

# AGITATION DECISION-MAKING FRAMEWORK

for nurses and care staff caring for  
people with advanced dementia

## GUIDELINES

## Table of Contents

Introduction	5
Admission procedures	5
When to assess an agitated resident	7
Framework: Section 1 'Epidemic Agitation'	8
Framework: Section 2 'Individual resident with agitation'	13
References	24
Tools: Brief Agitation Rating Scale (BARS)	26
Tools: Confusion Assessment Method (CAM)	27
Tools: Behavioural Analysis Form	29
Acknowledgements	30

## List of Tables

Table 1: Scope of physical assessment for agitation	14
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## List of Figures

Figure 1: Framework overview for use when more than one resident is agitated at once	3
Figure 2: Framework overview for use with an individual resident who is agitated	4

### DISCLAIMER

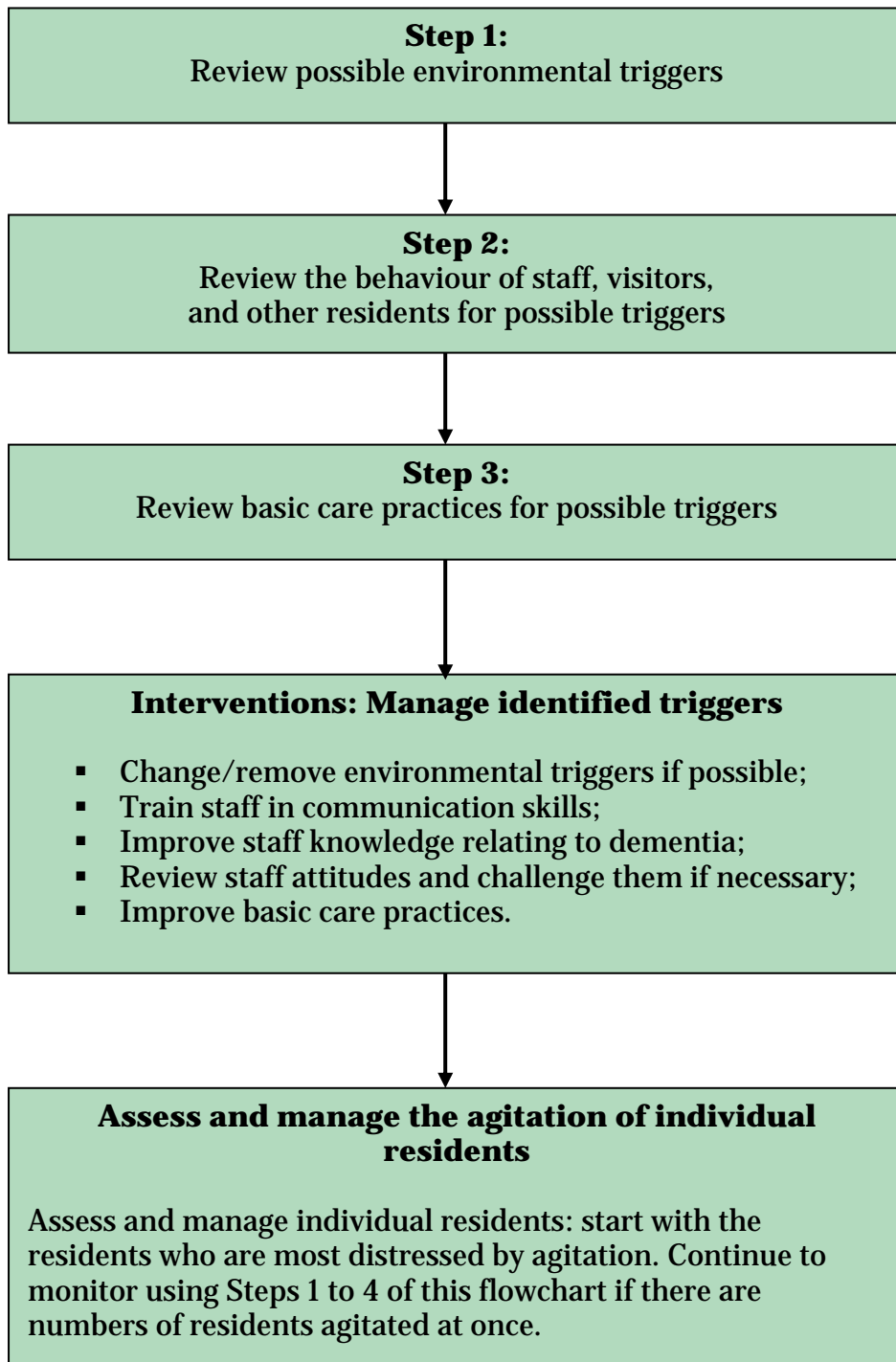
These guidelines were written during the 'Decision-making frameworks in advanced dementia: Links to improved care' project, a partnership between the University of Western Sydney School of Nursing and Midwifery, College of Health & Science; Sydney West Area Health Service Primary Care & Community Health Network; and the Blue Mountains GP Network Limited. Funded by the Australian Government Department of Health and Ageing under the National Palliative Care Program. The opinions expressed in this document are those of the authors and not necessarily those of the Australian Government.

The information provided is a general guide only. Refer to the general practitioner and other members of the treatment team for decisions relating to care of individual residents. The information provided in these guidelines is based on the available best practice literature, or in the absence of this literature, expert opinion.

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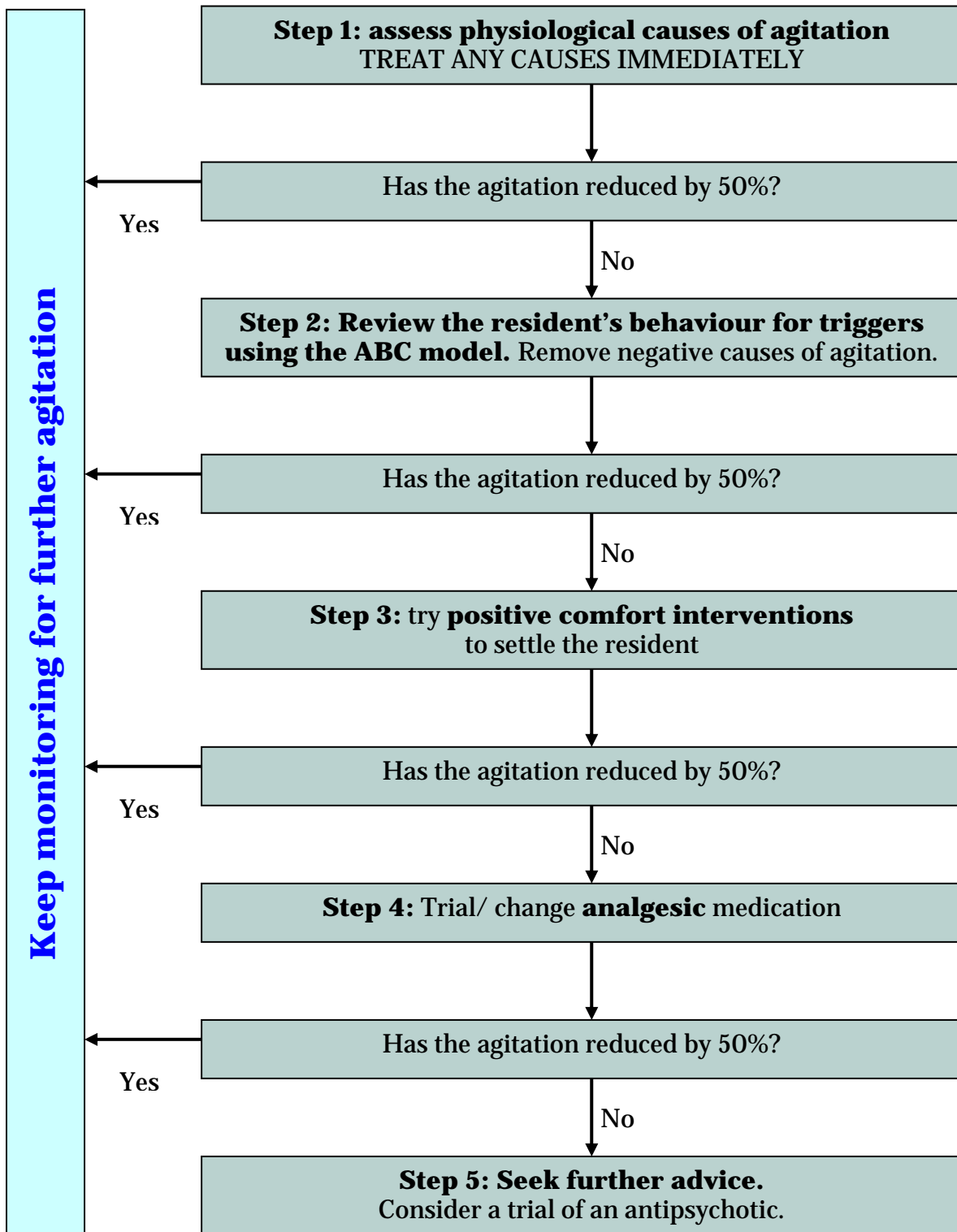
**Figure 1 Framework overview: 'epidemic agitation'**

**Facility-wide strategies to reduce 'epidemic agitation'**  
Use when a number of residents are agitated at once



**Figure 2: Framework overview for use with an individual resident who is agitated**

**Strategies to assess and manage agitated residents with dementia**



## Introduction

These guidelines are for nurses and care staff to use when managing agitation among residents with advanced dementia (MMSE < 10). For additional information, please refer to the 'Supporting Information' provided with these guidelines.

NB: Registered nurses remain responsible for the assessment and care of residents at all times, even if they delegate tasks to other staff members to complete.

For the purposes of this framework, agitation is defined as:

*'inappropriate verbal, vocal or motor activity not resulting from a specific need'*<sup>5</sup>

## On admission of a person with advanced dementia

**1. Give the person responsible +/- other family members a copy of the booklet: 'Dementia information for carers, families and friends of people with severe and end stage dementia'. 2<sup>nd</sup> edition.**

**2. Identify the goals of care.**

Discuss with the person responsible +/- family members, general practitioner and other members of the care team what the goals of care are. Goals of care should be discussed at every family conference relating to the resident's clinical care. Is the resident to receive:

- active interventions, when you will look for and treat all causes of agitation;
- a palliative approach, where you will carefully monitor agitation and manage problems if they occur, with care focussed on maintaining the quality of life and comfort of the resident. Assessment for causes of agitation will continue unless the person responsible and general practitioner +/- family members agree that limited assessment only will be undertaken. Care that focuses on the resident's comfort, psychological, social and spiritual needs, and the needs of the person responsible and family members are always provided as part of the palliative approach; or
- end of life (terminal) care, when death is likely to occur in the next days or weeks, and you will focus on resident comfort, and provide emotional support to the person responsible and family members.

The goals of care for a person with advanced dementia who is agitated should be realistic due to the progressive nature of the dementia. You may not be able to stop all agitation. Rather, the focus of the goal of care for agitation should be to systematically

identify and treat any causes of agitation amenable to treatment; and assist staff, family members and other residents to tolerate some agitated behaviour if it does not place the resident in danger, or pose a danger to others. The goal of care for a person with end stage dementia who is agitated and receiving end of life (terminal) care should be comfort only. Medication to calm and sedate the resident may be required at this stage.

Document the goals of care in the resident's notes and on the care plan.

### **3. Gather baseline data.**

#### **3a: Assess the resident for behavioural symptoms, per the Aged Care Funding Instrument (ACFI) Guidelines for ACFI 8 & 9**

- Use the ACFI 8 & ACFI 9 behaviour record forms.

#### **3b Assess for possible unmet needs that could trigger agitation:**

- complete a physical assessment including pain; constipation;
- review the resident's previous medical history including delirium and depression;
- review the resident's medications including use of psychotropics;
- screen for delirium using the Confusion Assessment Method (CAM) tool <sup>6</sup>;
- discuss the social input needs of the resident with the person responsible +/- other family members so you understand the resident's needs for activity versus quiet;
- compile a list of strategies successfully used by the family to alleviate agitation while the resident was at home.

### **4. Develop a behaviour management care plan for the resident based on the needs of the resident.**



NB residents with advanced dementia are at HIGH RISK of developing delirium.

- 5. Plan to hold a family conference** once the ACFI assessments have been finalised to discuss with the person responsible the facility policy(s) relating to managing behaviours of concern, including agitation. Include information on the use of restraints.

**This completes the agitation section of the admission.**

# **When to assess the resident for agitation**

Residents need to be assessed for agitation:

- every time the resident experiences agitation that does not settle with simple interventions such as offering additional food or fluids, or toileting the resident;
- any time that the resident is agitated and care staff suspect that the resident is physically unwell, due to a change in the resident's non-verbal behaviour.

A registered nurse needs to review the assessment tools:

- every shift for up to 4 days until you move to the next step of the framework, or until the agitation is managed.

# The Framework

An overview of the framework can be found in Figures 1 & 2 in this document. Systematically follow each step of the framework. To improve the outcome for the resident, do not skip any steps.

## 1: When a number of residents are agitated at once (For an overview use Flowchart 1)

Consider whether other residents are behaving similarly, showing 'epidemic agitation,' and if so try to identify institution-wide triggers amenable to control. Empathic interpretation of the residents' situation is needed. Residents with dementia could be provoked by what would irritate anyone else; yet the resident is even more vulnerable than a cognitively intact person. Furthermore, residents have limited control of their environment, and impaired ability to communicate with those who might act on their behalf. Agitation becomes the available response, and might be considered reasonable under some circumstances. The environmental vulnerability model underpins the following preventative strategies.

### Step 1. Review the environment

#### Registered nurse or delegate:

- review the environment and suggest changes to the care staff if there are apparent difficulties such as too much noise, clutter, or it's too hot;
- limit the number of visitors if necessary;
- alert the facility management if environmental factors such as overcrowding, or misleading stimuli such as heavily patterned carpets frequently trigger episodes of 'epidemic agitation'.

#### Care staff:

- check the amount of light: is it too bright, too dark, is there too much reflection off surfaces such as floors? Adjust the curtains and blinds if necessary;



- check the noise levels: is it too noisy? Are the TV and/or radio too loud? Turn down or turn off TVs and radios if necessary, try some soothing music or silence for a while;
- check the temperature: is it too hot or cold? Adjust the temperature if that's possible. If you cannot change the external temperature, then make sure the residents are dressed appropriately for the conditions;
- check for crowding: are there too many visitors or people in the same area? Take the most agitated residents to a quieter area;
- check for clutter: is there furniture that can be moved to provide clear spaces? Are there small quiet areas for sitting as well as open spaces to walk? Is access to an outside area available to walk in? Rearrange the chairs, in consultation with the registered nurse or person in charge, to allow easier access for residents;
- is the resident's independence assisted by cues like for example pictures to indicate where the toilet is? If not, work in consultation with others in the multidisciplinary team to place laminated pictures up to aid residents.

## **Step 2: Review the behaviour of staff, visitors or other residents**

### **Registered nurse or delegate:**

Closely observing agitation patterns across multiple residents, and inductively linking the behaviours with apparent stressors may identify sources of annoyance. Are other people in the area causing an 'outbreak' of agitation?

- observe the behaviour of the care staff, other residents and visitors. Suggest changes in the way they interact and communicate that may assist them to manage / tolerate people with dementia more effectively;
- discuss the issues with the nurse educator and facility management so that inservice education for staff, residents and regular visitors can be arranged if it is apparent there are gaps in their knowledge and skills relating to managing people with dementia.

### **Care staff:**

- encourage the non-demented people (other residents, visitors, staff) to be considerate of the residents with dementia. Report aggressive outbursts to the

registered nurse or person in charge immediately. Isolate aggressive residents so they do not harm themselves or other people;

- communicate with the residents in a quiet, calm way, and encourage others (other residents, visitors, staff) to do the same. Report any particularly troublesome episodes of poor communication to the registered nurse or person in charge;
- make the routines or tasks for the resident as simple as possible. Discuss with the diversional therapist and other members of the care team if a task is too complicated so that a method of 'breaking it down' into a series of smaller tasks is developed.

## **Step 3. Review basic care practices**

### **Registered nurse or delegate:**

Review whether the needs of the residents as a whole are being attended well. For instance:

- are the residents becoming agitated at certain times of the day, which could indicate hunger or thirst? Observe the care staff to see whether these factors could be impacting on the level of agitation. Have the care staff complete a food and fluid intake chart if unsure;
- are the residents needing exercise? Morning exercise is best, exercise in the afternoon increases agitation <sup>7</sup>. Observe for when residents are exercised and amend the schedule if necessary;
- is there a balance between sensory calming and sensory stimulating activities throughout the day? ie do the residents engage in meaningful activities followed by rest periods? Individualised interventions that alternate activities and rest periods of approximately 1.5hrs duration have been found to reduce episodes of agitation <sup>8</sup>. Review the schedule of activities with the diversional therapist and change the program if necessary;
- is every resident receiving 10 to 20 minutes (minimum) of one to one (individual) human interaction twice per day? Failure to do so can increase agitation <sup>4</sup>. Encourage care staff, volunteers and visitors to spend time quietly with individual residents.

### **Care staff:**

Report to the registered nurse or person in charge if you notice that residents are agitated at certain times of the day. Could this agitation be due to:

- hunger? Try giving the residents additional morning tea, afternoon tea or supper;
- thirst? Is every resident receiving fluids every one to two hours? If not, try to offer more fluids throughout the day while the resident is awake. Offer 50-100ml every hour unless the registered nurse in charge directs you not to;
- tiredness? Are the residents getting too much or too little exercise? Are the residents bored? Residents need a balance between doing activities that have meaning for them, and rest. Studies have shown that to prevent agitation a balance between activity and rest is required, with periods of about 1.5 hours of activity followed by a rest period of approximately 1.5 hours. Switching between activity and rest needs to happen all day;
- pain, or being uncomfortable? Watch the residents' behaviour carefully and report to the registered nurse if there are changes in behaviour that could be due to pain or discomfort. For example, are the residents restless, aggressive, more confused than usual, more quiet than usual, seeing or hearing things that aren't there? The residents could be constipated or have delirium, or other medical conditions;
- not receiving enough individual attention? Residents need at least 10 to 20 minutes of one to one (individual) human interaction twice per day or they may become agitated.

**Interventions, based on the findings from the  
assessment  
Manage agitation using facility-wide strategies**

**All staff and facility management to consider:**

- changing or removing as many environmental triggers as possible;
- improving staff knowledge about:
  - stages of dementia so all staff members (including ancillary staff such as cleaning and domestic staff) know what is usual behaviour for each stage in the dementia trajectory;
  - physical conditions affecting older people so all nursing and care staff understand conditions that may cause pain or discomfort;
- reviewing staff attitudes, so all staff are tolerant towards behaviours that are not affecting the safety or welfare of the residents, and all staff are flexible with care routines;
- training staff and encouraging good communication techniques:

- approach the resident from the front;
  - talk slowly;
  - use a calm voice;
  - maintain eye contact;
  - use short, simple statements;
  - minimise distractions;
  - offer simple choices;
  - use non-verbal cues;
  - allow time for the resident to respond after asking questions (approximately 30 seconds);
  - smile, laugh; praise the residents;
- improving basic care practices if your assessment has highlighted systemic issues;
  - providing social engagement and meaningful activity to those residents who might benefit. Activities such as *TimeSlips*<sup>9</sup> or the *Namaste* program<sup>10</sup> may be appropriate.

**If an individual resident is agitated, follow flowchart 2. Start immediately**

Document the findings from the reviews you have completed and any interventions that have been trialled for ‘epidemic agitation’. This documentation should form part of the quality improvement audit in the facility. Discuss with facility management the findings as appropriate. Make sure that all direct care staff as well as registered and enrolled nurses are aware of any changes in care that are required. If despite making system-wide changes a number of residents still remain agitated, then follow the recommendations outlined in Figure 2 and individualise the assessment and management of agitation for residents.

## 2: When an individual resident is agitated

(For an overview use Flowchart 2)

### Step 1. Assess the physiological causes of agitation

Where agitation appears idiosyncratic to the resident, staff should identify and manage treatable physiological causes of agitation specific to that individual. This step is both preventive and curative, and derives from the biological and unmet needs models, and represents removing the negative at the individual level.

It is important to assess and treat any physical causes of agitation first, or they may be overlooked. This is more likely to occur if social or affective needs are identified and fulfilled first <sup>3</sup>.

Complete an agitation assessment tool such as the Brief Agitation Rating Scale (BARS) <sup>11</sup> (attached to this document) before commencing assessment and management of an individual resident's agitation. This will take less than 2 minutes to complete and provide a baseline measure against which to evaluate the effectiveness of the intervention.

#### Registered nurse or delegate:

Review the resident in a systematic way:

- complete a set of observations: temperature, pulse, lying & standing blood pressure, urinalysis;
- **direct the care staff to complete a Confusion Assessment Method (CAM) tool <sup>6</sup> (attached) to screen for delirium.** Delirium may be from a viral or bacterial infection. Consider all causes. Most common causes are urinary tract infections, bad colds, bronchitis, pneumonia, infected wounds;
- review the resident's medications: have there been changes in the past two weeks? Is there an adverse reaction or interaction with the existing medications?
- review the resident's medical history: does the resident have a condition that might cause him/her to be more vulnerable to agitation?
- use the information from Table 1 to assess the resident. Remember that symptoms in older people can be non-specific eg myocardial infarction without chest pain or pulmonary oedema without dyspnoea <sup>12</sup>.

## Care staff:

- complete a Confusion Assessment Method (CAM) tool for delirium and give to the registered nurse or nurse in charge to review.

**Table 1: scope of physical assessment for agitated behaviour**

<b>Assess:</b>	<b>Consider and report or treat if present:</b>
Pain / discomfort*	<ul style="list-style-type: none"> <li>▪ Complete a full physical assessment for pain. A physical assessment is a more sensitive measure of pain<sup>13</sup> than using a behaviour observation tool such as the Abbey Pain Scale<sup>14</sup> or PAINAD<sup>15</sup>. <u>Give an analgesic if pain is present.</u> Consider headache and angina as possible sources of pain / discomfort<sup>16</sup>;</li> <li>▪ Is the resident uncomfortable for another reason? Look for simple reasons such as tight clothing or shoes, or clothing inappropriate to the weather.</li> </ul>
Head and neck	<ul style="list-style-type: none"> <li>▪ Is there evidence of trauma from an unobserved fall or following a transient ischaemic attack (TIA)?;</li> <li>▪ Assess the resident's mouth: are there dental caries causing toothache?; infections eg candida? ulcers; are swallowing problems developing?;</li> <li>▪ Assess the resident's eyes: has the resident a new problem with his/her eyes eg conjunctivitis? <u>Impaired vision is significantly related to verbally agitated behaviours</u><sup>17</sup>;</li> <li>▪ Assess the resident's ears: hearing problems (not using hearing aids; flat batteries in hearing aids; aids not fitted properly; wax) are a possible cause of agitation<sup>18</sup>.</li> </ul>
Chest	<ul style="list-style-type: none"> <li>▪ Is the resident hypoxic or uncomfortable due to cardiac or respiratory disease?;</li> <li>▪ Is the resident breathless?</li> </ul>
Abdomen	<ul style="list-style-type: none"> <li>▪ Review the bowel chart: is the resident constipated? faecally impacted? does the resident have diarrhoea?**;</li> <li>▪ Does the resident have a full bladder?: palpate or use a bladder scan if available;</li> <li>▪ Is the resident's renal function or liver function deteriorating? Pathology tests may be required, depending on the goals of care.</li> </ul>
Limbs	<ul style="list-style-type: none"> <li>▪ Are there injuries from falls? Are medical conditions such as osteoarthritis or gout causing additional pain?</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Is the resident dehydrated? Check skin turgor, provide additional fluids; seek further advice depending on the</li> </ul>

\* Follow the pain decision-making framework to assess and manage pain.

\*\* Follow the bowel management decision-making framework to assess and manage bowel problems.

<b>Assess:</b>	<b>Consider and report or treat if present:</b>
Other	goals of care for the resident; <ul style="list-style-type: none"> <li>▪ Is the resident hungry? Review the food intake and provide additional food if necessary;</li> <li>▪ Is the resident experiencing hallucinations or delusions that require treatment?</li> <li>▪ Is the resident overtired, have a sleep pattern disturbance, or fatigued?</li> <li>▪ Is the resident depressed?</li> <li>▪ Has there been a change in function related to feeding, continence, transfers and mobility, bathing &amp; dressing that is affecting the resident and causing him/her to be agitated?</li> </ul>

**STOP: LIMIT FURTHER ASSESSMENTS IF:**

- the goal of care is for end of life (terminal) care; or
- the goal of care is a palliative approach, and during the goals of care discussion it is agreed that further assessment will be limited.

Limited assessments mean:

- no pathology tests to establish physiological causes of agitation;
- no other invasive diagnostic tests to establish the causes of agitation.

The following assessments and care WILL CONTINUE:

- assessing the resident as required for common causes of delirium;
- treating the common causes of delirium to maintain resident comfort, using both non-pharmacological and pharmacological treatments as appropriate;
- managing agitated behaviour using both non-pharmacological and pharmacological treatments as appropriate, with the emphasis on maximising the quality of life and comfort of the resident.

If the resident is receiving end of life (terminal) care:

- terminal agitation will be managed by using appropriate amounts of medication to ensure the resident is comfortable unless this is contrary to the specific wishes of the resident and person responsible. Refer to the GP for a medication order, or commence on an end-of-life pathway per the facility policy.

DOCUMENT the reasons for the decision to limit further assessments in the resident's notes. Make sure the care plan reflects the goals of care.

**Care staff:**

- report to the registered nurse if there are changes in a resident's agitated behaviour that could be due to pain or discomfort. For example, is the resident restless, aggressive, more confused than normal, more quiet than usual, seeing or hearing things that aren't there? The resident may have delirium;
- assist with the physical examination of the resident as requested by the registered nurse in charge. Complete assessment tools (CAM and BARS) and give them to the registered nurse or nurse in charge for review;

- offer extra food, fluids, exercise, attention, to the agitated resident while waiting for the registered nurse to complete the physical assessment;
- do not try positive comfort measures eg multisensory room or aromatherapy, until the physical assessment has been completed. The resident may settle from the positive comfort measure, leaving a potentially serious physical condition undiagnosed.

**If no physical causes of agitation are found, move immediately to Step 2.**

## **Interventions, based on the findings from the assessment**

### **Physical causes of agitation**

- any conditions that can be managed with nurse-initiated interventions should be commenced immediately;
- refer to the general practitioner (GP) if further assessment or treatment is required for physical conditions, depending on the goals of care for the resident.

### **Evaluation of the interventions for physical causes of agitation:**

Agitation may not be completely eliminated by any treatment. Consider the treatment of the agitation effective if the agitation is reduced by 50% after treating<sup>4</sup>.

Use the Brief Agitation Rating Scale (BARS)<sup>11</sup> again, so that a comparison with the pre-intervention score can be made. Complete the BARS once per shift for up to 4 days if necessary.

Evaluating the effectiveness of any treatment depends of course on the treatment given. For example, if a resident is given a simple oral analgesic for pain or discomfort which manifests as agitated behaviour, then you would expect to see a result within 30-60 minutes of giving the medication. In this case, using a pain assessment tool before and after giving the medication will provide evidence of effectiveness<sup>\*</sup>.

If the resident is constipated, then reassess the agitation after the resident has had his/her bowels open. The time from giving a laxative until the resident has a bowel motion will vary, depending on the severity and type of constipation, and the type of laxative given<sup>\*\*</sup>.

**If the treatment doesn't reduce the agitation by 50% within the expected timeframe, then proceed to Step 2.**

<sup>\*</sup> Follow the pain decision-making framework to assess and manage pain.

<sup>\*\*</sup> Follow the bowel management decision-making framework to assess and manage bowel problems.



## Step 2: Review the resident's behaviour for triggers using the ABC model

Try to identify the Antecedents (triggers or causes), Behaviour, and Consequences (outcomes) of the agitated behaviour. Use the 'Behaviour Record Form' (copy attached to this document) or a similar form if the facility already has one in use.

Responsible staff should decide whether the continued agitation threatens the welfare of any resident; or humiliates the agitated resident in front of staff, other residents or visitors; disturbs other residents; compromises facility operations; or causes concerns sufficient to damage the facility's reputation. If not, then treatment may be unnecessary other than remaining vigilant to the resident's needs. As a matter of course, staff working with residents should be trained to have realistic expectations of residents with dementia. Staff should know that dementia predisposes a person to agitation. Subject to safety and other practical provisos, staff should tolerate aberrant behaviour among residents with dementia.

### Registered nurse or delegate:

- identify the antecedents. Discuss with the care staff and other members of the multidisciplinary team. Common triggers that inflame agitated behaviour include <sup>19</sup>:
  - inability to channel energies constructively;
  - frustration;
  - anxiety about bathing, dressing, other activities of daily living;
  - response to institutional restraints;
  - response to caregiver's mood: anger, frustration, fear;
  - response to a recent stressor eg death of a family member;
  - new surroundings.
- Consider:
  - is the behaviour potentially dangerous? If it is, immediately take action to prevent harm to the resident or others;
  - who is involved and how are they affected?;
  - is the resident trying to communicate distress?;
  - what was the resident doing when the agitated behaviour started?;
  - are there environmental factors (see pages 8-9 for a list) that are affecting this individual resident;
  - are there deficiencies in basic care practices (see pages 10-11) affecting this individual resident?;
  - is the resident offered a variety of meaningful activities, with a balance between activity and rest? Imbalance can cause agitation <sup>8</sup>.
- identify the observed behaviours. Use the BARS <sup>11</sup> to score the frequency of the behaviour if this has not already been completed. How long does the agitation

last? How severely affected is the resident? Are there any patterns to the agitated behaviour that can be identified? Document your observations on the behavioural analysis form;

- consider what the consequences of the behaviour are to the resident, and to other people (other residents, visitors, and staff). What is considered acceptable behaviour in this situation? If the behaviour is considered unacceptable, why is it unacceptable? Should the expectations of other people (staff, visitors, other residents) be adjusted regarding this behaviour?

Once the review of antecedents, behaviours and consequences is completed, manage the agitation by removing the negative triggers.

### Care staff

- participate in the review of antecedents, behaviours and consequences. As a care staff member you know the resident well and will be able to describe triggers known to agitate an individual resident;
- if the agitated behaviour is potentially dangerous then notify the registered nurse or person in charge immediately. Action to prevent harm to the resident or others needs to be started straight away.

If no triggers causing agitation are found, move immediately to Step 3.

## **Interventions, based on the findings from the assessment**

### **Remove negative triggers**

If management of the resident's agitation is required, then removing negative triggers should be tried first. Form a plan with a strategy to try based on the information from the above assessment. Set a goal and a realistic timeframe, and communicate the plan to the resident; the resident's family members, general practitioner, and all facility staff so that a consistent approach is applied:

- if environmental factors are identified as triggers, then alter any that are realistically possible;
- if deficiencies in basic care practices are identified for this resident then remedy them. Provide additional staff training if necessary;
- if a task or activity is causing agitation then review:
  - is it necessary to complete the task now? If not, then reschedule;

- does the task hurt the resident? If yes, provide analgesia for incident pain \*;
  - is the task too complex or confusing? Does the task make sense to the resident? If the task is complex or doesn't make sense then simplify it and explain it to the resident;
  - is the task part of a familiar routine? Are the skills of the resident being used to their full potential? Residents with dementia require structure and order to their day. They also need to be encouraged to maintain maximum possible independence;
  - who benefits most from completing the task? If the task is being completed for the staff's convenience then it should be reviewed and scheduled differently.
- if there is an imbalance in sensory arousal, then individualise the activity plan for the resident. Balance quiet periods with more active periods of approximately 1.5 hours duration <sup>8, 20</sup>. For example, if a resident is active all morning then agitated by lunchtime, schedule a rest period during the morning; if the resident is agitated in the afternoon and is found to receive very little stimulation then schedule an activity <sup>4</sup>.

### **Evaluation:**

Agitation may not be completely eliminated by any treatment. Consider the treatment of the agitation effective if the agitation is reduced by 50% after treating <sup>4</sup>.

Use the Brief Agitation Rating Scale (BARS) <sup>11</sup> again, so that a comparison with the pre-intervention score can be made. Complete the BARS once per shift for up to 4 days if necessary.

Evaluating the effectiveness of any treatment depends of course on the treatment given. For example, if a resident's schedule is changed to balance his/her arousal states, then a reduction in agitated behaviour may not be seen for a few days. Evaluation should be undertaken then.

If the intervention doesn't reduce the agitation by 50% within the expected timeframe, then proceed to Step 3.

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\* Follow the pain decision-making framework to assess and manage pain.

## Step 3: positive comfort interventions to settle the resident

Move to Step 3 interventions to settle agitated residents that have either had no benefit from previous countermeasures, or the cause of the agitation remains unknown. These interventions are relegated to late in the sequence because they are resource-hungry, and in any event should occur only when there are no apparent negative influences to remove. They could be either preventative or curative, and derive from the unmet needs model. See Section 3 of the 'Supporting information' for a summary of the effectiveness of interventions.

### Interventions, based on the findings from the assessment Try positive interventions

**All staff, in consultation with the registered nurse or nurse in charge:**

Try more intensive positive interventions for individual residents, including:

- relaxation;
- diversion;
- multi-sensory rooms;
- music therapy;
- aromatherapy;
- reminiscence;
- art therapy;
- pet therapy;
- walking or a socialising group <sup>4</sup>;
- try praising the resident, and using gentle touch to calm the resident. One study found that stroking the resident's face from the ear lobe to the chin may stimulate the memory of a loved one and have a calming effect <sup>21</sup>.

#### **Evaluation:**

Agitation may not be completely eliminated by any treatment. Consider the treatment of the agitation effective if the agitation is reduced by 50% after treating <sup>4</sup>.

Use the Brief Agitation Rating Scale (BARS) <sup>11</sup> again, so that a comparison with the pre-intervention score can be made. Complete the BARS once per shift for up to 4 days if necessary.

Evaluating the effectiveness of any treatment depends of course on the treatment given. For example, if a resident is taken to a multisensory room, then evaluation should occur at the end of the session, as defined by the facility policy for the room.

If the intervention doesn't reduce the agitation by 50% within the expected timeframe, then proceed to Step 4.

## Step 4: Trial/ change analgesic medication

Kovach et al (2004) <sup>3</sup> recommend a trial of analgesic medication prior to moving on to more negative interventions such as psychotropic medication or the use of restraints.

The rationale for including this step in this framework is that many of the behaviours triggering assessment in the Kovach et al study (2006) <sup>2</sup> were classified as agitation. The participants included 40% of residents with a physical cause for their behaviour, which went untreated in 70% of cases.

It is easy to imagine that a similar pattern of assessment and treatment could also exist within facilities in Australia, therefore it is reasonable to suggest that a trial of analgesics may be of benefit to residents prior to trialling other psychotropic medication.

**Interventions, based on the findings from the  
assessment  
Give an analgesic medication**

### Registered nurse or delegate:

Either:

- administer the prescribed analgesic medication PLUS pro re nata (prn) analgesic ordered for the resident regularly for 24 hours and evaluate the response <sup>4</sup> ; OR
- contact the general practitioner to obtain a medication order to start a prn analgesic and give it regularly for 24 hours and evaluate the result; OR
- contact the general practitioner to obtain a medication order to escalate the dose of the existing analgesic. Give the analgesic regularly for 24 hours and evaluate the result. \*

### Evaluation:

Agitation may not be completely eliminated by any treatment. Consider the treatment of the agitation effective if the agitation is reduced by 50% after treating <sup>4</sup>.

Use the Brief Agitation Rating Scale (BARS) <sup>11</sup> again, so that a comparison with the pre-intervention score can be made. Complete the BARS once per shift for up to 4 days if necessary.

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\* Follow the pain decision-making framework to assess and manage pain.

If the resident is able to complete a self-assessment tool to measure pain then have him/her do so. Otherwise, use a behavioural observation pain assessment tool to add to the evaluation in this step of the agitation framework.

Repeat the BARS and the pain assessment tool chosen after 24 hours of regular analgesia (either an increased dose, or after giving regular prn medication).

If the intervention doesn't reduce the agitation by 50% within the expected timeframe, then proceed to Step 5.

## **Step 5: Seek further advice. Consider a trial of an antipsychotic**

If the resident remains agitated, seek further advice from the general practitioner, or a dementia support nurse or geriatrician if available.

A trial of antipsychotics may be required, although these should be considered as a last resort for many residents. In one randomised controlled trial<sup>22</sup> comparing haloperidol, trazodone hydrochloride\* and behaviour management therapy, it was found that there was no significant differences between the effects of the three treatments on agitation. The participants treated with medications experienced a higher rate of adverse effects, including parkinsonian gait disturbances and bradykinesia (slowness in starting movement).

If medications are being used then atypical antipsychotics such as risperidone or olanzapine are often suggested as first choice due to their better side-effect profile<sup>19</sup>. Anticonvulsant mood stabilisers such as carbamazepine or valproic acid may decrease aggression and maintain an improvement in agitation<sup>19</sup>.

If antipsychotics are commenced, nurses should be aware that a small dose should be ordered initially, with gradual upwards titration of the dose if required. The medication should be stopped after a few months to see whether it is still necessary. Monitor carefully for side effects<sup>4</sup>.

### **Start from Step 1 again any time the resident has an increase in agitated behaviours.**

As a general principle, monitoring of the resident's behaviour and condition, the effects on others in the vicinity, and the outcomes of interventions should be continual. Many aspects of the above framework simply reiterate principles of client-centred care, which should be applied as a matter of course. High standards of nursing care are the best preventative, and the treatment of choice.

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\* Trazodone hydrochloride ("Desyrel") is not available in Australia

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## The Brief Agitation Rating Scale (BARS) for Residents of Aged Care Facilities

The BARS measures the frequency (not severity) of agitated behaviour.

**When to complete this tool:** a caregiver who has spent time with a resident can complete the tool any time a resident is exhibiting agitated behaviour. For a resident with uncontrolled agitation it is recommended that the BARS be completed once per shift (ie morning, afternoon and night) for 4 days to gather evidence of the frequency of agitated behaviours.

**How to score:** Total the scores for each of the 10 behaviours to obtain a total agitation score.

**Date:** ..... **Time:** ..... **Resident name:** .....

Behaviour	Frequency of each behaviour and score			
	None (score= 0)	Once or twice (score = 1)	Occasionally (score = 2)	Often or continuous (score = 3)
Hitting				
Grabbing				
Pushing				
Pacing or aimless wandering				
Repetitious mannerisms				
Restlessness				
Screaming				
Repetitive sentences or questions				
Making strange noises				
Complaining				
<b>Total Score</b>		<b>Comments</b>		

# CONFUSION ASSESSMENT METHOD (CAM) SHORTENED VERSION WORKSHEET

EVALUATOR: ..... DATE: .....

## 1. ACUTE ONSET AND FLUCTUATING COURSE

### BOX 1

a) Is there evidence of an acute change in mental status from the patient's baseline?

No \_\_\_\_\_ Yes \_\_\_\_\_

b) Did the (abnormal) behavior fluctuate during the day, that is tend to come and go or increase and decrease in severity?

No \_\_\_\_\_ Yes \_\_\_\_\_

## 2. INATTENTION

Did the patient have difficulty focusing attention, for example, being easily distractible or having difficulty keeping track of what was being said?

No \_\_\_\_\_ Yes \_\_\_\_\_

## 3. DISORGANIZED THINKING

Was the patient 's thinking disorganised or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

### BOX 2

No \_\_\_\_\_ Yes \_\_\_\_\_

## 4. ALTERED LEVEL OF CONSCIOUSNESS

Overall, how would you rate the patient's level of consciousness?

-- Alert (normal)

- Vigilant (hyperalert)
- Lethargic (drowsy, easily aroused)
- Stupor (difficult to arouse)
- Coma (unarousable)

Do any ticks appear in this box?

No \_\_\_\_\_ Yes \_\_\_\_\_

**If all items in Box 1 are ticked and at least one item in Box 2 is ticked a diagnosis of delirium is suggested.**

## **Explanation of features used in the Confusion Assessment Method (CAM) Shortened Version <sup>23</sup>**

### **Feature 1: *Acute Onset and Fluctuating Course***

This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient's baseline? Did the (abnormal) behaviour fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?

### **Feature 2: *Inattention***

This feature is shown by a positive response to the following question: Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

### **Feature 3: *Disorganised thinking***

This feature is shown by a positive response to the following question: Was the patient's thinking disorganised or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

### **Feature 4: *Altered Level of consciousness***

This feature is shown by any answer other than "alert" to the following question: Overall, how would you rate this patient's level of consciousness? (alert [normal], vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unarousable])

**The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.**

Adapted from Inouye SK et al, Clarifying Confusion: The Confusion Assessment Method. A New Method for Detection of Delirium. *Ann Intern Med.* 1990; 113:941-8.

Retrieved 28 October 2008 from: <http://www.hospitalelderlifeprogram.org>

Affix resident sticker here

## BEHAVIOURAL ANALYSIS FORM

<b>BEFORE INCIDENT</b>	<b>INCIDENT</b>	<b>AFTER INCIDENT</b>
<p>Date:</p> <p>Time:</p> <p>Location:</p> <p>BARS Score:</p> <p>Persons in the vicinity:</p> <p>What was the resident doing at the time of the incident?</p>  <p>Trigger (<i>if known</i>)</p>	<p>Observed behaviour:</p>       <p>Duration of behaviour:</p>	<p>Strategy used:</p>     <p>PRN medication:</p>   <p>Outcome (include repeat BARS score):</p>    <p>Resolution time:</p> <p>Signature:</p>
<b>RECOMMENDATIONS:</b>		

## **ACKNOWLEDGEMENTS: FRAMEWORK DEVELOPMENT**

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