NHS
Worcestershire
Acute Hospitals
NHS Trust

GUIDELINE FOR CRITICALLY ILL CHILDREN PRESENTING TO THE MINOR INJURY UNIT

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.

Introduction

The aim of this guideline is to aid the nurses within Kidderminster Minor Injury Unit (MIU) to provide a safe accessible service for paediatric patients who present to the MIU, whether they attend with minor or major illness/ injury. The guideline is based on a five-tier system produced by the Manchester Triage Group (2013) the guidance from the national Advanced Life Support Group 'APLS' manual (2018) and the Resuscitation Council UK, Guidelines for Resuscitation (2015).

The patients covered by this guideline are seriously ill children presenting to MIU.

This guideline is for use by the following staff groups:

The guidelines are to be used by Emergency Nurse Practitioners (ENP) working within the MIU, all practitioners should be aware of their Code of Professional Conduct (NMC 2002), which clearly requires nurses to act in a manner which safeguards the interests and well being of patients, ensuring no act or omission is detrimental to their safety.

Lead Clinician(s)

Jules Walton	Clinical lead
Guideline reviewed and approved by Accountable Director on:	31st May 2019
Review date: This is the most current document and is to be used until a revised document is available	31st May 2021

Key amendments to this Document:

Date	Amendment	By:
11th May 2006	Guideline approved by Clinical Effectiveness Committee	
May 2008	Reviewed by Lead Clinician and agreed to continue for a further two year period with no amendments	G O'Byrne
January 2012	Reviewed by Lead Clinician and agreed to continue for a further two year period with no amendments	G O'Byrne
January 2014	Guideline reviewed - minor amendments made to appendix 1 and 2. References and contribution list updated	G O'Byrne
March 2016	Document extended for 12 months as per TMC	TMC

	paper approved on 22nd July 2015	
August 2017	Document extended for 6 months as per TMC paper approved on 22nd July 2015 `	TMC
December 2017	Change wording of 'expiry date' on front page to the sentence added in at the request of the Coroner	
December 2017	Document extended for 3 months as per TLG recommendation	TLG
January 2018	Document extended for 2 years following divisional review	
May 2019	Document reviewed and changed.	Sally Bloomer

Guideline for critically ill children presenting to the Minor injury unit

Introduction

The aim of this guideline is to aid the nurses within Kidderminster Minor Injury Unit (MIU) to provide a safe accessible service for paediatric patients who present to the MIU, whether they attend with minor or major illness. The guideline is based on a five-tier system produced by the Manchester Triage Group (2013) the guidance from the national Advanced Life Support Group 'APLS' manual and the Resuscitation Council UK, Guidelines for Resuscitation (2018).

A small percentage of patients attending MIU are outside the scope of the unit, as it is a nurse led unit contact the RMO as appropriate, but these patients have to be seen, assessed and re-directed/ transferred appropriately.

The following guideline provides a framework for managing seriously ill children who present to the MIU whether they are presenting with injuries / illnesses that are inappropriate for treatment in the Minor Injury Unit.

The main aim of the Emergency Nurse Practitioner is to maintain ABCDE until safe transfer to appropriate Unit can be arranged. Interventions / advanced treatments should **not** delay transfer.

Guideline

Clinical presentation	Action
In all presentations	**2222 call – stating paediatric emergency/ cardiac arrest** **(RMO to attend)** **Request 999 ambulance with paramedic crew** **Record & document:** **Respirations** **Oxygen saturation** **Heart rate** **Blood pressure** **Capillary refill time** **BM** **Temperature** **Ensure accurate history is taken from parents with accurate documentation** **As soon as possible a nominated person will liase with the A&E dept. & also alert the paediatric team.**

Airway • Compromised	• Protect cervical spine if injury suspected • Head position – as per chart 1 • Follow B.L.S – see chart 1 • Maintain patent airway • Administer 100% oxygen • Suction as necessary • Assist breathing if indicated • Consider use of : - Oropharyngeal airway L.M.A. Intubation
• Signs of obstruction • Any stridor	• If a choking child see chart 4 (attached) • **DO NOT** inspect the throat • Encourage oxygen but do not force mask
Breathing • Inadequate or absent	• Assessment of breathing *E*ffort, *E*fficiency & *E*ffect • Oxygen via rebreathe mask or bag and mask • Consider L.M.A or intubation
• Any indication of poisoning • Any history of injury	• Give reversal agent if possible according to Patient Group Direction (P.G.D)
• Any wheeze and / or crackles	• Consider Tension Pneumothorax • If RMO present consider needle decompression • Consider: Asthma Bronchiolitis Pneumonia Heart failure • May require nebulised medication and / or steroids as per P.G.D

Circulation Abnormal :- • Heart rate • Rhythm • Capillary return	• See chart 1,2,and 3 (attached) • C.P.R. If indicated • E.C.G. If appropriate • Consider fluid administration – via I.V or intraosseous route – see chart 2 (attached0 **Lowered blood pressure is a late sign of circulatory failure**
Disability • Altered level of consciousness • Abnormal posture • Abnormal pupils (size / reaction)	• Record A.V.P.U. and blood sugar • Describe posture – see chart 1 (attached) • Are pupils equal and reacting • If any signs of fitting consider administration of rectal diazepam via P.G.D
Exposure • Abnormal temperature • Any evidence of a rash	• Record temperature • Administer rectal paracetamol if indicated according to P.G.D • Accurate description of any rash present • If suspected meningitis – give benzlepenicillin or cefortaxime as per P.G.D
Transfer Arrangements	• Via ambulance with a paramedic crew to A&E – either WRH or Alex depending on advice via middle grade or Consultant • A verbal and written report will be given to ambulance crew • As soon as child has left the Unit a verbal update will be given, via the telephone to the Consultant or Middle Grade at receiving A&E department

Monitoring Tool

STANDARDS	%	CLINICAL EXCEPTIONS
Seriously ill children will be assessed and transferred as per this guideline	100%	NONE

This guideline will be audited every 12 months by Clinical Lead.

Compliance of guideline will be monitored by the clinical lead.

References

- Advanced Paediatric Life Support ,6th edition 2018
- Resuscitation Council UK, Resuscitation Guidelines 2015
- Manchester Triage Guidelines 3rd– Manchester Triage Group 2013

CONTRIBUTION LIST

Key individuals involved in developing the document

Name	Designation
Joy Powell	Senior Sister MIU
Mr G O'Byrne	Consultant MIU
Carolyn Bullock	Emergency Nurse Practitioner MIU. KH.

Circulated to the following individuals for comments

Name	Designation
Mr F. France	A&E Consultant WRH
Dr P. Shone	A&E Consultant WRH
Mr C Hetherington	A&E Consultant AH
Mr R Morrell	A&E Consultant AH
Peter Byrne	Matron A&E AH
Chris Doughty	Resuscitation Officer WAHNHST

Circulated to the following CD's/Heads of dept for comments from their directorates / departments

Name	Directorate / Department
Dr. J. Scanlon	Paediatric Consultant

APPENDIX 1

CHART 1 – ASSESSMENT GUIDANCE

	INFANT <1 YR	SMALL CHILD 1- PUBERTY	LARGER CHILD PUBERTY TO ADULT
AIRWAY **HEAD POSITION**	Neutral	Sniffing	Head Tilt / Chin Lift
BREATHING **INITIAL SLOW BREATHS**	5 Effective	5 Effective	None
CIRCULATION **PULSE CHECK** **LANDMARK TECHNIQUE**	Brachial or femoral Lower half of sternum Two fingers or two thumbs	Carotid Lower half of sternum One hand	Carotid Lower half of sternum Two hands
C.P.R RATIO	15:2	15:2	30:2
DISABILITY	A Alert V Responds to only to voice P Responds only to pain U Unresponsive to all stimuli Posture: Decorticate- flexed arms & extended legs Decerebrate – extended arms & legs Pupils: Are they equal & Reacting Glucose – check BM	A Alert V Responds to only to voice P Responds only to pain U Unresponsive to all stimuli Posture: Decorticate- flexed arms & extended legs Decerebrate – extended arms & legs Pupils: Are they equal & Reacting Glucose – check BM	A Alert V Responds to only to voice P Responds only to pain U Unresponsive to all stimuli Posture: Decorticate- flexed arms & extended legs Decerebrate – extended arms & legs Pupils: Are they equal & Reacting Glucose – check BM
EXPOSURE	Temperature Rash	Temperature Rash	Temperature Rash

APPENDIX 2

CHART 2 – PAEDIATRIC RESUSCITATION

WEIGHT (Kg) 0 – 12 months old = [0.5 x age in months] + 4 (average birth weight 3.5 kgs)

1 – 5 years old = [2 x age in years] + 8

6 – 12 years old = [3 x age in years] + 7

ENERGY – 4 Joules per kilogram

TUBE – SIZE = age/4+4 and either side

FLUIDS – 20mls / kg (Bolus) 10 mls / Kg in Trauma

ADREANALINE – 0.1ml / kg 1:10,000

GLUCOSE – 2mls / kg 10% dextrose

A.P.L.S. 6th edition December 2018

APPENDIX 3

CHART 3 – GUIDANCE FOR CIRCULATION 'NORMAL VALUES'

AGE	RESPIRATORY RATE	HEART RATE	SYSTOLIC BLOOD PRESSURE
< 1 YR	30 – 40	110 – 160	70 – 90
1 – 2 YRS	25 – 35	100 – 150	80 – 95
2 – 5 YRS	25 – 30	95 – 140	80 – 100
5 – 12 YRS	20 – 25	80 – 120	90 – 110
> 12 YRS	15 – 20	60 – 100	100 – 120

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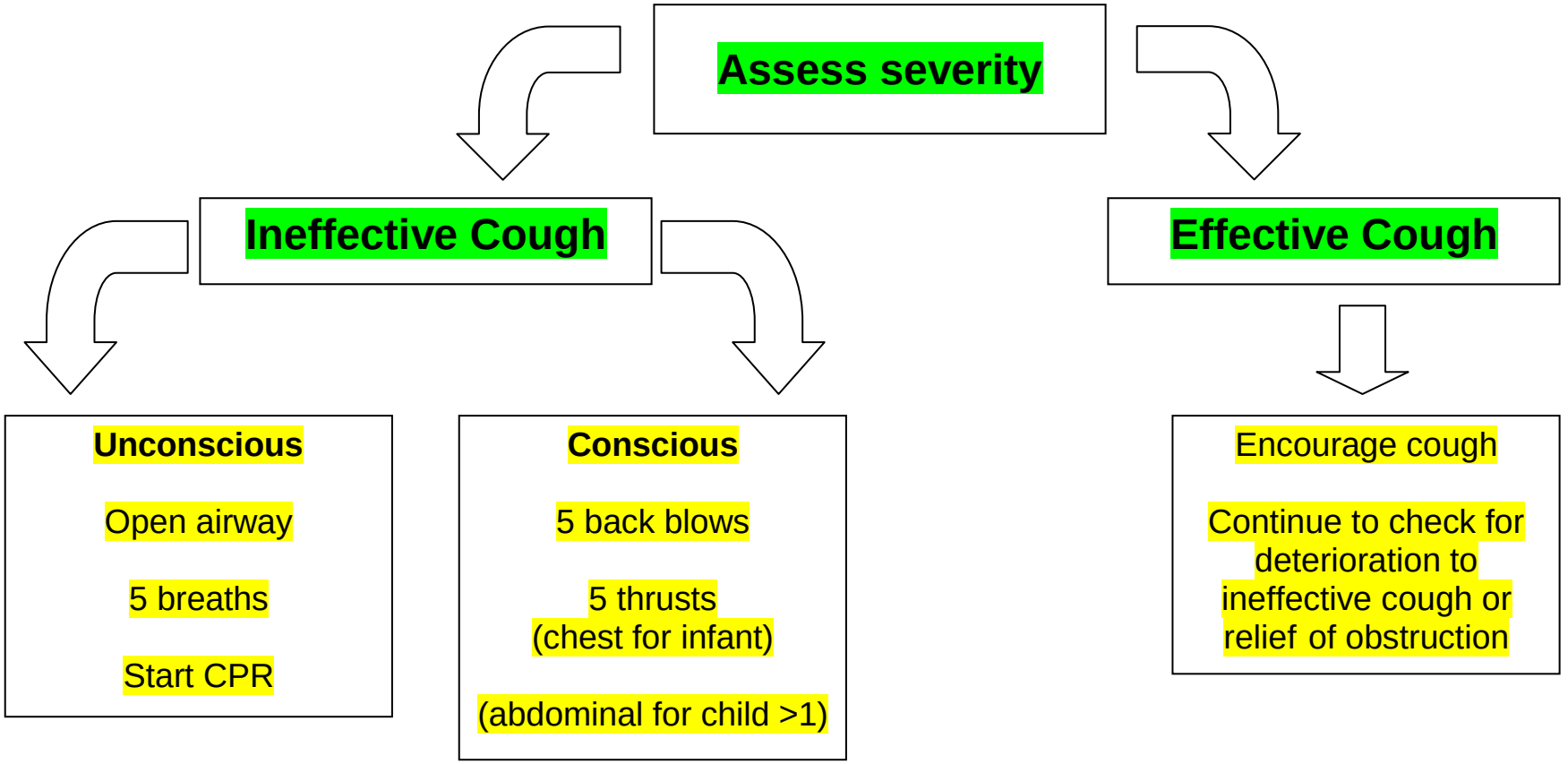
APPENDIX 4

CHART FOUR – PAEDIATRIC FOREIGN BODY AIRWAY OBSTRUCTION



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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.	**Does the policy/guidance affect one group less or more favourably than another on the basis of:**		
	• Race	no	
	• Ethnic origins (including gypsies and travellers)	no	
	• Nationality	no	
	• Gender	no	
	• Culture	no	
	• Religion or belief	no	
	• Sexual orientation including lesbian, gay and bisexual people	no	
	• Age	yes	Under 16 years of age
2.	**Is there any evidence that some groups are affected differently?**	n/a	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	n/a	
4.	**Is the impact of the policy/guidance likely to be negative?**	n/a	
5.	**If so can the impact be avoided?**	n/a	
6.	**What alternatives are there to achieving the policy/guidance without the impact?**	n/a	
7.	**Can we reduce the impact by taking different action?**	n/a	

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	no
2.	Does the implementation of this document require additional revenue	no
3.	Does the implementation of this document require additional manpower	no
4.	Does the implementation of this document release any manpower costs through a change in practice	no
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	no
	Other comments:	no

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