Diarrhoea and/or Vomiting (Gastroenteritis) Pathway

Clinical Assessment / Management for Children with suspected Gastroenteritis

Management - Primary Care and Community Settings

Patient presents with or has a history of diarrhoea and / or vomiting

SUSPECTED GASTROENTERITIS

History
Assessment of Vital Signs - Temp, Heart Rate, RR, capillary refill time
Consider differential diagnosis
Risk factors for dehydration - see figure 1

Do the symptoms and/or signs suggest an **immediately life threatening (high risk)** illness?

Yes

- **Refer immediately** to emergency care by **999**
- Alert Paediatrician
- Stay with child whilst waiting and prepare documentation

Consider any of the following as possible indicators of diagnoses other than gastroenteritis:
• Fever: Temperature of > 38°C • Shortness of breath • Altered state of consciousness • Signs of meningism • Blood in stool • Bilious (green) vomit • Vomiting alone • Recent head Injury • Recent burn
• Severe localised abdominal pain • Abdominal distension or rebound tenderness • Consider diabetes

Discuss with Paediatrician

Table 1

Clinical Findings	Green - low risk	Amber - intermediate risk	Red - high risk
Behaviour	• Responds normally to social cues • Content / smiles • Stays awake / awakens quickly • Strong normal crying / not crying • Appears well	• Altered response to social cues • No smile • Decreased activity • Irritable • Lethargic • Appears unwell	• No response to social cues • Unable to rouse or if roused does not stay awake • Weak, high pitched or continuous cry • Appears ill to a healthcare professional
Skin	• Normal skin colour • Warm extremities • Normal turgor	• Normal skin colour • Warm extremities • Reduced skin turgor	• Pale / mottled / ashen blue • Cold extremities
Hydration	• CRT < 2 secs • Moist mucous membranes (except after a drink) • Fontanelle normal	• CRT 2-3 secs • Dry mucous membranes (except for mouth breather) • Sunken fontanelle	• CRT> 3 secs
Urine output	• Normal urine output	• Reduced urine output / no urine output for 12 hours	• No urine output for >24 hours
Respiratory	• Normal breathing pattern and rate*	• Normal breathing pattern and rate*	• Abnormal breathing / tachypnoea*
Heart Rate	• Heart rate normal • Peripheral pulses normal	• Mild tachycardia* • Peripheral pulses normal	• Severe tachycardia**
Eyes	• Not sunken	• Sunken Eyes	
Other		• Additional parent/carer support required	

Fig 1 Children at increased risk of dehydration are those:
• Aged <1 year old (and especially the < 6 month age group)
• Have not taken or have not been able to tolerate fluids before presentation
• Have vomited three times or more in the last 24 hours
• Has had six or more episodes of diarrhoea in the past 24 hours
• History of faltering growth

Fig 2 Management of Clinical Dehydration
• Trial of oral rehydration fluid (ORS) 2 mls/kg every 10 mins
• Consider checking blood glucose, esp in <6 month age group
• If child fails to improve within 4 hours, refer to paediatrics
• Reintroduce breast/bottle feeding as tolerated
• Continue ORS if ongoing losses

***Normal paediatric values:**

(APLS†)	Respiratory Rate at rest: [b/min]	Heart Rate [bpm]
< 1 year	30 - 40	110 - 160
1-2 years	25 - 35	100 - 150
> 2-5 years	25 - 30	95 - 140
5-12 years	20-25	80-120
>12 years	15-20	60-100

† Advanced Paediatric Life Support The Practical Approach Fifth Edition Advanced Life Support Group Edited by Martin Samuels; Susan Wieteska Wiley-Blackwell / 2011 BMJ Books.

Green Action

Provide Written and Verbal advice (see patient advice sheet)
Continue with breast and / or bottle feeding
Encourage fluid intake, little and often eg. 5mls every 5 mins
Children at increased risk of dehydration [see Fig 1]
Confirm they are comfortable with the decisions / advice given before sending home.

Amber Action

Begin management of clinical dehydration algorithm [see Fig 2].
Agree a management plan with parents +/- seek advice from paediatrician.
As the child will need reassessing in 4 hours (this can be done remotely) if there is no clinical capacity to action please discuss with the Paediatric team.

Urgent Action

Refer immediately to emergency care - consider 999
Alert paediiatrician
Consider initiating Management of Clinical Dehydration [Fig 2] awaiting transfer
Consider commencing high flow oxygen support.

GMC Best Practice recommends: Record your findings (See "Good Medical Practice" http://bit.ly/1DPXl2b)

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This guidance has been reviewed and adapted by healthcare professionals across the Black Country

This document was arrived at after careful consideration of the evidence available including but not exclusively NICE, SIGN, EBM data and NHS evidence, as applicable. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient in consultation with the patient and / or carer.

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Glossary of Terms	
ABC	Airways, Breathing, Circulation
APLS	Advanced Paediatric Life Support
AVPU	Alert Voice Pain Unresponsive
B/P	Blood Pressure
CPD	Continuous Professional Development
CRT	Capillary Refill Time
ED	Hospital Emergency Department
GCS	Glasgow Coma Scale
HR	Heart Rate
MOI	Mechanism of Injury
PEWS	Paediatric Early Warning Score
RR	Respiratory Rate
WBC	White Blood Cell Count