



— B E L M A T T —
HEALTHCARE TRAINING

Telephone Triage

Jeshni Amblum-Almer

1

DEFINITIONS



Triage	A clinical activity to sort patients by acuity so that those with the greatest need are seen first
Streaming	An operational activity to assess whether low acuity patients are suitable to be seen by an appropriate non ED clinician
See & Treat	The first clinician to see the patient is responsible for all diagnosis and treatment-usually for patients presenting minor illness and injury
Navigation	Patients are directed to an appropriate in site service without a formal process of clinical assessment. This process is carried out by a non clinician (eg receptionist) or computer kiosk using clear criteria
Redirection	Patients are sent to a care provider at another geographical site.

Edwards et al, 2021

2

DEFINITIONS: London



STREAMING

- Streaming is the process of allocation of patients to the most appropriate physical areas of a hospital and the most appropriate clinical pathways. The purpose of streaming is to quickly determine the most appropriate place for a patient who walks through the front door of an A&E/co-located Urgent Treatment Centre (UTC) to be assessed and treated. This includes sending the patients to the right department within the hospital or re-directing them off site to a more appropriate setting (see below)

ASSESSMENT

- The process undertaken by a clinician in what ever area the patient has been streamed to and determines the clinical plan and treatment

TRIAGE

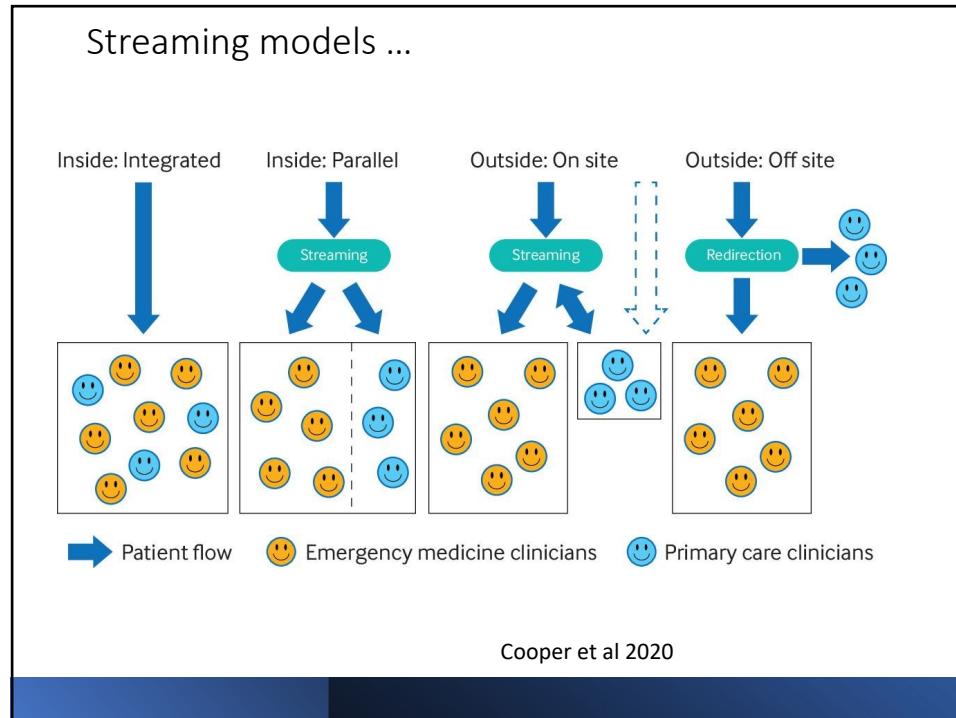
- The prioritisation of cases so that when there is a queue/delay to see a clinician those with time dependent conditions are prioritised over other conditions

REDIRECTION

- Redirection is the act of sending patients away (off site) from a hospital to other parts of the health and care system including other parts of the urgent and emergency care system, specialist services and community & primary care services

Healthy London Partnership 2017:page 5

3



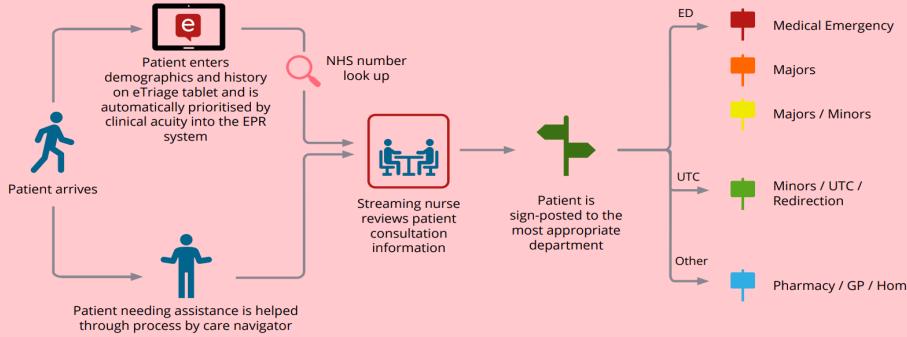
4

E-triage



What is eTriage?

eTriage is an automated digital check-in and triage software developed by active NHS clinicians to enable automatic triage of patients by clinical priority, supporting clinical decision-making and streamlining patient experience. A typical patient flow looks like this:



```

graph LR
    PatientArrives((Patient arrives)) --> EnterDemographics[Patient enters demographics and history on eTriage tablet and is automatically prioritised by clinical acuity into the EPR system]
    EnterDemographics --> NHSLookUp[NHS number look up]
    NHSLookUp --> StreamNurse[Streaming nurse reviews patient consultation information]
    StreamNurse --> SignPost[Patient is sign-posted to the most appropriate department]
    SignPost --> ED[ED]
    SignPost --> UTC[UTC]
    SignPost --> Other[Other]
    SignPost --> Pharmacy[Pharmacy / GP / Home]
    
```

Legend:

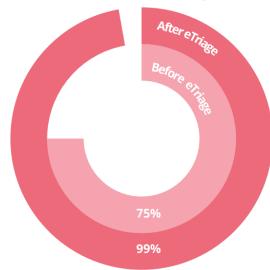
- ED
- Medical Emergency
- Majors
- Majors / Minors
- Minors / UTC / Redirection
- Other
- Pharmacy / GP / Home

5

E-triage

- Evaluation of 6/12 data from Stand alone unit = 28,000 patients
- Staff feedback identifies patients by their clinical risk prior to clinical assessment
- Patients with life threatening symptoms picked up immediately

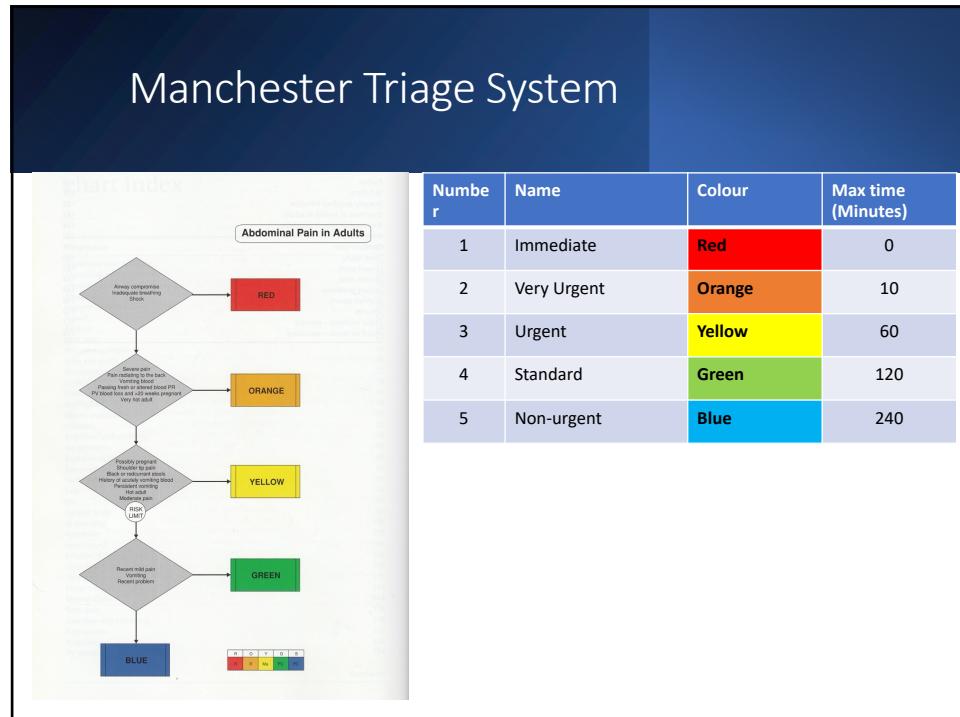
Patients assessed within 15 minutes of arrival at the UCC, %



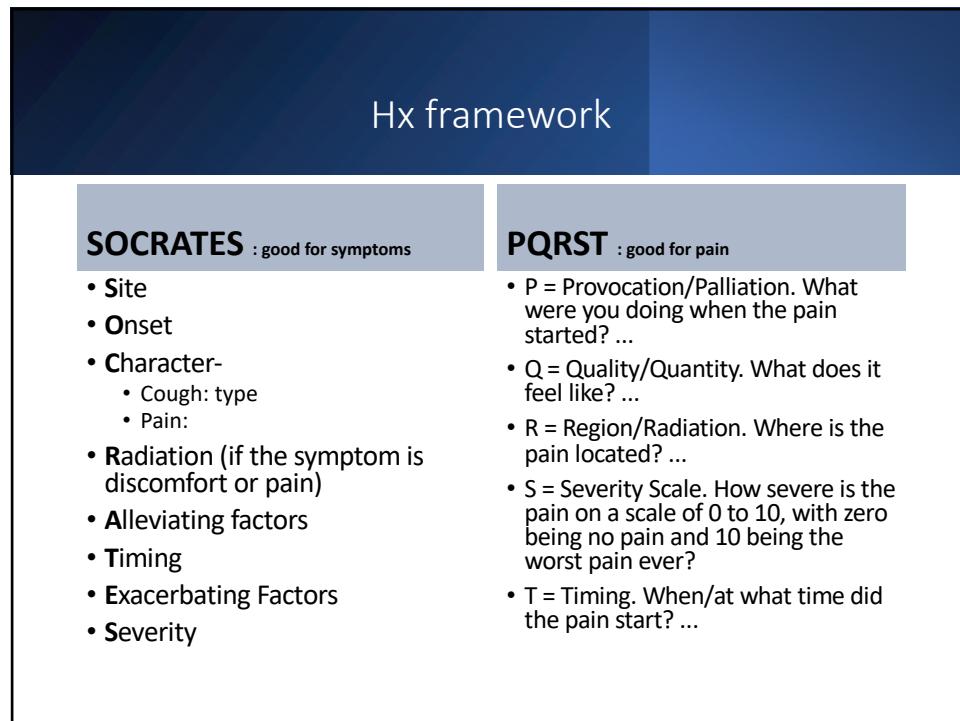
Category	Percentage
Before eTriage	75%
After eTriage	99%

eTriage has resulted in 99% of patients undergoing their initial assessment with a healthcare professional within 15 minutes of arrival. This is above the national target of 95%.

6



7



8

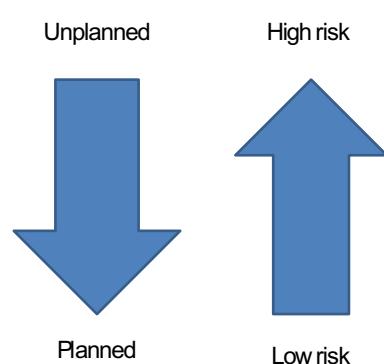
BACKGROUND TO TELEPHONE HEALTHCARE

- What is it and why do we need it?

9

Types of telephone healthcare assessment

- 999
- 111
- GP
- Mental health
- Long term conditions
- End of life



10

The infographic is divided into four main sections:

- Self care** (Blue box): A range of common illnesses can be treated with a well stocked medicine cabinet or plenty of rest.
- NHS 111** (Green box): Call NHS 111 free if you need medical help advice, but it is not a 999 emergency.
- Pharmacy** (Green box): Provides local confidential, expert advice and treatment for a range of common illnesses.
- GP** (Yellow box): For expert medical advice, medical examinations and prescriptions for illnesses.
- Minor injury unit/urgent care centre** (Orange box): Offers access to a range of treatment for minor illnesses and injuries, including broken bones.
- Emergency Department or 999** (Red box): These services should be used in an emergency, a critical or life-threatening situation.

Choose well. Get the right care, in the right place, at the right time

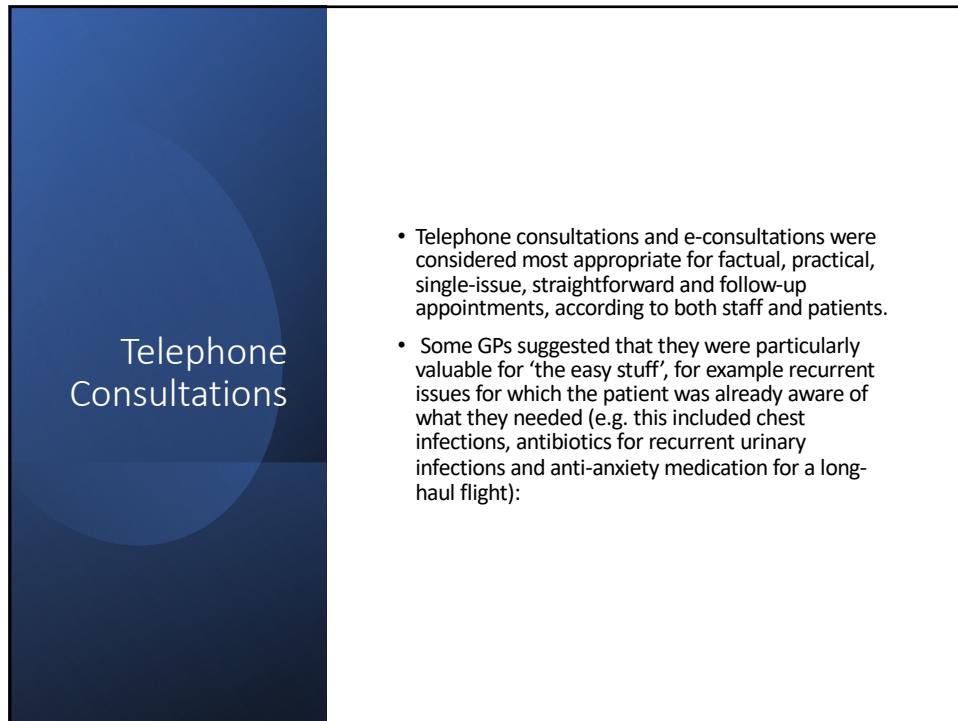
NHS
Kernow Clinical Commissioning Group

11

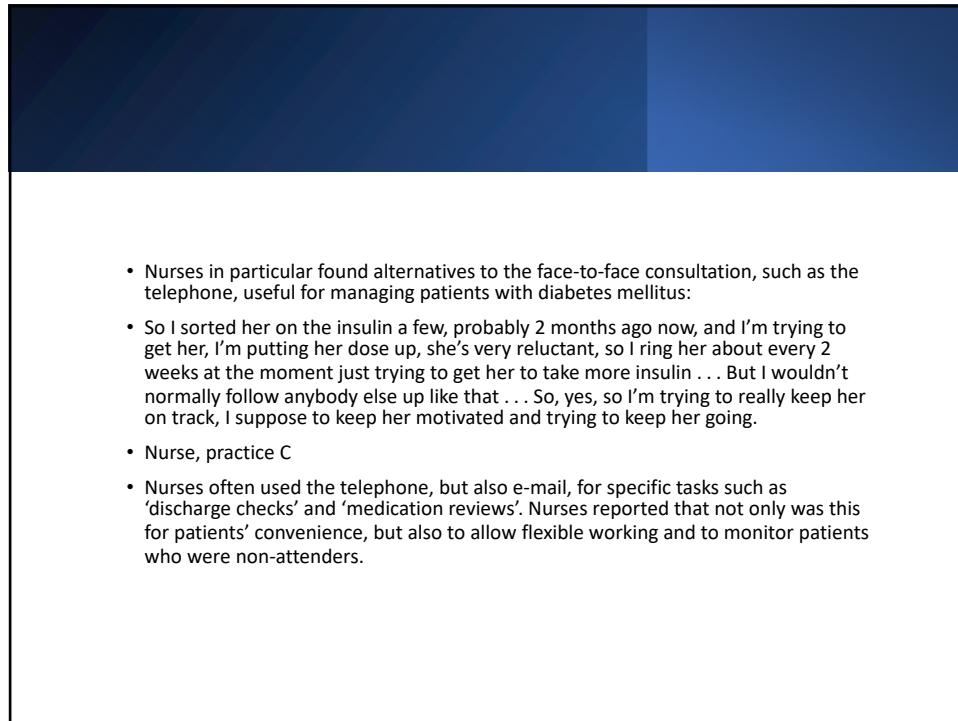
Why do patients Call

- Why do patients call? For problem affecting patient's quality of life Patient or carer has reached limits of tolerance of physical or emotional distress Fear of disease (meningitis/appendicitis etc) After discussion with family/ friends Role of responsible parent /carer Because they can
- What do patients want Expectations may be clear or undefined Clear expectations may be appropriate or inappropriate Examples of clear expectations – visit, advice on self-medication, reassurance condition not serious, prescription Problem must still be explored Negotiation may be needed
- Helman's Folk Model (1981) Patient seeks answers to six questions 1. What has happened? 2. Why has it happened? 3. Why to me? 4. Why now? 5. What would happen if nothing was done? 6. What should I do or whom should I consult for further help?

12



13



14

- Alternatives to the face-to-face consultation were also useful for people seeking advice about the side effects of medicines, and telephone calls were used by GPs for checking that symptoms had improved and did not require further investigation ('safety-netting'):
 - I guess just following up medications that you might have started just to make sure you know they're not getting side effects or, I'd say sick certificates is another one, just sort of checking on how somebody is before issuing another certificate.

15

Patients Perspective

'A doctor's surgery is full of bugs and germs and I didn't want to be sitting next to people who might pass something onto you . . . Yeah, it's one of the worst places to be, really, isn't it, if you're not well?'

- 40-year-old woman with cancer,
- An e-mail or e-consult allowed the patient to keep a record of the consultation; they could take time to prepare what they wrote and make sure that they had covered everything. This was particularly important for those who found the practice intimidating or had trouble remembering what they wanted to discuss with the GP.
- Can send a direct message and not have to trouble the receptionist. This was more efficient, quicker than trying to get through on the telephone and preferred by those who found the receptionists intimidating. Some liked the idea that the GP could make the decision about whether or not the problem was sufficiently urgent for an appointment, rather than the onus falling on either the patient or the receptionist:

'Then the decision whether I need to be seen is his [the GP's] . . . if you phoned the receptionist, you haven't got a hope in hell.'

16

Patients views

'Yes, I mean even when – even though I'm talking to [name of GP] on the end of the phone, there – it's still more impersonal than face to face, obviously. Because what you're lacking is that sort of physical interaction, you know, when the subliminal reading body languages and all that sort of thing. But it serves a purpose.'

50-year-old male patient with multiple comorbidities

'I just found out there is nobody owning the system or responsible for looking after it. If it is a serious project, I would expect someone to be taking control of it, making sure everyone has a reply or something.'

34-year-old female patient with young children, practice A

17

Triage software

Used by 111 and most 999 services now

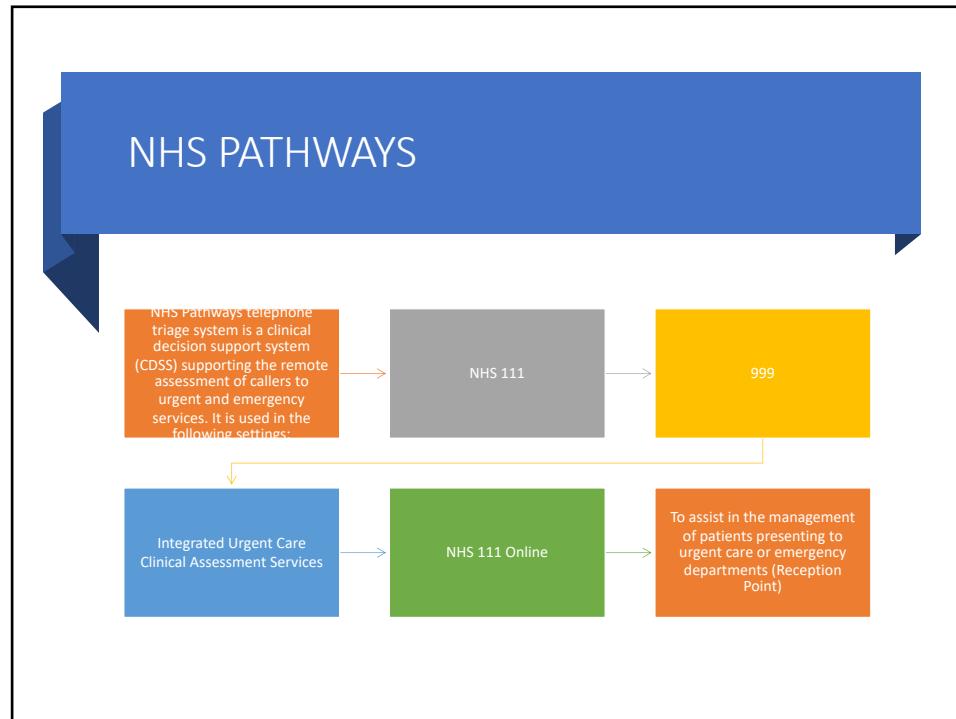
Reduce unnecessary emergency attendances

Universal application

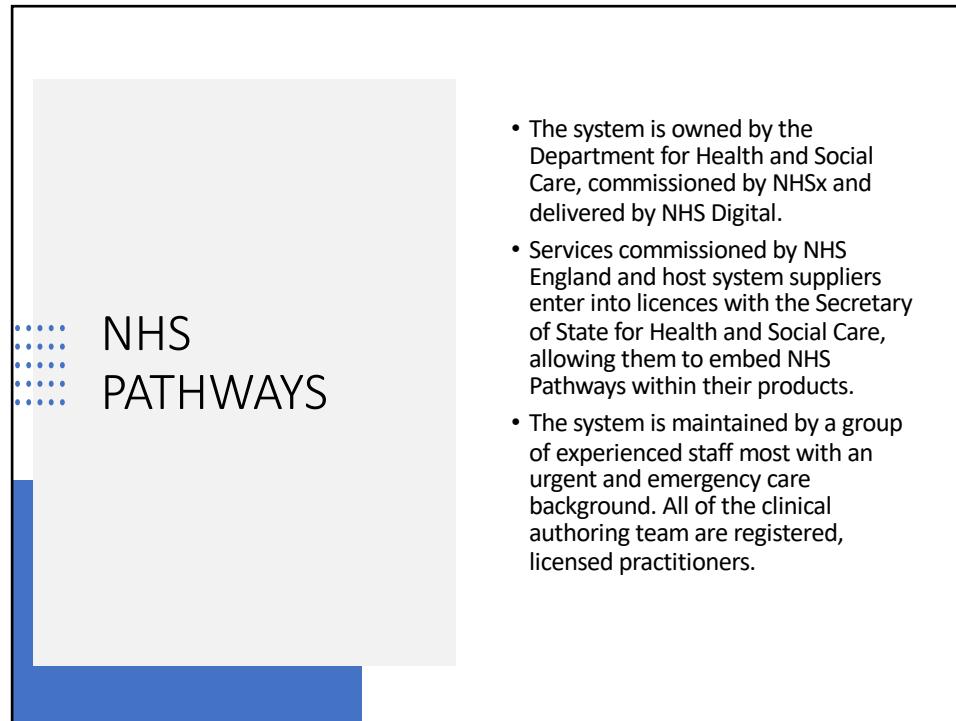
Operates on a diagnosis of exclusion



18



19



20

How does it work



The system is an interlinked series of algorithms, or pathways, that link clinical questions and care advice, leading to clinical endpoints. Non-clinical call handlers are presented with a series of questions. Based on the answers given, the most appropriate clinical response with a specific level of care and the time frame, is reached.



Questions are asked in a clinical hierarchy, so life-threatening questions are asked early in the call, progressing through to questions about less urgent symptoms.



The NHS Pathways system is broadly divided into three modules with the system taking a symptom-based approach, rather than a diagnostic one.

21

NHSPathways

NHS Pathways uses a medical, symptom based approach to

assessment of clinical problems and comprises:

- Individual flows of linked questions which are age and gender specific.
- Each flow is designed to: “rule out”, rather than “rule in”, in exactly the same way you do in your day to day practice with patients.
- Operates on a diagnosis of exclusion with a series of: “core” questions which lead to additional ‘stem’ questions if they are indicated.
- If a particular stem is completed with no sign of the conditions it covers, the caller returns to the “core” at a defined point for continued assessment
- Complete documentation of all clinical conditions considered for every flow.

22

NHS Pathways

Module 0 – Obvious immediate and imminent threats to life are excluded. This module covers the vast majority of the ambulance service business.

Module 1 – Conditions requiring non-emergent care are excluded. This module primarily leads to primary care and home care dispositions.

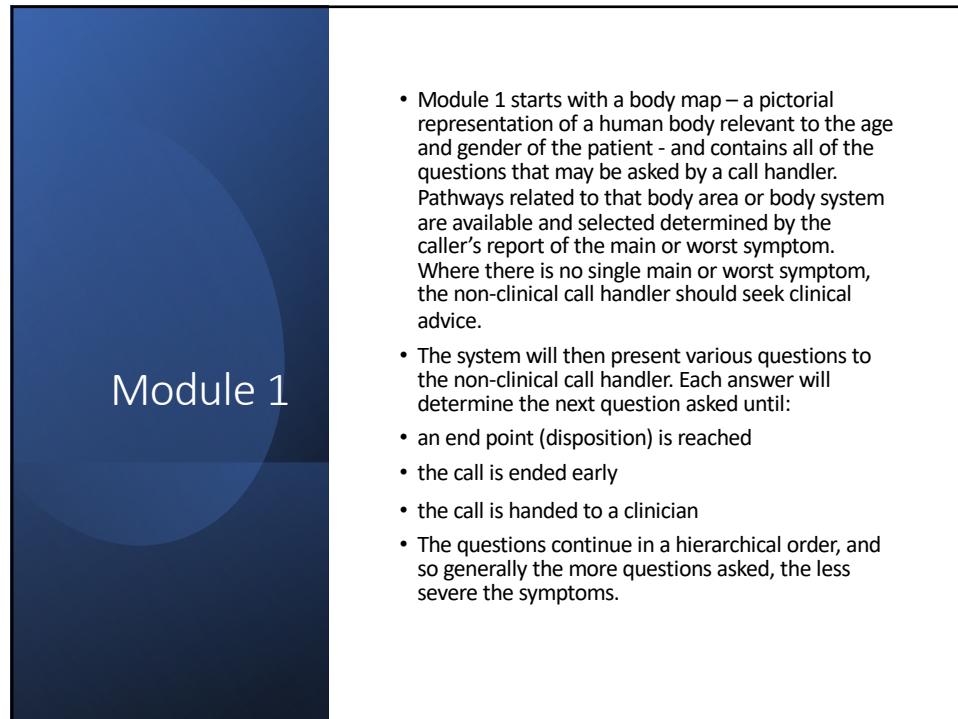
Module 2 – Clinician assessment module where there is no obvious emergency, but the call is complex or has arrived at a home care disposition. The call is transferred to a nurse or paramedic for further assessment or provision of care advice accordingly.

23

Module 0

- Module 0 consists of the entry pathways into the NHS Pathways system. Emergency situations are dealt with by asking questions about:
 - consciousness
 - breathing
 - choking
 - fitting
- commonly occurring “declared” serious conditions, such as heart attack, stroke, anaphylaxis or blood sugar problems (evidence shows that for certain high profile or well understood conditions, callers often declare these and are correct in their assumptions, so the system provides a rapid means of assessing such urgent cases).
- If the answers given to the symptoms assessed in Module 0 are sufficiently serious, the questions will trigger the dispatch of an emergency ambulance. No further questions or considerations of conditions are needed at this point.
- Module 0 rules out some, but not all, life-threatening conditions. Once these have been ruled out, the call handler reaches Module 1.

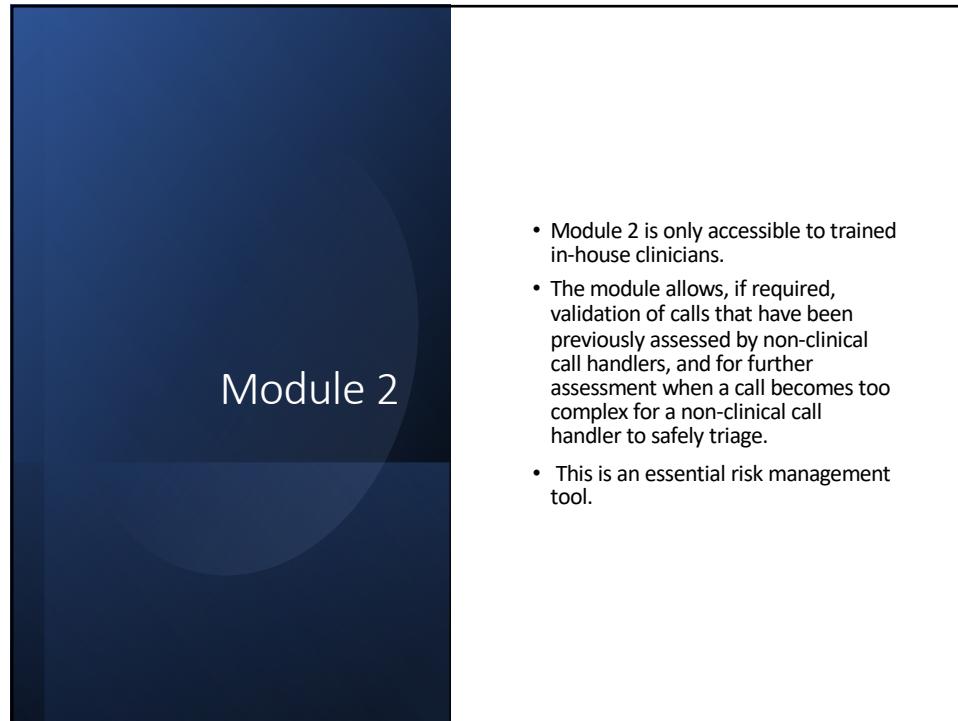
24

The background of this slide features a dark blue gradient with a large, semi-transparent white circle centered in the middle.

Module 1

- Module 1 starts with a body map – a pictorial representation of a human body relevant to the age and gender of the patient - and contains all of the questions that may be asked by a call handler. Pathways related to that body area or body system are available and selected determined by the caller's report of the main or worst symptom. Where there is no single main or worst symptom, the non-clinical call handler should seek clinical advice.
- The system will then present various questions to the non-clinical call handler. Each answer will determine the next question asked until:
 - an end point (disposition) is reached
 - the call is ended early
 - the call is handed to a clinician
- The questions continue in a hierarchical order, and so generally the more questions asked, the less severe the symptoms.

25

The background of this slide features a dark blue gradient with a large, semi-transparent white circle centered in the middle.

Module 2

- Module 2 is only accessible to trained in-house clinicians.
- The module allows, if required, validation of calls that have been previously assessed by non-clinical call handlers, and for further assessment when a call becomes too complex for a non-clinical call handler to safely triage.
- This is an essential risk management tool.

26

NHS Pathways

Pathways includes:

- **In-call advice** for delivery during a call to manage the situation – for example CPR.
- **Interim / worsening advice:** Information on managing symptoms until non-emergency ambulance or primary care response is accessed or delivered.
- **Home care advice** – where the call is suitable to be managed by the individual at home and detailed care advice is provided to support the patient in looking after themselves.

27

Right care, right place, right time

Focus is on providing patients with the service with the most appropriate care which:

Meets the clinical need

Is delivered by the most appropriate clinician

Provided at a location that is most suitable to the needs of the patient and of the wider health community.

28

Is pathways safe?

In 2014 a national service review was undertaken to facilitate the principles of the Francis and Berwick reports in terms of learning and sharing to improve patient care and also to:

- Understand the clinical governance of NHS 111 from the perspective of clinical governance leads, commissioners and providers, and to
- Identify good practice to inform wider learning.

Robert Francis QC, Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry, February 2013. Don Berwick, Report on Improving the Patient Safety of Patients in England, August 2013.

NHS111 Quality and Safety Report 2014

29

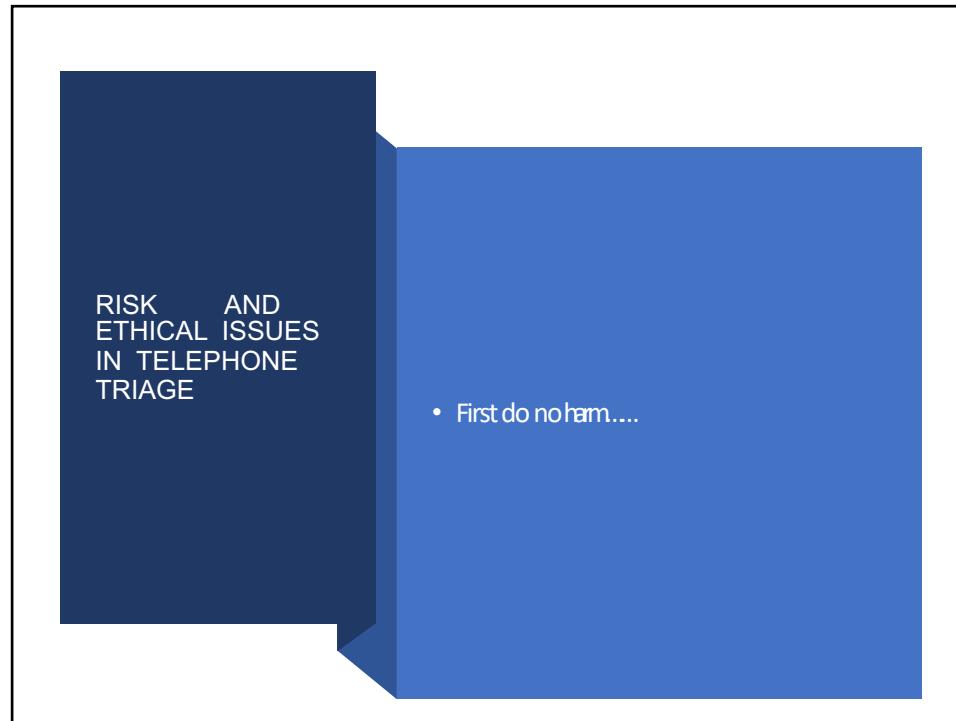
NHS111 Quality and Safety report 2014

Key	Key recommendations
Identify	Identify clinical governance structures and processes that promote and support clinical leadership
Develop	Develop capability for shared learning and continuous improvement across the whole health community.
Develop	Develop a universal system for reporting serious incidents and complaints and simplify information retrieval.
Develop	Develop a package of best practice examples of clinical governance models for regional dissemination

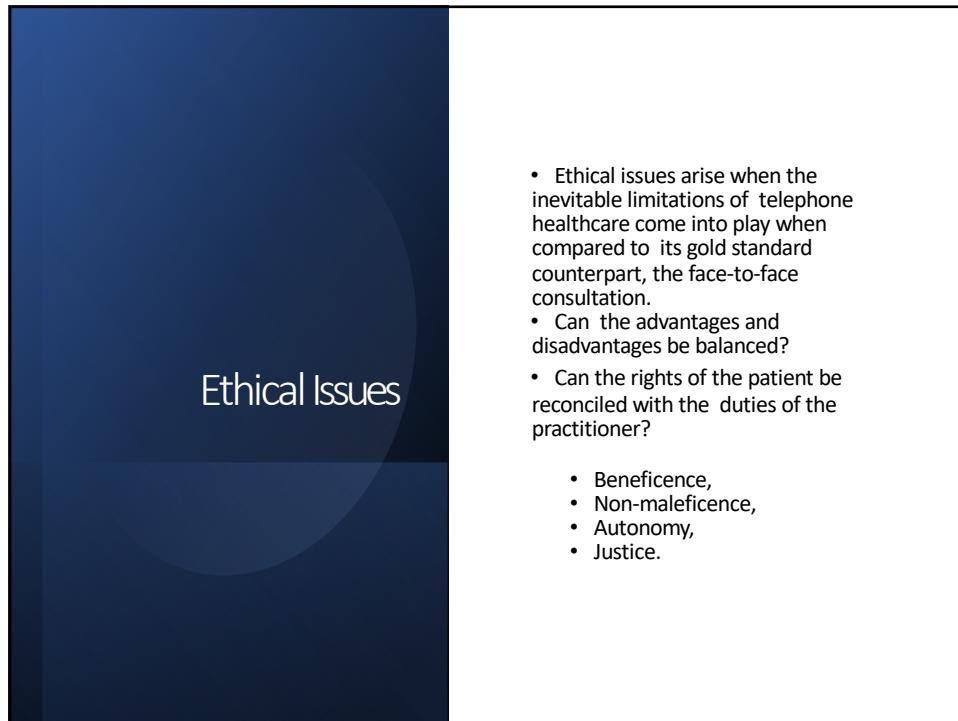
30



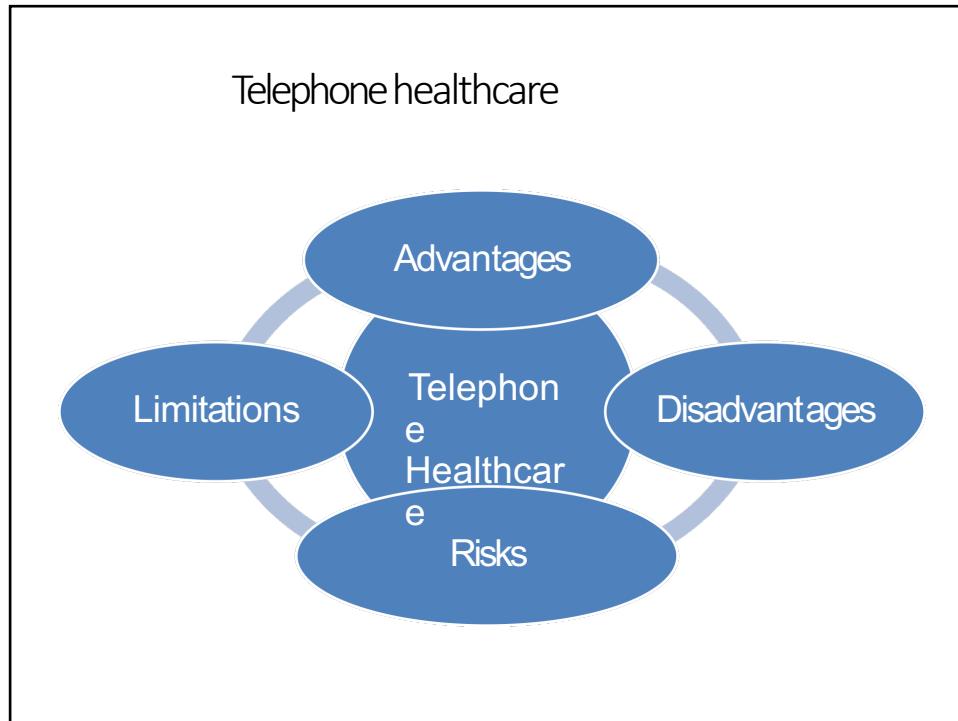
31



32



33



34



Risks in Telephone Healthcare

The key areas where people fall down in telephone healthcare include:

- Information gathering.
- Decision making.
- Giving advice.

35



Risks in
Telephone
Healthcare

36



Information Governance

- Supporting and managing the NHS Pathways clinical reference data. NHS Pathways is a clinical tool used for assessing, triaging and directing contact from the public to urgent and emergency care services such as 999, GP out-of-hours and NHS 111. It enables patients to be triaged effectively and ensures that they are directed to the most appropriate service available at the time of contact.
- Controlled by NHS Digital
- Information can be transferred to Europe? If this has changed
- Records kept for 8years

37

Use of Protocols

- Coleman (1997) proposed 3 ways nurses could be protected in telephone triage – but in practice this has general application:
- Use of protocols
- Documentation of calls
- Quality assurance and audit checks
- (Coleman 1997)

38

19

Software Packages

Decision-support software packages are available that support telephone triage by prompting clinicians to give comprehensive advice on conditions that may not need a face-to-face assessment.

Organisations offering health advice and out-of-hours providers use these packages.

39

Managing Risks of telephone healthcare

No real difference to how you manage risk in your day to day practice.

Speak to the patient; third party consultations amplify the pitfalls of telephone consultations and introduce extra dimensions relating to consent and confidentiality.

Justify the diagnosis and management plan you make in the context of a telephone consultation.

If there is any doubt a face-to-face consultation should be arranged.

40



41

Pre-consultation

- Ensure your pre-consultation preparation has been appropriate.
- Do you know the patient? If so, this is likely to make the consultation more efficient.
- Review the problem list.
- Review the last few consultations. Have they been telephone consultations? If so, your threshold for face-to-face consulting maybe lower.
- Review any relevant hospital letters, recent walk in centre contacts, out of hours contacts.
- Review any recent test results
- Review the medication list.
- Do reception notes contain any useful information e.g 'low mood'm ongoing urinary symptoms, etc?

42

The consultation



43

Excluding Red Flags at the Outset

Exclude	Exclude symptoms suggestive of COVID-19. If present and no life-threatening symptoms signpost the patient to 111 as per advice from Public Health England and NHS England.
Exclude	Exclude life-threatening symptoms immediately e.g acute chest pain, shortness of breath, abdominal pain, FAST symptoms. These will warrant 999 ambulance referral
Exclude	Exclude red flags consistent with significant pathology.

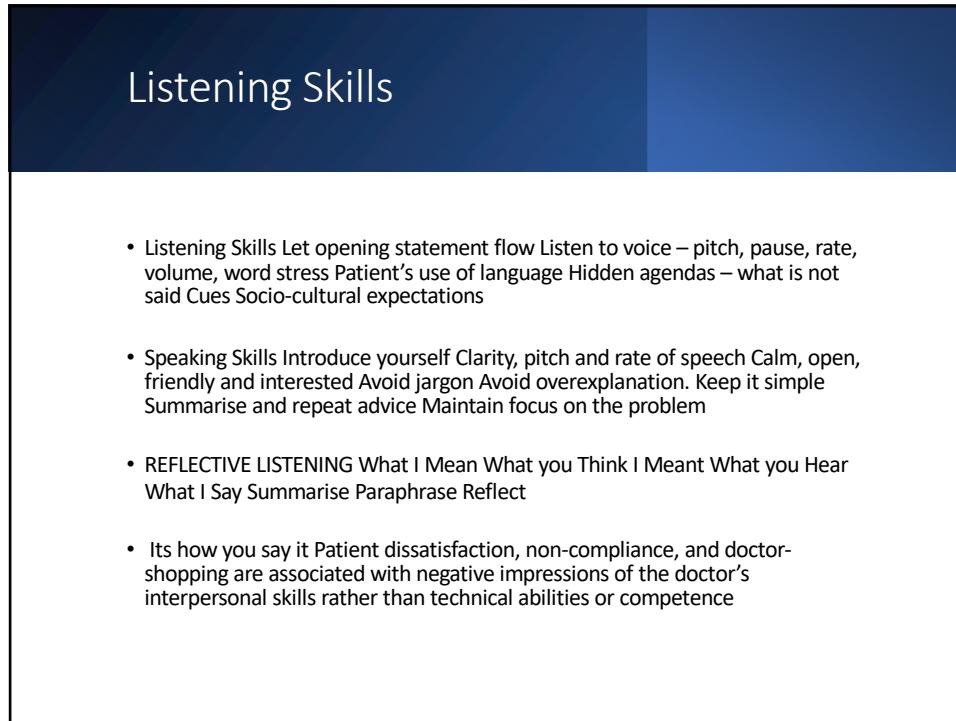
44



Telephone Triage

- Face to face vs Telephone Lack of visual signs and symptoms Lack of visual cues Speech and language difficulties Deafness Background noise Nervousness on phone Neighbour calling or neighbour's phone No access to patient Taping calls Possibility of hoax Need for active listening Accents Cultural diversity Limited English Speed of access, efficiency, flexibility
- Non-verbal Communication Continuous – fills silence with messages Verbal is single mode, non-verbal is several modes at once Involuntary, at the edge of awareness, but can be used consciously Verbal messages discrete packages information, non-v communicates attitudes, emotions and affect, conveys the way we present ourselves, how we relate Non-verbal increases if we are unwilling to express some emotion verbally
- Non-verbal Communication on the Telephone Rate and volume of speech Tone of voice Can undo verbal communication Need to build rapport (mainly non-verbal) Need to alter verbal communication to make up for lack of visual clues

45



Listening Skills

- Listening Skills Let opening statement flow Listen to voice – pitch, pause, rate, volume, word stress Patient's use of language Hidden agendas – what is not said Cues Socio-cultural expectations
- Speaking Skills Introduce yourself Clarity, pitch and rate of speech Calm, open, friendly and interested Avoid jargon Avoid overexplanation. Keep it simple Summarise and repeat advice Maintain focus on the problem
- REFLECTIVE LISTENING What I Mean What you Think I Meant What you Hear What I Say Summarise Paraphrase Reflect
- Its how you say it Patient dissatisfaction, non-compliance, and doctor-shopping are associated with negative impressions of the doctor's interpersonal skills rather than technical abilities or competence

46

Risk Assessment

Always talk to patient themselves if possible

- Exclude serious pathology
- Assess severity of symptoms with no diagnosis e.g. headache
- Time course of symptoms (months, weeks, days, hours) – why now? Severity over time (improving, static, worsening and rate of change)

Functional assessment (what are they doing now?)

- What have they been doing?)
- Level of concern of patient/ relative Number of previous contacts Multiple over long time suggests 'fat file' type patient
- Several over short span may suggest need to see
- Use time to see what develops (patient or doctor calls back)

47

Telephone Consultation



A Telephone Consultation -
The structure - 1. The Introduction (Engagement) 2. Gathering Information (Assessment) 3. Action Plan (Conclusion) 4. Options

The Introduction (Engagement) Always introduce yourself by name and state the organisation. Confirm the identity of the caller, and if it's not the patient – consider implications for confidentiality. Always START by trying to empathise, assuming the caller to be genuine and probably anxious. REMEMBER, IF IT'S SECOND OR SUBSEQUENT CALL FOR SAME EPISODE- EXTRA CAUTION - MORE LIKELY TO NEED FACE-TO-FACE

Gathering Information (Assessment) Listen to the caller, giving enough time to be in a position to assess what they are saying. Allow them to give their own account, but the 5 "W's" are useful: Ø What Ø Where Ø When Ø What makes better or worse Ø What is time-frame

Gathering Information (Assessment) AVOID- being long-winded/ asking multiple choice questions/NHS jargon/unnecessary questions ALWAYS – ask OPEN questions and engender confidence by making clear you are interested. Important also to make sure you have established the "caller's agenda" ANGER/ANXIETY- can be defused; always show respect, avoid labelling

48

The Action Plan (Conclusion)



Make sure they are listening!!! Any plan between 2 people involves negotiation - be assertive, but NOT aggressive



Option1 - Information or advice only Share your thinking with the patient, be assertive but not aggressive Check there is agreement and understanding of what you propose and emphasise your own confidence in your advice. Also admit what you CANNOT do.



Option 2 - Face to Face Consultation This may be at Base or Home Visit by Car Doctor. Assertive negotiation may be required to establish a genuine win/win relationship- work towards a compromise. Think positively and don't assume negative outcome OR – Consultation with others is necessary 999 Ambulance / Social services / etc

49

Neighbour Five Check Points

Neighbour
(1987) Five
Check Points

Connecting

Summarising

Handing Over

Safety Netting

Housekeeping

“The Inner
Consultation”

50

General Guidelines during Telephone Triage

Obtain any records, patient details
 Be aware of your state, voice, put aside your agenda
 Introductions, try to talk to patient
 Enquire about the reason for the call
 Listen reflectively, cues, ICE
 Elicit any other info, exclude red flags
 Establish clinical picture, summarise
 Clarify mutual agreement.
 Clear plan
 Give clear unambiguous advice
 Safety-net, give permission to call back
 Record keeping
 Reflection – housekeeping/time management

51

The Examination

How does the patient sound? Are they in pain? Is there any obvious shortness of breath?

- Do they have a BP machine? Can they check their own pulse? Can they check their BM?
- Can parents/guardians of children count a breathing rate? Can they identify recession?
- Some patient may even have a pulse oximeter?
- If this is a third-party consult e.g from a paramedic, can you document a full set of observations including a blood sugar and ECG findings.
- Can the patient email any skin lesions to you via a generic surgery email inbox?

52

Disposition

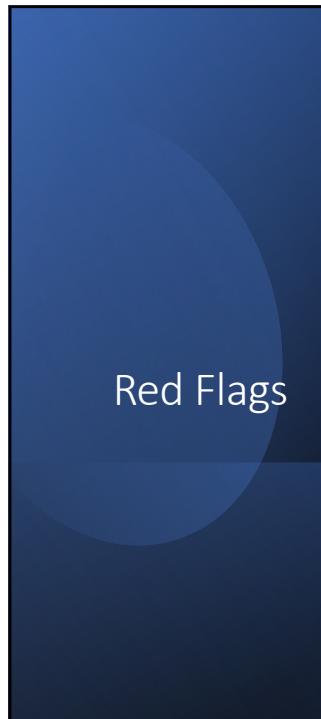
- You may wish to convert your telephone call into a video call (if you have appropriate software). This is helpful for observing children, rashes, possible cellulitis, for mental health consultations, or anything you feel having direct observation of the patient would be helpful.
- You may need to see the patient directly - ensure you use the appropriate PPE. This is currently not the preferred option, but there are situations where this may arise, for example a gynaecological exam, abdominal palpation, child assessment. If you do this, establish if they have any symptoms of COVID-19.
- If so, they will need to be referred to the appropriate service/place in your local area, for example the 'hot hub' if you have one in your area. If they don't, they should be asked to advise the practice/place they need to attend if they develop symptoms before their appointment.

53

Disposition

- If the disposition is telephone advice then consider what resources you could provide to the patient e.g PIL via SMS, or links to websites about joint exercises, mental health resources. Careful safety netting will be important at the end of any telephone consultation. Patients should be reassured that they can call back at any point if they still have concerns.
- The outcome of your consult may involve referral to another healthcare professional e.g. dentist, social worker, district nurse, care navigation team.

54



In the telephone consultation situations there are some extra dimensions to be considered:

- Be aware of the number of calls the patient has already made.
- If you find yourself dealing with somebody calling back for the 3rd (or more) time in the same episode - THINK CAREFULLY!
- Check with yourself that you are not being distracted, by the emotionality, or psychological pressure from the patient.
- “Red Herrings” can mask our view of Red Flags!

55



Common Pitfalls to Avoid

- Accepting patient/care giver “self-diagnosis”
- Jumping to conclusion
- Failure to speak to the patient
- Failure to assure continuity of care
- Functioning outside of scope
- Overreliance on decision support tools ■

Fatigue and haste

- Failure to LISTEN and THINK
- Being multitasked and/or distracted
- Knowledge deficit
- Failure to adequately assess
- Failure to anticipate worst possible

56

Questions to consider

Are you thinking when you talk to patients?

Do you have protocols to guide your assessments?

Do you actively assess each patient, looking outside the

box for unexpected occurrences?

Do you thoroughly explore any symptoms of concern?

Are you documenting thoroughly and promptly?

What do you (as a nurse) bring to the phone that a

secretary or MA would/could not?

DON'T JUMP TO CONCLUSIONS!

57

Practice Perils and Pearls

Don't jump to conclusions

Do a thorough assessment, even if they've

already been evaluated and treated by MD

Speak to the patient as well as the caller

If the caller/patient is concerned, YOU should be
concerned

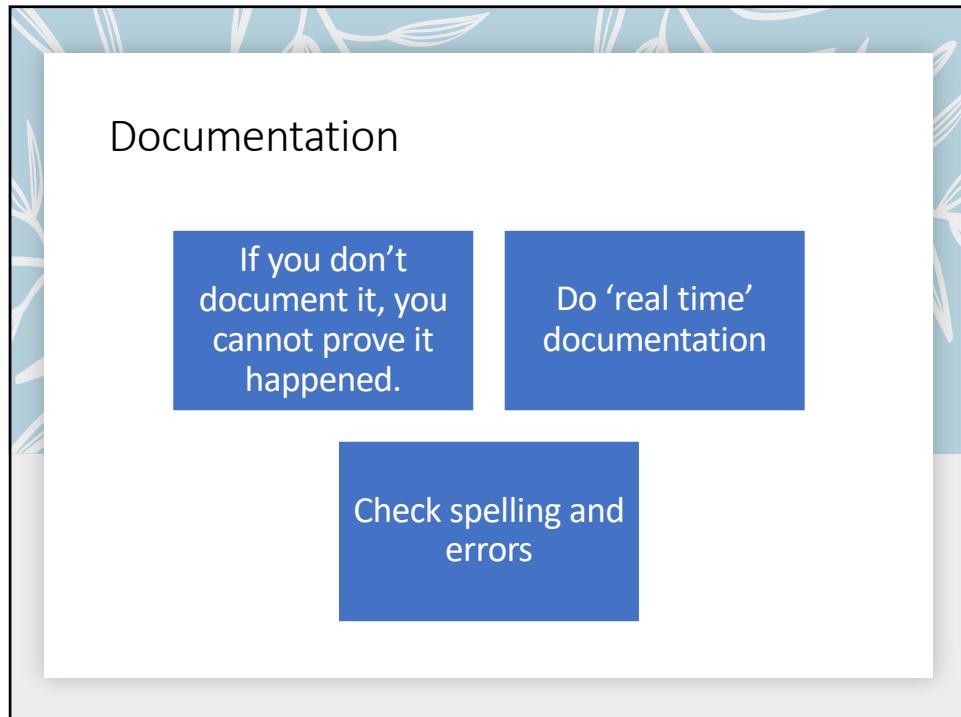
Be especially careful with repeat callers

Don't over rely on protocols

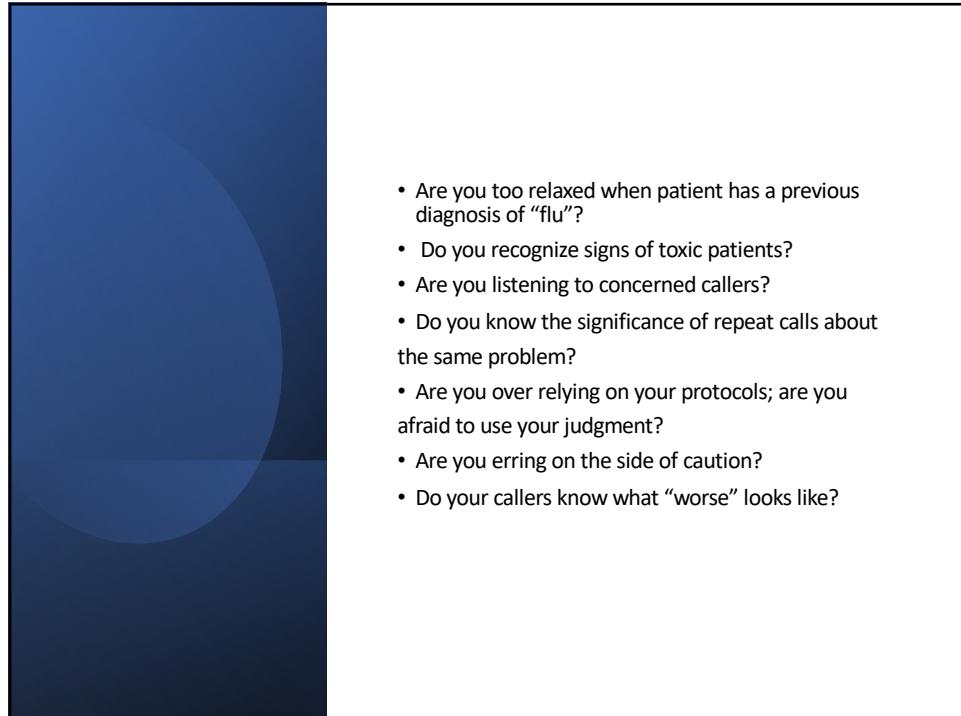
Don't assume that the recording of your call will
help you!

Use your judgment!!!

58



59



60



Remote Prescribing

Remote prescribing

This will increase over the next few months and remote prescribing can pose its own problems.

Common drugs that you may start prescribing remotely may include, the contraceptive pill, antibiotics, HRT and mental health medication.

61

Consider the Following

- The indication for the drug e.g. antibiotic. Do you have enough evidence to justify a prescription or would video call help? do you need some preliminary investigations e.g. a CRP, a urine dipstick, a blood sugar?
- If it is something the patient has had before, can you justify prescribing it again e.g steroid cream? pain relief?
- Ensure the patient is counselled for any new prescription
- Are there any non-pharmacological options e.g self help, websites, books, online resources
- If a drug is initiated, how do you plan to follow this up?
- If you do not plan to follow up the case then have you provided a careful safety net?
- Does the patient know what you are prescribing and why?

62

Prescribing

- Does the patient require a dosette? If so how will you set this up?
- If they are self isolating/shielding, how will they get the drug?
- Does the patient know where you will send the drug if using electronic prescribing services (EPS)
- Does the patient know what to do if they develop a problem with the drug prescribed?
- If for a medication review, are all appropriate checks up-to-date and if not, are they needed urgently i.e DMARD drugs or could they wait an extra few months assuming all has been stable e.g BP meds
- Set an appropriate timeframe for the next medication review.
- If a patient is stable, could you consider a 12-month prescription e.g of a contraceptive pill instead of six months?

63

Documentation

Ensure it is clear that your consultation has been via telephone and document that there is a current coronavirus pandemic in your notes. If it has been via video link, document this and document that the patient has consented to this.

- Ensure your plan is clear and why you have decided to prescribe remotely. Clearly document the safety net you provide and follow up advice.
- Any examination should also be documented e.g speaking comfortably in sentences or any values provided by a patient, carer or paramedic.

64



65

Structure of a Telephone Triage Encounter (1)

- Hello my name is...
 - Collect or confirm demographics
 - Speak to the patient wherever possible – check the patient is with the caller.
 - Empathize and establish a rapport
 - Remember the patient's perspective, social and cultural aspects.
 - Take a brief medical history
 - Exercise effective call control
 - History of presenting complaint
 - What can you see/hear.....what can't you see hear.....

66

- ABCD
- Exclude red flags

67

- Pc –Abdo Pain
HPC -Socrates/opqrstu
- O – onset injury yesterday at school around 12h00
 - Palliative – took paracetemol and ibuprofen – short term relief
 - Q–sharp pain with no associated symptoms. No urinary symptoms.
 - R- No radiation
 - Site/Severity –Lt side stabbing pain
 - PMH – medical – JAMTHREADSCA
 - Surgical – no surgery or operations
 - Accident s-
 - Gynae Gravida – n/pregnancies Parity – how many live births

68

• Immunisations – why haven't they had imms
 • Medication – contraceptive pill
 • Allergies - Penicillin

 • Social History – who lives at home with partner. Works in an office.

 Family history –

 Systems Overview – cvs – aneurysm – left side tearing pain radiating to the back
 Respiratory – chest infection/pneumonia
 • Abdo – appendicitis, cholecystitis, liver disease, bowel obstruction
 • GU – STIs cystitis, pyelonephritis
 • Psychiatric – anxiety psychosomatic
 • HEENT – infection
 • Gynae - coils, endometriosis, ovarian cysts, polyps

69

Structure of a Telephone Triage Encounter

- Make technology your best friend
- Review of systems: what have you missed.
- Identify chief complaint
- Triage – exclude from high risk to low risk
- Reflect back what you have heard – is it right?
- Summarise what your decision will be based on.
- Make an interpretation – do not diagnose
- Negotiate a shared outcome; is the patient happy with the plan
- Check understanding
- Signpost to ongoing care – know your care pathways
- Safety netting
- Document, document, document....

70

Stages of Decision Making

Obtain consent at the outset Information gathering

- Listen – actively hearing what the patient doesn't say

Understand

- Interpreting the main reason for the call amongst all the information the caller may give you

Agree

- Reflecting back to the caller the main concern and agreeing the next course of action

71

Introduction

- Always introduce yourself by name and ideally mention your organisation. If the caller is not the patient, establish/confirm the identity of the caller and relationship to the patient (and consider any implications for confidentiality).
- Try to speak directly to the patient if possible/appropriate. A first-hand history tends to be more reliable although there are clearly situations when an additional history from a third party will be valuable.
- Always empathise as few patients, no matter how offhand they seem, take the decision to call lightly. An initially prickly, demanding manner may be fuelled by anxiety, so empathise when you take the call, e.g.: "I hear (x) has a nasty sore throat, tell me all about it".
- Clinicians should remember that if it is the second call for the same patient within a short time frame, it will often require an even more careful and thorough triage as statistically, it is more likely to indicate a more significant clinical problem which requires a face to face consultation

72

Establishing why they have called

It is always important to be sure you have established the “caller’s agenda”. Sometimes the caller/patient’s ideas, concerns and feelings become evident without more direct questioning. Sometimes you will have to ask, e.g. “Tell me, have you any worries about what might be going to happen” or “have you had any bad experiences with these sort of symptoms before?”. Then, the fear of the throat closing up, the eardrum perforating or meningitis developing will be out in the open.

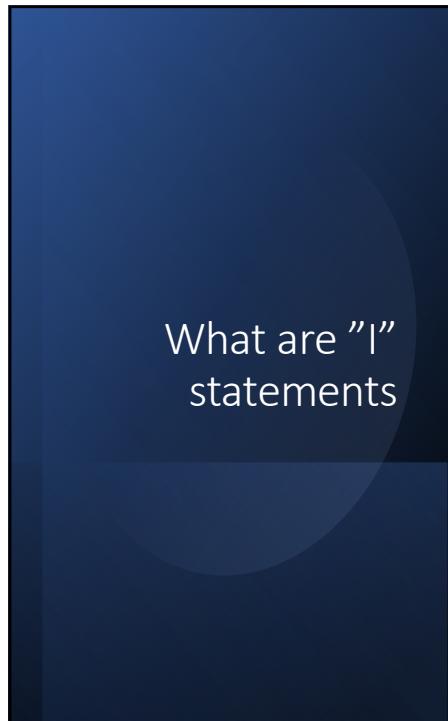
Always try to maintain respect for the other person and avoid labelling “Typical behaviour – they’re all the same”. Without respect, negotiation is impossible.

73

Gathering Information

- It is important to engender the confidence of the caller by making it clear that you are interested in what they are saying. It is equally important to avoid any unnecessary questions that might be regarded as an invasion of privacy or make the conversation sound like a police interrogation! Try to deal with issues one at a time.
- While it is important that you are in charge of the call it is vital that the caller is not made to feel in a vulnerable position. Avoid poorly timed questions and try hard to avoid repetition as this diminishes the confidence of the caller. Deliver questions/information in a clear manner, without ‘waffling or padding’ or ‘beating about the bush’.
- Consider whether enough information has been gathered to allow a safe assessment of the problem and a safe management decision and crucially, have all conditions requiring more urgent action been reasonably excluded?
- Sometimes you can help the caller who is anxious or angry with the use of “I” Statements. Using ‘I’ Statements allows a person to ‘own’ their thoughts feelings and opinions rather than using ‘you’ statements, which may implicitly blame the other person.

74



What are "I" statements

I' Statements may be used:

- Anytime you want to share your feelings in a frank, unthreatening, undemanding way
- If both parties have issues to resolve
- If the caller uses 'you' or blaming statements a lot. Remember your 'rights' must not be violated

I Phrases can make repeated or sensitive questions or statements less threatening.

- "I am wondering..."
- "I get the feeling that..."
- "I have a sense of..."

'I' Statements can be used to diffuse hostility:

- "I understand that you are angry"
- "I am sorry that...." Can be an expression of sympathy only and does not have to imply that anything was your fault
- 'I' Statements that disclose your feelings in a professional manner and create empathy:
- "I am concerned that"
- Having drawn together the information we need to assess the situation a management plan can be devised.

75

SIGNPOSTING

Important to establish rapport with caller

Introduce yourself to the caller and advise them on the direction the call will take:

'I am going to ask you some questions in order that we come to the most appropriate outcome.'

76

Initial Assessment

Rule out Immediate Life Threatening conditions:
Reason for call, ABC's, Consider safety of patient, do you need to use language line, type talk etc.

- **Establish who is on the phone:** patient , relative, third party, i.e. mum/dad, carer, sibling. Is the caller the patient. Try and confirm patient address at the outset.
- **NEVER ASSUME**

77

Initial Assessment

 Consider all verbal cues

 Speech pattern, speed, volume, articulation of words

Establish reason for call

- What has made you call tonight? What has changed?
- What is your norm?
- Is this different than your normal pain, breathing rate etc

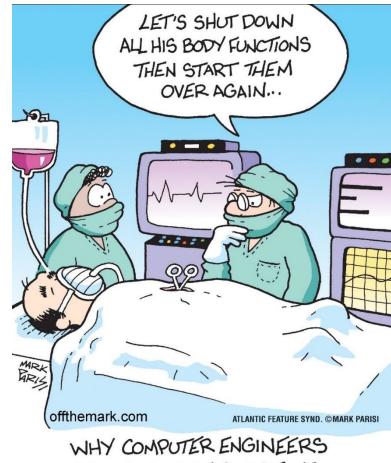
Questioning:

- Do not use leading questions, it is important to listen to what the caller/patient is telling you
- Always ask to speak to the patient if it is possible
- What have you taken?
- Have they seen the GP or health visitor?
- Check if the child is on the child protection register

78

Quantum Telephone healthcare

- Collect or confirm demographics ensuring compliance with the Data Protection Act 2018 and GDPR regulations.
- If the call has been transferred from a reception desk or a callback 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.



79

Quantum Telephone healthcare

- Speak to the patient wherever possible.
- Check the patient is with the caller.

© Cartoonbank.com



80

Quantum Telephone healthcare

- Empathize and establish a rapport



81

Quantum telephone healthcare

- Always remember the patient's perspective, particularly social and cultural context.

- Who is in the room with them.....

Cultural Differences When Communicating



82

- Can they self help?
- Have they been to the pharmacy
- School nurse or saw GP
- Health visitor

Signposting



83

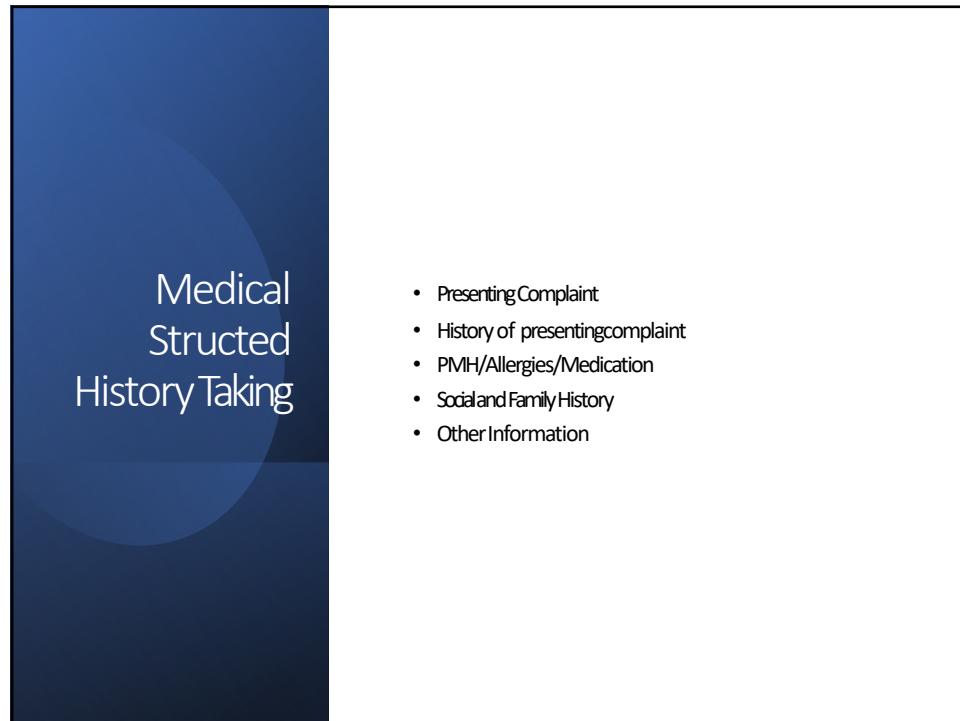
Time stratification

If the caller requires to be seen face to face how quickly is this required:

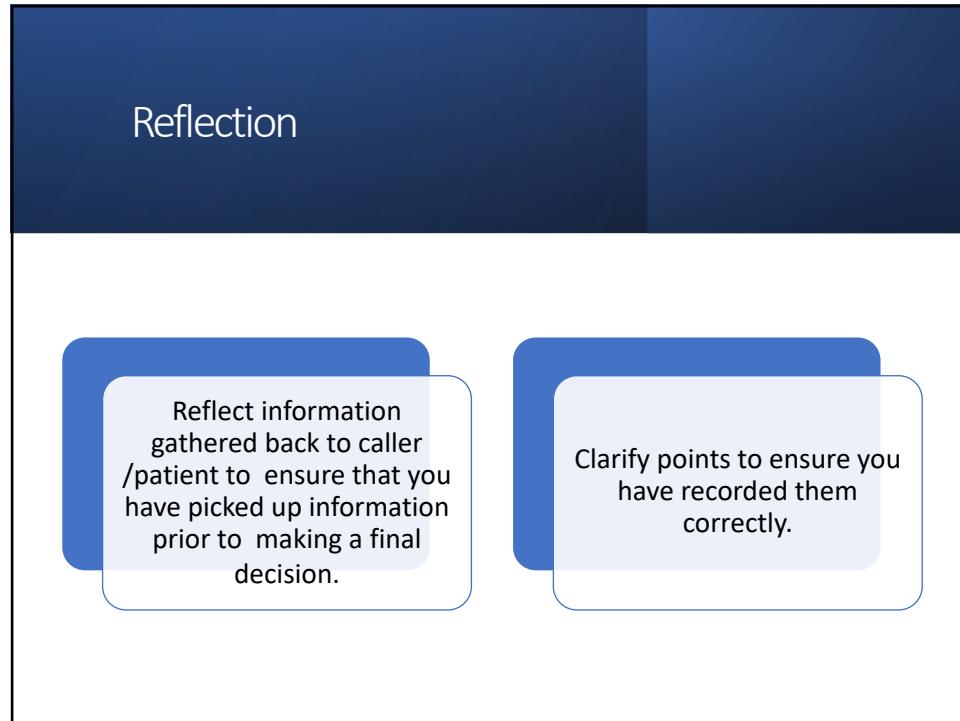
- 999? Does someone need to go out immediately.
- Home visit 1hr, 2 hr, 4hr?
 - GP practice today, tomorrow, next week?



84



85



86



Quantum Telephon e

- History of Presenting Complaint

87

Quantum Telephone healthcare

- Listen to everything.....
- What you can hear.....what you can't hear.....



"I'm sorry, but the doctor can't see you right now."

88

Quantum Telephone healthcare

- **Speech:**
*content,
rate,
rhythm,
tone,
emotion*

- **Non-
speech:**
*cough,
wheeze,
background*



89

Quantum telephone healthcare

- What can't you see?
- *Missing this could cost you your job!*
- ***Missing this could! cost you your career!***
- How can you support someone in describing this?



90

Quantum Telephone healthcare

- Make technology your best friend.



91

WHAT DOES THIS PICTURE TELL YOU?



- Identify Chief Complaint

Quantum
Telephone
Healthcare

92

Triage: Ask questions to exclude

Risk

High

- 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.

Low

93

CLINICAL DECISIONMAKING

- History taking and red flags in telephone healthcare

94

Clinical Decision Making



Clinical decision making is a balance of experience, awareness, knowledge and information gathering, using appropriate assessment tools, your colleagues and evidence-based practice to guide you.



The NHS wants patients to make more decisions about their treatment...so here's your blood tests and prescription pad, I'll be back later.

95

Core Skills of Clinical Decision Making



Pattern recognition: learning from experience.



Critical Thinking: removing emotion from reasoning, being 'sceptical', clarifying goals, examining assumptions, being open-minded, recognising personal attitudes and bias, able to evaluate evidence.



Communication Skills: active listening to everything, facilitating a patient-centred approach that embraces self-management; information provision - the ability to provide information in a comprehensible way to allow patients/clients, their carers and family to be involved in the decision making process.

96

Core Skills of Clinical Decision Making

Evidence-based approaches: using available evidence and best practice guidelines in decision making.

Team work: using the evidence to enlist help, support and advice from colleagues and the wider multi-disciplinary team.

Sharing: learning and getting feedback from colleagues on decision making.

Reflection: using feedback and outcomes to reflect in order to enhance practice delivery in the future

97

History Taking

The difference between life and death



98

History taking: A reminder

- We take a history
- Elicit the nature of the problem
- Reach a diagnosis (????)
- Explore the patient's own beliefs and agree
- the problem
- find out the patient's expectation
- Agree a management plan and ensure
- 'partnership in care'

99

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

100

History taking in telephone healthcare

Presenting complaint / HPC

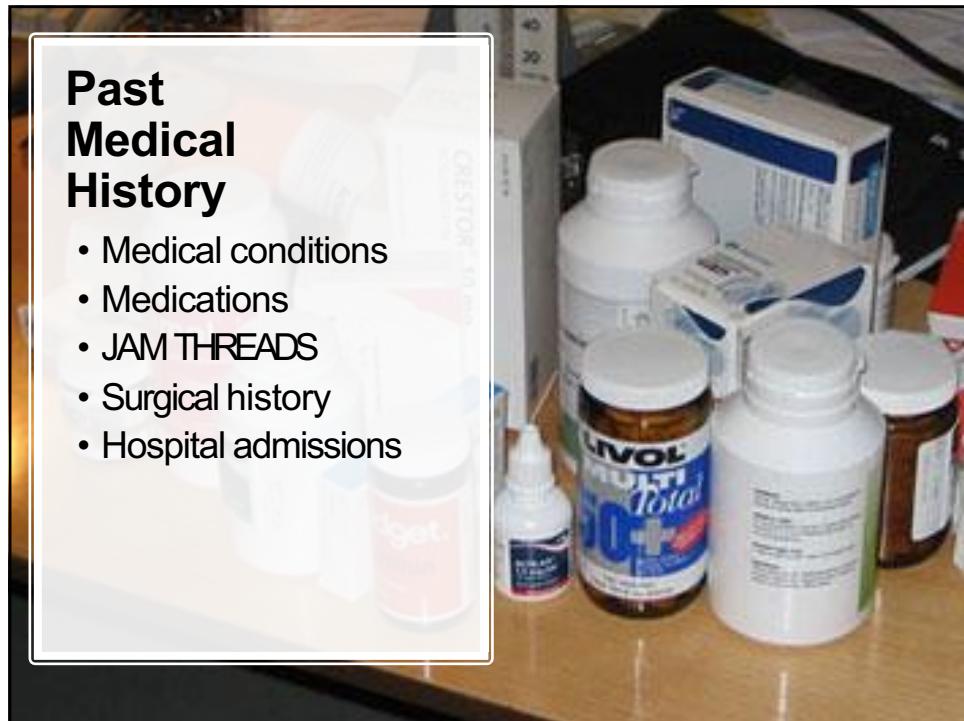
- Make sure you've really got the problem
- Focus on the symptoms not the diagnosis
- Explore cardinal symptoms
- Explore pathognomonic symptoms

101

Mnemonics – a tool not a rule

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

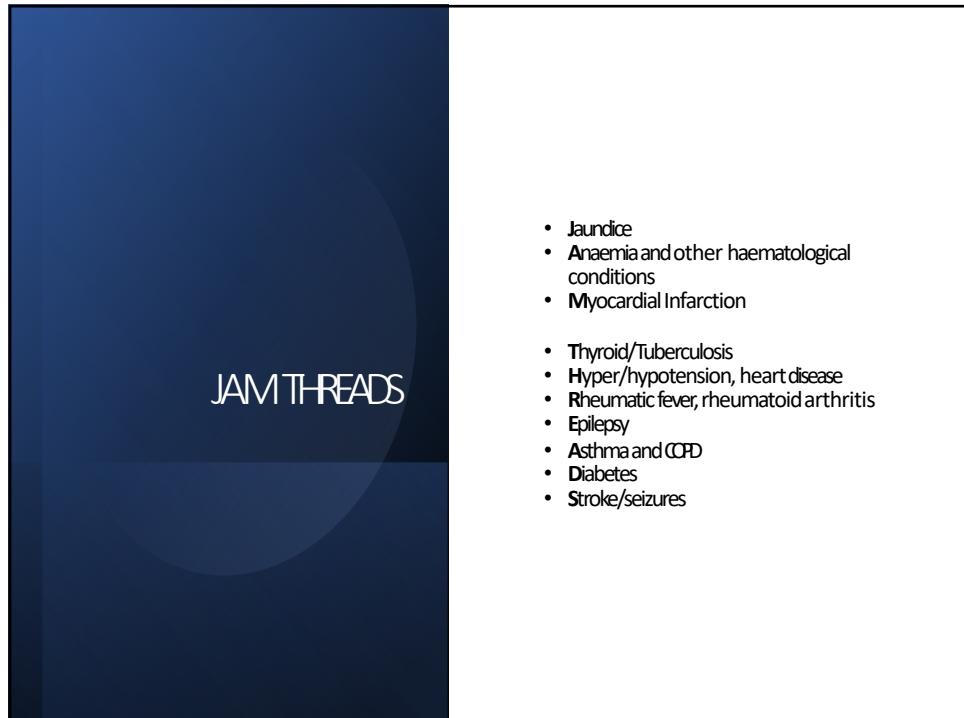
102



Past Medical History

- Medical conditions
- Medications
- JAM THREADS
- Surgical history
- Hospital admissions

103



JAM THREADS

- Jaundice
- Anaemia and other haematological conditions
- Myocardial Infarction
- Thyroid/Tuberculosis
- Hyper/hypotension, heart disease
- Rheumatic fever, rheumatoid arthritis
- Epilepsy
- Asthma and COPD
- Diabetes
- Stroke/seizures

104

Samosa Diet	
Sexual History Allergies Medication Occupation Smoking Alcohol Diet Immunisations Exercise Travel	<ul style="list-style-type: none"> • Relationship status? Contraception? When was the first day of your last menstrual cycle? Pregnancies? eg: P2G1 • Drugs, environment food, dressings, type of reaction? • Prescribed, OTC, Herbal, Supplement, Recreational • Current and previous, environmental exposure • Current or ex-smoker, pack year history, ready to quit? • Number of units per week – consider CAGE questionnaire? • Health Diet, types of food, amount • Up to date? Tetanus, Influenza, Pneumococcal B? • What type of exercise? How often? Frequency? • Recent travel? When? Where? 

105

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		

106

CIWA Scale (CIWA-Ar)

The Clinical Institute Withdrawal Assessment for Alcohol, revised scale

- Patients frequently under-report alcohol use and physicians often overlook alcohol problems in patients (Kitchens 1994) It is estimated that 1 of every 5 patients admitted to a hospital abuses alcohol. (Schuckit 2001)
- Unrecognized alcohol withdrawal can lead to potentially life-threatening consequences including seizures and delirium tremens
- Efficient, objective means of assessing alcohol withdrawal that can then be utilized in treatment protocols.

107

Clinical Opiate Withdrawal Scale (COWS)

COWS allows rapid assessment of levels of opiate withdrawal and assists in determining appropriate treatment.

Combines subjective with objective criteria to limit feigned responses (Wesson 2003) but of course over the telephone those objective criteria are difficult to assess

108



Review of Systems

- General
- Neurological
- ENT
- Cardiorespiratory
- Gastrointestinal
- Urological
- Obstetric and Gynaecological
- Rheumatological
- Orthopaedic
- Psychiatric

109

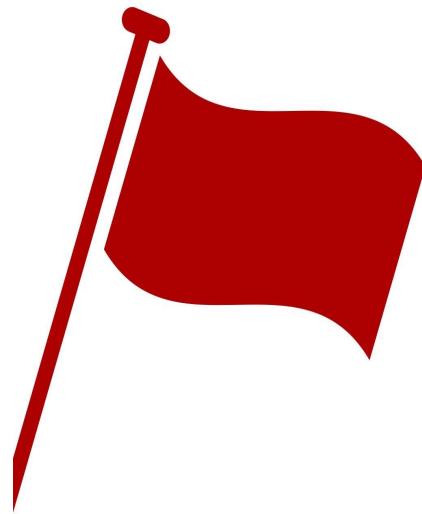
Review of System s

- A full systems review should not be asked of every patient.
- Should be structured around the presenting complaint.
- Top to toe
- Uncovers other medical problems
- Identify symptoms that may be related to presenting symptoms
- Move from general to specific questions

110

Red Flags

- <http://www.gponline.com/education/medical-red-flags>



111

Quantum Telephone Healthcare

- Reflect back with the patient what you have heard.
- Is it right?
- Summarise what your decision will be based on.



112

Quantum Telephone Healthcare

- Diagnosis?
- Interpretation

MCHUMOR by T. McCracken

"Off hand, I'd say you're suffering from an arrow through your head, but just to play it safe, I'm ordering a bunch of tests."

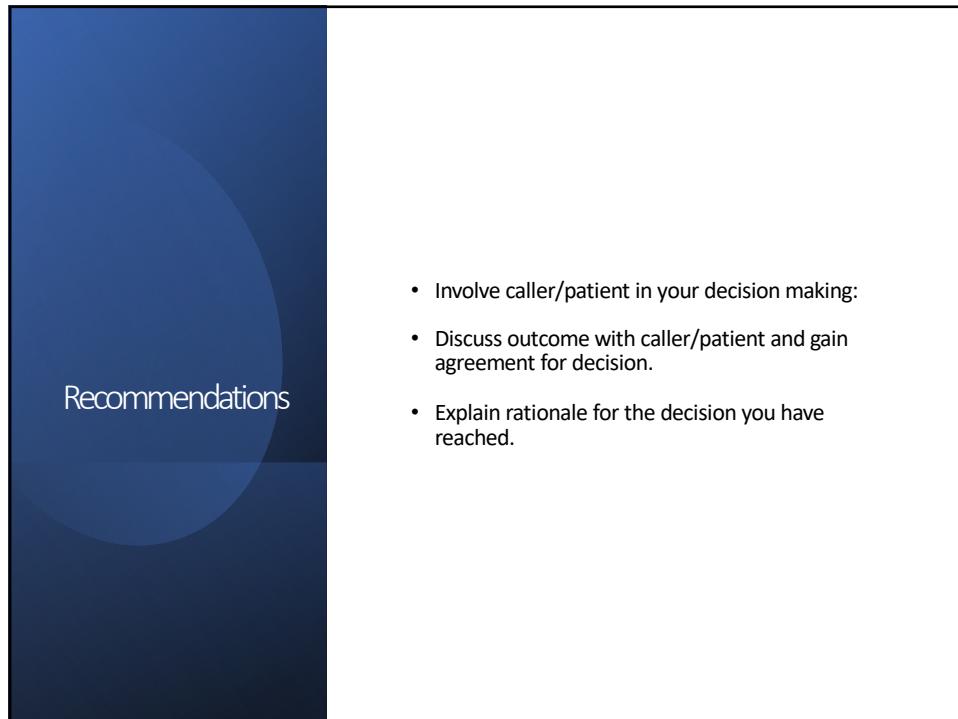
113

"I already diagnosed myself on the Internet.
I'm only here for a second opinion."

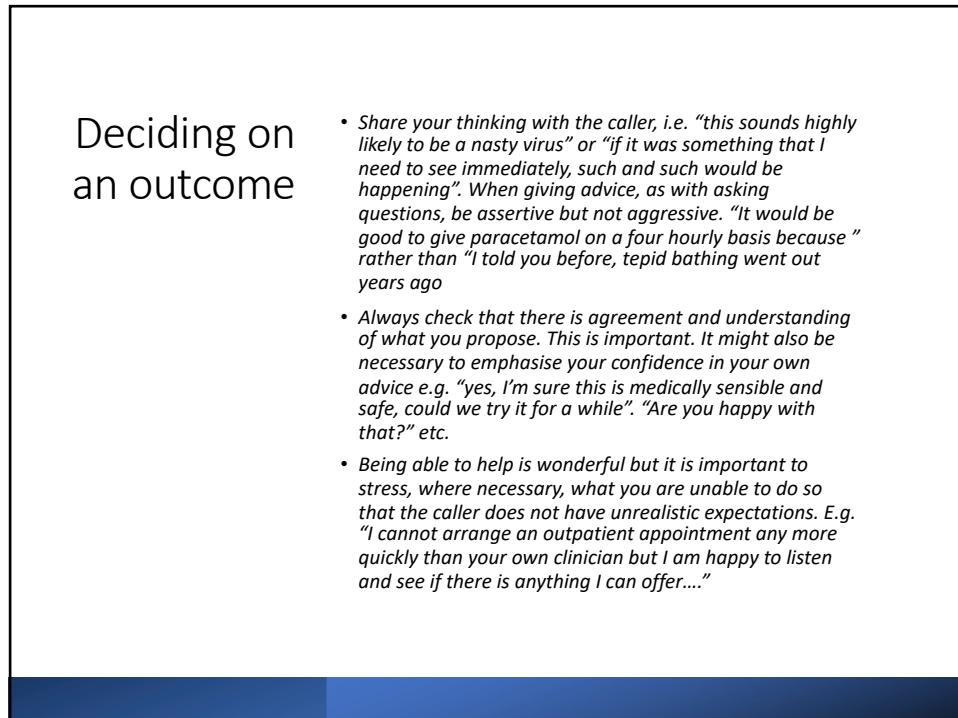
• Negotiate a shared outcome.
• Is the patient happy with the plan?
• Does the patient even understand the plan?

Quantum Telephone Healthcare

114



115



116

Quantum Telephone Healthcare

- Signposting: when you have enough information to make a decision.

(Do you have enough information to make a decision?)

- Know your care pathways



117

Social Circumstances/Barriers

Consider social circumstances:

- Ability to attend own GP/Out of hours clinic
- Patient transport
- Single parent with other children in the house
- In house on own
- Is the child in school or nursery



118

A consultation with others is needed (999 Ambulance, Nurse referral, social services)

- It is important that the caller fully understands why this course of action is being taken and that they agree decision.
- If the agenda is agreed the clinician will have reassured the patient that the best action is being taken.
- If not, the patient may be made even more anxious and refuse the ambulance when it arrives.

119

Outcome: Face to face consultation

This may be either at a centre or at home. Well established models exist for establishing the venue for a face to face consultation. This is an area where assertive negotiation may be required to establish a genuine win/win relationship with the caller. Be prepared to work together towards a compromise without neglecting yourself or your beliefs (a win-win situation).

"If we can meet at the Primary Care Centre I will be able to see you more quickly". Think positively and do not presume a negative outcome will occur. "I don't suppose you can bring him in, you see I'm very busy" is less likely to engender the response you are seeking. Such statements tend to be self-fulfilling!

120

• Short
 • Concise
 • Relevant presenting symptoms/ Any comments on social situation
 • Any red flags

Clinical Summary

121

Concluding a call



- 1 During the course of the call you have identified the key elements to enable you or a colleague to resolve the caller's situation. In terminating the call it is important that the outcome of the call is agreed between both parties. In this way the caller will feel confident that an appropriate outcome will be achieved and will not have unrealistic expectations. This might be expressed as:
- 2 "Just to recap, we've agreed that you will try to use the calpol on a four hourly basis and check his temperature each hour. If it is settling you will take him to the Health Visitor tomorrow but if not, you will ring back and I will see him at the Primary Care Centre before 11 o'clock. Are you happy with those arrangements
- 3 Always prepare a safety net and give the caller permission to ring back if things get significantly worse, e.g. "please do feel free to call if he gets worse". Give concrete examples of worrying signs and symptoms. Explain what to do if your plan is not working, including when and how to seek help.
- 4 Give clear, specific, follow up instructions e.g. "If the pain/temperature has not settled in an hour please call back"
- 5 If necessary, re-check patient understanding and acceptance of your plan.

122

Management Plan

- Clear management plan to develop patient confidence
- Ensure there is shared understanding
- The aggressive and usually anxious patient can make life a misery if badly handled. Even these calls can lead to a rewarding consultation if appropriately completed.
- A confident assertive clinician delivering good advice makes everyone feel better!
- With clear understanding of the patients' agenda and assertive triage, comes less stress, fewer complaints and a more pleasant working environment for everyone

123

Also consider

- Consent
- Information Governance
- Data Protection and GDPR
- Ethical Considerations
- What are the Common Pitfalls during a telephone consultation

124

DO NOT THINK YOU ARE ALL ALONE!



125

Resources available to support Telephone Triage

- Self/previous experience
- Caller/patient
- Peers
- Partners – Out of hours, A&E
- Pharmacists
- Call Structure Framework
- Toxbase
- Quality Assured Websites
- Books – BNF, OTC etc
- Safeguarding Leads



126

Visualisation

Can be a really useful tool

- We cannot see or touch the patient but we can aid our decision by enlisting an aide or assistant. The patient or caller can become an extension of our senses, by involving them in their own or the patient's care we make our assessment inclusive.
- They can tell us if a particular area is hot or cold, clammy, red, blue or swollen or if a rash blanches or not. Their input can fundamentally effect the decision we reach.
- However it can sometime be difficult for the patient to tell us exactly where the problem is.

127

Take a Few Minutes

Group 1

In groups, consider the pitfalls to taking a good history

Group 2

Reflect on why a structured triage is important Group 3

What are red flags and give examples?
Group 4

What is a red herring?

128



Red Flags

 A Red Flag is any piece of information that informs your thinking on the severity or clinical urgency of the patient's situation or symptoms.

 It is the recognition of these 'out of the ordinary elements' or conversely 'classic signs' which alerts you to recognise a potentially serious situation and act accordingly.

 This can occur at any time or in any part of the consultation period and may relate to something that is happening now or happened previously

129



Potential Red Flags

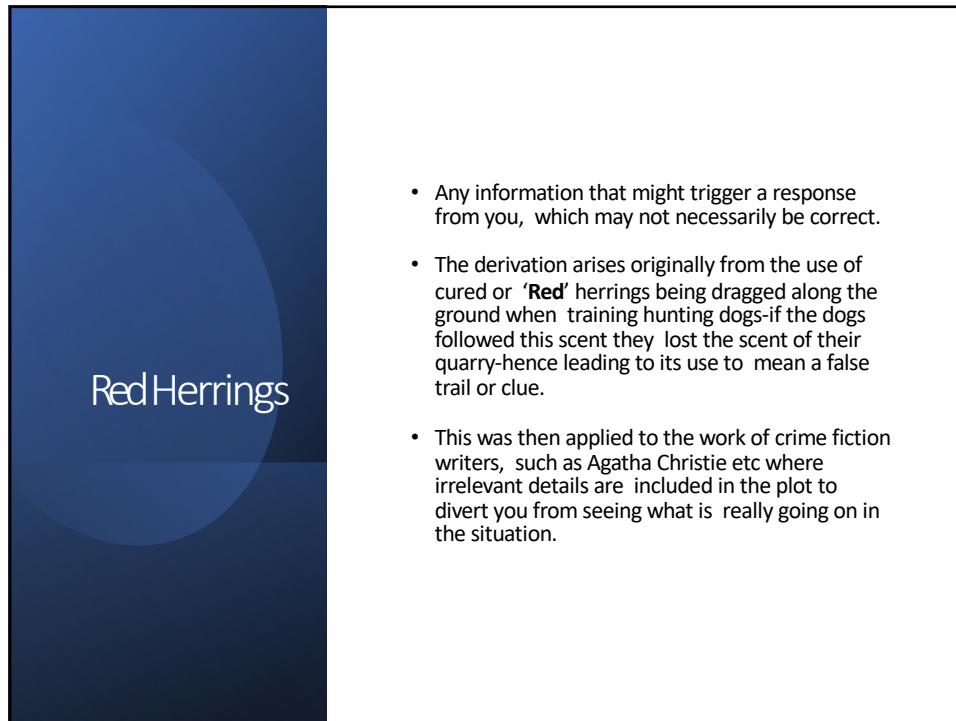
 Past Medical History

 The patient's recent ongoing contacts around this particular ongoing episode of care

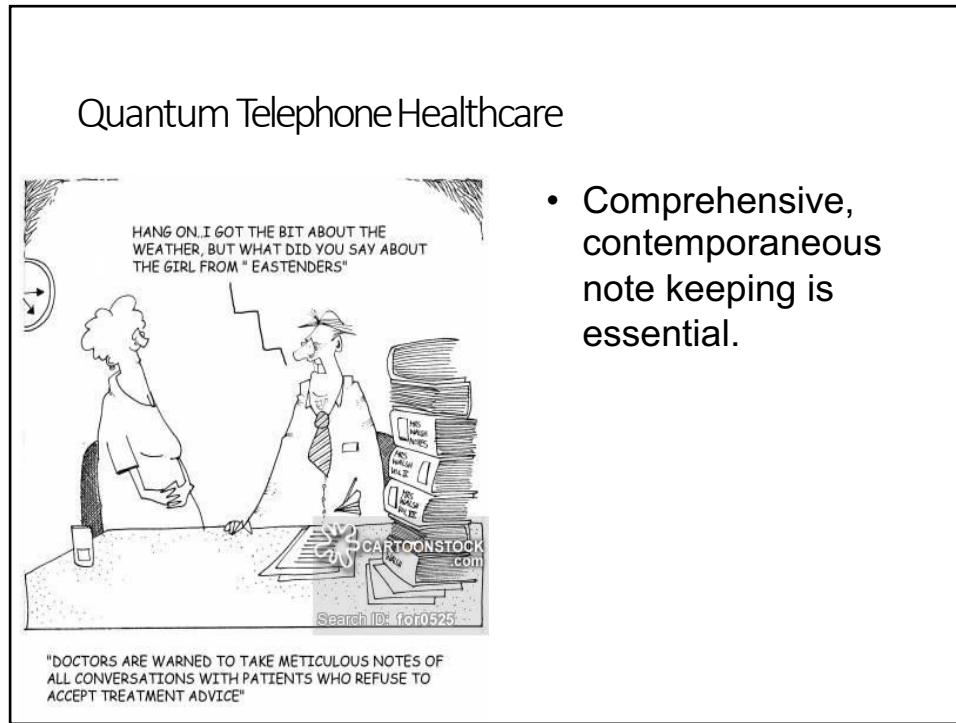
 Background conversation or noise

 An unusual or out of the ordinary symptom or clinical feature

130



131



132

Information Governance: recording phone calls

- Electronic sound files form part of the patient's records
- Recordings must be made, stored and disclosed under the provisions of the relevant legislation
- Patients must be informed the call is being recorded.
- Patients have a right to be provided with copies of information that is held about them and this would include recordings of telephone consultations. (Data Protection Act (1998),
- Secret recordings of calls from patients are not permitted. (GMC: Making and Using Visual and Audio Recordings of Patients (paragraph 56.11))

133

Information Governance: recording phone calls

- Recording may protect the clinician – but not always.
- Sessional GP working in the out-of-hours setting
 - Prescribed Penicillin
 - Patient penicillin allergic
 - Anaphylactic response
 - Claim ensued.



134

Information Governance: recording phone calls

- No paper record of allergy status noted
- GP adamant his usual practice was to check therefore the patient must have withheld this.
- Triage telephone recordings reviewed, from which it was clear that the patient (without any prompting) volunteered that they were allergic to Penicillin



135

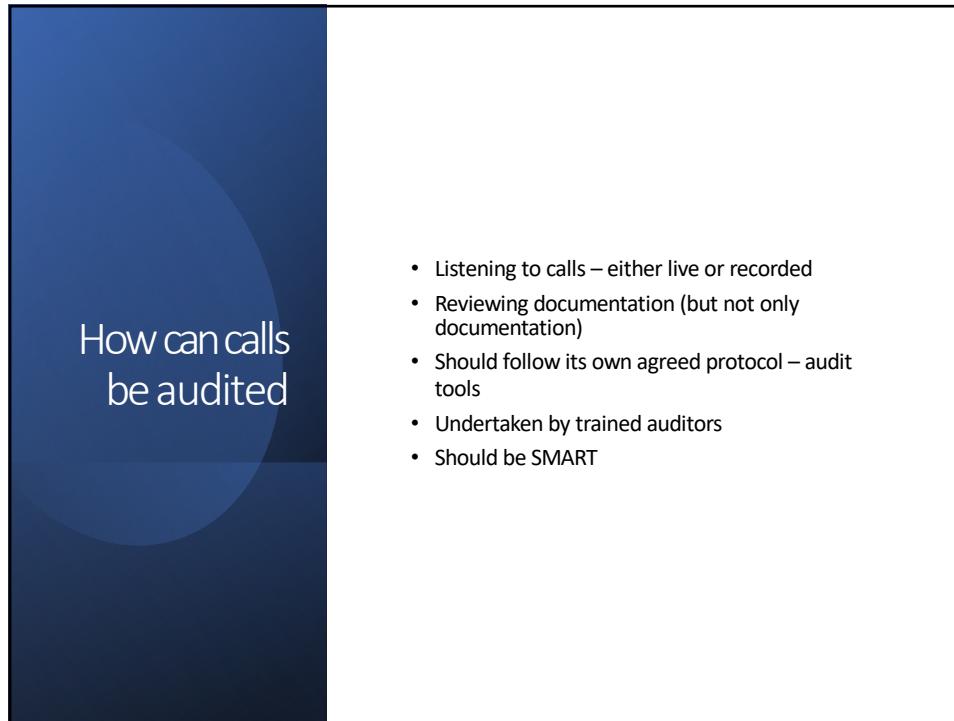
TELEPHONE HEALTHCARE QUALITY CONTROL

- Auditing....

136



137



138



Continuity of Care

- If you're not the patient's GP, ask the patient for consent to get information and a history from their GP and to send details of any treatment you've arranged.
- If the patient refuses, explore their reasons and explain the potential impact of their decision on their continuing care.
- If the patient continues to refuse, consider whether it is safe to provide treatment.
- Make record of your decision and be prepared to explain and justify it if asked to do so.
- **If you are providing services remotely, remember to...Follow our guidance on consent and good practice in prescribing**
- Work within your competence
- Check you have adequate indemnity cover for your remote consultation activities
- Discuss this element of your practice in your appraisals.

139

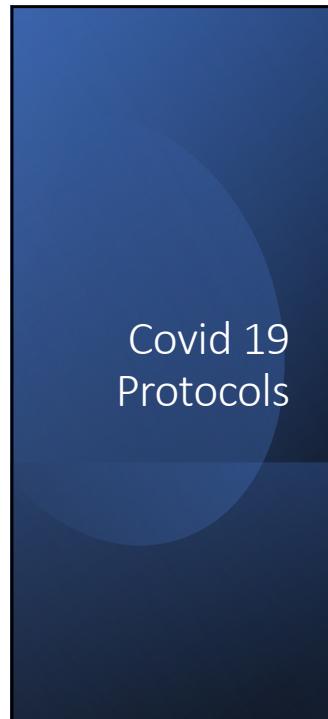
Decisionmaking

- The exchange of information between doctor and patient is central to good decision making. It's during this process that you can find out what's important to a patient, so you can identify the information they will need to make the decision.

The purpose of the dialogue is:

- to help the patient understand their role in the process, and their right to choose whether or not to have treatment or care
- to make sure the patient has the opportunity to consider relevant information that might influence their choice between the available options
- to try and reach a shared understanding of the expectations and limitations of the available options.

140



Covid 19 Protocols

- **COVID-19 DIAGNOSIS:** "Who made your COVID-19 diagnosis?" "Was it confirmed by a positive lab test or self-test?" If not diagnosed by a doctor (or NP/PA), ask "Are there lots of cases (community spread) where you live?" Note: See public health department website, if unsure.
- **COVID-19 EXPOSURE:** "Was there any known exposure to COVID before the symptoms began?" Definition of close contact: within 6 feet (2 meters) for a total of 15 minutes or more over a 24- hour period.
- **ONSET:** "When did the COVID-19 symptoms start?"
- **WORST SYMPTOM:** "What is your worst symptom?" (e.g., cough, fever, shortness of breath, muscle aches)
- **COUGH:** "Do you have a cough?" If Yes, ask: "How bad is the cough?"
- **FEVER:** "Do you have a fever?" If Yes, ask: "What is your temperature, how was it measured, and when did it start?"
- **RESPIRATORY STATUS:** "Describe your breathing?" (e.g., shortness of breath, wheezing, unable to speak)
- **BETTER-SAME-WORSE:** "Are you getting better, staying the same or getting worse compared to yesterday?" If getting worse, ask, "In what way?"

141



Covid19 Questions

- **HIGH RISK DISEASE:** "Do you have any chronic medical problems?" (e.g., asthma, heart or lung disease, weak immune system, obesity, etc.)
- **VACCINE:** "Have you had the COVID-19 vaccine?" If Yes, ask: "Which one, how many shots, when did you get it?"
- **BOOSTER:** "Have you received your COVID-19 booster?" If Yes, ask: "Which one and when did you get it?"
- **PREGNANCY:** "Is there any chance you are pregnant?" "When was your last menstrual period?"
- **13. OTHER SYMPTOMS:** "Do you have any other symptoms?" (e.g., chills, fatigue, headache, loss of smell or taste, muscle pain, sore throat)
- **O2 SATURATION MONITOR:** "Do you use an oxygen saturation monitor (pulse oximeter) at home?" If Yes, ask "What is your reading (oxygen level) today?" "What is your usual oxygen saturation reading?" (e.g., 95%)

142

When to call 999

- SEVERE difficulty breathing (e.g., struggling for each breath, speaks in single words) : *respiratory failure, hypoxia*
- Difficult to awaken or acting confused (e.g., disoriented, slurred speech) : *hypoxia, sepsis*
- Bluish (or gray) lips or face now : *cyanosis and need for oxygen*

- Shock suspected (e.g., cold/pale/clammy skin, too weak to stand, low BP, rapid pulse): *shock*
- Sounds like a life-threatening emergency to the triager

143

- [1] Diagnosed or suspected COVID-19 AND [2] symptoms lasting 3 or more weeks
- *Go to Guideline: COVID-19 - Persisting Symptoms Follow-up Call (Adult)*
- [1] COVID-19 exposure AND [2] no symptoms
- *Go to Guideline: COVID-19 - Exposure (Adult)*
- COVID-19 vaccine reaction suspected (e.g., fever, headache, muscle aches) occurring 1 to 3 days after getting vaccine
- *Go to Guideline: COVID-19 - Vaccine Questions and Reactions (Adult)*

144

Referral to A&E

- SEVERE or constant chest pain or pressure (Exception: Mild central chest pain, present only when coughing.) : *pneumonia, pleurisy*. Note: Consider using both this guideline AND the Chest Pain guideline if any concern for cardiac or other more serious cause of chest pain.
- MODERATE difficulty breathing (e.g., speaks in phrases, SOB even at rest, pulse 100-120) : *pneumonia*
- Headache AND stiff neck (can't touch chin to chest) : *meningitis*
- Oxygen level (e.g., pulse oximetry) 90 percent or lower : *hypoxia, infection*.
- Note: Triager should use clinical judgment for overall patient assessment, and not rely solely on pulse oximetry readings.
- Chest pain or pressure : *pneumonia, pleurisy, chest discomfort from COVID-19*, Patient sounds very sick or weak to the triager
- Reason: Severe acute illness or serious complication suspected.

145

See a healthcare professional in 4hrs

- MILD difficulty breathing (e.g., minimal/no SOB at rest, SOB with walking, pulse <100) : *pneumonia*. Note: Not from stuffy nose (e.g., not relieved by cleaning out the nose)
- Fever > 39.4 C : *serious bacterial infection*
- Fever > 38.3 AND age > 60 years : *pneumonia*
- Fever > 100.0 F (37.8 C) AND [2] bedridden (e.g., nursing home patient, CVA, chronic illness, recovering from surgery)

146

Speak to GP or senior clinician now

- HIGH RISK for severe COVID complications (e.g., weak immune system, age > 64 years, obesity with BMI > 25, pregnant, chronic lung disease or other chronic medical condition) (Exception: Already seen by PCP and no new or worsening symptoms.)
- *Reason: See HIGH RISK criteria in Background. Monoclonal antibody therapy or COVID-19 specific antivirals may be indicated. Testing for both COVID-19 and influenza may be needed.*
- HIGH RISK patient AND [2] influenza is widespread in the community AND [3] ONE OR MORE respiratory symptoms: cough, sore throat, runny or stuffy nose
- *Reason: During an influenza outbreak, treatment with antiviral influenza medication should be considered for HIGH RISK patients, especially for symptoms present < 48 hours. PCP may wish to phone in a prescription to the pharmacy. Testing for both COVID-19 and influenza may be needed.*

147

- HIGH RISK patient AND [2] influenza exposure within the last 7 days AND [3] ONE OR MORE respiratory symptoms: cough, sore throat, runny or stuffy nose
- *Reason: During an influenza outbreak, treatment with antiviral influenza medication should be considered for HIGH RISK patients, especially for symptoms present < 48 hours. PCP may wish to phone in a prescription to the pharmacy. Testing for both COVID-19 and influenza may be needed.*
- Oxygen level (e.g., pulse oximetry) 91 to 94 percent
- *Note: Triager should use clinical judgment for overall patient assessment and not rely solely on pulse oximetry readings.*

148

Needs Review in 24 hrs

Fever present > 3 days (72 hours)

- *R/O: bacterial sinusitis, bronchitis, pneumonia*

Fever returns after gone for over 24 hours AND [2] symptoms worse or not improved

- *R/O: bacterial sinusitis, bronchitis, pneumonia*

Continuous (nonstop) coughing interferes with work or school AND [2] no improvement using cough treatment per Care Advice

COVID-19 infection suspected by caller or triager AND [2] mild symptoms (cough, fever, or others) AND [3] negative COVID-19 rapid test

- *Reason: Possible false negative test. PCP may want to order a PCR, which is more accurate.*

- Cough present > 3 weeks

149

Home Care and Advice

COVID-19 diagnosed by positive lab test (e.g., PCR, rapid self-test kit) AND NO symptoms (e.g., cough, fever, others)

Reason: Positive recent COVID-19 test confirms diagnosis and patient is asymptomatic.

COVID-19 diagnosed AND has mild nausea, vomiting or diarrhoea

- *Note: Mild diarrhea is defined as 1 to 3 episodes per day. Mild vomiting is defined as 1 to 2 episodes per day.*

COVID-19 diagnosed by doctor (or NP/PA) AND [2] mild symptoms (e.g., cough, fever, others) AND [3] no complications or SOB

COVID-19 infection suspected by caller or triager AND mild symptoms (cough, fever, or others) AND [] has not gotten tested yet

- *Reason: No complications or SOB. COVID-19 testing is recommended (e.g., viral test with nasal swab). Home test kits for COVID-19 are available. Patient can also get tested for COVID-19 by their doctor (or NP/PA), retail clinic, urgent care center, or other clinic.*

150

Care Advice given per COVID-19 - Diagnosed or Suspected (Adult) guideline.

- **Reassurance and Education - Diagnosed With COVID-19 by Doctor (or NP/PA) and Mild Symptoms:**
 - Your doctor has diagnosed you as having COVID-19 based on your symptoms and COVID-19 testing.
 - If you have not been tested yet for COVID-19, we recommend that you get tested in the next 3 days.
 - For some people, the symptoms of COVID-19 can be mild, especially if you are healthy and under 65 years old.
 - *Here's some care advice to help you and to help prevent others from getting sick.*

151

- **When Can I Stop Home Isolation If I Am Sick With COVID-19?** • You can stop home isolation after 5 days if:
 - ... Fever is gone for at least 24 hours off fever-reducing medicines AND
 - ... Any cough and other symptoms are improving
- Wear a well-fitted mask for 10 full days any time you are around others inside your home or in public. Do not go to places where you are unable to wear a mask. • Notes: People who were severely ill with COVID-19 should stay home (isolate) for at least 10 days. Consult your doctor (or NP/PA) before ending isolation.

152

Advice

- **Call Back If:**
 - Fever over 39.4 C
 - Fever lasts over 3 days
 - Fever returns after being gone for 24 hours • Chest pain or difficulty breathing occurs
 - You become worse
- **Call Back If:**
 - Fever over 39.4 C
 - Chest pain or difficulty breathing occurs • You become worse
- **Call 999 If:**
 - Severe difficulty breathing occurs • Lips or face turns blue
 - Confusion occurs.
- **Tell the Ambulance Dispatcher About COVID-19 Diagnosis:**
 - When you call 999, tell the dispatcher that you probably have COVID-19.
- **Tell Ambulance Medics About Your COVID-19 Diagnosis:**
 - Tell the paramedic right away that you probably have COVID-19.
- The paramedics should call ahead to the emergency department to let them know.
- **You Should Tell Healthcare Personnel That You Might Have COVID-19:**
 - Tell the first healthcare worker you meet that you may have COVID-19.
 - Tell them you have symptoms and have been sent for COVID-19 testing.

153

General Care Advice for COVID-19 Symptoms:

- The symptoms are generally treated the same whether you have COVID-19, influenza or some other respiratory virus.
- **Cough:** Use cough drops.
- **Feeling dehydrated:** Drink extra liquids. If the air in your home is dry, use a humidifier.
- **Fever:** For fever over 101 F (38.3 C), take paracetemol every 4 to 6 hours (Adults 1g) OR ibuprofen every 6 to 8 hours (Adults 400 mg). Before taking any medicine, read all the instructions on the package. Do not take aspirin unless your doctor has prescribed it for you.
- **Muscle aches, headache, and other pains:** Often this comes and goes with the fever. Before taking any medicine, read all the instructions on the package.
- **Sore throat:** Try throat lozenges, hard candy or warm chicken broth.

154

Who should be considered for face to face

- Alternatives to the face-to-face consultation were considered potentially unsuitable if a new health problem was being presented, if the patient was elderly and confused or isolated, or if the patient was using a complex array of medicines. GPs also preferred to see a patient face to face if a translator was needed, if people had strong accents or when the health-care needs were complex. Some GPs said that they would always squeeze in an extra appointment for a child to be seen face to face:
 - . . . because the stakes are too high with children.

155

Headache

156

Back Pain

157

Case History

An obese 65-year-old man calls complaining of back pain that began 5 days ago while shoveling snow. The pain becomes worse when he stands

On exam: The spine is nontender, and pain increases with forward bending. Straight leg raising test is negative, and he has no neurologic deficits

158

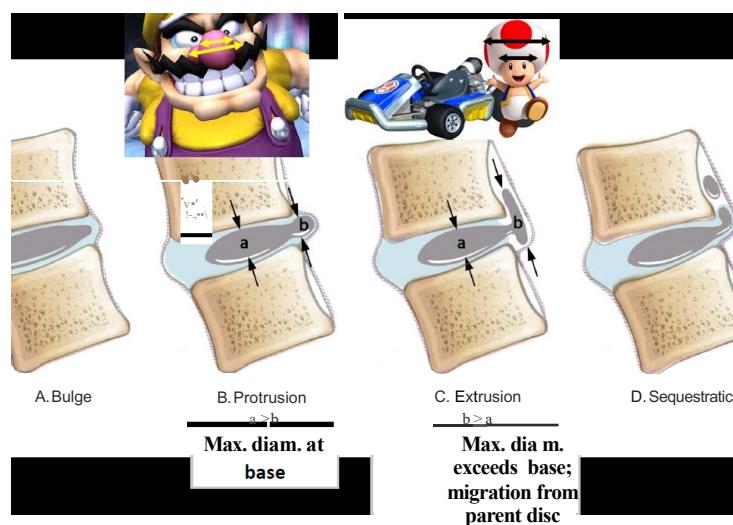
- The patient calls again in 6 weeks because the pain has not decreased. His legs feel "heavy," and he has had some incontinence in the last week
- On exam: He now has bilateral weakness of ankle dorsiflexion, absent ankle jerks, and saddle anesthesia



www.belmatt.co.uk

159

159

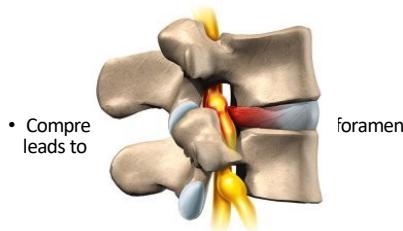


www.belmatt.co.uk

160

160

Disc Herniation – Physiology



www.belmatt.co.uk

161

161

Case Study

A 60-year-old man complains of the insidious onset of low back pain that worsens when he lies down, so he sleeps in a recliner. There is a remote history of back injury. He has lost 10kg in the past 6 months

On exam he has lumbar spine tenderness but no neurologic deficits

Laboratory: Hb 9 mg%, WCC 9,000,

ESR 110 mm/h, monoclonal spike on serum protein electrophoresis

www.belmatt.co.uk

162

162

RED FLAGS

- Fever, weight loss
- Intractable pain—no improvement in 4 to 6 weeks
- Nocturnal pain or increasing pain severity
- Morning back stiffness with pain onset before age 40
- Neurologic deficits

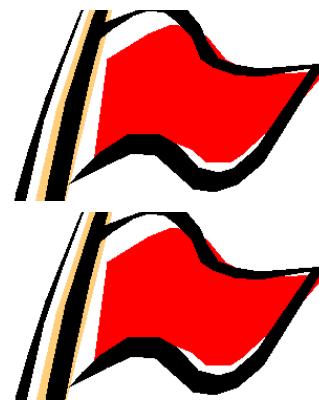


163

163

RED FLAGS

- Infections, consider fever chills. Secondary to infections. Meningeal
- Weakness, numbness and tingling
- If history of cancer, higher degree of alertness of metastatic



164

164

What Should I Be Worried

- Herniated disk
- Spinal stenosis
- Cauda equina syndrome
- Inflammatory spondyloarthropathy
- Spinal infection
- Vertebral fracture
- Cancer
- Referred visceral pain, eg, abdominal aneurysm, pancreatic cancer, GU cancer

www.belmatt.co.uk

165

165

CLINICAL BOTTOM LINE: Treatment...

- Most acute nonspecific pain resolves w/o medical intervention. Maintain normal activities as much as possible
- If symptoms persist, consider nondrug interventions. Exercise, spinal manipulation, acupuncture, massage, Psychological therapies
- If analgesia needed
 - First-line therapy: paracetemol or NSAIDs
 - Muscle relaxants / opiates: short course only, cautiously. Antidepressants: may be helpful for chronic symptoms
- Urgent surgical referral indicated: if infection, cancer, acute nerve compression, or cauda equina syndrome suspected
- Nonurgent surgical referral: if back pain persists + symptoms suggest nonacute nerve compression or spinal stenosis

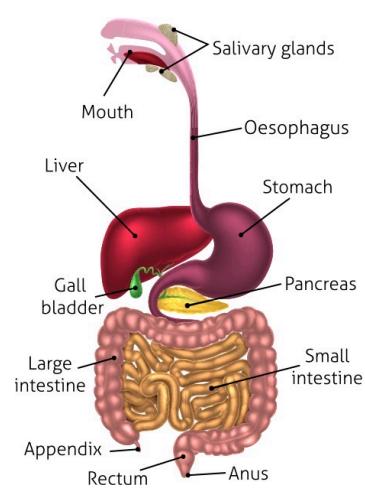
www.belmatt.co.uk

166

166

Abdo Pain

167



168

168

Respiratory

169

GenitoUrinary

170

Sexual Health

171

Mental Health

172

Prescription Request

173

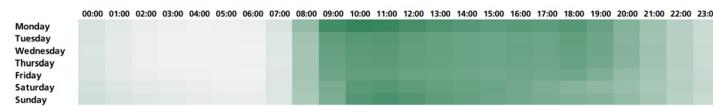
Injuries

174

How long should streaming take ?

- 80+ group is most likely to attend
- Of working adults: aged 20-24 have the highest rate of attendance
 - In terms of raw numbers, ages 20-24 are the most common adult attendees.
- 3/5 of patients attend between 9am and 6pm with 10m having the highest attendances
 - 9% are between midnight and 6am.
 - The early hours are busiest on Sundays
- Monday is the busiest- up to 14% busier than Friday which has the lowest attendances

Figure 2: Heatmap of A&E attendance by day and time, 2015/16
Darker shading indicates higher attendance



(Baker, 2017)

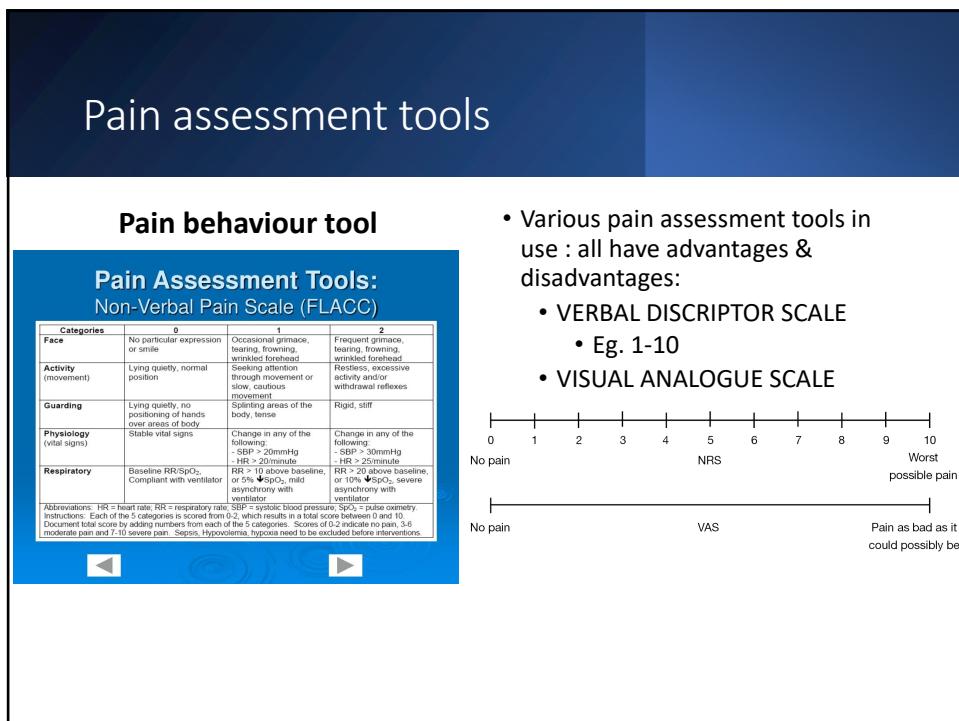
175

Pain assessment

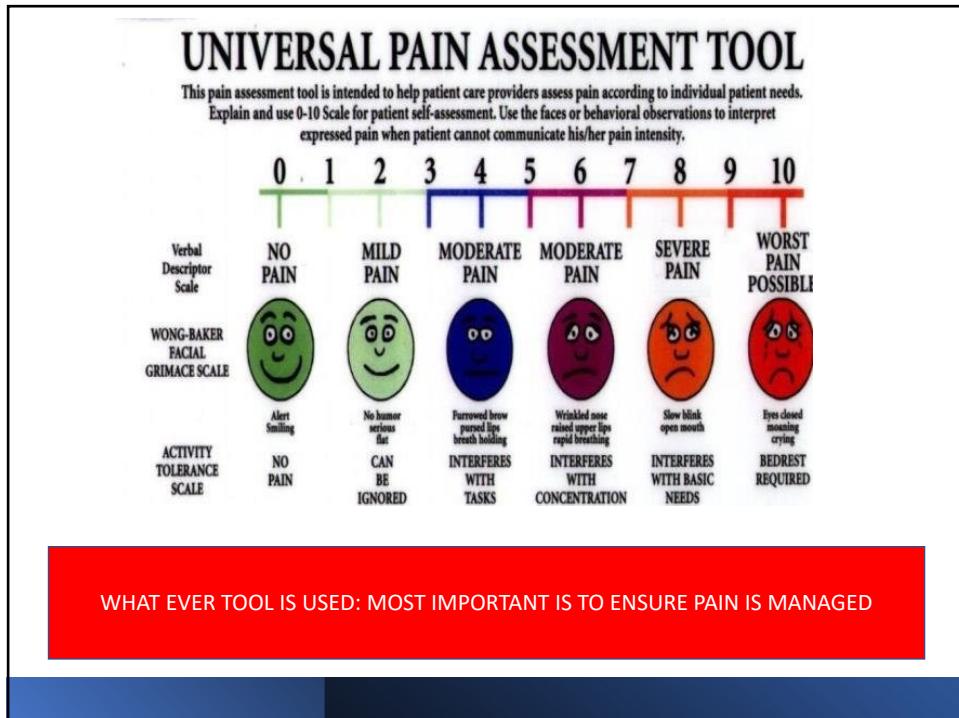
- Pain is one of the most common presenting complaints in ED (Cordell, et al , 2002) but often poorly assessed and managed (Manchester Triage Group, 2006)
- Assessing pain as part of assessment process brings several advantages such as
 - Pain is managed early & patient can be re-prioritised
 - Aggression reduced
 - Improved communication

176

Pain assessment tools



177



178

What are RED FLAGS ?

179

'Red flags are those clinical syndromes which alert the doctor to the fact that the patient needs prompt investigation and treatment for a potentially dangerous condition' (Stephenson, 2011: page IX)

ACTIVITY: LIST RED FLAGS FOR

ABDO PAIN

WOMENS HEALTH

CARDIAC

RESPIRATORY

URINARY

ONCOLOGY

BACK PAIN

TRAUMA

MENTAL HEALTH

NEURO

SORE THROAT

EYE COMPLAINTS

180

ABDOPAIN	WOMENS HEALTH
<p>RED FLAGS</p> <ul style="list-style-type: none"> • Age • Severe pain • Radiating to back /sudden onset • Significant PR bleed • Haematemesis • Pregnancy – see womens health • ? Testicular pain • Raised NEWS Score • ? New onset Jaundice • Significant PMH 	<p>RED FLAGS</p> <ul style="list-style-type: none"> • Heavy vaginal bleeding • Headace/ visual disturbance /ankle oedema/ hx seizure in pregnancy • Pain – especially radiating to shoulder tip

181

CARDIAC	RESPIRATORY
<p>RED FLAGS</p> <ul style="list-style-type: none"> • Characteristic of pain: <ul style="list-style-type: none"> • Crushing/heavy/tightness • Nausea & Vomiting • SOB • Appearance <ul style="list-style-type: none"> • Pale/ grey skin/ sweating/ • Radiating <ul style="list-style-type: none"> • Left arm /Jaw/back • Risk Factors <ul style="list-style-type: none"> • Previous cardiac hx • Diabetic • Significant hx in 1st degree relative < 60 	<p>RED FLAGS</p> <ul style="list-style-type: none"> • Unable to speak short sentences • Stridor /droolimg/loud wheeze • Acute onset agter injury • Significant pmh <ul style="list-style-type: none"> • Eg brittle asthma • Very low sats / tachypnoea • Abnormal chest/abdo movement • Suggestions of PE <ul style="list-style-type: none"> • Long haul flight/previous clot/ OCP/recent cancer/ pregnancy/ recent surgery

182

URINARY	ONCOLOGY
<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Associated joint or back pain • Any weakness or loss of sensation in legs • Saddle numbness • Priapism • Urinary retention 	<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Recent chemotherapy ? • High or low temp

183

BACK PAIN	TRAUMA
<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Altered sensation to legs • Saddle anaesthesia • Urinary/bowel incontinence • Significant trauma 	<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Significant MOI, eg <ul style="list-style-type: none"> • High speed RTC /death of occupant in same vehicle/prolonged entrapment • Blast injuries • Fall from 2 storeys or more • Spinal injury with new abnormal neurology • Chest injury with hypoxia • Head injury with LOC • Head injury in patients with anti-coagulants

184

MENTAL HEALTH	NEURO
<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Immediate intent to harm self/others/property • Obvious distressed, threatening. Agitated or unpredictable behaviour • Bizarre behaviour • Hx of mental health or self harm 	<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Sudden onset severe headache • Photophobia/rahs • Tender temples with vision disturbances or pain in jaw • Headache worse when leaning forward/cough/sneeze (SOL) • Recent head trauma • FAST positive <ul style="list-style-type: none"> • FACE • ARMS • SPEECH

185

SORE THROAT	EYE COMPLAINTS
<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Drooling • Stridor 	<p><u>RED FLAGS</u></p> <ul style="list-style-type: none"> • Sudden loss of vision • Severe pain • Chemical eye injury #

186

SPECIAL CONSIDERATION Children and silver trauma



shutterstock.com • 1149511679

Why do these 2 groups
warrant special
consideration ?

187

CHILDREN : not 'mini' adults

- Emotional development : range of
- Dependency on others
- Less experienced
- Carer/family
- Mobility
- Several physiological differences

188

	Green—Low risk	Amber—Intermediate risk	Red—High risk
Colour (of skin, lips, or tongue)	Normal colour	Pallor reported by parent or carer	Pale, mottled, ashen, or blue
Activity	Responds normally to social cues Content or smiles Stays awake or awakens quickly Strong normal cry or not crying	Not responding normally to social cues No smile Wakes only with prolonged stimulation Decreased activity	No response to social cues Appears ill to a healthcare professional (see box of definitions of terms) Does not wake, or if roused does not stay awake Weak, high-pitched, or continuous cry
Respiratory		Nasal flaring Tachypnoea: Respiratory rate (RR) >50 breaths/min at ages 6–12 months RR >40 breaths/min at ages >12 months Oxygen saturation <95% in air Crackles in the chest	Grunting Tachypnoea: RR > 60 breaths/min Moderate or severe chest indrawing
Circulation and hydration	Normal skin and eyes Moist mucous membranes	Tachycardia: >160 beats/min at age <12 months >150 beats/min at age 12–24 months >140 beats/min at age 2–5 years Capillary refill time ≥3 seconds Dry mucous membranes Poor feeding in infants Reduced urine output	Reduced skin turgor
Other	None of the amber or red symptoms or signs	Temperature ≥39°C at ages 3–6 months Fever for ≥5 days Rigors (see definitions box) Swelling of a limb or joint Non-weight bearing limb or not using an extremity	Temperature ≥38°C at ages <3 months Non-blanching rash Bulging fontanelle Neck stiffness Status epilepticus Focal neurological signs Focal seizures

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

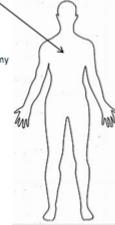
189

SILVER TRAUMA

TARN: Trauma Audit & Research Network
HECTOR: Heartland Elderly Care, Trauma & Ongoing Recovery Project

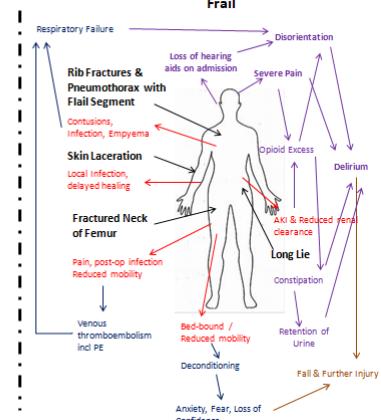
Non-Frail

- Rib Fractures & Pneumothorax
- Oxygen
- Analgiesia
- Tube Thoracostomy
- Chest Physio
- Short Stay



Frail

- Respiratory Failure
- Rib Fractures & Pneumothorax with Flail Segment
- Contusions, Infection, Empyema
- Skin Laceration
- Local infection, delayed healing
- Fractured Neck of Femur
- Pain, post-op infection Reduced mobility
- Venous thromboembolism incl PE
- Bed-bound / Reduced mobility
- Deconditioning
- Anxiety, Fear, Loss of Confidence
- Retention of Urine
- Fall & further injury
- Picture from Dr Raven



190

SILVER TRAUMA

- Comorbid disease, medications and frailty may all affect the expected physiological presentation of major trauma in elderly people.
- Elderly patients with head, chest wall and trunk injuries often have significant trauma and even isolated chest injuries have high associated mortality and morbidity.
- “Elderly” is defined as aged 70 years and over but this could be younger if frailty is deemed an issue.

Ref: London Major Trauma System

STREAM IMMEDIATELY TO ED

- Suspected pelvic injury
- Suspected head or spinal injury
- Suspected chest injury
- Injury to 2 or more body region
- Episode of LOC or GCS<15
- Observations not appropriate for UTC
- Patient on anticoagulant medication or has a bleeding disorder
- Severe pain
- Acutely short of breath
- Uncontrollable major haemorrhage
- Unclear/inappropriate hx

? FALL FROM STANDING in elderly

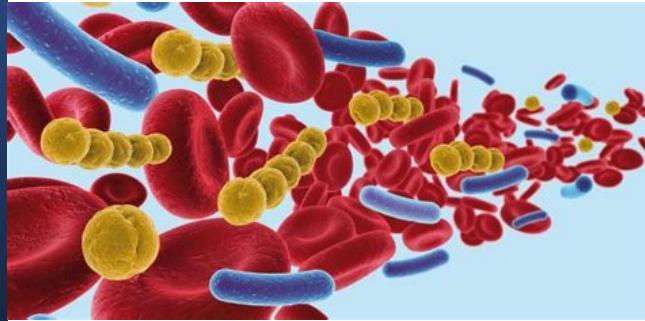
191

Other patient group that may need special considerations

- Chemotherapy patients or are within 6 weeks of finishing chemotherapy.
- Children or adults with care plan/passport
- (some) Mental Health
- Severely distressed

192

What is Sepsis ?



193

What is Sepsis

Sepsis is a syndrome defined as life-threatening organ dysfunction due to a dysregulated host response to infection.

Septic shock is a subset of sepsis, which describes circulatory, cellular, and metabolic abnormalities which are associated with a greater risk of mortality than sepsis alone.

It is thought to be a multifactorial response to an infecting pathogen that may be amplified by host factors (such as genetics, age, and co-morbidities), the pathogen (type, virulence, and burden), and the environment.

The most common sites of infection leading to sepsis are the respiratory, gastrointestinal, renal and genitourinary tracts

194

Prevalence

- The incidence of sepsis is increasing, which reflects an ageing populations with multiple co-morbidities, increased use of immunosuppressive drugs, increased antibiotic resistance, and increased awareness of the diagnosis (Singer 2017 ; Daniels 2017)
 - 250,000 cases of sepsis each year in the UK- but likely too be an underestimate (Daniel 2017)
 - A UK observational cohort study of 91 intensive care units (n = 56,673 adults) found that 27.1% of cases met sepsis criteria in the first 24 hours of admission (Padkins, 2017)
 - A review article states that estimates of sepsis prevalence range from 66 to 300 per 100,000 people in the developed world (Keeley 2017)
 - A systematic review of 23 international observational epidemiological studies of neonates and children found an estimated incidence of 48 cases per 100,000 person-years (Gotts, 2016)

195

Causes of Sepsis

- The exact pathophysiology of sepsis is not known, but it is thought to be a multifactorial response to an infecting pathogen that may be amplified by host factors (such as genetics, age, and co-morbidities), the pathogen (type, virulence, and burden), and the environment.
- The most common sites of infection leading to sepsis are the respiratory, gastrointestinal, renal and genitourinary tracts, as well as blood, skin, soft tissue, bone and joint sources
- Some studies cite an equal prevalence of Gram-positive and Gram-negative bacterial infections in people with sepsis, particularly *Staphylococcus aureus*, *Pseudomonas* species, and *Escherichia coli*
- In children, *Neisseria meningitidis* and *Haemophilus influenzae* may also be involved
- Rarely, fungal, viral, or parasitic infections are causative
- ***In about one-third of people with sepsis, no causative pathogen is identified***
- About 80% of hospital-treated sepsis cases originate from community-acquired infection [

196

Risk Factors

- Infants (under one year of age) and older people (over 75 years of age).
- People who are very frail.
- People who are immunocompromised due to a co-morbid condition (such as diabetes mellitus, HIV, cirrhosis, sickle cell disease, or asplenia).
- People who are immunosuppressed due to drug treatment (such as anticancer treatment, oral corticosteroids, or other immunosuppressive drugs).
- People who have had trauma, surgery, or other invasive procedures in the past six weeks.
- People with any breach of skin integrity (for example cuts, burns, blisters, or skin infections).
- People who misuse intravenous drugs or alcohol.
- People with indwelling lines or catheters.
- Women who are pregnant, are post-partum, or have had a termination of pregnancy or miscarriage in the past six weeks, including those who have:
 - Had a Caesarean section, forceps delivery or removal of retained products of conception.
 - Had prolonged rupture of membranes.
 - Or have been in close contact with people with group A streptococcal infection, for example, scarlet fever. Ongoing vaginal bleeding or an offensive vaginal discharge.

197

Complications of Sepsis

- Sepsis is a leading cause of morbidity and mortality. Between one-fifth and one-half of sepsis survivors following hospital admission experience long-term sequelae ('Post-Sepsis Syndrome').
 - Death
 - Recurrent infections may be due to immunosuppression from a persistent compensatory anti-inflammatory response
 - Malnutrition
 - Coagulopathy
 - Physical impairments
 - Encephalopathy and delirium
 - Psychological sequelae

198

NICE Recommendations

- NICE recommends that people with suspected sepsis are assessed for risk factors and then clinically using a structured set of observations (temperature, heart rate, respiratory rate, level of consciousness, oxygen saturation) to stratify risk of severe illness or death. The National Quality Board has encouraged further evaluation of NEWS in primary care.

199

When to suspect sepsis

- Be aware that sepsis can be challenging to identify, as the clinical presentation is variable depending on the underlying cause and the person's age and co-morbidities.
- Suspect sepsis in any person presenting with:
 - Symptoms or signs indicating possible infection causing significant illness or deterioration. This includes people who are deteriorating unexpectedly, or failing to improve as expected.
 - One or more risk factor(s) for sepsis, and who looks unwell.
 - Concern from a relative or carer that there is a change in appearance or behaviour.
- Be aware that:
 - People with sepsis may present with non-specific, non-localized clinical features, for example general malaise, agitation, or behavioural change.
 - People with sepsis may not present with a high temperature, and may present with hypothermia.
 - Sepsis may result from infection with almost any pathogen, therefore it may present with a wide range of clinical features depending on the site of infection and host response.
- Suspect neutropenic sepsis in any person who becomes unwell who is receiving anticancer treatment, and manage appropriately

200

Signs and Symptoms

- Ask the person/carers about:
 - Any recent fever or rigors.
 - Any symptoms suggesting specific infection, such as dysuria or productive cough.
 - Clinical features suggesting dehydration, such as reduced urine output in the past 18 hours.
 - Any altered behaviour, mental state, or cognition, such as not responding normally to social cues or waking only with prolonged stimulation, or new irritability (in children); new-onset confusion (in adults).
 - Any sudden change or deterioration in functional ability.
 - Possible **risk factors** for sepsis, including co-morbidities and drug treatments.
 - Possible risk factors for antibiotic resistance, such as recent or previous antibiotic therapy, previous hospital admissions, and residency in a care home, for example.
 - Immunization status (particularly in infants and young children).

201

Examination : Vital Signs

- General appearance, level of consciousness and cognition.
 - Cognitive assessment should include recognition of new-onset confusion, disorientation, and/or agitation.
- Temperature.
- Fever is the most common presentation of sepsis. **Do not use temperature as the sole predictor of sepsis**, however, and do not rely on fever or hypothermia to rule sepsis in or out. Heart rate, respiratory rate and signs of respiratory distress, and blood pressure.
- Signs of respiratory distress include nasal flaring, grunting, and apnoea in children less than 5 years of age.
- Measure blood pressure years of age and oxygen saturation at any age **but may not be appropriate at streaming and do not cause a delay in assessment or treatment**.
- Hypotension is a presenting feature in 40% of people with sepsis, but be aware that a normal blood pressure does not exclude sepsis in children and young people.
- Capillary refill time and oxygen saturation (abnormal results may indicate poor peripheral perfusion

202

NICE and Sepsis Trust : Red and Yellow flag sepsis : ADULTS

RED FLAG SEPSIS

- Objective evidence of new or altered mental state
- Systolic BP <90 mmHg
- Heart rate ≥ 130 per minute
- Respiratory rate ≥ 25 per minute
- SpO₂ < 92% (88% in COPD)
- Non-blanching rash / mottled / ashen / cyanotic
- Recent chemotherapy
- Not passed urine in 18 hours

YELLOW FLAG SEPSIS

- Relatives concerned about mental status
- Acute deterioration in functional ability
- Immunosuppressed
- Trauma / surgery / procedure in last 8 weeks
- Respiratory rate 21-24
- Systolic BP 91-100 mmHg
- Heart rate 91-130 or new dysrhythmia
- Temperature <36°C
- Clinical signs of wound infection

203

SEPSIS SCREENING TOOL GENERAL PRACTICE		UNDER 5																								
01 START THIS CHART IF THE CHILD LOOKS UNWELL, HAS ABNORMAL PHYSIOLOGY OR IF THERE IS PARENTAL CONCERN <small>RISK FACTORS FOR SEPSIS INCLUDE:</small> <input type="checkbox"/> Impaired immunity (e.g. diabetes, steroids, chemotherapy) <input type="checkbox"/> Recent trauma / surgery / invasive procedure <input type="checkbox"/> Indwelling lines / IVDU / broken skin																										
02 COULD THIS BE DUE TO AN INFECTION? <small>LIKELY SOURCE:</small> <input type="checkbox"/> Respiratory <input type="checkbox"/> Urine <input type="checkbox"/> Brain <input type="checkbox"/> Surgical <input type="checkbox"/> Skin / joint / wound <input type="checkbox"/> Indwelling device <small>SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS</small>																										
03 ANY RED FLAG PRESENT? <small>IF IMMEDIATELY UNHEARD TREAT AS RED FLAG SEPSIS</small> <input type="checkbox"/> Doesn't wake when cuffed / won't stay awake <input type="checkbox"/> Looks very unwell to healthcare professional <input type="checkbox"/> Weak, high-pitched or continuous cry <input type="checkbox"/> Severe tachypnoea (see chart) <input type="checkbox"/> Severe tachycardia (see chart) <input type="checkbox"/> Blood pressure low <input type="checkbox"/> Non-blanching rash / mottled / ashen / cyanotic <input type="checkbox"/> Temperature <36°C <input type="checkbox"/> If under 3 months, temperature 38°C+ <input type="checkbox"/> SpO ₂ < 90% on air increased O ₂ requirements																										
04 ANY AMBER FLAG PRESENT? <small>IF IMMEDIATELY UNHEARD TREAT AS RED FLAG SEPSIS</small> <input type="checkbox"/> Not responding normally / no smile <input type="checkbox"/> Reduced activity / very sleepy <input type="checkbox"/> Moderate tachypnoea (see chart) <input type="checkbox"/> Moderate tachycardia (see chart) <input type="checkbox"/> Skin < 90% or increased O ₂ requirement <input type="checkbox"/> Nasal flaring <input type="checkbox"/> Capillary refill time ≥ 3 seconds <input type="checkbox"/> Reduced urine output <input type="checkbox"/> Leg pain or cold extremities <input type="checkbox"/> Parental or carer concern																										
RED FLAG SEPSIS START GP BUNDLE																										
SEPSIS LIKELY - TRANSFER TO DESIGNATED DESTINATION - COMMUNICATE LIKELIHOOD OF SEPSIS AT HANDOVER																										
NO AMBER FLAGS : ROUTINE CARE AND GIVE SAFETY-NETTING ADVICE: GP RED FLAG BUNDLE: <small>THIS IS TIME-CRITICAL – IMMEDIATE ACTION REQUIRED:</small> DIAL 999 AND ARRANGE BLUE LIGHT TRANSFER																										
<small>COMMUNICATION: Ensure communication of the child's condition to crew. Advise if unable to pre-arrange 'Red Flag Sepsis'. Where possible a written handover is recommended including observations and antibiotic allergies.</small>																										
<table border="1"> <thead> <tr> <th rowspan="2">Age (years)</th> <th colspan="2">Tachypnoea (breaths per minute)</th> <th colspan="2">Tachycardia (beats per minute)</th> </tr> <tr> <th>Severe</th> <th>Moderate</th> <th>Severe</th> <th>Moderate</th> </tr> </thead> <tbody> <tr> <td><1</td> <td>≥60</td> <td>50-59</td> <td>≤150</td> <td>150-159</td> </tr> <tr> <td>1-2</td> <td>≥60</td> <td>40-49</td> <td>≤150</td> <td>140-149</td> </tr> <tr> <td>3-4</td> <td>≥60</td> <td>35-39</td> <td>≤150</td> <td>150-159</td> </tr> </tbody> </table>			Age (years)	Tachypnoea (breaths per minute)		Tachycardia (beats per minute)		Severe	Moderate	Severe	Moderate	<1	≥60	50-59	≤150	150-159	1-2	≥60	40-49	≤150	140-149	3-4	≥60	35-39	≤150	150-159
Age (years)	Tachypnoea (breaths per minute)			Tachycardia (beats per minute)																						
	Severe	Moderate	Severe	Moderate																						
<1	≥60	50-59	≤150	150-159																						
1-2	≥60	40-49	≤150	140-149																						
3-4	≥60	35-39	≤150	150-159																						
<small>THE UK SEPSIS TRUST</small> <small>Version 2020.3.3 PAGE 1 OF 1</small> <small>This document may be reproduced in whole or in part, provided the source is acknowledged. The original document is held by the National Institute for Health and Care Excellence (NICE) in electronic form. Any other version of this area, in whatever format (e.g. paper, email attachment) are considered to have passed through a third party and are therefore not valid. © NICE 2020. NICE is a registered trademark of the National Institute for Health and Care Excellence. NICE registration number 1100041. National SCORING Consortium registration number 84402. Sepsis Screening Tool, reference number 1000010. NICE reg number 20171206.</small>																										

204

SEPSIS SCREENING TOOL GENERAL PRACTICE AGE 5-11

01 START THIS CHART IF THE CHILD LOOKS UNWELL, HAS ABNORMAL PHYSIOLOGY OR IF THERE IS PARENTAL CONCERN

RISK FACTORS FOR SEPSIS INCLUDE:

<input type="checkbox"/> Impaired immunity (e.g. diabetes, steroids, chemotherapy)	<input type="checkbox"/> Indwelling lines / broken skin
<input type="checkbox"/> Recent trauma / surgery / invasive procedure	

02 COULD THIS BE DUE TO AN INFECTION?

LIKELY SOURCE:

<input type="checkbox"/> Respiratory	<input type="checkbox"/> Urine	<input type="checkbox"/> Skin / joint / wound	<input type="checkbox"/> Indwelling device
<input type="checkbox"/> Brain	<input type="checkbox"/> Surgical	<input type="checkbox"/> Other	

03 ANY RED FLAG PRESENT?

YES → **RED FLAG SEPSIS START GP BUNDLE**

NO → **SEPSIS UNLIKELY, NO OTHER DIAGNOSIS**

04 ANY AMBER FLAG PRESENT?

IF IMMUNITY IMPAIRED TREAT AS RED FLAG SEPSIS

Behaving abnormally / not wanting to play
Paroxysm or convulsions
Moderate tachypnoea (see chart)
Severe tachypnoea (see chart)
Bradycardia (<60 bpm)
SpO₂ < 90% on air
Non-blanching rash / mottled / ashen / cyanotic
Leg pain

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

GP RED FLAG BUNDLE:
THIS IS TIME-CRITICAL - IMMEDIATE ACTION REQUIRED:
DIAL 999 AND ARRANGE BLUE LIGHT TRANSFER

COMMUNICATION: ENSURE
Communicate Red Flag Sepsis to crew. Advise crew to pre-alert as 'Red Flag Sepsis'. Where possible a written message is recommended containing observations and antibiotic allergies.

THE UK SEPSIS TRUST
S107 2020 3.2 PAGE 1 OF 1

The controlled copy of this document is maintained by The UK Sepsis Trust. Any copies of this document held outside of this area, in whatever format (e.g. paper) which subsequently are considered to have passed into the public domain, will be subject to a fine of £2000. The UK Sepsis Trust is a registered charity number 1092338. VAT reg. number 29121080.

BELMATT - BELMATT Healthcare Training

205

Differential Diagnosis

- Pulmonary embolism. Acute myocardial infarction
- Heart failure.
- Acute delirium.
- Acute pancreatitis.
- Diabetic ketoacidosis.
- Adrenal insufficiency.
- Acute blood loss and hypovolaemia.
- Trauma and tissue injury, burns.
- Drug reactions, including neuroleptic malignant syndrome (an idiosyncratic complication of antipsychotic drug use, characterized by hyperthermia, rigidity, sweating, and labile blood pressure).
- Intoxication and poisoning, including carbon monoxide poisoning.

REFER
ED
STAT

206



NEWS

Six simple physiological parameters form the basis of the scoring system:

- respiration rate
- oxygen saturation
- systolic blood pressure
- pulse rate
- level of consciousness or new confusion*
- temperature.

***The patient has new-onset confusion, disorientation and/or agitation, where previously their mental state was normal – this may be subtle. The patient may respond to questions coherently, but there is some confusion, disorientation and/or agitation. This would score 3 or 4 on the GCS (rather than the normal 5 for verbal response), and scores 3 on the NEWS system.**

207

Chart 1: The NEWS scoring system

Physiological parameter	Score							
	3	2	1	0	1	2	3	
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25	
SpO ₂ Scale 1 (%)	≤91	92–93	94–95	≥96			≥97	
SpO ₂ Scale 2 (%)	≤83	84–85	86–87	88–92 ≥93 on air	93–94 on oxygen	95–96 on oxygen	≥97 on oxygen	
Air or oxygen?		Oxygen		Air				
Systolic blood pressure (mmHg)	≤90	91–100	101–110	111–219			≥220	
Pulse (per minute)	≤40		41–50	51–90	91–110	111–130	≥131	
Consciousness				Alert			CVPU	
Temperature (°C)	≤35.0		35.1–36.0	36.1–38.0	38.1–39.0	≥39.1		

208

STREAMING PROCESS

- Triage should be an integrated function and always performed by a trained clinician

Recommend shared Governance arrangements

- Aim to call and assess as soon as possible. Capacity must be planned to meet variation in demand (and not average)

209

Early interventions during triage

Simple assessment, painkillers and investigations can be 'front loaded'

(NHS England & NHS Improvement, 2017)



What are the pro's & cons of above?

210

Early interventions at streaming

- Medication using PGD
 - Eg. Analgesia / anti pyretic / anti -histamines
- ECG
- Urine test
- X-ray requesting

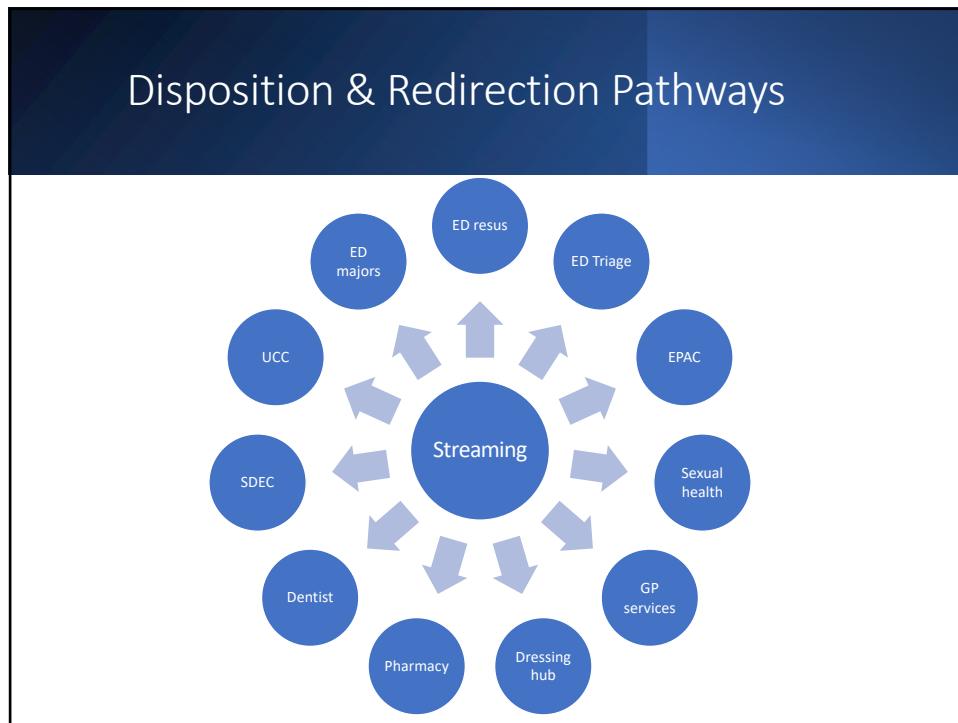
211

Disposition & Redirection Pathways

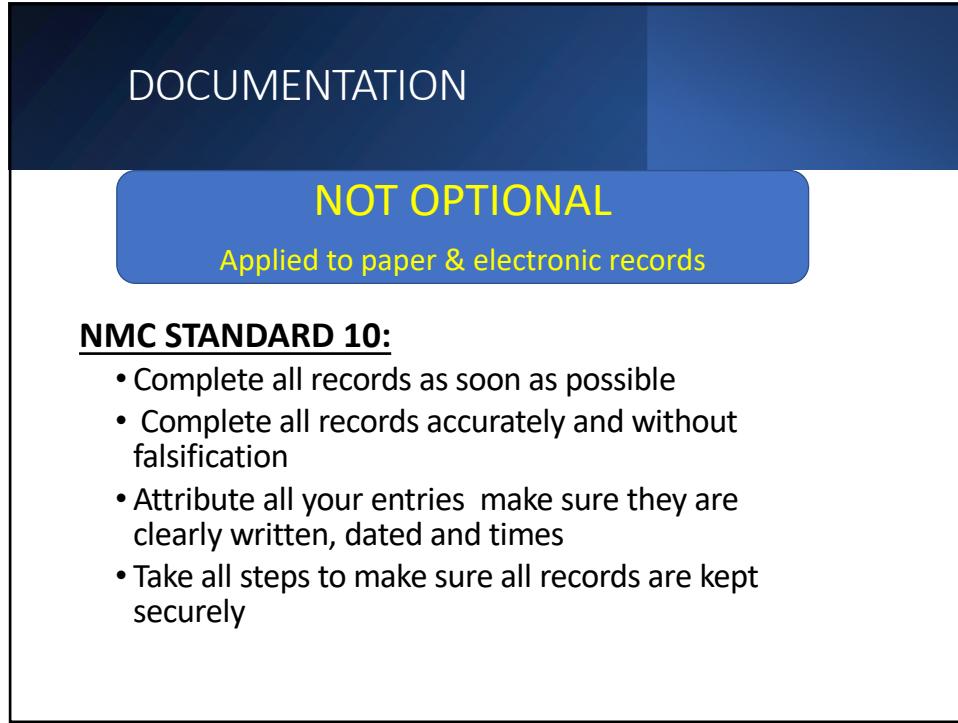


List dispositions available
in your area

212



213



214

DOCUMENTATION-2

NOT JUST NMC...

Applied to paper & electronic records

HCPC STANDARD 10:

- 10.1: You must keep full, clear and accurate records for everyone you care for, treat or provide other services to
- 10.2 :You must complete all records promptly and as soon as possible after providing care , treatment or other services
- 10.3: You must keep records secure by protecting them from loss, damage or inappropriate access

215

CONTACT INFO



+44 207 692 8709



admin@belmatt.co.uk
info@belmatt.co.uk



www.belmatt.co.uk



Suite 570, 405 Kings Road
Chelsea
SW10 0BB



216

References

- Cooper, A; Carson-Stevens, A; Hughes, T & Edwards, A (2020) Is streaming patients in emergency departments to primary care services effective and safe ? *British Medical Journal*. <https://www.bmjjournals.org/content/368/bmj.m462>. Accessed 13/11/2021
- Cordell, WH; Keene, KK; Giles, BK; Jones, BB; Jones, JH & Britzendine (2002) The high prevalence of pain in emergency medical care. *The American Journal of Emergency Medicine*. 20(3):165-169
- Daniels, R., McNamara, G., Nutbeam, T., et al. (2017) UK Sepsis Trust. <https://sepsistrust.org>
- E-triage <https://econsult.net/urgent-care>. Accessed 16/1/22
- Freitag, A., Constanti, M., O'Flynn, N. et al. (2016) Suspected sepsis: summary of NICE guidance. *British Medical Journal* 354, 1-3
- Harmon, M; Burslam, K; Reguilon, I & Tempest, M (2020) Improving clinical indicators through automated check-in and triage. https://econsult.net/wp-content/uploads/2020/03/UEC_A0Portrait_HE-event2.pdf. accessed 18/1/2022
- Hector (XX) <https://clahrcprojects.co.uk/resources/projects/hector-%E2%80%93-heartlands-elderly-care-trauma-ongoing-recovery-project-service-level>

217

REF 2

- Keeley, A., Hine, P. and Nsutebu, E. (2017) The recognition and management of sepsis and septic shock: a guide for non-intensivists. *Postgrad Med J* 93(1104), 626-634.
- Kendall-Raynor, P (2020). [Electronic tablet allows self check-in and triage of patients at emergency departments | RCNi](#). Accessed 18/1/2022
- London Major Trauma System (2018) *Management of Elderly Trauma Patients.- second Edition* . <https://www.c4ts.qmul.ac.uk/downloads/pain-london-major-trauma-system-elderly-trauma-guidance-second-edition-december-2018.pdf>
- Manchester Triage Group (2006) *Emergency Triage*. 2nd Edition. Oxford. Blackwell Publishing & BMJ Books
- NICE (2017) *Sepsis: recognition, diagnosis and early management*. <https://www.nice.org.uk/guidance/NG51>
- NICE (2020) *Fever in under 5's: assessment and initial management*. [NG143 Traffic light tool \(nice.org.uk\)](https://www.nice.org.uk/guidance/NG143) accessed 12/1/2022

218

References -3

- Stephenson (2011) *The Complementary Therapist's Guide to Red Flags and Referrals*, Elsevier Health Sciences, Edinburgh.
- Padkin, A., Goldfrad, C., Brady, A.R. et al. (2003) Epidemiology of severe sepsis occurring in the first 24 hrs in intensive care units in England, Wales, and Northern Ireland. *Crit Care Med* **31**(9), 2332-2338
- Sepsis Trust (2019) The Sepsis Manual. 5th Edition. <https://sepsistrust.org/wp-content/uploads/2021/11/5th-Edition-manual-080120.pdf>
- Singer, M., Deutschman, C.S., Seymour, C.W. et al. (2016) The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA* **315**(8), 801-81

219

Refernces to be used

- UK Department of Health and Social Care (2017) *A&E Departments to get more funding*. <https://www.gov.uk/government/news/ae-departments-to-get-more-funding> Accessed 14/11/2021.
- NHS Improvement (2017) *Good practice guide: Focus on improving patient flow*. <https://www.cuh.hse.ie/about-us/project-flow/useful-links/good-practice-guide-focus-on-improving-patient-flow-july-2017-nhs.pdf> Accessed 14/11/2021
- NHS England (2017) *Primary care streaming: Roll out to September 2017*. <https://castlepointandrochfordccg.nhs.uk/about-us/our-governing-body/governing-body-meetings/2017/27-july-2017/2801-item-07ii-primary-care-streaming-appendix-270717/file>. Accessed 14/11/2021

220

CONTACT INFO



+44 207 692 8709



admin@belmatt.co.uk
info@belmatt.co.uk



www.belmatt.co.uk



Suite 570, 405 Kings Road
Chelsea
SW10 0BB



221