

## What is delirium?

Delirium is a sudden change in mental state, which present in confusion, agitation, personality change, and difficulties with understanding and memory. It is also referred to as acute confusion. It is not the same as dementia, although people with dementia are at an increased risk of delirium.

## What causes delirium?

Delirium has many causes. Some causes include:

- Pain
- Infection
- Constipation
- Hydration
- Medication
- Environment

## How common is it?

It is estimated that 1 in 10 people in hospital experience delirium. This may be more frequent in those who are older, have memory impairments or dementia but can affect all ages and conditions where environmental conditions play a part. For instance, it is estimated that 80% of patients in intensive care experience delirium.

## How can RITA help?

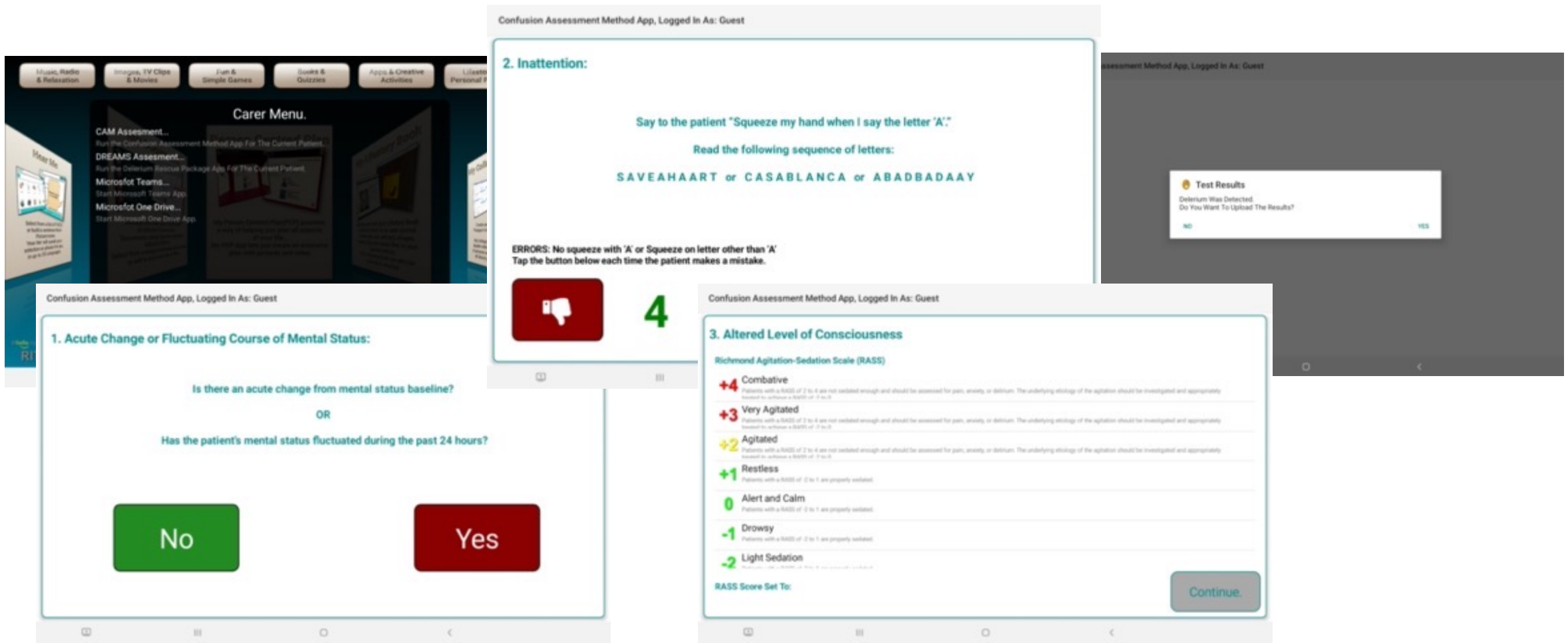
We have introduced a delirium toolkit to support nursing staff, carers, patients and care home residents experiencing delirium or at risk of experiencing delirium. The toolkit incorporates a variety of tools including:

- Delirium diagnosis - CAM ICU & 4AT
- Imperial College Healthcare's DREAMS delirium rescue package
- RITA Prevention of Delirium tool

# Delirium diagnosis for ICU/ITU

**CAM ICU** is a globally recognised confusion assessment method for the ICU departments and is used to assess whether patients have delirium. The CAM-ICU uses a flowchart-like process to determine whether patients are negative – in which they do not have delirium, or positive – in which they likely do have delirium.

A digital version of CAM ICU is now available on RITA for staff to use and share results from the bedside.



# Delirium diagnosis for use in multiple clinical settings

**4AT** is a globally recognised short tool for delirium assessment. It is designed to be easy to use in clinical care. The 4AT is designed to be used by any health professional at first contact with the patient, and at any other time when delirium is suspected.

A digital version of 4AT is now available on RITA for staff to use and share results from the bedside.

**4AT**  
Assessment test for delirium & cognitive impairment.

Steve McAvena 02/25/1971  
0987654321  
S Smith

1. ALERTNESS  
This includes patients who may be markedly drowsy (eg. difficult to rouse and/or obviously sleepy during assessment) or agitated/hyperactive.  
Observe the patient. If asleep, attempt to wake with speech or gentle touch on shoulder. Ask the patient to state their name and address to assist rating.  
Mild Sleepiness For Less Than 10 Seconds After Waking, Then Normal

2. AMT4  
Ask the patient to state their: Age, date of birth, place/location (name of the hospital or building), current year.  
1 Minute

3. ATTENTION  
Ask the patient: "Please tell me the months of the year in backwards order, starting at December."  
To assist initial understanding one prompt of "what is the month before December?" is permitted.  
Starts But Scores Less Than 7 Months

3. ACUTE CHANGE OR FLUCTUATING COURSE  
Evidence of significant change or fluctuation in: alertness, cognition, other mental function (eg. paranoia, hallucinations) arising over the last 2 weeks and still evident if last 2 days?  
4 or above possible delirium +/- cognitive impairment  
1-3 possible cognitive impairment  
0 delirium or severe cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

5 Cancel

eMail Test Scores.  
Enter the email address for 4AT Score Recipient.  
steve@mcanena.uk  
CANCEL OK

4 or above possible delirium +/- cognitive impairment  
1-3 possible cognitive impairment  
0 delirium or severe cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

0 Cancel

# Imperial College Healthcare's DREAMS – Delirium rescue package

## DREAMS: Drugs; Reorientate; Environment; Analgesia; Mobilise; Sedation and safety

Created by Imperial College Healthcare's ITU team DREAMS contains a checklist to be completed by staff the first time a patient scores CAM-ICU positive. It prompts staff to check a number of factors: whether a patient uses a hearing aid, is thirsty, whether they smoke or take drugs, and so on. This checklist can be used in any clinical setting to help staff re-orientate a distressed patient or resident.

A digital version of DREAMS is now available on RITA for staff to use and share results from the bedside.

The image displays three overlapping screenshots of the DREAMS digital checklist interface on a mobile device. The interface is titled "DREAMS" and "DELIRIUM RESCUE PACKAGE". It features a vertical list of categories on the left: Drugs, Reorientate, Environment, Analgesia, Mobilise, and Sedation & Safety. The main content area contains instructions and various checkboxes for each category. The top right shows the user is logged in as "DREAMS".

**Top Screenshot (Logged In As: "DREAMS"):**

- Instructions:** -This checklist should be completed the first time a patient scores CAM-ICU positive. It may be repeated later if desired. -It should be done together at the bedside by the multi-disciplinary team (doctor, nurse, pharmacist, physio). -Each intervention should be considered for the individual patient; they may not all be appropriate.
- Reorientate: Communication optimised: (tick all that apply)**
  - Glasses
  - Hearing aids
  - Speaking valve
- Environment: Sleep promotion: (tick all that apply)**
  - Facing window in daytime
  - Monitoring & observation frequency rationalised
  - Cluster activities (to avoid midnight to dawn)
  - Reduce night lighting and alarm volume
  - Eye mask offered
  - Ear plugs offered

**Middle Screenshot (Logged In As: Gues):**

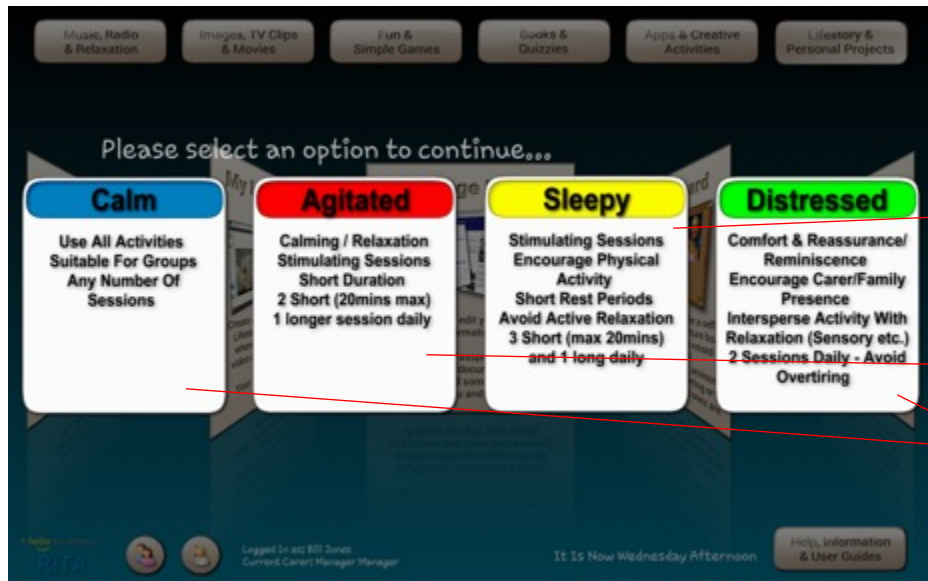
- Sedation & Safety: Sedation optimised (if safe): (tick all that apply)**
  - Daily sedation hold requested
  - RASS target -1 to 0 set
- Drugs: Withdrawal from recreational or prescribed drugs? (involve all that apply)**
  - Nicotine (give patch)
  - Alcohol (consider gabapentin, chlordiazepoxide)
  - Opiates (including drugs given on ICU)
  - Benzos (including drugs given on ICU)
  - Psychiatric medication (pre-admission)
  - Other...

**Bottom Screenshot (Logged In As: Guest):**

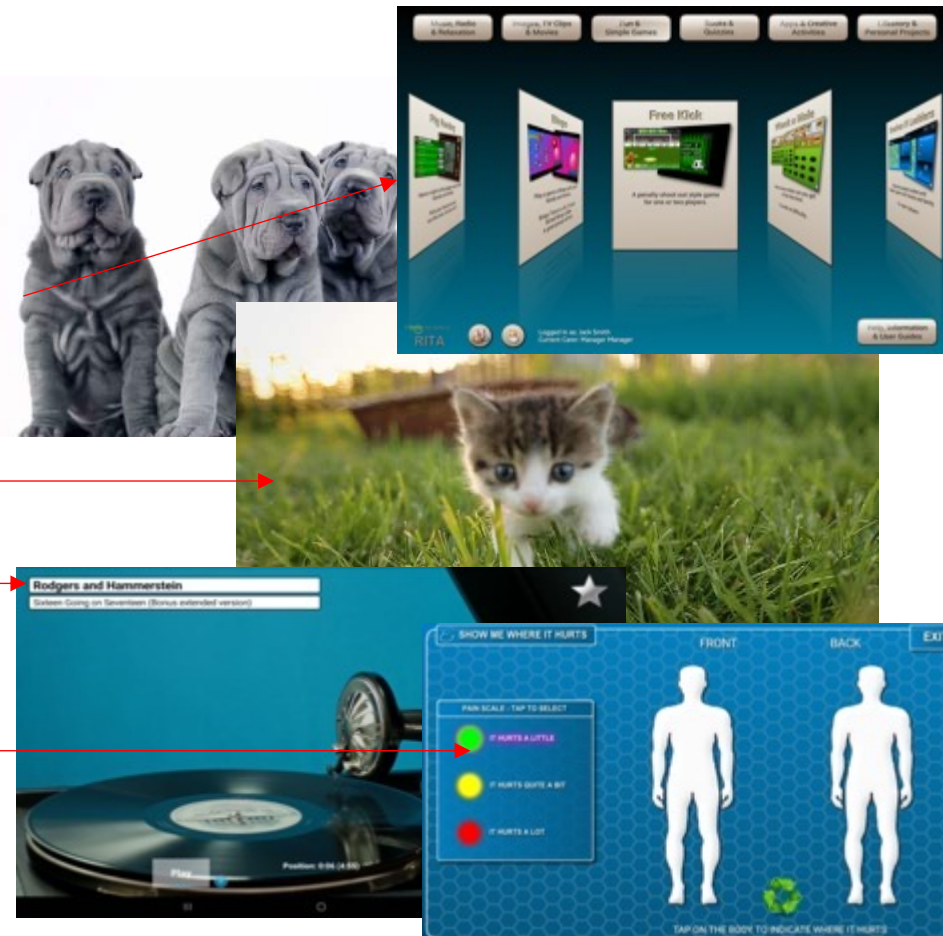
- Analgesia: Causes of discomfort treated: (tick all that apply)**
  - Pain
  - Constipation
  - Catheter
  - Pressure area
  - Thirst
  - Hunger
- Mobilise: Mobilisation goals set: (involve Physio / OT) (tick all that apply)**
  - Involve with self care
  - Sit over the edge of the bed
  - Sit out in the chair
  - Mobilise
  - Use the bathroom / toilet
  - Trip off ward

# Prevention of delirium and recovery from delirium using RITA

RITA contains a significant amount of content that contributes to improvements in quality of life and wellbeing. However, it can sometimes be difficult to choose content quickly based on a person's mood. Clinicians from [Imperial College Healthcare London](#), [Hinchingbrooke Hospital, Cambridgeshire](#), [Peterborough City Hospital](#), [Bradford Teaching Hospital](#) and [Calderdale & Huddersfield](#) have collaborated to co-design functionality in RITA that filters specific content in RITA based on their mood and provides guidance on how to engage with the individual. For example, if 'Agitated' is selected, apps such as my aquarium, my garden, relaxation music and sensory content is presented. If 'sleepy' is selected, apps such as fun and simple games, armchair exercises and music is presented.



	A	B	C	D	E	F	G	H
1	AppTitle	AGERate	AppFilter	Source	POD Agitated	POD Calm	POD Distressed	POD Sleepy
3	<b>APPS &amp; ACTIVITIES</b>							
4	Bubble Blaster	0	Activities	MYDIN		●		●
5	Higher Or Lower	0	Activities	MYDIN		●		
6	Horse Racing	0	Activities	MYDIN		●		●
7	Pig Racing	0	Activities	MYDIN		●		●
8	My Aquarium	0	Activities	MYDIN	●	●	●	
9	My Garden	0	Activities	MYDIN	●	●	●	
10	Greeting Card Maker	0	Activities	MYDIN	●	●	●	
11	Skype	0	Activities	STORE		●	●	
12	Music Keyboard	0	Activities	MYDIN	●	●	●	●
13	Painter	0	Activities	MYDIN	●	●	●	●
14								
15	<b>FUN &amp; GAMES</b>							
16	Bingo	0	Games	MYDIN		●		●
17	Rifle Range	0	Games	MYDIN		●		●
18	Coconut Shy	0	Games	MYDIN		●		●
19	Jigsaw	0	Games	MYDIN	●	●	●	●
20	Snakes & Ladders	0	Games	MYDIN	●	●	●	●
21	Free Kick	0	Games	MYDIN	●	●	●	●
22	Whack a Mole	0	Games	MYDIN	●	●	●	●
23	Fallout Shelter	-12	Games	STORE		●		●
24								
25	<b>TV &amp; VIDEO</b>							
26	Reminiscence Images	0	Media	N/A		●	●	●
27	Armchair Exercises	0	Media	MYDIN		●		●
28	Reminiscence Video Clips	0	Media	N/A		●	●	●
29	Video Player	0	Media	N/A		●	●	●
30	YouTube	12	Media	STORE		●	●	●
31	Digital Freeview TV (Requires TV Adapter)	0	Media	STORE		●	●	●
32	Movie Night	0	Media	MYDIN		●	●	●
33	BBC iPlayer	0	Media	STORE		●	●	●
34	Netflix	0	Media	STORE		●	●	●
35	TV Hub	0	Media	STORE		●	●	●
36	YouTube Kids	0	Media	STORE		●	●	●
37	Relaxation Music & Video	0	Media	MYDIN	●	●	●	●
38	Proud To Be British	0	Media	MYDIN	●	●	●	●
39	360 Sensory Images & Video	0	Media	MYDIN	●	●	●	●
40								
41	<b>MUSIC &amp; RADIO</b>							
42	Music Player	0	Music	N/A	●	●	●	●
43	Radio	0	Music	MYDIN	●	●	●	●
44	Radio Slides	0	Music	MYDIN	●	●	●	●
45	Relaxation Music & Video	0	Music	MYDIN	●	●	●	●
46	Sing Along	0	Music	MYDIN	●	●	●	●
47	Famous Speeches	0	Music	MYDIN	●	●	●	●
48	Reminiscence Music	0	Music	N/A	●	●	●	●
49	Radio X	0	Music	STORE	●	●	●	●
50	Proud To Be British	0	Music	MYDIN	●	●	●	●
51								
52	<b>LIFESTORY &amp; PERSONAL PROJECTS</b>							
53	Meet Me	0	Projects	MYDIN	●	●	●	●
54	My Lifestory Book	0	Projects	MYDIN	●	●	●	●
55	My Passport/Collage	0	Projects	MYDIN	●	●	●	●
56	My Activity Plan	0	Projects	MYDIN	●	●	●	●
57	My One Page Profile	0	Projects	MYDIN	●	●	●	●
58	PICTalk	0	Projects	STORE	●	●	●	●
59	Show Me Where It Hurts	0	Projects	MYDIN	●	●	●	●
60	My Photo Board	0	Projects	MYDIN	●	●	●	●
61	My Expressions	0	Projects	MYDIN	●	●	●	●
62								
63	<b>BOOKS &amp; QUIZZES</b>							
64	Quiz Time	0	Quiz	MYDIN		●		●
65	Audiobook Reader	0	Quiz	STORE	●	●	●	●
66	T.A.D.S. Text Adventure	0	Quiz	STORE	●	●	●	●
67	Mahjong Classic	0	Quiz	STORE	●	●	●	●
68	Word Search	0	Quiz	STORE	●	●	●	●
69	UK Newspapers	0	Quiz	STORE	●	●	●	●
70	Crossword Lite	0	Quiz	STORE	●	●	●	●
71	My Comic Book Reader	0	Quiz	MYDIN	●	●	●	●

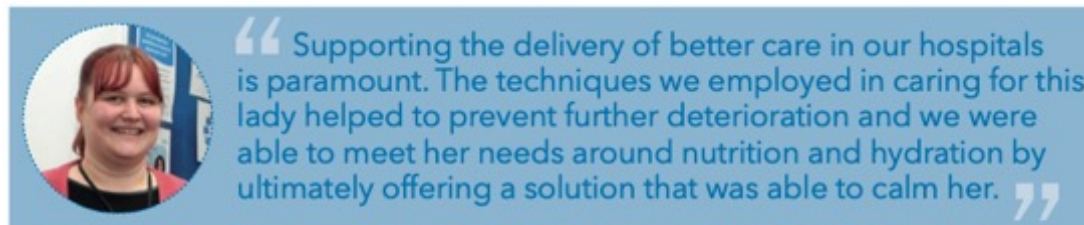


## Using RITA to treat delirium case study

A lady aged 78 years came into hospital with hyperactive delirium and psychosis, this was alongside her background of advanced dementia. Her delirium had been caused by an infection and she was very unwell.

She had severe pressure of speech and unable to engage at all. She spoke continuously, rapidly and loudly for 52 hours without sleeping. We were unable to feed her or give her anything to drink during this time and she screamed when anyone tried to touch her. We ascertained from her speech that she kept mentioning a dog, so we used RITA for a relaxation session, with Air on a G string playing and the film of husky puppies on the screen. She responded to this very positively, stopping every couple of minutes and laughing in delight at the puppies. The music buffered the external sounds of the ward which were making her jump when she heard them.

We discovered that getting her to focus on the images allowed us to feed her as she calmed down while they were on. Throughout this process, she stated to eat and drink again. The relaxation session was used for several days, in a room with natural light and instructions for staff to lower their voices when interacting with her. As time progressed, her delirium reduced and she spent more time looking at the images and they gave her great pleasure. We have alternated them with the kittens and she has commented on their colours. In my opinion, using RITA in this way has reduced the duration and severity of her delirium and enabled us to feed her which has prevented her from deteriorating further whilst in hospital.



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