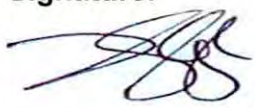
Patient Group Direction For The Administration Of Oral Paracetamol Or Ibuprofen To Children Awaiting Treatment For Minor Injury Or With Pyrexia By Registered Nurses Working Within NHS Grampian

Lead Author: Clinical Pharmacist, RACH	**Consultation Group**: See relevant page in the PGD	**Approver:** Medicines Guidelines and Policies Group **Authorisation:** NHS Grampian

Signature: 		**Signature:** 

NHSG Identifier: MGPG/PGD/Parlbu/1422	**Review Date:** January 2026 **Expiry Date:** January 2027	**Date Approved:** January 2024

NHS Grampian have authorised this Patient Group Direction to help individuals by providing them with more convenient access to an efficient and clearly defined service within the NHS Boards. This Patient Group Direction cannot be used until Appendix 1 and 2 are completed.

Uncontrolled when printed

Version 7

Revision History:

Reference and approval date of PGD that has been adapted and/or superseded	PGD supersedes NHSG/PGD/ParIbu/MGPG1154, Version 6	
Date of change	**Summary of Changes**	**Section heading**
January 2024	Updated to new MGPG PGD template.	
January 2024	Monographs updated.	
January 2024	Maximum age added.	Exclusion criteria

NHGS Identifier: NHSG/PGD/ParIbu/MGPG1422
Keyword(s): PGD Patient Group Direction paracetamol ibuprofen children pyrexia minor injury nurse

Policy Statement: It is the responsibility of the individual healthcare professionals and their line managers to ensure that they work within the terms laid down in this PGD and to ensure that staff are working to the most up to date PGD. By doing so, the quality of the services offered will be maintained, and the chances of staff making erroneous decisions which may affect individual, staff or visitor safety and comfort will be reduced. Supervisory staff at all levels must ensure that staff using this PGD act within their own level of competence.

The lead author is responsible for the review of this PGD and for ensuring the PGD is updated in line with any changes in clinical practice, relevant guidelines, or new research evidence.

Review date: The review date for a PGD needs to be decided on a case-by-case basis in the interest of safety. The expiry date should not be more than 3 years, unless a change in national policy or update is required.

Document:	Drafted:	October 2023
	Completed:	January 2024
	Approved:	January 2024 (published – January 2024)
	Amended and re-authorised:	

Organisational Authorisations

This PGD is not legally valid until it has had the relevant organisational authorisation.

PGD Developed/Reviewed by;

Medical practitioner	**Name:** Kay Davies **Title:** Consultant Anaesthetist **Contact email:** kay.davies@nhs.scot **Signature:** ..Kay Davies..... **Date:** 18/01/2024
Senior representative of the professional group who will provide care under the direction	**Name:** Kathryn Auchnie **Title:** Clinical Nurse Manager **Contact email:** kathryn.auchnie@nhs.scot **Signature** ..... **Date:** 18/01/2024
Lead author	**Name:** Charlotte Morrison **Title :** Paediatric Pharmacist, RACH **Contact email:** charlotte.morrison@nhs.scot **Signature:** ..... **Date:** 24/01/2024
Pharmacist	**Name:** Jonathan Smith **Title :** Paediatric Pharmacist, RACH **Contact email:** jonathan.smith2@nhs.scot **Signature:** ..... **Date:** 24/01/2024

Approved and authorised for use within NHSG by;

Medicines Guidelines and Policies Group Chair	Signature	Date Signed
Lesley Coyle		18/01/2024

Management and Monitoring of Patient Group Direction

PGD Consultative Group

The consultative group is legally required to include a medical practitioner, a pharmacist and a representative of the professional group who will provide care under the direction.

Name:	Title:
Charlotte Morrison	**Lead Author:** Paediatric Pharmacist, RACH
Jonathan Smith	**Pharmacist:** Paediatric Pharmacist, RACH
Kay Davies	**Medical Practitioner:** Consultant Anaesthetist
Kathryn Auchnie	**Senior Representative:** Clinical Nurse Manager

Patient Group Direction For The Administration Of Oral Paracetamol Or Ibuprofen To Children Awaiting Treatment For Minor Injury Or With Pyrexia By Registered Nurses Working Within NHS Grampian

Clinical indication to which this PGD applies

Definition of situation/ Condition	This Patient Group Direction (PGD) will authorise registered nurses to administer a single dose of oral paracetamol or ibuprofen (Appendix 4) to individuals aged 3 months and over, who weigh ≥6kg, awaiting treatment for minor injury or pyrexia within NHS Grampian Hospitals. Children arriving at the Emergency Department (ED), Assessment Units or Minor Injury Units are triaged to separate minor from major injuries or illness. Opiates are prescribed and administered as soon as possible to relieve pain caused by major injuries. However, many children having suffered minor injury arrive at ED/Assessment Units/Minor Injury Units in pain and may not have been given analgesia prior to attendance and have to wait in pain before they are treated. Similarly, children suffering with pyrexia may not have been given an anti-pyretic. This PGD should be used in conjunction with the recommendations in the current British National Formulary for Children (BNFC), and the individual Summary of Product Characteristics (SmPC).
Inclusion criteria	All individuals presenting at the Emergency Department, Assessment Units or Minor Injury Units are triaged according to local protocol. If after the triage process, they are suffering from minor injury or pyrexia and are over 3 months old and weigh ≥6kg, they may be treated with oral paracetamol or ibuprofen in accordance with the product monograph recommendations and contraindications. Prior to the administration of the medicine, valid consent to receiving treatment under this PGD must be obtained. Consent must be in line with current NHSG consent policy.
Exclusion criteria	Individuals may be administered paracetamol or ibuprofen under this PGD unless: • They are aged under 3 months old • Over 18 years of age • They are under 6kg in weight • No valid consent has been received.

Precautions and special warnings	The products listed for use under this PGD should only be used for the specific condition and age groups specified. Individuals who are suffering from a condition out with the PGD specifications should be seen by medical staff. Medicines included in the PGD should not be used for treatment of individuals who have a known or suspected hypersensitivity to the product or any of its ingredients. In the event that an individual suffers an adverse reaction medical help should be sought immediately.
Action if excluded from treatment	Medical advice must be sought – refer to relevant medical practitioner. Document the reason for exclusion under the PGD and any action taken in the individual's appropriate clinical records.
Action if treatment is declined	Individual/parent/carer should be advised of the risks and consequences of not receiving treatment. Inform/refer to the relevant medical practitioner if individual/parent/carer declines treatment. Document that the administration was declined, the reason and advice given in appropriate clinical records.

Description of treatment available under the PGD

Name form and strength of medicine	See individual medicine monographs.
Legal status	See individual medicine monographs.
Is the use out with the SmPC?	See individual medicine monographs.
Dosage/Maximum total dose	See individual medicine monographs.
Frequency of dose/Duration of treatment	See individual medicine monographs.

Maximum or minimum treatment period	See individual medicine monographs.
Route/Method of administration	See individual medicine monographs.
Quantity to be administered	See individual medicine monographs.
Storage requirements	See individual medicine monographs.
Additional Information	See individual medicine monographs.
Follow-up (if applicable)	Individuals should not leave if they are feeling unwell without speaking to the healthcare professional who administered the medicine first. If necessary a doctor or the individuals GP should be contacted for advice.
Advice (Verbal)	See individual medicine monographs.
Advice (Written)	The Patient Information Leaflet (PIL) contained in the medicine(s) should be made available to the individual/parent/carer. Where this is unavailable, or unsuitable, sufficient information should be given in a language that they can understand.
Identifying and managing possible adverse reactions	See individual medicine monographs. **This list is not exhaustive. Please also refer to current BNFC and manufacturers SmPC for details of all potential adverse reactions.** **BNFC**: BNF for Children British National Formulary - NICE **SmPC/PIL/Risk Minimisation Material:** Home - electronic medicines compendium (emc) MHRA Products | Home RMM Directory - (emc) If an adverse reaction does occur give immediate treatment and inform relevant medical practitioner as soon as possible. Document in accordance with locally agreed procedures in the individual's record.

	Report any suspected adverse reactions using the Yellow Card System. Yellow Card Scheme - MHRA
Facilities and supplies required	The following are to be available at sites where the medicine is to be administered: • Appropriate storage facilities • An acceptable level of privacy to respect individual's right to confidentiality and safety • Basic airway resuscitation equipment (e.g. bag valve mask pocket mask, supraglottic airway) • Immediate access to Epinephrine (Adrenaline) 1 in 1000 injection • Access to a working telephone • Another competent adult, who can summon urgent emergency support if required should ideally be present • Access to medical support (this may be via the telephone) • Approved equipment for the disposal of used materials • Clean and tidy work areas, including access to hand washing facilities or alcohol hand gel • A copy of this current PGD in print or electronically.

Characteristics of staff authorised to administer medicine(s) under PGD

Professional qualifications	Registered Nurses as recognised by the Nursing and Midwifery Council (NMC).
Specialist competencies	**Approved by the organisation as:** • Competent to assess the individual's/parent's/carer's capacity to understand the nature and purpose of the medicine administration in order to give or refuse consent • Aware of current treatment recommendations and be competent to discuss issues about the medicine with the individual • Having undertaken appropriate training to carry out clinical assessment of individuals identifying that treatment is required according to the indications listed in the PGD • Competent in the recognition and management of anaphylaxis or under the supervision of persons able to respond appropriately to immediate adverse reactions • Competent to undertake administration of the medicine • Competent to work under this PGD and authorised by name as an approved person to work under the terms of the PGD.
Ongoing training and competency	**All professionals working under this PGD must:** • Have undertaken NoS PGD module training on TURAS Learn

	• Have attended basic life support training either face to face or online and updated in-line with Board requirements • Have undertaken NHS e-anaphylaxis training or equivalent which covers all aspects of the identification and management of anaphylaxis in-line with Board requirements • Maintain their skills, knowledge and their own professional level of competence in this area according to their individual Code of Professional Conduct. **Note:** All practitioners operating under the PGD are responsible for ensuring they remain up to date with the use of the medicine. If any training needs are identified these should be discussed with those responsible for authorisation to act under the PGD • Have knowledge and familiarity of the following; o SmPC for the medicine(s) to be administered in accordance with this PGD.
Responsibilities of professional manager(s)	**Professional manager(s) will be responsible for;** Ensuring that the current PGD is available to all staff providing care under this direction. Ensuring that staff have received adequate training in all areas relevant to this PGD and meet the requirements above. Maintain up to date record of all staff authorised to administer the medicine(s) specified in this direction.

Documentation

Authorisation of administration	Registered Nurses working within NHS Grampian can be authorised to administer the medicine(s) specified in this PGD by their Clinical Nurse Manager/Senior Charge Nurse/Consultant in charge of their substantive area of work. All authorised staff are required to read the PGD and sign the Agreement to Administer Medicines Under PGD (Appendix 1). A Certificate of Authorisation (Appendix 2) signed by the authorising professional/manager should be supplied. This should be held in the individual health professional's records, or as agreed locally.
Record of administration	An electronic or paper record must be completed to allow audit of practice.

	An electronic/HEPMA record of the screening and subsequent administration or not, of the medicine(s) specified in this PGD should be made in accordance with individual Health Board electronic/HEPMA recording processes. If a paper record is used for recording the screening of individuals and the subsequent administration or not, of the medicine(s) specified in this PGD, this should include as a minimum: • Date and time of administration • Individual's name and CHI • Exclusion criteria, record why the medicine was not administered (if applicable) • Record that valid consent to treatment under this PGD was obtained • The name, dose, form, route of the medicine(s) administered • Advice given, including advice given if excluded or declined treatment under this PGD • Signature and name in capital letters of the healthcare professional who administered the medicine, and who undertook the assessment of the individual's clinical suitability for the administration/supply of the medicine • Record of any adverse effects and the actions taken (advise individuals' GP/relevant medical practitioner). Depending on the clinical setting where administration is undertaken, the information should be recorded manually or electronically, in one (or more) of the following systems, as appropriate: • Consent forms • Secondary Care Medical Notes • HEPMA • Individual service specific systems. Local policy should be followed with respect to sharing information with the individual's General Practitioner. All records should be clear, legible and contemporaneous and in an easily retrievable format.
Audit	All records of the medicine(s) specified in this PGD will be filed with the normal records of medicines in each practice/service. A designated person within each practice/service where the PGD will be used will be responsible for annual audit to ensure a system of recording medicines administered under a PGD.

References

Electronic Medicines Compendium
http://www.medicines.org.uk

Medicine	Date of Revision	Accessed
Paracetamol 250mg/5ml Oral Suspension (The Boots Company Plc)	02/01/24	10/01/24
Paracetamol 120mg/5ml Oral Suspension (McNeil Products Ltd)	09/02/23	10/01/24
Paracetamol 500mg Tablets (Aurobindo Pharma - Milpharm Ltd)	11/09/23	10/01/24
Paracetamol 500mg Soluble Tablets (Zentiva)	02/06/23	10/01/24
Ibuprofen for Children Oral Suspension 100mg/5ml (Thornton & Ross Ltd)	22/05/23	10/01/24
Ibuprofen 200 mg Tablets (Haleon UK Trading Limited)	14/07/23	10/01/24
Ibuprofen 400mg tablets (Wockhardt UK Ltd)	29/06/23	13/07/23

British National Formulary for Children
https://www.medicinescomplete.com accessed 07/07/2023

NPPG - Position statement 2020-01 Choosing an Oral Liquid Medicine for Children https://nppg.org.uk/wp-content/uploads/2020/12/Position-Statement-Liquid-Choice-V1-November-2020.pdf accessed 10/07/23

MHRA Paracetamol: updated dosing for children to be introduced https://www.gov.uk/drug-safety-update/paracetamol-updated-dosing-for-children-to-be-introduced accessed 11/07/23

Appendix 1

Healthcare Professional Agreement to Administer Medicine(s) Under Patient Group Direction

I: _____ (Insert name)

Working within: _____ e.g. Area, Practice

Agree to administer the medicine(s) contained within the following Patient Group Direction:

Patient Group Direction For The Administration Of Oral Paracetamol Or Ibuprofen To Children Awaiting Treatment For Minor Injury Or With Pyrexia By Registered Nurses Working Within NHS Grampian – Version 7

I have completed the appropriate training to my professional standards enabling me to administer the medicine(s) under the above direction. I agree not to act beyond my professional competence, nor out with the recommendations of the direction.

Signed: _____

Print Name: _____

Date: _____

Profession: _____

Professional Registration number/PIN: _____

Appendix 2

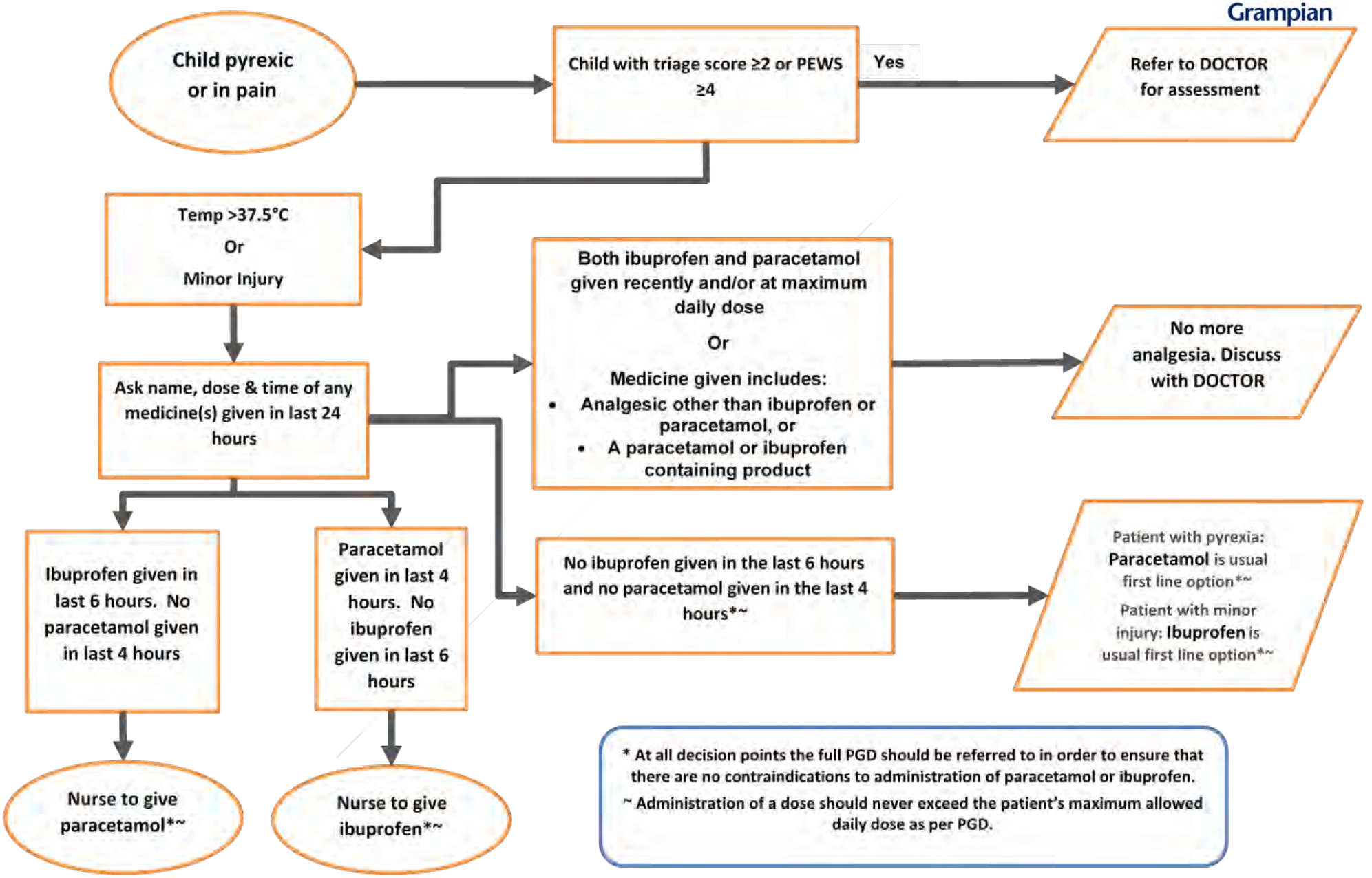
Healthcare Professionals Authorisation to Administer Medicine(s) Under Patient Group Direction

The Lead manager/Professional of each clinical area is responsible for maintaining records of all clinical areas where this PGD is in use, and to whom it has been disseminated.
The Senior Nurse/Professional who approves a healthcare professional to administer the medicine(s) under this PGD is responsible for ensuring that they are competent, qualified and trained to do so, and for maintaining an up-to-date record of such approved persons.
The Healthcare Professional that is approved to administer the medicine(s) under this PGD is responsible for ensuring that they understand and are qualified, trained and competent to undertake the duties required. The approved person is also responsible for ensuring that administration is carried out within the terms of the direction, and according to their individual code of professional practice and conduct.
Patient Group Direction For The Administration Of Oral Paracetamol Or Ibuprofen To Children Awaiting Treatment For Minor Injury Or With Pyrexia By Registered Nurses Working Within NHS Grampian – Version 7
Local clinical area(s) where the listed healthcare professionals will operate under this PGD:

Name of Healthcare Professional	Signature	Date	Name of Manager	Signature	Date

Patient Group Direction For The Administration Of Oral Paracetamol Or Ibuprofen To Children Awaiting Treatment For Minor Injury Or With Pyrexia By Registered Nurses Working Within NHS Grampian – Version 7					
Name of Healthcare Professional	**Signature**	**Date**	**Name of Manager**	**Signature**	**Date**

Appendix 3 - Nurse Administration of Analgesia/Antipyretic to Minor Injury or Pyrexic Patients



Appendix - 4 Medicine Monographs

The information in these monographs is not exhaustive. They must be read in conjunction with the current issue of the British National Formulary, and the Summary of Product Characteristics for each product

Paracetamol Oral Suspension 120mg in 5mL or 250mg in 5mL and Paracetamol 500mg Tablets or Soluble Tablets	
Indication	To treat pyrexia or minor injury.
Inclusion Criteria	As per main PGD inclusion criteria.
Exclusion Criteria	As per main PGD exclusion criteria and additionally: • Has hepatic impairment • Has renal impairment • Has hypersensitivity to any of the ingredients • Already had paracetamol (Oral/IV/PR) administered within last 4 hours – do not give more paracetamol until at least 4 hours after last dose • Has already taken the maximum dose of paracetamol in the last 24 hours (consider ibuprofen) • The suspension and soluble tablets may contain sorbitol and/or maltitol. As sorbitol and maltitol are metabolised to fructose, individuals with hereditary fructose intolerance (HFI) should not be given the suspension/soluble tablet if either are present.
Precautions and Special Warnings	As per main PGD Precautions and warnings and additionally: Caution is advised if paracetamol is administered concomitantly with flucloxacillin due to increased risk of high anion gap metabolic acidosis (HAGMA), particularly in individuals with severe renal impairment, sepsis, malnutrition and other sources of glutathione deficiency. Close monitoring, including measurement of urinary 5-oxoproline, is recommended. The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by colestyramine. Paracetamol is extensively metabolised in the liver and can therefore interact with medicinal products with the same metabolic pathway or induce/inhibit the same metabolic pathway. Chronic use of medicinal products which induce liver enzymes like rifampicin, barbiturates, some anti-epileptic drugs (e.g. carbamazepine, phenytoin, phenobarbital, primidone) and St. John's wort can increase the hepatotoxicity of paracetamol as a result of an increased and fast formation of toxic metabolites. Caution is therefore necessary with concomitant use of enzyme-inducing drugs.

<table>
<tr><th colspan="2">Paracetamol Oral Suspension 120mg in 5mL or 250mg in 5mL and Paracetamol 500mg Tablets or Soluble Tablets</th></tr>
<tr><td></td><td>The soluble tablets contain sodium (quantity is brand specific) which should be considered for any individuals on a sodium restricted diet.

Some formulations of the suspension contain propylene glycol, which can cause CNS depression, hyperosmolality, metabolic acidosis and renal impairment. However at standard doses of paracetamol the quantity contained within the suspension is below the NPPG recommended maximum of 50mg/kg/day for children aged 1 month to 4 years, and 500mg/kg/ day for children aged 5 to 17 years.</td></tr>
<tr><td>Legal Status</td><td>Paracetamol liquid oral suspension 120mg in 5mL and 250mg in 5mL is a Pharmacy-only Medicine (P) or General Sales List Medicine (GSL). Paracetamol 500mg tablets and soluble tablets are GSL/P or Prescription-only Medicines (PoM) dependent on pack size.</td></tr>
<tr><td>Dose/Maximum total dose</td><td>Table 1 - Oral Paracetamol Doses’
<table>
<tr><th>Age</th><th>Weight</th><th>Dose
(max 4 doses in 24 hours)</th></tr>
<tr><td>3-5 months</td><td>6-7kg</td><td>60mg</td></tr>
<tr><td>6-23 months</td><td>8-11kg</td><td>120mg</td></tr>
<tr><td>2-3 years</td><td>12-16kg</td><td>180mg</td></tr>
<tr><td>4-5 years</td><td>17-20kg</td><td>240mg</td></tr>
<tr><td>6-7 years</td><td>21-24kg</td><td>250mg</td></tr>
<tr><td>8-9 years</td><td>25-31kg</td><td>375mg</td></tr>
<tr><td>10-11 years</td><td>32-39kg</td><td>500mg</td></tr>
<tr><td>12-18 years</td><td>40-50kg</td><td>500-750mg</td></tr>
<tr><td>12-18 years</td><td>>50kg</td><td>750mg – 1g</td></tr>
</table>
If individual is underweight for their age use dose for appropriate weight band.

If individual is overweight for their age use dose for appropriate age band.</td></tr>
</table>

Paracetamol Oral Suspension 120mg in 5mL or 250mg in 5mL and Paracetamol 500mg Tablets or Soluble Tablets	
	A maximum of 4 doses can be given in 24 hours (see Table 1) A minimum of 4 hours is required in between doses. Doses based on BNF for children online and MHRA guidance 2011.
Frequency of dose/Duration of treatment	See Dosage/Maximum total dose section above.
Maximum or minimum treatment period	A maximum of 4 doses only can be given in 24 hours, but **only a single dose can be administered under this PGD**.
Route/Method of Administration	Route of administration is oral. For the oral suspension it is important to **shake the bottle** for at least 10 seconds before use.
Quantity to be administered	Only one dose can be administered under this PGD. Dose as per Table 1 'Oral Paracetamol Doses'.
Potential Adverse Reactions	Refer to the product Summary of Product Characteristics (SmPC) for full details of known adverse effects. Adverse effects of paracetamol are rare but hypersensitivity including skin rash may occur. Some formulations of the suspension contain methyl hydroxybenzoate (E218), which may cause allergic reactions (possibly delayed). Some formulations of the suspension contain benzyl alcohol which may cause allergic reactions. Some formulations of the suspension/soluble tablets contain sorbitol and/or maltitol, which may cause gastrointestinal discomfort and can have a mild laxative effect.

Paracetamol Oral Suspension 120mg in 5mL or 250mg in 5mL and Paracetamol 500mg Tablets or Soluble Tablets	
Advice	Advise individual/parent/carer what to expect and what to do for minor and major reactions. The individual/parent/carer should be advised that they should not take any other paracetamol containing products at the same time. A maximum of 4 doses can be given in any 24 hour period at 4-6 hourly intervals, i.e. if the individual has been given a dose in the Emergency department, Assessment Unit or Minor Injuries Unit they need to wait at least 4 hours before re-dosing. If maximum dose is exceeded they should seek medical advice. The individual/parent/carer should be told to inform the nursing staff of any adverse effects experienced while waiting for treatment.
Follow up (If applicable)	Advise of the possible adverse effects and where to seek advice in the event of a suspected adverse reaction developing.
Storage	For tablets/soluble tablets, store below 25°C in the original package. For oral suspension store below 25°C. Protect from light. Store in the original package.

Ibuprofen 100mg in 5mL Oral Suspension and Ibuprofen 200mg or 400mg Tablets	
Indication	To treat pyrexia or minor injury.
Inclusion Criteria	As per main PGD inclusion criteria
Exclusion Criteria	As per main PGD exclusion criteria and additionally: • Already had ibuprofen administered within the last 6 hours – do not give more ibuprofen until at least 6 hours after last dose • Has already taken the maximum dose of ibuprofen in the last 24 hours (consider paracetamol) • Is asthmatic • Has a bleeding disorder • Has renal impairment • Has heart failure • Has hepatic impairment • Has had previous sensitivity to aspirin or other non steroidal anti-inflammatories (NSAIDs) • Has gastro intestinal problems including history of previous bleeds • The suspension may contain sorbitol and/or maltitol. As sorbitol and maltitol are metabolised to fructose, individuals with hereditary fructose intolerance (HFI) should not be given the suspension if either are present. • The tablets may contain sucrose. Individuals with hereditary fructose intolerance (HFI), glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take the tablets if sucrose is present. • Currently taking any of the following medicines; o Anticoagulants o Aspirin or other NSAIDs o Ciclosporin or tacrolimus o Methotrexate o Ciprofloxacin and other quinolone antibiotics o Lithium o Zidovudine
Precautions and Special Warnings	As per main PGD Precautions and warnings and additionally: The tablets may contain sucrose (quantity is brand specific) which should be considered for any individuals with diabetes mellitus.

Ibuprofen 100mg in 5mL Oral Suspension and Ibuprofen 200mg or 400mg Tablets	
	Caution should be advised in individuals receiving concomitant medications which could increase the risk of gastrotoxicity or bleeding, such as corticosteroids and selective serotonin reuptake inhibitors. Ibuprofen can mask symptoms of infection, which may lead to delayed initiation of appropriate treatment. When Ibuprofen is administered for fever or pain relief in relation to infection, monitoring of infection is advised. Ibuprofen may diminish the effect of antihypertensive medicines and/or cause hyperkalemia in individuals receiving antihypertensive therapy. Caution is required prior to starting ibuprofen in individuals with a history of hypertension as fluid retention, hypertension and oedema have been reported in association with NSAID therapy. Additionally, diuretics can increase the risk of nephrotoxicity of NSAIDs including ibuprofen. NSAIDs including ibuprofen increase plasma glycoside levels. Concomitant administration of ibuprofen with CYP2C9 inhibitors (such as voriconazole and fluconazole) may increase the exposure to ibuprofen. Caution is advised and a dose reduction of ibuprofen may be required.
Legal Status	Ibuprofen available as a 100mg in 5mL oral suspension* and a 200mg or 400mg tablet can be a GSL/P/PoM, dependent on pack size. (*Note: It is now also available in a 200mg/5mL oral suspension but this is not currently stocked in the NHSG acute sector.)

<table>
<tr><td>Dose/Maximum total dose</td><td>
Table 2 - Oral Ibuprofen Doses’
<table>
<tr><th>Age</th><th>Weight</th><th>Dose
(max 3 doses in 24 hours)</th></tr>
<tr><td>3-5 months</td><td>6-7kg</td><td>50mg</td></tr>
<tr><td>6-11 months</td><td>8-10kg</td><td>50mg</td></tr>
<tr><td>1-3 years</td><td>11-16kg</td><td>100mg</td></tr>
<tr><td>4-6 years</td><td>17-22kg</td><td>150mg</td></tr>
<tr><td>7-9 years</td><td>23-31kg</td><td>200mg</td></tr>
<tr><td>10-11 years</td><td>32-39kg</td><td>200mg (tablet) or 300mg (suspension)</td></tr>
<tr><td>12-18 years</td><td>Over 40 kg</td><td>400mg</td></tr>
</table>
If individual is underweight for their age use dose for appropriate weight band.

If individual is overweight for their age use dose for appropriate age band.

A maximum of 3 doses can be given in a 24 hour period (see Table 2).

A minimum of 6 hours is required between doses.

Doses based on BNF for children online and MHRA guidance 2011.
</td></tr>
<tr><td>Frequency of dose/Duration of treatment</td><td>See Dosage/Maximum total dose section above.</td></tr>
<tr><td>Maximum or minimum treatment period</td><td>A maximum of 3 doses can be given in a 24 hour period, but only a single dose can be administered under this PGD.</td></tr>
<tr><td>Route/Method of Administration</td><td>Route of administration is oral.

For the oral suspension it is important to shake the bottle well before use.</td></tr>
<tr><td>Quantity to be administered</td><td>Only one dose can be administered under this PGD. Dose as per Table 2 ‘Oral Ibuprofen Doses’.</td></tr>
</table>

Potential Adverse Reactions	Refer to the product Summary of Product Characteristics (SmPC) for full details of known adverse effects. Gastrointestinal upset is the most common side effect of ibuprofen. Bleeding, exacerbation of asthma symptoms and cardiovascular side-effects may occur. Serious skin reactions, including exfoliative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis, have been reported rarely in association with the use of NSAIDS. Ibuprofen should be discontinued at the first appearance of signs and symptoms of severe skin reactions, such as skin rash, mucosal lesions, or any other sign of hypersensitivity. There is a risk of renal impairment in dehydrated children and adolescents. The suspension may contain Sodium Methyl Parahydroxybenzoate (E219) and Sodium Propyl Parahydroxybenzoate (E217) which may cause allergic reactions (possibly delayed). The suspension may contain sorbitol and/or maltitol, which may cause gastrointestinal discomfort and can have a mild laxative effect.
Advice	Advise individual/parent/carer what to expect and what to do for minor and major reactions. The individual/parent/carer should be advised that the maximum of 3 doses of ibuprofen in 24 hours should not be exceeded. They should also wait at least 6 hours before giving a further dose. To minimise the incidence of GI upset, ibuprofen is best taken with or just after food if not being fasted. The individual/parent/carer should be told to inform the nursing staff of any adverse effects experienced while waiting for treatment.
Follow up (If applicable)	Advise of the possible adverse effects and where to seek advice in the event of a suspected adverse reaction developing.
Storage	Store below 25°C in the original packaging.