ON SCENE CONVEYANCE AND REFERRAL PROCEDURE

Links

The following documents are closely associated with this procedure:

- Transfer of Patients Policy
- Capacity to Consent Policy
- JRCALC Guidance
- Safeguarding Children & Young People Policy
- Safeguarding Adults Policy
- Paramedic Pathfinder handbook
- Resuscitation Decisions in End of Life Care SOP
- Clinical management in End of Life Care SOP
- Paediatric Care Policy
- Clinical Record Keeping Policy

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Document Lead:	Associate Director of Paramedicine
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For use by:	All Clinical staff

Equality Impact Assessment	

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Version Control	**Document Location** If using a printed version of this document ensure it is the latest published version. The latest version can be found on the Trust's Intranet site.

Version	Date Approved	Publication Date	Approved By	Summary of Changes
1.0	16 December 2015	22 December 2015	Clinical Governance Group	New procedure which replaces non-conveyance guidelines
1.1	30 September 2016	18 October 2016	Clinical Governance Group	Advice on safety netting included 9.6, 9.7, 9.8 Updated sepsis tool added- removal of previous sepsis algorithm Context to appendices tools added in section 10.3 Addition of condition specific pathfinder tools for Falls in the Older Person and COPD. Additional reference to consideration of Major Trauma Tool to Trauma Pathfinder algorithm.
1.2	08 December 2016	14 December 2016	Document Owner	The wording of the final line in box 1 of both the Paramedic Pathfinder algorithms has been changed from 'NEWS >4' to 'NEWS >4 or 3 in any single Parameter'.

ON SCENE CONVEYANCE AND REFERRAL PROCEDURE

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Appendices

1. Introduction

1.1. East Midlands Ambulance Service (EMAS) NHS Trust is committed to providing consistently excellent clinical care, and recognises that this does not always involve transporting a patient to hospital. This procedure will outline the support available and standards expected from clinicians when determining appropriate conveyance or referral options.

1.2. This procedure aims to provide a framework of expectations for different grades of clinicians and to standardise the assessment and decision making models utilised when assessing patients and determining appropriate conveyance outcomes including; conveyance to Emergency Departments (ED's), referring to ED alternatives or self-care options. It will include the use of Paramedic Pathfinder, the National Early Warning Score (NEWS), JRCALC guidance, appropriate documentation, safety net communication with patients and, appropriate referrals to alternative care providers.

2. Objectives

2.1. The objectives of this procedure are to:

- Provide reference to supporting guidance to be used, enabling a consistent and standardised approach to decision making by clinicians when determining appropriate conveyance and referral options for patients.
- Outline a clear process for appropriate referrals to suitable alternatives to ED using Paramedic Pathfinder
- Provide clear guidance on the roles and expectations of different clinical grades of clinicians when not conveying patients to ED
- Ensure adequate information is provided to the patient, including safety net advice and a non-conveyance leaflet
- Specify the requirement for completing full patient records including Paramedic Pathfinder outcome and safety net advice where appropriate.
- Highlight the support available to clinicians when determining appropriate conveyance outcomes.

3. Scope

3.1. This procedure is not exhaustive and should therefore be read and applied in conjunction with all of the policies, procedures and sources of guidance listed on the front cover.

3.2. Guidance documents do not fall within the scope of this policy and are not subject to the same formal approval requirements as procedural documents.

4. Definitions

4.1. **Trainee Ambulance Technician** - A healthcare professional, traditionally having undertaken an accredited programme with the Institute of Health Care Development (IHCD) or an Associate Ambulance Practitioner (AAP) qualification, but who has not completed a designated period of consolidated practice.

4.2. **Ambulance Technician** – A qualified healthcare professional, traditionally having undertaken an accredited programme with the Institute of Health Care Development (IHCD) or an Associate Ambulance Practitioner (AAP) qualification and, has completed a designated period of consolidated practice.

4.3. **Paramedic** – An Allied Health Professional, specialising in out of hospital & pre-hospital care. Registered with the Health & Care Professions Council (HCPC).

4.4. **Emergency Care Practitioner** – A Specialist Paramedic, Nurse or other Allied Health Professional in urgent care with additional assessment, treatment and referral responsibilities over and above that of paramedics and ambulance technicians**.**

4.5. **Paramedic Pathfinder** – evidence-based clinical triage tools to be used to by all clinicians to support and confirm clinical decisions for appropriate conveyance to ED or alternative care pathways for each incident where a conveyance decision is required (e.g. not for inter-facility transfers).

4.6. **Pathfinder Supported** – Patient assessment completed with Paramedic Pathfinder tool utilised and the result appropriately documented on the patient report form.

4.7. **National Early Warning Score (NEWS)** – a nationally accepted standardised assessment tool for determining and communicating acute illness severity across all areas of healthcare.

4.8. **JRCALC** – Joint Royal Colleges Ambulance Liaison Committee UK Ambulance Services Clinical Practice Guidelines

4.9. **Conveyance Outcome** – this can be appropriate conveyance to ED, a specialist treatment centre or, a direct referral to a patient's GP, urgent care centre, minor injuries unit, walk-in-centre or appropriate self-care / signposting advice with robust safety netting.

5. Responsibilities

5.1. The **Medical Director** has overall responsibility for the implementation of this procedure, in accordance with National guidance and for ensuring that all clinicians deliver care in accordance with this procedure.

5.2. The **Associate Director of Paramedicine** will have responsibility to oversee the suitability of conveyance and referral options available to clinicians across the region.

5.3. The **Paramedic Pathfinder Leads** are responsible for ensuring the various Paramedic Pathfinder tools reflect current best evidence-based practice and the use of the tools are maximised across the region.

5.4. **Organisational Learning** (Clinical Education) has responsibility to ensure that current guidelines are taught and that it provides clinical staff with the opportunity

to update their skills in line with their continuing professional development needs either with a Clinical Team Mentor, tutor or, at an education centre.

5.5. **Locality Management Teams** have the responsibility to work with the Associate Director of Paramedicine and the Paramedic Pathfinder Leads to ensure the safe and effective alignment of ED alternatives to the Paramedic Pathfinder Triage Tool. Additionally, they also have the responsibility to ensure information is disseminated within divisions regarding any clinical processes involved in the assessment, decision making processes and conveyance options including alternative care pathways to EDs.

5.6. **All Clinical Staff** are responsible for applying best practice, maintaining their knowledge, assessment, diagnostic and treatment skills appropriate to their scope of practice and training when assessing patients, and determining appropriate conveyance options and outcomes.

6. Standardising Conveyance Decisions and Outcomes

6.1. For some patients, transportation or rapid transportation to ED is appropriate. Application of NEWS and Paramedic Pathfinder will confirm this decision along with JRCALC guidance. The clinician should therefore provide any immediate or essential care and follow the Transfer of Patients Policy.

6.2. For many patients, a full holistic assessment in conjunction with Paramedic Pathfinder, NEWS and clinical guidance will determine an appropriate referral to an alternative care provider with a clinician-to-clinician handover or, self-care advice with robust safety netting and signposting to alternative healthcare providers as the optimum outcome.

6.3. Paramedic Pathfinder must be used to support and confirm all conveyance, referral or self-care decisions. **Appendix 6** shows the expectations for each clinical grade when determining conveyance outcomes and the appropriate point when involving the Clinical Assessment Team (CAT) is required.

6.4. Appropriate management of patients closer to home, away from ED, can enhance the quality of care and patient satisfaction allowing improved follow up and on-going care. Attending ED is more likely to result in an admission where some conditions are better managed in the community. Furthermore, many patients attending ED via ambulance stay there for a very short time.

6.5. A potential barrier to using ED alternatives is the perception that should an unexpected adverse outcome occur, the clinician will find themselves subject to disciplinary action. Therefore, assuming the clinician has followed Paramedic Pathfinder, documented appropriately and used a suitable alternative, clinicians can be assured that they will be supported and no punitive action will be undertaken.

7. Paramedic Pathfinder

7.1. Paramedic Pathfinder is a nationally recognised, validated evidence-based clinical decision making tool that supports and confirms clinicians' decisions related to appropriate conveyance options. It is the decision making tool that must be applied to each clinical decision related to appropriate conveyance options by EMAS clinicians. Used in conjunction with NEWS there are currently two outcomes from Paramedic Pathfinder within EMAS; namely red and amber.

7.2. A patient eliciting a red outcome on Paramedic Pathfinder should be conveyed to ED or a suitable treatment centre. The use of Paramedic Pathfinder should of course be supplemented with effective clinical decision-making.

7.3. A patient eliciting an amber outcome on Paramedic Pathfinder should be considered for referral to an alternative care provider. This may include the use of ECPs. If following all assessments and the use of Paramedic Pathfinder, it is the clinicians' view that the patient does not require hospital treatment but does need further assessment, and despite the attending clinicians best efforts, a referral to a suitable alternative cannot be arranged, the patient should be transported to hospital. This should also be documented as a failed referral in the patient report form.

7.4. Paramedic Pathfinder should be applied throughout the patient assessment and a minimum of two sets of vital signs should be recorded to enable the generation and identification of trends with the NEWS score. This demonstrates how a patient's condition may be deteriorating, stable or improving. Always consider appropriate diagnostic tests based on the history and presenting complaint of the patient, including for example, a blood glucose measurement, ECG and peak flow.

8. Capacity

8.1. When treating patients and determining conveyance/non-conveyance options, the patients' consent must be sought, and their capacity to consent to the care decisions made assessed and documented in line with the Capacity to Consent Policy and JRCALC guidance as shown in **appendix 5.**

9. Documentation

9.1. The Paramedic Pathfinder outcome must be documented each time a patient is assessed, including those patients transported to the ED, this demonstrates the clinician has used Paramedic Pathfinder to support, confirm and guide their clinical decision-making. For all conveyance options, documentation of the Paramedic Pathfinder outcome further justifies the decision made.

9.2. Paramedic Pathfinder will support the appropriate decision to convey high acuity patients. Due to the potential severity of the presenting complaint, some conveyance decisions will be based more on pattern recognition e.g. a cardiac arrest / serious trauma. The Paramedic Pathfinder outcome should still be recorded as it demonstrates compliance with the Pathfinder tool.

9.3. Patients that elicit red outcomes on Paramedic Pathfinder should be recorded as being PP(1, 2 or 3) +ve. 'PP' demonstrates Paramedic Pathfinder has been applied. The number indicates in which box on the tool the patient triggered a discriminator and '+ve' indicates the positive recognition of the discriminator triggered. For example, a patient presenting with uncontrollable bleeding will be recorded as being PP2+ve.

9.4. Patients that elicit amber outcomes on Paramedic Pathfinder should be recorded as being PP123-ve. This indicates Paramedic Pathfinder has been used and following active consideration and ruling out of all the discriminators allied with effective clinical reasoning it may be appropriate to refer the patient to an alternative care pathway.

9.5. Pertinent negatives actively considered and ruled out must be individually documented, examples such as 'no red flags indicated' or 'all red flags ruled out' do not demonstrate the clinician has actively considered and ruled out all the pertinent negatives. If a clinician is unable to rule out all the indicated red flags or is not aware of all the red flags requiring consideration then following the Paramedic Pathfinder recommendation is most appropriate.

9.6. Should a decision be made not to convey a patient to a treatment facility, robust safety netting must be in place and documented prior to discharging the patient from your care. This includes a mental capacity assessment and a plan of action for the patient/carer or relative. The plan should provide details of any referral made to an alternative care provider, instruction for the patient's continued care, including associated red flags and where and how to obtain help if things go wrong. A non-conveyance leaflet must be completed and left with the patient.

9.7. For those patients refusing transportation to a treatment facility the clinician must assess the patient's capacity in relation to their ability to consent and ensure the safety netting plan is in place. Ensure that the patient has all the relevant information relating to their presenting condition and has been informed of the potential consequences of their decision. A non-conveyance leaflet must be completed and left with the patient, when a patient is not conveyed to a treatment facility. This ensures safety netting advice is clearly recorded and provides pertinent information if the patient is seen by another healthcare professional.

9.8. In the event of a patient refusing transportation with a life threatening presentation e.g. lethal overdose of medication, but satisfies the mental capacity assessment clinicians **must** not make decisions independently and **must** seek further support from other health and social care professionals, such as G.P, Out of Hours, Social worker and Crisis team. Decisions must be made jointly with other professionals along with chronological documentation illustrating all options explored.

10. Specific Considerations

10.1. The medical and trauma Paramedic Pathfinder tools used in conjunction with NEWS and effective clinical reasoning will elicit an appropriate conveyance outcome for the patient in the majority of cases.

10.2. There are specific considerations where additional relevant factors are to be determined. This can be due to a patient category where Paramedic Pathfinder

does not apply, like End of Life Care or where condition specific presentations and physiology determine additional considerations.

10.3. The appendices attached to this procedure list further condition specific algorithms to support and confirm clinical decisions for the patient presentations including;

10.4. Seasonal/Pandemic Influenza referral tool (Patients ≥ 16) – This assessment tool will be publicised to front line clinicians as required through EMAS communication channels as directed by the medical director during seasonal outbreaks. The guidance is subject to change through central NHS/NICE guidance dependant on specific influenza strain prevalent at the time and may also include guidance on PPE. Changes will be ratified through the EMAS rapid approval procedure through the medical director.

10.5. Management of Diarrhoea and vomiting assessment tool (Patients ≥18) – Pre hospital assessment tool based on NICE guidelines for patients presenting with isolated diarrhoea and vomiting symptoms. Includes advice on crew PPE and reference to IPC cleaning products procedure.

10.6. Adult Head Injury Guidance Tool – To be applied to patients with head injury who have generated an "amber" outcome on Paramedic Pathfinder Trauma (appendix 3).

10.7. Sepsis Toolkit – Sepsis screening tool for use on all patients regardless of age where there is a history of potential infection. Based on NICE guidelines. Includes treatment guidance.

10.8. Pathfinder COPD Tool - Can be utilised by all clinical staff to assist in assessing patients suitable for ED alternative referral. In some divisions, alternative care providers have agreed to take referrals matching these criteria. Where these agreements are in place they will be communicated to staff locally.

10.9. Pathfinder Elderly Falls Tool – Can be utilised by all clinical staff to assist in assessing patients suitable for ED alternative referral. In some divisions, alternative care providers have agreed to take referrals matching these criteria. Where these agreements are in place they will be communicated to staff locally.

10.10. A patient presenting with a specific consideration(s) covered by additional guidance must be assessed using the algorithm(s) provided. This supports the clinicians' decision-making, provides a clear outline of expected outcomes and ensures all patients continue to receive high standards of appropriate conveyance and clinical decisions related to their presenting condition(s).

10.11. Patients for whom End of Life Care or resuscitation decisions are required can present specific challenges to clinicians. Guidance to support clinical decision making in these high fidelity and emotive situations is documented within the End of Life Care Policy and Resuscitation Decisions in End of Life Care Standard Operating Procedure documents (2014).

10.12. Safeguarding considerations for patients are applied in addition to any other guidance. The clinician should apply any safeguarding considerations in line with EMAS Safeguarding Policy (2013).

11. Paediatrics

11.1 Due to the variables in the physiological parameters of children, Paramedic Pathfinder and NEWS cannot be applied to determine clinical priority in the under 16's. Good patient assessment and history taking is the key to allow potentially life threatening illness or injury to be recognised, and interventions made at the earliest opportunity.

11.2 When assessing children special consideration should be given to the potential for serious underlying illness and this should be considered along with the child's medical history including immunisations and birth history. Further information on the assessment of paediatric patients can be found in JRCALC 2013 and the Paediatric Care policy.

11.3 In line with the Paediatric care policy 2014 the following should apply;

All children under the age of two years must be conveyed to hospital or a minor injuries unit, walk-in centre, urgent care centre, polyclinic or GP surgeries in line with the Paediatric Care Policy. This is to apply unless the parent(s) or legal guardian(s) decline hospital treatment or transportation. Ideally all children under the age of 18 should be conveyed to a hospital or alternative care provider. However, if any child between 2 and 18 years who, after clinical assessment, is to be left in the care of their parent or guardian, they should have a GP referral made by the attending crew.

11.4 In the event a parent or guardian refuses treatment or transportation or referral to the GP they must be advised the following:

To contact the GP
To recall 999 if they have any cause for concern

Give consideration to any potential safeguarding issues for any refusal of care against clinician advice to a child under 18 years of age. (See Safeguarding policy 4.4.3)

12. Consultation

12.1. In order to ensure adequate and wide ranging consultation, this document has been shared to the following groups:

- Coroners Working Group
- Clinical Effectiveness Group
- Clinical Governance Group

13. References

- JRCALC Clinical Practice Guidelines
- EMAS Paramedic Pathfinder Handbook

14. Monitoring Compliance and Effectiveness of the Procedure

13.1. The Associate Director of Paramedicine will monitor the implementation of this procedure, take assurance to the Clinical Governance Group. This report will be sent to the group on an annual basis, however if the on-going monitoring of this procedure shows that there are significant implications for the implementation of the procedure then it will be sent to the group sooner.

APPENDIX 1

Plan for Dissemination of Procedural Document

Title of document:	**ON SCENE CONVEYANCE AND REFERRAL PROCEDURE**		
Version Number:	**V1.2**	**Dissemination lead: Print name, title and contact details**	**Andy Swinburn** **Associate Director of Paramedicine** **Andy.swinburn@emas.nhs.uk**
Previous document already being used?	**Yes**		
Who does the document need to be disseminated to?	**All frontline clinicians, CAT members and EOC Managers**		
Proposed methods of dissemination: **Including who will disseminate and when** Some examples of methods of disseminating information on procedural documents include: *Information cascade by managers* *Communication via Management/ Departmental/Team meetings* *Notice board administration* *Articles in bulletins* *Briefing roadshows* *Posting on the Intranet*	**Red Clinical Bulletin** **Follow up Article in InFocus Clinical Newsletter** **Dissemination through Team Leaders and Clinical Team Mentors.** **Publication on Insite (intranet)** **Publication in the policy library on the shared (S:) drive**		

Note: Following approval of procedural documents it is imperative that all employees or other stakeholders who will be affected by the document are proactively informed and made aware of any changes in practice that will result.

EMAS Paramedic Pathfinder - Medical

1

This process does not apply to the following patient categories:
Cerebrovascular Accident
Non-Traumatic Chest Pain
Patients under 16 Years of Age
Obstetric and Gynaecological Presentations
Acute Mental Health Presentations
Overdose with possible lethality
Patient on an EOL Pathway
NEW Score > 4 or 3 in a single parameter

Complete Primary Survey
ABCD

2

Airway Compromise
Progressive or Sudden Worsening of Breathing
Shock-think SEPSIS
Uncontrollable Bleeding
History of New Neurological Deficit
Acute Loss of Mobility
Reduced Level of Consciousness
Severe Pain

Yes → Stabilise & immediate transportation to ED

No

3

History of Unconsciousness
Headache as Primary Presentation
Purpura/ Non Blanching Rash
Vascular Compromise
Tachycardia > 120
Temp ≤ 35 or ≥ 40 Deg C
Vomiting Blood
Haematuria/ First Episode Retention
Abdominal Pain Radiating to Back

Yes → Emergency Department

No

Is there a suitable ED alternative?

- Yes → Make referral → Feedback to Patient & Carers
  Review Initial Assessment
  Recheck Clinical Observations
  Complete Documentation → CLEAR & LEAVE SCENE
- No or unsure → Contact CAT to seek alternatives → CLEAR & LEAVE SCENE

EMAS Paramedic Pathfinder - Trauma

1

This process does not apply to the following patient categories:
Obvious minor injury not requiring further assessment
Cerebrovascular Accident
Non-Traumatic Chest Pain
Patients under 16 Years of Age
Obstetric and Gynaecological Presentations
Acute Mental Health Presentations
NEW Score > 4 or 3 in a single parameter

Complete Primary Survey
CABCD

2

Airway Compromise
Progressive or Sudden Worsening of Breathing
Shock- think SEPSIS
Uncontrollable Bleeding
History of New Neurological Deficit
Acute Loss of Mobility
Reduced Level of Consciousness
Severe Pain
Significant MOI (inc spinal immobilisation)
Head injury with loss of consciousness

Yes → Stabilise & immediate transportation to ED (with consideration for major trauma)

No

3

Penetrating Injury of Head, Neck or Torso
Gross Deformity /Open Fracture
History of Unconsciousness
Vascular Compromise
Critical Skin
Inhalation Injury
Direct Trauma to the Neck or Back
Facial Oedema
Temp ≤ 35 Deg C
Electrical or Chemical Burn

Yes → Emergency Department

No

Is there a suitable ED alternative?

- **Yes** → Make referral → Feedback to Patient & Carers; Review Initial Assessment; Recheck Clinical Observations; Complete Documentation → CLEAR & LEAVE SCENE
- **No or unsure** → Contact CAT to seek alternatives → CLEAR & LEAVE SCENE

APPENDIX 4

National Early Warning Score (NEWS)

Calculating a patient's NEWS relies on recording several non-invasive,and easily repeatable observational parameters that may indicate deviation from normal levels. Small changes in individual observations may predict deterioration in the seriously unwell patient before obvious, critical changes in condition occur. However, the NEWS tool is not designed to predict patient outcomes.

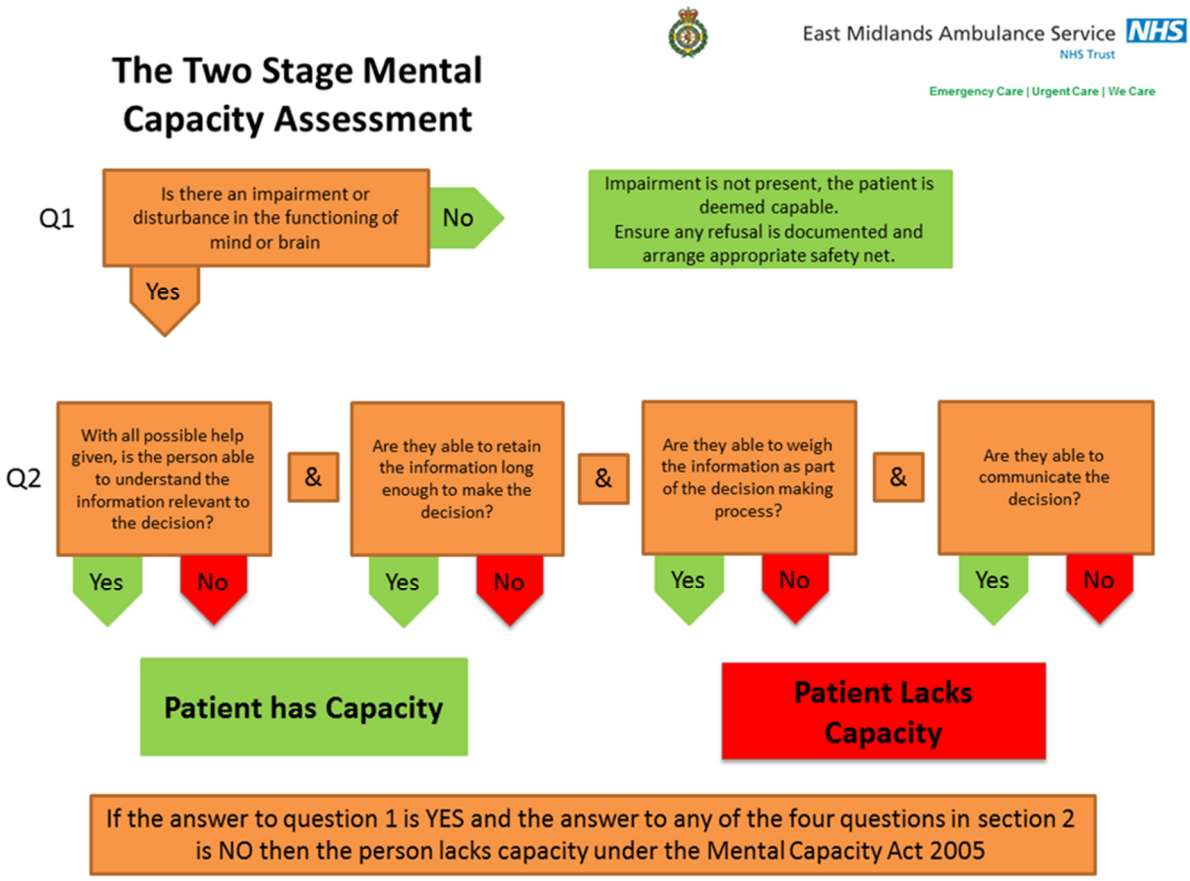
Continued application of NEWS is integral to the Paramedic Pathfinder tools. Scores of 0-4 indicate lower clinical risk. An early warning score greater than 4 or, a score of 3 in a single parameter must be conveyed to ED or a suitable treatment centre.

The NEWS system is a clinical guide to assist clinician's in their decision making process, it does not replace good clinical judgement by the clinician. Any deviation from the NEWS recommendations, e.g. where a patient has condition specific physiology and a care plan stating their condition specific observational parameters, must be clearly documented.

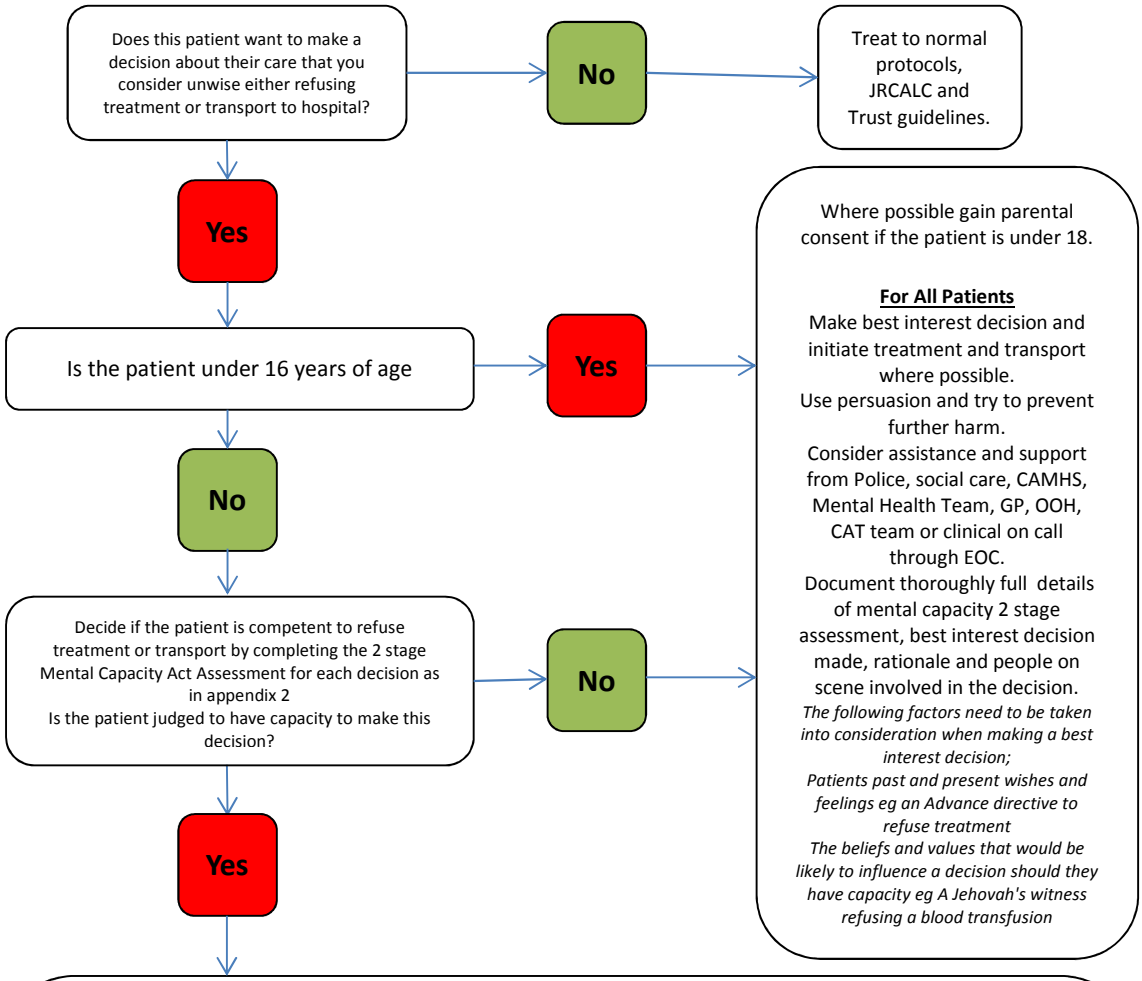
PHYSIOLOGICAL PARAMETERS	3	2	1	0	1	2	3
Respiration Rate	≤8		9 - 11	12 - 20		21 - 24	≥25
Oxygen Saturations	≤91	92 - 93	94 - 95	≥96			
Any Supplemental Oxygen		Yes		No			
Temperature	≤35.0		35.1 - 36.0	36.1 - 38.0	38.1 - 39.0	≥39.1	
Systolic BP	≤90	91 - 100	101 - 110	111 - 219			≥220
Heart Rate	≤40		41 - 50	51 - 90	91 - 110	111 - 130	≥131
Level of Consciousness				A			V, P, or U

APPENDIX 5

The following algorithms, taken from the Capacity to Consent Policy aid the clinician when assessing a patient's capacity when on scene.



A Guide to Assessing Capacity in an Emergency Situation



Ensure documentation is completed as per normal protocols.
Ensure MCA 2 stage assessment is documented in full with time and outcome.
Where possible document where relatives, carers, friends are on scene.
Ensure involvement with local mental health service/crisis team.
Document outcome and advice from any further assistance requested at scene such as from Police, social care, Mental Health Team, CAMHS, GP, OOH, CAT team or clinical on call through EOC.
If patient is not transported then where possible, arrange for them to be with a responsible adult and document who this is.
Safety net thoroughly giving worsening advice to both patient and carer/family.
Explain to patient and carers to call again should the patient reconsider their decision.
Where possible ensure onward referral, with consent, to GP.
Consider safeguarding referral for care concern or concern for any dependants.

Where a patient is in immediate risk, the ability to undertake a full and thorough assessment of their mental capacity is not always possible. (For example a patient with reduced consciousness or catastrophic haemorrhage) In such circumstances decisions must be made based on the evidence available at that time and based on the principle that the balance of probabilities (i.e being more likely than not) would suggest that the patient lacked capacity.
Any actions then undertaken on this basis must be considered immediately necessary to save life and or prevent serious deterioration in the patient physical or mental well-being. This doctrine is a positive duty in law, which means that failure to act could be deemed negligent.

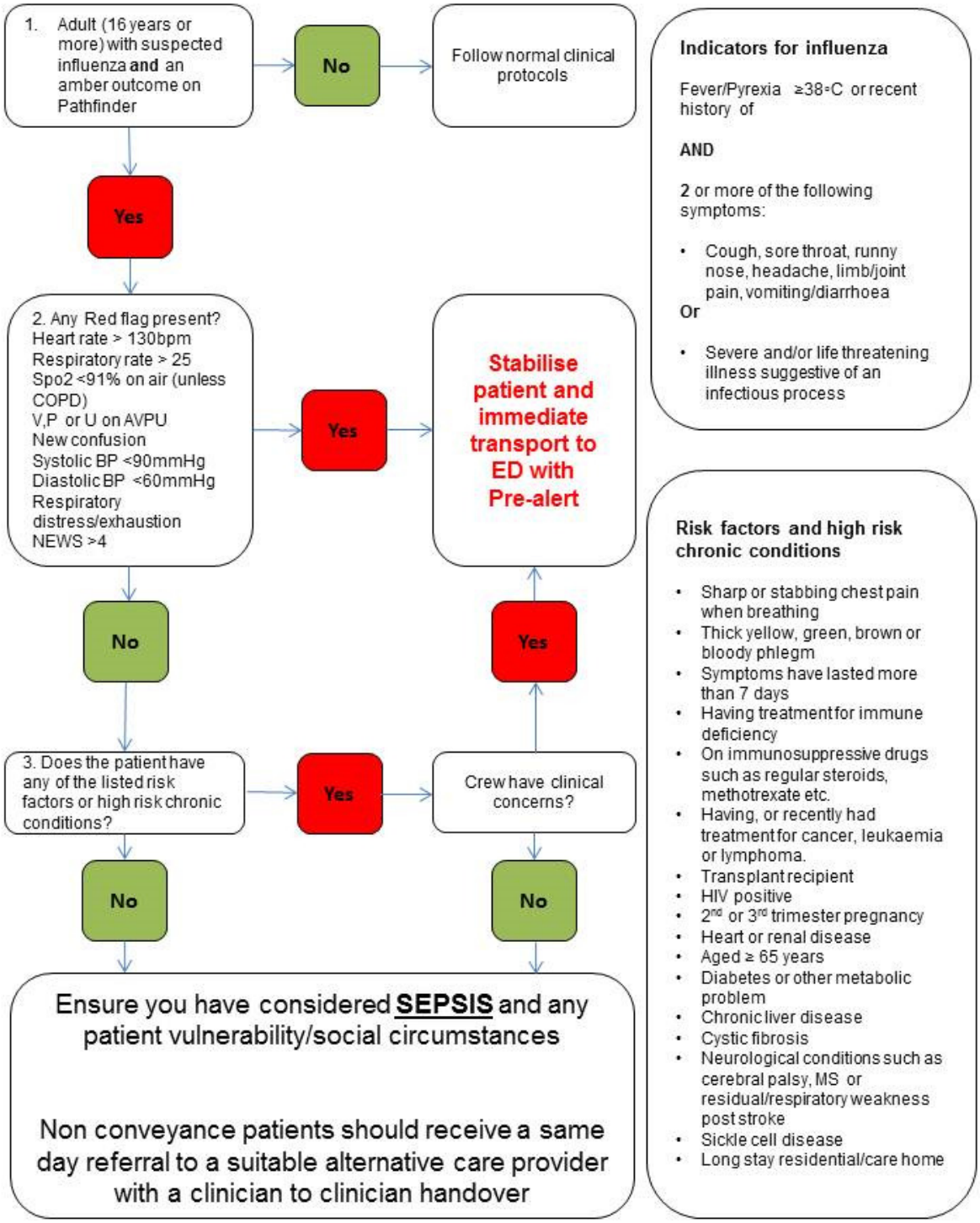
APPENDIX 6

Scope / Clinician	See/Treat/Refer to CAT	See/Treat/Refer with a clinician to clinician handover	See/Treat/Refer/ Discharge
Emergency Care Assistant	✓ **Patient refusals to transport only**	**X**	**X**
Trainee Technician	✓ **Pathfinder supported**	**X**	**X**
Qualified Technician	✓	✓ **Pathfinder supported**	**X**
Paramedic	✓	✓ **Pathfinder supported**	✓ **Pathfinder supported**
Emergency Care Practitioner	✓	✓	✓

APPENDIX 7

EMAS Seasonal/ Pandemic Influenza Referral Tool

Version 1.1. Sept 2015



Indicators for influenza

Fever/Pyrexia ≥38◦C or recent history of

AND

2 or more of the following symptoms:

- Cough, sore throat, runny nose, headache, limb/joint pain, vomiting/diarrhoea

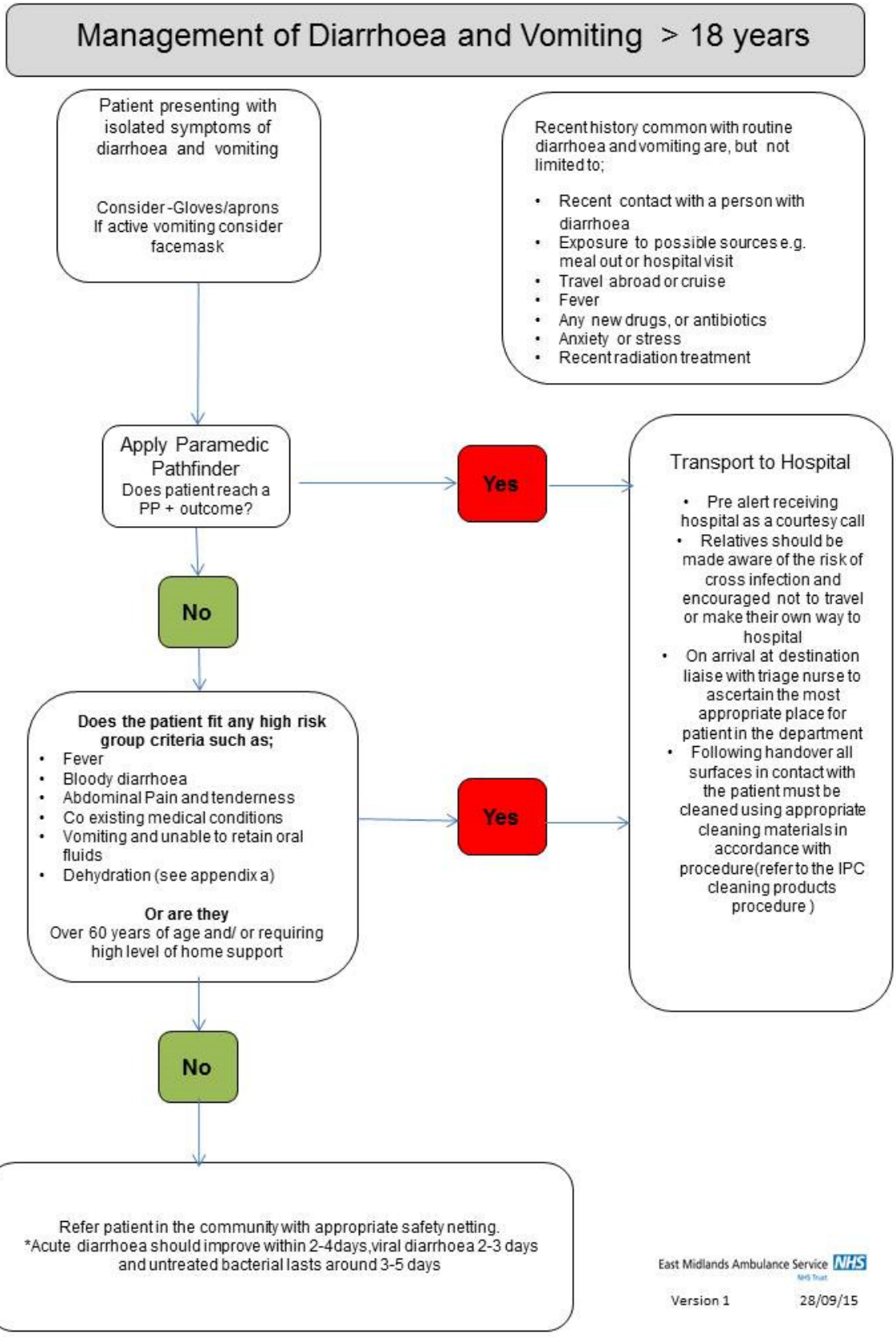
Or

- Severe and/or life threatening illness suggestive of an infectious process

Risk factors and high risk chronic conditions

- Sharp or stabbing chest pain when breathing
- Thick yellow, green, brown or bloody phlegm
- Symptoms have lasted more than 7 days
- Having treatment for immune deficiency
- On immunosuppressive drugs such as regular steroids, methotrexate etc.
- Having, or recently had treatment for cancer, leukaemia or lymphoma.
- Transplant recipient
- HIV positive
- 2nd or 3rd trimester pregnancy
- Heart or renal disease
- Aged ≥ 65 years
- Diabetes or other metabolic problem
- Chronic liver disease
- Cystic fibrosis
- Neurological conditions such as cerebral palsy, MS or residual/respiratory weakness post stroke
- Sickle cell disease
- Long stay residential/care home

APPENDIX 8


Management of Diarrhoea and Vomiting > 18 years
Patient presenting with isolated symptoms of diarrhoea and vomiting
Consider -Gloves/aprons
If active vomiting consider facemask
Recent history common with routine diarrhoea and vomiting are, but not limited to;
• Recent contact with a person with diarrhoea
• Exposure to possible sources e.g. meal out or hospital visit
• Travel abroad or cruise
• Fever
• Any new drugs, or antibiotics
• Anxiety or stress
• Recent radiation treatment
Apply Paramedic Pathfinder
Does patient reach a PP + outcome?
Yes
No
Transport to Hospital
• Pre alert receiving hospital as a courtesy call
• Relatives should be made aware of the risk of cross infection and encouraged not to travel or make their own way to hospital
• On arrival at destination liaise with triage nurse to ascertain the most appropriate place for patient in the department
• Following handover all surfaces in contact with the patient must be cleaned using appropriate cleaning materials in accordance with procedure(refer to the IPC cleaning products procedure)
Does the patient fit any high risk group criteria such as;
• Fever
• Bloody diarrhoea
• Abdominal Pain and tenderness
• Co existing medical conditions
• Vomiting and unable to retain oral fluids
• Dehydration (see appendix a)
Or are they
Over 60 years of age and/ or requiring high level of home support
Yes
No
Refer patient in the community with appropriate safety netting.
*Acute diarrhoea should improve within 2-4days,viral diarrhoea 2-3 days and untreated bacterial lasts around 3-5 days
East Midlands Ambulance Service NHS
NHS Trust
Version 1
28/09/15

Diarrhoea and vomiting tool - Appendix 8a

Clinical features of dehydration

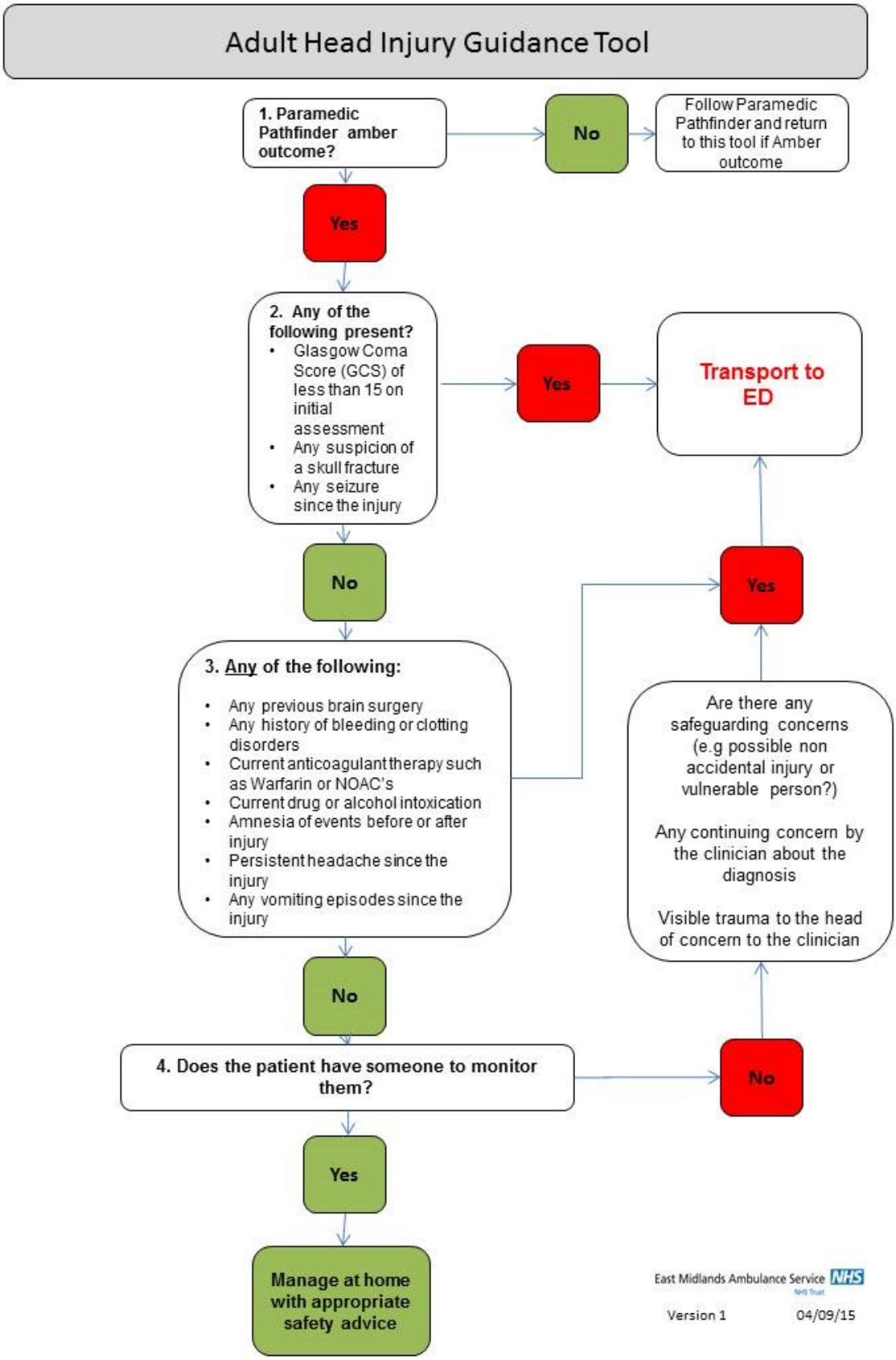
Severe Dehydration
Profound apathy
Weakness
Confusion leading to coma
Shock
Tachycardia
Marked peripheral vasoconstriction
Systolic BP < 90mmHg
Anuria

Moderate Dehydration
Apathy/Tiredness
Dizziness
Muscle cramps
Pinched face/dry tongue or sunken eyes
Reduced skin elasticity
Postural hypotension
Tachycardia
Oliguria

Mild Dehydration
Lassitude
Anorexia
Nausea
Light-headedness
Postural hypotension

[Farthing et al, 1996; World Gastroenterology Organisation, 2012] NICE Guidelines Clinical Knowledge Summaries. Diarrhoea-adult assessment

APPENDIX 9


Adult Head Injury Guidance Tool
1. Paramedic Pathfinder amber outcome?
No
Follow Paramedic Pathfinder and return to this tool if Amber outcome
Yes
2. Any of the following present?
• Glasgow Coma Score (GCS) of less than 15 on initial assessment
• Any suspicion of a skull fracture
• Any seizure since the injury
Yes
Transport to ED
No
Yes
3. Any of the following:
• Any previous brain surgery
• Any history of bleeding or clotting disorders
• Current anticoagulant therapy such as Warfarin or NOAC's
• Current drug or alcohol intoxication
• Amnesia of events before or after injury
• Persistent headache since the injury
• Any vomiting episodes since the injury
Are there any safeguarding concerns (e.g possible non accidental injury or vulnerable person?)
Any continuing concern by the clinician about the diagnosis
Visible trauma to the head of concern to the clinician
No
4. Does the patient have someone to monitor them?
No
Yes
Manage at home with appropriate safety advice
East Midlands Ambulance Service NHS
Version 1
04/09/15

East Midlands Ambulance Service Sepsis toolkit – **GUIDANCE (1 of 3)**

This pre – hospital sepsis screening toolkit should be applied to all patients presenting to EMAS with either a fever or a recent history of fever AND a history suggestive of infection. Maternal Patients applies to all pregnant patients and those upto 6 weeks postpartum (or 6 weeks after the end of pregnancy if pregnancy did not end in birth)

History suggestive of infection includes but is not limited to;

- ❑ Pneumonia/Chest infection
- ❑ Urinary tract Infection
- ❑ Abdominal pain/Distension (in children this may present with the patient drawing up their legs)
- ❑ Cellulitis/septic arthritis/infected wound
- ❑ Indwelling device related infection
- ❑ Meningitis (Consider Benzyl Penicillin as per JRCALC)
- ❑ Contact risk of bacteraemia
- ❑ Infection of unknown origin

Maternal patients or those upto 6 weeks post partum are at an increased risk of infection and consideration should also be given to the following;

- ❑ Chorioamnionitis/ endometritis
- ❑ Infected caesarean or perineal wound
- ❑ Breast abscess/ mastitis
- ❑ Influenza, severe sore throat, or pneumonia

Where there is a confirmed or suspected infection present then this should be detailed on the PRF. It should be noted that patients with sepsis may indeed have non–specific, non–localised presentations , for example feeling very unwell, and may not have a high temperature.

Using this screening tool

Using the **SCREENING** tool on page 2 identify which age range column the patient matches and then identify which box your patient triggers, green, red or amber.

Using the **TREATMENT** tool on page 3, identify the corresponding coloured box identified on the screening tool above for treatment guidelines. Remember, **Red Flag** Sepsis is a time critical emergency;

Don't stay and delay, call and convey!!

Paramedic Pathfinder Sepsis toolkit – **SCREENING (2 of 3)**

Outcome	Aged 12 and Adult	Aged 5 to 11	Under 5
No to all	NEWS ≥ 3 Patient looks very sick	Patients observations do not enter severe or moderate criteria in critical value table Child looks feverish or sick Parent/carer very worried	
	If yes to anyone of the above assess for red flags as below		
Yes to one or more	V, P or U on AVPU Systolic BP< 90mmHg Pulse> 130 bpm Resp rate > 25 bpm Requires O2 to maintain SpO2>92% COPD Patients – New need for O2 therapy to maintian SpO2>88% No urine passed for >18 hours Recent Chemotherapy Non Blanching Rash Mottled/ashen/cyanotic	Objective change in behaviour or mental state Doesn't wake if roused or won't stay awake SpO2 < 90% Severe tachypnoea (see critical values table)) Severe tachycardia (see critical values table) Pulse < 60 No urine passed > 18 hours Temperature < 36°c Non Blanching Rash Mottled/ashen/blue skin Recent Chemotherapy	No response to social cues/obviously sick Doesn't wake if roused or won't stay awake Spo2 < 90% Severe tachypnoea (see critical values table) Severe tachycardia (see critical values table) Pulse < 60 No wet nappies/urine passed >18 hours Temperature < 36°c Non Blanching Rash or Mottled/ashen/blue skin Temperature >38°c if under 3 months old Recent Chemotherapy
	If no red flags found above assess for amber flags below		
Yes to one or more	Systolic BP 91 – 100mmHg Pulse 91 – 130 (100 to 129 if **Maternal**) or new arrhythmia No urine passed for 12 to 18 hours Temperature < 36°c Immunosuppressed Acute deterioration in function Relatives concerned about mental state Trauma or surgery in last 6 weeks *Additional **Maternal** Amber Flags* Immunosupressed/gestational diabetes or diabetes Invasive procedure in last 6 weeks (forceps delivery, miscarriage, termination) Prolonged Membrane rupture Bleeding/offensive vaginal discharge	Behaving abnormally/not wanting to play Significantly decreased activity/parental concern Spo2<92% Moderate tachypnoea (see age per page) Moderate tachycardia (see age per page) Cap refill > 3s Reduced urine output Leg pain/cold feet or hands	Responding abnormally to social clues Wakes only with prolonged stimulation Significantly decreased activity/parental concern Nasal flaring Spo2<91% Moderate tachypnoea (see age per page) Moderate tachycardia (see age per page) Cap refill > 3s Reduced urine output Leg pain/cold feet or hands Temperature >39°c if 3 – 6 months old

Paramedic Pathfinder Sepsis toolkit – **TREATMENT (3 of 3)**

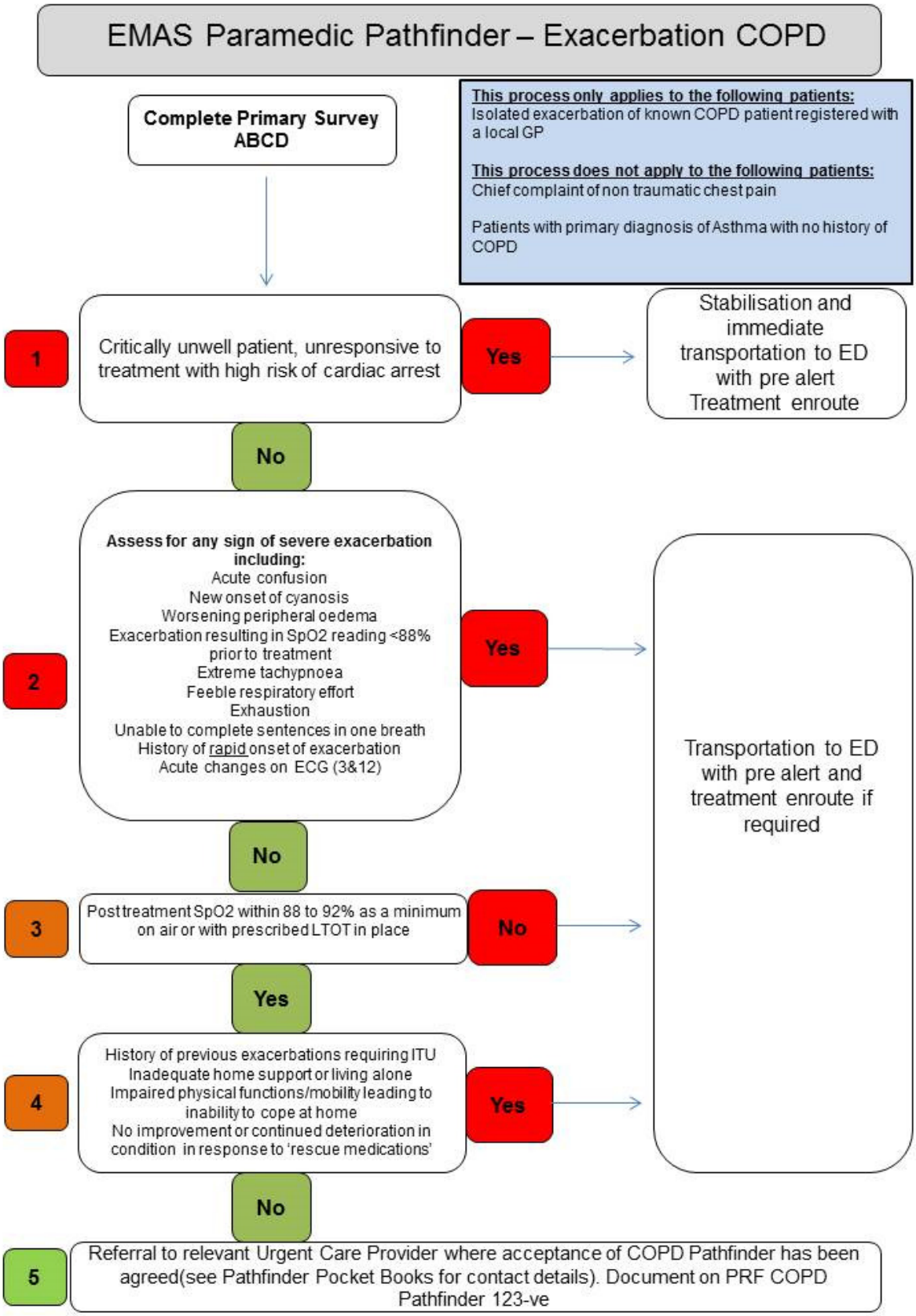
Category	Aged 12 and Adult	Aged 5 to 11	Under 5
Low risk of sepsis	If concerned consider other diagnosis, transfer as required. Apply Paramedic Pathfinder. If Amber outcome referral or conveyance to ACP ensuring **same day** health care professional assessment with **clinician to clinician handover** confirming low risk of **SEPSIS** in handover. Low risk sepsis can **sometimes** be treated in the community however it should still be treated with urgency. Without treatment low risk sepsis is likely to progress , sometimes rapidly, particularly in high risk groups of patients such as the elderly, the very young or those with a low threshold for infection.		
Red Flag Sepsis	Pre Alert receiving ED with "Red Flag Sepsis" and transfer as time critical Give O2 to keep SpO2 >94% (88% in COPD) Systolic > 90mmHg give one 250ml bolus 0.9% sodium Chloride. Systolic < 90mmHg give 250ml bolus 0.9% sodium chloride to maximum of 2000mls to rectify systolic to > 90mmHg	Pre alert receiving ED with "Paediatric Red Flag Sepsis" and transfer as time critical Give O2 to keep SpO2 > 94%	
Sepsis likely	Treat as per normal JRCALC guidelines and transfer to ED. Handover as "Sepsis likely"	Treat as per normal JRCALC guidelines and transfer to ED Handover as "Sepsis likely"	

Where the patient triggers a positive to the green recognition screening but presents with no red or amber flags then crews should consider differential diagnosis and treat to normal JRCALC/Paramedic Pathfinder protocols

Paediatric Critical Values Table

Age (years)	Tachypnoea		Tachycardia	
	Severe	Moderate	Severe	Moderate
<1	≥ 60	50 - 59	≥ 160	150 - 159
1-2	≥ 50	40 - 49	≥ 150	140 – 149
3-4	≥ 40	35 - 39	≥ 140	130 – 139
5	≥ 29	27 – 28	≥ 130	120 – 129
6-7	≥ 27	24 – 26	≥ 120	110 – 119
8-11	≥ 25	22 - 24	≥ 115	105 – 114

APPENDIX 11


EMAS Paramedic Pathfinder – Exacerbation COPD
Complete Primary Survey ABCD
This process only applies to the following patients:
Isolated exacerbation of known COPD patient registered with a local GP
This process does not apply to the following patients:
Chief complaint of non traumatic chest pain
Patients with primary diagnosis of Asthma with no history of COPD
1
Critically unwell patient, unresponsive to treatment with high risk of cardiac arrest
Yes
Stabilisation and immediate transportation to ED with pre alert Treatment enroute
No
2
Assess for any sign of severe exacerbation including:
Acute confusion
New onset of cyanosis
Worsening peripheral oedema
Exacerbation resulting in SpO2 reading <88% prior to treatment
Extreme tachypnoea
Feeble respiratory effort
Exhaustion
Unable to complete sentences in one breath
History of rapid onset of exacerbation
Acute changes on ECG (3&12)
Yes
No
3
Post treatment SpO2 within 88 to 92% as a minimum on air or with prescribed LTOT in place
No
Yes
4
History of previous exacerbations requiring ITU
Inadequate home support or living alone
Impaired physical functions/mobility leading to inability to cope at home
No improvement or continued deterioration in condition in response to 'rescue medications'
Yes
No
Transportation to ED with pre alert and treatment enroute if required
5
Referral to relevant Urgent Care Provider where acceptance of COPD Pathfinder has been agreed(see Pathfinder Pocket Books for contact details). Document on PRF COPD Pathfinder 123-ve

APPENDIX 12

Falls in the Older Person - Pathfinder

Complete Primary Survey
ABCD

This process only applies to the following patients:
Patients living in their own homes **AND** > 50 years of age
Who have suffered an isolated fall from < 1 meter (or < 5 steps)

1

FAST positive
GCS <15
Signs/symptoms of a fracture
Uncontrollable haemorrhage
Signs/symptoms of a fracture
Severe pain
Head injury with history of reduced LOC

Yes → Stabilisation and transportation to ED utilise MTC triage tool
Treatment enroute

No

2

Amnesia of events pre or post fall
Head injury with prescription of coagulopathy
Acute ECG 3/12 changes
NEWS >4
Acute postural hypotension with symptoms of dizziness
Severe pain or distress suggestive of underlying fracture/injury during mobility test

Yes → Transport to ED for further assessment. Document on PRF Falls Pathfinder 2 +ve

No

3

Recent escalation in frequency of falls in last 7 days
Home environment creates immediate dangers for patient
Evidence of incontinence or sudden urge to visit WC
Inadequate home support giving crew immediate cause for concern
Evidence of compromised tissue viability (developing pressure ulcers/sores)
More difficulty than normal completing mobility test

Yes → Suitable for referral to an alternative care provider for visit in agreed timeframe within 2 hours (Contact details maybe added for specific partner providers locally)

No

4

Suitable for referral to GP or other care provider for non-urgent falls assessment (Contact details maybe added for specific partner providers locally)