of gabapentin was not recommended in children younger than 6 years owing to the lack of sufficient supporting data (SPC).

Lacosamide	At the time of publication, lacosamide did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for adjunctive treatment of focal seizures with or without secondary generalisation (BNF).
Lamotrigine	At the time of publication, lamotrigine did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for monotherapy and adjunctive treatment of focal and GTC seizures, seizures associated with Lennox–Gastaut syndrome, and monotherapy treatment of typical absence seizures in children aged 2 to 12 years (BNF).
Levetiracetam	At the time of publication, levetiracetam did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for monotherapy and adjunctive treatment of focal seizures with or without secondary generalisation and adjunctive therapy of myoclonic seizures in patients with JME and GTC seizures (BNFC).
Oxcarbazepine	At the time of publication, oxcarbazepine did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for focal seizures with or without secondary GTC seizures (BNF).
Pregabalin	At the time of publication, pregabalin did not have UK marketing authorisation for use in children (BNF). Pregabalin was not recommended for use in children

		younger than 12 years and adolescents (12–17 years) owing to insufficient data on safety and efficacy (SPC).
	Tiagabine	At the time of publication, tiagabine did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for focal seizures with or without secondary generalisation that are not satisfactorily controlled by other antiepileptics (BNF).
	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox-Gastaut syndrome (BNF).
	Vigabatrin	At the time of publication, vigabatrin did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome. It can be prescribed in combination with other epileptic treatment for focal epilepsy with or without secondary generalisation (BNF).
	Zonisamide	At the time of publication, zonisamide did not have UK marketing authorisation for BECTS/Panayiotopoulos syndrome and late-onset childhood occipital epilepsy (Gastaut type). It had authorisation for adjunctive therapy for adult patients with refractory focal seizures, with or without secondary generalisation (BNF).
IGE	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the

	<p>use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).</p>
Lamotrigine	<p>At the time of publication, lamotrigine did not have UK marketing authorisation for use in IGE. It had authorisation for monotherapy and adjunctive treatment of focal and GTC seizures, seizures associated with Lennox–Gastaut syndrome, and monotherapy treatment of typical absence seizures in children aged 2 to 12 years (BNF).</p>
Levetiracetam	<p>At the time of publication, levetiracetam did not have UK marketing authorisation for IGE. It had authorisation for monotherapy and adjunctive treatment of focal seizures with or without secondary generalisation and adjunctive therapy of myoclonic seizures in patients with JME and GTC seizures (BNF).</p>
Topiramate	<p>At the time of publication, topiramate did not have UK marketing authorisation for use in IGE. It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox–Gastaut syndrome (BNF).</p>
Zonisamide	<p>At the time of publication, zonisamide did not have UK marketing authorisation for use in IGE. It had authorisation for adjunctive therapy for adult patients with</p>

		refractory focal seizures, with or without secondary generalisation (BNF).
JME	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Lamotrigine	At the time of publication, lamotrigine did not have UK marketing authorisation for use in juvenile myoclonic epilepsy. It had authorisation for monotherapy and adjunctive treatment of focal and GTC seizures, seizures associated with Lennox–Gastaut syndrome, and monotherapy treatment of typical absence seizures in children aged 2 to 12 years (BNF).
	Levetiracetam	At the time of publication, levetiracetam did not have UK marketing authorisation for monotherapy use in JME. It had authorisation for monotherapy and adjunctive treatment of focal seizures with or without secondary generalisation and adjunctive therapy of myoclonic seizures in patients with JME and GTC seizures (BNF).
	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for use in JME. It had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive

		treatment for seizures associated with Lennox–Gastaut syndrome (BNF).
	Zonisamide	At the time of publication, zonisamide did not have UK marketing authorisation for use in JME. It had authorisation for adjunctive therapy for adult patients with refractory focal seizures, with or without secondary generalisation (BNF).
Absence syndromes	Clobazam	At the time of publication, clobazam did not have UK marketing authorisation for use in children younger than 3 years (BNFC). There was insufficient experience of the use of this drug in children younger than 6 years to enable any dosage recommendation to be made (SPC). It did have authorisation for adjunctive therapy for epilepsy, monotherapy under specialist supervision for catamenial (menstruation) seizures (usually for 7–10 days each month, just before and during menstruation), and cluster seizures (BNFC).
	Lamotrigine	At the time of publication, lamotrigine had UK marketing authorisation for monotherapy of typical absence seizures for those aged 2–12 years only. There was no authorisation outside this age range (BNF).
	Levetiracetam	At the time of publication, levetiracetam did not have UK marketing authorisation for use in absence syndromes. It had authorisation for monotherapy and adjunctive treatment of focal seizures with or without secondary generalisation and adjunctive therapy of myoclonic seizures in patients with JME and GTC seizures (BNF).
	Topiramate	At the time of publication, topiramate did not have UK marketing authorisation for use in absence syndromes. It

		had authorisation for monotherapy and adjunctive treatment of focal seizures and GTC seizures and adjunctive treatment for seizures associated with Lennox–Gastaut syndrome (BNF).
	Zonisamide	At the time of publication, zonisamide did not have UK marketing authorisation for use in absence syndromes. It had authorisation for adjunctive therapy for adult patients with refractory focal seizures, with or without secondary generalisation (BNF).
Status epilepticus	Propofol	At the time of publication, propofol did not have UK marketing authorisation for status epilepticus but had authorisation for anaesthesia and sedation. Diprivan 2%, Propofol-Lipuro 2%, and Propoven 2% were not licensed for use in children younger than 3 years; Diprofusor TCI ('target controlled infusion') system was not licensed for use in children (BNFC).
	Thiopental sodium	At the time of publication, thiopental sodium did not have UK marketing authorisation for status epilepticus (only if other measures fail, see section 4.8.2 in BNF), by slow intravenous injection (BNF). It is authorised for convulsive states: 75 to 125 mg (3 to 5 ml of a 2.5% solution) given by intravenous infusion (SPC).
	Midazolam	At the time of publication, midazolam injection did not have UK marketing authorisation for status epilepticus (BNF, BNFC).
	Diazepam	At the time of publication, diazepam did not have UK marketing authorisation for the use of Rectubes and Stesolid Rectal Tubes in children younger than 1 year (BNFC).

Abbreviations: BECTS, benign epilepsy with centrotemporal spikes; BNF, British national formulary; BNFC, British national formulary for children; GTC, generalised tonic–clonic; IGE, idiopathic generalised epilepsy; JME, juvenile myoclonic epilepsy; SPC, summary of product characteristics.

Differences in recommendations for helping people to cope with epilepsy

Recommendations specific for children and young people

In children and young people, self-management of epilepsy may be best achieved through active child-centred training models and interventions.

Recommendations specific for adults

Adults should receive appropriate information and education about all aspects of epilepsy. This may be best achieved and maintained through structured self-management plans.

Differences in recommendations for what to do after a first seizure

Recommendations specific for children and young people

The information that should be obtained from the child or young person and/or parent or carer after a suspected seizure is contained in [appendix D](#) of the epilepsy NICE guideline.

It is recommended that all children and young people who have had a first non-febrile seizure should be seen as soon as possible¹ by a specialist in the management of the epilepsies to ensure precise and early diagnosis and initiation of therapy as appropriate to their needs.

Recommendations specific for adults

The information that should be obtained from the adult and/or family or carer after a suspected seizure is contained in [appendix D](#) of the epilepsy NICE guideline.

It is recommended that all adults having a first seizure should be seen as soon as possible by a specialist in the management of the epilepsies to ensure precise and early diagnosis and initiation of therapy as appropriate to their needs.

¹ The Guideline Development Group considered that with a recent onset suspected seizure, referrals should be urgent, meaning that patients should be seen within 2 weeks.

Differences in recommendations when diagnosing epilepsy

Recommendations specific for children and young people

The diagnosis of epilepsy in children and young people should be established by a specialist paediatrician with training and expertise in epilepsy.

Recommendations specific for adults

The diagnosis of epilepsy in adults should be established by a specialist medical practitioner with training and expertise in epilepsy.

Recommendations on where to perform investigations for children

All investigations for children should be performed in a child-centred environment.

Differences in recommendations for using an EEG when diagnosing epilepsy

Recommendations specific for children and young people

An electroencephalogram (EEG) should be performed only to support a diagnosis of epilepsy in children and young people. If an EEG is considered necessary, it should be performed after the second epileptic seizure but may, in certain circumstances, as evaluated by the specialist, be considered after a first epileptic seizure.

In children and young people, a sleep EEG is best achieved through sleep deprivation or the use of melatonin.

Recommendations specific for adults

An EEG should be performed only to support a diagnosis of epilepsy in adults in whom the clinical history suggests that the seizure is likely to be epileptic in origin.

Differences in recommendations for the use of neuroimaging when investigating the cause of epilepsy

Recommendations specific for children and young people

Computed tomography (CT) should be used to identify underlying gross pathology if magnetic resonance imaging (MRI) is not available or is contraindicated, and **for children or young people in whom a general anaesthetic or sedation would be required for MRI but not CT.**

Differences in recommendations for the use of blood tests and other investigations when investigating the cause of epilepsy

Recommendations specific for children and young people

In children and young people, other investigations, including blood and urine biochemistry, should be undertaken at the discretion of the specialist to exclude other diagnoses, and to determine an underlying cause of the epilepsy.

Recommendations specific for adults

In adults, appropriate blood tests (for example, plasma electrolytes, glucose, calcium) to identify potential causes and/or to identify any significant comorbidity should be considered.

Differences in recommendations for using an ECG when diagnosing epilepsy

Recommendations specific for children and young people

In children and young people, a 12-lead electrocardiogram (ECG) should be considered in cases of diagnostic uncertainty.

Recommendations specific for adults

A 12-lead ECG should be performed in adults with suspected epilepsy.

Differences in recommendations when starting treatment AEDs

Recommendations specific for children and young people

Anti-epileptic drug (AED) therapy in children and young people should be initiated by a specialist.

Recommendations specific for adults

AED therapy should be initiated in adults on the recommendation of a specialist.

Differences in recommendations for continuing treatment with AEDs

Recommendations specific for children and young people

Regular blood test monitoring in children and young people is not recommended as routine, and should be done only if clinically indicated and recommended by the specialist.

Recommendations specific for adults

Regular blood test monitoring in adults is not recommended as routine, and should be done only if clinically indicated.

Recommendations for referral to tertiary care that are specific for children

In children, the diagnosis and management of epilepsy within the first few years of life may be extremely challenging. For this reason, children with suspected epilepsy should be referred to tertiary services early, because of the profound developmental, behavioural and psychological effects that may be associated with continuing seizures.

Differences in recommendations for the use of psychological interventions

Recommendations specific for children and young people

Psychological interventions (relaxation, cognitive behaviour therapy) may be used in children and young people with drug-resistant focal epilepsy.

Recommendations specific for adults

Psychological interventions (relaxation, cognitive behaviour therapy, biofeedback) may be used in conjunction with anti-epileptic drug (AED) therapy in adults where either the person or the specialist considers seizure control to be inadequate with optimal AED therapy. This approach may be associated with an improved quality of life in some people.

Differences in recommendations for the use of the ketogenic diet

Recommendations specific for children and young people

Refer children and young people with epilepsy whose seizures have not responded to appropriate anti-epileptic drugs (AEDs) to a tertiary paediatric epilepsy specialist for consideration of the use of a ketogenic diet.

Recommendations specific for adults

No recommendation has been made for adults.

Differences in recommendations for treating refractory convulsive status epilepticus

Recommendations specific for children and young people

Administer intravenous midazolam¹ or thiopental sodium to treat children and young people with refractory convulsive status epilepticus. Adequate monitoring, including blood levels of anti-epileptic drugs (AEDs), and critical life systems support are required. See also the suggested protocols in [appendix F](#) of the epilepsy NICE guideline.

Recommendations specific for adults

Administer intravenous midazolam, propofol or thiopental sodium to treat adults with refractory convulsive status epilepticus. Adequate monitoring, including blood levels of AEDs, and critical life systems support are required. See also the suggested protocols in [appendix F](#) of the epilepsy NICE guideline.

¹ At the time of publication (January 2012), this drug did not have UK marketing authorisation for this indication and/or population (see [Licensing indications](#) for details). Informed consent should be obtained and documented in line with normal standards in emergency care.

Differences in recommendations for conducting a review

Recommendations specific for children and young people

Children and young people should have a regular structured review with a specialist.

For children and young people, the maximum interval between reviews should be 1 year, but the frequency of reviews should be determined by the child or young person's epilepsy and their wishes and those of the family and/or carers. The interval between reviews should be agreed between the child or young person, their family and/or carers as appropriate, and the specialist, but is likely to be between 3 and 12 months.

Recommendations specific for adults

Adults should have a regular structured review with their GP, but depending on the person's wishes, circumstances and epilepsy, the review may be carried out by the specialist.

For adults, the maximum interval between reviews should be 1 year but the frequency of review will be determined by the person's epilepsy and their wishes.

Adults should have regular reviews. In addition, access to either secondary or tertiary care should be available to ensure appropriate diagnosis, investigation and treatment if the person or clinician view the epilepsy as inadequately controlled.

Adults with well-controlled epilepsy may have specific medical or lifestyle issues (for example, pregnancy or drug cessation) that may need the advice of a specialist.

Glossary

Sources

Epilepsy. NICE clinical guideline 137 (2012)

Your responsibility

The guidance in this pathway represents the view of NICE, which was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties. Implementation of this guidance

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