

<b>Title</b>	Acute myocardial infarction	<b>Version</b>	2.4
<b>Target Audience</b>	FY doctors & student nurses	<b>Run time</b>	10 -15 mins
<b>Authors</b>	Udesh Naidoo, James Foxlee, Karen Britton, Paul Wilder, Mark Loughrey	<b>Last review</b>	4/7/18
<b>Faculty comments</b>	Normal faculty requirements	<b>Necessity</b>	n/a

## Brief Summary

This scenario demonstrates management of uncomplicated acute anterior myocardial infarction in a previously well patient. There are no planned physiological deteriorations from the baseline during the scenario.

## Educational Rationale

Initial assessment and management of chest pain is an essential skill for all FY doctors and allied health professionals. This scenario looks for systematic assessment and concurrent treatment of this common medical emergency, along with exclusion of differential diagnoses with a similar presentation.

## Learning Objectives: Nurse

- ABCDE assessment and NEWS scoring of a deteriorating patient
- Initial appropriate management
- Suitable escalation and SBAR handover
- Communication with the patient and inter-professional team working

## Learning Objectives: Doctor

- Receiving an SBAR handover and responding appropriately
- ABCDE assessment and initial management of a deteriorating patient
- Consider differential diagnosis for chest pain
- Early recognition of myocardial infarction
- Appropriate investigations and treatments in line with Trust guidelines
- Suitable escalation and SBAR handover

No	CURRICULUM MAPPING	This scenario
1	Acts professionally	✓
2	Delivers patient-centred care and maintains trust	✓
3	Behaves in accordance with ethical and legal requirements	✓
4	Keeps practice up to date through learning and teaching	✓
5	Demonstrates engagement in career planning	
6	Communicates clearly in a variety of settings	✓
7	Works effectively as a team member	✓
8	Demonstrates leadership skills	✓
9	Recognises, assesses and initiates management of the acutely ill patient	✓
10	Recognises, assesses and manages patients with long term conditions	✓
11	Obtains history, performs clinical examination, formulates differential diagnosis and management plan	✓
12	Request relevant investigations and acts upon results	✓
13	Prescribes safely	✓
14	Performs procedures safely	✓
15	Is trained and manages cardiac and respiratory arrest	
16	Demonstrates understanding of the principles of health promotion and illness prevention	✓
17	Manages palliative and end of life care	
18	Recognises and works within limits of personal competence	✓
19	Makes patient safety a priority in clinical practice	✓
20	Contributes to quality improvement	

# Candidate Briefing: Nurse

Setting: Resus Bay

You are working in Resus in A&E. A patient is brought in by ambulance with chest pain, having been sent in by their GP. Please perform an initial assessment and escalate as appropriate.

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# Candidate Briefing: Doctor

Setting: Resus Bay

You are part of the team on the acute medical take.

Your registrar has been referred a 51 year old patient with chest pain by their GP; the patient has arrived by ambulance.

Your registrar is currently busy with a high dependency patient elsewhere in the hospital and they have asked you to perform an initial assessment, management and escalate as appropriate.

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# How to run with candidates from only one discipline

An additional member of faculty can play the role of the nurse in this scenario if needed.

Sim Nurse briefing:

You are a junior nurse working in A&E. You are expected to perform basic observations and escalate as appropriate. You cannot interpret ECGs but are concerned by the nature of this patient's pain. The patient has taken some GTN spray without effect.

Chest X ray and ECG have already been performed and results are available. You have taken bloods but not sent them off; you will not do so until the candidate specifies the tests required.

## CONDUCT

Throughout the scenario you should act as a "competent robot" i.e. you should perform all tasks requested to the best of your ability, but should not initiate any treatment on your own. If you are not being effectively instructed by the candidate, you may be prompted via your ear piece by the lead facilitator as to what your next action should be.

If you strongly disagree with management then you are free to question them, stating your reasons.

If asked to give drugs, you should request that they are prescribed on the drug chart. If they are unsure of the dosage please refer them to the BNF or Hospital Guidelines App or via Intranet.

# Technical set-up

Setting	Resus bay		
Simulator	High fidelity manikin / actor		
Gender	Female	Age	51

## Initial monitor parameters

RR	O2 sats	Pulse (HR)	BP	ECG rhythm
20	94% on air	104	140/95	Sinus rhythm, ST elevation
Cap Refill Time	Blood glucose	Temp.		
3s	5.9	36.9		

## Initial patient set-up

Airway	Obstruction	Airway adjunct
	No	No

Breathing	Chest sounds	O2 supply
	Clear	Air

Circulation	Heart sounds	Cannula	BP cuff	Peripheral pulses
	Normal	No	Attached	Weak

Disability	Eyelids	Pupils	AVPU/GCS
	Open	Reactive	15

Exposure	Posture	Moulage	Bowel sounds
	45 degrees	None	Normal

## Specific equipment / prop requirements

- Crash trolley by bed: including defibrillator (not attached)
- Monitoring: ECG, non-invasive BP (cuff), pulse oximeter (SpO2)
- Cannula in situ
- ABG results (x2)
- Blood bottles with request form
- ECG demonstrating ST elevation in the anterior leads (V2 - 4) with reciprocal ST depression in II, III, aVF
- CXR (chest radiograph): normal
- Ambulance Handover sheet & A&E front sheet
- Blank drug chart
- NEWS chart (obs chart)
- Mobile phone with guidelines app
- BNF

# Facilitator Briefing

## Telephone Advice

- You will be sitting in the control room for the duration
- Answer all calls as “switchboard” in the first instance to allow for realistic delay. Call back after 1 - 2 minutes
  
- The Medical Registrar should sound busy and state they are tied up with another patient
- They should be helpful but press the candidate hard about what assessment has been performed e.g. nature of pain, findings of physical examination
- If the candidate is not armed with the information, tell them to get the required info and call you back
- Enquire about ECG findings - it should show sinus rhythm with anterior (V2-4) ST elevation with reciprocal ST depression (II, III, aVF)
- Enquire about the chest X-ray - what did it show?
- End by saying that it sounds like the patient is having an MI and they should be transferred to the cath lab, following cardiology consultation
  
- The cath Lab Cardiology Consultant should be helpful but want to know the exact ECG findings, duration of pain (2 hours approx) and management instituted
- When this information has been imparted, state that the patient needs a primary PCI and they should be immediately transferred to the cath lab
- If not given, give aspirin and clopidogrel (300mg of each), and fondaparinux

# Patient Briefing

Setting A&E resus bay

Name Samantha Tully

Age 51

Gender Female

## What has happened to you?

- Sent in by GP after a telephone conversation; they told you to call an ambulance
- Gradual onset of dull pain in centre of the chest while moving boxes in garage > 2 hours ago
- No arm or jaw pain
- Not relieved by rest or paracetamol. Got better in ambulance (following GTN) but now recurred
- No exacerbating factors
- Never had before

### OTHER SYMPTOMS

- Feels nauseous but no vomiting
- Feels hot and sweaty.
- Has had headache (since GTN spray)

## How you should role-play

You can talk normally but are in pain and feeling nauseous.  
Request analgesia - "something stronger than paracetamol and something to take the sickness away"

## Your background

### PAST MEDICAL HISTORY

- Varicose veins
- No regular medication
- No known drug allergies

### SOCIAL HISTORY

- IT firm employee
- Smoked 20+ cigarettes a day for 20 years
- Binge drinks on weekends

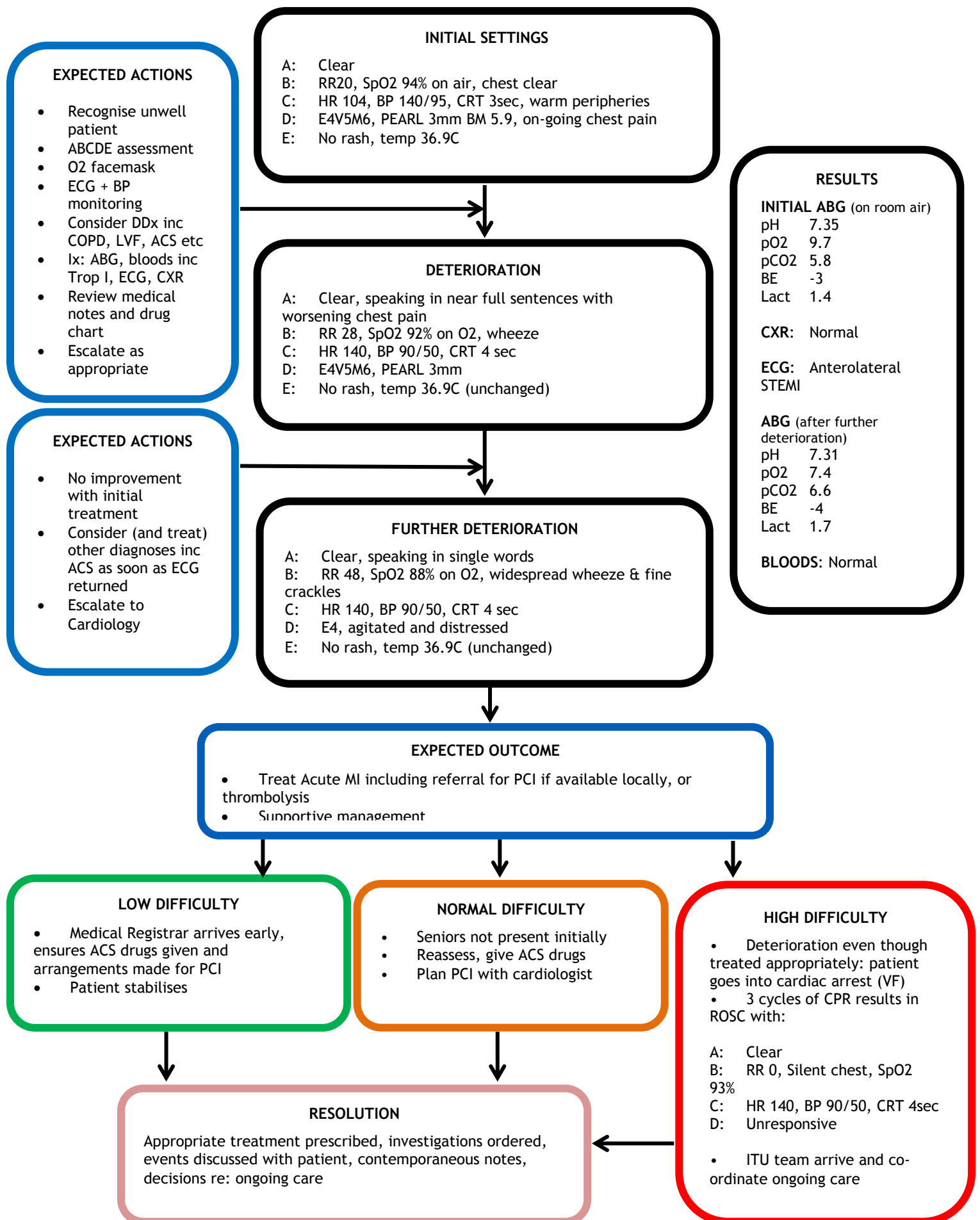
### FAMILY HISTORY

Both parents and sibling alive and well

Father on treatment for hypertension and peripheral vascular disease, mother has thyroid trouble and diabetes.



# Scenario flowchart



# References

- Local ACS guidelines & hospital guidelines app
- NICE Clinical Guideline 95: Chest pain of recent onset: assessment and diagnosis. Available at: <https://www.nice.org.uk/guidance/cg95>
- NICE Clinical Guideline 167: Myocardial infarction with ST-segment elevation: acute management. Available at: <https://www.nice.org.uk/guidance/cg167>
- NICE Clinical Guideline 94: Unstable angina and NSTEMI: early management. Available at: <https://www.nice.org.uk/guidance/cg94>

# Clinical props

RADIOMETER ABL800 FLEX			
Identifications			
Patient ID	789987		
Patient Last Name	TULLY		
Patient First Name	Sam		
Sex	Female		
Date of birth			
FO <sub>2</sub> (I)	21.0	%	
T	36.9	°C	
Sample type	Arterial		
Operator	TEMP FPH 1		
Blood Gas Values			
pH	7.350		[ 7.350 - 7.450 ]
pCO <sub>2</sub>	5.80	kPa	[ 4.70 - 6.00 ]
↓ pO <sub>2</sub>	9.7	kPa	[ 11.1 - 14.4 ]
Hct <sub>c</sub>	50.0	%	
Oximetry Values			
ctHb	128	g/L	
↓ FO <sub>2</sub> Hb	93.8	%	[ 94.0 - 98.0 ]
sO <sub>2</sub>	94.0	%	
FCOHb	0.8	%	[ 0.5 - 1.5 ]
FHHb	3.5	%	[ 0.0 - 5.0 ]
FMetHb	1.1	%	[ 0.0 - 1.5 ]
Calculated Values			
cBase(Ecf) <sub>c</sub>	-3.0	mmol/L	
cHCO <sub>3</sub> <sup>-</sup> (P) <sub>c</sub>	21.7	mmol/L	
Electrolyte Values			
cNa <sup>+</sup>	138	mmol/L	[ 136 - 146 ]
↑ cK <sup>+</sup>	4.6	mmol/L	[ 3.4 - 4.5 ]
cCl <sup>-</sup>	102	mmol/L	[ 98 - 106 ]
↑ cCa <sup>2+</sup>	2.40	mmol/L	[ 2.2 - 2.45 ]
Anion Gap <sub>c</sub>		mmol/L	
Metabolite Values			
↑ cGlu	5.9	mmol/L	[ 3.9 - 5.8 ]
cLac	1.4	mmol/L	[ 0.5 - 1.6 ]
cCrea	90	µmol/L	[ 44 - 97 ]
Notes			
↑	Value(s) above reference range		
↓	Value(s) below reference range		
c	Calculated value(s)		

# RADIOMETER ABL800 FLEX

## Identifications

Patient ID	<b>789987</b>
Patient Last Name	<b>TULLY</b>
Patient First Name	<b>Sam</b>
Sex	<b>Female</b>
Date of birth	
FO <sub>2</sub> (I)	<b>21.0</b> %
T	<b>36.9</b> C
Sample type	<b>Arterial</b>
Operator	TEMP FPH 1

## Blood Gas Values

↓ pH	<b>7.310</b>		[ 7.350 - 7.450 ]
pCO <sub>2</sub>	<b>6.60</b>	kPa	[ 4.70 - 6.00 ]
↓ pO <sub>2</sub>	<b>7.4</b>	kPa	[ 11.1 - 14.4 ]
Hct <sub>c</sub>	<b>50.0</b>	%	

## Oximetry Values

ctHb	<b>128</b>	g/L	
↓ FO <sub>2</sub> Hb	<b>91.9</b>	%	[ 94.0 - 98.0 ]
sO <sub>2</sub>	<b>92.0</b>	%	
FCO <sub>2</sub> Hb	<b>0.8</b>	%	[ 0.5 - 1.5 ]
FHHb	<b>3.5</b>	%	[ 0.0 - 5.0 ]
FMetHb	<b>1.1</b>	%	[ 0.0 - 1.5 ]

## Calculated Values

cBase(Ecf) <sub>c</sub>	<b>-4.0</b>	mmol/L
cHCO <sub>3</sub> <sup>-</sup> (P) <sub>c</sub>	<b>21.7</b>	mmol/L

## Electrolyte Values

cNa <sup>+</sup>	<b>138</b>	mmol/L	[ 136 - 146 ]
↑ cK <sup>+</sup>	<b>4.6</b>	mmol/L	[ 3.4 - 4.5 ]
cCl <sup>-</sup>	<b>102</b>	mmol/L	[ 98 - 106 ]
↑ cCa <sup>2+</sup>	<b>2.40</b>	mmol/L	[ 2.2 - 2.45 ]
Anion Gap <sub>c</sub>		mmol/L	

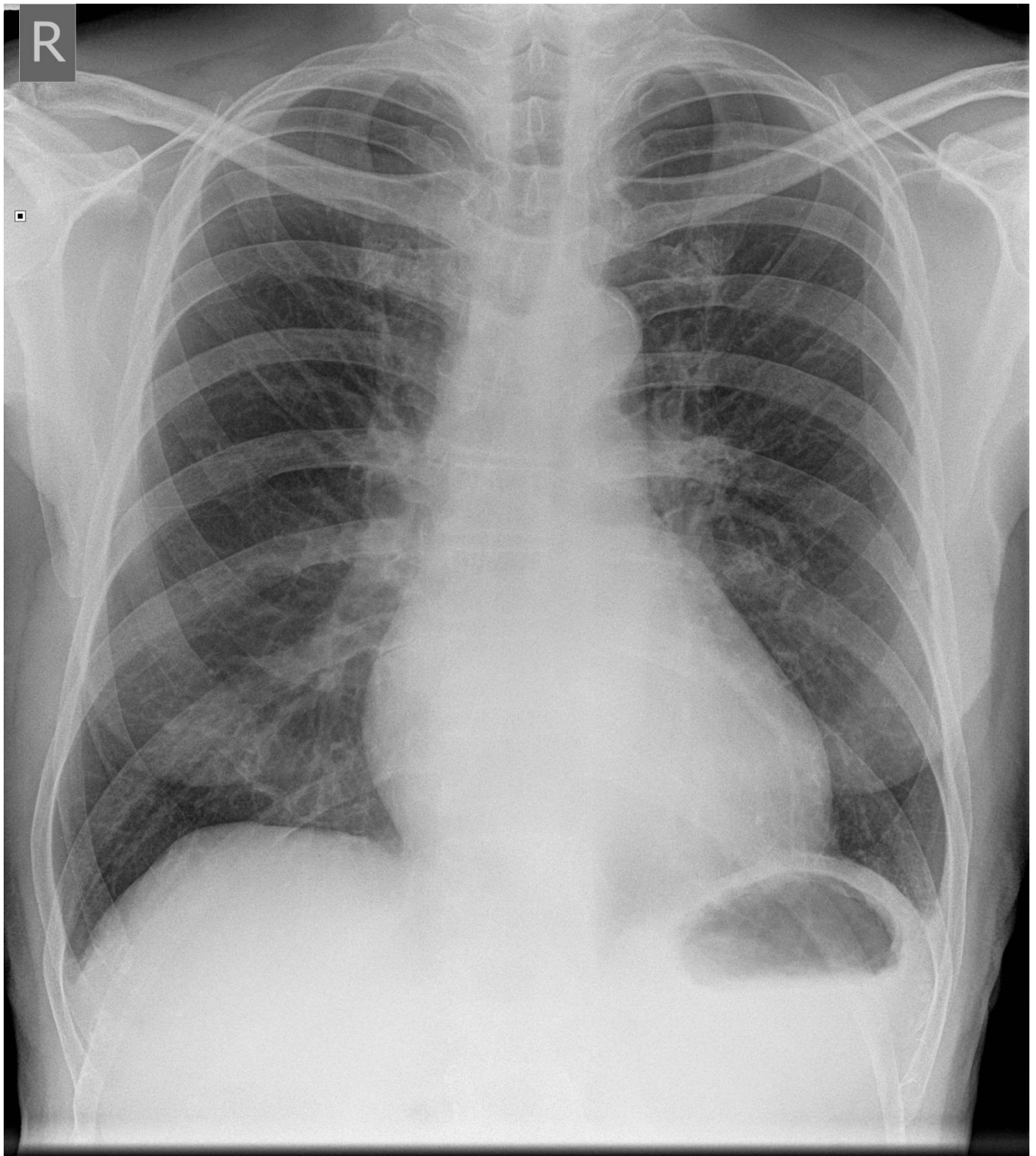
## Metabolite Values

↑ cGlu	<b>5.9</b>	mmol/L	[ 3.9 - 5.8 ]
↑ cLac	<b>1.7</b>	mmol/L	[ 0.5 - 1.6 ]
cCrea	<b>90</b>	μmol/L	[ 44 - 97 ]

## Notes

↑	Value(s) above reference range
↓	Value(s) below reference range
c	Calculated value(s)





# NEWS - OBSERVATION CHART



Frimley Health  
NHS Foundation Trust


Surname: Tully First name: Samantha  
 Hospital number: 12345 D.O.B: 1.1.1968 Date of admission: Today

	DATE									DATE										TIME
<b>A+B</b> Respirations Breaths/min	≥25																			≥25
	21-24	20																		21-24
	18-20																			18-20
	15-17																			15-17
	12-14																			12-14
	9-11																			
≤8																				≤8
<b>A+B</b> SpO2 Scale 1 Oxygen saturation (%)	≥96																			≥96
	94-95	94																		94-95
	92-93																			92-93
	≤91																			≤91
SpO2 Scale 2 <sup>†</sup> Oxygen saturation (%) Use Scale 2 if target range is 88-92%, eg in hypercapnic respiratory failure  <sup>†</sup> ONLY use Scale 2 under the direction of a qualified clinician	≥97 on O <sub>2</sub>																			≥97 on O <sub>2</sub>
	95-96 on O <sub>2</sub>																			95-96 on O <sub>2</sub>
	93-94 on O <sub>2</sub>																			93-94 on O <sub>2</sub>
	≥93 on air																			≥93 on air
	88-92																			88-92
	86-87																			86-87
	84-85																			84-85
≤83%																			≤83%	
Air or oxygen?	A=Air	A																		A=Air
	O2 U/min																			O2 U/min
	Device																			Device
<b>C</b> Blood pressure mmHg Score uses systolic BP only	≥220																			≥220
	201-219																			201-219
	181-200																			181-200
	161-180																			161-180
	141-160	104																		141-160
	121-140																			121-140
	111-120																			111-120
	101-110																			101-110
	91-100																			91-100
	81-90	45																		81-90
	71-80																			71-80
	61-70																			61-70
	51-60																			51-60
≤50																			≤50	
<b>C</b> Pulse Beats/min	≥131																			≥131
	121-130																			121-130
	111-120																			111-120
	101-110																			101-110
	91-100	104																		91-100
	81-90																			81-90
	71-80																			71-80
	61-70																			61-70
	51-60																			51-60
	41-50																			41-50
31-40																			31-40	
≤30																			≤30	
<b>D</b> Consciousness Score for NEW onset of confusion (no score if chronic)	Alert	A																		Alert
	Confusion																			Confusion
	V																			V
	P																			P
U																				U
<b>E</b> Temperature °C	≥39.1°																			≥39.1°
	38.1-39.0°																			38.1-39.0°
	37.1-38.0°	36.1																		37.1-38.0°
	36.1-37.0°																			36.1-37.0°
	35.1-36.0°																			35.1-36.0°
≤35.0°																			≤35.0°	
NEWS TOTAL		2																		TOTAL
Monitoring frequency																				Monitoring
Pain score																				Pain score
Initials																				Initials

National Early Warning Score 2 (NEWS2) © Royal College of Physicians 2017

Version: 201807\_004

Product Code:

Hospital Number: 789987					
NHS Number: 123456					
Title: [Redacted] Sex: F DoB: [Redacted] Age: 46 Yrs Surname: [Redacted] First name: MEL SARAH Address: [Redacted] Postcode: [Redacted] Tel (H): [Redacted] Tel (M): [Redacted] Employer / Educ. Est: Self employed Religion: Catholic Language: English		NOK: [Redacted] Address: [Redacted] Relationship: [Redacted] Tel (H): [Redacted] Tel (M): [Redacted]			
Source of Referral: Self Date of Arrival: [Redacted] Time of Arrival: 1325 Mode of arrival: OWN No of Attendances in past year: [Redacted] Previous Attendance Number: ED-12-051816-1 To be seen in: Resus		GP: [Redacted] Address: [Redacted] Tel No: [Redacted] Fax No: [Redacted]			
Speciality Expected: MED Specialty: [Redacted]		Time referred to specialty: [Redacted] Time seen: [Redacted]	Duty/On-Call Emergency Department Consultant: [Redacted]		
Presenting Complaint: [Redacted]					
Triage Nurse: Tom Presenting Complaint: Chest pain History of Presenting Complaint: Recurrent onset chest pain On Assessment: Central chest pain, radiating to neck Previous Medical History: [Redacted] Social History: lives alone		Time of Triage: 1330 Triage (ESI): 3 Pain Score: 10/10 Allergies: None Tetanus Status: [Redacted] Triage Treatment: ECG, MOVE TO RESUS Triage Notes: [Redacted]			
Temperature	36.5	Blood Pressure	140/95	Nurse Concern	Yes
Pulse	105	SP O <sub>2</sub> (Air)	98	GCS	E V M = 15
Respiratory rate	18	Pupils (Left)		Pupils (Right)	
Peak Flow	(Pre/Post)	Blood sugar		Weight	--
MET SCORE =					





Name	Signature	Initials	Position	Speciality	Date	Time

Have you considered the use of a Chaperone when seeing this patient,  
Please refer to the Trust and Emergency Department Chaperone Policy.

Chaperone Used? Y / N

Name: \_\_\_\_\_

**Presenting Complaint:**

Chest pain

**HISTORY:** (Please continue on continuation sheets if necessary)

Central chest pain  
described as central ache  
Non-radiating  
Not associated with SOB,  
Palpitations,  
Smoker 20y pack hx  
• 8 TROM / HTN  
• 8 known family hx.

Age >65	
3 Coronary Artery Disease (CAD)	
Risk Factors: Family history, raised cholesterol, diabetes mellitus, hypertension, active smoker	
Known CAD stenosis >50%	
Aspirin use in past 7 days	
Recent (<24 hours) severe angina	
Raised cardiac markers (CK)	
ST deviation >0.5mm	
TIMI Risk Score	

Age >60	
BP >140/90	
Clinical features: Unilat weak (2 pts) Speech only (1 pt)	
Duration: >60 mins (2 pt) 10-59 mins (1 pt) <10 mins (0 pt)	
Diabetic	
ABCD2 Score (max 7)	

Women of Childbearing age? LMP: ..... Pregnant? Y / N

Hosp No.: 789987



**Past Medical History**

Varicose veins

- Diabetes
- AF
- Hx Dementia
- Hypertension
- IHD/Angina
- COPD
- Arthritis
- Epilepsy
- Asthma
- Pacemaker

(Please tick relevant conditions if present)

**Drugs**

Is the patient on anti-cancer medication? YES/NO      If yes, what?  
Please contact Lead Chemo Nurse on bleep 277

N/A

**Allergies**

Drug	Reaction	Date

3



**Systematic Enquiry:**

**Family History**

**Social History**

Alcohol: .....units/week                      Smoking:

Occupation:    Retired: Yes /No

Lives in: House / Flat / Bungalow / WCF / Residential Home / Nursing Home/ Barracks

Surrey / Hampshire / Berkshire/ Other/ Not known

Usually able to go out: Yes / No              Lives alone: Yes / No              Stairs: Yes / No

Mobility:  Independent              Services:  MOW                      Carer/s:  None  
 Stick                                       Bathing services                       Spouse  
 Frame     District Nurse                           Other family  
 Wheelchair                                   Day Centre                                   Friend/ Neighbour  
 Day Hospital                                   OD  BD  TDS  QDS

Drives: Yes / No

Has memory deficit been present for 6 months or more?    Yes               No

AMT (N/A )

<input type="checkbox"/> Age	<input type="checkbox"/> Recognition of two persons	<input type="checkbox"/> Time (to nearest hour)	<input type="checkbox"/> Date of Birth
<input type="checkbox"/> Address for recall	<input type="checkbox"/> WW2	<input type="checkbox"/> Year	<input type="checkbox"/> Present monarch
<input type="checkbox"/> Location	<input type="checkbox"/> Count backwards 20 - 1		

Score ...../10

If Score 7 or below commence dementia CQUIN    Yes               No

Hosp No.: 789987



**EXAMINATION**

Jaundiced      Anaemic      Cyanosed      Clubbed      Lymphadenopathy

Temp ..... Cap Blood Glucose.....

General Impression:

Cardiovascular

HR ..... reg / irreg      BP sitting .....  
BP lying.....      BP Standing ..... (Remember >2 mins for Postural BPs)  
HS.....      Murmur? Y N      Carotid Bruit? Y N  
JVP .....      Oedema .....

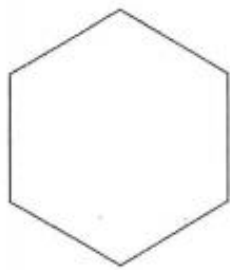
Respiratory

RR .....      Sats on Air .....      Sats on .....% O<sub>2</sub> .....  
Current PEFR.....      Best PEFR .....      Predicted PEFR .....

Percussion / Auscultation



Abdominal



Ascites? Y / N
PR
PV





**Neurological**

GCS: E ..... V ..... M ..... /15

Pupils: .....

Cranial Nerves: (Not Assessed - tick here: )

Abnormalities:

Peripheral Nerves: (Not Assessed - tick here: )

		Power			Reflexes		Tone	
		Right	Left		Right	Left	Right	Left
Shoulders	abd (c5,6)							
	add (c5,6,7)							
Elbow	flex (c5,6)			Biceps (c5,6)				
	ext (c7,8)			Triceps (c7,8)				
Wrists	flex (c6,7,8)			Supinator (c6)				
	ext (c7,8)							
Hips	flex (l1,2,3)							
	ext (l5,s1,2)							
	abd (l4,5,s1)							
	add (l2,3,4)							
Knees	flex (l4,5,s1,2)			Knee (l2-4)				
	ext (l2,3,4)							
Ankles	flex (l4,5,s1,2)			Ankle (s1,2)				
	ext (s1,2)			Plantar (l5-s2)				

**Cerebellar Signs:**

Nystagmus ..... Gait .....

Finger/Nose ..... Dysdiadochokinesis .....

Heel/shin ..... Dysarthria .....

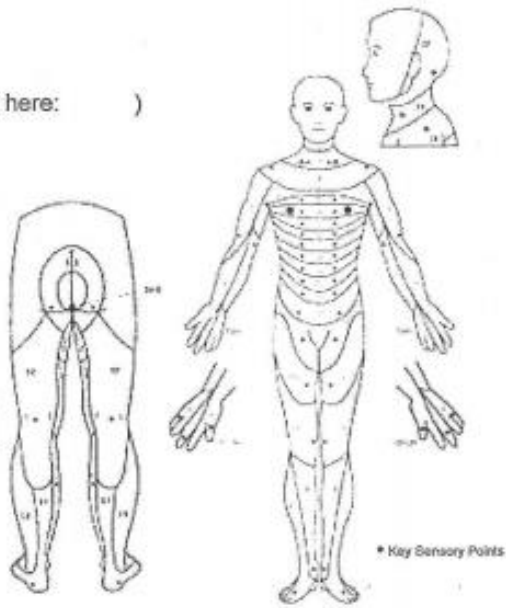
Romberg's test .....



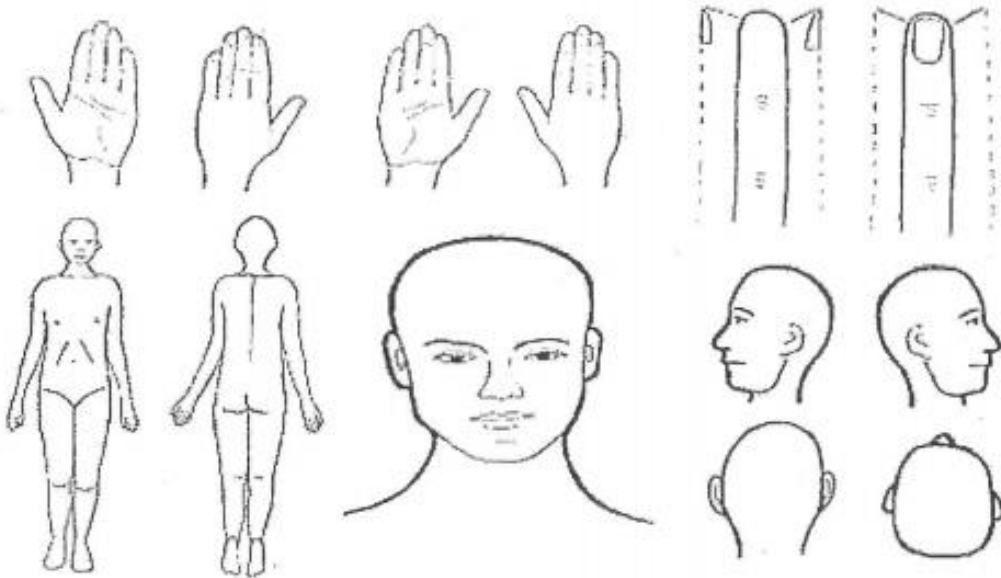
**Sensation**

(Not Assessed - tick here: )

Anal sensation? Y N



Other examination findings / comments:





**Initial Impressions / Differential Diagnosis:**

**Investigations:**

Radiology:  CXR  AXR  CT Head  Other.....

Results:

Bloods:  FBC  Coag / INR  ESR  
 U&Es  LFTs  Bone  CRP  
 Other .....

Results:

Hb	MCV	Na	Bili	AST	Chol
WCC	B12	K	Alk P	GGT	HDL
Neut	Folate	Ur	ALT	Amylase	TG
Plt	PT	Creat	Alb	CK	LDL
ESR	APTT	Glucose 6.5	PO4	Trop (1)	TSH
	INR	CRP	Cor Ca	Trop (2)	FT4

**Others:**

ECG  Urine   $\beta$ HCG  ABG  Other .....

Results:





**Management Plan:**

	Discharge? Y/N Refer? Speciality ..... Admit CDU? (consider VTE prophylaxis) Decision time .....
--	---

<b>VTE Risk?</b> Please assess on separate risk assessment sheet	
Have you started VTE prophylaxis?	Y N
If not - reasons:	
<b>MRSA Status:</b>	<b>C. Diff status:</b>
Met Calls Y N	For CPR? Y N
	Orange sticker? Y N

Senior Review: Name: ..... Designation:.....

Time ..... Date ..... Signature .....

First Name(s): <u>SAM</u>	Ward	Date chart started	Chart number
Surname: <u>TULLY</u>	<u>ED</u>		of
Hospital Number: <u>789987</u>	Consultant	Doctor bleep number	Date of admission
NHS Number: _____			<u>TODAY</u>
Date of Birth: _____			

Date weighed	Weight (kg)	Height (M)	Surface area (M <sup>2</sup> )	Ideal Body Weight (IBW)	Body Mass Index (BMI)	Diet

Allergies (write 'none known' and sign if none known)

Drug/substance	Details of reaction

This patient also has the following additional charts (complete and tick relevant box (es))

IV heparin infusion chart	<input type="checkbox"/>	Chemotherapy chart	<input type="checkbox"/>	Medicines reconciliation	<input type="checkbox"/>
PCA	<input type="checkbox"/>	Epidural	<input type="checkbox"/>		<input type="checkbox"/>

Communication for doctors

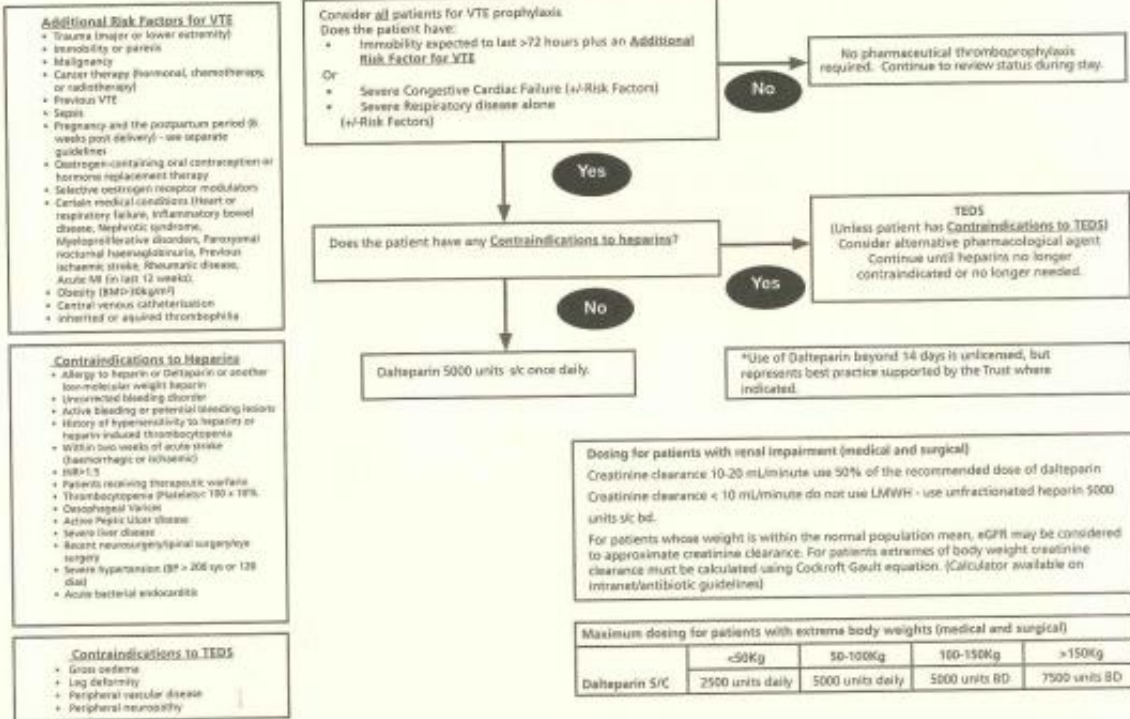
Date	Sign and Bleep No.	Actioned sign and date

Does this patient smoke: Yes / No

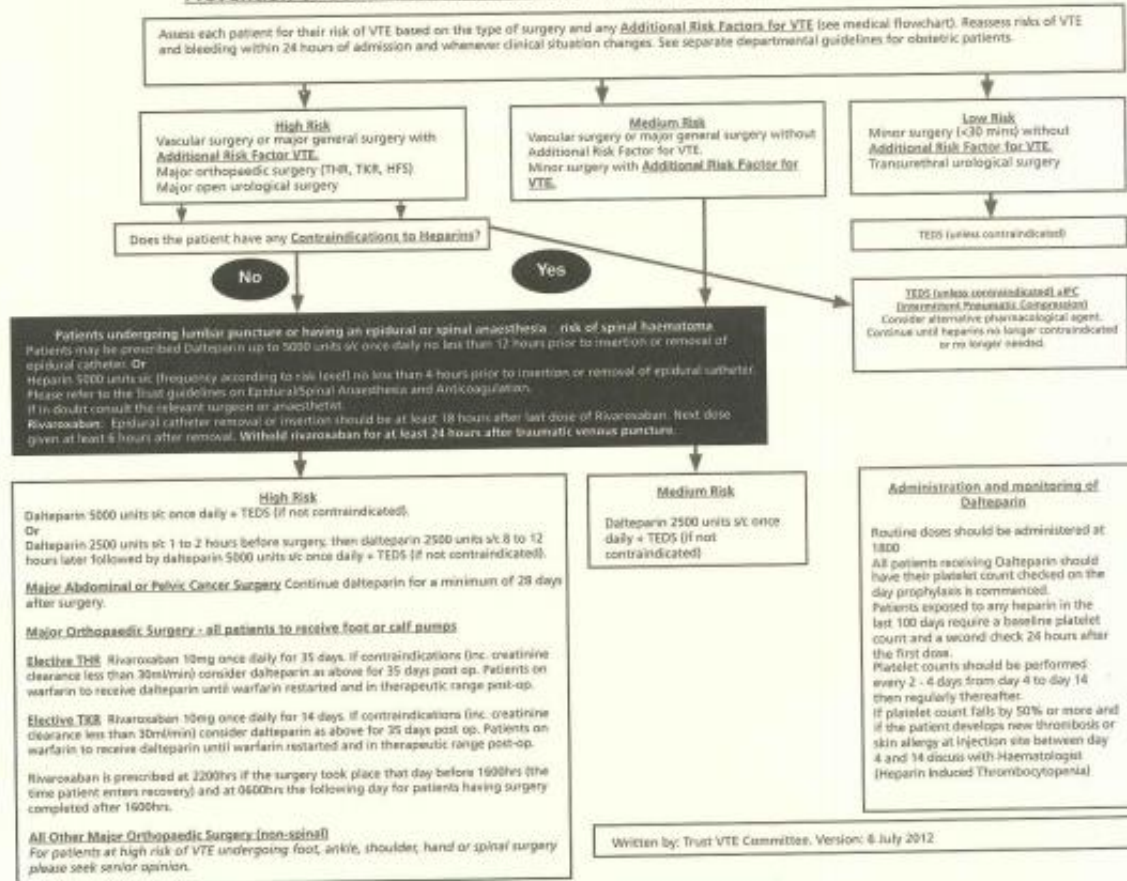
Is patient self medicating: Yes / No

Date of referral to smoking cessation nurse:

## Prevention of Venous Thromboembolism in Acutely ill Adult Medical Patients (non-obstetric)



## Prevention of Venous Thromboembolism in Adult Surgical Patients



**RISK ASSESSMENT RECORD SHEET FOR VENOUS THROMBOEMBOLISM (VTE)**

- Please use in conjunction with Trust guidelines overleaf
- Please see separate Trust guidelines for obstetric patients

Thrombosis Risk	Patient Related	Procedure Related	Initial Assessment	Assessment at 24 hours	Assessment on	Assessment on	
			— / — / —	— / — / —	— / — / —	— / — / —	
High	Previous VTE						
	Immobility expected to last >72 hours						
	Malignancy						
	Acute or chronic lung disease						
	Acute or chronic inflammatory disease						
	Chronic heart failure						
	Lower limb paralysis (excluding acute stroke)						
	Acute infectious disease, e.g. pneumonia						
	BMI >30kg/m <sup>2</sup>						
	Inherited or acquired thrombophilia						
	Pregnancy or less than 6 weeks post partum						
			Hip or knee replacement				
			Hip fracture				
		Other major orthopaedic surgery					
		Surgical procedure lasting >30mins with additional VTE risk factor(s)					
Medium	Oestrogen containing oral contraception or HRT						
	Selective oestrogen receptor modulators						
	Age > 60						
	Dehydration						
	Varicose veins with phlebitis						
			Minor surgical procedure with additional VTE risk factor(s)				
		Surgical procedure lasting >30mins with no additional VTE risk factors					
		Plaster cast immobilisation of lower limb					
Low	None of above	None of above					
<b>Bleeding Risk/Contraindications</b>	<b>Patient Related</b>	<b>Procedure Related</b>					
	Haemophilia or other known bleeding disorder						
	Thrombocytopenia (Platelets < 100 x 10 <sup>9</sup> /L)						
	Within two weeks of acute stroke (haemorrhagic or ischaemic)						
	Severe hypertension (BP > 200 systolic or 120 diastolic)						
	Severe liver disease						
	Oesophageal Varices						
	Active Peptic Ulcer disease						
	Active bleeding or potential bleeding lesions						
	Major bleeding risk, existing anticoagulant therapy						
	Severe renal disease						
		Neurosurgery, spinal surgery or eye surgery					
		Other procedure with high bleeding risk					
		Lumbar puncture/spinal/epidural in previous 4 hours or anticipated in next 12 hours					
Risk assessment performed by							
Signature							
Copy of Patient Information Leaflet given to patient			Yes	No			



FOR DRUGS NOT ADMINISTERED ENTER THE APPROPRIATE CODE IN THE ADMINISTRATION BOX AND SIGN

1 NIL BY MOUTH  
2 REFUSED  
3 UNABLE (NEEDS)

**REGULAR PRESCRIPTIONS**

**OXYGEN**

Circle target saturation  
Adjust flow rate to maintain specified oxygen saturation

Target oxygen saturation  
88 to 92%    94 to 98%

TIME	MONTH/YEAR	DATE
0800		
1200		
1800		
2200		
Device		

PRESCRIBERS SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
 Home Oxygen Indicated: YES / NO  
 Referral to Respiratory Nurse for HCOF Date: \_\_\_\_\_

Other: \_\_\_\_\_

Nurse to initial against time to confirm oxygen is being administered and meeting specified target. Flow rate is to be documented to the left of the column, i.e.  2L  Sign

PHARMACOLOGICAL VTE PROPHYLAXIS/TREATMENT INCLUDING NOACS	DOSE	ROUTE
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW STOP
INDICATION AND SPECIAL INSTRUCTIONS	Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD <input type="checkbox"/> CHANGE	
PHARMACY POD H POD W	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	

MECHANICAL VTE PROPHYLAXIS	DOSE	ROUTE
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW STOP
INDICATION AND SPECIAL INSTRUCTIONS	Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD <input type="checkbox"/> CHANGE	
PHARMACY POD H POD W	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	

WARFARIN AND OTHER COUMARIN ANTICOAGULANTS	DOSE	ROUTE	TIME	INR
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW	DATE STARTED	DOSE (mg)
INDICATION	DURATION	TARGET INR	PLEASE TICK APPROPRIATE STATUS <input type="checkbox"/> NEW <input type="checkbox"/> PREADMISSION	
PHARMACY POD H POD W	BOOK PROVIDED ON: BY:	DATE COUNSELLED: BY:	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	
DRUG (Approved Name)	DOSE	ROUTE	PRESCRIBERS SIGNATURE	GIVEN BY

DRUG (Approved Name)	DOSE	ROUTE
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW STOP
INDICATION AND SPECIAL INSTRUCTIONS	Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD <input type="checkbox"/> CHANGE	
PHARMACY POD H POD W	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	

DRUG (Approved Name)	DOSE	ROUTE
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW STOP
INDICATION AND SPECIAL INSTRUCTIONS	Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD <input type="checkbox"/> CHANGE	
PHARMACY POD H POD W	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	

DRUG (Approved Name)	DOSE	ROUTE
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW STOP
INDICATION AND SPECIAL INSTRUCTIONS	Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD <input type="checkbox"/> CHANGE	
PHARMACY POD H POD W	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	

DRUG (Approved Name)	DOSE	ROUTE
PRESCRIBERS SIGNATURE _____ GMC No. _____	START	REVIEW STOP
INDICATION AND SPECIAL INSTRUCTIONS	Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD <input type="checkbox"/> CHANGE	
PHARMACY POD H POD W	TO CONTINUE ON <input type="checkbox"/> YES DISCHARGE <input type="checkbox"/> NO	

**WHEN REQUIRED MEDICATION**

**OXYGEN**

CIRCLE TARGET OXYGEN SATURATION  
 88-92% 94-98% Other

OXYGEN		Date																	
CIRCLE TARGET OXYGEN SATURATION 88-92% 94-98% Other		Time Started																	
		Flow rate																	
DEVICE	MAX FLOW RATE (Liters/min)	Device																	
PREScriBER SIGNATURE	GMC No.	DATE	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	
DOSE	ROUTE	FREQUENCY	Time																
PREScriBER SIGNATURE	GMC No.	DATE	Dose																
INDICATION AND SPECIAL INSTRUCTIONS		<input type="checkbox"/> NEW <input type="checkbox"/> PRE AD	Route																
PHARMACY POD H POD W		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO	Given by																
DRUG (Approved name)		Date																	

Reminder: Prescribe on regular prescription and state "see variable prescription"

MONTH/YEAR →  
DATE

### Insulins - variable dosing

DRUG (Approved name)		ROUTE	SIG →	DATE	
		S/C			
PRESCRIBERS SIGNATURE		GMC No.	START	STOP	
DEVICE		Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD			
PHARMACY		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO			
POD H POD W					
DRUG (Approved name)		ROUTE	SIG →	DATE	
		S/C			
PRESCRIBERS SIGNATURE		GMC No.	START	STOP	
DEVICE		Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD			
PHARMACY		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO			
POD H POD W					
DRUG (Approved name)		ROUTE	SIG →	DATE	
		S/C			
PRESCRIBERS SIGNATURE		GMC No.	START	STOP	
DEVICE		Please tick appropriate status <input type="checkbox"/> NEW <input type="checkbox"/> PRE AD			
PHARMACY		TO CONTINUE ON DISCHARGE <input type="checkbox"/> YES <input type="checkbox"/> NO			
POD H POD W					

### WHEN REQUIRED INSULINS

DRUG (Approved name)	DOSE (UNITS)	ROUTE	FREQUENCY	DATE	TIME	DOSE (in Units)	ROUTE	DATE	DOSE (in Units)	ROUTE	DATE	DOSE (in Units)	ROUTE	DATE	DOSE (in Units)	ROUTE	DATE
		S/C															
PRESCRIBERS SIGNATURE	GMC No.			DATE													
INDICATION AND SPECIAL INSTRUCTIONS																	
PHARMACY																	
DRUG (Approved name)																	
		S/C															
PRESCRIBERS SIGNATURE	GMC No.			DATE													
INDICATION AND SPECIAL INSTRUCTIONS																	
PHARMACY																	
DRUG (Approved name)																	
		S/C															
PRESCRIBERS SIGNATURE	GMC No.			DATE													
INDICATION AND SPECIAL INSTRUCTIONS																	
PHARMACY																	







MRSA Status

New	Previous Admission

C. Diff Status

New	Previous Admission

**ONCE DAILY GENTAMICIN PRESCRIPTION**  
 Use gentamicin calculator or intranet to calculate dose.  
 Level must be taken 6 to 14 hours after the first dose has been given.

Specify Dosing Regime	5mg/kg	3mg/kg	Other						
Indication: _____									
Date to be given	Time to be given	Dose (mg)	Prescribers signature GMC No.	Date of sig.	Start time of infusion	Given by: (sign)	Date and Time blood level taken	sign:	Gentamicin Levels mg/l

**General Guidance**

- All antimicrobial prescriptions MUST follow the Trust's Antimicrobial Policies or MUST have been agreed by Microbiology. See full up to date policy on intranet.
- **INDICATION, STOP AND REVIEW DATES MUST BE RECORDED ON THE CHART.**
- CURB 65 score MUST be recorded for all community acquired pneumonia.
- Check previous relevant microbiology results before prescribing antibiotics and check new microbiology results daily. If a patient is not responding to treatment seek advice from a consultant microbiologist.
- Doses need to be adjusted to suit patient's age, size and renal function. To calculate creatinine clearance use calculator on intranet and see dose adjustments for antibiotics.
- All IV regimes MUST be reviewed at 48 hours and switched to oral if appropriate.

**IV SWITCH GUIDELINES**

If YES to all, consider change to ORAL	If YES to any, remain on IV
Patient able to swallow and tolerate oral fluids?	Oral route compromised?
Temperature settling and < 38°C for at least 48hrs?	Continuing serious sepsis?
Heart rate <100bpm for last 12hrs? (no unexplained tachycardia)	Febrile with neutropenia?
WCC between 4-12x10 <sup>9</sup> /L?	Specific indication / deep seated infection. (Meningitis, endocarditis, encephalitis, osteomyelitis, neutropenia, cystic fibrosis, septicaemia, haematology/ immunocompromised pts, continuing sepsis, other severe infections as discussed with microbiology.) Seek microbiology advice if unsure.
Oral formulation available?	
Others markers: BP stable Respiratory rate <20 breaths/min CRP returning to normal and less than 100 (adult)	
Absence of mental confusion (when representing symptoms of infection)	No oral formulation available (seek microbiology advice on alternative)



