

## Paediatric Preoperative Anxiolytic Medication

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### Key amendments to this guideline

Date	Amendment	Approved by:
12/12/2018	New Document approved	Paediatric QI Meeting

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

**This guideline is for use by the following staff groups :** Anaesthetists, Paediatric Staff, Theatre Staff, Surgeons

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## Paediatric Anxiolytic Premedication

### 1.0 Introduction

The primary goal of anxiolytic premedication in children is to ease the induction of anaesthesia by facilitating a smooth separation from their parents. All medications referred to in this guideline have the potential to produce profound sedation and should always be administered with caution and close monitoring. The child's age, body weight, drug history, allergy status and underlying medical and surgical conditions must all be taken into account when deciding upon which premedication to use. Premedication should be avoided in children with airway abnormalities (especially airway obstruction), sleep apnoea, haemodynamic instability/intolerance or deteriorating mental status. Extra caution must be taken before administering premedication to any child who is acutely unwell or has systemic organ failure. Appendix 1 provides detailed but not exhaustive lists of patient conditions where preoperative sedation is contra-indicated.

Intravenous cannulation after adequate topical anaesthesia e.g. AMETOP® gel is often well tolerated by children. However, in most cases drug administration without a needle is more pleasant for children, their family and the medical team. Oral administration of small volumes of medication does not increase the risk of aspiration pneumonia in appropriately starved patients who follow the trust's fasting policy for general anaesthesia.

The main factors predicting anxiety and distress in children at induction of anaesthesia are: age, shy/withdrawn temperament, parental anxiety, previous negative hospital experiences and negative reactions to immunisations. Premedication is only one means by which preoperative anxiety can be reduced in children undergoing surgery. Simple, non-pharmacological methods and age appropriate communication strategies can be very effective and possess favourable risk/benefit profiles.

Intervention	Comment
Pre-hospital programmes (videos, tours etc.)	Most effective in children over 4years old
Play therapy	Trained therapists will tailor it accordingly
Parents present at induction is generally beneficial (separation anxiety is a particular problem in children aged 1-3years)	Depends on parental and patient factors and anaesthetists preference (may discourage if <5kg, difficult airway, acutely unwell)
Distraction methods (e.g. playing tablet computer game) versus engagement with the anaesthetic process (e.g. blowing up the balloon)	It is important to select the method that will work best for an individual child at that particular time

Children react to the stress of surgery and anaesthesia in an age-dependent manner. A small minority of children display abnormal reactions related to behavioural and psychological disorders. For the anxious but cooperative child, midazolam or 50-65% Nitrous oxide with oxygen is often adequate. In more anxious and uncooperative children, midazolam combined with either clonidine or ketamine is more effective. However, polypharmacy in this context requires closer supervision by medical and nursing staff. Intranasal clonidine is useful in the child refusing oral medication. Intramuscular ketamine should be reserved for extreme circumstances, administered only by anaesthetists

experienced in its use, with full monitoring and resuscitative equipment immediately available.

This guideline designed to help clinicians to select the most appropriate preoperative, anxiolytic medication for their patients aged between 2 and 18 years of age. Important pharmacological (dosage and route of administration) considerations are discussed. The essential, good clinical care required when looking after children who receive preoperative sedation is highlighted for medical and nursing staff.

## 2.0 Consent

For any procedure involving sedation, the parents and if appropriate, the child should be given information about the rationale for sedation, the technique to be used and the risks and side effects. Although not specific to preoperative anxiolytic medication to facilitate induction of anaesthesia, NICE Guidance concerning the use of sedation in children and young people undergoing diagnostic and therapeutic procedures is available via the following link:

<https://pathways.nice.org.uk/pathways/sedation-in-children-and-young-people#content=view-node%3Anodes-information-and-consent>

The Royal College of Anaesthetists (RCoA) have produced Information leaflets explaining what to expect when you have an anaesthetic and what choices there may be. 5 different leaflets, specifically designed for children of different ages and their carers are available via the following link:

<https://www.rcoa.ac.uk/childreninfo>

## 3.0 Risks of Sedation

Although rare, even if patient selection is appropriate and drugs are used within recommended doses, serious adverse events can still occur with sedative medications. The major risks are of the patient entering an excessively deep level of sedation and losing their ability to maintain a patent airway or effective breathing. This leads to hypoxia and its consequences. It is vital that systems are in place to minimise these risks, recognise any such problems immediately and to rescue the patient if they occur. As long as appropriate steps are taken to re-establish the airway and assist breathing if needed, there should be no harm to the patient.

The staff attending the patient must have the necessary skills to recognise and manage an obstructed airway and to assist breathing with bag and mask. They must be able to urgently obtain assistance from persons with advanced airway management skills (e.g. intubation) and the equipment to secure the airway and to support the circulation must be immediately available.

Side effects of sedative agents include nausea and vomiting, agitation or dysphoria and prolonged drowsiness. Children given sedation in the afternoon who are affected by prolonged drowsiness are more likely to require admission. It is important to remember that sedative premedication can potentially delay the discharge of children undergoing elective day case surgery.

#### 4.0 Guideline Content

Table 4.1 summarises dosage recommendations, approximate onset and offset times (there will be individual variation) and some other important pharmacological considerations for these drugs

**Table 4.1 – Details of Guideline**

Drug	Route	Dose (use IBW if BMI above 91 <sup>st</sup> centile for age)	Onset Time (min)	Duration (hours)	Advantages	Disadvantages
<b>FIRST LINE SEDATIVE: BUCCAL MIDAZOLAM 0.2 to 0.3mg/kg (use oral route if buccal preparation is unavailable) If Midazolam previously ineffective or caused paradoxical reaction discuss with consultant anaesthetist and consider alternative</b>						
Midazolam	Buccal Oral	0.2 to 0.3mg/kg (max 10mg) 0.3 to 0.5mg/kg (max 20mg)	10-20 30-40	1-2 1-2	Sedation, anxiolysis & anterograde amnesia	Paradoxical reaction seen in some children
<b>SECOND LINE SEDATIVE: ORAL CLONIDINE 2 to 4micrograms/kg when given alone (maximum dose 150micrograms) Oral Clonidine 2micrograms/kg when combined with Midazolam</b>						
Clonidine	Oral Intranasal	2 to 4µg/kg (max 150micrograms) 2µg/kg (max 150micrograms)	45-60 30-60	4-6 4-6	IV preparation is tasteless & can be given nasally to children refusing oral medication	Slower onset than midazolam when given as single agent. Bradycardia & Hypotension can occur, no amnesia
<b>THIRD LINE SEDATIVE: ORAL KETAMINE 3mg/kg (maximum dose 200mg) when combined with Midazolam Oral Ketamine 5 to 7mg/kg if given alone (maximum dose 400mg)<sup>#</sup></b>						
Ketamine	Oral Intranasal Buccal	5 to 7mg/kg (max 400mg) 3 to 5mg/kg 3 to 5mg/kg	15-30 10-15 10-15	4-6 2-4 2-4	Sedation and analgesia	Increased salivation, nystagmus, dissociative state with higher doses. Injectable Ketelar® is extremely bitter to taste alone
<b>TEMAZEPAM MAY BE USED AS AN ALTERNATIVE TO MIDAZOLAM IN OLDER CHILDREN (OVER 11YEARS)</b>						
Temazepam	Oral	0.5mg/kg (max 20mg)	45-60mins	2-3	For patients >40kg or where a longer period of anxiolysis is desirable	Longer duration of action

\*Consider giving oral atropine 30micrograms/kg (max 900micrograms) 1 hour preoperatively for patients with excessive salivation or bradycardia.

<sup>#</sup>Avoid using Ketamine as sole agent sedative premedication because a higher dose is required for adequate sedation, leading to increased side effects. Use undiluted drugs for intranasal administration to allow a small volume to be dispensed quickly. A nasal MAD (mucosal atomisation device) can make intranasal administration quicker and easier.

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If administration by no other route is possible, but sedation is considered essential for successful induction of anaesthesia, intramuscular (IM) ketamine can be used as a last resort (see table 4.2). A dose of 5mg/kg IM is recommended to produce adequate sedation within 5-10 minutes. Sedation can be profound so IM ketamine must be prescribed and administered by an experienced paediatric anaesthetist only. Administration should ideally be in the anaesthetic room/operating theatre or anaesthetic suite in the radiology department (if undergoing a radiological procedure under GA). This avoids the need to transfer of such patients. Anaesthetist, paediatric trained ODP/anaesthetic nurse, monitoring and resuscitation equipment must be immediately available throughout.

Drug	Route	Dose (based on IBW if BMI above 91 <sup>st</sup> centile for age)	Onset Time (min)	Duration (hours)	Advantages	Disadvantages
Ketamine	IM - Use 50mg/ml concentration to restrict injection volume and minimise injection pain	5mg/kg (Max 500mg)	5-10	1-3	Sedation and analgesia	Increased salivation, nystagmus, dissociative state with higher doses

Other routes of administration are possible for some of the medications listed in Table 2.1 but they should only be used at the discretion of a consultant anaesthetist because of potential side effects e.g. intranasal midazolam causes a very unpleasant stinging sensation. Lower doses are required via non-enteral routes which avoid first pass metabolism but absorption can be variable.

### 5.0 Summary of cautions & contraindications (see Table 5 below)

If in doubt please consult BNFc or your paediatric pharmacist for advice.

Drug	Contraindications	Cautions
Benzodiazepines	Severe respiratory depression, upper airway compromise, neuromuscular weakness, previous hyper-excitability	Cardiorespiratory disease, neuromuscular disease, drug and alcohol abuse. Hypovolaemia, hypothermia, vasoconstriction. Hepatic or renal impairment, severe personality disorders
Clonidine and Dexmedetomidine	Bradycarrhythmias secondary to second or third degree AV block or sick sinus syndrome	Concomitant administration of Methylphenidate. Mild/moderate bradycarrhythmia, constipation, polyneuropathy, Raynaud's syndrome or other occlusive peripheral vascular disease, history of depression.
Ketamine	Hypertension, stroke, acute porphyria	Severe cardiac disease. Epilepsy/seizures, psychosis, thyroid

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		disorder, glaucoma. Dehydration, respiratory infection.
Atropine	Myasthenia Gravis, paralytic ileus, pyloric stenosis, toxic megacolon	Down's syndrome, autonomic neuropathy, hypertension, pyrexia

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## 6.0 Reversal Drugs

### 6.1 Flumazenil 20micrograms/kg IV

can be used to reverse benzodiazepine sedation (maximum single dose 200micrograms) – can be repeated as necessary up to maximum of 50micrograms/kg per course

### 6.2 Naloxone 10micrograms/kg IV

can be used to reverse opioid induced respiratory depression (repeat as necessary)

**BEWARE: the half-life of Flumazenil and Naloxone are less than some benzodiazepines and opioids respectively, there is a risk of delayed re-sedation.**

Opioids are important preanaesthetic medications for children with preoperative pain. In addition to providing analgesia they can help to calm some children. However, the opioid related side effects such as respiratory depression, dysphoria, pruritis, nausea and vomiting limit their usefulness as sedatives. Apnoea is more likely when opioids are combined with other sedatives, so this should be avoided. If deemed unavoidable caution must be exercised and reductions in the dose of both drugs considered. Appendix 2 provides further details about important drug interactions with sedative drugs.

## 7.0 Drug Doses in Obese Children

Childhood obesity is defined in children aged 2years and above as a body mass index (BMI) above the 98th percentile for children and teens of the same age and sex. BMI for age above 91<sup>st</sup> centile suggest that a child is overweight.

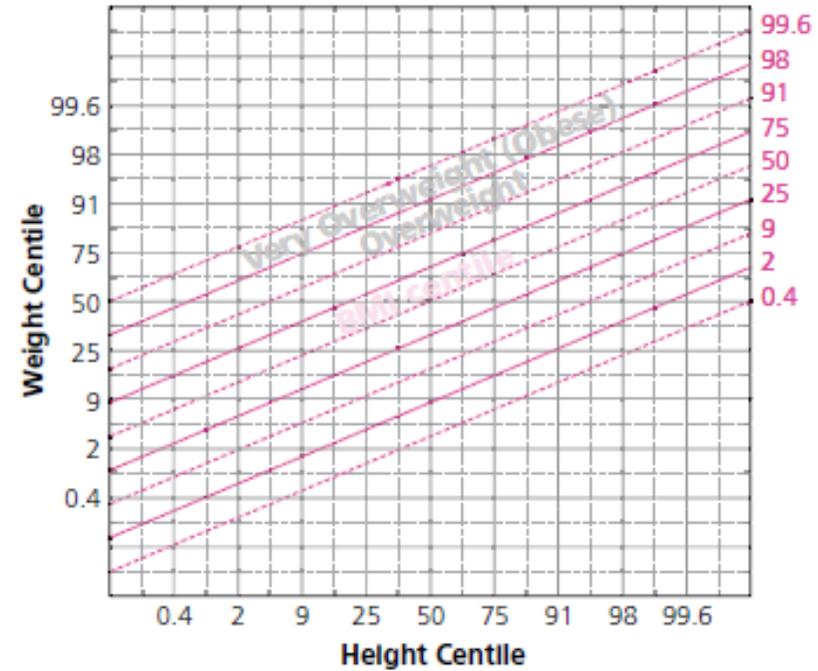
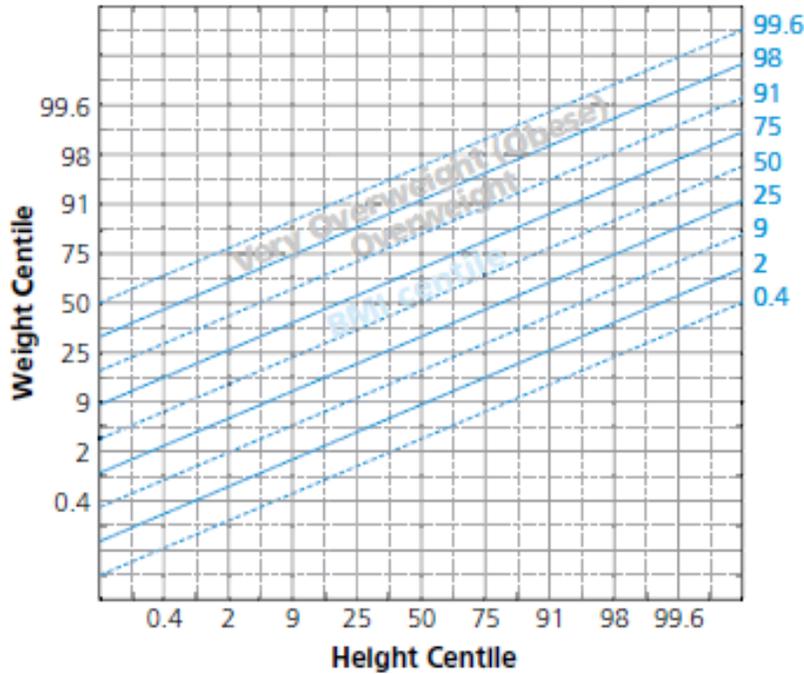
RCPCH age and gender-specific growth charts are available via the links below and an electric version is also available in eZnotes (Appendix 3 summarises how to use the eZnotes growth charts). Data from these charts can then be used to look-up the BMI centile:

[https://www.rcpch.ac.uk/sites/default/files/Girls\\_2-18\\_years\\_growth\\_chart.pdf](https://www.rcpch.ac.uk/sites/default/files/Girls_2-18_years_growth_chart.pdf)

[https://www.rcpch.ac.uk/sites/default/files/Boys\\_2-18\\_years\\_growth\\_chart.pdf](https://www.rcpch.ac.uk/sites/default/files/Boys_2-18_years_growth_chart.pdf)

1. Plot the child's measured height (cm) and weight (kg)
2. Note the weight and height centiles from the growth chart
3. Plot the weight centile against the height centile on the Body Mass Index (BMI) centile look-up chart
4. Read off the corresponding BMI centile from the slanting centile lines
5. A BMI above the 91<sup>st</sup> centile suggests overweight
6. A child whose BMI is above the 98<sup>th</sup> centile is very overweight (clinically obese)

BMI centile look-up charts from the RCPCH are shown below (blue colour – boys, pink colour –girls)



**IBW (Ideal Body Weight) should be used to calculate the per kg doses of all premedicants in overweight and obese children (BMI above 91<sup>st</sup> centile).**

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Although IBW might not be the best size metric to use for calculating the dose of all premedicant drugs in overweight children from a pharmacokinetic perspective. In this clinical situation where the therapeutic window is narrow, overdose and inadvertent over-sedation must be avoided at all costs. Dosing based upon IBW is therefore prudent

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### 7.1 Determine IBW using the Moore method:

RCPCH Height-for age-growth charts are used to give a percentile. This same percentile is used to read off the IBW from a weight-for-age growth chart. It is based on the concept that ideal body weight is the same standard deviation from the mean as the child's height. So, for example, if a 6-year old boy's height is on the 75<sup>th</sup> centile, one can use a weight-growth chart to read off the expected weight on the 75<sup>th</sup> centile for a 6-year old boy (see Appendix 4). A gender specific RCPCH growth chart (readily available on eZnotes or via the above links) is needed. A note of caution is that Moore's method may overestimate IBW in taller children.

Pharmacokinetic principles will not be discussed in detail here but remember that for loading doses of drugs the calculation is based on VD (volume of distribution).

The VD for hydrophilic drugs should theoretically be based on IBW. The BNFC specifies for this group of drugs, that doses should be calculated on the basis of IBW in order to avoid excessive doses in obese children. Note: Suxamethonium is an exception which despite its hydrophilicity should be dosed according to TBW (Total Body Weight) because of an increased pseudocholinesterase activity in this population.

The VD of lipophilic (hydrophobic) drugs should be based on measured TBW, but bearing in mind toxicity and never exceeding adult recommended doses.

Not all drugs fit neatly into these 2 categories, some partially distribute into fat and their increased VD in obese children is therefore based on an adjusted body metric (IBW plus a proportion of overall body weight as a correction factor). This concept of ABW (Adjusted Body Weight) takes into account the fact that in obese children 20-40% of the excessive weight is due to an increase in muscle, bone and other lean body tissue mass. ABW can be estimated with this formula:

### 7.2 Adjusted Body Weight = $IBW + 0.3 \times (TBW - IBW)$

Intramuscular premedication should be avoided in all children wherever possible but particularly in those who are obese because drugs might only reach the adipose tissue rather than muscle and result in erratic absorption.

## 8.0 Practical management of pre-operative sedation

1. The patient must have an allocated bed.
2. It must be >6 hours since the child consumed food and > 1 hour since clear fluids.
3. Following pre-operative assessment, the premedication should be prescribed by an anaesthetist.
4. Precise timing of premedication administration is crucial and should correspond with the theatre list order.
5. The premedication might be prescribed with 'on-call' listed as the time of administration. In this situation, the prescribing anaesthetist will telephone the ward to tell the patients named nurse when to administer the premedication.
6. If the child refuses, vomits or spits out the drug, contact the anaesthetist who prescribed the drug who may consider repeating a revised dose.
7. All oral premedications can be mixed with neat fruit cordial or a 'carrier' such as Paracetamol or Ibuprofen liquid to try to mask their unpleasant taste. This is especially important if bitter tasting IV preparations of Midazolam or Ketamine need to be used. Note both clonidine and dexmedetomidine are particularly tasteless.
8. After receiving the premedication the child must remain on the paediatric ward (or designated observation area at Kidderminster Treatment Centre) under the direct supervision of a responsible adult, such as a parent or guardian and be allocated a responsible paediatric nurse.
9. For all sedated patients there must be a named, responsible anaesthetist who is present in the hospital and available for advice.
10. When the child becomes drowsy they should lie in a bed. If the child becomes sedated (V on AVPU scale) continuous oxygen saturation should be monitored. If the oxygen saturation reads <96%, oxygen should be applied via facemask and the prescribing anaesthetist/on-call anaesthetist contacted immediately.
11. In addition to continuous oxygen saturation monitoring and general observation by nursing staff, the child should have age appropriate PEWS recorded and escalated using 'SBAR' if their PEWS triggers 3 and above. The following parameters must be recorded:
  - Oxygen saturation
  - Respiratory rate
  - Pulse
  - Conscious level (AVPU score: Alert, Verbal, Pain, Unresponsive)
12. In addition to PEWS triggers the patient's responsible nurse should also call for help if they have significant concerns for any reason.
13. If the child becomes deeply sedated (P or U on AVPU scale) then the requirements for personnel, monitoring and equipment must be increased. If the prescribing or on-call anaesthetist is unable to attend immediately, in an emergency the paediatric arrest team should be called.
14. The child must be transported to theatre on a bed or trolley. All "premedicated" patients must be escorted to theatre by a trained member of nursing or medical staff along with oxygen and basic resuscitation equipment (including portable suction).

15. The effects of sedative premedication can persist into the postoperative period.  
Patients will be monitored accordingly and provisions made for extended inpatient stay in the event that day case discharge criteria are not met.

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## 9.0 Medicinal forms

Drug	Medicinal Form	Comment
Ketamine (Ketalar® injection)	Single use vials - 200mg/20ml, 500mg/10ml	Very bitter taste orally 50mg/ml concentration should be used for IM to minimise injection volume
Midazolam Buccal	Oromucosal pre-filled oral syringes (2.5mg, 5mg, 7.5mg and 10mg)	Round dose down to nearest multiple of 2.5mg
Midazolam oral solution	Midazolam 12.5mg/5ml oral solution	Various flavours
Midazolam solution for injection	Single use vials – 1mg/ml (2ml vial) and 10mg/2ml vial	Irritant when given intranasally. Very bitter taste (must be diluted with 5-10ml juice prior to oral administration).
Clonidine (Catapres®) solution for injection	Single use vial – 150micrograms/1ml	Can be used IV, IN, IM and PO. Tasteless
Clonidine oral suspension	50mcg/5ml oral suspension	Oral route only
Temazepam	10mg Tablets and 10mg/5mls elixir	Suitable for children 12years and over

## 10.0 References

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## Appendix 1 - Contraindications to Sedation

### Airway and Respiratory Disease

Structural airway abnormality e.g. micrognathia (small mandible)  
Functional airway abnormality e.g. adenotonsillar enlargement, laryngo/tracheomalacia, macroglossia (note stridor, snoring, sternal recession)  
Obstructive sleep apnoea  
Oxygen dependency  
Respiratory failure (high respiratory rate, oxygen treatment)  
Severe brittle asthma (controlled/stable asthma is not a contra-indication)

### Cardiovascular Disease

Stable congenital heart disease is not a contra-indication, but discuss with cardiology if there is a clinical concern.  
Cardiovascular instability  
Hypotension/hypovolaemia  
Cardiac failure  
Cardiac arrhythmia  
Pulmonary hypertension

### Metabolic or Liver Disease

End-stage liver failure  
Certain metabolic disorders prone to acute decompensation without other concurrent treatment  
Patients with mucopolysaccharidoses  
Reduce doses to 50-75% of the recommended dose in cholestasis i.e. visible jaundice or serum bilirubin >70 mmol/l  
Normal oral sedation doses can be given following successful liver transplantation, if liver function is normal  
Prolonged fasting may cause hypoglycaemia and acidosis in some metabolic conditions: BMs should be checked regularly i.e. hourly or half hourly if falling and appropriate action taken. A glucose infusion is likely to be needed.

### Neurology/neurosurgery/neuromuscular Disease

Raised intracranial pressure (drowsiness, headache, vomiting)  
Craniofacial patients with a syndrome  
Depressed conscious level  
History of central apnoea  
Respiratory failure secondary to neuromuscular disease  
Acutely uncontrolled epilepsy  
Convulsion requiring emergency drug administration in the preceding 24hrs  
Convulsions associated with cyanosis  
Failure to regain full consciousness after a recent convulsion  
Epilepsy if controlled is not a contra-indication to sedation, but take careful history regarding recent/type of convulsions

### Renal Disease

Uraemic patients with evidence of impaired consciousness and/or raised serum potassium  
Oral sedation is not contra-indicated in patients stabilised on dialysis

### **Gastro-intestinal Disease**

Severe gastro-oesophageal reflux, such as frequent vomits  
Acute bowel obstruction (abdominal distension, large naso-gastric losses, hypovolaemia)  
Well controlled gastro-oesophageal reflux is not contraindicated but consider nursing the child upright and aspirate any NGT pre- sedation.

### **Haematological Disease**

Sickle cell crisis  
Uncompensated anaemia i.e. acute, unstable anaemia (chronic stable anaemia is not a contra-indication to sedation)  
Porphyria  
Caution in homozygous sickle cell disease, as hypoxia and/or dehydration can precipitate a crisis

## **Appendix 2 - Drug Interactions with sedative drugs**

### **Opioids**

High risk of drug interaction, leading to unpredictable and uncontrollable level of sedation if sedation is given to patients who are receiving opioids

### **IV anti-convulsants**

Sedation is contra-indicated with concurrent IV anti-convulsants

### **Diazepam and lorazepam**

Sedation is contra-indicated with regular or recent (i.e. within the preceding 24 hours) diazepam or lorazepam

### **Drugs which inhibit hepatic enzymes e.g. Clarithromycin, Erythromycin, Fluconazole, Omeprazole, Grapefruit Juice etc.**

Sedative effects can be increased when midazolam is given with these drugs/foods

### **Drugs which induce hepatic enzymes e.g. phenobarbitone, phenytoin, rifampicin etc**

There is an increased sedation failure rate in patients who are taking such as drugs

### **Drugs that have sedative side effects e.g. anti-psychotics, anti-depressants, anti-convulsants**

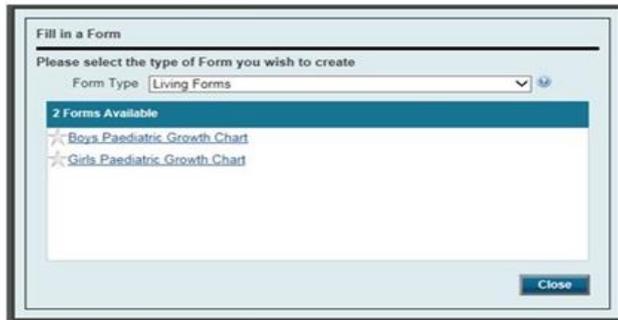
Care should be taken regarding the additive sedative actions of these drugs

### Appendix 3 - Summary of how to use eZnotes growth charts

1. Within the case note viewer, go to the "little man" icon and select 'Fill in a Form'



2. Select 'Living Forms' to show the Growth Chart options:



3. Choose the correct gender and the form will open ready for completion:



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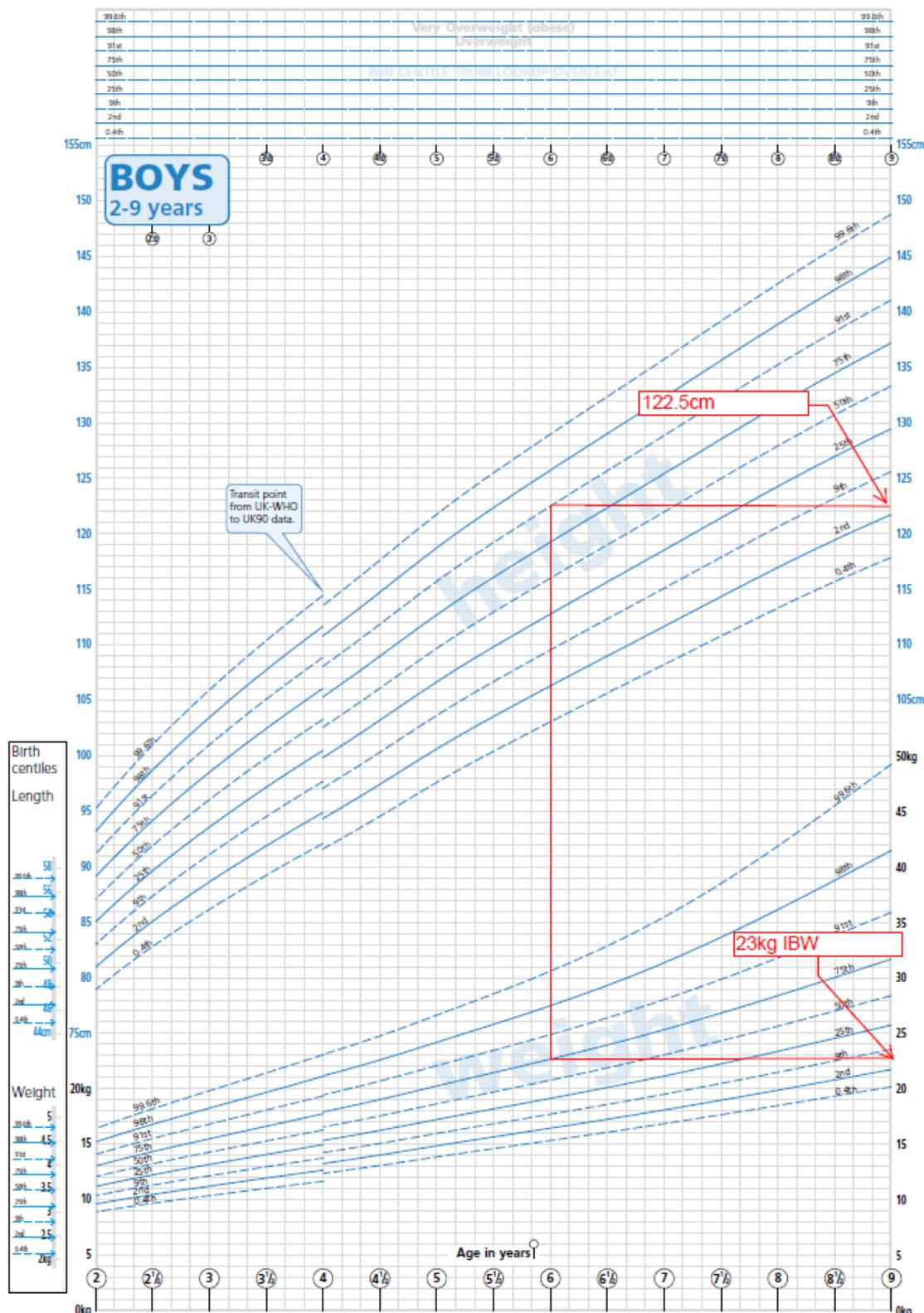
- Once completed the growth chart will be saved in the Outpatient tab under the sub folder Growth Chart. You can also search using the word "growth chart" or "WR4207", via the magnifying glass.



- Once a chart is opened, please continue to use this chart – do not create another chart. If there are problems with the chart, please discuss with Dr Baylon Kamalarajan or an experienced user to rectify.
- Please do not finalise charts until the child is 18 years of age (or will no longer be seen in a paediatric setting). Current data can be exported to PDF format to share with other professionals if needed without finalising charts.

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Appendix 4 – Example using Moore’s method to determine IBW for a 6year old boy, height 122.5cm (75<sup>th</sup> Centile)



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### Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Dr Mike McCabe (Consultant Anaesthetist, Paediatric Anaesthesia Lead)
Dr Tom Dawson (Consultant Paediatrician)
Ms Sarah Scott (Paediatric Pharmacist)

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Paediatric QIM
Anaesthetic Governance

## Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	<b>Does the policy/guidance affect one group less or more favourably than another on the basis of:</b>		
	• Race	N	
	• Ethnic origins (including gypsies and travellers)	N	
	• Nationality	N	
	• Gender	N	
	• Culture	N	
	• Religion or belief	N	
	• Sexual orientation including lesbian, gay and bisexual people	N	
	• Age	N	
2.	<b>Is there any evidence that some groups are affected differently?</b>	N	
3.	<b>If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?</b>	NA	
4.	<b>Is the impact of the policy/guidance likely to be negative?</b>	N	
5.	<b>If so can the impact be avoided?</b>	NA	
6.	<b>What alternatives are there to achieving the policy/guidance without the impact?</b>	NA	
7.	<b>Can we reduce the impact by taking different action?</b>	NA	

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

## Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	N
2.	Does the implementation of this document require additional revenue	N
3.	Does the implementation of this document require additional manpower	N
4.	Does the implementation of this document release any manpower costs through a change in practice	N
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	N
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.

Please note that the key documents are not designed to be printed, but to be used on-line. This is to ensure that the correct and most up-to-date version is being used. If, in exceptional circumstances, you need to print a copy, please note that the information will only be valid for 24 hours and should be read in conjunction with the key document supporting information and/or Key Document intranet page, which will provide approval and review information.