National Patient Safety
Improvement Programmes

Managing Deterioration

RESTORE2

The physical deterioration and escalation tool for care/nursing homes

@NatPatSIP / @MatNeoSIP

www.improvement.nhs.uk

Delivered by:
The AHSN Network
Wessex Patient Safety Collaborative

Led by:
NHS England
NHS Improvement

Information for Presenters using this slide deck

These slides have been developed as a resource for people seeking to implement RESTORE2.

They may be used as a standalone training resource or in conjunction with the RESTORE2 “Rollout Handbook” (April 2020).

The HEE “Managing Deterioration” videos are referenced on the relevant Slides. These short 3 minute videos may be used as a teaching aid during a training session or referred to as an available resource for future use.

Important note about the Case Studies at the end – You may want to re/move the slides with the answers on if you don’t want people seeing the answers too soon!

These slides may be adapted by presenters as long as the content of the tools themselves are not amended in any way. This includes NEWS2, RESTORE2, SBARD and any other tools referred to.

Some other Care Home resources are signposted via some relevant Wessex PSC webpages. Presenters may wish to adapt the slides to point to other sites as well as, or instead of, the Wessex PSC information.

We hope you find these resources helpful to your work. Constructive feedback is always welcome to improve our materials, comments to geoff.cooper@wessexahsn.net

Wessex PSC v5 - 18/11/2020

Wessex Academic Health Science Network

Patient Safety Collaborative

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

A Patient Safety Initiative co-produced by
West Hampshire CCG & Wessex Patient Safety Collaborative

RESTORE2 the physical deterioration and escalation tool for care/nursing homes.

It is designed to support homes and health professionals to:

- Recognise when a resident may be deteriorating or at risk of physical deterioration
- Act appropriately according to the resident's care plan to protect and manage the resident
- Obtain a complete set of physical observations to inform escalation and conversations with health professionals
- Speak with the most appropriate health professional in a timely way to get the right support
- Provide a concise escalation history to health professionals to support their professional decision making.

These slides can be used in conjunction with the RESTORE2 Rollout Handbook (April 2020)

Deterioration, including Sepsis, is often recognised late, sometimes too late, and can have life changing consequences.

But what if we could identify it sooner?

or in the Care Home

at the GPs

in the Ambulance

in the Emergency Department

in hospital

and what if we all spoke the same language and could communicate our concerns better?

Soft Signs

(early indications of "unwellness")

NEWS2

(National Early Warning Score v2)

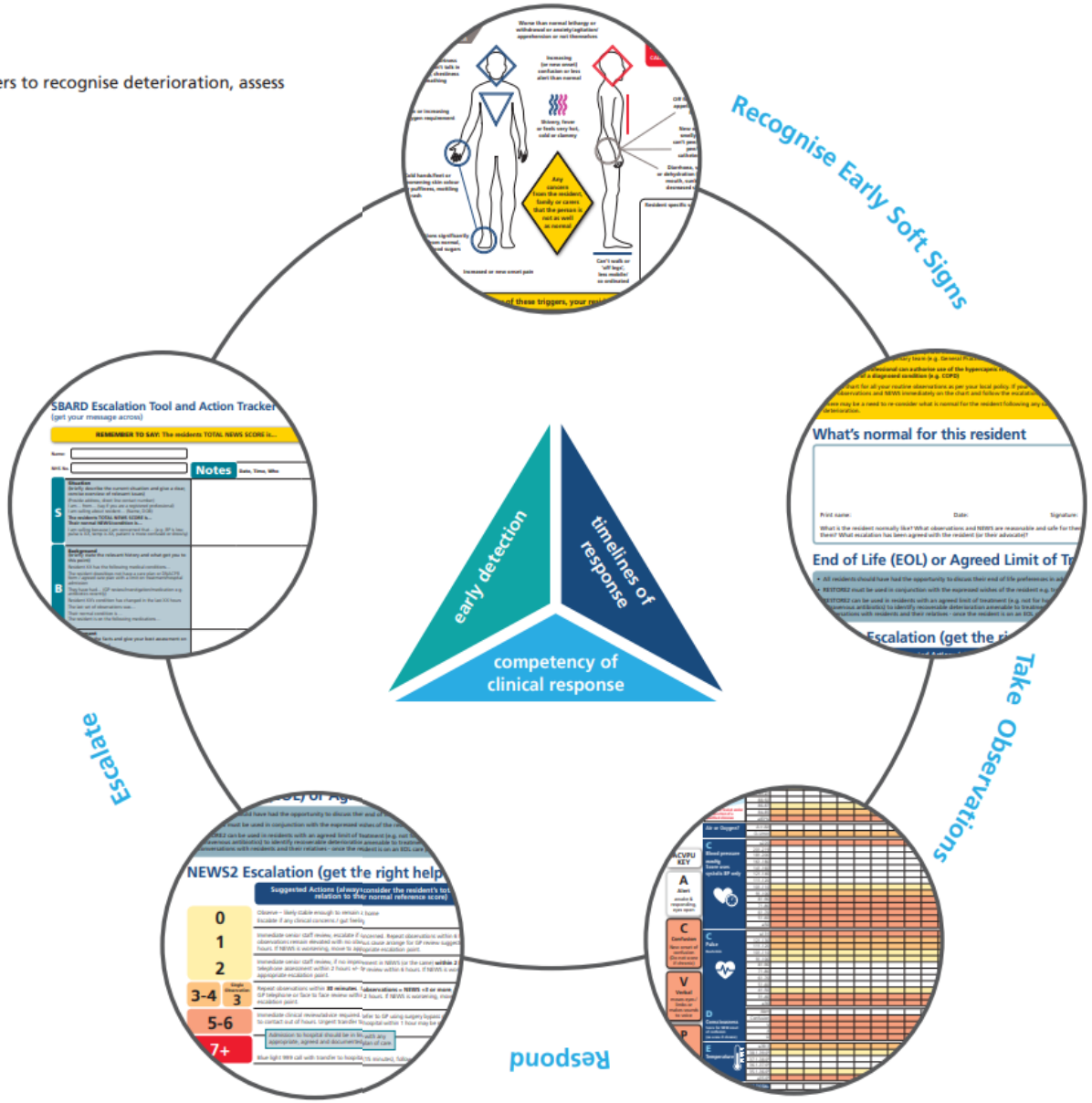
SBARD

(Situation - Background Recommendation - Decision)

How does RESTORE2™ work?

RESTORE2™ has five key components that support carers to recognise deterioration, assess the risk and act on your findings:

- The soft signs of deterioration which support carers to identify potentially unwell residents
- A 'what's normal for this resident' reference box so people understand when a residents condition has changed and what plans have been put in place to manage this. This includes their normal NEWS
- National Early Warning Score physical observation chart that provides a standardised assessment of risk and sickness
- An escalation pathway to ensure you 'get the right help'
- A structured communication tool to help you 'get your message across'



RESTORE2 has been recommended by the British Geriatric Society

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

British Geriatrics Society
Improving healthcare for older people

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Home > Resources > COVID-19: Managing the COVID-19 pandemic in care homes

SHARE

COVID-19: Managing the COVID-19 pandemic in care homes

GOOD PRACTICE GUIDE

Authors:
British Geriatrics Society

Date Published:
30 March 2020

Last updated:
30 March 2020

The COVID-19 pandemic raises particular challenges for care home residents, their families and the staff that look after them. This guidance has been developed to help care home staff and NHS staff who work with them to support residents through the pandemic.

Navigate to

- Key recommendations
- Introduction
- Identifying residents who may have COVID-19 and how to respond
- Isolating residents
- Advance care planning and escalation
- Decisions about escalation of care to hospital
- Supporting care home residents and staff
- References and resources

Key recommendations

2. Care home staff should be trained to check the temperature of residents displaying possible signs of COVID-19 infection, using a tympanic thermometer (inserted into the ear).

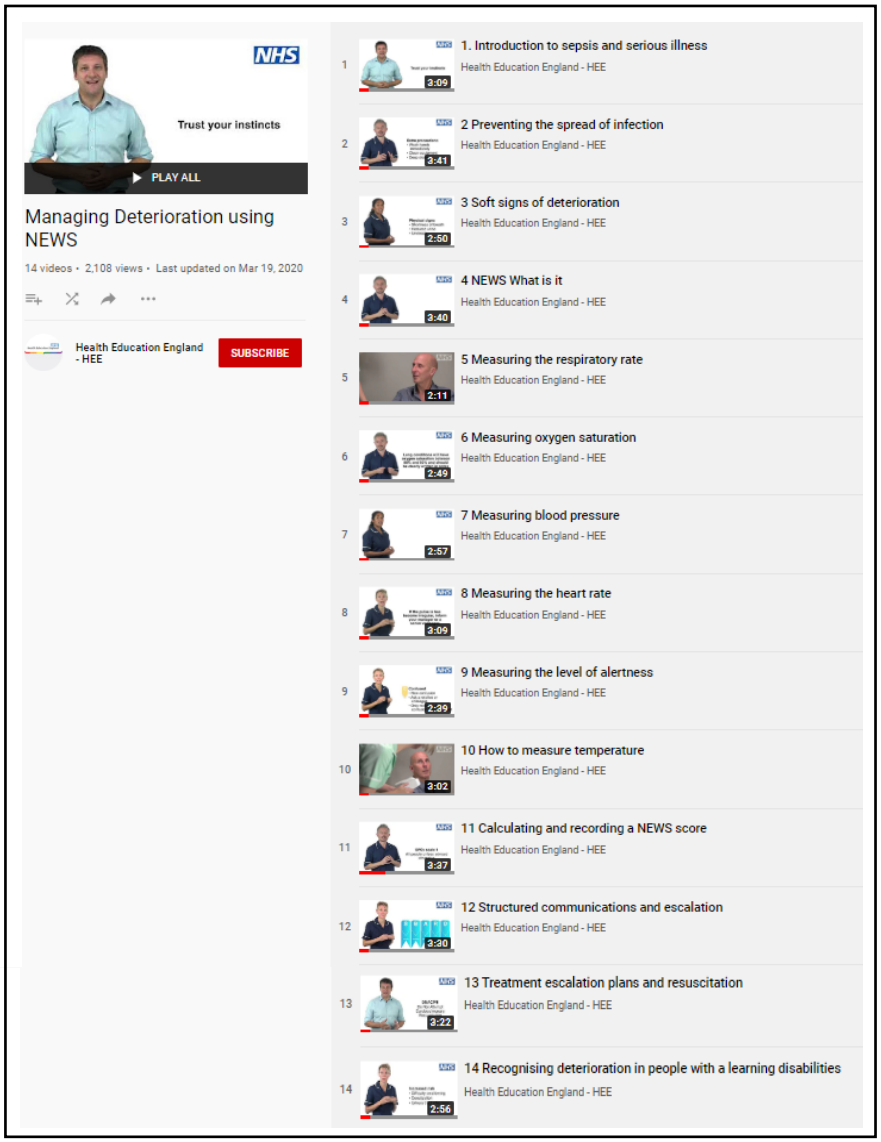
3. Where possible, care home staff should be trained to measure other vital signs including blood pressure, heart rate, pulse oximetry and respiratory rate. This will enable external healthcare practitioners to triage and prioritise support of residents according to need.

6. If taking vital signs, care homes should use the RESTORE2 tool to recognise deterioration in residents, measure vital signs and communicate concerns to healthcare professionals.

Learning Disabilities Mortality Review (LeDeR) Programme

Learning Disabilities Mortality Review (LeDeR) Programme

Additional Resources - Managing Deterioration Videos



Linking the Managing Deterioration Videos and RESTORE2

Spotting serious illness and sepsis
Some people are more at risk than others of becoming unwell very quickly and developing a serious illness such as sepsis. This is known as 'deterioration' and it is important that anyone who cares for individuals who are at risk of deterioration knows how to spot the signs, especially during the current COVID-19 outbreak.

Watch this film
- Introduction to sepsis and serious illness

Soft Signs and What's Normal
What to look out for when it is not appropriate to take measurements of a person's vital signs. The RESTORE2 mini tool is helpful in these situations.
A white paper from Geoff Cooper at Wessex AHSN looks at using soft signs to identify deterioration.

Watch these films
- Preventing the spread of infection
- Soft signs of deterioration
- Recognising deterioration with a learning disability

Take Observations
The National Early Warning Score is used by GPs, ambulance services and acute hospital trusts. RESTORE2 makes NEWS2 more accessible to care and nursing homes.

Watch these films
- NEWS: What is it?
- Measuring the respiratory rate
- Measuring oxygen saturation
- Measuring blood pressure
- Measuring the heart rate
- Measuring level of alertness
- How to measure temperature
- Calculating and recording a NEWS score

Escalate and Communicate
Effective communication is vital for safety critical messages between different healthcare staff

Watch these Films
- Structured communication and escalation
- Treatment escalation plans and resuscitation

Wessex AHSN and West of England AHSN have collaborated with West Hampshire CCG (RESTORE2) and Health Education England to produce a series of free videos and e-learning materials to support staff working in care homes to care for residents who are at risk of deterioration.
The full set of 14 Managing Deterioration Videos can be accessed via: https://wessexahsn.org.uk/projects/358/care-home-training-resources

Other Care Home Resources

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

Resources for Care Homes are being developed continuously

These Wessex PSC webpages will help signpost people to information, training resources and downloads for Care Homes

Enhanced Health in Care Homes: https://wessexahsn.org.uk/projects/304/enhanced-health-in-care-homes

Care Home Resources: https://wessexahsn.org.uk/projects/358/care-home-training-resources (with link to Videos)

RESTORE2: https://wessexahsn.org.uk/projects/329/restore2 (with link to West Hampshire CCG RESTORE2 webpage)

Using Soft Signs to Identify early indications of Physical Deterioration: https://wessexahsn.org.uk/projects/357/using-soft-signs-to-identify-early-indications-of-physical-deterioration

Other Wessex PSC Deterioration related webpages

Deterioration and NEWS: https://wessexahsn.org.uk/projects/116/deterioration-and-news

Safety Communications (inc. SBAR): https://wessexahsn.org.uk/projects/273/safety-communications-inc-sbar

Sepsis: https://wessexahsn.org.uk/projects/22/sepsis (with link to ICHP Suspicion of Sepsis Dashboard)

Other Wessex PSC Quality Improvement & Patient Engagement webpages

Quality Improvement Hub (QIHub): https://wessexahsn.org.uk/projects/127/quality-improvement-hub-qihub

Patient Engagement - Working with Patient Partners (Co-Design): https://wessexahsn.org.uk/projects/143/patient-engagement-working-with-patient-partners-co-design

Wessex Academic Health Science Network
Patient Safety Collaborative

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

Introduction (Rollout Handbook Page 4)

1 

1. Introduction to sepsis and serious illness
Health Education England - HEE

2 

2 Preventing the spread of infection
Health Education England - HEE

4 

4 NEWS What is it
Health Education England - HEE

Understanding the terms used in these training resources

CARER(S)

In this workbook we use the term 'carer' or 'carers' to refer to any member of staff in a residential or nursing home engaged in caring for a resident. This includes individuals with a professional registration.

DNACPR

Do Not Attempt Cardiopulmonary Resuscitation or DNACPR decisions are documents that state that a resident should NOT receive cardiopulmonary resuscitation (which can involve chest compressions and shock therapy in an attempt to restart someone's heart). A DNACPR form only relates to cardiopulmonary resuscitation and not to the delivery of other treatments and should not be confused with a Treatment Escalation Plan.

NEWS

Stands for **National Early Warning Score.** NEWS is a system developed to help people assess how unwell someone is. It is based on six observations or 'vital signs' and gives a score from 0-20. The higher the score, the more unwell the person is likely to be. The current system is referred to as NEWS2 as this is the second version of NEWS. In this document we use NEWS to refer to the latest version of NEWS i.e. NEWS2.

RESIDENTIAL AND NURSING HOMES

In this workbook we use the terms 'residential' and 'nursing' to refer to all of the different types of homes that provide care to residents. Residential homes will typically be staffed by carers with limited access to internally employed registered nurses whilst nursing homes will have access to registered nurses as part of their workforce. RESTORE2™ can be used successfully in any of these settings.

TEP / TREATMENT ESCALATION PLAN

A **Treatment Escalation Plan**, or TEP, is a personalised recommendation for someone's medical care which sets out how health conditions should be managed in the future if a resident deteriorates.

A TEP may be informed by an advance care plan which documents the resident's wider wishes and preferences or an Advance Decision to Refuse Treatment (ADRT) which outlines a person's refusal of a specific treatment.

VITAL SIGNS

Also known as observations, these are the measurements of essential body functions such as breathing rate, also known as respiratory rate, oxygen saturations, heart rate, also known as pulse rate, blood pressure, level of alertness and temperature.

Introduction to RESTORE2™

RESTORE2™ is a physical deterioration and escalation package designed specifically for residential and nursing homes. It can also be used in the domiciliary care sector.

RESTORE2™ will support you in a residential or nursing home to:

- Recognise when a resident may be deteriorating or at risk of physical deterioration.

- Act appropriately according to the residents care plan and treatment escalation plan.

- Be confident to measure a complete set of physical vital signs (observations) to inform escalation and conversations with health professionals.

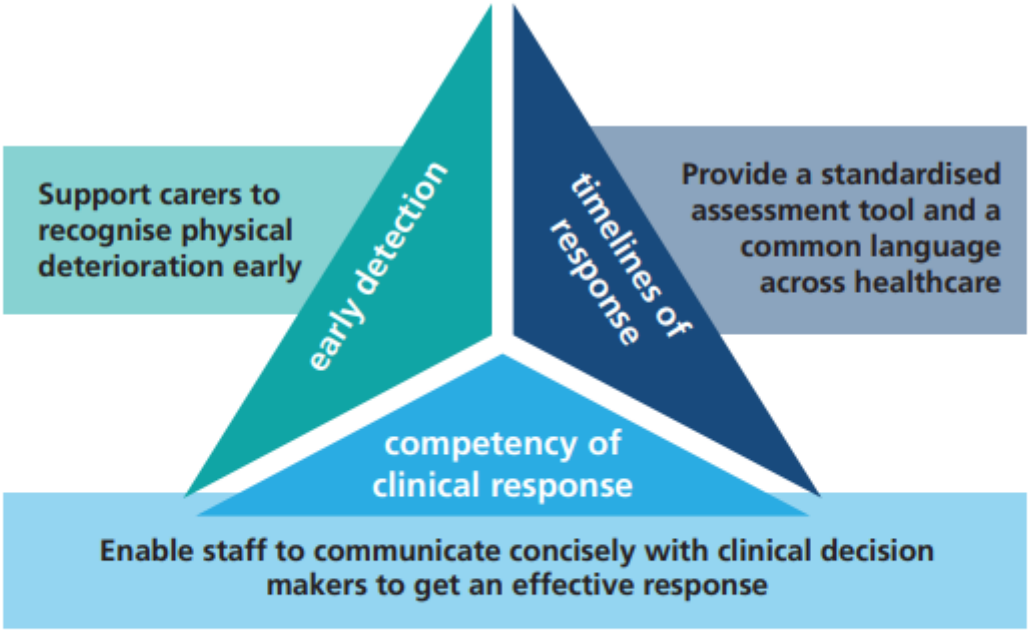
- Speak with the most appropriate health professional at the right time, giving the most relevant information to support their professional decision making.
- Get staff and residents the right care, at **the right time in the right place for the right outcome.**

Getting the best outcome for residents

If any one of us was unwell, we would want the following things to be in place to give us the best chance of a good outcome:

- Someone to recognise our deterioration early
- Healthcare services to get to us as quickly as is required
- A clinical response that meets our needs.

These three things are the triad of clinical outcomes. They are critical in preventing worsening deterioration and giving your resident the best chance of being treated successfully. Ideally, this means managing them in the community in their own place of residence but it could mean having the shortest possible admission to hospital or supporting a dignified and managed death.



RESTORE2™ is not an admission avoidance tool – it is a right care, right time, right place tool, right outcome tool.

The challenges of managing physical deterioration

There are a number of challenges facing staff in residential and nursing homes that sometimes makes achieving the triad of clinical outcomes difficult, including:

Early Detection

CHALLENGE

Carers may not have always had sufficient training to recognise physical deterioration early

RESTORE2™ uses soft signs language developed with carers to support easy recognition of possible deterioration

RESTORE2™ supports carers to recognise what is normal for the resident and when they may be becoming unwell

CHALLENGE

Recognising physical deterioration in residents with increasingly complex underlying health problems is difficult

Timelines of Response

CHALLENGE

There is a lack of standardised assessment tools designed specifically for use in all homes

RESTORE2™ includes NEWS2 – a standardised deterioration tool used by GP's, ambulances and hospitals– a common language

RESTORE2™ is shown to improve carers confidence to raise concerns because of using soft signs and NEWS

CHALLENGE

Carers do not always feel supported to raise concerns to healthcare professionals

Competency Of Clinical Response

CHALLENGE

Communicating effectively with multiple healthcare providers when escalating is difficult

RESTORE2™ uses a structured communication tool to help carers get their message across

RESTORE2™ provides vital signs and a NEWS which can help other healthcare professionals to prioritise resident care

CHALLENGE

Healthcare services have lots of competing demands to respond to

How does RESTORE2™ work?

RESTORE2™ has five key components that support carers to recognise deterioration, assess the risk and act on your findings:

- The soft signs of deterioration which support carers to identify potentially unwell residents
- A 'what's normal for this resident' reference box so people understand when a residents condition has changed and what plans have been put in place to manage this. This includes their normal NEWS
- National Early Warning Score physical observation chart that provides a standardised assessment of risk and sickness
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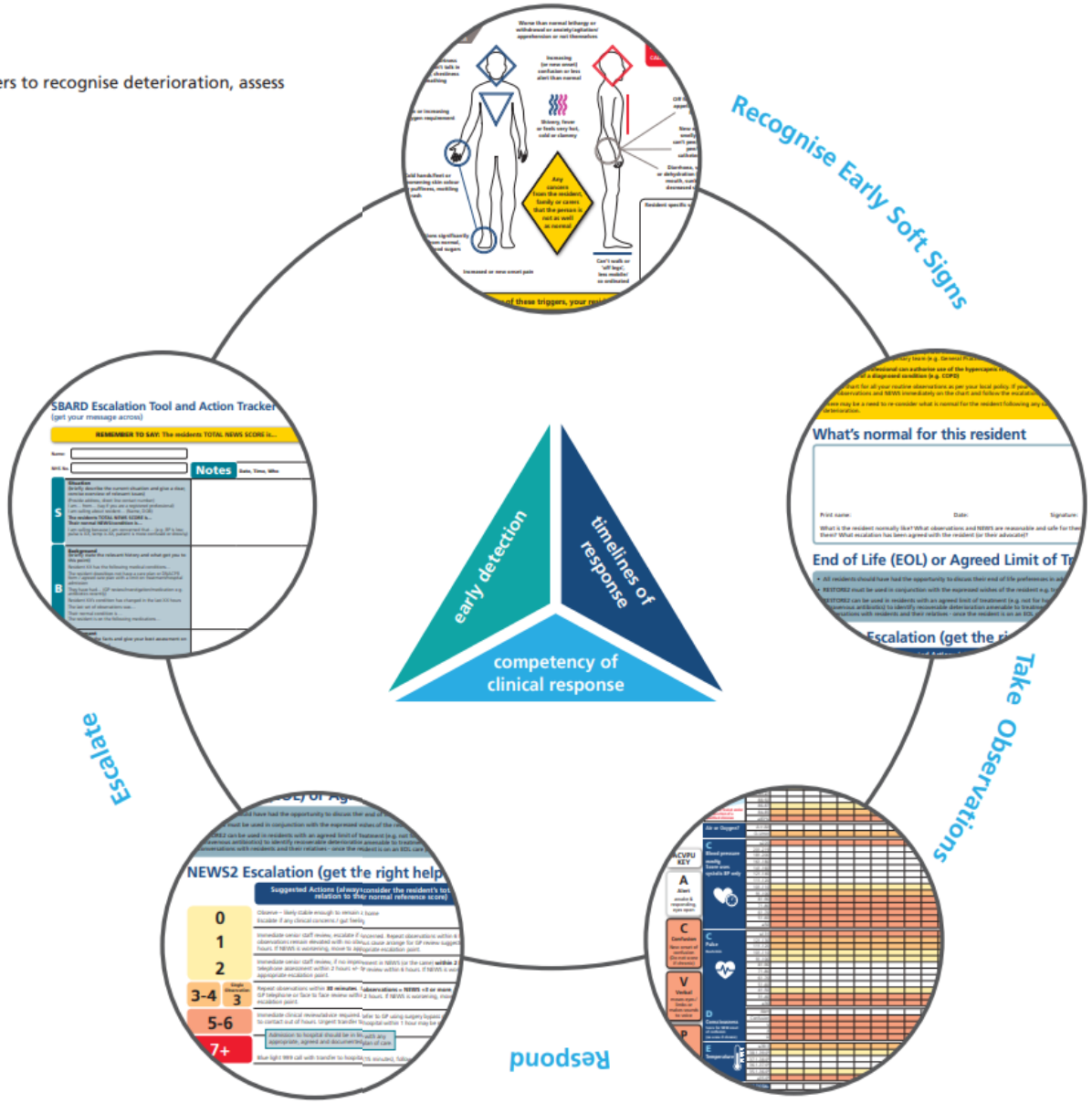
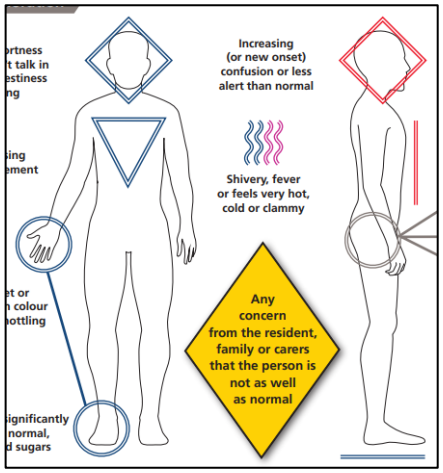
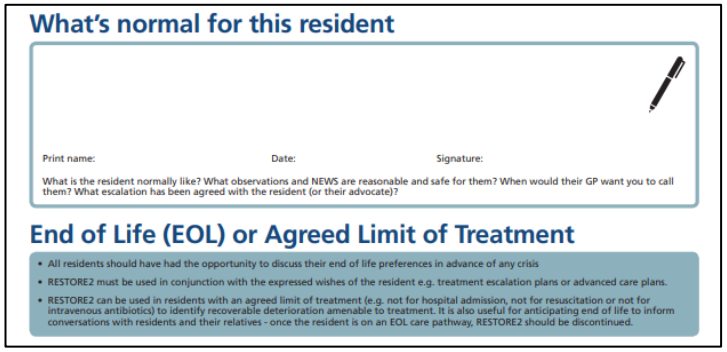


5 key elements of managing Deterioration

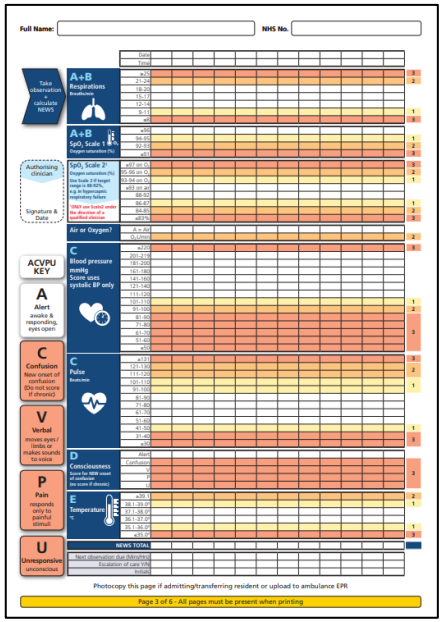
RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate



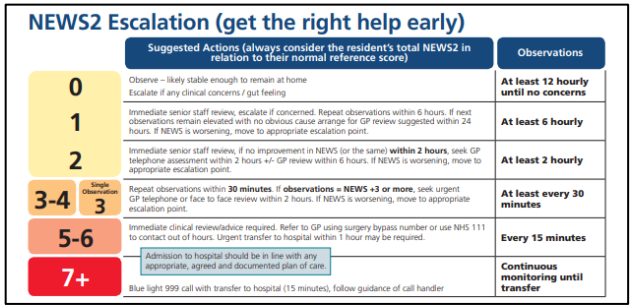
1 Early Detection (Soft Signs)



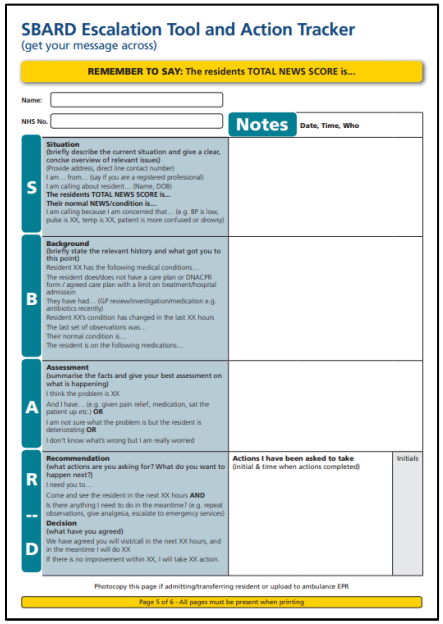
2 Knowing what's normal (including EoL preferences)



3 Understanding how unwell they are (NEWS2)



4 Knowing what to do next



5 Communicating your concerns

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

Soft Signs (Rollout Handbook Page 12)

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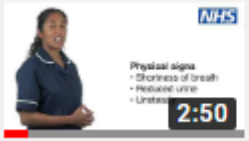


3 Soft signs of deterioration

Health Education England - HEE

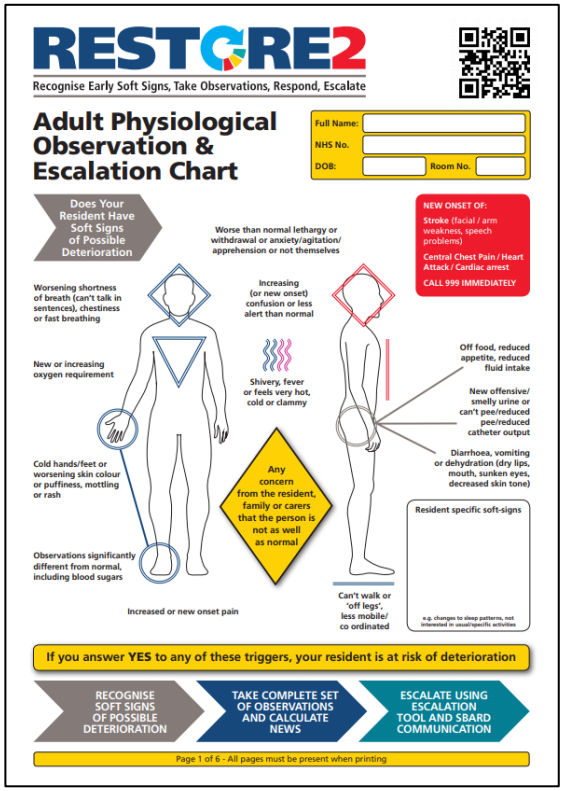
14

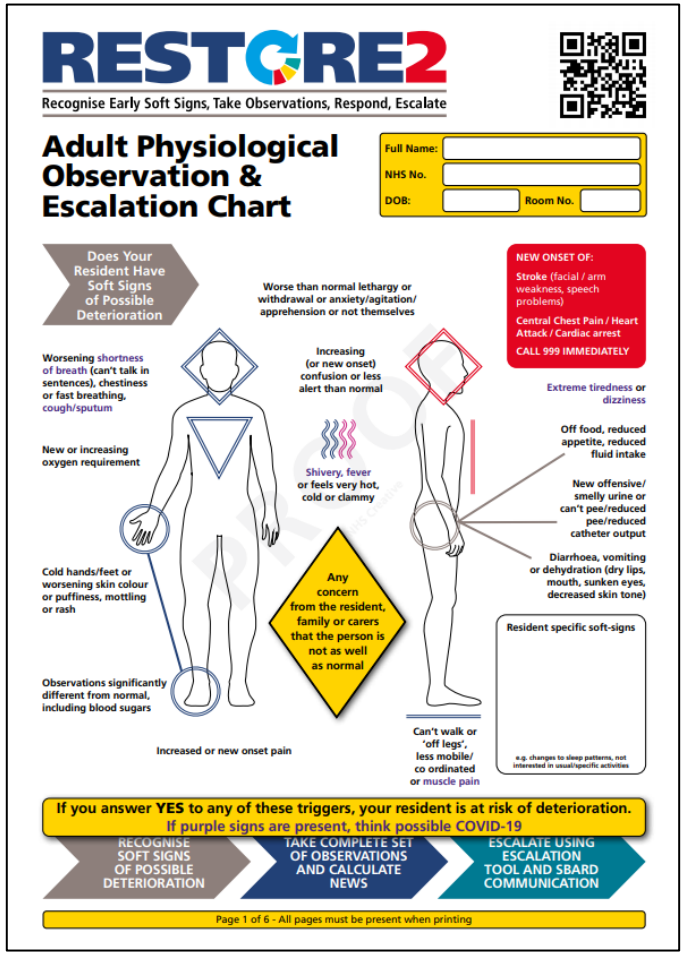
14 Recognising deterioration in people with a learning disabilities

Health Education England - HEE

Check you have the latest version…

From: https://westhampshireccg.nhs.uk/restore2/





With purple (possible Covid-19) Soft Signs

The Soft Signs of Physical Deterioration

As a carer, you spend time with residents and can get to know them very well. Sometimes it can be obvious that someone is unwell. Other times the signs might be much harder to spot.

What are soft signs?

Soft signs are the early indicators that someone might be becoming unwell. You do not have to be a health care professional to recognise these signs and as a carer you are ideally placed to recognise small changes in your resident. Often family and friends will pick up on the subtle changes in a person's behaviour, manner or appearance.

'Family concerns should always be taken seriously, even if you think the resident is fine.'

Types of soft signs

Soft signs can be related to many things including the resident's:

- physical presentation
- mental state or
- behaviour and ability

Examples of changes in a person's physical presentation could include:

- being short of breath
- not passing much urine
- being hot, cold or clammy to touch, or
- being unsteady when walking

Examples of changes in someone's mental state may include:

- feeling more anxious or agitated
- having new or worse confusion, or
- being more withdrawn than normal

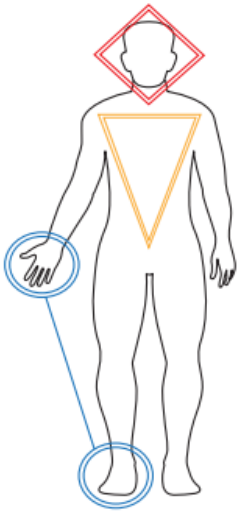
Changes in behaviour or ability may include:

- altered sleep patterns
- increased tiredness
- reduced inhibitions, or
- being very restless or hyperactive.

Some soft signs are universal – for example new onset shortness of breath or decreased urine output. Others may be unique to that particular person, for example a sudden inability to participate in activities they enjoy like doing the crossword, a particular change in behaviour such as withdrawal, agitation or hyperactivity. By getting to know your resident, speaking with their family, friends and carers, you can build up a picture of soft signs that are significant to each particular resident.

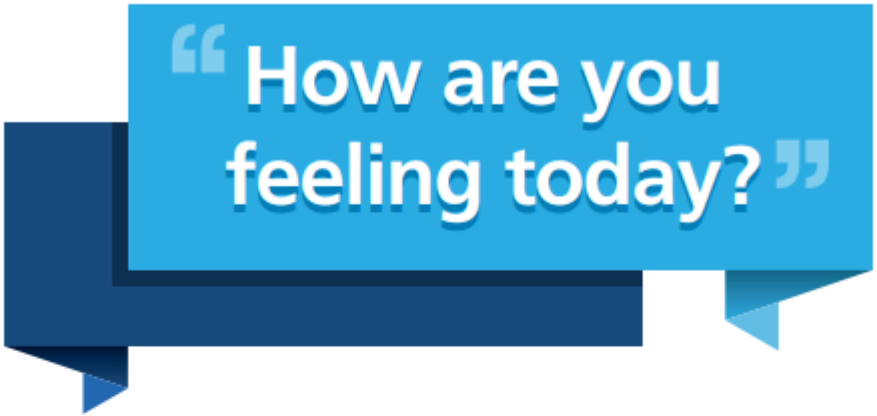
Example soft signs

Mental	Physical	Behaviour or Ability
Worse than normal lethargy	Worsening shortness of breath (can't talk in sentences)	Altered sleep patterns
Withdrawn	New or increasing oxygen requirement	Tiredness / not wanting to get out of bed
Anxiety/agitation or not themselves	Chestiness	Reduced inhibitions
More argumentative or tearful	Fast or unusually slow breathing	Reduced awareness
Increasing (or new onset) confusion	Cold hands/feet	Increased risk taking behaviour
Less alert than normal	Worsening skin colour	More restless / hyperactive
Reduced levels of concentration	Puffiness	Loud or animated
	Skin mottling or rash	Reduced interest in personal care
	Increased or new onset pain	Reduced interest in activities of daily living
	Observations significantly different from normal, including blood sugars	Anger / frustration outbursts
	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)	
	Can't walk or 'off legs', less mobile/co-ordinated	



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

How to spot soft signs



It is good practice to ask the people you care for, ‘how are you feeling today’? Allow them time to answer the question in their own way and make a note of individual or unique soft signs in the resident’s records for future reference.

You should encourage friends and family to tell you if they notice any soft signs.

Soft signs are particularly useful for residents who have difficulty communicating or understanding information due to dementia or learning difficulties.

‘By learning about soft signs, you may be able to recognise deterioration early and act to protect your residents from serious illness’

Soft signs will lead into using the National Early Warning Score (NEWS) system as part of RESTORE2™ and escalating your concerns to a healthcare professional or senior colleague.

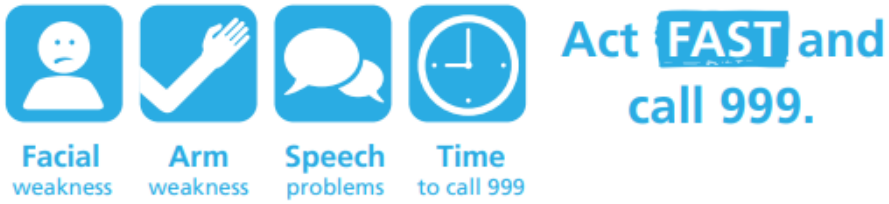
Medical Emergencies

There are some occasions when the early signs of deterioration may be a medical emergency. In these cases, it is not appropriate to delay contacting the emergency services in order to record a **NEWS**. It may be appropriate to monitor your resident's vital signs once you have contacted the emergency services.

Such situations include:

- Chest pain or a suspected heart attack (not all six signs need to be present for a resident to be having a heart attack)

- Where the individual is displaying signs consistent with having a Stroke

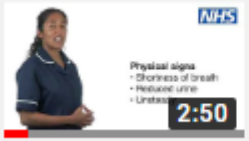


- Prolonged seizure where the patient does not have a care plan in place to manage it or their breathing is compromised
- Where the resident has sustained a significant injury – e.g. a fracture, head injury.

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

What's normal (Rollout Handbook Page 16)

3 

3 Soft signs of deterioration

Health Education England - HEE

14 

14 Recognising deterioration in people with a learning disabilities

Health Education England - HEE

Knowing your Resident

As a carer, you may know your resident better than any other healthcare professional that comes into contact with them.

It is really important that when the resident is admitted to your home:

- You complete a set of vital signs (physical observations) so that you know what is normal for them
- You take time to learn about their usual behaviours so you know if they start doing things that are not normal for them
- You understand their medical history, including any medicines that they regularly take
- You assume that they have the ability (capacity) to make decisions about what they want, including should they become unwell
- You have a conversation with the resident's GP about when and in what circumstances the GP might want you to call them with a concern

Knowing your resident will help you to support them to live well but also to think about what they would like to happen if they become unwell. This may include having a Treatment Escalation Plan or Do Not Attempt Cardiopulmonary Resuscitation order.

- As a carer you are ideally placed to recognise small changes in your resident
- By getting to know your resident, speaking with their family, friends and carers, you can build up a picture of soft signs that are significant to each particular resident
- If a resident has chest pain, a suspected heart attack or stroke – call 999.

End of Life care

RESTORE2™ can be helpful in identifying when a resident is approaching the end of their life. This can help to inform conversations with them and their relatives or GP. Once a resident is receiving care whilst dying, RESTORE2™ and physical observations should not be used so as not to cause unnecessary distress.

- As a carer, you can support people in having conversations about their End of Life care preferences, and help to arrange a Treatment Escalation Plan with their GP
- You should understand whether a treatment escalation plan and a resuscitation decision exists, and what it says about that person's wishes
- You need to know where these documents are kept so that you can access them in an emergency
- A DNACPR order does not mean that a resident cannot be treated for other conditions from which they may recover. For example, they may still benefit from antibiotics for an infection, or first aid for an episode of choking
- RESTORE2™ can be helpful in identifying when a resident is approaching the end of their life but should be discontinued once the person has an end of life plan.

End of life care

Death and dying are inevitable. The quality and accessibility of this care will affect all of us. The needs of people of all ages who are living with dying, death and bereavement, their families, carers and communities, must be addressed, taking into account their priorities, preferences and wishes. Personalised care at end of life will result in a better experience, tailored around what really matters to the person, and more sustainable NHS services.

If you would like more information on the End of Life Care Programme, please email england.endoflifecare@nhs.net and follow our personalised care Twitter account @Pers_Care.

13

13 Treatment escalation plans and resuscitation

Health Education England - HEE

Treatment Escalation Plans and Resuscitation

Knowing your resident will help you to support them to live well but also to think about what they would like to happen if they become unwell...

When a resident you are caring for becomes unwell, there are different options for looking after them. If possible and safe, most residents would prefer to be treated in their own home. For some residents it will be appropriate to call the GP or 999 to arrange admission into hospital.

For some people, going into hospital is not appropriate or in their best interests. This can be for a number of reasons. Often, people who know they are approaching the end of their life may have decided that they want to die in their home and not in hospital if possible.

For others, perhaps where a specific illness or event has happened (for example a serious stroke) they may have previously expressed a wish to be looked after by people that know them in a way that maintains their dignity.

There are helpful documents available that support residents to have a say in their care prior to when they become unwell. These include Treatment Escalation Plans (TEPS) and Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) documents.

Treatment Escalation Plans

A Treatment Escalation Plan, or TEP, is a personalised recommendation for someone's medical care. It is for use in an emergency situation as a reference and communicates the level of intervention or de-escalation in the resident's clinical management.

A Treatment Escalation Plan is made with the resident and their caring team, and often with their family. It is ideally made when they are well and can say what they would want to happen.

If your resident does not have the ability (capacity) to make decisions around what they would want to happen if they became unwell, a suitably trained person should undertake a capacity assessment that is time and decision specific – for example...if you developed a chest infection and oral antibiotics were not working, would you want to go into hospital for intravenous treatment?

If the person lacks capacity to make this decision then a decision in their best interests, involving the residents GP, close family and home staff can be made and documented.

The plan should include details about where the person wishes to be cared for and what treatments they would or would not want. This can include medication, surgery, intravenous antibiotics, or help with breathing. If your resident does not have a Treatment Escalation Plan you should assume they are for full treatment and intervention.

Resuscitation

Cardiopulmonary resuscitation can involve chest compressions and defibrillation (heart shock therapy) in an attempt to restart someone's heart. Resuscitation is more likely to be successful in someone who is ft and well, than in someone who is frail with medical problems.

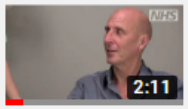
Do Not Attempt Cardiopulmonary Resuscitation or DNACPR decisions may be included in a Treatment Escalation Plan or be documented separately. They advise emergency teams like the ambulance service on whether they should or should not attempt resuscitation.

Even if a resident has a DNACPR in place, this does not mean that they cannot be treated for other conditions. For example, they may still benefit from antibiotics for an infection, or first aid for an episode of choking.

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

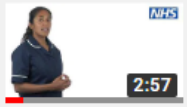
Taking Observations (Rollout Handbook Page 19)

5 

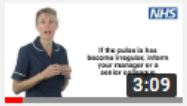
5 Measuring the respiratory rate
Health Education England - HEE

6 

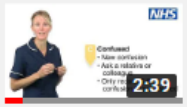
6 Measuring oxygen saturation
Health Education England - HEE

7 

7 Measuring blood pressure
Health Education England - HEE

8 

8 Measuring the heart rate
Health Education England - HEE

9 

9 Measuring the level of alertness
Health Education England - HEE

10 

10 How to measure temperature
Health Education England - HEE

11 

11 Calculating and recording a NEWS score
Health Education England - HEE

National Early Warning Scores

The NEWS system was developed to help people assess how unwell someone is, and to quickly recognise any deterioration so that treatment can be started promptly.

A common language across healthcare

NEWS stands for National Early Warning Score.
The system is widely used in healthcare settings around the United Kingdom and forms a 'common language'. NEWS helps to quickly summarise how unwell the resident is in a way that is clear, concise and cannot be misinterpreted so that other healthcare professionals can prioritise their care effectively.

The National Early Warning Score or NEWS is a number that is calculated from 6 observations or 'vital signs'. These are:

- Breathing or respiratory rate
- The level of oxygen in their blood, known as oxygen saturation
- Blood pressure
- Heart rate, also known as pulse rate
- Level of alertness
- Temperature

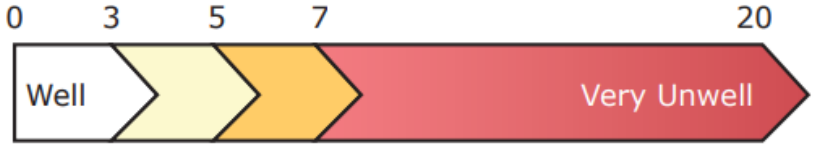
How NEWS works

In NEWS, each vital sign is given a score based on the measurement. The score ranges between zero, which would be normal, and three, which is very abnormal. 2 further points are given if someone is on oxygen therapy.

White is 0 points	Yellow is 1 point	Orange is 2 points	Pink is 3 points
0	1	2	3

NEWS charts are colour coded to help you to add up the correct NEWS. If you are using a paper chart, you must write the vital sign in the correct place. This is because the colour shows you how many points to score.

In total, this gives a NEWS score of between zero and twenty. The higher the score the more unwell the person is likely to be.



You must have all six vital signs to calculate a NEWS score. The total score is very accurate in predicting how unwell someone is.

When to do a NEWS

Many residential and nursing homes will take a set of vital signs and calculate a NEWS when a resident is first admitted or within 24 hours to help them understand what is normal for the resident.

The purpose of measuring vital signs is not to turn residential and nursing homes into mini hospitals. The home is the residents own and should not be overly medicalised. RESTORE2™ allows you to identify the soft and early signs of deterioration which triggers a set of vital signs specifically when a resident is unwell or is at risk of becoming unwell to help you share your concerns with others.

- NEWS helps to quickly summarise how unwell the resident is in a way that is clear, concise and easy to communicate
- You must have all six vital signs to calculate a NEWS score
- You must understand that what a normal NEWS would be for your resident and be able to identify that a high NEWS is likely to mean that a resident is unwell.

Measuring vital signs (observations)

Any area where RESTORE2™ is used will need to have the appropriate equipment available and staff who are trained to measure vital signs (observations).

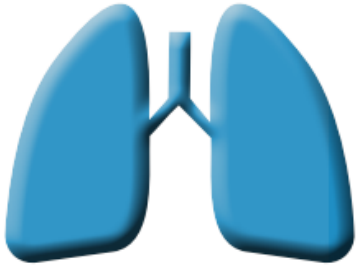
To measure vital signs in order to calculate a NEWS you will need:

- Thermometer
- Blood pressure machine and cuffs of different sizes
- Finger probes, known as pulse oximeters, for measuring oxygen levels
- Colour printed NEWS chart or electronic devices with NEWS software
- A timer or device that can time one minute

All equipment must be regularly calibrated and checked. If you find any problems with any of the equipment you must report this immediately.

- Make sure the resident is relaxed and has rested for 5 minutes before measuring their vital signs
- Always gain consent to take a reading and explain what you are going to do to the resident
- You must have been appropriately trained to take physical observations and the equipment that you used must be clean and calibrated
- Once you have measured a resident's vital signs you need to document it on the paper RESTORE2™ chart or your electronic record.

Breathing (respiratory) rate



The speed at which someone is breathing is a really useful indicator of whether they are unwell or not. As a vital sign, it is one of the observations that most accurately can predict a resident's outcome and one of the easiest to measure. A normal breathing rate, or respiratory rate, is between 12 and 20 breaths per minute.

A slow breathing rate (less than 12 breaths per minute) may be due to:

- Taking a strong painkiller such as morphine which would suggest that they have taken too much medication
- Problems with the heart, including failure or infection.

Slow breathing can occur when a resident is awake or asleep. It is different from apnoea, which is a temporary halt in breathing that is most common when a person is sleeping. Slow breathing is also not the same as heavy or laboured breathing.

If someone is taking 25 or more breaths per minute, this is considered very significant and is worrying. Some patients with long term lung conditions such as COPD, may have a higher rate of breathing than others. In these people, it is important to spot a change from their normal breathing rate.

Other causes of a high breathing rate include:

- Infection (sepsis, pneumonia)
- Asthma
- Exercise
- Anxiety or pain
- Compensation for some other underlying disease or condition.

How to measure breathing (respiratory) rate

The key to getting an accurate measure of someone's respiratory rate is to not let them know that you are counting their breaths. This is because once someone becomes aware of their breathing, they may start breathing faster or slower than normal.

To measure someone's respiratory rate:

- Ensure the person is comfortable in their chair or bed
- Watch their chest rise and fall as they breathe in and out
- Measure how many breaths they take over a full minute to rule out irregular breathing patterns. You can use a stopwatch or an electronic device to count one minute while you are counting the breaths.

Breathing (respiratory) rate is scored in the following way:

12-20	9-11	21-24	8 or less **or** 25 or more
0	1	2	3

Even if the resident's overall NEWS isn't high, if you are worried about someone's breathing you need to speak to a senior colleague or your manager.

- A normal breathing rate is between 12 and 20 breaths per minute
- Always count a residents breathing rate over one whole minute
- Try watching the resident from a distance and don't encourage the resident to speak whilst counting
- Even if the resident's overall NEWS isn't high, if you are worried about someone's breathing you need to speak to a senior colleague or your manager.

Oxygen saturations

Oxygen saturation describes the level of oxygen in your blood. A normal oxygen saturation range is 96 to 98 percent.

You can measure oxygen saturation with a pulse oximeter using a probe that is usually placed on the end of someone's finger. The display screen shows the oxygen level as a percentage.

A pulse oximeter works by sending out waves of red and infrared light. These pass through the skin and blood vessels, and onto a sensor on the other side of the probe, measuring how many red blood cells (the part of blood that carries oxygen around the body) have oxygen attached or not. The sensor uses this information to work out the percentage of oxygen in the blood.

In order for the probe to accurately measure oxygen levels, the resident must have a good pulse and good blood flow to their fingers.

Cold hands, dehydration or a dirty probe can make it difficult to get an accurate reading.

Nail varnish and false nails can also affect the reading. You may need to talk to a senior colleague for advice on whether the residents varnish or false nails need to be removed.

How to take a reading

Using pulse oximetry is straight forward.

- Ensure the pulse oximeter is clean and working
- Select an appropriate finger for the probe and apply the probe
- Ask the person to rest their hand
- Allow the oximeter to take a reading. It usually flashes a bit before the numbers appear.

Oxygen scales

There are two scales for blood oxygen levels.

Scale 1: Scale 1 is used for all residents, including people with respiratory conditions such as Chronic Obstructive Pulmonary Disease unless you have been specifically instructed otherwise by a lung doctor or nurse.

96% or more	Between 94 and 95%	Between 92 and 93%	91% or less
0	1	2	3

Scale 2: There are a group of people who live with a lower level of oxygen in their blood. These are people with certain lung conditions and a usual oxygen saturation range for them is 88-92%. If this is the case, it should be clearly written in their notes by their lung doctor or nurse and you should use Scale 2 to record their oxygen saturations. Otherwise, assume that they need oxygen levels of 96-98%.

Oxygen saturations are scored on scale 2 in the following way:

Between 88 and 92%	Between 86 and 87%	Between 84 and 85%	83% or less
0	1	2	3
93% or more on air	93 to 94% on oxygen*	95 to 96% on oxygen*	97% or more on oxygen*

* Giving these residents extra oxygen can be harmful as higher oxygen levels in their bloodstream can reduce their urge to breathe, causing respiratory arrest.

If you are using a paper RESTORE2™ chart, make sure to cross through the scale that is not being used to avoid mistakes.

You must also record whether the reading has been taken while the person is breathing normal room air or is on oxygen therapy. If so, record how much oxygen they are being given.

Air	Oxygen
0	2

- A normal oxygen saturation range is above 96 percent
- For people with certain lung conditions a normal oxygen saturation is between 88 and 92 percent
- Warm the resident's hands before measuring their saturations if necessary
- Do not use the probe on a residents finger while taking their blood pressure on the same arm as the blood flow with be cut off, giving a false or error reading
- Always check you have the correct type of probe – some probes are designed for specific use e.g. on the ear. A wrongly placed probe may give an incorrect reading
- You must not use Scale 2 to record oxygen saturations unless you have a written instruction from a lung doctor or nurse to do so
- Just because your resident has a chronic respiratory condition like Chronic Obstructive Pulmonary Disease, this does not automatically mean that they need to be on Scale 2
- Make sure you cross through the scale that is not being used to avoid mistakes.

Blood pressure

Blood Pressure, or BP, measures the force that your heart uses to pump blood around your body.

A BP measurement includes two numbers. For example, 120 over 80.

The top number, 120 in this example, is called the systolic blood pressure. This is the pressure generated when your heart pumps.

The bottom number, 80 in this example, is the diastolic blood pressure. This is the pressure when your heart is resting between beats.

NEWS only uses the top number. In NEWS, the normal range of systolic BP is 111 to 219. Although 219 seems very high, it is classed as normal until it goes above this level because many (particularly elderly residents) do have high blood pressure and may not be unwell.

High blood pressure

High blood pressure can be related to

- Smoking
- Alcohol
- Being overweight or not getting enough exercise.

If untreated, high blood pressure can increase the risk of developing headaches, heart disease, stroke and kidney disease. Many people will be on medication to lower their blood pressure for this reason.

Having pain or being anxious can increase blood pressure.

Low blood pressure

Low blood pressure is less common than high blood pressure, but can be a sign that someone is becoming very ill.

Low blood pressure might be a sign that

- someone isn't drinking enough or has become dehydrated due to vomiting or diarrhea
- the resident has a serious infection that is starting to affect the way their heart is able to pump.

Low blood pressure can be caused by certain medications, including being on too much medication for high blood pressure, or due to problems with how well your heart squeezes.

How do you measure blood pressure?

Blood pressure can be measured using manual or electronic devices.

To measure someone's blood pressure:

- Check if the resident has a preference as to which arm to use
- Select an appropriately sized cuff for their upper arm. This is a cuff that will wrap around their arm completely. It should not be too tight or too loose. Keep a note of which cuff size you use for which person
- Line up the arrow on the cuff marker with the centre of their arm
- Warn the resident that the cuff is going to become tight on their arm
- Press the button to start filling the cuff with air
- Then wait for all the air to come out of the cuff
- The BP will appear on the monitor.

Recording the BP

If you are working out the NEWS, you will only need the systolic BP which is the top number. You should still chart all of the numbers. Systolic blood pressure is scored in the following way:

Between 111 and 219	Between 101 and 110	Between 91 and 100	90 or less or 220 or more
0	1	2	3

- For NEWS, a normal upper (systolic) blood pressure is 111 and 219
- Low or falling blood pressure is often a late sign that a resident is very unwell
- Make sure the resident has loose fitting clothes to push their sleeve up comfortably
- Never take a blood pressure over layers of clothing
- Make sure the resident's arm is supported and comfortable and the cuff is at the same level as their heart.

Heart Rate

The heart rate, or pulse rate, is the number of times your heart beats in one minute.

A normal heart rate is between 50 and 90 beats per minute, but it can vary. It can speed up or slow down depending on the situation.

Someone's heart rate can go faster if they are:

- Developing an infection
- Exercising
- Are very anxious
- Are dehydrated
- Are in pain
- Or if their heart isn't pumping properly or regularly.

Someone's heart rate can be slow due to:

- Medication
- Very low temperature
- Or problems with the electrical circuit in their heart.

Regularity

A pulse can either be regular or irregular.

If the pulse is regular then each beat happens consistently and in rhythm.

An irregular heart beat feels different. It may feel like a skipped beat, or you may feel that the rate swaps from fast to slow.

If the pulse is irregular, and you haven't noticed this before, you need to inform your manager or a senior colleague.

Measuring heart rate

There are several different ways that you can measure someone's heart rate and it is important that you follow your organisation's guidelines.

Blood pressure machines and pulse oximeters usually measure the heart rate as well as the blood pressure or oxygen levels. In most cases, measuring the heart rate of a resident in this way will be appropriate.

Unfortunately, electronic devices are not very good at measuring the heart rate in people with an irregular heartbeat. If you know your resident has an irregular heartbeat, or you get a reading from an electronic device that seems unusual, the most reliable way to measure heart rate is to feel someone's pulse in their wrist. To do this:

- Turn their hand over so it is palm side up
- Place two fingertips in the groove at their wrist, about one inch from the base of their thumb
- When you can feel the pulse, start counting the number of beats in one minute
- Record the heart rate.

Recording the heart rate

If you have felt an irregular pulse you should also document this in the notes. Remember to tell your manager or a senior colleague if you have any concerns. Even if the rest of the resident's vital signs are normal, you must raise concerns about changes in their heart rate.

Heart rate is scored in the following way:

Between 51 and 90	Between 41 and 50 or 91 and 110	Between 111 and 130	40 or less or 131 or more
0	1	2	3

- A normal heart rate is between 51 and 90 beats per minute, but it can vary
- Anxiety or pain can increase your heart rate. A person who is asleep will have a lower heart rate. You should still enter these onto your RESTORE2™ chart in the same way
- If you know your resident has an irregular heart beat the most reliable way to measure it is to feel someone's pulse in their wrist over 60 seconds.

Level of alertness

A resident's level of alertness can change for many reasons. Sometimes this may be clear such as the person becoming very confused or unresponsive; other times there may be a less obvious change in behaviour, such as struggling to pay attention or remember things.

If someone suddenly becomes confused or less alert than normal this could be due to:

- An infection
- A stroke or mini stroke
- Low blood sugar level
- A head injury
- Severe heart or lung problems causing low oxygen levels
- Or even a reaction to a medication.

The ACVPU scale

Level of alertness is measured using the ACVPU scale. ACVPU stands for: **A**lert, newly Confused, responsive only to **V**oice, responsive only to **P**ain, **U**nresponsive:

- **Alert.** This is someone who is behaving and responding normally and opens their eyes without prompting. They move their arms and legs and communicate as they normally do
- **Confused.** This is someone who is newly confused. Ask yourself, is this person more confused than before? Ask a relative or colleague if you are unsure. If someone is normally confused or has a diagnosis of dementia, you would only record C if the confusion has worsened
- **Voice.** This describes someone who will only respond to your voice and is more sleepy than normal. Try clearly saying their name and asking them to open their eyes or squeeze your fingers
- **Pain.** This describes a person who will not open their eyes or respond to your voice, but will move or groan when you cause them pain. You can safely cause pain by pinching the muscle in their neck, or pressing on their nail. You must only do this if you are concerned about their level of alertness
- And, **Unresponsive**. This is describes someone who will not move, make any sounds or open their eyes.

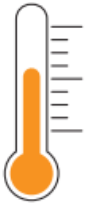
Level of alertness is scored in the following way:

If someone is scoring C, V, P or U, this scores 3 in NEWS you need to ask for help.

- The confusion part of ACVPU relates to new or worsening confusion. It is possible for someone to be normally confused e.g. with dementia but still to be alert
- Ask yourself – is this resident more confused than before?
- If someone is scoring C, V, P or U you need to ask for help.

Temperature

Our bodies are normally very good at keeping our internal or 'core' temperature within normal limits at around 37°C. Everyone has their own individual "normal" body temperature, which may be slightly higher or lower than this.



A high internal temperature above 38 degrees Celsius is described as a fever.

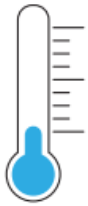
Fevers can be caused by:

- Infections
- Some medications
- And, overexposure to sunlight or heat stroke.

Fever is the body's normal response to challenges like infection.

A low internal body temperature might be related to being in a cold environment but can also be caused by:

- Infections
- And, certain conditions such as diabetes or thyroid disease.



A low core temperature is highly predictive of poor outcome in residents with infection.

Taking a temperature reading

To take a temperature reading you need to be familiar with the type of thermometer you have available.

The most common type of thermometer is the ear thermometer (tympanic) as they are quick and easy to use. However, they can under-record the resident's temperature if not used properly.

To use an ear thermometer:

- Make sure that the thermometer is clean.
- Place a new, clean, disposable tip on the end of the probe.
- Gently pull the pinna of the ear back and insert the probe into the ear canal. The ear canal points slightly downwards and to the face
- The reading may not be accurate if the probe isn't fully inserted into the ear.
- Squeeze and hold down the button for 1 second
- Remove the thermometer and read the temperature
- Record the temperature reading on the paper NEWS chart or on an electronic device
- Throw the disposable tip away.

Other types of thermometers include digital thermometers and strip type thermometers. Strip-type thermometers are not recommended as they measure the temperature of the skin and not the core body temperature.

Temperature is scored in the following way:

Between 36.1 and 38.0°C	Between 35.1 and 36.0°C or 38.1 and 39.0°C	39.1°C or more	35°C or less
0	1	2	3

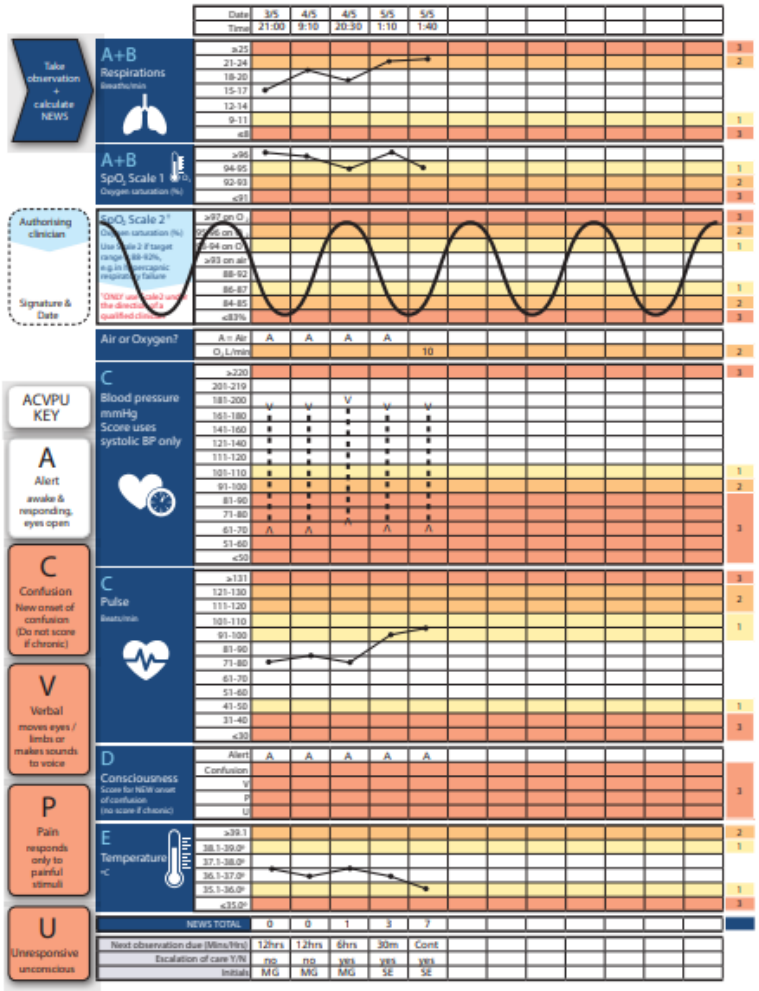
- Normal internal or 'core' temperature is at around 37°C
- A low core temperature is highly predictive of poor outcome in residents with infection
- Ear (tympanic) thermometers are reliable but can under-record the residents temperature if not used properly
- If the reading is abnormal but the resident appears well, check your equipment and technique and re-measure the temperature.

Recording observations

Each vital sign should be recorded within the paper RESTORE2™ chart or entered onto an electronic observation system.

If you are using a paper chart then it needs to be printed in colour to help you to add up the correct NEWS. When using a paper chart, you must write the vital sign in the correct place. This is because the colour shows you how many points to score.

Carefully add up the scores for each vital sign. If the individual is on oxygen, they score an additional 2 points. Take care when manually adding up the NEWS. Always re-check your work. If possible, check it using a downloadable NEWS app.



- You must have all six vital signs to calculate a NEWS
- Make sure that you carefully add the numbers up to reach the correct score
- If you are writing the observation measurement on the NEWS chart in addition to marking a point on the chart, make sure both are in the same colour- coded section to avoid confusion when adding scores up
- Make sure you look at the trend (the way each observation is going up or down) as well as the absolute number and NEWS
- NEWS supports you to raise a concern but never ignore your gut feeling, even if the NEWS is normal. If you feel a person is unwell, always tell your manager or a senior colleague.

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

Escalation (Rollout Handbook Page 38)

13

13 Treatment escalation plans and resuscitation

Health Education England - HEE

Escalation

Depending on your local arrangements, different scores will require you to take different actions to raise your concerns.

You must:

- know what is normal for a particular resident
- be able to communicate to an appropriate person when someone's NEWS is higher than usual.

As a general rule, many people use the 3-5-7 approach with NEWS in the community.

- A resident with a score of 3 can probably be managed in the community by local health services
- A resident with a score of 5 is concerning and requires urgent review
- A resident with a score of 7 or above is likely to be very unwell and will probably require hospital care.

Remember – NEWS is a communication tool that can support decision making.

If you are a doctor or nurse, you must still use your clinical judgement to decide what care the resident needs and where this would be best delivered.

If you are a carer, NEWS helps you to understand how urgently you should be communicating your concerns with a registered healthcare professional.

RESTORE2™ provides you with detailed suggested actions to take based on the residents NEWS and examples of reasonable responses from healthcare professionals so you know what kind of outcome you should be expecting.

As well as escalating your concerns you must continue to monitor your resident in case they become more unwell and you need more urgent support (or they improve with treatment).

- When you escalate, make sure you consider what the resident's normal NEWS is and how this is different to their current score
- A resident with a score of 3 can probably be managed in the community by local health services
- A resident with a score of 5 is concerning and requires urgent review
- A resident with a score of 7 or above is likely to be very unwell and will probably require hospital care
- If you are a doctor or nurse, you must still use your clinical judgement to decide what care the resident needs and where this would be best delivered.

Based on your resident's NEWS you should carry out repeat observations at the following suggested frequency unless there is a clear indication not to e.g. the resident is receiving care whilst dying:

0	at least 12 hourly until no concerns	12hrs
1	at least 6 hourly	6hrs
2	at least 2 hourly	2hrs
3-4 (Single Observation 3)	at least every 30 minutes	30mins
5-6	every 15 minutes	15mins
7+	continuous observation and monitoring until transfer	continuous

RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

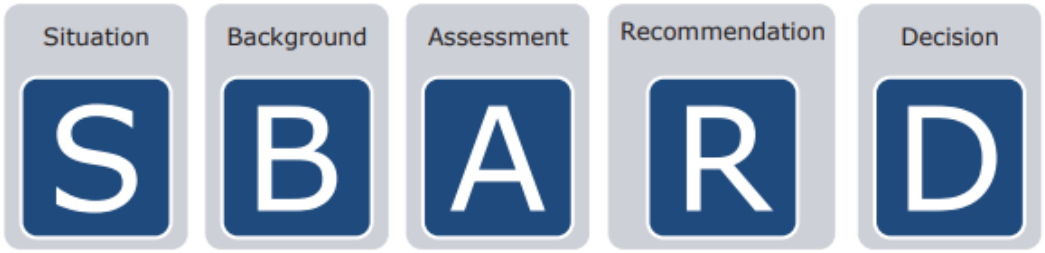
Communication (Rollout Handbook Page 40)

12

12 Structured communications and escalation

Health Education England - HEE

Follow your organisations reporting procedures



Getting your message across

Being able to communicate effectively is a critical skill for everyone working with residents. There is little point in recognising deterioration in a resident if you are unable to communicate your concerns in a way that makes others take action to support you to manage your resident.

It can be difficult to communicate when you are under pressure or tired. It can be challenging communicating with so many different groups of people, including GPs, the ambulance service and community teams.

It is good practice to always try and plan your communication so you know what essential information you need to include. To assist you in getting your message across every time, RESTORE2 uses a Structured Communication Tool call SBARD. This is easy to use and helps information to be transferred accurately and safely between people.

SBARD stands for:

Situation	Background	Assessment	Recommendation	Decision
S	B	A	R	D

Evidence shows that using SBARD helps with communication, confidence and patient safety.

- Evidence shows that using SBARD helps with communication, confidence and patient safety
- Practice using SBARD every time you are handing over information to a colleague or healthcare professional and soon it will become more familiar to you
- Have the SBARD template available next to the phone so that you can use it as a prompt when you need to
- Once you have escalated your concerns, you must still continue to attend to the immediate safety and comfort of your resident
- Carry out and document any of the actions you have been asked to take
- Remember to continue measuring the resident's vital signs to evidence any improvement or deterioration.

Situation

S

Start by explaining the current situation.
Introduce yourself and state your role. Explain where you are calling from, who you are and whether you are a carer or registered nurse and what your direct phone number is in case you get cut off. Provide key information about the resident including:

- their full name, date of birth and NHS number.

Explain what it is that you are concerned about and use the National Early Warning Score to tell them what the resident's current NEWS is and what would be normal for them.

Background

B

Briefly state the resident's relevant medical history and what has got you to the point of calling for help. This should include medical conditions, any treatments or medicines that they are on and whether they have an End of Life care plan or any limitations to treatment. You could include:

- the last GP review if relevant
- any new medicines like antibiotics
- test results that are awaited
- the resident's last set of vital signs.

Assessment

A

This is where you can summarise what action you have taken so far and suggest what you think might be happening. If you aren't sure what is going on, don't let this put you off raising your concerns! You could include:

- signs or symptoms e.g. diarrhoea, skin rash, pain or fatigue
- any pain relief or other medications you have given
- actions like re-positioning the resident
- other observations like urine output or blood sugar (glucose)

Recommendation

Think about what you would like to happen next. This may include whether you would want your resident to be seen by a healthcare professional and how quickly. You can also ask what actions you could carry out, either to manage the resident or whilst you wait for help to arrive. You could use phrases like:

- *'please could you...' or 'I need to you to...' and*
- *'what do I need to do next?' or 'Is there anything I need to do in the meantime?'*

Decision

Finally, summarise your agreed management plan so that you are both clear on what each of you will do to care for the unwell resident. Importantly, remember to document this conversation in the care plan. You could use phrases like:

- *'we have agreed that you will...' and 'I will do...' and*
- *'if there is no improvement within XX, I will take XX action'*

Calling the Ambulance Service

CALLING AN AMBULANCE

- Always know your direct line telephone number so that a call handler or health professional can call you back quickly and easily without having to go through a switchboard, reception or other floor of your home
- If possible, use a portable device to make your call– that way if the ambulance service need to speak or see the resident they don't have to hang up and call back on a different line
- You may not be able to follow the SBARD structured communication tool when speaking to the ambulance call handlers as they use NHS pathways which takes them through specific questions in a certain order. However, by having planned your conversation you should have all of the necessary information to hand
- Some ambulance services use a different structured communication tool called ATMIST. You should use the communication tool you have been trained on and feel most comfortable with
- If your resident needs to be admitted, make sure your RESTORE2™ chart is copied for the crew or ask them to photograph it and upload it to their Electronic Patient Record. RESTORE2™ is your legal document. Don't send the original into hospital. If you are using a digital version of RESTORE2™, print the observations out for the crew to give to the hospital.

RESTORE2

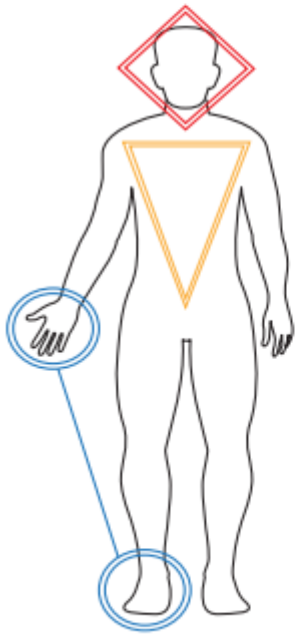
Recognise early soft-signs, Take observations, Respond, Escalate

Scenarios (Rollout Handbook Page 43)

Scenarios

Soft Signs (see page 12/13 for more information)

Molly is a fun and outgoing 78 year old. She mobilises with a zimmer frame and loves to socialise with other residents and staff in the lounge. When she's not talking she is an avid reader of romantic novels, you can often find her with her head in a book in the conservatory. Molly often jokes that she is too busy to sleep; she goes to bed late and tends to get up early, often having a cup of tea with the night staff before they go off duty.



What might Molly's soft signs be if she was becoming unwell?

- physical presentation
  -
  -
- mental state
  -
  -
- behaviour and ability
  -
  -

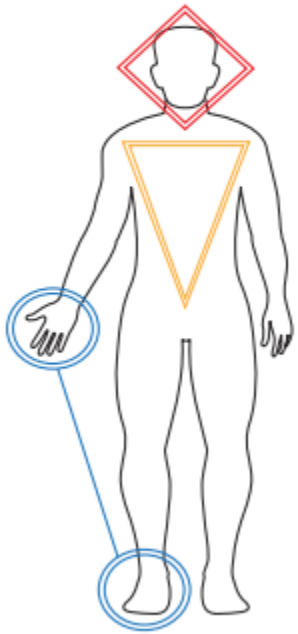
Scenarios

Soft Signs (see page 12/13 for more information)

David is 67. He lives in your nursing home, primarily because of his poorly controlled diabetes. He is a double leg amputee and sometimes uses a wheelchair. Often he stays in his room. When his blood sugars are high he gets headaches, becomes increasingly tired and feels very thirsty. He also gets very grumpy.

What might David's soft signs be if he was becoming unwell?

- physical presentation
  -
  -
- mental state
  -
  -
- behaviour and ability
  -
  -



NEWS calculations

You may not always have an electronic observation system or app to help you add up the NEWS. Making sure that you calculate the correct NEWS is critical in ensuring that your resident gets the support they need. Practise adding up the correct score.

Question 1 (Answer provided as example)

1&2	Observation	Score
Breathing (Respiration) rate	27	3
Sp02 SCALE 1	97%	0
Air or Oxygen	AIR	0
Systolic Blood Pressure	112	0
Heart rate	132	3
Level of Alertness	ALERT	0
Temperature	37.9	0
	Total	6
	Next observations due	15 mins

Question 2

Observation	Score
18	
98%	
AIR	
161	
85	
ALERT	
37.1	
Total	
Next observations due	

White is 0 points	Yellow is 1 point	Orange is 2 points	Pink is 3 points
0	1	2	3

NEWS calculations

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

Question 3

3&4	Observation	Score
Breathing (Respiration) rate	11	
Sp02 SCALE 2	95%	
Air or Oxygen	OXYGEN	
Systolic Blood Pressure	145	
Heart rate	81	
Level of Alertness	VERBAL	
Temperature	36.2	
	Total	
	Next observations due	

Question 4

Observation	Score
20	
92%	
AIR	
124	
91	
ALERT	
36.6	
Total	
Next observations due	

Question 5

5&6	Observation	Score
Breathing (Respiration) rate	22	
Sp02 SCALE 1	96%	
Air or Oxygen	AIR	
Systolic Blood Pressure	121	
Heart rate	95	
Level of Alertness	ALERT	
Temperature	37.3	
	Total	
	Next observations due	

Question 6

Observation	Score
16	
98%	
AIR	
89	
112	
CONFUSED	
35.9	
Total	
Next observations due	

White is 0 points	Yellow is 1 point	Orange is 2 points	Pink is 3 points
0	1	2	3

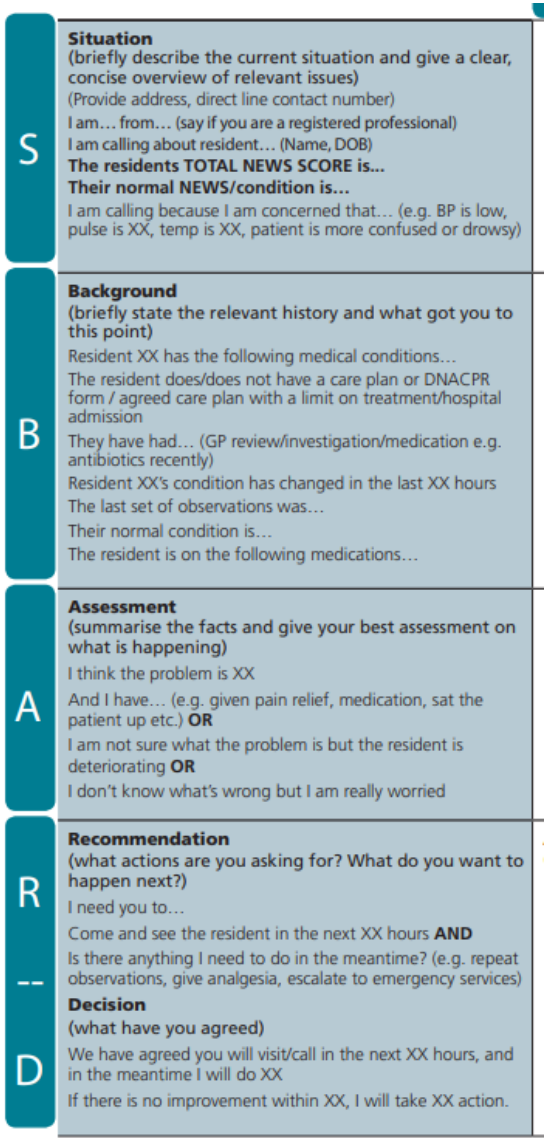
Complete the Situation, Background, Assessment and Recommendation sections of the SBARD.

Simon is an 81 year old resident (NHS number 239 293 0128) who has been in your home (Sunny Hollow Residential Home, 01276 623 9833) for two years – you know him very well. Simon is always very cheerful and engaging but he has dementia – he has trouble remembering where he is and has to be supported to take his medication. However, he always recognises his daughter when she visits and loves talking about old memories with her. Simon is physically well, and only takes some tablets to lower his blood pressure. He is prone to chest infections and has just in case antibiotics in the home. When you see Simon today, he looks more withdrawn. His daughter tells you that he struggled to recognise her and thought that she was his mother. He sounds chesty so you sit him up.

You do a set of physical observations on Simon.

- Breathing 24
- Oxygen saturations 96%
- Air/Oxygen Air
- Systolic Blood Pressure 181
- Heart rate 89
- Level of alertness Confused
- Temperature 37.8°C

His NEWS is 5. His normal NEWS is 0 or 1. Simon has a treatment escalation plan that states he is not for resuscitation but is for full medical treatment of any reversible illness. This includes being admitted to hospital for treatment. Complete the Situation, Background, Assessment and Recommendation sections of the SBARD.



SBARD Example Scenario

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

Situation

I am *"name"* calling from Sunny Hollow Residential Home. I am a carer. My direct line / mobile number is 01276 123 4567.

I am calling about Simon, an 81 year old resident who appears unwell today. I am concerned that he is chesty with a higher than normal breathing rate and more confused than usual.

Background

Simon has dementia. He always recognises his daughter but struggled to recognise her today and thought that she was his mother.

Simon has a DNACPR in place but is for full treatment of any reversible illness, including hospital admission. He gets recurrent chest infections. He is currently on a blood pressure medication only. He does have antibiotics in the home.

He has deteriorated in the last XX hours his temperature is 37.8°C and his breathing rate is 24 breaths per minute.

Assessment

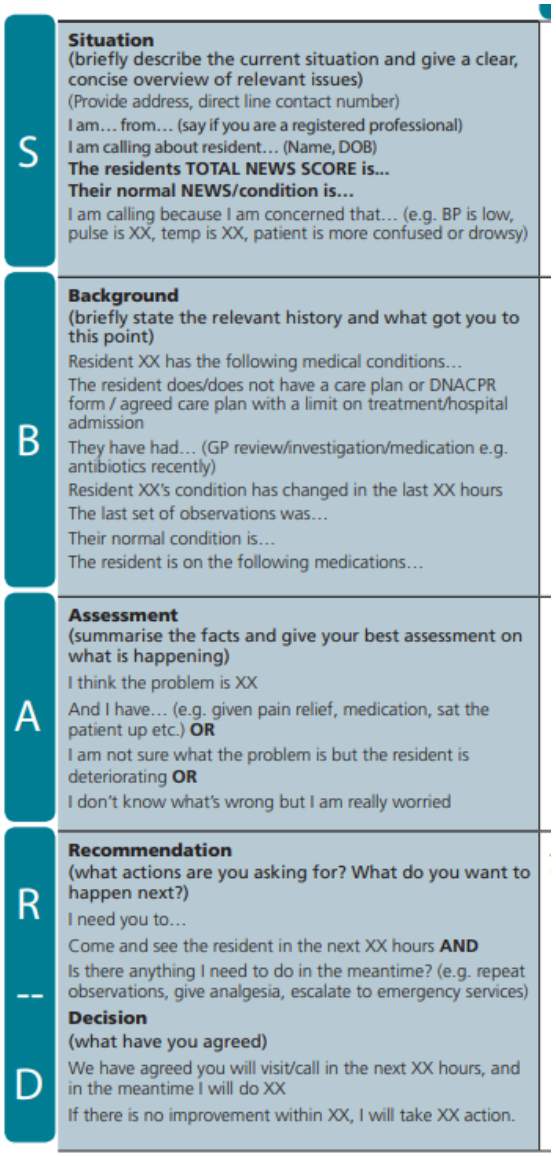
I think he has a chest infection. I have sat him up.

Recommendation

Please could you come and see him in the next hour. I will repeat his observations in 15 minutes. Would you like me to start his antibiotics?

Decision

Thank you, we have agreed that you will visit in the next 2 hours. In the meantime we will start his antibiotics and encourage him to take more fluids.



RESTORE2

Recognise early soft-signs, Take observations, Respond, Escalate

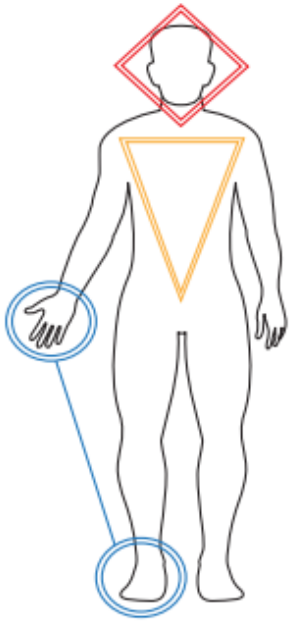
Scenarios (Rollout Handbook Page 47)

Plot Spoiler – Answers Shown

David is 67. He lives in your nursing home, primarily because of his poorly controlled diabetes. He is a double leg amputee and sometimes uses a wheelchair. Often he stays in his room. When his blood sugars are high he gets headaches, becomes increasingly tired and feels very thirsty. He also gets very grumpy.

What might David's soft signs be if he was becoming unwell?

- physical presentation
  -
  -
- mental state
  -
  -
- behaviour and ability
  -
  -



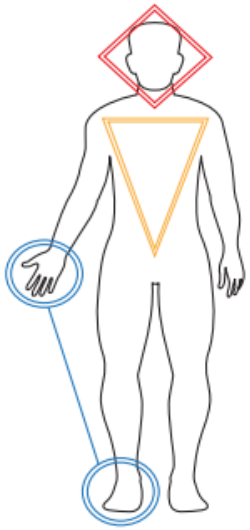
Correct answers: Soft Signs

David: Physical: Increased drinking, increased urine output, headaches, Mental: change in mood, more withdrawn, Behaviour/Ability: More tired / sleepy / drowsy.

Scenarios

Soft Signs (see page 12/13 for more information)

Molly is a fun and outgoing 78 year old. She mobilises with a zimmer frame and loves to socialise with other residents and staff in the lounge. When she's not talking she is an avid reader of romantic novels, you can often find her with her head in a book in the conservatory. Molly often jokes that she is too busy to sleep; she goes to bed late and tends to get up early, often having a cup of tea with the night staff before they go off duty.



What might Molly's soft signs be if she was becoming unwell?

- physical presentation
  -
  -
- mental state
  -
  -
- behaviour and ability
  -
  -

Correct answers: Soft Signs

Molly: Physical: Less able / unable to mobilise, decreased fluid intake, Mental: Withdrawn / less sociable, Less able to concentrate / read, Behaviour/Ability: More tired / sleepy, Spending more time in bed.

1&2	Observation	Score
Breathing (Respiration) rate	27	3
Sp02 SCALE 1	97%	0
Air or Oxygen	AIR	0
Systolic Blood Pressure	112	0
Heart rate	132	3
Level of Alertness	ALERT	0
Temperature	37.9	0
	Total	6
	Next observations due	15 mins

Observation	Score
18	
98%	
AIR	
161	
85	
ALERT	
37.1	
Total	0
Next observations due	

3&4	Observation	Score
Breathing (Respiration) rate	11	
Sp02 SCALE 2	95%	
Air or Oxygen	OXYGEN	
Systolic Blood Pressure	145	
Heart rate	81	
Level of Alertness	VERBAL	
Temperature	36.2	
	Total	8
	Next observations due	

Observation	Score
20	
92%	
AIR	
124	
91	
ALERT	
36.6	
Total	1
Next observations due	

5&6	Observation	Score
Breathing (Respiration) rate	22	
Sp02 SCALE 1	96%	
Air or Oxygen	AIR	
Systolic Blood Pressure	121	
Heart rate	95	
Level of Alertness	ALERT	
Temperature	37.3	
	Total	3
	Next observations due	

Observation	Score
16	
98%	
AIR	
89	
112	
CONFUSED	
35.9	
Total	9
Next observations due	

Correct answers: NEWS calculations

Q2 = zero (0)

Q3 = eight (8) because of Scale 2

Q4 = one (1) because of Scale 2

Q5 = three (3)

Q6 = nine (9)

Example answers: SBARD

Situation

XX calling from Sunny Hollow Residential Home. I am a carer

Direct line 01276 623 9833

Calling about Simon, 81 year old resident. His NEWS is 5. His normal NEWS is 0 or 1.

Concerned that he is chesty with a higher than normal breathing rate and more confused than usual.

Background

Simon has dementia. He always recognises his daughter but struggled to recognise her today and thought that she was his mother.

Simon has a DNACPR in place but is for full treatment of any reversible illness, including hospital admission. He gets recurrent chest infections.

He is currently on a blood pressure medication only. He does have antibiotics in the home.

He has deteriorated in the last XX hours and his observations are:

- Breathing 24
- Oxygen saturations 96%
- Air/Oxygen Air
- Systolic Blood Pressure 181
- Heart rate 89
- Level of alertness Confused
- Temperature 37.8°C

Assessment

I think he has a chest infection. I have sat him up.

Recommendation

Please could you come and see him in the next hour. I will repeat his observations in 15 minutes. Would you like me to start his antibiotics?

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.

Optional Competency Statement

Individual competency assessment is not a mandatory part of the RESTORE2 process
but a suggested template is included as an example for anyone considering adopting this approach.

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

Name _____ **Job Title** _____

RESTORE2™ Competency Statement
The participant can demonstrate clinical knowledge (registered professionals) and skill (all staff) in the use of RESTORE2™, incorporating soft signs, NEWS2 and SBARD without direct supervision. Assessment of practice must be by a Registered Health Care Professional.

RESTORE2™ Competency Framework			
Competency Criteria **The participant will be able to:**	**Assessment method**	**Comments**	**Competence achieved (Assessor) Sign and Date**
1. Demonstrate knowledge and skill in the use of the RESTORE2™ and NEWS2 observation tools			
1a. Understand the normal presentation of their residents and the significance of treatment escalation plans / DNACPR orders (all staff), including knowledge of underlying conditions, individual risk factors (registered professionals)	Discussion		
1b. Identify possible early soft signs of deterioration in residents and understand the responsibility to escalate concerns accordingly (all staff)	Discussion and observation		
1c. Be aware of when it is appropriate to complete a set of vital signs and when it is appropriate to immediately escalate to the emergency services (all staff)	Discussion		
1d. Demonstrate ability to accurately perform a full set of vital signs (breathing rate, oxygen saturations, blood pressure, heart rate, ACVPU, temperature) (all staff) **(only complete if vital signs competency not done)**	Observation		
1e. Accurately document individual scores on the RESTORE2™ tool and add them up to get the correct total score (all staff)	Observation		
1f. Identify the immediate actions to be taken in response to the total NEWS2 in relation to what is normal for the resident using the RESTORE2™, including the frequency of next observations (all staff)	Observation and discussion		
1g. Identify an appropriate plan for on-going management of the deteriorating resident (registered professionals)	Observation and discussion		
2. Demonstrate knowledge and skill in the use of the SBARD escalation tool			
2a.Demonstrate when to use the SBARD tool (all staff)	Discussion		
2b. Explain the 5 stages of SBARD and what information should be communicated for each stage (all staff)	Discussion		
2c. Demonstrate accurate documentation of SBARD on the RESTORE2™ tool (all staff)	Observation		

Date NEWS 2 e-learning or Health Education England Deterioration/Sepsis modules completed
_____

Date Physical Assessment Competency Completed _____

I can confirm that the above named individual has completed the NEWS 2 e-learning or Health Education England Sepsis modules and has retained evidence of completion.

Assessor _____ Signature_____ Status _____ Date _____

I can confirm that the above named individual has completed a physical assessment competency document and is able to perform clinical observations to a satisfactory standard without supervision.

Assessor _____ Signature_____ Status _____ Date _____

I can confirm that the above named individual has completed the RESTORE2™ competency document and can verify that he/she is able to use RESTORE2™ safely and appropriately.

Assessor _____ Signature_____ Status _____ Date _____

6
CPD hours once completed

Some “Top Tips” from West Hampshire CCG

These tips are offered as helpful advice not instruction. Full details of West Hampshire CCGs Implementation & Audit process referred to can be found on the West Hampshire CCG website (via: https://wessexahsn.org.uk/projects/329/restore2).

RESTORE2™
Recognise Early Soft Signs, Take Observations, Respond, Escalate

Trainer tips

Below are some tips that may help you when you are supporting a home to implement RESTORE2™.

In our experience most homes will only be able to support staff for an hour to an hour and half for training. It can be difficult to get all the messages across in this short time. Below are the key issues we found when auditing RESTORE2™ as well as some points that you may want to consider before you deliver your training session.

Training

Not all homes will have a training room; your training may take place in the lounge a bedroom, dining room. Be prepared for:

- Residents interrupting. By walking into the lounge, sitting in the lounge or sleeping in the lounge
- Staff turning up late to the session, leaving the session to answer a phone call or being asked to return to the floor or to pick up children
- Staff may bring their children to the session, this can distract everyone including you
- You were told to expect 10 staff don’t be surprised if 2 or 20 staff turn up

The manager needs to attend the training and lead on the implementing RESTORE2™; otherwise staff will struggle to embed the tool

Try to emphasise during the training:

- The home needs to start using RESTORE2™ as soon as they have had the training (Otherwise staff will forget how to use RESTORE2™ and could misplace the charts)
- The home needs to keep a record of the issues and concerns and contact you as soon as possible so that you can address concerns. Some issues that have been highlighted:
  - GPs comments were not supportive of RESTORE2™
  - Paramedic not aware that RESTORE2™ was being used in homes
  - 111/999 not receptive to being told a NEWS2 score

Top Tips for rolling out RESTORE2™

RESTORE2™
Recognise Early Soft Signs, Take Observations, Respond, Escalate

Most homes don’t have an observation policy; NHS West Hampshire CCG has developed some guidance that can be shared.

The home needs to understand that the learning starts once they start using RESTORE2™; it’s difficult to cover every eventuality. A RESTORE2™ champion should be allocated and given time to complete a pre audit to establish if RESTORE2™ is being used correctly, this is helpful to both the home and the auditor.

Emphasise that the home needs to recognise that RESTORE2™ supports residents receiving the right care at the right time in the right place. Remind staff to document on the SBARD (Some staff are familiar with the SBARD but don’t necessarily use it) and the action tracker as this gives a written account of what the home has done to ensure that the resident has received the right care.

Talk about documentation. The NMC Code 2015 (10.4) states

“*Attribute any entries you make in any paper or electronic records to yourself, making sure they are clearly written, dated and timed, and do not include unnecessary abbreviations, jargon or speculation*”

Reinforce that RESTORE2™ / NEWS2 will become a common language across healthcare and they are part of healthcare and they need to support the spread.

Acknowledge that staff may come across pockets of professionals who may not be aware of RESTORE2™ but they should not get despondent.

RESTORE2™ should give staff the confidence to talk to another professional and will assist decision making/confirmation of clinical judgement.

A reliable NEWS2 score for the resident helps agency staff or new staff who may not know the resident; this could stop a resident being conveyed to hospital.

Keep reaffirming that staff need do what the escalation chart tells them to do, that staff need to keep contemporaneous notes, record the care given or omitted and the rationale for these decisions.

A NEWS2 score that’s above reference does not necessarily mean that you automatically need to call 999 – consult the Treatment Escalation Plan to see the resident’s wishes

Tell staff that they should discuss the residents NEWS2 score with every professional who has contact with the resident. RESTORE2™ should not be used in isolation.

Top Tips for rolling out RESTORE2™

Some “Top Tips” from West Hampshire CCG

These tips are offered as helpful advice not instruction. Full details of West Hampshire CCGs Implementation & Audit process referred to can be found on the West Hampshire CCG website (via: https://wessexahsn.org.uk/projects/329/restore2).

RESTORE2™

Recognise Early Soft Signs, Take Observations, Respond, Escalate

Remind staff to send a photocopy of the observation chart and the action tracker. This helps the next team caring for the resident; it stops the assumptions of what the resident is normally like or what has been happening to the resident prior to conveyance

Homes need to include agency staff when using RESTORE2™

Don’t forget to tell the sponsor when a home has a good outcome when using RESTORE2. We can spread the RESTORE2™ news!

Once all three measures have been completed and met the criteria (at 4 weeks, 12 weeks and 24weeks) it then becomes the homes responsibility to carry on completing the RESTORE2™ audits as part of their internal governance. It’s the homes safety net to ensure that staff are using the tool correctly.

Reinforce that RESTORE2™ needs to be part of handover.

Remind the manager that RESTORE2™ should be discussed at staff meetings; this gives staff a chance to express what’s going well or not so well. It also maintains momentum.

Remind the manager if they are leaving the home to let you know as you will need to arrange a visit with the new manager to discuss RESTORE2™.

Sounds like a conflicting message. Encourage staff to use their clinical judgement (Nursing Home) and their gut feeling in a care homes. The NEWS2 score may not be above reference but the resident is clearly unwell.

Top Tips for rolling out RESTORE2™

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

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West of England Academic Health Science Network

Patient Safety Team
West of England Academic Health Science Network

Patient Safety Team
Wessex Academic Health Science Network

The RESTORE2™ Project Advisory Board