

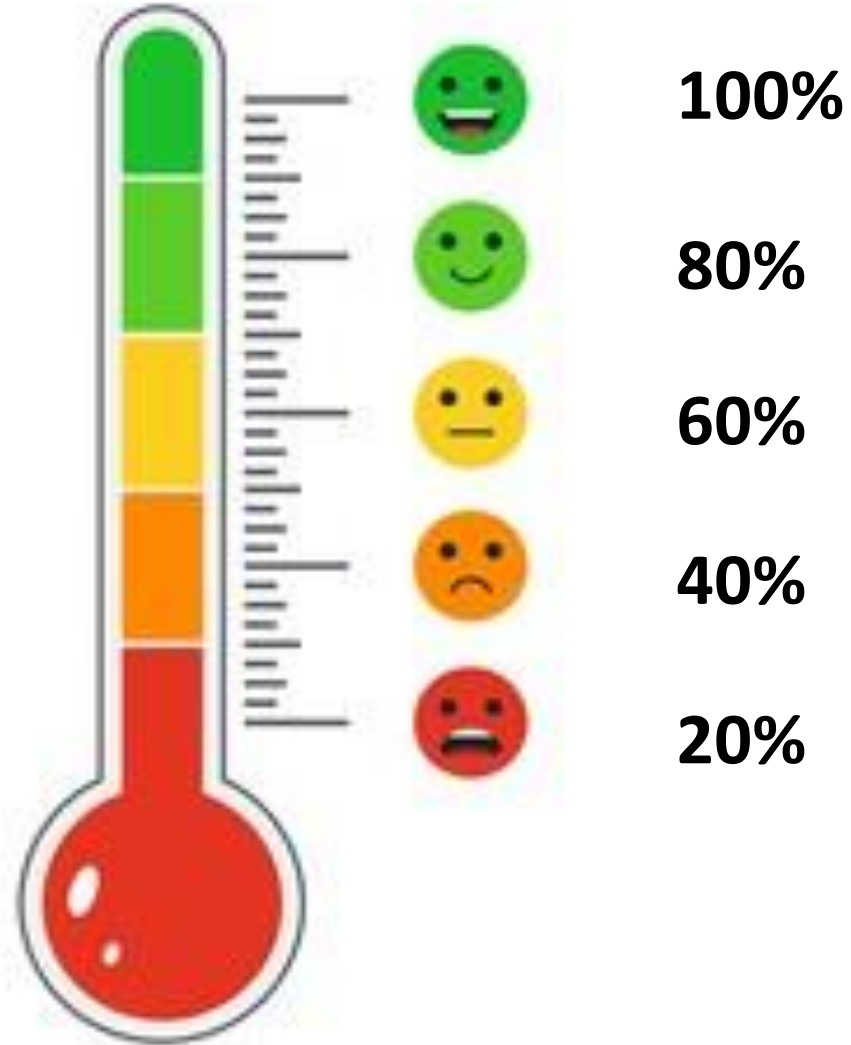
Whzan training



Please give us your feedback!!
Pre-Training Survey

<https://www.surveymonkey.com/r/QDF5F53>





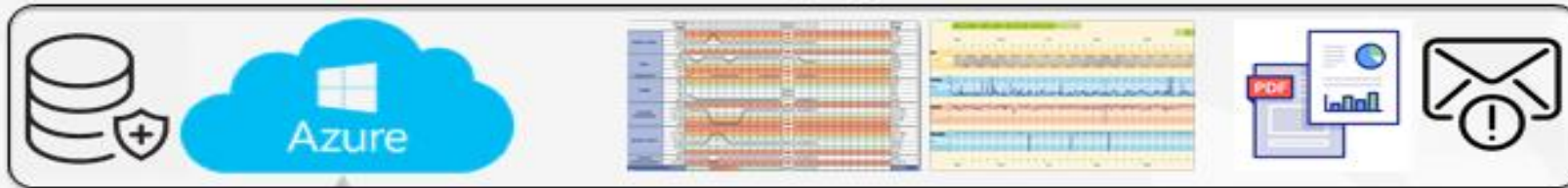
Today you will learn to...

- Identify and record the soft signs of deterioration
- Explain the reasons for taking the basic observations
- Competently take and record the 6 basic observations using the Whzan blue box
- Explain of the normal and abnormal ranges for each of these observations
- Explain what the NEWS2 score is and how to use it in practice
- Describe how to look after the blue box

What is Whzan Digital Health?



Whzan Triaging Clinical Portal



Whzan Tablet

Tools and Assessments



Photos



Bluetooth instrument selection



What are the benefits?



Takes observations: blood pressure, temperature, blood oxygen, pulse, respirations and level of consciousness



Calculates NEWS2 scores



Early detection of deterioration and early treatment



Secure photo sharing



GP, MDT and 111: real time access to patient data

Sustainability

- Sustainability means designing and delivering health and social care to ensure that resources are used in ways that don't prejudice the future generations health and wellbeing. As well as financial and social elements, there is increasing urgency to improve environmental sustainability if we are to achieve the NHS goal to be net zero carbon.
- Sustainable technologies such as telehealth and telecare are growing rapidly globally. These strategies have the potential to improve health outcomes, the quality of care and make obvious savings such as with fewer journeys and admissions to hospital
- Whzan is one such technology and its ability to identify early deterioration in residents means they are only going to hospital when really needed. Initial evaluative data of its roll out in care homes in NCL supports this, and highlights cost savings from zero increases in non-elective admissions to hospital, less call outs to the LAS and a reduction in A/E attendances
- Under the environmental sustainability lens these technologies offer huge potential to reduce the carbon footprint of health and social care and are also one of the major NHS initiatives to become net zero carbon.



Whzan in action



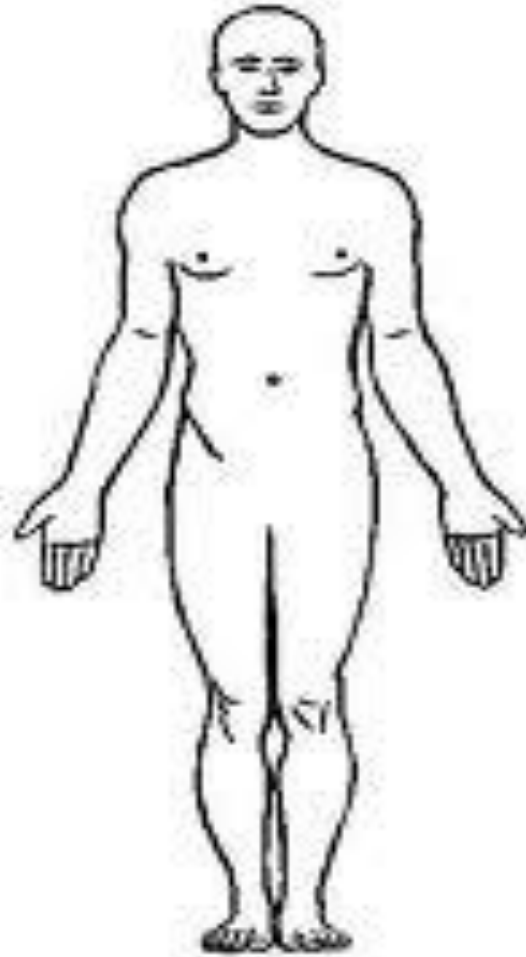
Soft Signs of deterioration

- Carers familiar with resident's usual behaviour and habits can intuitively recognise that the resident "just isn't themselves".
- Use soft signs of deterioration to compare what is usual for your resident with things like eating, bowel or bladder habits or mobility with what you are seeing in front of you



Confusion
Distress
Tired
Withdrawn
Angry
No patience
Moody
hallucinations

Loss of Mobility
Not able to walk as usual
Unsteady
Refuse to get up from bed
Fall
Need to take frequent rests

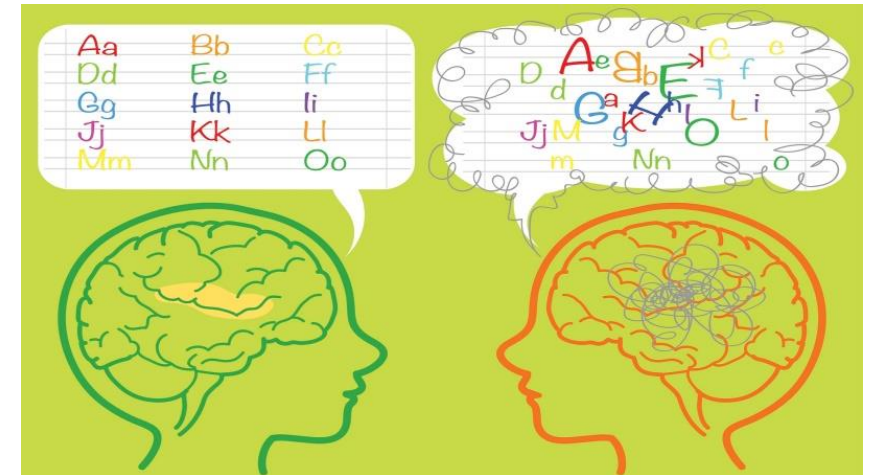


Skin
Dry
Bruises
Wounds
Skin tear
Oozing
swelling

Diarrhoea
Smell changes
Colour changes
Constipation
Sick
Reduced appetite

Special considerations with learning disabilities

- Recognising deterioration in residents with learning disabilities can be challenging due to:
- Lack of ability to recognise signs and symptoms
- Barriers to communication
- Subtle soft signs or non-specific soft signs of deterioration
- Lack of adherence to interventions/ examinations
- Prone to infections, constipation and pressure sores
- May be on medications with potential for side effects.



Special considerations with mental health

- Recognising deterioration in residents with mental health conditions can be challenging due to:
 1. Lack of ability to recognise signs and symptoms
 2. Barriers to communication
 3. Patient may be confused/ have hallucinations as baseline
 4. Uncertainty whether it is a deterioration in mental health condition or a physical problem
 5. Lack of adherence to interventions/ examinations, fluctuating baseline



Why do we take clinical observations?

- A set of clinical observations can give many indications of general deterioration e.g. signs of infection
- To establish what is the baseline range for the resident when they are well. Baseline observations should be recorded every 28 days.
- Underlying conditions that have not yet been diagnosed
- Observations are really helpful for a clinician assessing a patient, especially via phone or video call.

What is a blood pressure

- Blood pressure is a measure of the force that the heart uses to pump blood around the body.
- There are 2 readings:
 - Systolic - pressure when the heart pumps
 - Diastolic - pressure when the heart relaxes
- They are written as systolic/diastolic e.g. 140/80 mmHg
- The units of measurement are mmHg (stands for millimetres of mercury)



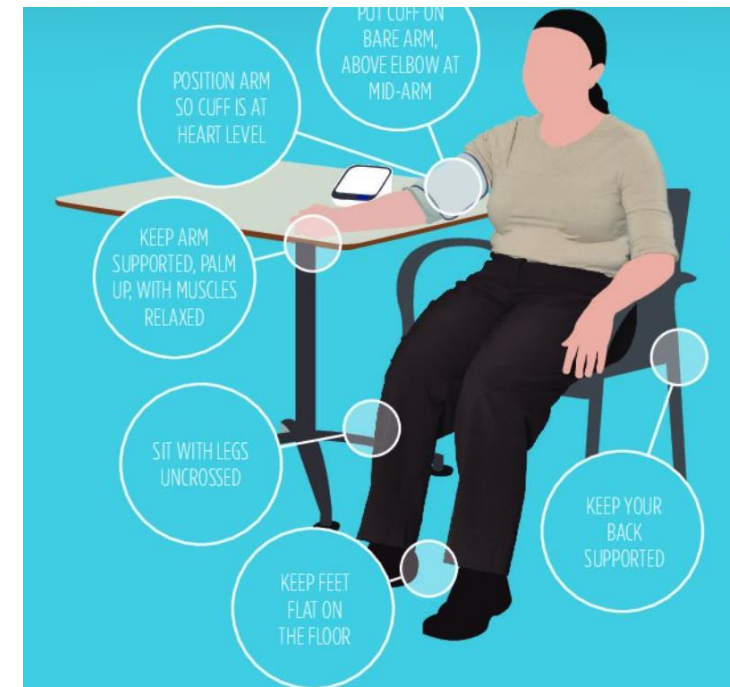
What is a normal or abnormal blood pressure

- **Normal blood pressure** is considered to be between **90/60mmHg** and **140/90mmHg**
- High blood pressure is considered to be 140/90mmHg or higher (**150/90mmHg or higher if you're over the age of 80**)
- Low blood pressure is a reading of 90/60mmHg or less. It does not always cause symptoms.
- It is a common problem in older residents and an important cause of falls.

Top
Tips

When taking the blood pressure...

- Make sure the person is relaxed
- Make sure the person is not talking/coughing
- Make sure the legs are uncrossed
- Explain that it will get tight for a few seconds and then it will release



Use of Pulse Oximetry

- A pulse oximeter helps you monitor the level of oxygen in your blood and how fast your heart is beating.
- It is known as an oxygen saturation or how much is the blood “saturated” or filled with oxygen.
- An ideal blood oxygen level is between **95% and 100%** (values **under 92% are considered low**)
- However residents with underlying conditions such as COPD and heart failure may have lower readings and would have a plan of care to follow



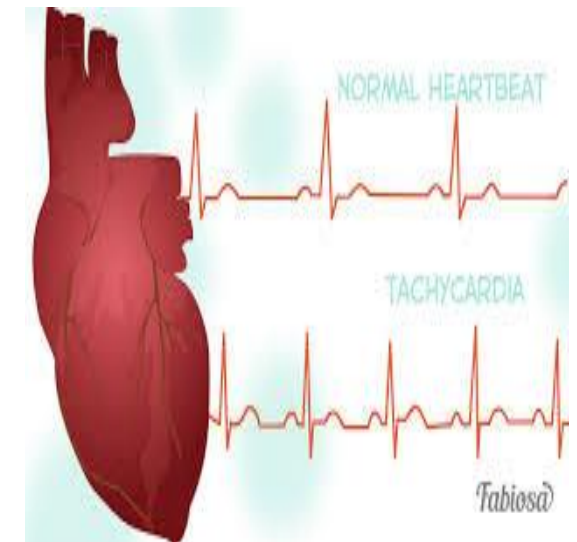


When measuring the blood oxygen...

- Make sure the person's hands are warm
- Make sure the person doesn't wear nail varnish or fake nails
- Make sure the person is sitting straight up
- You can try different fingers to get a better reading

Heart rate or pulse

- The Heart Rate or Pulse is the number of times the heart beats in a minute.
- Most normal resting pulse readings will be between **60 and 100 beats per minute**
- **Tachycardia** refers to a **fast resting heart rate**, usually over 100 beats per minute
- A **resting heart rate** of fewer than 60 beats per minute qualifies as **Bradycardia** but there will be exceptions



Temperature

- A normal temperature range can be between **36.0 -37.5°C** but this can be different for everyone and fluctuate throughout the day.
- A temperature of **38°C or more** is usually considered a high temperature (fever).
- Having a body temperature of **34.8 - 35°C is low and not considered normal**. This temperature indicates likely suffering from hypothermia and should quickly seek medical help.





When measuring the temperature...

- Explain that the temperature will be measured in the ear
- Make sure the tip of the thermometer is fully inside the ear before taking the reading.
- Do not apply any force when inserting the thermometer as it can be painful

Respiratory rate

- A respiratory rate is the number of breaths you take each minute
- 1x Inhale and exhale =1 breath
- The normal range is between 12 – 20 bpm
- The rate should be measured at rest, not after someone has been up and walking about.



Respiratory rate





When measuring the respiratory rate...

- Do not tell the person you are measuring the respiratory rate
- Make sure the person is sitting up straight and relaxed.
- Explain that they can't talk for a minute while you take the measurement
- Only count each time the chest rises

Level of consciousness

- The level of consciousness assesses a person's wakefulness and awareness of his/her surroundings.
- When assessing the level of consciousness you need to determine if your resident is:
 - Alert
 - Confused
 - Responsive only to voice
 - Responsive only to pain
 - Unconscious
- **New confusion** needs to be closely monitored as it can be a sign of deterioration.



What is a NEWS2 Score?



How do you get a NEWS2 score?

| NEWS key | FULL NAME | | DATE OF BIRTH | | DATE OF ADMISSION | | | | | | | | | | | |
|--|-------------------------|---|---------------|---|-------------------|------|---|---|--|-------|-------------------------|---------|---------|--------------|------------------------|------------------------|
| | 0 | 1 | 2 | 3 | | | | | | | | | | | | |
| | DATE | | | | | DATE | | | | | | | | | | |
| | TIME | | | | | TIME | | | | | | | | | | |
| A+B Respirations <i>Breathbeats</i> | ≥25 | | | | | 3 | | | | ≥25 | | | | | | |
| | 21-24 | | | | | | 2 | | | 21-24 | | | | | | |
| | 18-20 | | | | | | | | | 18-20 | | | | | | |
| | 15-17 | | | | | | | | | 15-17 | | | | | | |
| | 12-14 | | | | | | | | | 12-14 | | | | | | |
| | 9-11 | | | | | | | 1 | | 9-11 | | | | | | |
| | ≤8 | | | | | | | | | 3 | | | | | | |
| A+B SpO ₂ Scale 1 <i>Oxygen saturation (%)</i> | ≥96 | | | | | | | | | ≥96 | | | | | | |
| | 94-95 | | | | | | | | | 94-95 | | | | | | |
| | 92-93 | | | | | | | | | 92-93 | | | | | | |
| | ≥91 | | | | | | | | | 3 | | | | | | |
| SpO₂ Scale 2¹ <i>Oxygen saturation (%)</i> Use Scale 2 if target range is 95-97%, eg in hypoxic respiratory failure <small>¹ONLY use Scale 2 under the direction of a qualified clinician</small> | ≥97 on O ₂ | | | | | | | | | 3 | ≥97 on O ₂ | | | | | |
| | 95-96 on O ₂ | | | | | | | | | 2 | 95-96 on O ₂ | | | | | |
| | 93-94 on O ₂ | | | | | | | | | 1 | 93-94 on O ₂ | | | | | |
| | ≥93 on AIR | | | | | | | | | | ≥93 on AIR | | | | | |
| | 88-92 | | | | | | | | | | 88-92 | | | | | |
| | 86-87 | | | | | | | | | | 1 | 86-87 | | | | |
| | 84-85 | | | | | | | | | | 2 | 84-85 | | | | |
| ≤83% | | | | | | | | | | 3 | ≤83% | | | | | |
| Air or oxygen? | A=Air | | | | | | | | | | A=Air | | | | | |
| | O ₂ L/min | | | | | | | | | | O ₂ L/min | | | | | |
| | Device | | | | | | | | | | 2 | Device | | | | |
| C Blood pressure <i>mmHg</i> Score uses systolic BP only | ≥220 | | | | | | | | | | 3 | ≥220 | | | | |
| | 201-219 | | | | | | | | | | | 201-219 | | | | |
| | 181-200 | | | | | | | | | | | 181-200 | | | | |
| | 161-180 | | | | | | | | | | | 161-180 | | | | |
| | 141-160 | | | | | | | | | | | 141-160 | | | | |
| | 121-140 | | | | | | | | | | | 121-140 | | | | |
| | 111-120 | | | | | | | | | | | 111-120 | | | | |
| | 101-110 | | | | | | | | | | | 1 | 101-110 | | | |
| | 91-100 | | | | | | | | | | | 2 | 91-100 | | | |
| | 81-90 | | | | | | | | | | | | 81-90 | | | |
| | 71-80 | | | | | | | | | | | | 3 | 71-80 | | |
| 61-70 | | | | | | | | | | | | 61-70 | | | | |
| 51-60 | | | | | | | | | | | | 51-60 | | | | |
| ≤50 | | | | | | | | | | | | 3 | ≤50 | | | |
| C Pulse <i>Beats/min</i> | ≥131 | | | | | | | | | | | 3 | ≥131 | | | |
| | 121-130 | | | | | | | | | | | | 2 | 121-130 | | |
| | 111-120 | | | | | | | | | | | | | 111-120 | | |
| | 101-110 | | | | | | | | | | | | | 101-110 | | |
| | 91-100 | | | | | | | | | | | | | 91-100 | | |
| | 81-90 | | | | | | | | | | | | | 81-90 | | |
| | 71-80 | | | | | | | | | | | | | 71-80 | | |
| | 61-70 | | | | | | | | | | | | | 61-70 | | |
| | 51-60 | | | | | | | | | | | | | 51-60 | | |
| | 41-50 | | | | | | | | | | | | | 1 | 41-50 | |
| 31-40 | | | | | | | | | | | | | | 3 | 31-40 | |
| ≤30 | | | | | | | | | | | | | | 3 | ≤30 | |
| D Consciousness <i>Scores for NEWS</i> <i>Alert or confusion</i> <i>(No score if chronic)</i> | Alert | | | | | | | | | | | | | Alert | | |
| | Confusion | | | | | | | | | | | | | Confusion | | |
| | V | | | | | | | | | | | | | V | | |
| | P | | | | | | | | | | | | | P | | |
| | U | | | | | | | | | | | | | U | | |
| E Temperature <i>°C</i> | ≥39.1 ¹ | | | | | | | | | | | | | 2 | ≥39.1 ¹ | |
| | 38.1-39.0 ¹ | | | | | | | | | | | | | 1 | 38.1-39.0 ¹ | |
| | 37.1-38.0 ¹ | | | | | | | | | | | | | | 37.1-38.0 ¹ | |
| | 36.1-37.0 ¹ | | | | | | | | | | | | | | 1 | 36.1-37.0 ¹ |
| | 35.1-36.0 ¹ | | | | | | | | | | | | | | 1 | 35.1-36.0 ¹ |
| ≤35.0 ¹ | | | | | | | | | | | | | | 3 | ≤35.0 ¹ | |
| NEWS TOTAL | | | | | | | | | | | | | | TOTAL | | |
| Monitoring frequency | | | | | | | | | | | | | | Monitoring | | |
| Escalation of care Y/N | | | | | | | | | | | | | | Escalation | | |
| Initials | | | | | | | | | | | | | | Initials | | |

NEWS2 Category and Response

| NEWS Reading | NEWS Category | Pragmatic Community Response |
|--------------|---------------|---|
| 0 - 2 | LOW | Monitoring within the care home setting |
| 3 - 4 | INTERMEDIATE | Discussion with external healthcare professional |
| 5 - 6 | HIGH | Urgent response from external healthcare professional |
| ≥ 7 | CRITICAL | Emergency response e.g. call ambulance * |

NEWS2 Escalation Guidance for Care Homes - Barnet



Please note **NEWS2 should not be used alone to determine a clinical response**. It can be used to support further assessment of residents who staff are concerned about (such as those showing soft signs of deterioration) along with aiding decision making and effective clinical handover.

When deciding next steps always consider:

- 1) The resident's baseline NEWS2 score (is this normal for them or a change in NEWS2?)
- 2) Their care plan and long term conditions (including any advanced care plan)
- 3) Your intuitive feeling

| NEWS2 SCORE | SUGGESTED ACTIONS (always consider the resident's normal NEWS2 score and compare their current score to this) | OBSERVATIONS |
|-------------|--|--------------------------------------|
| 0 | Observe - likely stable enough to remain at home Escalate if any concerns/gut feeling/soft signs of deterioration, can discuss with One Care Home Team | 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/Rapid Response/One Care Home Team review within 24 hours If NEWS2 worsening, move to appropriate escalation point | At least 6 hourly |
| 2 | Immediate senior staff review. If no improvement in NEWS2 (or the same) within 2 hours seek GP/Rapid Response/One Care Home Team/111*6 telephone advice within 2 hours +/- review within 6 hours. If NEWS2 is worsening, move to appropriate escalation point | At least 2 hourly |

| | | |
|--|---|--------------------------------------|
| 3 - 4 or Single observation 3 | Repeat observations within 30 minutes If repeat observations = NEWS2 score 3 or more , seek urgent GP/Rapid Response/One Care Home Team/111*6 telephone advice or face to face review within 2 hours. If NEWS2 is worsening, move to appropriate escalation point | At least every 30 minutes |
| 5 - 6 | Immediate clinical review/advice required. Refer to GP/One Care Home Team/111*6. Urgent transfer to hospital may be needed - be prepared Admission to hospital should be in line with any appropriate, agreed and documented plan care plan | Every 15 minutes |
| 7+ | Blue light 999 call with transfer to hospital, follow guidance of call handler | Continuous monitoring until transfer |

Adapted from RESTORE2. NCL CCG, January 2021, review January 2022

Contact details if escalation/support for enacting advanced care plan required

| Service | How to contact | Operating hours/days |
|---|---|--|
| Rapid Response | 0300 020 0655 (press option 2 when prompted) | 8am-8pm, 7 days a week |
| One Care Home Team | 07909535425 | 8am-4pm, Mon-Fri Telephone advice 4pm-8pm Mon-Fri |
| 111*6 | Dial 111, press 9 when prompted | 24hrs a day, 7 days a week |
| Palliative care (First Contact Centre - North London Hospice) | 020 8343 8841 | 24hrs a day, 7 days a week |

Insert GP/s details here (name of practice/s, phone number/s, opening hours)



How to look after the BLUE BOX

- **Keep the blue box charging at all times after each use.** Make sure you plug in the internal cable to the tablet
- If the **tablet's battery is below 30% then it will impact Bluetooth** communication between equipment and tablet
- Remember that only the tablet charges and the other instruments use batteries
- If equipment is not working or very slow check and change the battery as needed or turn the equipment off and on



How to look after the BLUE BOX

- **Do not exchange equipment between boxes**– each tablet is paired with one BP machine, one pulse oximeter and one thermometer
- Follow the cleaning guidelines as per Whzan kit care document – clenell wipes are suitable to use
- **Allocate a safe space for the blue box**
- **Allocate a space to keep spare equipment** like thermometer covers or spare batteries
- **Infection prevention control:** Remember to clean the equipment after each service user and weekly cleaning of the whole box
- You **do not need to wear PPE to take observations** unless the person is isolated or there is a risk of contact with bodily fluids

How to look after the BLUE BOX

If you need technical support, your first line contact is Whzan. If Whzan are not responding or you can't get the kit fixed, contact your nurse educator

Whzan Support number: [+44 \(0\)1983 817000](tel:+44201983817000)

Or email at support@whzan.com

How do I get my login?

To get your login, please speak to your manager.

Your login will be your personal email address and a password of your choice.

You will NOT receive any emails from Whzan to your personal email address.



Please sign in

Username

Password
[Show password](#)

[Forgot my password](#)



- 1.** What are the soft signs of deterioration for a resident?
 - A.** early changes in the usual behaviour or habits of a resident where the carer recognises that they are just not themselves
 - B.** the hard physiological signs of deterioration(e.g. low blood pressure) in a resident
 - C.** the main causes of the deterioration in a resident



- 2.** Which of the following are examples of soft signs of deterioration in a resident? (may be more than one)
- A.** Need to take more rests than normal when mobilising around the care home
 - B.** Not wanting to get out of bed and have a shower when their usual pattern is to shower daily
 - C.** Feeling off their food when they usually have a good appetite
 - D.** Having high temperature and low blood pressure



- 3.** What actions would you take if a resident was showing any soft signs of deterioration?
- A.** Continue to keep an eye on the resident and report if you feel these signs are getting worse
 - B.** Document your concerns in the resident's notes at the end of your shift
 - C.** Immediately report your concerns to the staff member in charge or follow your workplace escalation pathway if there is one



- 4.** Which of the following is a reason for taking vital signs using the Whzan blue box? (may be more than one of these)
- A.** They can give many indications of deterioration in the resident
 - B.** Are helpful for a clinician when assessing a resident
 - C.** To establish the resident's baseline vital signs
 - D.** So that the carer can have practice in taking vital observations



- 5.** You are taking the vital signs for a resident as you are concerned that they just don't seem to be their normal self. Which answer is abnormal and needs to be reported to the staff member in charge?
- A.** A temperature of 38°C and a heart rate of 110 beats per minute
 - B.** A blood pressure of 134/82 mmHg
 - C.** An oxygen saturation of 97%
 - D.** A respiratory rate of 15 breaths per minute



6. You are taking the baseline vital signs for a new resident to the care home and record the following results. Which answer is abnormal and needs to be reported to the staff member in charge? (may be more than one of these)

- A. A temperature of 36.8°C and heart rate of 85 beats per minute
- B. A blood pressure of 160/100 mmHg
- C. An oxygen saturation of 93%
- D. A respiratory rate of 12 breaths per minute



7. When measuring a resident's respiratory rate which of the following statements are correct? (may be more than one of these)
- A. Let the resident know that you are about to measure their respiratory rate
 - B. When counting the respiratory rate observe the number of times the resident's chest rises and falls over one minute
 - C. Ensure the resident has been resting for at least 10 minutes and is sitting up straight
 - D. The normal respiratory rate is between 12 and 20 breaths per minute



- 8.** A part of the NEWS2 tool is assessing the level of alertness for the resident. Which of the following answers are abnormal and needs to be reported to the staff member in charge? (may be more than one of these)
- A. The resident is behaving and communicating as they normally do
 - B. You notice that the resident with Dementia is more confused than they normally are
 - C. The resident is more sleepy than normal and only responds to your voice
 - D. You go into a resident's room and find them unresponsive



9. In what ways can the NEWS2 score be used in practice?
- A. To recognise sick residents more quickly and get help earlier
 - B. Helps health care professionals to quickly understand how unwell the resident is and how soon they need to be seen
 - C. The safety of residents is improved
 - D. All of the above



- 10.** As the senior carer your responsibility is to communicate signs of deterioration to the GP or other health care professional. Based on your training how would you do this?
- A. Phone the GP and refer to your various observation charts and record notes to communicate concerns
 - B. Complete the SBAR tool (Situation, Background, Assessment and Recommendations) and use this to handover to the GP
 - C. Provide a verbal handover to the GP using your memory of what the concerns are
 - D. Fax your written concerns to the GP and wait for their response





Please give us your feedback!!

Post-Training Survey

<https://www.surveymonkey.com/r/QD55CQJ>

