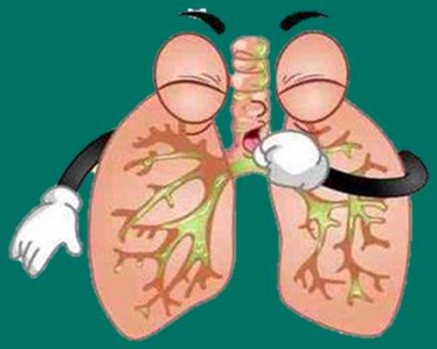
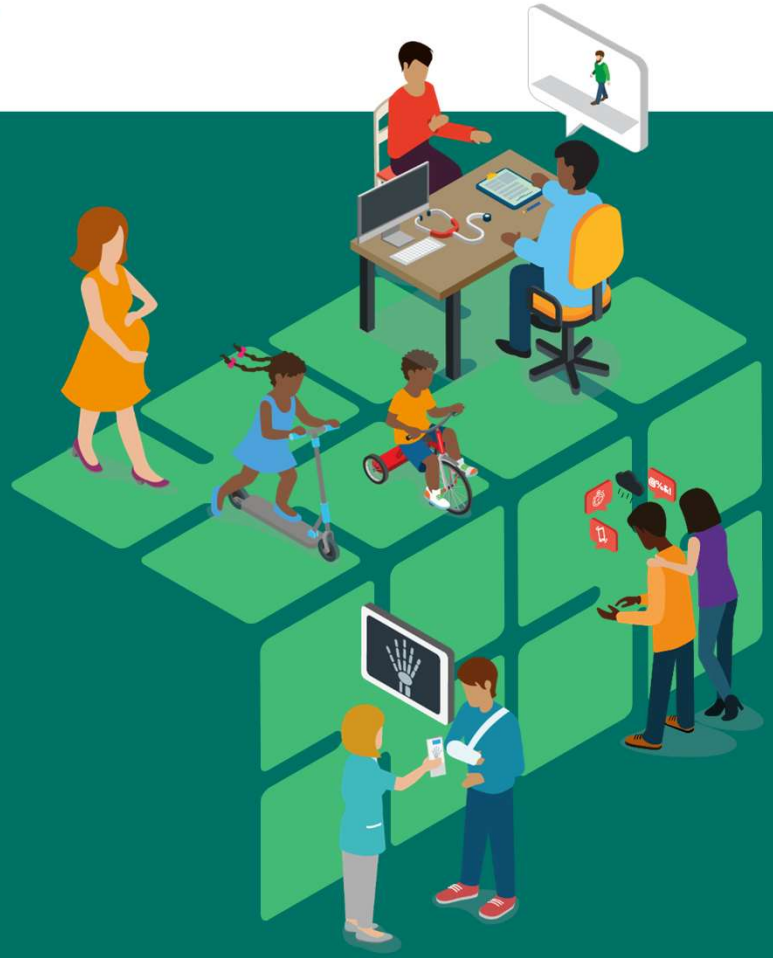
Hertfordshire and West Essex Integrated Care System

Approved Training Provider

NHS Hertfordshire and West Essex Integrated Care Board

Chest Infection





Working together
for a healthier future

Aim of the session

For staff to understand:

- What is chest infection
- Signs & symptoms chest infection
- Supporting resident with chest infection
- Chest infection prevention and treatment

To enable all staff to:

- Monitor the wellbeing of residents and identify early signs of deterioration
- Know how to communicate their concerns to their colleagues and outside agencies
- Understand the roles of the different health services available to their residents
- Understand the importance of documenting changes in residents' wellbeing and how to describe their concerns

What is a Chest Infection?

- **A chest infection is an infection of the lungs or large airways**
- A chest infection can be a **viral** or **bacterial** infection
- It is usually spread by sneezing and coughing. This launches droplets into the air which are inhaled by others.
- It can also be spread by poor hand hygiene practices resulting in cross contamination
- The main types of chest infection are **bronchitis** and **pneumonia**
- Most bronchitis cases are caused by viruses, whereas most pneumonia cases are due to bacteria

What is a Chest Infection?

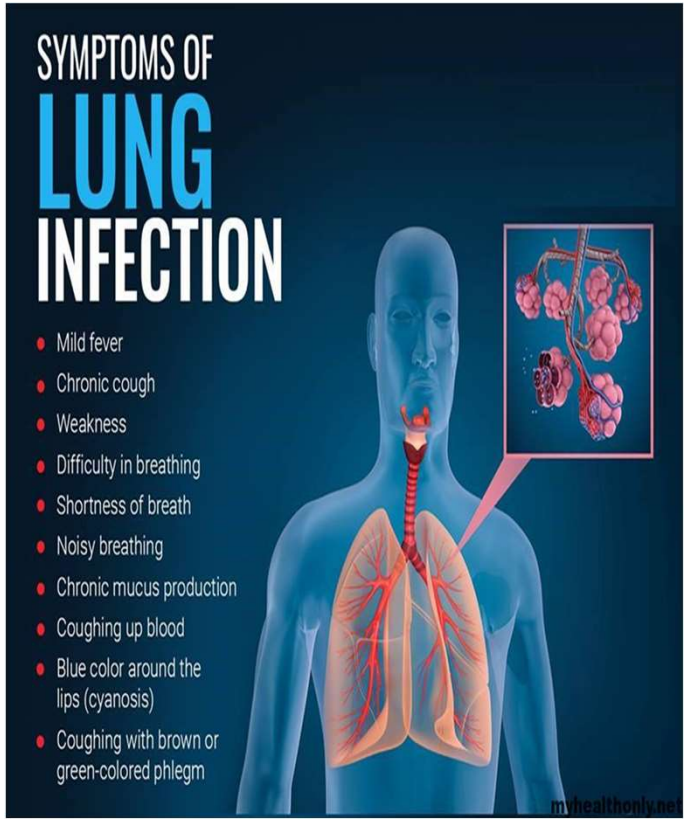
Who is at risk of developing a chest Infection?

- Elderly people are one of the higher risk groups of developing a chest infection
- Long term health condition
- Those with diabetes
- Heart failure
- Asthma/ COPD
- Compromised immune system
- Those with a poor or unsafe swallow

Signs and symptoms of a Chest Infection

Main symptoms:

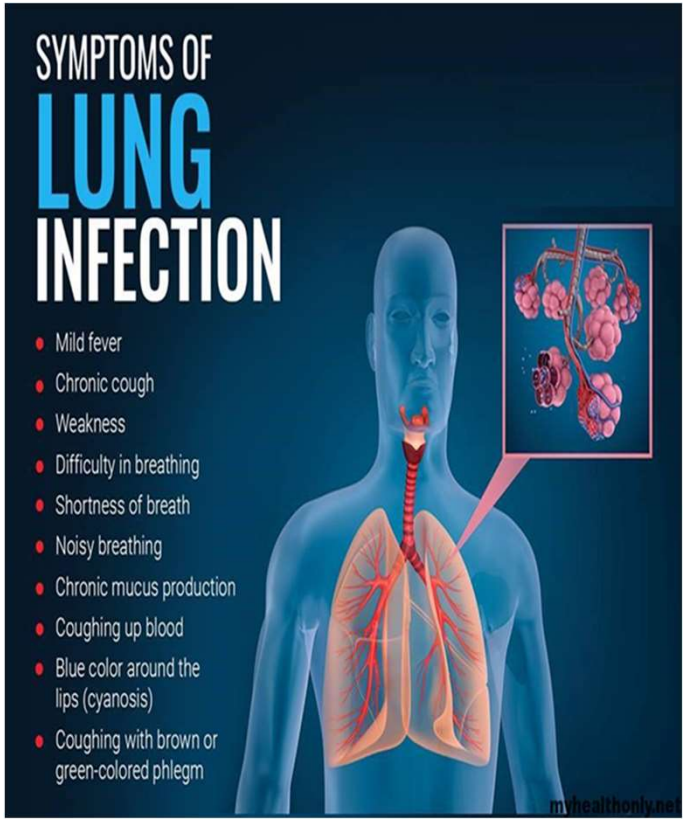
- Persistent cough
- Coughing yellow or green sputum
- Breathlessness - rapid and shallow breathing
- Wheezing
- High temperature
- Headache
- Increased heart beat/pulse
- Pain in chest or discomfort



Signs and symptoms of a Chest Infection

Main symptoms continued:

- Confused and disorientated
- Reduced mobility
- Fatigue
- Loss of appetite



How to support your resident with a Chest Infection

- Encourage plenty of rest
- Encourage drinking plenty of fluids - drinking a warm drink of honey and lemon - to relieve a sore throat caused by persistent coughing
- Treat fever, headaches, aches and pains with paracetamol if tolerated
- Raising pillows to assist with breathing/ rest
- Deep breathing and coughing exercises
- Encourage mobilise / change position regularly
- Contact GP for review
- Document all care/findings, even if you think it is minor or nothing to worry about, if you have noticed a change then document and report it

Chest Infection prevention

- Practice safe hand hygiene
- Practice safe mouth hygiene - cover your mouth when you cough or sneeze
- Throw away used tissues immediately
- Ensure yours and your residents vaccinations are up to date (annual Flu vaccination, one off pneumococcal vaccination - helps prevent pneumonia. Shingles Vaccination)
- Ensure surfaces are kept clean
- Monitor your residents for any signs of deterioration and act
- Document any interventions/ professional advice sought/ support provided to your resident

Chest Infection prevention

- Wear appropriate PPE
- Eating a healthy, balanced diet help strengthen the immune system, making you less vulnerable to developing chest infections
- Stop Smoking
- Cut down on Alcohol

Chest Infection treatment

Treatment will depend on the cause of your chest infection.

It will either be caused by:

- A virus (like viral bronchitis) - this usually clears up by itself after a few weeks and antibiotics will not help
- Bacteria (like pneumonia) - a GP may prescribe antibiotics (the whole course needs to be completed as advised by the GP, even if start to feel better)

Antibiotics are only used to treat bacterial chest infections. They're not used for treating viral chest infections, like flu or viral bronchitis.

Antibiotics do not work for viral infections. A sample of mucus may need to be tested to see what's causing chest infection.

Contact GP

References

Chest infection - NHS (www.nhs.uk)

Restore 2

Deterioration and escalation tool for residential and nursing homes

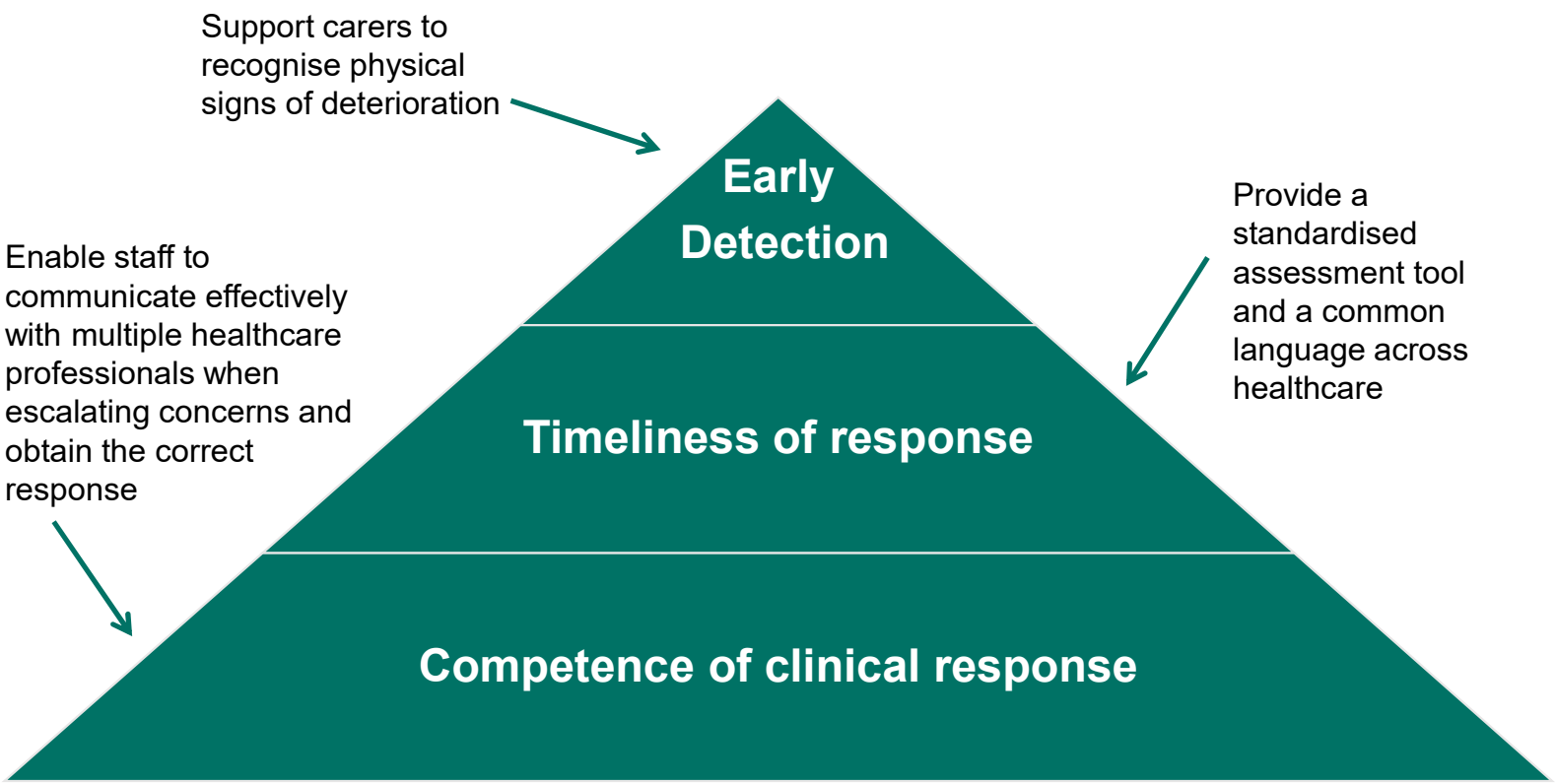
What is Restore 2?

Restore 2 is a deterioration and escalation tool for residential and nursing homes.

This approach allows care home staff to communicate with outside healthcare professionals including GP's by:

- Using evidence based methods to help care home staff recognise and communicate concerns about early deterioration in a resident
- By using these tools care homes are able to speak the same language, using proven techniques such as NEWS 2 and SBAR

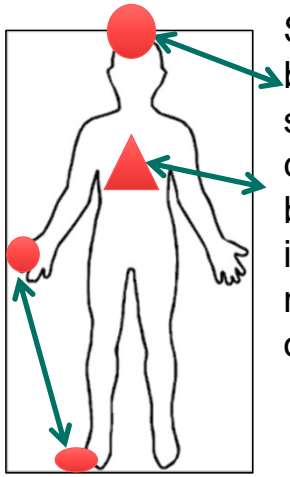
Restore 2


Support carers to recognise physical signs of deterioration
Early Detection
Provide a standardised assessment tool and a common language across healthcare
Enable staff to communicate effectively with multiple healthcare professionals when escalating concerns and obtain the correct response
Timeliness of response
Competence of clinical response

Restore 2

Signs of deterioration provide relevant prompts for staff and an entry point into NEWS2 observations

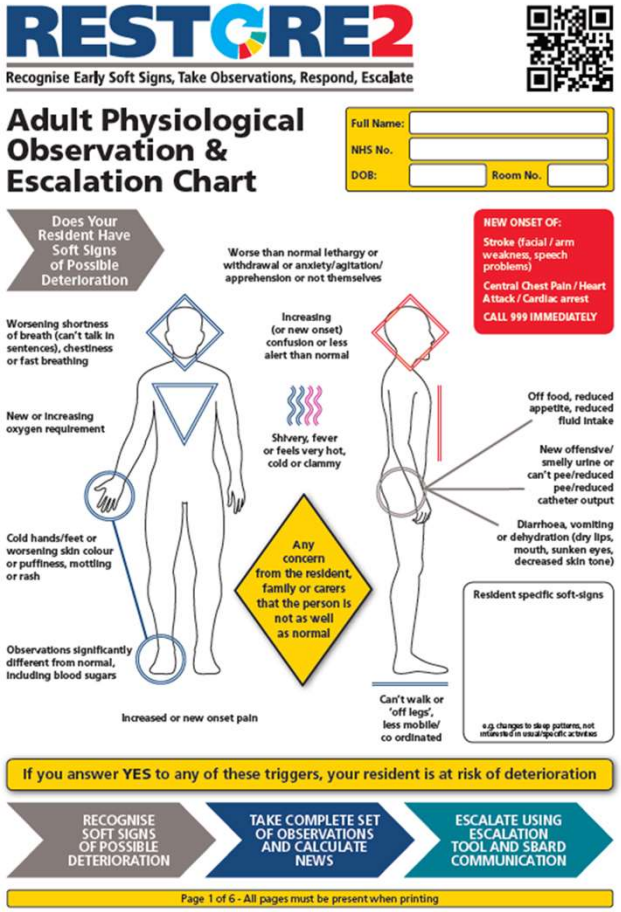
Does your resident have signs/ symptoms?



Shortness of breath, can't talk in sentences, chestiness/ rapid breathing, new or increasing requirement for oxygen

Cold hands/ feet, change in skin colour, puffiness, mottling or rash. Definitive change in clinical observations

Restore 2



RESTORE2

Recognise Early Soft Signs, Take Observations, Respond, Escalate

Adult Physiological Observation & Escalation Chart

Full Name:
NHS No.
DOB: Room No.

Does Your Resident Have Soft Signs of Possible Deterioration

NEW ONSET OF:
Stroke (facial / arm weakness, speech problems)
Central Chest Pain / Heart Attack / Cardiac arrest
CALL 999 IMMEDIATELY

Worse than normal lethargy or withdrawal or anxiety/agitation/ apprehension or not themselves

Worsening shortness of breath (can't talk in sentences), chestiness or fast breathing

Increasing (or new onset) confusion or less alert than normal

New or increasing oxygen requirement

Shivery, fever or feels very hot, cold or clammy

Off food, reduced appetite, reduced fluid intake

New offensive/ smelly urine or can't pee/reduced pee/reduced catheter output

Diarrhoea, vomiting or dehydration (dry lips, mouth, sunken eyes, decreased skin tone)

Cold hands/feet or worsening skin colour or puffiness, mottling or rash

Any concern from the resident, family or carers that the person is not as well as normal

Resident specific soft-signs

Observations significantly different from normal, including blood sugars

Increased or new onset pain

Can't walk or 'off legs', less mobile/ co ordinated

e.g. changes to sleep patterns, not interested in usual/specific activities

If you answer **YES** to any of these triggers, your resident is at risk of deterioration

RECOGNISE SOFT SIGNS OF POSSIBLE DETERIORATION → TAKE COMPLETE SET OF OBSERVATIONS AND CALCULATE NEWS → ESCALATE USING ESCALATION TOOL AND SBARD COMMUNICATION

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Restore 2

Full Name: _____ **NHS No.** _____

How to use RESTORE2

RESTORE2 which includes the National Early Warning Score (NEWS2) promotes a standardised response to the assessment and management of unwell residents. It is not a replacement for clinical judgement and should always be used with reference to the persons carefescalated plan and any agreed limits of treatment. If you are concerned about the resident or if one observation has changed significantly ALWAYS ACT ON YOUR CONCERNS AND SEEK ADVICE from a competent clinical decision maker e.g. GP, Registered Nurse or AHP.

- This chart uses aggregated (total) NEWS - it is important that you understand the residents normal NEWS (the score when they are stable and as well as usual) to support appropriate escalation. You should try and establish what is normal for residents on admission with a member of the multi-disciplinary team (e.g. General Practitioner, frailty practitioner).
- **Only a Medical Professional can authorise use of the hypercapnic respiratory failure scale for residents who normally have low oxygen levels as part of a diagnosed condition (e.g. COPD)**
- Use this chart for all your routine observations as per your local policy. If your resident shows ANY of the soft signs of deterioration, record their observations and NEWS immediately on the chart and follow the escalation tool as appropriate, using SBARD to communicate
- There may be a need to re-consider what is normal for the resident following any sustained improvement in their condition or non-acute deterioration.

What's normal for this resident

Print name: Date: Signature:

What is the resident normally like? What observations and NEWS are reasonable and safe for them? When would their GP want you to call them? What escalation has been agreed with the resident (or their advocate)?

End of Life (EOL) or Agreed Limit of Treatment

- All residents should have had the opportunity to discuss their end of life preferences in advance of any crisis
- RESTORE2 must be used in conjunction with the expressed wishes of the resident e.g. treatment escalation plans or advanced care plans.
- RESTORE2 can be used in residents with an agreed limit of treatment (e.g. not for hospital admission, not for resuscitation or not for intravenous antibiotics) to identify recoverable deterioration amenable to treatment. It is also useful for anticipating end of life to inform conversations with residents and their relatives - once the resident is on an EOL care pathway, RESTORE2 should be discontinued.

NEWS2 Escalation (get the right help early)

	Suggested Actions (always consider the resident's total NEWS2 in relation to their normal reference score)	Observations
0	Observe – likely stable enough to remain at home Escalate if any clinical concerns / gut feeling	**At least 12 hourly until no concerns**
1	Immediate senior staff review, escalate if concerned. Repeat observations within 6 hours. If next observations remain elevated with no obvious cause arrange for GP review suggested within 24 hours. If NEWS is worsening, move to appropriate escalation point.	**At least 6 hourly**
2	Immediate senior staff review, if no improvement in NEWS (or the same) **within 2 hours**, seek GP telephone assessment within 2 hours +/- GP review within 6 hours. If NEWS is worsening, move to appropriate escalation point.	**At least 2 hourly**
3-4 (Single Observation 3)	Repeat observations within **30 minutes**. If **observations – NEWS +3 or more**, seek urgent GP telephone or face to face review within 2 hours. If NEWS is worsening, move to appropriate escalation point.	**At least every 30 minutes**
5-6	Immediate clinical review/advice required. Refer to GP using surgery bypass number or use NHS 111 to contact out of hours. Urgent transfer to hospital within 1 hour may be required.	**Every 15 minutes**
7+	Admission to hospital should be in line with any appropriate, agreed and documented plan of care. Blue light 999 call with transfer to hospital (15 minutes), follow guidance of call handler	**Continuous monitoring until transfer**

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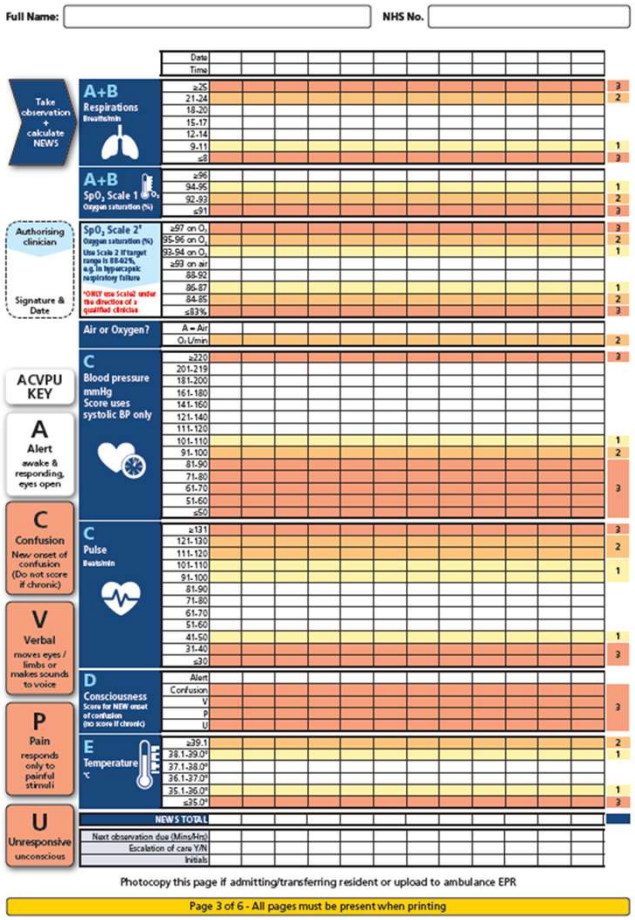
Restore 2


Full Name:
NHS No.
Date
Time
Take observation + calculate NEWS
A+B
Respirations
Breaths/min
≥25
21-24
18-20
15-17
12-14
9-11
≤8
A+B
SpO2 Scale 1
Oxygen saturation (%)
≥96
94-95
92-93
≤91
Authorising clinician
Signature & Date
SpO2 Scale 2*
Oxygen saturation (%)
Use Scale 2 if target range is 88-92%, e.g. in hypercapnic respiratory failure
*ONLY use Scale2 under the direction of a qualified clinician
≥97 on O2
95-96 on O2
93-94 on O2
≥93 on air
88-92
86-87
84-85
≤83%
Air or Oxygen?
A = Air
O2 L/min
ACVPU KEY
A Alert awake & responding, eyes open
C Confusion New onset of confusion (Do not score if chronic)
V Verbal moves eyes / limbs or makes sounds to voice
P Pain responds only to painful stimuli
U Unresponsive unconscious
C
Blood pressure mmHg
Score uses systolic BP only
≥220
201-219
181-200
161-180
141-160
121-140
111-120
101-110
91-100
81-90
71-80
61-70
51-60
≤50
C
Pulse
Beats/min
≥131
121-130
111-120
101-110
91-100
81-90
71-80
61-70
51-60
41-50
31-40
≤30
D
Consciousness
Score for NEW onset of confusion (no score if chronic)
Alert
Confusion
V
P
U
E
Temperature °C
≥39.1
38.1-39.0°
37.1-38.0°
36.1-37.0°
35.1-36.0°
≤35.0°
NEWS TOTAL
Next observation due (Mins/Hrs)
Escalation of care Y/N
Initials
Photocopy this page if admitting/transferring resident or upload to ambulance EPR
Page 3 of 6 - All pages must be present when printing

Restore 2

SBARD Escalation Tool and Action Tracker
(get your message across)

REMEMBER TO SAY: The residents TOTAL NEWS SCORE is...

Name:

NHS No.

		Notes (Date, Time, Who)	
S	**Situation** (briefly describe the current situation and give a clear, concise overview of relevant issues) (Provide address, direct line contact number) I am... from... (say if you are a registered professional) I am calling about resident... (Name, DOB) **The residents TOTAL NEWS SCORE is...** **Their normal NEWS/condition is...** I am calling because I am concerned that... (e.g. BP is low, pulse is XX, temp is XX, patient is more confused or drowsy)		
B	**Background** (briefly state the relevant history and what got you to this point) Resident XX has the following medical conditions... The resident does/does not have a care plan or DNACPR form / agreed care plan with a limit on treatment/hospital admission They have had... (GP review/investigation/medication e.g. antibiotics recently) Resident XX's condition has changed in the last XX hours The last set of observations was... Their normal condition is... The resident is on the following medications...		
A	**Assessment** (summarise the facts and give your best assessment on what is happening) I think the problem is XX And I have... (e.g. given pain relief, medication, sat the patient up etc.) **OR** I am not sure what the problem is but the resident is deteriorating **OR** I don't know what's wrong but I am really worried		
R -- D	**Recommendation** (what actions are you asking for? What do you want to happen next?) I need you to... Come and see the resident in the next XX hours **AND** Is there anything I need to do in the meantime? (e.g. repeat observations, give analgesia, escalate to emergency services) **Decision** (what have you agreed) We have agreed you will visit/call in the next XX hours, and in the meantime I will do XX If there is no improvement within XX, I will take XX action.	**Actions I have been asked to take** (initial & time when actions completed)	Initials

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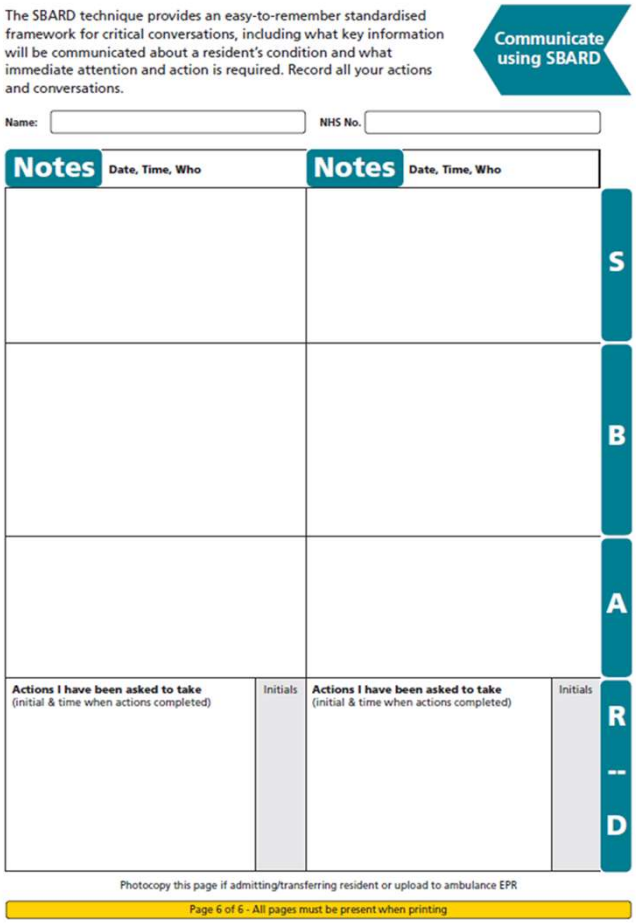
Restore 2



The SBARD technique provides an easy-to-remember standardised framework for critical conversations, including what key information will be communicated about a resident's condition and what immediate attention and action is required. Record all your actions and conversations.

Communicate using SBARD

Name: NHS No.

Notes	Date, Time, Who	Notes	Date, Time, Who	
				S
				B
				A
Actions I have been asked to take (initial & time when actions completed)	Initials	**Actions I have been asked to take** (initial & time when actions completed)	Initials	R -- D

Photocopy this page if admitting/transferring resident or upload to ambulance EPR

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Hertfordshire and West Essex Integrated Care System

SBAR tool - to support you to structure your conversations when discussing your residents with professional colleagues

S	**SITUATION** • Your name and Care home name • Name of patient , age, DOB • What is the concern, what has happened? Describe symptoms which are different than normal. Does the patient have capacity to tell you what is wrong?	**Examples of symptoms you might describe:** • Falls – are there injuries? • Confused, disorientated, dizzy, unsteady • Drowsy or hard to rouse • Hot / flushed /sweating. Cold / clammy / shivering / pale • Breathing harder or faster, slower or shallower • Complaining of pain, grimacing, posture indicating pain if unable to communicate - describe where pain is • Weakness in legs or arms / facial differences • Coughing / bringing up phlegm / wheezing • Vomiting / nausea - how long for • Change in urinary continence / Smelly urine, blocked or problem with catheter • Change in bowel habit /Diarrhoea • Not eating or drinking / loss of appetite • Bleeding from what area?
B	**BACKGROUND** • How long have symptoms been present? • Did they come on suddenly? • Does the person have any other long term illness? • Have they already been seen by the GP for this change? If so was any medications started? What instructions were given to the home? • Have you got a list of their current medication? • Has the patient recently been into hospital? If so what for? • Does the patient have a current DNAR in place? If yes be clear why you are ringing	
A	**ASSESSMENT** • What actions have you already taken? Is the patient in a safe place? • Has the person lost consciousness? Be very clear is it a true loss of consciousness? If yes how long for in minutes. • Are there any obvious signs of injury or bleeding?	**Examples of assessment actions you might describe:** • First aid options used /Recovery position • Pressure on bleeding area • BP, Pulse, respiration rate, temperature, urine analysis - give results
R	**RECOMMENDATION** • Explain what you need - be specific about the request and timeframe • Make suggestions i.e. ECP or Dr or advice only • Clarify expectations **Note: an ambulance can take from 9 – 60 minutes depending on urgency**	**Examples of recommendations you might describe:** • Review by GP urgently • Ambulance • Call back from Clinical Advisor • Clarify what is happening as a result of call – when you can expect a visit or ambulance

SBAR COMMUNICATION TOOL- AIDE MEMOIRE

FINAL

If an ambulance is sent these are suggestions of what do whilst waiting for the ambulance to arrive?

Reassure the resident and stay with them, continue to monitor for signs of deterioration which may mean a further call to the service. Ask another staff member to follow the check list. Do you need an escort? Do you need to ask senior management to attend the home?

In no particular order:-

1. Inform relatives.

2. Prepare the RED BAG; Photocopy medication charts and bag all medication. Is there any in the fridge, room or cupboards?

3. Photocopy main care plan details or grab sheet making sure the details are up to date. Especially where you have allergies or special instructions around other medical conditions. Include copy of DNAR form. Is there any special information which may help staff to communicate or deliver care for the resident, (i.e. strategies to adopt when the patient is anxious especially with dementia residents)? Are there any triggers which are not recorded?

4. Prepare an overnight bag for the resident. Remember to take items that may offer reassurance. Maintaining the residents' dignity is paramount so having their own belongings may help.

SBAR link to assist in e-learning

SBAR Communication in Care Homes - e-Learning for Healthcare (e-lfh.org.uk)