



— **B E L M A T T** —
HEALTHCARE TRAINING

Telephone Healthcare and **Consultation Skills**

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Aims

The aim of the Telephone Triage and Consultation Skills Webinar for Primary Care Healthcare Professionals is to enhance participants' skills in effectively assessing, managing, and communicating with patients over the phone in a primary care setting including out of hours clinical assessments.

Session Objectives

By the end of the webinar, participants should be able to:

1. Understand the importance of telephone triage and consultation skills in providing high-quality care in primary care settings.
2. Develop effective communication techniques for telephonic interactions, ensuring clarity and understanding.
3. Conduct comprehensive patient assessments remotely, identifying urgent symptoms and red flags.
4. Apply critical thinking skills to make informed decisions and ensure patient safety during telephonic consultations.
5. Utilise active listening, empathy, and rapport-building techniques to establish trust and understanding with patients.
6. Manage difficult situations and challenging patients during telephonic consultations.
7. Enhance documentation and record-keeping practices for telephone triage and consultation encounters.
8. Identify resources and further learning opportunities to continue professional development in telephone triage and consultation skills.

Course Outline

Introduction

- Importance of telephone triage and consultation skills in primary care
- Overview of the webinar objectives and structure

Fundamentals of Telephone Triage

- Role and responsibilities of healthcare professionals in telephone triage
- Effective communication strategies for telephonic interactions
- Challenges and potential pitfalls of telephone triage
- Ensuring patient safety and conducting risk assessments remotely

Assessment and Decision-Making in Telephone Triage

- Conducting comprehensive patient assessments over the phone
- Recognizing urgent symptoms and red flags
- Critical thinking skills for informed decision-making remotely
- Documentation and record-keeping in telephone triage

Communication Techniques for Effective Consultations

- Active listening skills for telephonic consultations
- Empathy and rapport-building strategies remotely
- Clear and concise communication techniques
- Providing information and education effectively over the phone

Managing Difficult Situations and Challenging Patients

- Handling angry or upset patients during telephonic consultations.
- De-escalation techniques for challenging situations
- Addressing communication barriers and misunderstandings
- Self-care strategies for healthcare professionals during challenging phone calls

Case Studies and Role-Play

- Interactive case studies to apply knowledge and skills learned.
- Role-playing exercises to practice telephone triage and consultation techniques.
- Group discussions and debriefing on case scenarios.

Q&A and Closing Remarks

- Addressing participant questions and concerns
- Summary of key takeaways from the webinar

<u>Structuring the Call</u>
Hello my name is... <p>Introduce yourself, explain your role and what you are going to do. This represents the first stage in effective communication, breaking down barriers and letting the patient know they have your attention.</p>
Collect or confirm demographics <p>Confirming the patients identify carefully ensures compliance with the Data Protection Act 2018 and GDPR regulations. If the call has been transferred from a reception desk or a call-back is being undertaken this is crucially important. If the call represents an emergency, demographic information is still essential to be able to direct the appropriate care rapidly.</p>
Speak to the patient wherever possible – check the patient is with the caller. <p>Speak directly to the patient if possible/appropriate to maximise the reliability of the information. A history from a third party may also play a role but ideally speak to the patient, even if you have to negotiate to do so. If the patient is not with the caller at the time of the call this represents a high-risk consultation and if it is clear there are no emergent symptoms requiring a priority response try to get the caller to ask either the patient to call themselves or to call back when the patient is present.</p>
Empathize and establish a rapport <p>This is where a consultation may be made or broken. From the outset make it clear you care and are interested. Sincere, sympathetic verbal 'nods' take a few moments but add so much value to the perception of the caller. Anxiety and the expectation of not being heard or believed can precipitate poor triage, so empathise from the opening line – for example: "I hear X is poorly today. Tell me about it?"</p>
Remember the patient's perspective, social and cultural aspects. <p>This is essential to safe telephone triage and much harder to remember over the phone. Equality and diversity are easier to overlook when you can't see a person so at all times remember your safeguarding hat. Domestic violence, child protection and vulnerable adults are all much easier to hide down the end of a telephone line. If in doubt remember the face to face consultation is always an option.</p>
Take a brief medical history <p>Check the patient's history where there is access to medical records, otherwise ask succinctly about chronic health problems, allergies, medications, and recent visits/hospitalizations focussing largely on issues which may impact on the outcome of the call. If the call represents an emergency, the need to gather this information should be balanced against the need for expedient care. Document this information carefully.</p>
Exercise effective call control <p>Whilst by definition the patient will initially lead the call direction the clinician should ask the questions and give direction. Here is where the time taken earlier to empathise and establish a rapport will pay off as the caller should be aware you are invested in them. When callers digress and appear to have lost their initial direction refocus them by feeding back to them the underlying reason for the call and encourage them to direct their explanation more appropriately. Use of the caller's name and repetitive persistence using a calm, caring but firm tone can encourage the caller to mirror your behaviour. Polite interruption may sometimes be necessary however take care this does not lead to you missing or skimming over something essential and fundamental to a safe assessment.</p>

History of presenting complaint
Note a brief history of the presenting condition which should include a description of the patient. This will help develop an accurate mental picture of the patient's illness or injury.
What you can hear....what you can't hear.....and what might reasonably be expected to happen.
At all times be aware that of the five senses normally available to you only one remains. Consider what you can hear and what you can't hear. Listen carefully to speech patterns, content, rhythm, emotion, tone. Are they speaking in complete sentences; does their use of language seem appropriate. Can you hear a cough or audible wheeze; is there grunting in a paediatric patient? Be aware of the visual clues you would normally rely on and consider how you can support the patient in describing things which they may not have identified as remarkable. For example: "My babies breathing looks a bit funny", may mean anything from a minor cough to imminent respiratory failure. Picking up on these clues may very well represent the difference between life and death. In light of all this, and the history given, consider what might reasonably be expected to happen. Use this to stratify your risk assessment.
Make technology your best friend
Do not be afraid to use technology to guide you. If the patient describes a condition you are not familiar with take the time to look it up; don't presume you know or that the patient can inform you. Asking questions shows strength and builds confidence in both the patient and the clinician. Use relevant professional sites to check red flags or early warning scores where this is appropriate.
Identify chief complaint
Encourage the caller to describe the patient's main symptom. Initial use of open questions followed up with more directed closed questions assists in eliciting and clarifying key information. Use mnemonics where these are helpful to maintain direction and avoid missing key information and practice active listening. Be resourceful. Get the caller to be your eyes and hands wherever this is possible. Ideally document the chief complaint in the caller's own words.
Triage the chief complaint – exclude from high risk to low risk
<ul style="list-style-type: none"> • Life threatening emergencies requiring 999/ED • Potential emergent or urgent conditions. • Non-urgent, moderately sick patients. • Persistent symptoms which are low risk for complications. • Chronic or recurrent symptoms which are not worsening • Mild symptoms that may be safely treated at home. <p>Ensure adequate information has been collected to comprehensively assess the patient and reach a safe impression and care plan. Take great care to verify any conditions requiring more urgent action have been reasonably excluded. Document this succinctly.</p> <p>Be certain you have understood the caller's ideas, concerns and feelings and take care not to judge or label typical behaviour. For example, time taken here reassuring the patient with a three-day history of bowel change the reason that bowel cancer is not your primary diagnosis may save numerous phone calls and consultations down the line. Always however remember safety netting discussed below.</p>
Reflect back what you have heard – is it right? Summarise what your decision will be based on.
Reflect back to the caller what you believe you have heard as the call progresses and clarify understanding; take care not to be blinkered and be prepared to completely re-examine your initial understanding and reassess if there is any doubt whatsoever.

Take time to probe carefully for key information if you get a confusing answer and keep going until you are satisfied mutual understanding has taken place. Hesitation and pauses may be key indicators the caller does not understand.

Don't be afraid to go back to the beginning and start again if you are not completely confident the information you are basing your decision on is accurate, comprehensive and safe.

Make an interpretation – do not diagnose

Telephone triage does not involve making diagnoses; to make a firm diagnosis blind, with both arms tied behind your back and your nose removed is generally unsafe. In telephone triage it is also unnecessary since the goal is to match the symptom pattern relating to the presenting problem and medical history to allow the formulation of a clinical impression and safe care plan.

Effective telephone triage allows the clinician to direct the patient to the most appropriate care (which may be home care advice only), in the most appropriate place by the most appropriate clinician at the most appropriate time.

Negotiate a shared outcome; is the patient happy with the plan; do they even understand the plan?

Callers will generally start off with an expectation regarding the care they need. Whilst meeting or exceeding these expectations will generally ensure patient satisfaction this may not always be possible and such expectations will need to be managed. Take time to ensure the patient understands the reasons for your decision, restating them if necessary and explain why their expected outcome is not the only outcome which is safe and meets their needs.

Signpost to ongoing care – know your care pathways

Take time before undertaking telephone triage to know your local care pathways well. Whilst a patient may have an expectation of a GP phone call or consultation, use of such a resource in this way may be spurious. For example a patient calling for emergency contraception may be more appropriately directed to the local GUM clinic who will be well placed to manage all their needs including crucially their continuing education and sexual health screening as well as potentially being well placed to recognise those vulnerable patients requiring more specialist care. The GP surgery can issue the prescription for emergency contraception but may need to refer on anyway. Effective selection of care pathways can both minimise and optimise local healthcare usage.

Make sure the patient understands and can implement the proposed care pathway.`..

Take care to convey your advice in bite size pieces and satisfy yourself the patient understands. Consider does the caller seem likely to follow the advice and what action do you need to take in light of this. For example patients may understand your proposed care pathway is appropriate but may have experienced difficulty accessing it in the past. Time taken to pick up on and address such issues will help ensure the patient buys into the care plan and is more likely to follow and therefore benefit from it thereby improving the safety of the consultation.

Safety netting

In telephone triage as with any other consultation, safety netting is crucial where patients have risk factors for certain conditions or where specific complications may be predicted as part of the underlying disease process or treatment.

In the early stages of a disease process, the 'red-flag' features of serious illness may be concealed or absent; for example at first presentation, the serious complications of an usually uncomplicated illness may not have developed; for example, dehydration in gastroenteritis or sub-dural haematoma after head injury. Safety-netting is a diagnostic strategy to deal with this situation.

Effective safety-netting should incorporate three key questions:

1. If I'm right what do I expect to happen?
2. How will I know if I'm wrong?
3. What would I do then?

Safety netting involves initiating agreed strategies to monitor and follow up the patient where this is necessary and protects both the patient and health professional alike. It ensures patients with unresolved or worsening symptoms know when and how to access further advice, thereby reducing clinical risk.

Tips for effective Safety Netting

- Be specific in the advice given - 'If x happens, ring the surgery or OOH provider immediately.'
- Provide a likely timescale for when you believe symptoms should have resolved - 'Your cough should clear up soon if it's due to the chest infection. If it's still there in two weeks, please book an urgent appointment to see me.'
- It can be helpful to book an appointment for follow up yourself and may be safer than just saying, 'book an appointment if it's not better.'
- Consider referring patients to written information, patient leaflets, recognised and appropriate helplines and organisations which may be accessed to reinforce or support verbal advice. Check the patient has internet access before doing so however.
- Document the specific advice, given rather than simply saying 'advice given'.
- Check patients are aware how to access advice eg: giving the number of the out of hours provider.
- Bear in mind the need to re-assess if symptoms are not settling, or if there is no response to the treatment you have given. Remember to include: 'red flags' where these are appropriate and be prepared to reconsider an earlier impression.
- Make sure the patient is clear the call is not a: 'once and for all' decision and just because you're not necessarily organising an appointment or care for them at that time doesn't mean you won't later if the clinical picture changes.
- Having given specific advice, close with an umbrella statement along the lines of:
"If you develop any new symptoms of any kind of your condition gets worse, changes or you have any other concerns at all, call us back on XXXXXX"

Documentation – Information Governance

Good documentation should be clear, concise and credible. Using a standard for documenting clinical records supports this goal and ensures professionalism. Remember to document negative as well as positive responses to questions which demonstrate and document a comprehensive assessment. The SOAP structure for history taking may be useful in this respect.

Record Keeping: SOAP

Subjective	Statements of symptoms and complaints, ideally in the patient's own words.	Presenting Complaint History of Presenting complaint
Objective	Findings	What you have heard - Speech and non-speech. Patients medical history Previous medical assessments / tests
Assessment	of subjective and objective findings	Clinical decision making – putting ALL the facts together to reach a conclusion
Plan	of treatment	Documenting a care plan including recommendations, instructions, medications, further consultations and worsening care advice.

Review of Systems

General	Fever, rigors, night sweats, weight loss, fatigue, skin rashes, bruises
Neurological	<p><u>General</u> Fits / falls / LOC Headaches / Dizziness Vision / Hearing Memory loss Neck stiffness / photophobia</p> <p><u>Motor</u> Weakness / wasting Incontinence</p> <p><u>Sensory</u> Pain, numbness, tingling</p>
ENT	<p><u>Ear</u> Hearing loss, tinnitus, otalgia</p> <p><u>Nose</u> Rhinorrhoea, epistaxis</p> <p><u>Throat</u> Sore throat / odynophagia</p>
Cardiorespiratory	Chest pain / palpitations SOB / Wheeze / Cough / sputum Leg swelling
Gastrointestinal	<p><u>Work down the body</u> Appetite change Dysphagia Nausea / vomiting Indigestion / heartburn Abdominal pain Change in bowel habit / appearance / blood or mucous in stool</p>
Urological	<p><u>Storage</u> Frequency / volume Urgency / nocturia</p> <p><u>Infection</u> Dysuria / haematuria</p> <p><u>Prostatic / voiding (if male)</u> Hesitancy Poor flow / dribbling Feeling of incomplete emptying</p>

Obs & Gynae	<p><u>PV bleeding</u> Menorrhagia / inter-menstrual bleeding / post coital / post-menopausal bleeding PV discharge</p> <p><u>Pain</u> Pelvic / dysmenorrhoea / dyspareunia</p> <p><u>Pregnancy</u> Chance could be pregnant If pregnant, foetal movements, contractions / tightening, PV loss, pre-eclampsia symptoms (headache, visual disturbance, epigastric pain, oedema)</p>
Rheumatological	<p><u>Joints</u> Pain / stiffness / swelling</p> <p><u>Work down the body</u> Skin: rashes / ulcers / raynauds Hair loss Eyes: redness / dryness Mouth: dryness Chest: breathlessness / SOB GI: IBD symptoms GU: Discharge</p>
Orthopaedic	<p><u>Joints / Bone / Soft tissue</u> Pain, stiffness, swelling, movement restriction, ability to weight bear</p> <p><u>Mechanical symptoms</u> Locking / giving way</p> <p><u>Neurological Symptoms</u> Weakness, numbness, paraesthesia</p>
Psychiatric	<p><u>Depression screen</u> Core (mood, anhedonia) Biological (sleep / energy) Future (hopelessness / suicidal thoughts)</p> <p><u>Schizophrenia 1st rank symptoms</u></p> <ol style="list-style-type: none"> 1. 3rd person auditory 2. Running commentary 3. Delusion of thought 4. Delusions of control 5. Delusional perception <p><u>Other</u> Memory loss / anxiety / insight</p> <p><u>Risk</u> To self and others</p>

History Taking in Telephone Healthcare

- Presenting complaint
- History of presenting complaint
- Past medical history
- Mental health
- Medication
- Family history
- Social history
- Sexual history
- Occupational history
- Review of Systems
- Third party information
- Summary

Adapted from Douglas et al 2005

Symptom and Pain Assessment

O	Onset / are Other people sick
P	Provocative and palliative actions
Q	Quality and quantity of the pain/symptom
R	Region, radiation, recurrence
S	Site, Severity
T	Timing/temporal/treatment
U	Understanding / Impact / What do 'u' think is wrong?
V	Values / goals of care

Past medical history: “JAM THREADS”

Jaundice

Anaemia & other haematological conditions

Myocardial Infarction

Thyroid/Tuberculosis

Hyper/hypotension, heart disease

Rheumatic fever, rheumatoid arthritis

Epilepsy

Asthma and COPD

Diabetes

Stroke/seizures

Family and Social History: “Samosa Diet”

Sexual History	Relationship status? Contraception? When was the first day of your last menstrual cycle? Pregnancies? eg: P2G1
Allergies	Drugs, environment, food, dressings, type of reaction?
Medication	Prescribed, OTC, Herbal, Supplement, Recreational
Occupation	Current and previous; environmental exposure?
Smoking	Current or ex-smoker, pack year history, ready to quit?
Alcohol	Number of units per week – consider CAGE questionnaire?
Diet	Health Diet, types of food, amount
Immunisations	Up to date? Tetanus, Influenza, Pneumococcal, Hep B?
Exercise	What type of exercise? How often? For how long?
Travel	Recent travel? When? Where?

CAGE Questionnaire for Detecting Alcoholism		
Question	Yes	No
C: Have you ever felt you should C ut down on your drinking?	1	0
A: Have people A nnoyed you by criticizing your drinking?	1	0
G: Have you ever felt G uilty about your drinking?	1	0
E: Have you ever had a drink first thing in the morning (E ye opener)?	1	0
A total score of 0 or 1 suggests low risk of problem drinking A total score of 2 or 3 indicates high suspicion for alcoholism A total score of 4 is virtually diagnostic for alcoholism		

Table 1 – CAGE validation values compared to those obtained using the MINI* gold standard for different cut-off points in the sample (n = 729)

CAGE score [†]	Alcohol dependence based on MINI (n)*		Sensitivity (%) [‡]	Specificity (%) [§]	Positive predictive value (%)	Negative predictive value (%) [¶]
	Present	Absent				
0	3	582	-	-	-	-
1	5	44	93,8	85,5	31,3	99,5
2	14	34	83,3	91,9	42,1	98,7
3	20	18	54,2	96,9	55,3	96,8
4	6	3	12,5	99,6	66,7	94,2

* MINI¹⁵: instrument used as the gold standard in diagnosing alcohol dependence according to DSM-IV criteria¹⁷

[†] CAGE score⁷: total of four items (Cut down; Annoyed; Guilty and Eye-opener).

[‡] Sensitivity = True-positive results/(true positives + false negatives)

[§] Specificity = True-negative results/(false positives + true negatives)

^{||} Positive predictive value = True-positive results/(true positives + false positives)

[¶] Negative predictive value = True-negative results/(false negatives + true negatives)

Castells, Maria Alicia, & Furlanetto, Letícia Maria. (2005). Validity of the CAGE questionnaire for screening alcohol-dependent inpatients on hospital wards. *Revista Brasileira de Psiquiatria*, 27(1), 54-57. <https://dx.doi.org/10.1590/S1516-44462005000100012>

Clinical Institute Withdrawal Assessment Scale for Alcohol, Revised (CIWA-Ar)

Nausea and Vomiting

- 0 – No nausea or vomiting
- 1
- 2
- 3
- 4 – Intermittent nausea with dry heaves
- 5
- 6
- 7 – Constant nausea, frequent dry heaves and vomiting

Paroxysmal Sweats

- 0 – No sweat visible
- 1 – Barely perceptible sweating, palms moist
- 2
- 3
- 4 – Beads of sweat obvious on forehead
- 5
- 6
- 7 – Drenching sweats

Agitation

- 0 – Normal activity
- 1 – Somewhat more than normal activity
- 2
- 3
- 4 – Moderate fidgety and restless
- 5
- 6
- 7 – Paces back and forth during most of the interview or constantly thrashes about

Visual Disturbances

- 0 – Not present
- 1 – Very mild photosensitivity
- 2 – Mild photosensitivity
- 3 – Moderate photosensitivity
- 4 – Moderately severe visual hallucinations
- 5 – Severe visual hallucinations
- 6 – Extreme severe visual hallucinations
- 7 – Continuous visual hallucinations

Tremor

- 0 – No tremor
- 1 – Not visible, but can be felt at finger tips
- 2
- 3
- 4 – Moderate when patient's hands extended
- 5
- 6
- 7 – Severe, even with arms not extended

Tactile Disturbances

- 0 – None
- 1 – Very mild paraesthesias
- 2 – Mild paraesthesias
- 3 – Moderate paraesthesias
- 4 – Moderately severe hallucinations
- 5 – Severe hallucinations
- 6 – Extremely severe hallucinations
- 7 – Continuous hallucinations

Headache

- 0 – Not present
- 1 – Very mild
- 2 – Mild
- 3 – Moderate
- 4 – Moderately severe
- 5 – Severe
- 6 – Very severe
- 7 – Extremely severe

Auditory Disturbances

- 0 – Not present
- 1 – Very mild harshness or ability to frighten
- 2 – Mild harshness or ability to frighten
- 3 – Moderate harshness or ability to frighten
- 4 – Moderately severe hallucinations
- 5 – Severe hallucinations
- 6 – Extremely severe hallucinations
- 7 – Continuous hallucinations

Orientation and Clouding of the Sensorium

- 0 – Oriented and can do serial additions
- 1 – Cannot do serial additions
- 2 – Disoriented for date but not more than 2 calendar days
- 3 – Disoriented for date by more than 2 calendar days
- 4 – Disoriented for place/person

Cumulative scoring

Cumulative score	Approach
0 – 8	No medication needed
9 – 14	Medication is optional
15 – 20	Definitely needs medication
>20	Increased risk of complications

APPENDIX 1

Clinical Opiate Withdrawal Scale

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name: _____ Date and Time ____/____/____:____	
Reason for this assessment: _____	
Resting Pulse Rate: _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i> 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120	GI Upset: over last 1/2 hour 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting
Sweating: over past 1/2 hour not accounted for by room temperature or patient activity. 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face	Tremor observation of outstretched hands 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
Restlessness Observation during assessment 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds	Yawning Observation during assessment 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
Pupil size 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible	Anxiety or Irritability 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort	Gooseflesh skin 0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection
Runny nose or tearing Not accounted for by cold symptoms or allergies 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks	<div style="text-align: right;">Total Score _____</div> <div style="text-align: center;">The total score is the sum of all 11 items</div> Initials of person completing assessment: _____

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

This version may be copied and used clinically.

UK Mental Health Triage Scale

UK Mental Health Triage Scale				
Triage Code /description	Response type/ time to face-to-face contact	Typical presentations	Mental health service action/response	Additional actions to be considered
A Emergency	IMMEDIATE REFERRAL Emergency service response	Current actions endangering self or others Overdose / suicide attempt / violent aggression Possession of a weapon	Triage clinician to notify ambulance, police and/or fire service	Keeping caller on line until emergency services arrive / inform others Telephone Support.
B Very high risk of imminent harm to self or to others	WITHIN 4 HOURS Very urgent mental health response	Acute suicidal ideation or risk of harm to others with clear plan or means Ongoing history of self harm or aggression with intent Very high risk behaviour associated with perceptual or thought disturbance, delirium, dementia, or impaired impulse control Urgent assessment under Mental Health Act Initial service response to A & E and 'front of hospital' ward areas	Crisis Team/Liaison/ face-to-face assessment AND/OR Triage clinician advice to attend a hospital A&E department (where the person requires medical assessment/ treatment)	Recruit additional support and collate relevant information Telephone Support. Point of contact if situation changes
C High risk of harm to self or others and/or high distress, especially in absence of capable supports	WITHIN 24 HOURS Urgent mental health response	Suicidal ideation with no plan or ongoing history of suicidal ideas with possible intent Rapidly increasing symptoms of psychosis and / or severe mood disorder High risk behaviour associated with perceptual or thought disturbance, delirium, dementia, or impaired impulse control Overt / unprovoked aggression in care home or hospital ward setting Wandering at night (community) Vulnerable isolation or abuse	Crisis Team/Liaison/ Community Mental Health Team (CMHT) face-to-face assessment	Contact same day with a view to following day review in some cases Obtain and collate additional relevant information Point of contact if situation changes Telephone support and advice to manage wait period
D Moderate risk of harm and/or significant distress	WITHIN 72 HOURS Semi-urgent mental health response	Significant patient / carer distress associated with severe mental illness (but not suicidal) Absent insight /early symptoms of psychosis Resistive aggression / obstructed care delivery Wandering (hospital) or during the day (community) Isolation / failing carer or known situation requiring priority intervention or assessment	Liaison/CMHT face-to-face assessment	Telephone support and advice Secondary consultation to manage wait period Point of contact if situation changes
E Low risk of harm in short term or moderate risk with good support/stabilising factors	WITHIN 4 WEEKS Non-urgent mental health response	Requires specialist mental health assessment but is stable and at low risk of harm during waiting period Other services able to manage the person until mental health service assessment (+/- telephone advice) Known service user requiring non-urgent review adjustment of treatment or follow-up Referral for diagnosis (see below) Requests for capacity assessment, service access for dementia or service review / carer support	Out-patient clinic or CMHT face-to-face assessment	Telephone support and advice Secondary consultation to manage wait period Point of contact if situation changes
F Referral not requiring face-to-face response from mental health	Referral or advice to contact alternative provider	Other services (outside mental health) more appropriate to current situation or need	Triage clinician to provide advice, support Advice to contact other provider and/or phone referral to alternative service provider (with or without formal written referral)	Assist and/or facilitate transfer to alternative service provider Telephone support and advice
G Advice, consultation, information	Advice or information only OR More information needed	Patient or carer requiring advice or information Service provider providing information (collateral) Initial notification pending further information or detail	Triage clinician to provide advice, support, and/or collect further information	Consider courtesy follow up telephone contact Telephone support and advice

Sands, N. Elsom, E. Colgate, R & Haylor, H. (2016) Development and inter-rater reliability of the UK Mental Health Triage Scale (In Press). *International Journal of Mental Health Nursing*.

Blind assessment of the Paediatric patient.

'BREATHING'

Breath sounds: stridor, wheeze, snoring, croupy

Rate of breathing: slow and fast are worrying.

Eye contact and interaction.

Apppearance (cyanosis, skin mottling, rash)

Abdominal breathing

Temperature (core & extremities)

Tracheal tug

Head bobbing and heavy breathing

Innner rib retractions: substernal and intercostal

Nasal flaring

Grunting: precedes respiratory failure.

Pregnancy, Delivery, Birth and Neonatal period **questioning for paediatrics**

- Were they normal pregnancy, delivery and birth?
- Were they completely well after birth?
- Have they been completely well since?
- Have they had all their vaccinations?
- Are they under the supervision of any doctors or hospital for anything?
- Do they take any regular medication?
- What was the last thing you took them to the doctors for?
- Are they feeding well?
- Are they breast or bottle fed?

NICE Traffic Light System (1)

Table 5.2 Traffic light system for identifying risk of serious illness.* [new 2013]

Children with fever and any of the symptoms or signs in the red column should be recognised as being at high risk. Similarly, children with fever and any of the symptoms or signs in the amber column and none in the red column should be recognised as being at intermediate risk. Children with symptoms and signs in the green column and none in the amber or red columns are at low risk. The management of children with fever should be directed by the level of risk.

	Green – low risk	Amber – intermediate risk	Red – high risk
Colour (of skin, lips or tongue)	<ul style="list-style-type: none"> Normal colour 	<ul style="list-style-type: none"> Pallor reported by parent/carer 	<ul style="list-style-type: none"> Pale/mottled/ashen/blue
Activity	<ul style="list-style-type: none"> Responds normally to social cues Content/smiles Stays awake or awakens quickly Strong normal cry/normal crying 	<ul style="list-style-type: none"> Not responding normally to social cues No smile Wakes only with prolonged stimulation Decreased activity 	<ul style="list-style-type: none"> No response to social cues Appears ill to a healthcare professional Does not wake or if roused does not stay awake Weak, high-pitched or continuous cry
Respiratory		<ul style="list-style-type: none"> Nasal flaring Tachypnoea: <ul style="list-style-type: none"> RR > 50 breaths/minute, age 6–12 months RR > 40 breaths/minute, age > 12 months Oxygen saturation ≤ 95% in air Crackles in the chest 	<ul style="list-style-type: none"> Grunting Tachypnoea: <ul style="list-style-type: none"> RR > 60 breaths/minute Moderate or severe chest indrawing
Circulation and hydration	<ul style="list-style-type: none"> Normal skin and eyes Moist mucous membranes 	<ul style="list-style-type: none"> Tachycardia: <ul style="list-style-type: none"> > 160 beats/minute, age < 1 year > 150 beats/minute, age 1–2 years > 140 beats/minute, age 2–5 years CRT ≥ 3 seconds Dry mucous membranes Poor feeding in infants Reduced urine output 	<ul style="list-style-type: none"> Reduced skin turgor
Other	<ul style="list-style-type: none"> None of the amber or red symptoms or signs 	<ul style="list-style-type: none"> Age 3–6 months, temperature ≥ 39°C Fever for ≥ 5 days Rigors Swelling of a limb or joint Non-weight bearing limb/not using an extremity 	<ul style="list-style-type: none"> Age < 3 months, temperature ≥ 38°C Non-blanching rash Bulging fontanelle Neck stiffness Status epilepticus Focal neurological signs Focal seizures

CRT capillary refill time; RR respiratory rate

* This traffic light table should be used in conjunction with the recommendations in this guideline on investigations and initial management in children with fever.

NICE Traffic Light System (2)

- Assess children with learning disabilities using the traffic light table, taking into account their disability
- Children who are assessed as low risk 'green' can be cared for at home with appropriate advice
- If any 'amber' features are present and no diagnosis has been reached, provide parents or carers with a 'safety net' or refer to specialist paediatric care for further assessment
- Children assessed remotely with 'red' features should be sent for urgent referral
- Antipyretics should not be used with the sole aim of reducing fever



Paediatric Assessment Triangle



C

Circulation (to skin)



Having a sick baby or child is always worrying, often challenging and sometimes downright scary. Distressed children, unable to tell you what happened, how they feel or where it hurts only further complicates matters. Yet without this, how can you overcome the urge to rush them to A&E whilst still making a safe decision on the best thing to do?

The Paediatric Assessment Triangle permits rapid observational assessment of a child, uses no equipment and gives an indication of the severity of the illness/injury and the urgency with which care should be sought.

Each element is considered individually.

- Appearance
- Work of Breathing
- Circulation (to skin)

IF ANY SINGLE element is abnormal an IMMEDIATE CALL to 111 be made to seek further advice.

Appearance	(Work of) Breathing	Circulation (to skin)
<p><u>Normal</u></p> <ul style="list-style-type: none"> • Normal cry/speech • Responds normally to stimuli – eg toys / parents / keys • Moves limbs well and appropriately 	<p><u>Normal</u></p> <ul style="list-style-type: none"> • Normal breathing • No extra muscles being used to breathe • No unusual noises 	<p><u>Normal</u></p> <ul style="list-style-type: none"> • Normal colour for child • No significant bleeding
<p><u>Abnormal</u></p> <ul style="list-style-type: none"> • Unusual or absent cry or speech • Decreased response to parents / stimuli • Floppy or rigid muscle tone • No movement when stimulated • Unable to put chin on chest themselves 	<p><u>Abnormal</u></p> <ul style="list-style-type: none"> • Child is working hard to breathe or using extra muscles to breathe • Neck or chest sucking in whilst BREATHING IN • Any unusual noises whilst breathing • Decreased or absent work of breathing 	<p><u>Abnormal</u></p> <ul style="list-style-type: none"> • Child is very pale • Skin is mottled (especially tummy or thighs) • New marks like bruising or bleeding under the skin • Blue/grey tinge to fingers/ toes / lips • Obvious or significant bleeding

PAEDIATRIC ASSESSMENT TRIANGLE

Most people involved in emergency ambulance care will freely admit paediatric calls fill them with dread. Some mistakenly assume them to be "little adults", hoping applying the same assessment skills and criteria will elicit an adequate diagnosis so they can get them to hospital and hand them over to more experienced clinicians as fast as possible!

This anxiety is unsurprising given that:

- Only 5% of emergency ambulance calls are paediatric (Houston & Pearson 2010) limiting exposure and experience (Gausche 2000),
- Even when clinicians have the required skill set to adequately assess children, vehicles often carry inadequate specialist resources (Houston & Pearson 2010).
- Children who are profoundly unwell may appear haemodynamically stable for protracted periods before sudden, rapid, catastrophic collapse (Sandell et al 2009).

Is it any wonder we worry? So how can we allay our anxiety adequately to calmly approach a paediatric patient and potentially distressed caregivers and make a safe, thorough assessment?

Understanding a little about the anatomical and physiological differences between adults and children is a good starting point.

HOW DO PAEDIATRICS DIFFER FROM ADULTS?

Narrower airways supplying immature lungs predispose children to potentially catastrophic airway compromise from minimal obstruction (Frenkel 2004). The cricoid cartilage forms the narrowest part of paediatric airways (instead of the adult larynx) which are lined with pseudostratified ciliated epithelium anchored minimally to areolar tissue, predisposing children to oedema, upper respiratory tract infections and airway compromise. The baby head represents 19% of body surface area (compared with 9% in adults) which coupled with shorter necks gives propensity for abnormal flexion, damage and occlusion (Frenkel 2004).

Children have relatively faster metabolism and oxygen consumption, increasing respirations and heart-rate; paediatric blood-pressures are lower as systemic vascular resistance rises steadily until adulthood; appendix 1 details age-based variations (Frenkel 2004).

Early compensated paediatric shock generates sympathetic nervous stimulation increasing heart-rate, systemic vascular resistance and fluid retention. This compensatory cardiovascular response maintains systemic blood-pressure despite significant circulatory compromise before sudden deterioration (Sandell et al 2009). Appendix 2 details variances in normal/compensating vital signs.

PAEDIATRIC ASSESSMENT

Quantum paediatric care begins the moment the job is received. An early discussion en-route allows the crew to mentally prepare and consider any time-critical details given, possible priorities of care and equipment required (Greaves 2006). Where the age is known a reminder of normal observations is invaluable saving time later (JRCALC 2010).

Textbooks highlight the need for a calm, confident approach with careful use of age-appropriate verbal and non-verbal communication, reassuring expressions, tone and action. In an ideal world this is followed by an early structured primary assessment (ALSG 2010). However, when confronted with a screaming, distressed frightened child with often terrified caregivers such an idealistic approach is a challenge.

Out-of-hospital paediatric assessment is further complicated by difficulties in:

- Communication (Hohenhaus 2006)
- History taking (Adirim and Smith 2006)
- Age based variations, lack of sensitivity (blood-pressure), specificity (heart /respiratory rate) (McCarthy et al 1985)

Recognising the difficulties and associated lack of competence in paediatric assessment, in 2007 the National Institute of Clinical Excellence (NICE) recommended a “traffic light” system of physiological parameters to identify those patients with serious physiological disturbances at risk of deterioration, prior to cardiac arrest.

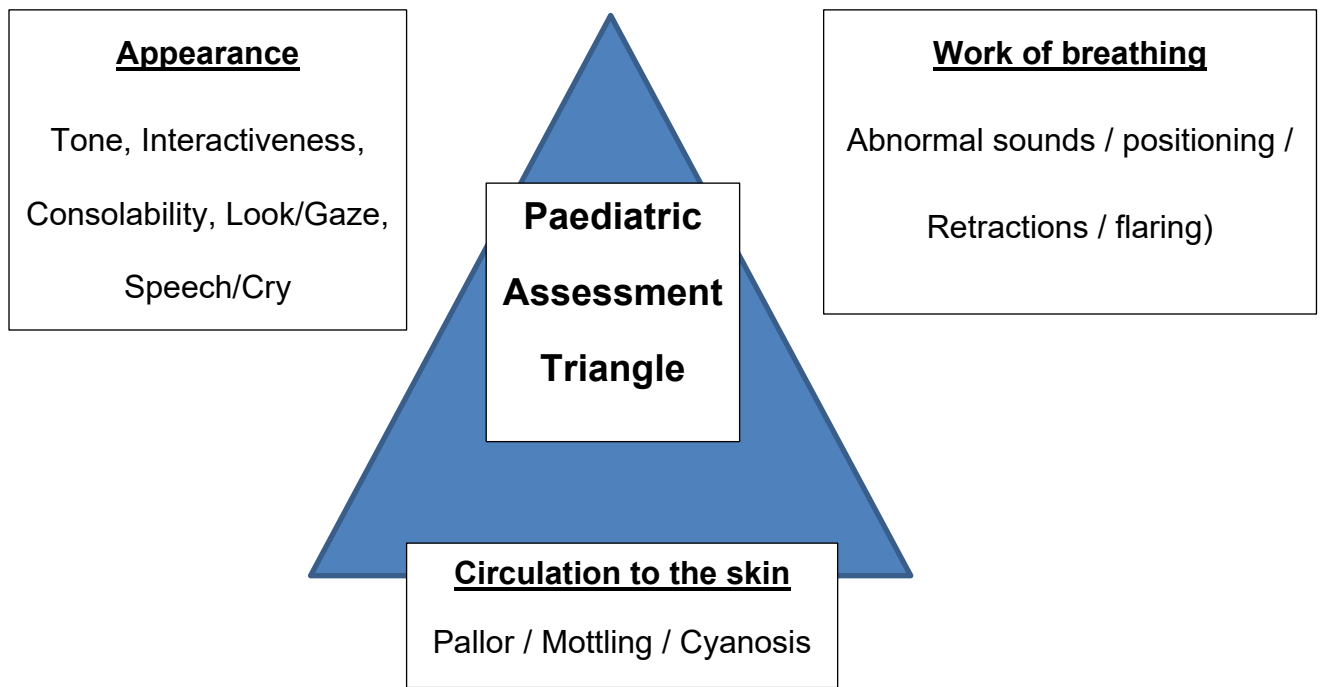
This was developed into the Paediatric Early Warning Score (PEWS), which required clinicians to consider various parameters including:

- Respiratory rate / effort
- Temperature / skin turgidity / rashes / warmth of extremities
- Heart rate / capillary refill / oxygen saturations / blood pressure
- Level of consciousness (appendix 3 refers).

(NICE 2007)(Edgell et al 2009)

In the hospital setting, with specialist equipment and appropriately qualified clinicians to hand, PEWS proved a reliable tool which gave practitioners more confidence. In the out-of-hospital environment however difficulties obtaining and recording vital signs compromised the reliability of this scoring system (Bird et al 2009).

Diekmann et al (2000) proposed the paediatric assessment triangle (PAT) using direct observations to recognise seriously unwell children.



(Diekmann et al 2000)

The advantage of the PAT (Figure 1) over PEWS is that it relies only on visual and auditory cues, is rapid, accurate and easily learned following the ABC mnemonic so familiar to emergency clinicians. Importantly it also provides a simple structure to follow when entering highly charged and often distressing situations (Diekmann et al 2000).

Interpretation is also straightforward; any observed abnormality within any element renders that component abnormal and defines the initial category of illness as illustrated in table 1. Importantly however it also dictates both severity and potential for rapid deterioration.

Table 1

<u>Appearance</u>	<u>Work of Breathing</u>	<u>Circulation to skin</u>	<u>General Impression</u>
Normal	Normal	Normal	Stable
Normal	Abnormal	Normal	Respiratory Distress
Abnormal	Abnormal	Normal/Abnormal	Respiratory Failure
Normal/Abnormal	Normal/Abnormal	Abnormal	Shock
Abnormal	Normal	Normal	CNS/Metabolic
Abnormal	Abnormal	Abnormal	Cardiopulmonary failure

(Diekmann et al 2000)

Using the Paediatric Assessment Triangle

The Paediatric Assessment Triangle addresses three key areas: Appearance, work of Breathing and Circulation to the skin. Each of these will be addressed in turn.

A - Airway and Appearance

The child's general appearance is the single most important characteristic in assessing severity and predicting urgency, being a more sensitive indicator of degrees of distress than the formal neurologic exam, or the AVPU (Alert, responsive to Verbal, Painful stimuli, or Unresponsive) neurologic assessment in the paediatric primary survey.

Importantly, even when they are progressing to more severe degrees of distress, children may remain “alert” and neurologically “normal”. Their 'appearance' – as identified in the PAT, is however likely to be abnormal and the first indicator there may be a more pressing problem presenting.

Assessing appearance begins from across the room following the mnemonic “tickles” (TICLS): Tone, Interactability, Consolability, Look/Gaze, and Speech/Cry. Table 2 summarises the most important features which should be considered.

Table 2

<u>Components of Appearance The “tickles” (TICLS) mnemonic</u>		
T	Tone	Is she moving around or resisting examination vigorously and spontaneously? Is there good muscle tone?
I	Interactability	How alert is she? How readily does a person, object, or sound distract her or draw her attention? Will she reach out, grasp and play with a toy or new object, like a penlight or tongue blade?
C	Consolability	Can she be consoled or comforted by the caregiver or by the clinician?
L	Look/Gaze	Can she fix her gaze on the clinician's or caregiver's face or is there a “nobody home,” glassy-eyed stare?
S	Speech	Is her speech/cry strong and spontaneous? Or weak, muffled, or hoarse?

(Diekmann et al 2000)

Abnormal appearance may arise as a result of inadequate oxygenation, ventilation or brain perfusion. Whatever the cause, having identified an abnormality the decision should be made to transport the patient to definitive care whilst maximising oxygenation, ventilation and perfusion.

Although an important indicator of the presence of illness or injury, appearance does not necessarily indicate the cause of the problem. It is the 'work of breathing' and 'circulation to skin' which help identify the systemic cause and severity/urgency.

B - Work of Breathing

Work of breathing is a much more reliable indicator of oxygenation and ventilation than conventional respiratory assessment methods reflecting the child's physiologic compensatory response to cardiopulmonary stress.

Assessing work of breathing entails:

- Listening for abnormal airway sounds, and
- Observing for specific visual information about breathing effort.

Table 3

<u>Characteristics of Work of Breathing</u>	
<u>Element</u>	<u>Explanation</u>
Abnormal airway sounds	Altered speech, stridor, wheezing or grunting
Abnormal positioning	Head bobbing, tripodding
Retractions	Supraclavicular, intercostal or substernal retractions of the chest wall
Flaring	Nasal flaring

(Diekmann et al 2000)

Combining assessment of appearance and work of breathing can establish severity. A child with normal appearance and increased work of breathing is in respiratory distress.

Abnormal appearance and increased work of breathing means early respiratory failure; abnormal appearance and abnormally decreased work of breathing is late respiratory failure.

C - Circulation to skin

Rapid circulatory assessment determines adequacy of cardiac function and perfusion of vital organs. An important indicator is circulation to skin. When cardiac output is inadequate, the body minimises peripheral circulation to preserve blood supply to vital end organs (e.g. brain, heart and kidney). Therefore, circulation to skin reflects the overall status of circulation to the body's important end organs. Table 4 summarizes characteristics consistent with inadequate cardiac function. .

When assessing circulation to skin care should be taken to ensure the child is not cold as this may result in a false positive. Cold ambient temperature is the most common cause for misinterpretation of skin signs.

Table 4

<u>Characteristics of Circulation to Skin</u>	
Pallor	White skin coloration from lack of peripheral blood flow.
Mottling	Patchy skin discoloration, with patches of cyanosis, due to vascular instability or cold
Cyanosis	Bluish discoloration of skin and mucus membranes.

(Diekmann et al 2000)

INTERPRETING THE PAEDIATRIC ASSESSMENT TRIANGLE

Having considered all three elements in the triangle, a rapid assessment of physiological stability - and consequently severity and urgency - may be made (table 1 refers) as well as the likely category of physiologic abnormality and immediate interventions required.

For the clinician, the PAT provides a simple structure to follow when called to paediatrics which allows them to collate and interpret critical information without even touching the patient. It helps set priorities for life saving interventions and importantly gives clinicians some reassurance that in the highly charged environment of paediatric emergency care they have an efficient safe tool by which to assess these patients and keep them safe.

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01 ARE THERE CLUES THAT THE PATIENT MAY BE SERIOUSLY ILL?

RISK FACTORS FOR SEPSIS INCLUDE:

- ☐ Age > 75
☐ Impaired immunity (e.g. diabetes, steroids, chemotherapy)
- ☐ Recent trauma / surgery / invasive procedure
☐ Indwelling lines / IVDU / broken skin

02 COULD THIS BE DUE TO AN INFECTION?

LIKELY SOURCE:

- ☐ Respiratory ☐ Urine ☐ Skin / joint / wound ☐ Indwelling device
☐ Brain ☐ Surgical ☐ Other

**SEPSIS
UNLIKELY,
CONSIDER
OTHER
DIAGNOSIS**

03 ANY RED FLAG PRESENT?

- ☐ Objective evidence of new or altered mental state
☐ Unable to stand / collapsed
☐ Unable to catch breath / barely able to speak
☐ Very fast breathing
☐ Skin that is very pale, mottled, ashen or blue
☐ Rash that doesn't fade when pressed firmly
☐ Recent chemotherapy
☐ Not passed urine in previous 18 hours

**RED FLAG
SEPSIS
START BUNDLE**

04 ANY AMBER FLAG PRESENT?

IF UNDER 17 & IMMUNITY IMPAIRED TREAT AS RED FLAG SEPSIS

- ☐ Behavioural change / reduced activity
☐ Immunosuppressed
☐ Trauma / surgery / procedure in last 8 weeks
☐ Breathing harder work than normal
☐ Reduced urine output
☐ Temperature <36°C
☐ Signs of wound infection
☐ Not passed urine in previous 12-18 hours

FURTHER INFORMATION AND REVIEW REQUIRED:

- ARRANGE URGENT FACE-TO-FACE ASSESSMENT USING CLINICAL JUDGEMENT TO DETERMINE APPROPRIATE CLINICAL ENVIRONMENT

NO AMBER FLAGS : ROUTINE CARE AND GIVE SAFETY NETTING ADVICE:

CALL 111 IF CONDITION CHANGES OR DETERIORATES.
SIGNPOST TO AVAILABLE RESOURCES AS APPROPRIATE

CALL
999 IF
ANY
OF:

Slurred speech or confusion
 Extreme shivering or muscle pain
 Passing no urine (in a day)
 Severe breathlessness
 'I feel I might die'
 Skin mottled, ashen, blue or very pale

TELEPHONE TRIAGE BUNDLE:

**THIS IS TIME-CRITICAL – IMMEDIATE ACTION REQUIRED: DIAL 999
AND ARRANGE BLUE LIGHT TRANSFER**

COMMUNICATION: Ensure communication of 'Red Flag Sepsis' to crew. Advise crew to pre-alert as 'Red Flag Sepsis'.



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