The Australian Government funds the South Australian Dementia Behaviour Management Advisory Services (SA DBMAS) which is one of eight centres nationally that provides information, advice and support to improve the quality of life of people with dementia and their carers where the behaviour of the person with dementia impacts on their care.

The Australian Government is committed to improving the health of all Australians, ensuring they have access to high quality health services and supportive care services. Through the Dementia Initiative, the Australian Government aims to strengthen the capacity of the health and aged care sectors to provide appropriate evidence-based prevention and early intervention, assessment, treatment and care for people with dementia.

Authors: Tim Wallace, Rajiv Chand, Elisabeth Buck, Pam Riley, Gina Murphy, Helen Brauer, Susan McAuliffe, Jane Doolette and Elizabeth McGrath.

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**Introduction**

The content of this guide draws on currently accepted knowledge of the behavioural and psychological symptoms of dementia (BPSD), and promotes evidence based practice in dementia care to maximise the quality of life for people living with dementia and their carers. This guide aims to enhance communication and interactions between carers, the person with dementia and their family members, and improve the occupational health and safety of people who provide care. There are a number of terms used to refer to the behavioural symptoms of dementia including: behaviours of concern (BOC); challenging behaviours; and BPSD. Throughout this guide we refer to these as behaviours of concern, but other terms are used interchangeably. We have also used the word people / person to describe those living with dementia with behaviours of concern, and the word carer to describe those who are providing care and support for the person with dementia.

**How to use this guide**

This guide has been designed to be used in conjunction with your organisational procedures, starting with a risk assessment of the behaviours of concern. After the risk assessment, you sequentially step through the other sections of the guide. If the behaviours of concern are resolved, then you do not need to continue with the steps. If at any point in time you are unsure of how to complete one of the steps, consult the relevant section of this guide as it will provide you with some useful suggestions to try. If you require further help with the behaviour of a person you are caring for, please call DSA on 1800 699 799 for assistance.
Risk Assessment

There are some behaviours which give rise to dangerous situations for the person experiencing the behaviour or for others in the immediate vicinity. The first step is to manage the immediate risk. Once the immediate risk has been resolved, continue to follow this guide.

<table>
<thead>
<tr>
<th>Verbal Presentation</th>
<th>Physical Presentation</th>
<th>Immediate Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raised voice / angry tone</td>
<td>Threating language</td>
<td>Assess the impact on safety: Is anyone at risk?</td>
</tr>
<tr>
<td>Screaming</td>
<td>No verbal behaviours</td>
<td>Remove self and others (if safe to do so) from the situation</td>
</tr>
<tr>
<td>Calling out</td>
<td>No physical presentation</td>
<td>Decrease the environmental stimuli for the person displaying aggression</td>
</tr>
<tr>
<td>Brandishing weapons / raised fists / fighting posture</td>
<td>Damaging property</td>
<td>If behaviour persists or escalates then crisis management should be initiated.</td>
</tr>
<tr>
<td>Fidgeting / restlessness</td>
<td>Pacing back and forth / walking in an urgent manner</td>
<td>Refer to your organisational procedures and contact emergency services as required.</td>
</tr>
<tr>
<td>Fidgeting / restlessness</td>
<td>Pacing back and forth / walking in an urgent manner</td>
<td>If safe, attempt to diffuse the situation using non-pharmacological approaches (refer to page 16 of psychosocial section)</td>
</tr>
</tbody>
</table>

Use short and simple communication techniques. Stop any interaction that infringes on their personal space. Offer verbal reassurance (speak in a slow and low tone – observe body language etc). Give the person space and time to calm down. Allow a minimum of five minutes before attempting to reengage. Follow the steps in this manual. Contact DBMAS on 1800 699 799 for assistance if you would like some further help.

Emergency High Low

3 Dementia Behaviour Management Advisory Services

ReBOC  |  www.dbmas.org.au

02 Behaviours of Concern

And And And / Or
There are some behaviours which give rise to dangerous situations for the person experiencing the behaviour or for others in the immediate vicinity. The first step is to manage the immediate risk. Once the immediate risk has been resolved, continue to follow this guide.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Verbal Presentation</th>
<th>Physical Presentation</th>
<th>Immediate Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>any of the following</td>
<td>Brandishing weapons / raised fists / fighting posture</td>
<td>• Assess the impact on safety: Is anyone at risk?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Damaging property</td>
<td>• Remove self and others (if safe to do so) from the situation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Actual injuries to self or those around them</td>
<td>• Decrease the environmental stimuli for the person displaying aggression</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• If behaviour persists or escalates then crisis management should be initiated. Refer to your organisational procedures and contact emergency services as required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• If safe, attempt to diffuse the situation using non-pharmacological approaches (refer to page 16 of psychosocial section)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Use short and simple communication techniques</td>
</tr>
<tr>
<td>High</td>
<td>Raised voice / angry tone</td>
<td>Fidgeting / restlessness</td>
<td>• Stop any interaction that infringes on their personal space</td>
</tr>
<tr>
<td></td>
<td>Threatening language</td>
<td>Pacing back and forth / walking in an urgent manner</td>
<td>• Offer verbal reassurance (speak in a slow and low tone – observe body language etc – refer to page 14)</td>
</tr>
<tr>
<td></td>
<td>Screaming</td>
<td></td>
<td>• Give the person space and time to calm down. Allow a minimum of five minutes before attempting to reengage</td>
</tr>
<tr>
<td>Low</td>
<td>Calling out</td>
<td>Fidgeting / restlessness</td>
<td>• Follow the steps in this manual</td>
</tr>
<tr>
<td></td>
<td>No verbal presentation</td>
<td>Pacing back and forth / walking in an urgent manner</td>
<td>• Contact DSA on 1800 699 799 for assistance if you would like some further help</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No physical presentation</td>
<td></td>
</tr>
</tbody>
</table>
Behaviours of Concern
Behaviours of concern

What is dementia
Dementia is the term used to describe the symptoms of a large group of illnesses which cause a progressive decline in a person’s cognitive functioning. It is a broad term which describes a loss of memory, intellect, reasoning, social skills and normal emotional reactions that are often reflected in a person’s behaviour.

Dementia types
Dementia is caused by many disorders, the most common of these are:

- Alzheimer’s disease
- Vascular dementia
- Parkinson’s disease
- Dementia with Lewy Bodies
- Fronto-temporal dementia
- Huntington’s disease
- Alcohol related dementia.

Most people with dementia are older but dementia is not a normal part of ageing. The onset of symptoms is usually gradual, with early signs of dementia being quite subtle. Dementia has a progressive nature.

What are behaviours of concern
A behaviour of concern is any behaviour which causes stress, worry, risk of or actual harm to the person, their carers, staff, family members or those around them. The behaviour deserves consideration and investigation as it is an obstacle to achieving the best quality of life for the person with dementia and may present as an occupational health and safety concern for staff.

Examples of behaviour of concern
- Verbal disruption
- Physical aggression
- Repetitive actions or questions
- Resistance to personal care
- Sexually inappropriate behaviour
- Refusal to accept services
- Problems associated with eating
- Socially inappropriate behaviour
- Wandering or intrusiveness
- Sleep disturbance.

Important considerations

- Behaviours of concern are common and are a consequence of the brain changes
- Behaviours may resolve on their own or escalate as the disease progresses
- Management strategies may only partially reduce the behaviour frequency or impact.
The brain and behaviour

The brain is the most complex organ in the human body and is responsible for all aspects of our behaviour. Researchers are still trying to understand in greater detail the numerous structures that make up the brain, and their corresponding function.

The brain has four primary lobes and the limbic system. Each lobe has a number of sub-structures with different specialised functions. The primary functions of the four lobes and the limbic system are described on this page in the colour coded boxes.

Dementia causes progressive damage to these brain regions, with the type and severity of the disease determining the degree of impairment to function and behaviour.

The brain does not exist in isolation, and it is important to understand the biological, psychological, and physical environment that provide the context for all behaviours.
The brain and behaviour

Frontal Lobe
The frontal lobe is responsible for higher cognitive functions involving planning, problem solving, starting and stopping actions and regulating social behaviour.

Damage to this region causes
• Inability to initiate activity
• Repetitive behaviour
• Inability to regulate mood or emotional state
• Rude and socially inappropriate behaviour

Parietal Lobe
The parietal lobe processes and integrates tactile information (touch, pressure, temperature and pain) along with information from the occipital lobe, to create an understanding of ourselves and the world around us.

Damage to this region causes
• Inability to locate and recognise objects
• Lack of coordination
• Disorientation

Temporal Lobe
The temporal lobe plays a vital function in learning & memory, understanding language, perception and recognition.

Damage to this region causes
• Difficulties in understanding speech, recognising faces and objects
• Long and short term memory loss
• Increased aggression
• Changes to interest in sexual behaviour
• Persistent talking.

Occipital Lobe
The occipital lobe separately encodes visual information received by the retina in the eyes into colour, orientation and movement and passes this information to the temporal and parietal lobes.

Damage to this region causes
• Hallucinations
• Blindness
• Inability to see colour or motion
• Synesthesia (e.g. hearing colours, tasting sounds).

Limbic System
The limbic system has a primary role in processing and regulating emotions, memory and sexual arousal.

Damage to this region causes
• Increased agitation
• Uncontrolled emotions
• Disturbed day/night cycle
• Changes to sexual arousal.
Four models may assist in understanding the causes for changed behaviour associated with dementia. It may be necessary to use more than one of these models to gain greater insights into why the behaviour is occurring.

**Unmet needs**

**Theory**
A person may exhibit behaviours when their needs are not met eg: hunger, thirst, toilet, pain, fatigue, temperature, over/under stimulation, social engagement. Maslow’s hierarchy of needs is one way of conceptualising the priority of needs, with the needs fundamental to survival being the foundation for higher order needs.

**Strategy**
Attempt to understand which individual unmet needs are contributing to behaviours and manage these needs prior to behaviours occurring.

**ABC model**

**Theory**
Antecedents > Behaviour > Consequences. The ABC model focuses on triggers (antecedents) that precede behaviours, with the subsequent consequences reinforcing the behaviour.

**Strategy**
Problem solve to determine antecedents that may have triggered the person’s behaviour. Identifying the ABC’s can help to target interventions aimed at reducing the antecedents, or in some instances modifying the consequences.
Models for understanding behaviour

**Progressively lowered stress threshold**

**Theory**
Dementia lowers a person’s ability to deal with daily stress and increases the susceptibility to environmental stressors. Accumulated stressors such as noise, temperature and light can contribute to behaviours of concern.

**Strategy**
Identify and remove cumulative stressors from the environment to reduce the likelihood of stress related behaviours. Schedule rest breaks to allow the person to cope with daily stress more effectively.

**Biomedical model**

**Theory**
Pathological changes to the brain in dementia impair normal brain functions and cause behavioural symptoms. Behaviours of concern are a part of dementia.

**Strategy**
Manage reversible causes of confusion and behaviour related to treatable biological and physiological conditions. Understand that treatment resistant behaviours are caused by the disease and not an intentional or malicious act.

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**Progressively Lowered Stress Threshold**

**Cumulative stress**

**Time of day**
- Unexpected touch
- Confusion
- Fatigue
- Pain
- Noisy
- Thirst
- Hunger
- Stress threshold

**Normal**

**Alzheimers**

**Language**

**Memory**
Delirium Screen

ReBOC
Delirium, an acute confusional state, can compound the confusion and exacerbate behaviours caused by dementia. Delirium has numerous causes, with a wide range of risk factors which are detailed here. People with multiple risk factors are more likely to suffer from delirium. Treating the delirium is critical as it presents a significant health risk and can limit the effectiveness of any behaviour management strategies. Follow this delirium screen flow-chart to identify whether delirium is contributing to the behaviour changes.

Consider the use of this pathway if the person is aged over 65 years or 45 years for Aboriginal or Torres Strait Island Communities.

For further information on delirium, please read Delirium Care Pathways (Traynor & Britten, 2010)

**Delirium risk factors:**
- Infection
- Dehydration
- Malnutrition
- Sensory impairment
- Sleep deprivation
- Immobility
- Depression
- Physical restraint
- Hospitalisation
- Pain
- Multiple medications
- Electrolyte dysfunction
- Hepatic or renal dysfunction
- Cardiovascular Disease
- Constipation/Diarrhoea
- Indwelling catheter
- Abnormal sodium
- History of delirium

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### Has the patient/client been identified as potentially suffering from delirium?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conduct baseline cognitive function assessments</td>
<td></td>
</tr>
<tr>
<td>• Is the person’s cognition currently impaired?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Determine any changes in cognitive function</td>
<td></td>
</tr>
<tr>
<td>• Has this change occurred over hours or days?</td>
<td></td>
</tr>
<tr>
<td>• Does the person’s presentation fluctuate over the day?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Assess for Delirium</td>
<td></td>
</tr>
<tr>
<td>• Confusion Assessment Method (CAM)</td>
<td></td>
</tr>
<tr>
<td>• MMSE/Heidelberg Cognitive Screen/Clockface/RUDAS</td>
<td></td>
</tr>
<tr>
<td>• Medication review: Any changes in the past weeks or months?</td>
<td></td>
</tr>
<tr>
<td>• Organic Screen: CBE, biochemistry, U/E/C, LFT, TFT, urine, C&amp;S, chest x-ray</td>
<td></td>
</tr>
<tr>
<td>• Physical examination and pain review</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Consider sub-clinical delirium</td>
<td></td>
</tr>
<tr>
<td>• Does the patient/client have some symptoms of delirium?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Monitor and respond to any sudden changes in cognitive functioning by repeating pathway.</td>
<td></td>
</tr>
</tbody>
</table>

### Differential diagnosis
- Assess for depression or dementia

### Adapt Care Plan
- Refer to GP or specialist for treatment
- Provide supportive care
- Refer to Delirium Care Pathways (Traynor & Britten, 2010).
Assessment

ReBOC
Establish a behaviour baseline

This section will guide you through some of the key contexts that impact on behaviour.

It is important to measure and describe behaviours as objectively as possible, using neutral language of what was observed, and for measurement to be done consistently both before and after any interventions or management strategies. This will aid in developing an appropriate plan of care, as well as helping to evaluate the effectiveness of care. For assistance in measuring behaviours contact DSA on 1800 699 799.

**Baseline questions**

- What is the specific behaviour to be reduced? (describe what occurs step by step)
- Who is the behaviour an issue to? (there may be more than one person who is affected)
- How often is it the behaviour occurring? (frequency)
- What is the impact of the behaviour on:
  - Carer stress? (can vary from carer to carer)
  - Quality of life of the person with dementia?
  - Health and safety of involved parties?
  - Other aspects?

By answering these questions at baseline, you will be able to map the behaviour impact. When evaluating the effectiveness of any management strategies, you can ask the same questions again to see if the changes to frequency and severity have reduced the overall impact of the behaviour.

**Important considerations**

- When describing the behaviour, do not try to interpret the intent or motivation, only record what was observable (see incident report example on page 15)
- Behaviours are a major source of stress for carers
- The perception of behaviour severity is influenced by carer stress levels and knowledge about dementia related behaviours
- Family and care staff are a good source of information about the person with dementia, their history, personality, and preferences
- The skills and knowledge of a variety of professional disciplines may be beneficial in producing a positive outcome.
Assessment

All behaviours occur in a context, and within that context, the behaviour makes perfect sense to the person exhibiting it. The challenge of behaviour assessment is to gain insight into the context of the behaviour of the person with dementia at that moment in time, and to unpick their reality one strand at a time until the behaviour makes perfect sense to you.

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>ROLE IN BEHAVIOUR</th>
<th>PEOPLE WITH DEMENTIA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health</td>
<td>The body is the link between the brain and the environment. Anything that adversely impacts the body can impact the brain and therefore behaviour</td>
<td>Are more likely to be over 65, and have age related changes to their physical health which may require medication</td>
</tr>
<tr>
<td>Social / Emotional History</td>
<td>Cumulative memories and associated feelings will shape how people perceive the world around them</td>
<td>Are reliant on their life experiences in understanding the present. How they experience today is shaped by their related past experiences</td>
</tr>
<tr>
<td>Medicines</td>
<td>Medicines frequently have therapeutic actions or side effects which can impact on brain chemistry and alter mood or perception</td>
<td>Are more likely to have a medication regimen that alters mood or perception, and are more likely to be sensitive to its effects</td>
</tr>
<tr>
<td>Environment</td>
<td>The physical environment provides the sensory information that the brain needs to understand the world</td>
<td>Have a diminished capacity to process sensory information and are more likely to not understand the context of the physical environment.</td>
</tr>
<tr>
<td>Communication approach</td>
<td>Communication is 95% non-verbal, with non-verbal cues conveying the emotional context and meaning to help inform the appropriate response.</td>
<td>Often lose the verbal context of communication due to short term memory loss, and rely heavily on the emotional context of communication to guide their reactions</td>
</tr>
</tbody>
</table>
Date: 5th January  
Time: 5:35pm  
Person reporting: Donna (staff)  
Others involved: Sarah (staff) - witness

Where did the incident occur?
Lounge room

What happened before the behaviour of concern? (Consider cumulative stressors / unmet needs)
Mrs A had just left the dining room during tea (barely touched her food). Mrs A was moving around the lounge room rearranging the cushions and chairs. The television was on loudly and the curtains were drawn, making the room dark.

What happened during the behaviour incident? (Describe the behaviour incident objectively, including who was involved, where it occurred, and what the person with dementia did)
Mrs A moved a cushion near Mr B. Mr B told Mrs A to "bloody get out of it". Mrs A then proceeded to call Mr B "a useless bastard" and kicked and punched at him. Sarah (staff) attempted to hold Mrs A to stop her hitting Mr B at which point Mrs A bit Sarah on the arm.

What happened following the behaviour incident?
The locum GP was called. John (staff) separated Mr B and Mrs A. Mrs A continued to call out "bloody murderers" and you are all crooks as she paced around the facility until the locum arrived. Mrs A’s behaviours were observed from a distance and Donna (staff) offered her a warm drink and a snack but Mrs A refused this.

What might have caused the behaviour to occur?
Mrs A may have been startled by Mr B’s response. Restraining Mrs A to prevent her from harming Mr B may have made her more upset.

What strategies could you suggest or trial to help avoid the behaviour in the future?
Mrs A could have been diverted to get her to move away from the situation instead of using physical restraint. Increased supervision and assistance for Mrs A to complete her meal and then be provided with purposeful activity which may prevent the situation.
All medicines have an increased potential to cause adverse effects in older people. Various classes of drugs (eg beta-blockers, anticonvulsants, benzodiazepines, tricyclic antidepressants, corticosteroids, narcotics, fluoroquinolones, H2 receptor antagonists, antiparkinsonian drugs, antihypertensives, and anticholinergics) can have a negative impact on a person’s emotional and / or cognitive state and this may be exacerbated for someone with dementia. The net result of this emotional and cognitive change may be an escalation of any behaviours of concern.

Inappropriate polypharmacy (the use of multiple medications) further increases the risk of adverse drug events such as falls, confusion and functional decline. Therefore, reviewing a person’s current medication regimen is an important part of the assessment process of managing behaviours.

To determine if a medication review is needed, consider these points:

- Is the person on five or more regular medications?
- Is the person having more than twelve doses of medications per day?
- Has the person had significant changes in their medication regimen during the last three months?

If you answered yes to one or more of these points, organise a medication review by speaking to your GP or pharmacist.

### Useful resources

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone number</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicines Line</td>
<td>1300 633 424</td>
<td><a href="http://www.nps.org.au">www.nps.org.au</a></td>
</tr>
<tr>
<td>Quality Use of Medicines Program</td>
<td>13 32 54 or 1800 555 254</td>
<td><a href="http://www.dva.gov.au">www.dva.gov.au</a></td>
</tr>
</tbody>
</table>

### Important considerations

- Medicines specifically intended for managing behaviours of concern can at times worsen the behaviour they are intended to treat
- Medication reviews should always be done in accordance with organisational procedures.
It is important to assess a person’s physical health status as any health issues can contribute to behavioural disturbances, often in seemingly unrelated ways. People with dementia are particularly vulnerable to issues with their physical health as they are:

- more likely to have age related changes to their health,
- less likely to be able to manage their physical health independently, and
- less likely to be able to understand and/or communicate their physical health concerns

Assessment of physical health needs to be a comprehensive and holistic screen. Any less than optimal health issues identified should be addressed in conjunction with an appropriate specialist. Whilst the list below is not exhaustive, please consider how these and other physical health factors present may be impacting on the behaviour.

<table>
<thead>
<tr>
<th>Physical Health</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical history:</strong></td>
<td>Chronic and acute issues</td>
</tr>
<tr>
<td><strong>Skin integrity:</strong></td>
<td>rashes, bruising, redness, swelling, unusual colour</td>
</tr>
<tr>
<td><strong>Nutrition / hydration:</strong></td>
<td>adequate oral intake, weight gain or loss, inability to eat or drink independently</td>
</tr>
<tr>
<td><strong>Swallowing / eating:</strong></td>
<td>history of choking or aspiration, pocketing of food in cheeks, excessive chewing</td>
</tr>
<tr>
<td><strong>Oral and dental:</strong></td>
<td>gum disease, dental decay, ill fitting dentures, bad breath</td>
</tr>
<tr>
<td><strong>Mobility:</strong></td>
<td>recent falls, use of mobility aids, abnormal gait, ill-fitting shoes</td>
</tr>
<tr>
<td><strong>Bladder &amp; Bowel:</strong></td>
<td>incontinence, constipation, diarrhoea, frequency, colour, odour, infection</td>
</tr>
<tr>
<td><strong>Wound:</strong></td>
<td>skin tears, ulcers, wound discharge, odour</td>
</tr>
<tr>
<td><strong>Pain / discomfort:</strong></td>
<td>fidgeting, restlessness; guarding a joint / limb, grimacing, calling out, groaning</td>
</tr>
<tr>
<td><strong>Speech problems:</strong></td>
<td>inability to communicate needs</td>
</tr>
<tr>
<td><strong>Sleep:</strong></td>
<td>insomnia, daytime napping, nightmares, sleep apnoea</td>
</tr>
<tr>
<td><strong>Sensory:</strong></td>
<td>alterations in vision, hearing, touch, taste and smell.</td>
</tr>
</tbody>
</table>
The combination of the building, floor-plan, fittings and fixtures, furniture, lighting, ventilation, open space, building materials, flooring, acoustics, and more, forms the environment. The environment can be considered as a passive carer and it plays a critical role in ensuring people’s quality of life is maximised.

A review of the literature on designing physical environments for people with dementia found evidence supporting a number of design considerations (Hammond et al, 2008). When considering the environment’s role in the behaviours of concern, the following points are desirable in relieving the behaviours. The environment should:

- Be small in size
- Be domestic and home like;
- Have scope for ordinary activities (unit kitchens, washing lines, garden sheds);
- Include unobtrusive safety features;
- Have rooms for different functions with furniture and fittings familiar to the age and generation of the residents;
- Provide a safe outside space;
- Have single rooms big enough for a reasonable amount of personal belongings;
- Provide good signage and multiple cues where possible; eg. sight, smell, sound;
- Use objects rather than colour for orientation;
- Enhance visual access, i.e. ensure that the resident can see what they need to see from wherever they spend most of their time; and
- Control stimuli, especially noise.

### Useful resources

<table>
<thead>
<tr>
<th>Service</th>
<th>Publisher</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of environmental assessment tools for the evaluation of Australian residential facilities for people with dementia</td>
<td>Dementia Collaborative Research Centre</td>
<td><a href="http://www.dementia.unsw.edu.au">www.dementia.unsw.edu.au</a></td>
</tr>
<tr>
<td>Design for People with Dementia: Audit Tool</td>
<td>Dementia Services Development Centre, University of Stirling</td>
<td><a href="http://www.dementiashop.co.uk">www.dementiashop.co.uk</a></td>
</tr>
<tr>
<td>DSA</td>
<td></td>
<td>1800 699 799</td>
</tr>
</tbody>
</table>
Elements of a person’s social history can help explain behavioural disturbance. Vivid memories of traumatic past experiences may be triggered during every day activities, and the person may have trouble distinguishing between their memories and the current situation.

When you consider the person’s behaviour, think about the role that the following elements play:

- **Cultural Background** customs, traditions, language.
- **Life History** personal memories, accomplishments, interests.
- **Personality** introverted and quiet, loud and gregarious, sense of humour.
- **Spirituality** religious beliefs, personal experiences.
- **Values and beliefs** ability to trust others, acceptance of support, moral framework, respect for others.
- **Social connections and support networks** roles within the community, homes
- **Sexuality** desires, instincts, preferences, feelings, beliefs.
- **Interests and hobbies** sports, crafts, music, cooking, gardening.
- **Extraordinary life events** positive and negative events, war, trauma, births, deaths.
- **Habits and routines** early riser, late to bed, breakfast in bed, eating meals outside / in front of the television, showering.

### Useful resources

<table>
<thead>
<tr>
<th>Service</th>
<th>Publisher</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Personal Life History booklet</td>
<td>Alzheimer's Australia SA</td>
<td><a href="http://www.fightdementia.org.au">www.fightdementia.org.au</a></td>
</tr>
<tr>
<td>“This is Me” Life Story Book</td>
<td>Alzheimer's Australia Tasmania</td>
<td><a href="http://www.fightdementia.org.au">www.fightdementia.org.au</a></td>
</tr>
</tbody>
</table>
Behaviours of concern often occur between the person with dementia and their carers. Carers in their interactions provide a set of contextual cues and prompts that influence the person with dementia’s behavioural response. Identifying and modifying any aspects of the carer’s communication style that contribute to the behaviour will improve the outcome.

For example, a carer who is stressed because the person they are caring for is repeatedly asking what the time is, will tell the person the time, but will convey their frustration at the person with dementia by using a firmer tone of voice and perhaps clenching their fists. The person with dementia will then respond to the actions and expressed emotion of the carer, instead of the words.

When thinking about the way that carers communicate and interact with the person with dementia, consider both the verbal and non-verbal aspects.

**Non-verbal communication** – ignoring the words, what message is being conveyed by:
- Body language – posture (leaning towards the speaker) and gestures (arm and hand movements)
- Facial expression – eyebrows (raised or furrowed), jaw (clenched or relaxed) mouth (smile or frowned)
- Tone of voice – inflection, pitch (low or high), volume (loud or quiet)
- Pace of speech – fast (excitement / anger) or slow (calm / disengaged)
- Eye contact – insufficient (disinterested) or intense (threatening)
- Approach – threatening (startle reaction or the person pulling away) or non-threatening

**Verbal communication** – ignoring the delivery, what message is being conveyed by:
- Message complexity – the number and complexity of ideas communicated
- Word complexity – complicated jargon / over-simplification

### Useful resources

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<tr>
<td>Dementia Education Online</td>
<td>NSW/ACT Dementia Training Study Centre</td>
<td>dementia.uow.edu.au</td>
</tr>
<tr>
<td>Help Sheets</td>
<td>Alzheimer’s Australia</td>
<td><a href="http://www.fightdementia.org.au">www.fightdementia.org.au</a></td>
</tr>
</tbody>
</table>

### Important considerations

- One of the most challenging aspects of caring for a person with dementia is learning to develop new approaches to communicating
- Consider both verbal and non-verbal communication when interacting with a person with dementia
The comprehensive assessments undertaken thus far will give you a greater insight into the reality of the person with behaviours of concern. From this perspective you will be able to identify their current physiological and emotional needs, and match interventions accordingly. Monitoring and evaluating the impact of an intervention is an integral part of the process.

**Physiological & emotional needs**

Physiological needs affect emotional states, and will frequently present as behaviours of concern.

Assess and address the physical needs with the guidelines in the assessment section. If behaviours persist, the emotional needs of the person with dementia will need to be addressed with psychosocial strategies to improve the well-being of the person.

Emotions drive all behaviour and all behaviours have an underpinning emotional state. If you can identify the underpinning emotional state that corresponds to the specific behaviour, you can target care interventions to meet the emotional needs accordingly.

**Important considerations**

- Choose approaches that best meet identified unmet physiological and emotional needs
- Monitoring and evaluating the impact of an intervention is an integral part of the process
- Pharmacological and psychosocial interventions may be used independently or in combination
- Strategies that take the person with dementia’s personal life history into account will have the greatest chance of success
- Management strategies can only partially compensate for the progressive brain changes in dementia. Set realistic expectations
- Interventions should focus on maximising well-being and minimising ill-being.
There are a broad range of psychosocial strategies of varying complexity available for use in managing behaviours exhibited by people with dementia. They are most effective when using an individualised approach, taking into account the person’s history including culture, family, interests and working life. It is beneficial if activities are meaningful and relevant to the client. A regular routine, allowing for flexibility in care is often beneficial for clients. A strategy that works one day may not work the next; however this does not mean that the strategy is ineffective and that it should not be used again.

A brief overview of some of the more effective psychosocial strategies has been provided below. For further information or assistance with implementing any psychosocial strategies, please call DSA on 1800 699 799.

### Psychosocial Strategies

<table>
<thead>
<tr>
<th>Validation therapy</th>
<th>Exercise therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Validation therapy is a communication approach that “validates” or accept the values, beliefs and “reality” of the person with dementia - even if it has no perceived basis in reality.</td>
<td>• Exercise and physical therapy is the use of movement to improve physical health and wellbeing.</td>
</tr>
<tr>
<td>• Validation therapy can reduce stress and frustration by accepting the person’s reality rather than attempting to orient them.</td>
<td>• Exercise has numerous health benefits including social engagement, improved mobility, reduced risk of falls and improved quality of life for participants. Examples of exercises include dancing, tai chi and walking.</td>
</tr>
<tr>
<td>• Validation therapy relies on validation at a verbal and non-verbal communication level to be effective.</td>
<td>• Consider physio review and GP review to ensure the participant is safe to take part in exercise programs.</td>
</tr>
</tbody>
</table>

### Multi sensory stimulation

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<th>Scheduled reassurance therapy (SRT)</th>
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<tbody>
<tr>
<td>• SRT involves brief 1 minute interactions every 30 minutes consisting of positive social interactions where no nursing/ care tasks are performed.</td>
</tr>
<tr>
<td>• SRT is replicated throughout the day to reduce agitation / anxiety and provide the client with companionship and increased wellbeing.</td>
</tr>
<tr>
<td>• Client may become agitated / anxious if the program is not strictly adhered to. Consistency is the key to success.</td>
</tr>
</tbody>
</table>
Psychosocial Strategies

**Aromatherapy**
- Aromatherapy involves using essential oils to calm and relax the client.
- Lemon balm and lavender have been researched and evidence exists for their calming properties mainly in relation to the management of agitation.
- Consult the client’s GP and contact an accredited aromatherapist to conduct sessions with clients as there may be incompatibilities with existing medical conditions.

**Pet therapy**
- Pet therapy is the use of animals or pets to improve well-being and quality of life in people with dementia.
- The use of visiting pet services or staff and family members’ pets can reduce anxiety and stress and be a useful diversional technique.
- Animals and pets can be unpredictable. Pet therapy should always be used under close supervision. Consider the use of stuffed toys or robotic toy animals as an alternative to real pets.

**Spirituality**
- Spirituality relates to the human spirit or soul as opposed to the physical body. This includes traditional and alternative beliefs.
- Spiritual and religious beliefs and practices can be a significant source of comfort for people and reduce anxiety related to uncertainty and fear.
- Spiritual beliefs and practices are often of significant importance to people. Where possible allow people the freedom to choose to engage with their individual spiritual beliefs and practices.

**Music therapy**
- Music therapy is the use of music to improve well-being. It can include listening to music, singing, humming, playing instruments and swaying / tapping to the beat.
- Music therapy can be effective in improving overall quality of life, reducing a number of behaviours of concern. Using familiar and favourite music is most successful.
- Be sure to learn the likes and dislikes of the person with dementia. Avoid over stimulation or triggering unpleasant memories. A registered music therapist can help you implement a music therapy program.
Psychosocial Strategies

Bright light therapy

- Bright light therapy involves exposure to natural sunlight or full spectrum artificial light of 2500 lux brightness for thirty minute periods in the morning and evening. This helps to regulate a person’s sleeping pattern.
- Bright light therapy can be effective to reduce sleep disturbance in people with dementia, including early morning awakenings and daytime sleeping.
- Bright light therapy should always be used within the proper limits of intensity and time.

Reality orientation therapy

- Reality orientation therapy is the use of verbal and environmental prompts (e.g., calendar clocks) to reorient a person with dementia to the present.
- Orienting a person with dementia to their current context can assist with their independence and autonomy and reduce agitation.
- The person with dementia’s reality may not always be the present. Open communication will allow the person with dementia to let you know where they are at the moment. Any signs of distress when using the above tools should alert you to the fact that this is not the right time or place.

Spaced retrieval

- Spaced retrieval is a training technique used to assist individuals with impaired memory to retain information for later recollection. It has been used successfully with people at all stages of dementia.
- The therapy involves beginning with a prompt question for the target behavior and training the client to recall the correct answer. When retrieval is successful, the interval preceding the next recall test is increased.
- Spaced retrieval can improve client function and independence by enhancing recall of key information related to specific tasks or behaviors.
- It is advised to engage a psychologist or specialist trained in spaced retrieval to maximise the likelihood of success.

Doll therapy

- Doll therapy is a diversional intervention that provides people with dementia an opportunity to interact with a ‘life-like’ baby doll in a manner that is therapeutic to them.
- Doll therapy can reduce agitated behaviour and improve quality of life for people with dementia through an opportunity to express their emotions; meaningful communication through interacting with and talking about the baby doll; and a sense of role and purpose.
- Doll therapy can be seen as age-inappropriate. Organisational policies and guidelines should be used in conjunction with staff training on doll therapy.
Psychosocial Strategies

Simulated presence therapy

- Simulated presence therapy is the use of pre-recorded audio or video loops for playback to simulate and stimulate a conversation between the person and the recording.
- Simulated presence therapy can provide meaningful occupation and can be used to alleviate boredom or prevent/reduce agitated behaviour.
- If the person with dementia no longer recognises the voices or people this could be upsetting for them. Always assess for a positive reaction and do not persist if the person becomes unsettled by the voices or pictures. Do not use simulated presence therapy to replace other activities that the person is interacting and engaging with.

Dementia Friendly Environment

- Dementia friendly environments are those that have been modified or purposefully designed through the application of design principles that consider the needs of people with dementia.
- Dementia related behaviours can be prevented by creating physical and built environments that are: self orienting; compensate for disability; engage the local community; maximise independence; demonstrate care for staff; and reinforce personal identity.
- When creating dementia friendly environments remember that "homelike" is different for each individual person with dementia.
Evidence for the efficacy of drugs is limited and the risk of adverse effects is significant (including death with antipsychotics). Behaviours that respond poorly to medication include disruptive vocalisations, shouting, wandering, pacing, repetition, cognitive deficits, incontinence, voiding inappropriately, insomnia and withdrawal. Psychotropic medicines have a modest effect on dementia-related behaviours overall, but medicines that specifically target depression or psychosis have greater efficacy.

Informed consent from the person or their guardian must be obtained prior to medication commencement.

Classes of medicines used in behaviour management include antipsychotics, benzodiazepines, anticholinesterases, N-methyl-D-aspartate (NMDA) antagonist, anticonvulsants and antidepressants.

### Medication review
- Monitor closely when starting medication or increasing the dose to ensure the target behaviour improves and that adverse effects are tolerated.
- Review the need for continuing antipsychotic therapy within 3 months and regularly after this. Withdrawing antipsychotic treatment may not worsen behaviour, provided it is done gradually.
- There should be specific monitoring of side effects such as drowsiness, restlessness, limb stiffness, reduced mobility, abnormal involuntary movements (e.g., tremor, abnormal mouth movements) and postural hypotension (dizziness on standing).
- Involving a medical specialist in prescribing and/or reviewing medications is highly recommended.

### Commencing medication
- Start any new medication at the lowest possible dose.
- Only start one new medication at a time — if there has been no benefit after 2-3 weeks, the dose could be increased gradually.
- Any increase in dose should be small and made slowly.
- Use an antipsychotic only if aggression, agitation or psychotic symptoms cause severe distress or an immediate risk of harm.
- Non-pharmacological interventions should continue to be used in conjunction with any pharmacological therapy.

### Important considerations
- Only commence drug treatment for BPSD once physical causes have been addressed and the behaviours have not responded to non-pharmacological strategies.
- Side-effects and drug interactions need to be considered prior to prescribing.
- It may be necessary to wait several weeks before efficacy can be assessed.
- There should be careful monitoring and documenting of adverse effects and intended benefits.
### Useful resources

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dementia Support Australia</td>
<td>Dementia Support Australia provides advice and recommendations for carers of a person with dementia where behaviours are impacting care.</td>
<td>1800 699 799</td>
</tr>
<tr>
<td>Dementia Collaborative Research Centre</td>
<td>The Dementia Collaborative Research Centre conducts dementia research with the primary aim to translate research into practice</td>
<td><a href="http://www.dementia.unsw.edu.au">www.dementia.unsw.edu.au</a></td>
</tr>
<tr>
<td>Dementia Outcomes Measurement Suite</td>
<td>DOMS provides dementia assessment tools for health professionals</td>
<td><a href="http://www.dementia-assessment.com.au">www.dementia-assessment.com.au</a></td>
</tr>
<tr>
<td>Life Line</td>
<td>Lifeline is a volunteer based service which offers generalist counselling and is available 24 hours 7 days a week.</td>
<td>13 11 14</td>
</tr>
<tr>
<td>National Dementia Helpline (Alzheimer’s Australia)</td>
<td>The National Dementia Helpline provides understanding and support for people with dementia, their family and carers as well as details of the full range of services provided by Alzheimer’s Australia. They also provide practical information and advice as well as up to date written material about dementia</td>
<td>1800 100 500             <a href="http://www.fightdementia.org.au">www.fightdementia.org.au</a></td>
</tr>
<tr>
<td>Aged Care Information</td>
<td>This number can provide information on a range of aged care services and supports available nationally and in your local region. Coordination and advice can also be provided to access respite services, counseling and emotional support for carers.</td>
<td>1800 200 422             <a href="http://www.agedcareaustralia.gov.au">www.agedcareaustralia.gov.au</a></td>
</tr>
<tr>
<td>Continence information line</td>
<td>The National Continence Helpline is an information and referral telephone service for people with incontinence and their carers.</td>
<td>1800 330 066</td>
</tr>
<tr>
<td>Health Direct Australia</td>
<td>Health Direct Australia is a 24 hour telephone triage information and advice service for residents of the ACT, NSW, the NT, SA, Tasmania and WA.</td>
<td>1800 022 222</td>
</tr>
<tr>
<td>Medicines Line</td>
<td>Medicines Line providing consumers with information on prescription, over-the-counter and complementary (herbal/natural/vitamin/mineral) medicines.</td>
<td>1300 633 424</td>
</tr>
<tr>
<td>Poisons Information Centre</td>
<td>Poisons Information Centre provide emergency medical advice on what to do if someone has swallowed or been exposed to a poison, whether by accident or intentionally.</td>
<td>131 126</td>
</tr>
<tr>
<td>Aged Care Complaints Investigation Scheme</td>
<td>The Aged Care Complaints Investigation Scheme investigates complaints and concerns about Australian Government-subsidised aged care including residential (hostel or nursing home) and community care.</td>
<td>1800 550 552</td>
</tr>
<tr>
<td>Dementia Training Study Centres</td>
<td>The aim of the Dementia Training Study Centres is to improve the quality of care and support provided to people living with dementia and their families through the development and upskilling of the dementia care workforce and the transfer of knowledge into practice</td>
<td><a href="http://www.dtsc.com.au">www.dtsc.com.au</a></td>
</tr>
</tbody>
</table>

Dementia Services Development Centre 2008, Design for people with dementia: Audit tool, University of Stirling, Stirling.


Traynor, S. & Britten, N. 2010, Delerium Care Pathways, Dept. of Health and Ageing, Australia.


Traynor, S. & Britten, N. 2010, Delerium Care Pathways, Dept. of Health and Ageing, Australia.


