National Patient Safety Improvement Programmes

NHS Bradford District and Craven Clinical Commissioning Group

NHS

Managing Deterioration

Module 1 - Using Softer Signs to recognise deterioration

Mel Johnson Y&H PSC Programme Manager
Bev Gallagher Head of Safety and Quality Improvement

@NatPatSIP / @MatNeoSIP

www.improvement.nhs.uk

Delivered by:
*The***AHSN***Network*
Yorkshire & Humber Patient Safety Collaborative

Led by:
NHS England
NHS Improvement

What do we mean by ‘Deterioration’?

Deterioration : ‘when a resident moves from their normal clinical state to a worse clinical state. This increases their risk of morbidity, organ failure, hospital admission, further disability and even sometimes death.’

To improve resident outcomes we focus on:

1. **Recognition** –spotting early signs that residents are deteriorating
2. **Response** – what actions do we take?
3. **Communication** – how to effectively ask for help from other healthcare staff (e.g. GPs, Ambulance, community nurses). Ensuring residents are part of any decision we make.

Why do we need to spot deterioration early?

- By recognising deterioration earlier we can prevent harm
- Acting early increases the chances of successful treatment and being able to follow residents wishes
- We can avoid some hospital admissions which can be upsetting for residents

Can Carers Spot the Signs?

There is lots of research that says yes!

One study in 2000 showed that Nursing assistants in care homes spotted signs of illness by an average of 5 days before they were seen in the patients observations.
The study found that nursing assistants were able to spot behavioural and functional status changes in residents.

Reference: Boockvar K1, Brodie HD, Lachs M, J Am Geriatr Soc. 2000 Sep;48(9):1086-91. Nursing assistants detect behaviour changes in nursing home residents that precede acute illness: development and validation of an illness warning instrument.

Knowing your Resident is

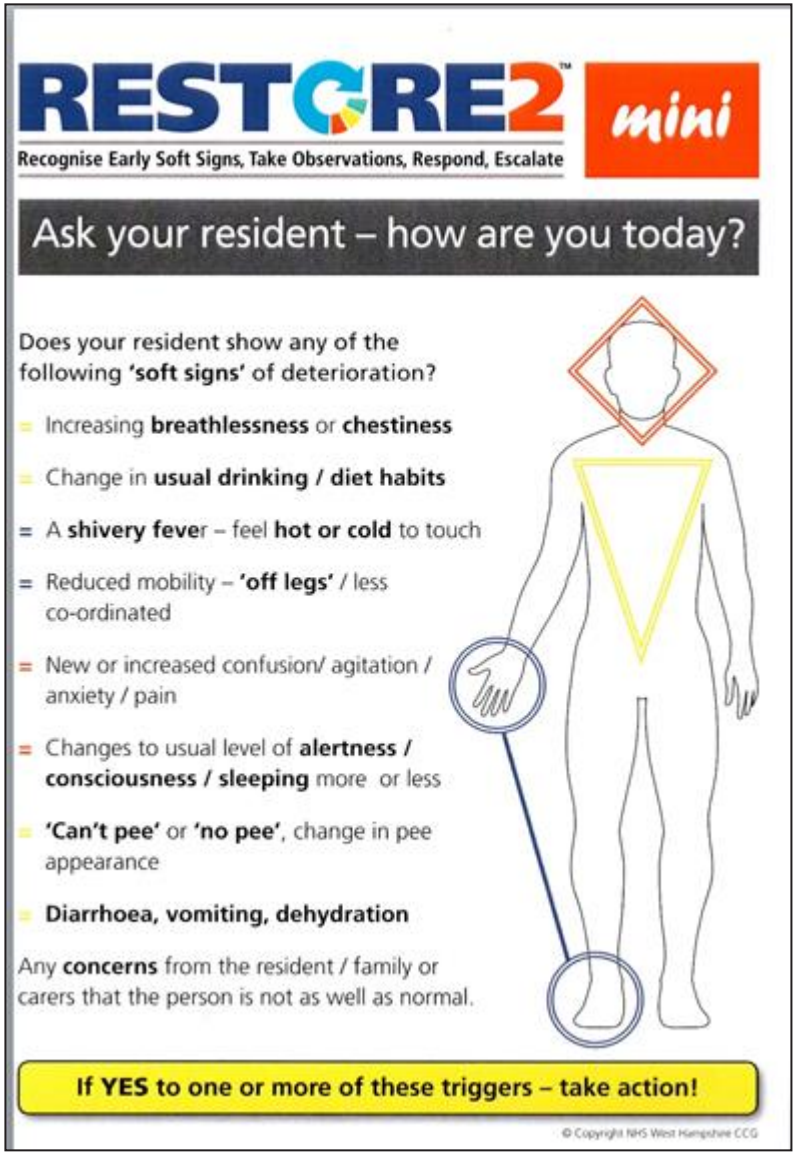
- Important signs can be spotted by everyone who comes into contact with residents (care staff, support staff, relatives, residents themselves).
- Understanding what is normal for your resident helps you detect changes.
- Good communication in the team is crucial; handover, accurate paperwork and care plans.
- The whole team needs to feel able to speak up if they are worried and feel they will be listened to.
- Looking at all the soft signs together will help you spot early deterioration.

RESTORE2 Mini

This tool consists of 8 prompts to help spot early signs of deterioration.

The tool is designed to support your '*Gut Instinct*' and help you explain to colleagues why you are worried so better care decisions can be made.

We will go through the clinical reasons why each of these prompts are included in the tool.



Local Bradford & Craven Tool

RESTORE2 mini

Recognise Early Soft Signs, Take Observations, Respond, Escalate

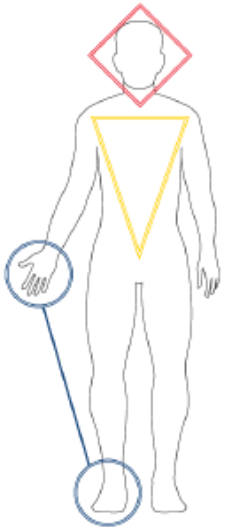
NHS Bradford District and Craven Clinical Commissioning Group

Resident Name:			
Date:		Time:	

Ask your resident - how are you today?

Does your resident show any of the following 'soft signs' of deterioration?

- ☐ = Increasing breathlessness or chestiness?
- ☐ = Change in usual drinking/diet habits?
- ☐ = A shivery fever - feel hot or cold to touch?
- ☐ = Reduced mobility - 'off legs' / less co-ordinated?
- ☐ = New or increased confusion / agitation / anxiety / pain?
- ☐ = Changes to usual level of alertness / consciousness / sleeping more or less?
- ☐ = 'Can't pee' or 'no pee', change in pee appearance?
- ☐ = Diarrhoea, vomiting, dehydration?



Any concerns from the resident / family or carers that the person is not as well as normal?

If YES to one or more of these triggers - **take action!**

Actions taken:	Person completing			
	Reported to:			
	Date:		Time:	
Person in charge action taken:				
	Date:		Time:	
Outcome for resident:				

Before calling for help

- **Check Vital Signs (where possible):** e.g. temperature, pulse, etc.
- **Review Records:** recent care notes, medications, other plans of care
- **Have relevant information available when calling:** e.g. care plan, vital signs, advance care plans such as DNACPR and RESPECT, allergies, medication list

Get your message across

Resident Name:		Date of Birth:	

Raise the alert within your home e.g. to a senior carer, registered nurse or manager. If possible, record the observations using a NEWS2 based system. Report your concerns to a health care professional e.g. nurse / GP / GP Hub / 111 / 999 using the SBARD Structured Communication Tool. 'Hello my name is', I am calling from .....about our resident.....

S Situation: e.g. what's happened. How are they?

B Background: e.g. what is their normal, how have they changed? Any long term medical conditions e.g. COPD, heart failure, diabetes?

A Assessment: e.g. what have you observed / done? Include signs you spotted from RESTORE2 Mini and any other vital signs if available e.g. temperature

R Recommendation: 'I need you to....'

D Decision: what have you agreed? (including any Treatment Escalation Plan and further observations)

Key prompts/decisions

Name of person			
Service:		Today's date:	
Signature:		Time of call:	

Don't ignore your 'gut feeling' about what you know and see.
Give any immediate care to keep the person safe and comfortable.

RESTORE2_SBARD_tool (Jul2020)

Any Concerns?

- The first and most important sign is that the resident, family or anyone on the team expresses a concern that a resident is not as well as normal.

- However small the change, your first step should be to do an assessment using the RESTORE2 mini tool.

Remember: it may not be a specific sign you notice first, it could be a gut feeling that they are not 'quite right', or are acting 'out of character'.

Joseph, 81

About Joseph

- He moved to a residential home two years ago when his wife died because he wasn't managing at home. His daughter visits once a week.
- He has a past medical history of bowel cancer and he had an operation in his 60's to remove part of his bowel, leaving him with a stoma which he can manage himself.
- He was diagnosed with prostate cancer 5 years ago, which has spread to his hip bone and can cause him some pain on walking although he manages well on his own with a stick.
- He is sometimes a little forgetful but does not have a diagnosis of dementia.
- He is very sociable, likes his food, chatting with staff and other residents and enjoys his life in the home.

Monday

- Joseph gets up at his usual time but comments to staff that he feels a bit ‘groggy’ and that he didn’t sleep well.
- He sits in his chair and watches TV, doesn't chat to other residents or staff like he usually would.
- He is sleepy during the day, which isn’t like Joe, staff leave him to doze because he has had a disturbed night’s sleep.
- He has not had much stoma output today, but he doesn’t mention this to carers.
- Joe does not mobilise as much as usual during the day.

New or increased confusion/ agitation/ anxiety/ pain

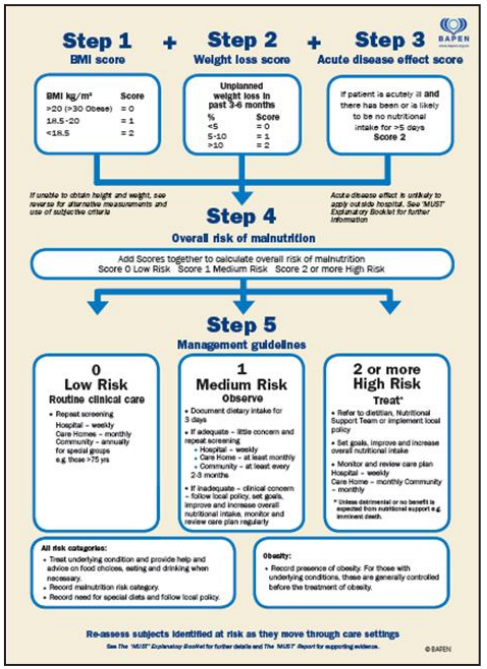
- You may notice the resident fidgeting, trying to get out of their chair/bed, looking scared or anxious. Residents may become more active and aggressive, newly or more confused or nervous, withdrawn and tearful.
- Not all residents can tell you they are in pain. You may need to look for clues: looking uncomfortable, fidgety, agitated or not wanting to move.

Clinical cause: Pain is an important symptom of something not being right e.g. pressure damage, bowel problems, angina.
Agitation can be an important sign of a developing infection, **delirium**, pain, lack of oxygen or problems with medication.

Free toolkit and e learning available via: http://www.yhscn.nhs.uk/mental-health-clinic/Dementia/WYHHCPICS/WYH_ICS_Delirium.php

Change in the usual drinking / diet habits

- Has the resident's normal eating pattern altered? e.g.eating less, avoiding certain foods.
- Has the resident has lost weight? Either through weekly monitoring or you may notice other signs like poorly fitting clothes, jewellery, drawn face.



Tools like MUST are a great help in monitoring and assessing dietary intake.

https://www.bapen.org.uk/screening-and-must/must/introducing-must

Lack of nutrition can lead to malnutrition with its potentially serious consequences.

Clinical cause: Causes of weight loss include stress, decreased intake due to ageing or can be a result of other changes in the body such as depression, infections and cancers. Lack of appetite can be a sign of lots of underlying medical conditions.

Tuesday

- Joseph had another disturbed night with back pain. He is short-tempered with staff when they ask why he hasn't eaten all of his breakfast.
- He sits in his chair watching TV again. It is a lovely sunny day but Joe shows no interest in sitting in the garden today.
- When walking to the toilet staff notice he seemed a little unsteady on his feet and he needed help with his trousers.
- When offered a cup of tea he declines, asking for juice because his mouth is dry.
- Joe finds that he doesn't really fancy the cottage pie for evening meal. He usually looks forward to this on a Tuesday. He has some soup instead.

Changes to alertness/ consciousness/ sleeping (more or less)

- Have there been any changes to a residents sleep pattern (more or less)?
- Whatever the residents usual way of communicating is, are they are doing this less often or less effectively?
- Does the resident have less energy?
- Consider their consciousness ‘Think **CAVPU’**

Level of Consciousness	
C	(New or Increased) **C**onfusion
A	**A**lert ‘can answer questions sensibly’
V	Responds to **V**erbal commands/questions
P	Responds to a **P**ressure or **P**ain stimulus
U	**U**nresponsive to any stimulus

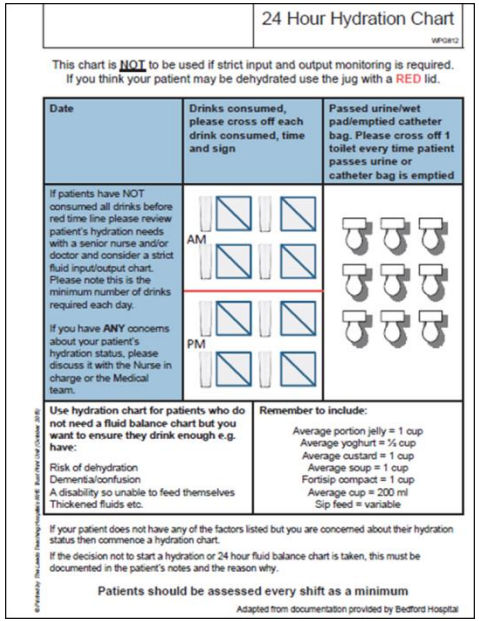
Clinical cause: These symptoms could be a sign of **delirium**

Wednesday

- Joe is really not feeling himself today. He is tired and doesn't have the energy to eat or drink much.
- He decides to mention his low stoma output to carers, and when they ask about his waterworks he says it has been darker and more smelly than usual.
- Carers dip his urine which is all clear.
- Joe asks for extra paracetamol during the day and before bed for his backache. Embarrassingly, he forgets the name of several carers and domestic staff during the day. He goes to bed early.

‘Can’t pee’ or ‘no pee’, change in pee appearance

- Sometimes difficult to spot until the resident becomes dehydrated which can have serious health consequences.
- Key is monitoring; consider using a simple input and or output chart; or looking for signs of dehydration.



24 Hour Hydration Chart

This chart is NOT to be used if strict input and output monitoring is required.
If you think your patient may be dehydrated use the jug with a RED lid.

Date	Drinks consumed, please cross off each drink consumed, time and sign	Passed urine/wet pad/emptied catheter bag. Please cross off 1 toilet every time patient passes urine or catheter bag is emptied
If patients have NOT consumed all drinks before red time line please review patient's hydration needs with a senior nurse and/or doctor and consider a strict fluid input/output chart. Please note this is the minimum number of drinks required each day. If you have **ANY** concerns about your patient's hydration status, please discuss it with the Nurse in charge or the Medical team.	AM PM	

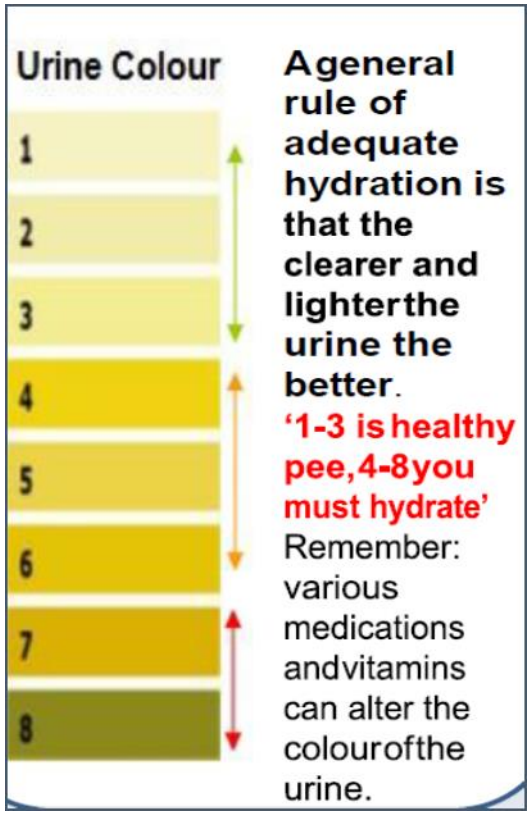
Use hydration chart for patients who do not need a fluid balance chart but you want to ensure they drink enough e.g. have:	Remember to include:
Risk of dehydration Dementia/confusion A disability so unable to feed themselves Thickened fluids etc.	Average portion jelly = 1 cup Average yoghurt = ½ cup Average custard = 1 cup Average soup = 1 cup Fortisip compact = 1 cup Average cup = 200 ml Sip feed = variable

If your patient does not have any of the factors listed but you are concerned about their hydration status then commence a hydration chart.

If the decision not to start a hydration or 24 hour fluid balance chart is taken, this must be documented in the patient's notes and the reason why.

Patients should be assessed every shift as a minimum

Adapted from documentation provided by Bedford Hospital



Clinical cause: this can be a sign that the resident has a UTI or their kidneys are not functioning well

Thursday

- Joe’s daughter Maggie is visiting today. He always looks forward to the weekly visits, but today he seems to have forgotten, because the carers have to remind him this morning.
- He is eating and drinking less, and Maggie notices that his mouth and skin seem dry and his clothes appear looser than normal
- He falls asleep during her visit, which is troubling for Maggie. She talks to carers.
- Carers inform her of Joe’s sluggish bowels and say they think it is because of the increase in pain medication at night. They reassure Maggie that they are giving him laxatives and keeping an eye on things.

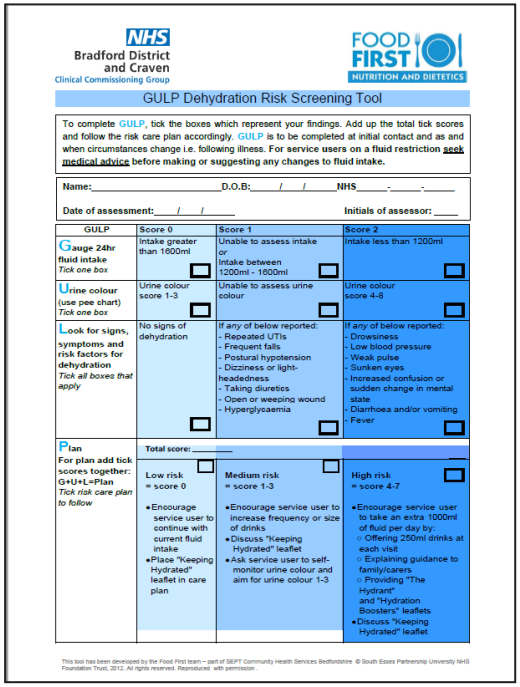
Diarrhoea, vomiting, dehydration

Loose stools can very quickly lead to dehydration even if the resident is drinking normally. Monitoring of bowels is an important indicator. As well as frequency and consistency it is useful to also note the colour of stools.

Look for the signs of dehydration:

- Increased thirst,
- tiredness,
- dizziness,
- headache,
- dark/decreased urine,
- sticky/dry mouth,
- Irritability

Consider using a dehydration assessment tool like GULP



NHS Bradford District and Craven Clinical Commissioning Group

FOOD FIRST NUTRITION AND DIETETICS

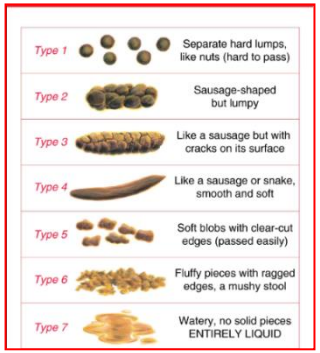
GULP Dehydration Risk Screening Tool

To complete GULP, tick the boxes which represent your findings. Add up the total tick scores and follow the risk care plan accordingly. GULP is to be completed at initial contact and as and when circumstances change i.e. following illness. For service users on a fluid restriction seek medical advice before making or suggesting any changes to fluid intake.

Name:_____ D.O.B:___/___/___ NHS_____-_____-_____

Date of assessment:___/___/___ Initials of assessor: ____

GULP	Score 0	Score 1	Score 2
Gauge 24hr fluid intake *Tick one box*	Intake greater than 1600ml ☐	Unable to assess intake or Intake between 1200ml - 1600ml ☐	Intake less than 1200ml ☐
Urine colour (use pee chart) *Tick one box*	Urine colour score 1-3 ☐	Unable to assess urine colour ☐	Urine colour score 4-8 ☐
Look for signs, symptoms and risk factors for dehydration *Tick all boxes that apply*	No signs of dehydration ☐	If *any* of below reported: - Repeated UTIs - Frequent falls - Postural hypotension - Dizziness or light-headedness - Taking diuretics - Open or weeping wound - Hyperglycaemia ☐	If *any* of below reported: - Drowsiness - Low blood pressure - Weak pulse - Sunken eyes - Increased confusion or sudden change in mental state - Diarrhoea and/or vomiting - Fever ☐
Plan For plan add tick scores together: G+U+L=Plan *Tick risk care plan to follow*	Total score: _____ Low risk = score 0 ☐ •Encourage service user to continue with current fluid intake •Place "Keeping Hydrated" leaflet in care plan	Medium risk = score 1-3 ☐ •Encourage service user to increase frequency or size of drinks •Discuss "Keeping Hydrated" leaflet •Ask service user to self-monitor urine colour and aim for urine colour 1-3	High risk = score 4-7 ☐ •Encourage service user to take an extra 1000ml of fluid per day by: ○ Offering 250ml drinks at each visit ○ Explaining guidance to family/carers ○ Providing "The Hydrant" and "Hydration Boosters" leaflets •Discuss "Keeping Hydrated" leaflet



Clinical cause: Changes to bowel patterns can be a sign of infections, underlying medical conditions such as thyroid disorders or IBS, medications such as laxatives and antibiotics and more worrying conditions such as cancer.

Friday

- This morning, carers find Joseph in the bathroom in a mess. His stoma has started working and is passing loose watery stools.
- He has tried to change the bag, but has not managed and has soiled his clothes and the bathroom. He seems muddled and upset as to what he should be doing.
- Carers let him rest in his chair today and bring food to him at meal times. He picks at his food and leaves drinks unfinished.
- He is put to bed early because he is falling asleep in his chair throughout the day.

Increasing signs of breathlessness or chestiness

For some breathlessness may be normal (COPD, Asthma, Heart Failure) you are looking for any **changes** to their condition or residents who develop breathlessness where this is not normal for them.

Increased breathlessness is one of the earliest signs of severe illness.

Chest problems are common in residents, common signs to look out for are:

- breathlessness or rapid and shallow breathing,
- wheezing/ noisy breathing,
- a persistent cough,
- coughing up yellow or green phlegm (thick mucus), or blood,
- chest pain or tightness,
- a rapid heartbeat,
- a high temperature (fever),
- skin colour changes (paler/bluish).

Clinical cause: lung conditions such as COPD or cancers, heart conditions including abnormal heart rhythms, anxiety and being unfit and or overweight.

A shivery fever – feels hot or cold to touch

As well as potentially having a high temperature, there are other indicators that you may notice in the resident earlier such as them feeling tired or fatigued, having a headache or feeling sick or vomiting.

Clinical cause: Fever is most likely to be due to an infection, most commonly you will see infections from Chest, Urine, Stomach (Gastroenteritis) and skin (cellulitis, ulcers). However fevers can also be caused by virus, heat exhaustion & certain inflammatory conditions such as rheumatoid arthritis or a malignant tumour.

Saturday morning

- Joe has significantly deteriorated overnight. He mobilised to the bathroom during the night without his stick and fell for the first time. Luckily, he does not seem to have significantly injured himself, and denies hitting his head. Staff helped him back to bed. He seemed disorientated and unsteady on his feet.
- Carers note that his skin is dry and he appears pale.
- This morning, Joe was unable to get out of bed. He has had an accident and wet himself overnight. He is complaining of back and tummy ache. He is confused, asking for his wife Barbara.

Reduced Mobility- ‘off legs’ / less co-ordinated

- More dependent, asking for help, needing more staff to help with transfers, needing more help for activities of daily living.

Clinical cause: May be early signs of an acute illness such as a urine infection, dehydration, malnutrition, chest infection.

Softer Signs & COVID

The following indicated how the symptoms of COVID relate to the softer signs you have learnt about. If you suspect COVID you must tell your senior carer/home manager immediately.

COVID Symptom	Linked Softer Sign
Dry cough.	Increased breathlessness or chestiness
Tiredness, delirium	Changes to usual level of alertness
Aches and pains, headache	New or increased pain
Sore throat	Increased breathlessness or chestiness
Diarrhoea	Diarrhoea, vomiting, dehydration
loss of taste or smell.	Change in usual drinking/diet habits
Rash on skin, or discolouration of fingers or toes.	Shivery fever
Difficulty breathing or shortness of breath.	Increasing breathlessness
loss of speech or movement	Reduced mobility
Chest pain or pressure.	New pain

When did you first notice Joe was deteriorating?

- Monday – Reduced mobility, changes to his daily routine
- Tuesday – Poor sleep, low in mood, loss of appetite, reduced mobility, dehydration
- Wednesday – Tired, poor appetite, changes to bowels, reduced pee, increased pain, new confusion
- Thursday- Forgetfulness, poor appetite, weight loss, tired, changed bowel habits
- Friday – Diarrhoea, increased confusion, loss of appetite, sleepy
- Saturday – Fall, disoriented, unsteady, pale, incontinent, increased pain, very confused.

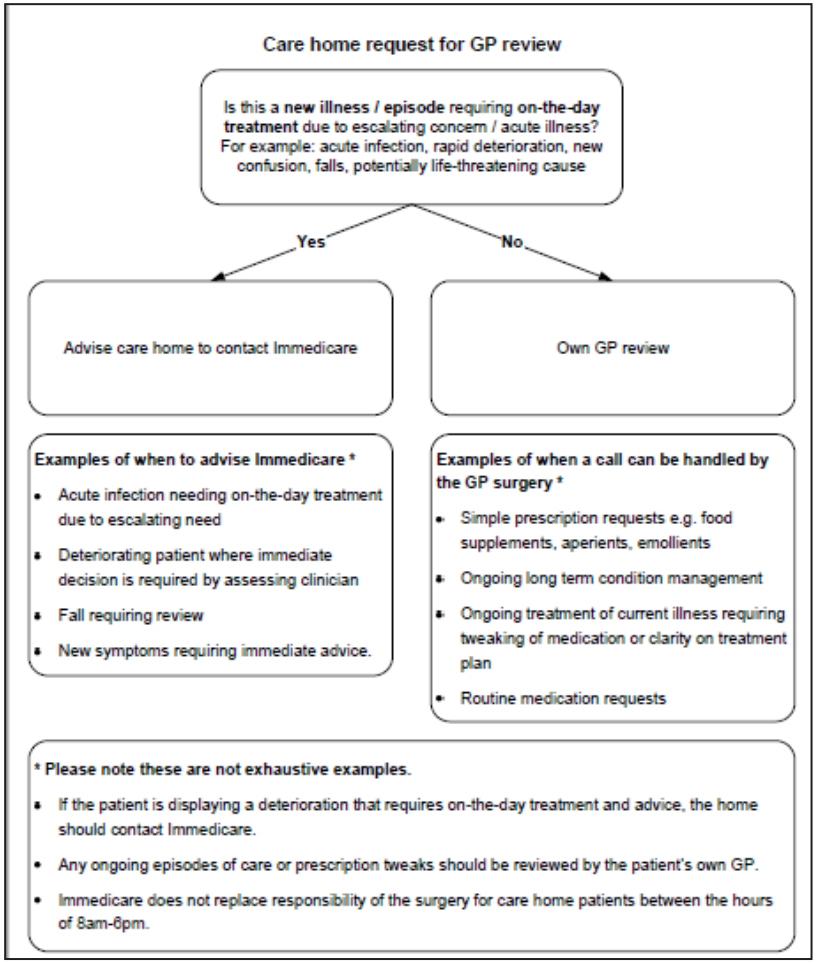
When would you have called for help?

What happened to Joe?

- His carers called 111 on Saturday am and following ambulance assessment he was admitted to hospital
- He was admitted to an elderly medical ward where he was found to have high calcium. This had probably been caused by his prostate cancer affecting his bones.
- High calcium causes symptoms of dehydration, constipation, confusion and bony aches. It can be fatal if not treated quickly.
- He was very sick on admission and ended up staying 2 weeks in hospital , developing a chest infection on day 5
- He returned to his care home on day 14 and took 3 months to fully recover his strength.

Could this outcome have been avoided?

Escalating your concerns



Care home request for GP review

Is this a **new illness / episode** requiring **on-the-day treatment** due to escalating concern / acute illness?
For example: acute infection, rapid deterioration, new confusion, falls, potentially life-threatening cause

Yes → Advise care home to contact Immedicare

No → Own GP review

Examples of when to advise Immedicare *

- Acute infection needing on-the-day treatment due to escalating need
- Deteriorating patient where immediate decision is required by assessing clinician
- Fall requiring review
- New symptoms requiring immediate advice.

Examples of when a call can be handled by the GP surgery *

- Simple prescription requests e.g. food supplements, aperients, emollients
- Ongoing long term condition management
- Ongoing treatment of current illness requiring tweaking of medication or clarity on treatment plan
- Routine medication requests

*** Please note these are not exhaustive examples.**

- If the patient is displaying a deterioration that requires on-the-day treatment and advice, the home should contact Immedicare.
- Any ongoing episodes of care or prescription tweaks should be reviewed by the patient's own GP.
- Immedicare does not replace responsibility of the surgery for care home patients between the hours of 8am-6pm.

Before calling for help

- **Check Vital Signs (where possible):** e.g. temperature, pulse, etc.
- **Review Records:** recent care notes, medications, other plans of care
- **Have relevant information available when calling:** e.g. care plan, vital signs, advance care plans such as DNACPR and RESPECT, allergies, medication list

Get your message across

Resident Name:		Date of Birth:	

Raise the alert within your home e.g. to a senior carer, registered nurse or manager.
If possible, record the observations using a **NEWS2** based system. **Report your concerns to a health care professional e.g. nurse / GP / GP Hub / 111 / 999 using the SBARD Structured Communication Tool. 'Hello my name is', I am calling from .....about our resident.....**

		Key prompts/decisions
S	**Situation:** e.g. what's happened. How are they?	
B	**Background:** e.g. what is their normal, how have they changed? Any long term medical conditions e.g. COPD, heart failure, diabetes?	
A	**Assessment:** e.g. what have you observed / done? Include signs you spotted from RESTORE2 Mini and any other vital signs if available e.g. temperature	
R	**Recommendation:** 'I need you to....'	
D	**Decision:** what have you agreed? (including any Treatment Escalation Plan and further observations)	

Name of person			
Service:		Today's date:	
Signature:		Time of call:	

Don't ignore your 'gut feeling' about what you know and see.
Give any immediate care to keep the person safe and comfortable.

RESTORE2_SBARD_tool (Jul2020)

Key messages

- Using RESTORE2 Mini to recognise when someone is becoming ill can lead to early interventions and stop the situation getting worse.
- Everyone has a responsibility to notice these changes and crucially to tell someone!
- If the team works well together these early signs are more likely to be spotted and get acted upon.
- Carers are in the best position to do this as you have the skills and knowledge to use these tools effectively.

What Next?

- Discuss your learning with colleagues, are there any questions you need help with?
- How you could use RESTORE2 Mini in your home, would it be a paper form to complete or do you have an electronic system?
- Test new ideas out, perhaps you could use the form for any residents you are worried about for a day, discuss with colleagues how it went and what you learnt?
- Not everyone will be able to attend a ‘live’ session so think about how you will make sure all your colleagues get the training?
- Practical considerations: where will you store the forms so they can be grabbed easily, how will you tell each other of your concerns (more about this in Module 3).
- Use your workbooks to remind yourselves what you have learnt.

Questions?

If you have any questions or would like further support/information on using RESTORE 2 mini, contact:

Bev Gallagher – Bev.Gallagher@bradford.nhs.uk

Lauren Ward – Lauren.Ward@bradford.nhs.uk


THANK
YOU!