CCG logo here

A common language across healthcare:

using RESTORE2 & NEWS2 to identify the physically deteriorating patient in Care/Nursing Homes

Training Pack

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

NHS Parliamentary Awards
RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

Joint national winner for 'Excellence in Primary Care'

Endorsed by Steven Brine MP for Winchester & Chandler's Ford

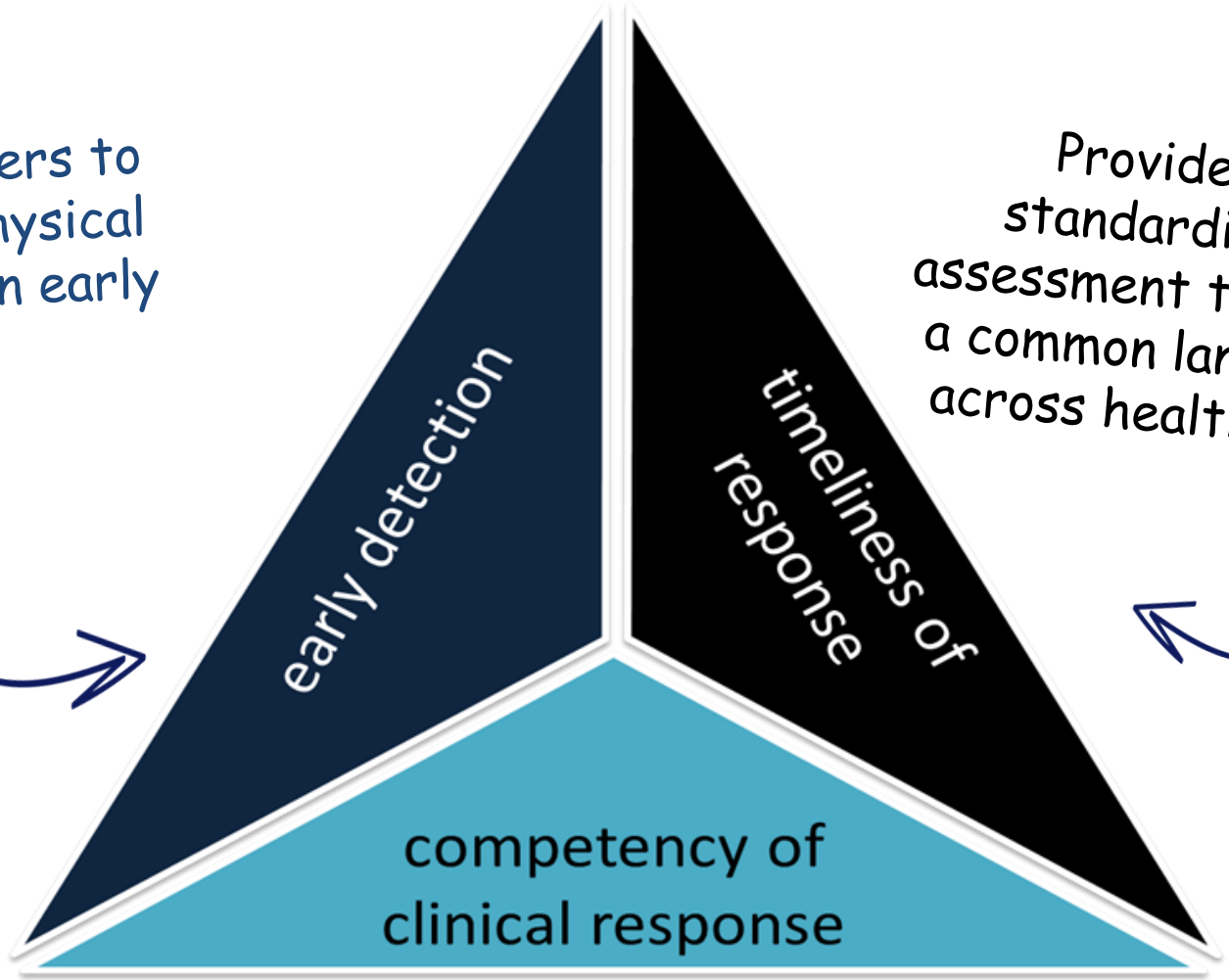

What is
RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

- **RESTORE2 is a physical deterioration and escalation tool for care/nursing homes**

- It is designed to support homes to:
  - Recognise when a resident may be deteriorating or at risk of physical deterioration
  - Act appropriately according to the residents care plan
  - 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
  - Provide a concise escalation history to health professionals to support their professional decision making
  - Get staff and residents the right support in the right timescale

The Triad of Clinical Outcomes

Support carers to recognise physical deterioration early



Provide a standardised assessment tool and a common language across healthcare

Enable staff to communicate concisely with clinical decision makers to get an effective response

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Objectives and Aims

Objective

- To provide staff with an overview of the RESTORE2 tool and the necessary skills and knowledge to apply the tool in practice

Aims

- To provide an understanding of the advantages of applying the RESTORE2 tool to recognise and react to the deteriorating patient
- Train staff on the steps and processes of applying the RESTORE2 tool in practice, including soft signs, recording observations, escalation and communication
- Provide staff with skills required to apply the RESTORE2 tool to their practice to ensure early and appropriate intervention
- Undertake scenarios to ensure that staff are comfortable with using the tool


Why do your residents need
RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

Case Study **Lost Opportunities**

- 10am Resident Y developed ‘flu like symptoms - referred to the local GP practice who diagnosed a chest infection – prescribes antibiotics

Oxygen saturations 91% in air

Not engaging in rehab

More lethargic than previously

Chance to repeat observations and recognise potential for deterioration

NEWS would have been 3 if measured

Nursing Home – GP

Case Study **Lost Opportunities**

- 5pm Antibiotics have not arrived
- 00.10am Resident developed a fever and elevated heart rate and the nursing home contacted the Out of Hours GP service who advised paracetamol and fluids

worsening clinical picture

OOH GP did not do a NEWS

advised to wait until morning for antibiotics

NEWS would have been 8 if measured

Nursing Home – GP – Out of Hours GP

Case Study Lost Opportunities

- 03.30am Home contacted Out of Hours again because of concerns around falling blood pressure and oxygen levels in the blood

worsening clinical picture

Effects of paracetamol in reducing temperature not appreciated

NEWS would have been 7 if measured

Nursing Home – GP – Out of Hours GP

Case Study Lost Opportunities

- 04.00am Home call 999 as so concerned about the resident.
- The resident died in the emergency department at 09.30am due to sepsis

low mortality

NEWS Score	Mortality
0	0.5%
<5	5.5%

root causes

no-one recognised how sick the resident was

response from healthcare services was inadequate

home were unable to effectively communicate their concerns to healthcare professionals

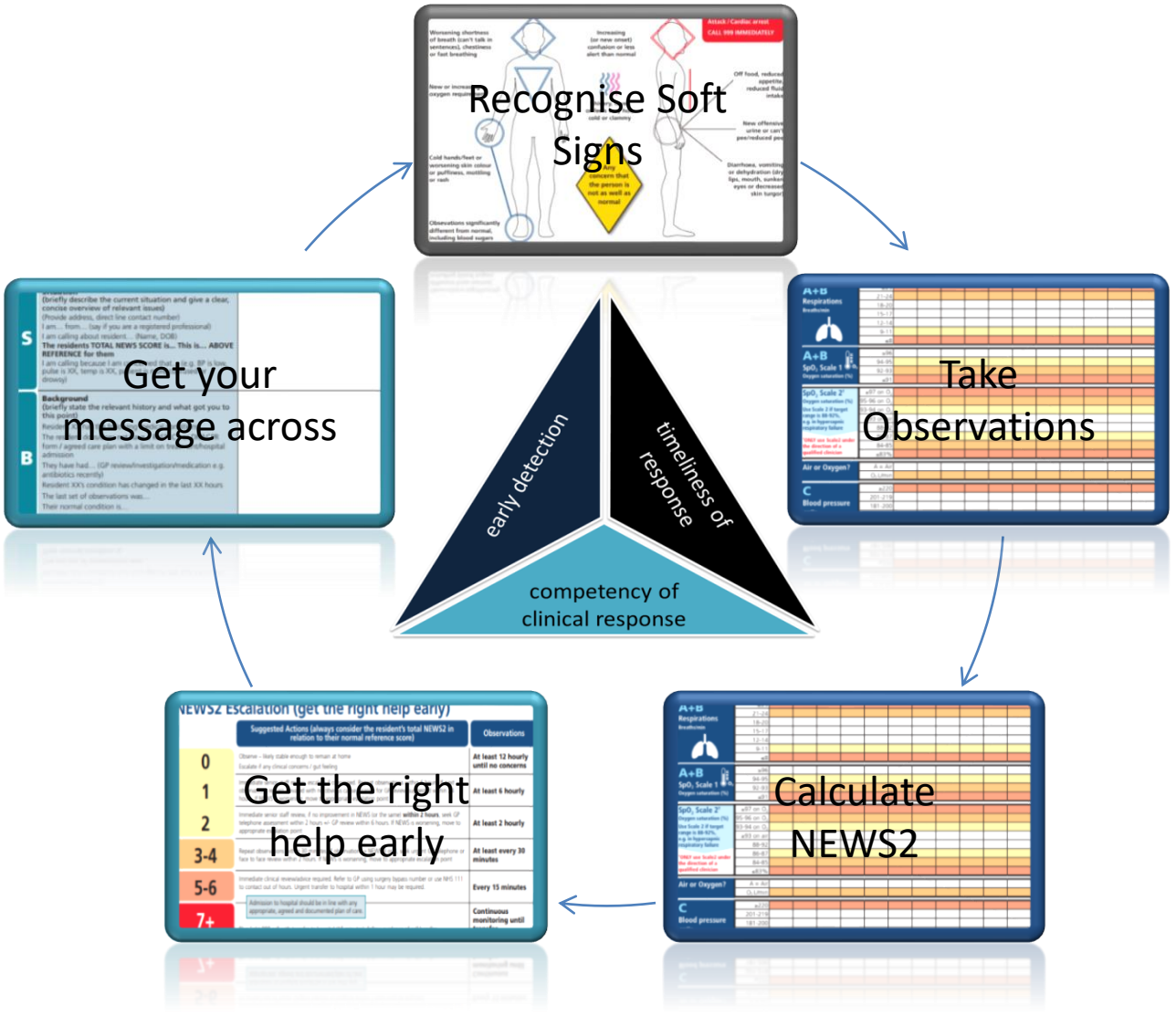
high mortality

NEWS Score	Mortality
≥5	22%
≥7	27%
≥9	38%

Nursing Home – GP – Out of Hours GP – 999 - Hospital

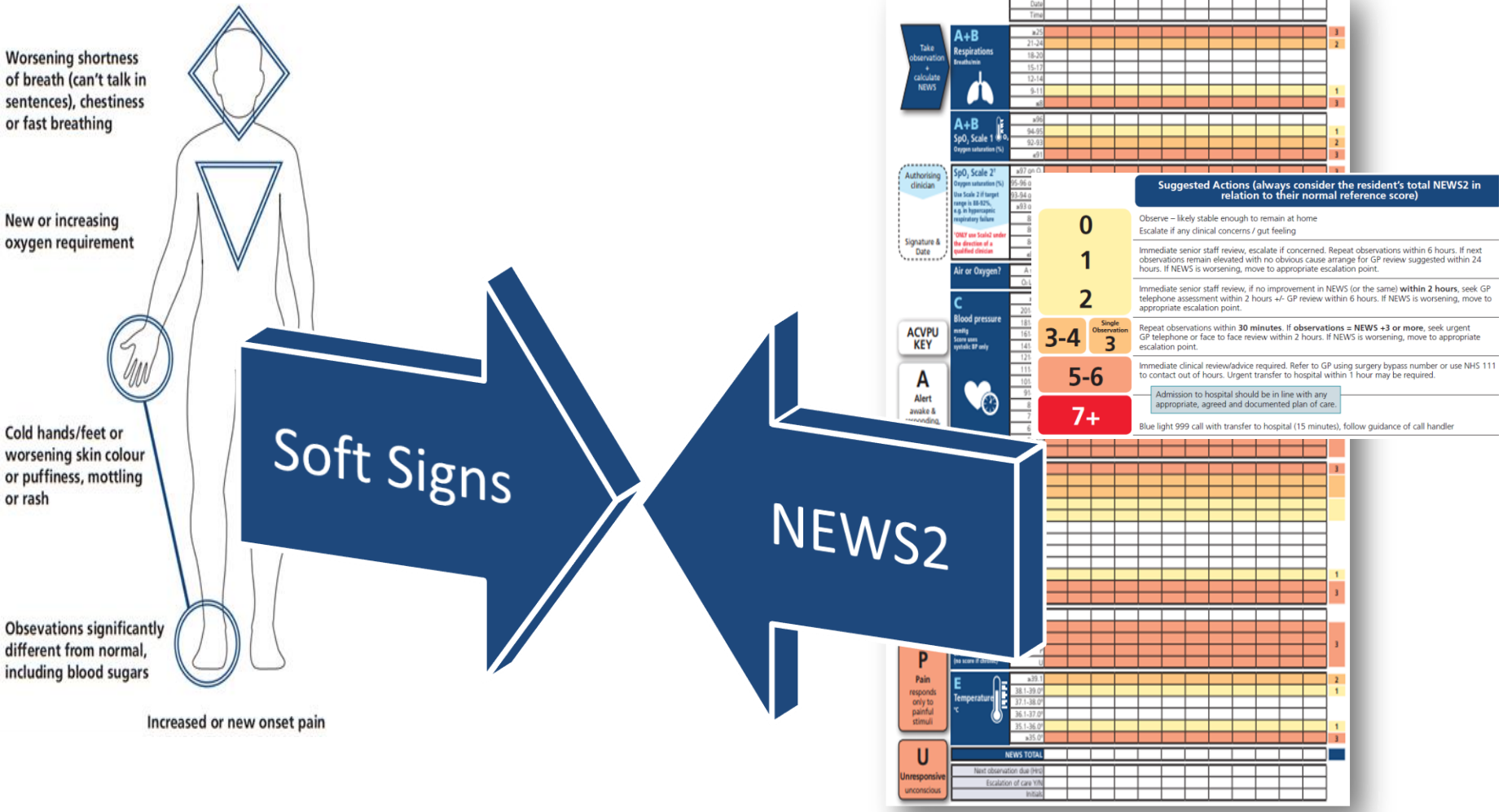

How do you use
RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

- RESTORE2 combines soft signs with NEWS2, a clear escalation pathway designed around care homes and an SBARD communication tool and Action Tracker



Identifying the soft signs of deterioration

Making NEWS accessible + SBARD



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RESTORE2

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

Does Your Resident Have Soft-Signs?

NEW ONSET OF:

Stroke (facial / arm weakness, speech problems)

Central Chest Pain / Heart Attack / Cardiac arrest

CALL 999 IMMEDIATELY

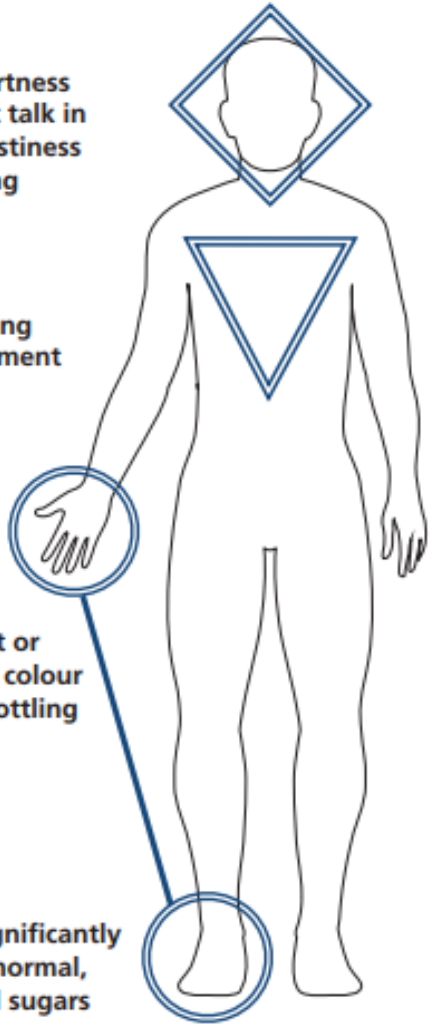
Worse than normal lethargy or withdrawl or anxiety/agitation/ apprehension or not themselves

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

New or increasing oxygen requirement

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

Obsevations significantly different from normal, including blood sugars



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

Shivery, fever or feels very hot, cold or clammy

Any concern that the person is not as well as normal

Off food, reduced appetite, reduced fluid intake

New offensive urine or can't pee/reduced pee

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

When to call 999

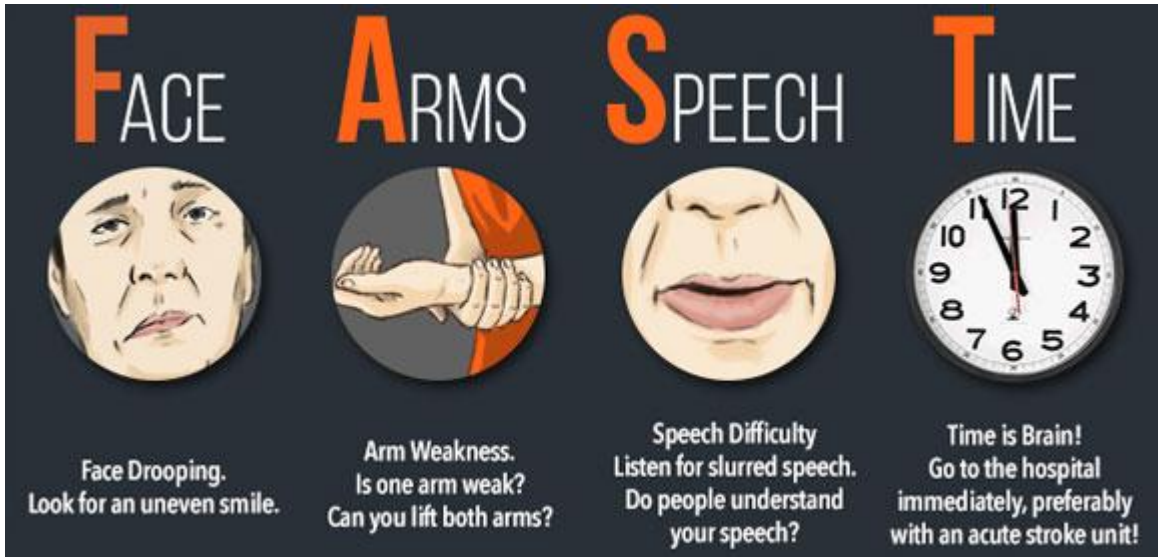
NEW ONSET OF:

Stroke (facial / arm weakness, speech problems)

Central Chest Pain / Heart Attack / Cardiac arrest

CALL 999 IMMEDIATELY

- A stroke is a brain attack. It happens when the blood supply to part of the brain is cut off. Without blood brain cells can be damaged or die – do not use RESTORE2 but call 999



When to call 999

NEW ONSET OF:

Stroke (facial / arm weakness, speech problems)

Central Chest Pain / Heart Attack / Cardiac arrest

CALL 999 IMMEDIATELY

- All chest pain should be investigated. Get immediate medical help if you think someone is having a heart attack– do not use RESTORE2 but call 999

Call 999 if you have sudden chest pain that:

- spreads to your arms, back, neck or jaw
- makes your chest feel tight or heavy
- also started with shortness of breath, sweating and feeling or being sick

You could be having a heart attack. Call 999 immediately as you need immediate treatment in hospital.

Understanding your resident

- Homes are encouraged to understand what is normal for the resident and work with GP's or other teams (e.g. frailty teams) to define when another health professional would want to be informed of an event – this should include knowing what a normal set of physical observations looks like for the resident
- Any escalation should be with reference to the residents wishes and advanced care plan – if a plan does not exist it should be created with the resident or the appropriate person with Power of Attorney (health and welfare)
- Essential that there is evidence of a documented Capacity Assessment where Best Interests Decisions are being made and that decisions are made with others and are clearly articulated

Understanding your resident

Reference NEWS2 (What's normal for this resident)

Edward is normally fit and active but is often mildly confused in the mornings before breakfast. Normally NEWS score is 0 but in the morning Edward may trigger the AVPU scale – only call a GP if the confusion continues to lunchtime. Edward is for full treatment and admission to hospital if required. Edward becomes agitated when he is becoming unwell which is a good soft sign for him.

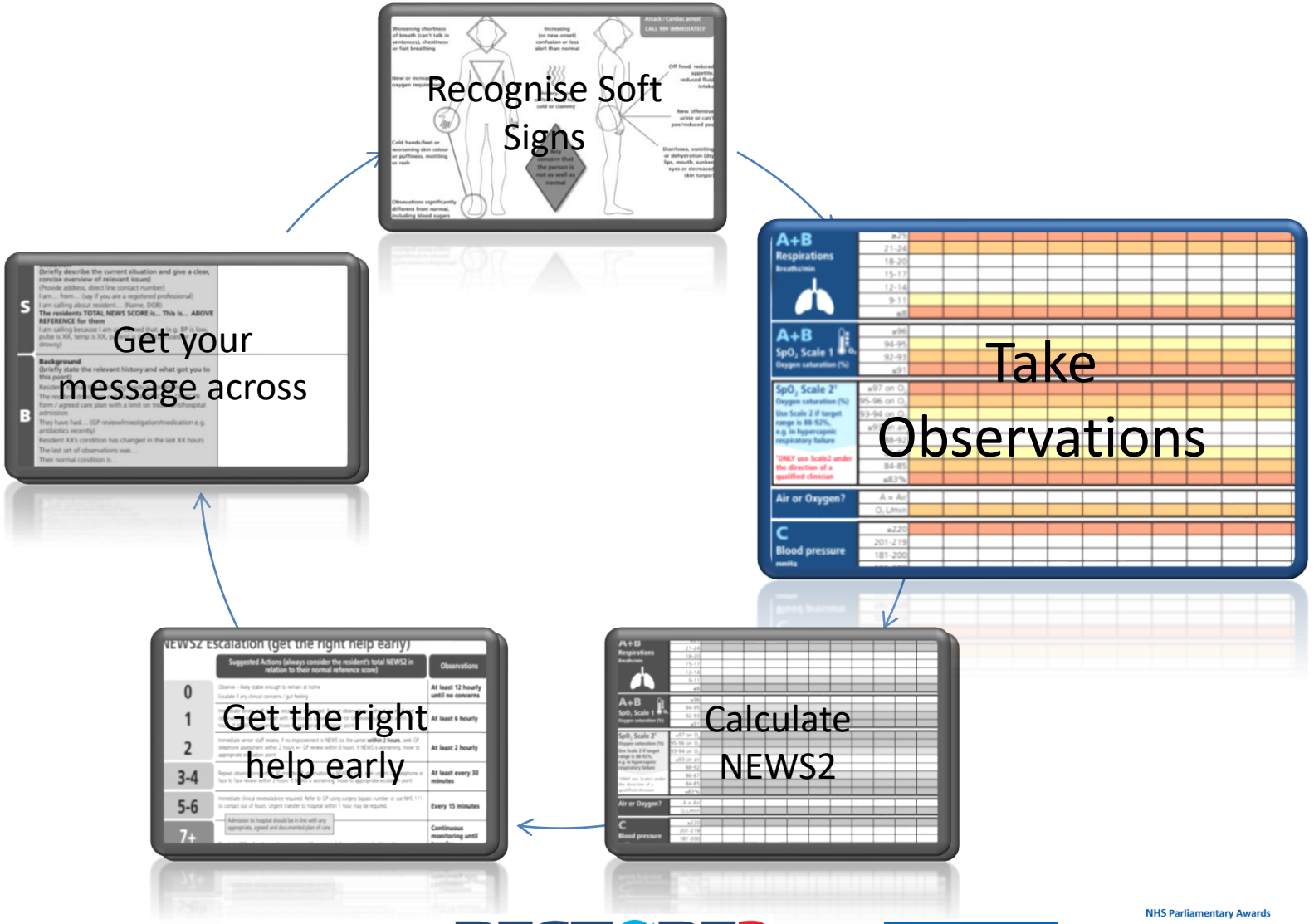
Print name: Dr. Davids Date: 12/4/18 Signature: DDAVIDS

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

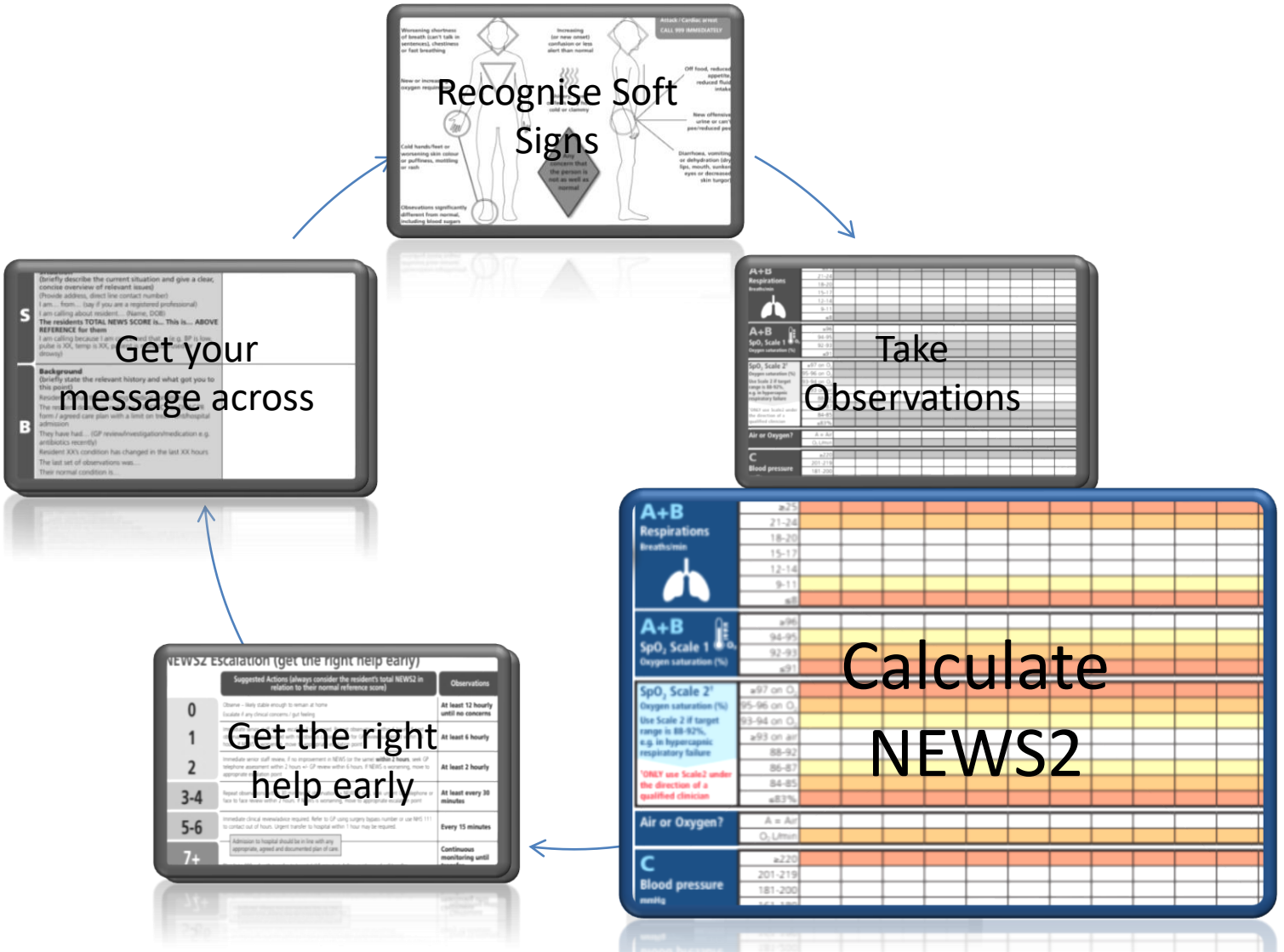
End of Life (EOL) or Agreed Limit of Treatment

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

Take Observations

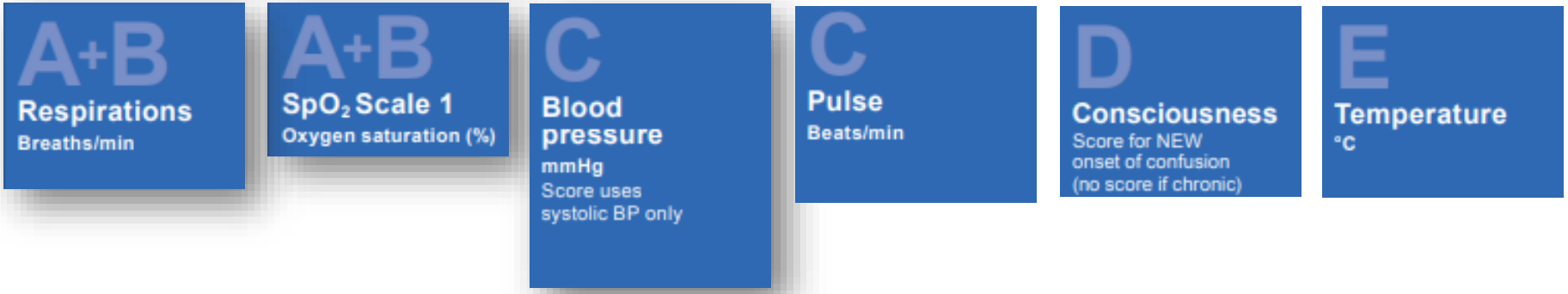


Calculate NEWS2



Physical Observations

- Validated tool widely used in acute care comprising six biological measurements:
  - Respiration Rate
  - Oxygen Saturations
  - Temperature
  - Systolic Blood Pressure
  - Heart Rate
  - Level of Consciousness (defined by ACVPU)



- Staff need to have had the appropriate training in taking physical observations
- Homes need to invest in quality equipment for observations and ensure that this is serviced and calibrated regularly
- Staff must take and document complete observations
- Recording should be made in black pen, be clear, dated, timed and signed

NEW

NEW

NEW (No Baseline)

Authorising clinician

Signature & Date

SpO_2 Scale 2† Oxygen saturation (%) Use Scale 2 if target range is 88-92%, e.g. in hypercapnic respiratory failure †ONLY use Scale2 under the direction of a qualified clinician	≥97 on O_2													3
	95-96 on O_2													2
	93-94 on O_2													1
	≥93 on air													
	88-92													
	86-87													1
	84-85													2
	≤83%													3
Air or Oxygen?	A = Air													
	O_2 L/min													2
C Blood pressure mmHg Score uses systolic BP only	≥220													3
	201-219													
	181-200													
	161-180													
	141-160													
	121-140													
	111-120													
	101-110													1
	91-100													2
	81-90													3
	71-80													
	61-70													
	51-60													
	≤50													
P Pulse beats/min	≥131													3
	121-130													
	111-120													
	101-110													
	91-100													
	81-90													
	71-80													
	61-70													
	51-60													
	41-50													1
	31-40													3
	≤30													
D Consciousness Score for NEW onset of confusion (no score if chronic)	Alert													
	Confusion													3
	V													
	P													
	U													
E Temperature °C	≥39.1													2
	38.1-39.0°													1
	37.1-38.0°													
	36.1-37.0°													
	35.1-36.0°													1
	≥35.0°													3
NEWS TOTAL														
Next observation due (Hrs)														
Escalation of care Y/N														
Initials														

ACVPU KEY

A Alert awake & responding, eyes open

C Confusion New onset of confusion (Do not score if chronic)

V Verbal moves eyes / limbs or makes sounds to voice

P Pain responds only to painful stimuli

U Unresponsive unconscious

Respiration Rate

- RR is the most important parameter but the least recorded
- RR is thought to be the most sensitive indicator of a patient's physiological well-being
- RR reflects not only respiratory function as in hypoxia or hypercapnia, but cardiovascular status as is pulmonary oedema and metabolic imbalance i.e. DKA
- Elevated RR is a powerful sign of acute illness and distress, in all patients
- Generalised pain and distress
- Sepsis remote from the lungs
- CNS disturbance and metabolic disturbances such as metabolic acidosis
- Reduced RR is an important indicator of CNS depression and narcosis
- **Always take RR over 60 seconds**

Physiological parameter	Score						
	3	2	1	0	1	2	3
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25

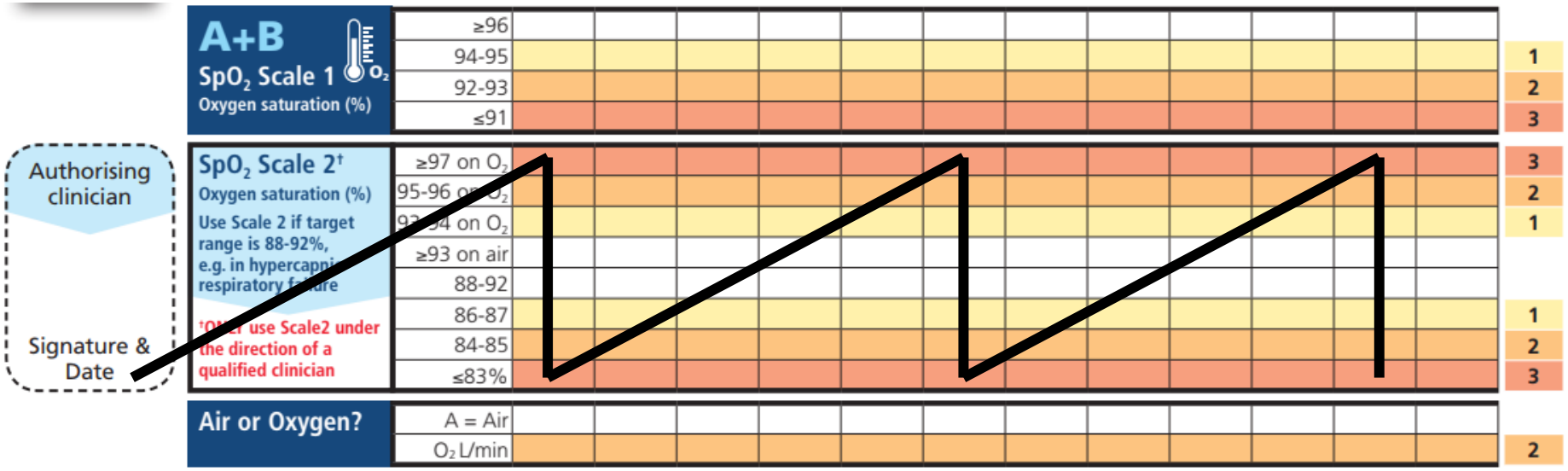
SpO_2 Scoring scales

- NEWS2 has two scoring scales for SpO_2

The new SpO_2 scoring Scale 2 is only for patients with a prescribed oxygen saturation requirement of 88–92% (e.g. in patients who normally retain Carbon Dioxide and need to do this to drive their respiratory effort (hypercapnic respiratory failure))

- This should only be used in patients **confirmed to have hypercapnic respiratory failure on blood gas analysis** on either a prior, or their current, hospital admission
- The decision to use the new SpO_2 scoring Scale 2 should be made by a competent clinical decision maker and should be recorded in the patient's clinical notes
- In all other circumstances, the regular NEWS SpO_2 scoring scale (Scale 1) should be used
- For the avoidance of doubt, the SpO_2 scoring scale not being used should be clearly crossed out

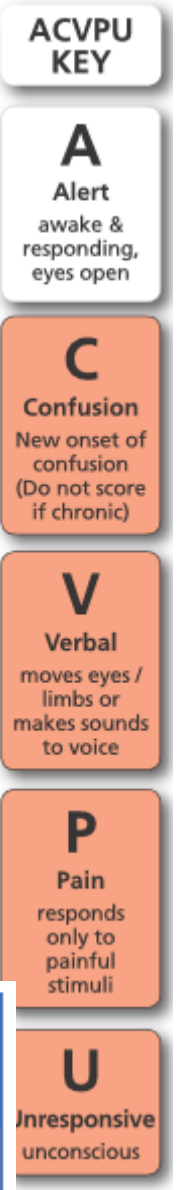
SpO_2 Scoring scales



Level of Consciousness

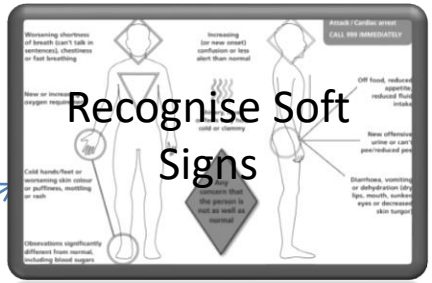
- Measured via ACVPU

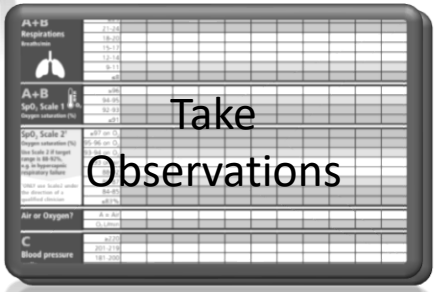
  (alert, new confusion, voice, pain, unresponsive)
- Alert – patient is active, responsive, interacting with people and surroundings, answers questions etc.
- New onset or worsening confusion is now included which excludes residents with confusion as part of their normal disease process
- Voice – responds to voice but not spontaneously interacting, may be drowsy, keeps eyes closed, may not speak coherently
- Pain – not alert and does not respond to verbal stimuli, responds to painful stimulus
- Unresponsive – unresponsive, unconscious

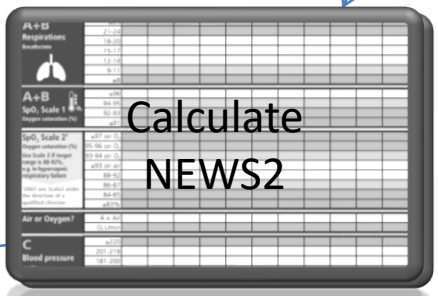


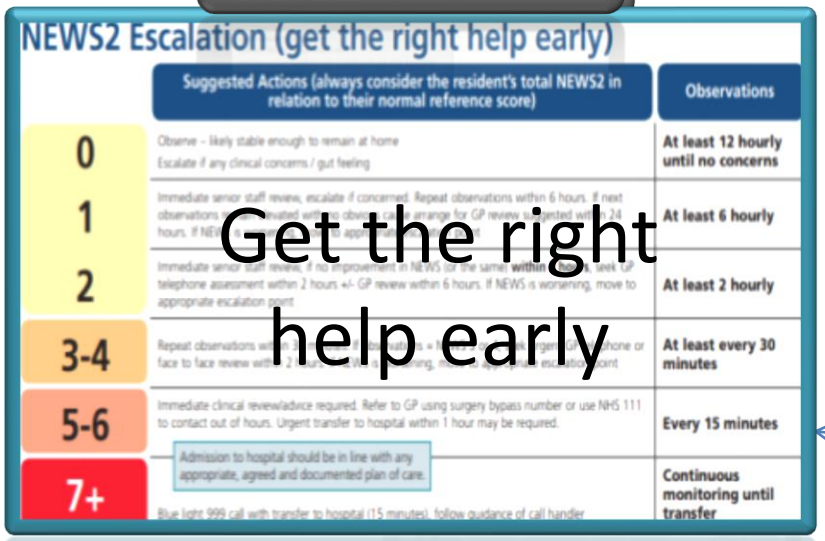
Physiological parameter	Score						
	3	2	1	0	1	2	3
Consciousness				Alert			CVPU

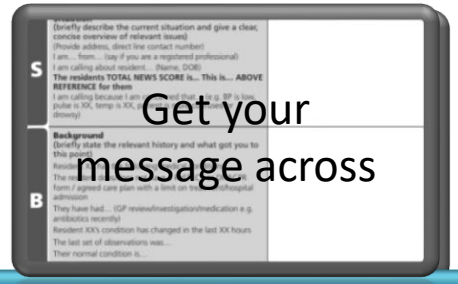
Escalation – get the right help











Get the right help early

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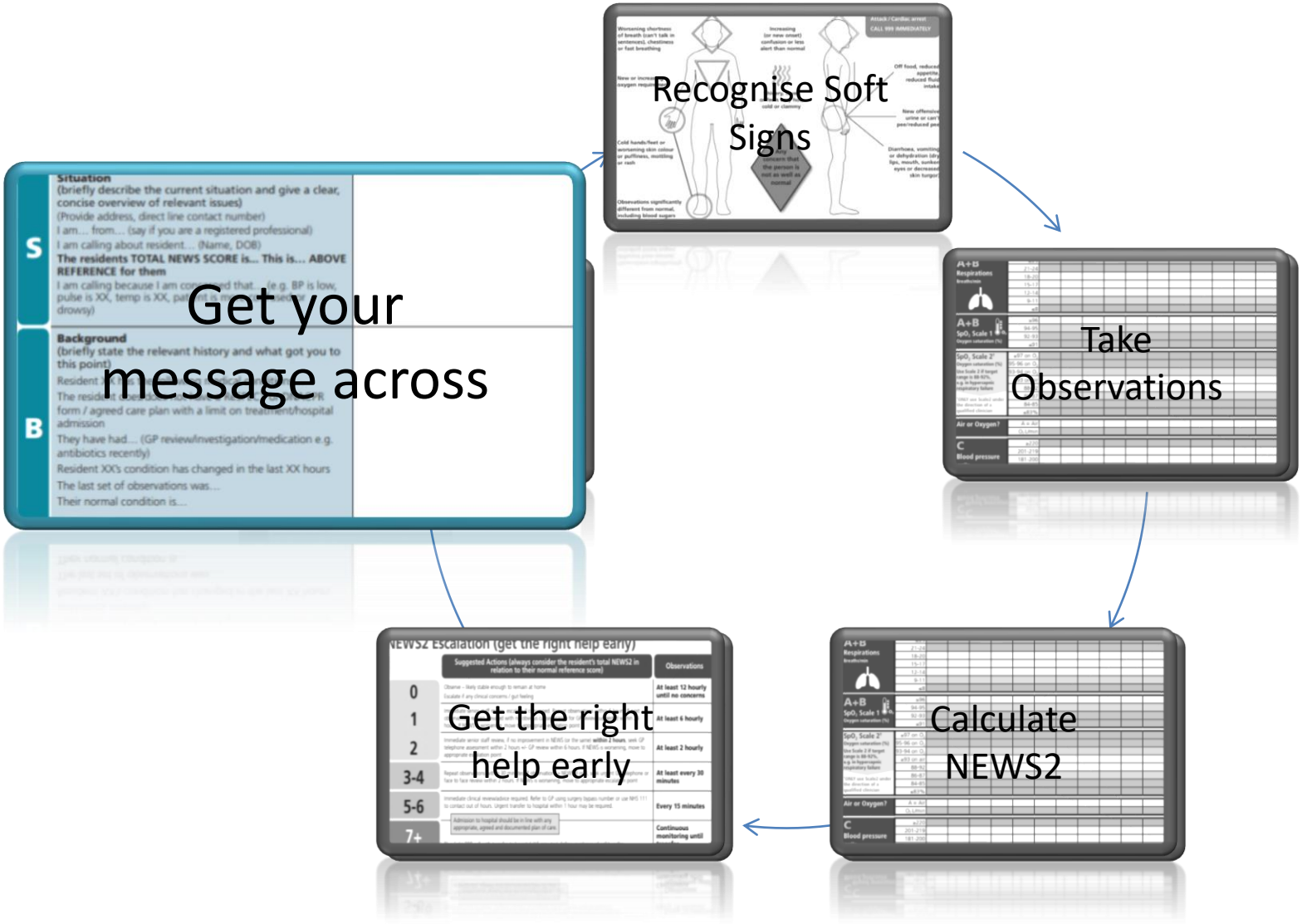
Escalation – get the right help

Removes the element of personal interpretation

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

Get your message across



- SBARD is a structured method for communicating critical information that requires immediate attention and action
- Five steps:
  - Situation
  - Background
  - Assessment
  - Recommendation
  - Decision

SBARD Escalation Tool and Action Tracker

(get your message across)

REMEMBER TO SAY:
The residents TOTAL NEWS SCORE is... This is... ABOVE REFERENCE for them

		1 Notes (including date and time of escalation)
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... This is... ABOVE REFERENCE for them** 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 ReSPECT 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…	
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	**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)** …XX hours, and …ake XX action.	**Actions I have been asked to take** (initial & time when actions completed) — Initials

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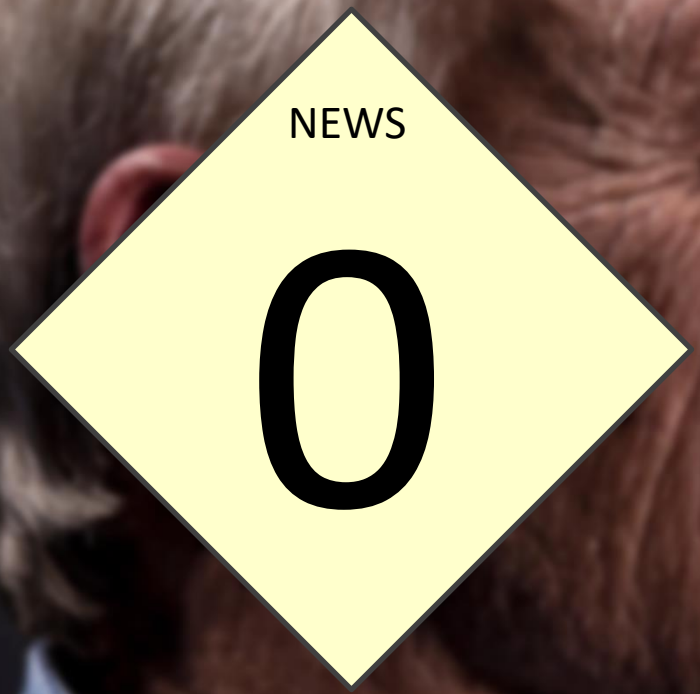
Case Study RESTORE2 in a Nursing Home

- Resident has a normal NEWS2 score of 0



Completing monthly observations means the staff recognise what is "normal" for the resident

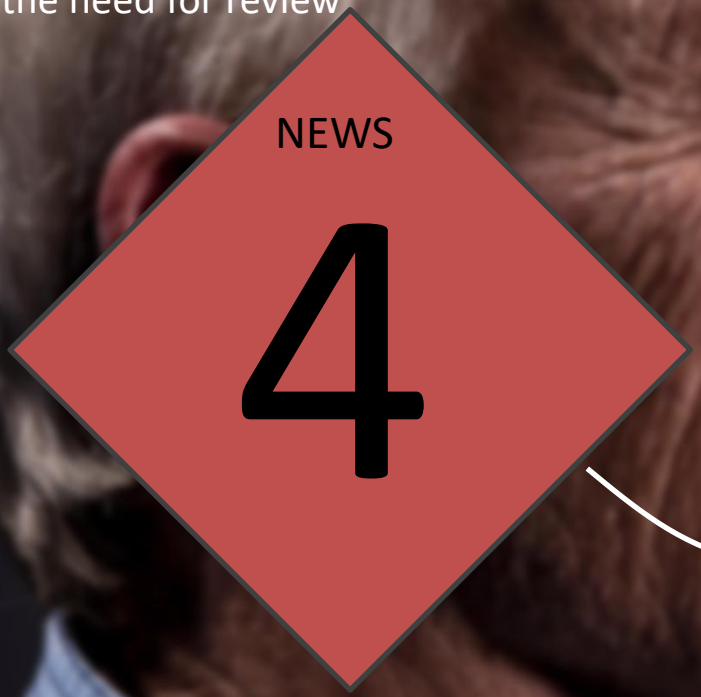
Use of the Reference box (what's normal for the resident) makes staff aware of needs specific for the resident

Nursing Home

Case Study

RESTORE2 in a Nursing Home

- Staff noticed a change in the residents general condition “soft signs” which prompted observations and highlighted the need for review



low temperature

off food

increased lethargy

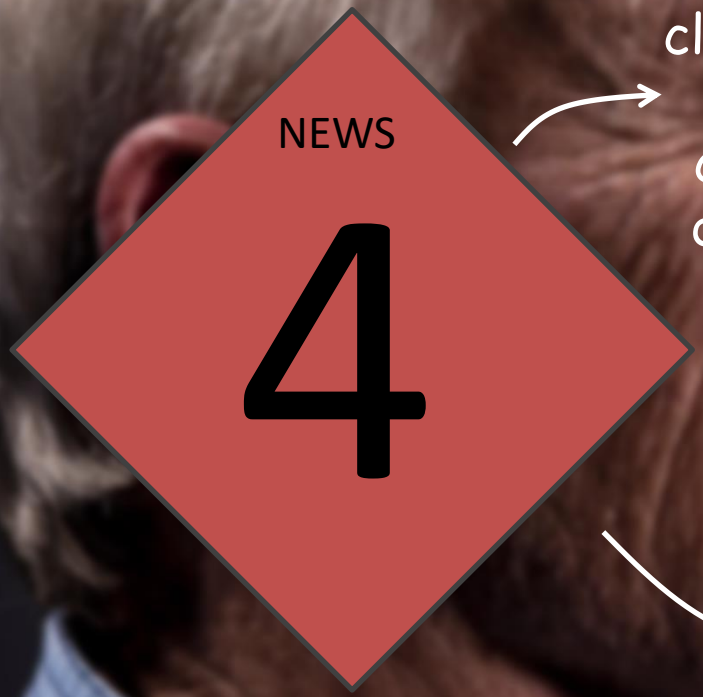
not taking fluid and medications

Clear story to tell GP with physiology using SBARD

Nursing Home – Recognising change and escalating concerns

Case Study RESTORE2 in a Nursing Home

- GP reviewed and regular monitoring maintained, with the addition of blood sugar readings due to residents medical history



clear, objective evidence of condition and deterioration

Respect form in place to help formulate plan of care

Family kept informed and included in discussions

Good visual representation of residents condition

Nursing Home – **GP Review**

Case Study RESTORE2 in a Nursing Home

- The resident was reviewed, considered for end of life care and anticipatory medications put in place
- Resident able to stay in home and be cared for by a familiar team

'the home staff felt the RESTORE2 tool complimented their clinical judgement resulting in timely review and avoidance of hospital admission'

'the incident has highlighted the importance of recognising soft signs and how a fully informed and followed process can populate an appropriate plan of care

Right place, right time, right care

Nursing Home – GP – **No hospital admission needed**

Case Study RESTORE2 in a Nursing Home

- Resident admitted for respite care following a fall and treatment for rib pain and a chest infection

Home don't know the resident and what's normal for them

Home does have a reference point for normal physiology

Nursing Home

Case Study RESTORE2 in a Nursing Home

- 2 days after admission staff and the residents family noticed small changes with the residents “soft signs”

breathlessness

off food

increased lethargy

looking pale

Clear story to tell GP service with physiology

Nursing Home – **Out of Hours GP**

Case Study RESTORE2 in a Nursing Home

- OOH reviewed but the resident deteriorated further that evening. Following GP review and liaison with the hospital team admission was recommended for assessment and oxygen administration

clearer handoff between services

clear, quantifiable evidence of deterioration

transferable records of physiology

Nursing Home – OOHGP – **Ambulance Service - Hospital**

Case Study RESTORE2 in a Nursing Home

- The resident was discharged from hospital following treatment for chest sepsis & pulmonary oedema after 4 days , returned to the nursing home for further respite and home 2 weeks later

'the home staff felt the RESTORE2 tool enhanced their confidence in being able to request a GP review and communicating the reasons for this'

'the incident has also highlighted to the care home staff the importance of soft signs and how changes can be an early indicator of deterioration'

Nursing Home – OOHGP – Ambulance – Hospital – **Nursing Home - Home**

Using RESTORE2

lets do some scenarios

RESTORE2

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

RESTORE2

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

Case Study 2

Charlie

Charlie

Charlie is 67 yrs old

Admitted to home as unable to cope and has reduced mobility

Full capacity No respiratory problems

Observations

Resps 16 per minute

Sats 96%

BP 125/90

P88

ACVPU= A

T 37

Normal News2 Score

- Normal NEWS 2 Score “0”
- Monthly observations stable for first 3 months of his stay

Soft Signs

One morning you notice that Charlie is reluctant to eat his breakfast and feels he needs to go back to bed for a rest

When you check on Charlie an hour later you feel his hands are colder than normal

WHAT DO YOU DO ?

Observations and reassess news

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

Observations

Reps 20

Sats 95%

BP 115/80

P95

A- Alert

T 37.5

NEWS2

Score 2

WHAT DO YOU DO?

Escalation plan

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

Refer to escalation plan	2 hrly obs
Request senior staff review Repeat observations 2 hrly	No change
	NEWS2 score 2
Document , Document , Document	**What do you do ?**

Refer to escalation plan

Repeat observations

Reps 22

Stats 95%

Bp 115/70

P 95

Alert

T 38

NEWS2 score now 4

What do you do ?

Refer to escalation plan

Next step

- Repeat observations every 30 minutes
- Seek Urgent GP advice
- how would you give the information to the GP

SBARD

- **Situation**

I am ringing because I am concerned regarding one of my residents

Charlie has been with the home for 3 months and is generally fit and well

I became concerned as he is off his food and unusually lethargic

His reference/normal NEWS2 score is 0

We have been monitoring his observations over the day and his NEWS2 Score has risen to 4

- **Background**

Charlie is 67yrs old and alert with full capacity

He is on medication for hypertension but no other medication

He has not required medical review since joining the home

His last set of observations are : Reps 22, Stats 95%, Bp 115/70, P 95 Alert ,T 38

SBARD

- **Assessment**

I am not sure what the problem is but he is deteriorating

Recommendation

Please could you visit to review Charlie ?

Is there anything I can do whilst I am waiting for you ?

GP- Advice please give 1g of paracetamol and continue with observations

- **Decision**

GP – will visit in the next two hours after surgery

Continue with observations and call back if Charlies condition changes before the GP arrives

Document .Document .Document

Outcome

- Charlie is reviewed by GP
- Antibiotics prescribed (UTI)
- To continue observations in line with the escalation tool until returned to Charlies “Normal”

Reflection

- What did you do ?
- Recognised soft signs
- Used SBAR to communicate your concerns
- Achieved a GP review in a timely manner