The Use of Antipsychotics in Residential Aged Care

Clinical Recommendations developed by the RANZCP Faculty of Psychiatry of Old Age (New Zealand)

Rationale for the clinical recommendations:

The right medicine for the right problem, prescribed for the right person at the right time.
The Royal Australian and New Zealand College of Psychiatrists (RANZCP) and PHARMAC have developed these recommendations to encourage evidence-based practice for the treatment of elderly people in residential care with psychological and behavioural symptoms of mental disorders. The most common mental disorder in this group of people is dementia. There are many possible behavioural and psychological symptoms of dementia (BPSD) including psychosis, agitation, wandering and aggression. Other mental disorders that may affect the elderly, such as depression and schizophrenia-like psychotic illnesses, can also have behavioural and psychological symptoms that are distressing for the sufferers and their carers.

Traditionally, the medications most used for elderly people with these disorders are the older conventional or "typical" antipsychotics. In the 1990s "atypical" antipsychotics were released, and became widely prescribed because they were thought to carry a reduced risk of causing symptoms resembling Parkinson's disease or other extra-pyramidal side effects.

Analysis of the research data for atypical antipsychotics shows them to be beneficial for certain of the BPSD, but to confer a risk of some potentially serious adverse outcomes. In 2004 the UK Committee on the Safety of Medicines issued a warning that these medicines were associated with an increased risk of stroke for people with dementia and advised against their use in that setting. In 2005 the US Food and Drug Agency warned of an overall increase in mortality from their use in dementia. Subsequent research indicates that for people with dementia, typical antipsychotics may be at least as strongly associated with adverse events as atypicals. Although these associations have not been proved to be causal, they are concerning. Research on other classes of medicines such as mood stabilizers or benzodiazepines has not demonstrated any clear benefits for BPSD. Furthermore, these medicines can increase confusion, sedation and falls.

In addition to these findings there are significant concerns in society, shared by some doctors and organisations such as Alzheimer’s Associations that antipsychotics and similar medications are being over-prescribed to people with dementia as an inappropriate first-line means of achieving behavioural control. The preferred first-line management strategies for BPSD are psychological and behavioural interventions. If these are not sufficient to prevent distress or dangerous behaviour, there is evidence to support the use of atypical antipsychotics. However, unnecessary use of these medicines puts people at unnecessary risk.

For older people with psychosis in the context of schizophrenia-like illnesses and severe affective disorders, atypical antipsychotics are considered to be as effective as and generally better tolerated than typical antipsychotics. It is not certain if the associations with serious adverse drug reactions outlined above pertain to the use of antipsychotics for these indications. Nonetheless, use of antipsychotics in these settings should meet the standards of best practice.
Best-practice prescribing of antipsychotics for Elders in residential care
(algorithm):

These recommendations represent the expert opinion and evidence-based knowledge of the RANZCP Faculty of Psychiatry of Old Age (New Zealand). As published clinical trial evidence relating to this area of prescribing is sometimes sparse, preliminary or even non-existent in respect of many of the issues covered, our pooled clinical expertise, relevant international guidelines, and peer-reviewed research literature have been critical to developing these recommendations.

The algorithm below summarises these recommendations.
General practitioners and nurses are sometimes confronted with challenging behaviour or symptoms such as agitation and aggression from people in residential care. Often the behaviour is related to the environment or the resident’s interaction with others. Frequently there are a number of contributing causes operating together rather than one obvious single cause. These contributing factors need to be considered before medications are used. Any problem should be investigated in its early stages because environmental factors can take time to identify or alter.

Residential care facilities should have flexible activity programs available to stimulate, exercise and engage residents. Such programs can reduce challenging behaviour and symptoms. Although research evidence into the effectiveness of specific non-medication interventions to reduce such symptoms is limited, simple, practical solutions can make a difference and may avoid the need to use medication. Interventions such as moving rooms, encouraging family visits, providing music, contact with pets, encouraging exercise, limiting over-stimulation, using aromatherapy and training carers to understand and cope with agitated people have been reported to reduce these behaviours and symptoms. Regular review of all residents by the GP and nursing home staff will support these interventions.

It is critical to develop a culture of awareness; identifying problems early, determining the contributing factors and attempting non-pharmacological interventions first. All staff should share in this, but leadership from registered nursing staff, management and the consulting GP is important.

An increasing number of ageing people with longstanding mental illnesses are now living in residential care facilities. This trend will continue. These people have different needs to people with dementia although they may be taking similar medications. When admitting a person with longstanding mental illness, the residential facility should obtain detailed management plans and risk assessments from the relevant mental health service. This will enable identification of any triggering factors for challenging behaviours or episodes of illness, early indicators of relapse and risk-reducing strategies. If the person has been assigned a key worker, residential care staff should regularly liaise with them. Residential facilities should have programs or activities that are appropriate for people with and without dementia, and provide opportunities for residents to interact with people away from the facility. Staff should receive education about the major mental illnesses and the risks and benefits of the treatments for them. The GP and nursing staff should regularly review people with chronic mental illnesses and be prepared to make social, environmental and medication changes.

Staff must feel supported by senior clinicians and management if they are to feel confident to abandon reliance upon chemical attempts to manage very challenging behaviours.

Fostering a positive, collegial and creative background culture of care in a residential care facility and developing openness to non-medication strategies are as important as considering the individual merits of each clinical situation.
2. Identifying the target problem/s: What is the aim of an intervention?

Simply considering BPSD as the target problem is not sufficient as this is a catch-all phrase for a large number of behaviours and symptoms which have different management implications. For example, the management of apathy and aggression is different. Using BPSD as the written indication for antipsychotic medicines is insufficient.

The target of treatment should always be documented clearly. It is important to note that some types of behaviour do not respond well to any medication. In general, antipsychotics are less likely to be helpful when:

- the behaviour is intermittent
  e.g. significant physical aggression once per week versus four or five times every afternoon
- the behaviour is situation-specific
  e.g. resisting showering versus resisting all cares
- the behaviour is goal-directed
  e.g. attempting to leave to go home to "look after the children" versus anxious hovering around the doors every evening.

Some problems that are generally unsuitable for antipsychotic use include apathy, low mood, inappropriate toileting, inappropriate sexualised behaviour, wandering and calling out. Antipsychotics are best targeted at hallucinations, delusions and persistent driven, angry, extremely anxious or aggressive states.

Health professionals may be confronted with a host of different challenging behaviours and symptoms from people with various mental illnesses living in residential care, including:

- calling out
- aggression
- agitation (unhappy restlessness)
- hallucinations and illusions
- delusions
- wandering
- depression
- elevated mood
- “sundowning”
- extreme anxiety
- resistiveness to cares
- intrusive behaviours
- inappropriate sexualised behaviour
- inappropriate urination or defaecation
- other inappropriate social behaviours
- day / night reversal
- insomnia
- apathy / loss of motivation

Over 50% of people with dementia exhibit challenging behaviour at some point during their illness. People may also exhibit a combination of these behaviours and as different types of behaviour require different approaches, health professionals must decide precisely which behaviours are being targeted before trialling medication or other strategies.

For specific intermittent behaviours it is helpful to use a simple behavioural chart so staff can record the frequency of the identified behaviours for a set duration before the commencement of any treatment. Ideally separate charts should be completed for each problem behaviour. Once a specific problem is identified, a realistic intervention aim should be decided. For example, when a resident frequently intrudes into other people’s rooms while staff are delivering personal cares, the intervention might aim to reduce the frequency of this and to ensure they knock before entering. Clear identification of the target problem also enables response to treatment to be more precisely measured in terms of intensity, frequency and consequences.
3. Formulating the target problem/s:
Why is the challenging behaviour or symptom occurring?

Challenging behaviours and symptoms occurring in the context of mental illness among people in residential care are associated with suffering and can have serious consequences. It is important to try to understand why a particular symptom or behaviour is being experienced by a particular person at that particular time. This is called “formulating the problem”.

It is useful to consider the problem as an expression of unmet need – a communication that challenges others to understand. It is then possible to ask if care staff, family or health professionals can assist the person to meet their particular need in a more appropriate or healthy way. For example, is calling out an expression of pain, boredom, sadness, anxiety or loneliness?

It is vital to identify possible medical causes through a comprehensive physical assessment (e.g. pain, infection, drug toxicity and side effects). An understanding of the person’s biographical history and current psychological, social and environmental factors is also important. The person themselves and those who know them well may be able to give additional information about the current problem/s. For example, has an old soldier been nervous of hospitals and people in uniform since being in a concentration camp during a war?

By using a simple biopsychosocial model [a methodical approach that examines behaviours in terms of antecedents (A), the exact behaviour (B) and the consequences (C)] and by educating carers, it is possible to effect change by manipulating triggers in the physical or social environment or altering responses to the behaviour which perpetuate it, rather than using a pharmacological intervention. On the basis of identifying the target problem/s and probable causes, an individual care plan can be formulated and documented as a trial to reduce the incidence of challenging behaviours and symptoms. For example, staff might use an ABC chart to discover that a woman with dementia's attempts to kiss and cuddle male residents mostly occurs after her husband has visited and is usually responded to with lots of rewarding one to one staff time.

Careful assessment to determine the neural basis of challenging behaviours and symptoms may inform more specific management. It is important to detect catastrophic reactions due to sensory overload, inaccurate responses due to inaccurate perception, impaired information processing due to reduced ability to divide or alternate attention, or a primary impulse control disorder. These issues require psychological, cognitive or behavioural strategies, and/or pharmacological interventions other than antipsychotic medicines.

Whether the symptom or behaviour is occurring in the context of dementia or not, it is also vital to ensure that there are no psychiatric diagnoses being missed for which specific medication or non-pharmacological treatments exist. Sometimes the target symptom is a signal of an underlying treatable condition and will resolve when the core condition is properly managed; for example, an underlying depression linked with aggression, persistent anxiety or insomnia.

Forming theories as to “why” gives staff logical interventions to try, assists staff and others to cope and protects the older person from being viewed negatively.
4. Non-pharmacological management of the target problem/s: What interventions are worth trying

Best-practice guidelines internationally are clear that non-pharmacological management should be a first-line treatment of challenging behaviours and symptoms in the context of mental illnesses, especially in dementia. In cases where marked distress or imminent and serious risks indicate that initial treatment needs to include medication, non-pharmacological management must still be initiated in parallel. Sometimes medications are used to provide a temporary respite while non-pharmacological strategies can be put into place.

Non-pharmacological strategies should be person-centred and tailored to the individual. A critical aspect of person-centred assessment is consideration of the person’s unmet needs and how these needs may be met by a non-pharmacological strategy. The choice of non-pharmacological intervention will be guided by the person’s background, likes and dislikes and by the skills and resources available at the residential care facility. The intervention may be directed at meeting the unmet need, such as correcting under or over-stimulation, relieving boredom, addressing a lack of exercise or providing reassurance and comfort.

Some examples of less specific interventions include:

- music
- reminiscence therapy
- aromatherapy
- light therapy
- art therapy
- controlled sensory and multi-sensory stimulation (Snoezelen therapy)
- massage
- regular timetabled one to one staff time
- providing meaningful jobs or activities
- exercise
- verbal strategies such as reassurance, reorientation, diversion, distraction and mediation.

Some of the best non-pharmacological interventions are creative, and may be as simple as changing the bathing routine or placing familiar objects in a person’s room. It can be helpful to involve all staff, as well as families and the person themselves in this care planning process. Caregiver intervention programmes and education are effective and caregivers should receive comprehensive training on these interventions.

It is important to ensure that physical health is optimised at the same time as attention is paid to an individual’s emotional, spiritual, social and cognitive well-being. These untargeted, global approaches may yield good results.

The phrase “It is easier to change the environment than the individual” encapsulates this approach when dealing with people with brain impairment. However, it is understood that there are occasions when potentially effective non-pharmacological interventions can be imagined but not easily implemented in practice, such as providing staff supervision for all attempts at mobilisation or providing a quiet environment every afternoon.
5. Deciding if an antipsychotic medicine should be used: When to prescribe an antipsychotic and which one?

A) Is the target symptom appropriate for antipsychotic treatment?
The primary role of antipsychotic medicines is to treat conditions associated with psychotic symptoms such as delusions and hallucinations. In the absence of clearly defined psychotic symptoms the use of antipsychotic medication is questionable and may fall outside standard clinical practice and the funded or licensed use of these agents in New Zealand.

B) Could another psychiatric disorder be present that warrants a trial of a non-antipsychotic medication?
A specific illness diagnosis should be made, as treatment of the illness is an important consideration separate from simply managing symptoms. This is especially important when agitation is a prominent symptom of another psychiatric disorder. Depression is common in the elderly, especially so in elderly people in residential facilities. Therefore an antidepressant trial can be an appropriate intervention for a challenging symptom such as aggression when it occurs in the context of some other potential symptoms of depression. Depression is the diagnosis not to miss. Similarly, when the problem is arising in the context of dementia, use of a cholinesterase inhibitor rather than an antipsychotic should be considered for psychotic symptoms, agitation and aggression (although these medicines are not funded in New Zealand at present). In anxiety disorders an antidepressant may also be useful. When sleep is disordered, a short-term trial of a short to medium half-life hypnosedative may be warranted as part of a global sleep management plan.

C) Is another medical disorder present that requires some other medical treatment?
Psychotic symptoms may arise from factors other than primary psychiatric disorder. It is essential to investigate possibilities such as delirium, where the management of choice is to treat the underlying physical causes. Nevertheless, in the case of delirium short term use of low-dose antipsychotic medicine may be appropriate to manage distressing psychotic symptoms, especially in situations where these symptoms interfere with adequate management of the delirium.

D) Does the symptom require treatment in terms of acuity?
Where psychotic symptoms are prominent, specific treatment should only be instituted when the symptom is distressing or dangerous to the individual and/or others in the environment. Psychotic symptoms may be present without causing significant concern to the individual, other residents, carers or family, and in this setting require good observation and non-pharmacological management.

E) Do the potential benefits of prescribing outweigh the potential risks?
In choosing any intervention, pharmacological or non-pharmacological, there must be an adequate risk/benefit analysis. This means assessing the likely benefits and side effects from treatment, and weighing these up against the risks and potential benefits of not treating.

After consideration of the above factors, there remain a subgroup of people with dementia and other disorders who are sufficiently distressed, dangerous or distressing to others as the result of various psychotic symptoms or BPSD, for whom environmental or other interventions are insufficient. In this group it may be appropriate to consider judicious use of antipsychotic medicines alongside ongoing environmental management and cognitive strategies.

Typical antipsychotics are often not appropriate for use as first-line treatment. They have effects upon brain and body systems that may add a range of adverse effects which can be as difficult to manage as the original issue. These include sedation, postural hypotension, impaired cognitive function or confusion, hypersalivation, blurred vision, dry mouth, constipation, raised risk of cardiac arrhythmias (via Qtc prolongation), bone marrow suppression, weight gain and the important extra-pyramidal side effects of parkinsonism, akathisia, dystonia and dyskinesia. Haloperidol has a definite place in the acute and short-term management of delirium symptoms and the BPSD mentioned above, but is not recommended for longer term treatment because of the high risk of developing extra-pyramidal syndromes, especially parkinsonism, even at low doses. More potent phenothiazines should not be used without specialist advice.

The use of atypical antipsychotics should be informed by clinical factors, taking into account potential adverse effects including extra-pyramidal symptoms, postural hypotension, sedation, the risk of stroke and the "metabolic syndrome" (weight gain, insulin resistance and hypertension). The literature is not sufficiently robust to inform on specific choices but does assist in terms of side effect differences.

All antipsychotics might confer an increased risk of stroke and of death (from all causes), at least for those Elders who have dementia. The evidence regarding specific risks from particular agents is not yet robust enough to make firm recommendations, nor indeed to prove that these associations are causal. However, international regulatory bodies such as the FDA (USA) and the CSM (UK) have made strong statements warning against the use of antipsychotics in the context of dementia. Age is the strongest risk factor for stroke, so the oldest old with dementia and those with other strong stroke risk factors should only be prescribed antipsychotics after very careful consideration.

The following tables outline the collected clinical recommendations of the contributing authors representing the Faculty of Psychiatry of Old Age (New Zealand). These recommendations rely upon clinical experience and judgement as well as upon the published evidence extant in 2008 as it pertains to Elders or that which can be extrapolated with great caution from evidence pertaining to younger adults. In fact, there is little peer reviewed published literature on which to make firm recommendations. The agents chosen represent the available antipsychotics on the Pharmaceutical Schedule in New Zealand as at August 2008 with the addition of some recently marketed agents that are not as yet funded.
## Antipsychotic Medication

<table>
<thead>
<tr>
<th>Oral agents</th>
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<tbody>
<tr>
<td><strong>Chlorpromazine</strong></td>
<td>Up to 250mg (up to 100mg in dementia)</td>
</tr>
<tr>
<td><strong>Methotrimeprazine</strong></td>
<td>Up to 25mg (less in dementia)</td>
</tr>
<tr>
<td><strong>Pericyazine</strong></td>
<td>Up to 5mg (less in dementia)</td>
</tr>
<tr>
<td><strong>Trifluoperazine</strong></td>
<td>Up to 5mg (less in dementia)</td>
</tr>
<tr>
<td><strong>Haloperidol</strong></td>
<td>Up to 5mg (up to 2mg in dementia)</td>
</tr>
<tr>
<td><strong>Risperidone</strong></td>
<td>Up to 6mg (up to 2mg in dementia)</td>
</tr>
<tr>
<td><strong>Olanzapine</strong></td>
<td>Up to 10mg (less in dementia)</td>
</tr>
<tr>
<td><strong>Quetiapine</strong></td>
<td>Up to 300mg (up to 100mg in dementia)</td>
</tr>
<tr>
<td><strong>Clozapine</strong></td>
<td>Up to 300mg (up to 100mg in dementia)</td>
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<table>
<thead>
<tr>
<th>Injectable agents</th>
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<tbody>
<tr>
<td><strong>Chlorpromazine</strong></td>
<td>Up to 100mg</td>
</tr>
<tr>
<td><strong>Methotrimeprazine</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Haloperidol</strong></td>
<td>Up to 5mg</td>
</tr>
<tr>
<td><strong>Zuclopenthixol</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Olanzapine</strong></td>
<td></td>
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<thead>
<tr>
<th>Longer acting Depot agents</th>
<th></th>
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<tbody>
<tr>
<td><strong>Haloperidol</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fluphenazine</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Flupenthixol</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pipothiazine</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Risperidone</strong></td>
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### Approximate standard dose range for elderly (per day)

<table>
<thead>
<tr>
<th><strong>Antipsychotic Medication</strong></th>
<th><strong>Main cautions</strong></th>
<th><strong>Advice re use</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpromazine</td>
<td>Sedating, postural hypotension, central and peripheral anticholinergic, EPSE, QTc prolongation.</td>
<td>Inexpensive.</td>
</tr>
<tr>
<td>Methotrimeprazine</td>
<td>As above but more significant concern.</td>
<td>Avoid without psychiatrist endorsement.</td>
</tr>
<tr>
<td>Pericyazine</td>
<td>As above.</td>
<td>Not commonly used.</td>
</tr>
<tr>
<td>Trifluoperazine</td>
<td>As above.</td>
<td>Avoid without psychiatrist endorsement.</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>High EPSE risk, QTc prolongation.</td>
<td>Special place as potent short-term agent and in delirium, avoid long term or high dose use.</td>
</tr>
<tr>
<td>Risperidone</td>
<td>At higher doses, EPSE risk approaches that of haloperidol.</td>
<td>Possibly less EPSE risk than haloperidol for longer term low dose use.</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Anticholinergic, sedating, can give rise to the “metabolic syndrome” as above.</td>
<td>Less risky than typicals in terms of EPSE but possibly less effective, special place in parkinsonism, needs divided dosing.</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>As for Chlorpromazine but less EPSE.</td>
<td></td>
</tr>
<tr>
<td>Clozapine</td>
<td>Anticholinergic, sedating, postural hypotension, cardiomyopathy, severe neutropenia, severe constipation, can give rise to the “metabolic syndrome” as above, hypersalivation, regular mandatory blood testing.</td>
<td>Only prescribed by psychiatrists and must be used with special caution.</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>Limited experience in elderly.</td>
<td>Do not use without psychiatric endorsement, third-line, for psychotic symptoms only.</td>
</tr>
<tr>
<td>Ziprasidone</td>
<td>Limited experience in elderly.</td>
<td>Do not use without psychiatric endorsement, third-line, for psychotic symptoms only.</td>
</tr>
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</table>

### Shorter acting

<table>
<thead>
<tr>
<th><strong>Antipsychotic Medication</strong></th>
<th><strong>Main cautions</strong></th>
<th><strong>Advice re use</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpromazine</td>
<td>Emergency use only, which should precipitate a referral to secondary care.</td>
<td></td>
</tr>
<tr>
<td>Methotrimeprazine</td>
<td>Do not use.</td>
<td></td>
</tr>
<tr>
<td>Haloperidol</td>
<td>EPSE risk high.</td>
<td>Emergency use only, which should precipitate a referral to secondary care.</td>
</tr>
<tr>
<td>Zuclopenthixol</td>
<td>Do not use.</td>
<td></td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Not funded. Do not use in primary care.</td>
<td></td>
</tr>
</tbody>
</table>

### Longer acting Depot agents

<table>
<thead>
<tr>
<th><strong>Antipsychotic Medication</strong></th>
<th><strong>Advice re use</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol</td>
<td>Do not use without specialist endorsement.</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>Do not use without specialist endorsement.</td>
</tr>
<tr>
<td>Flupenthixol</td>
<td>Do not use without specialist endorsement.</td>
</tr>
<tr>
<td>Pipothiazine</td>
<td>Do not use without specialist endorsement.</td>
</tr>
<tr>
<td>Risperidone</td>
<td>Do not use without specialist endorsement, special limited funding arrangement.</td>
</tr>
</tbody>
</table>
All residential care facilities should have clear policies and procedures for gaining and recording consent to treatment with any medicine, including antipsychotics. People must have the opportunity to make informed decisions about their care and treatment. Good communication is essential between health professionals and people with mental illnesses living in residential care, their families, carers and those named in activated EPOAs for Personal Care and Welfare. Clinical and care decisions should be based on values relating to quality of life goals held by people with mental illnesses and by those that care for them.

When decisions concern treatment for challenging behaviours and symptoms and when the person lacks competency to decide upon their own treatment, those involved must be given the relevant information tailored to their educational and intellectual level. This ensures that the risks and benefits of potential treatments are clearly understood. Information should be culturally appropriate, available in other languages and be accessible to those with disabilities such as hearing impairments. The potential for stroke and death should be discussed when these medicines are used in the context of dementia.

The proposed treatment should be the least restrictive alternative in terms of the person’s rights and basic freedoms. Advanced Directives should be taken into account.

In true emergencies when no other reasonable course of action remains, antipsychotic medicines are sometimes indicated for short-term acute behavioural control. In these urgent situations treatment should be sought quickly and targeted appropriately to minimise distress and danger. Gaining informed personal or proxy consent may not be possible. It is necessary to act in the best interests and safety of all concerned, including people other than the person exhibiting the dangerous behaviour or symptom. However, informed consent should be sought as soon as possible and assent to treatment should always be sought when a person is unable to give informed consent. Key family or carers should be notified in an open manner as soon as possible. Emergency use of antipsychotics in this situation, either in oral covert form or by injection, should trigger an early formal review of their use, full discussion with those involved and, in the case of IM injection, a discussion with secondary care services if a repeat event seems likely.

All communication regarding a decision to prescribe an antipsychotic medicine should be documented clearly in care plans or clinical notes, with the circumstances and considerations that led to the decision.
It is recommended that the old adage: “start low, go slow” is followed, with the addition of “monitor frequently”.

Having selected the appropriate medication, the starting dose should be as low as possible. This is particularly important for people who are older, frail, cognitively impaired or who carry a specific significant risk that the antipsychotic may heighten, such as for falls. The starting dose can be divided or timed according to the behaviour – for example a lunchtime dose for those patients exhibiting “sundowning”. However, many antipsychotics have half lives in older people such that once per day dosing is rational and more frequent dosing can lead to accumulation.

Dose increments should be modest and occur at no less than weekly intervals depending on response. Maximum doses, the length of the trial and the size of effect considered worthwhile should be pre-determined if possible. Continued high doses or prolonged use of antipsychotics when there has been no significant improvement in the target symptom must never occur.

Carers must know what key side effects to monitor during treatment initiation. Changing to an alternative strategy is preferable to ongoing increases to the point of causing side effects.

A successful trial will be indicated by a reduction in the intensity and/or frequency of target symptoms or behaviours. It is reasonable to trial a medication for four weeks at a treatment dose for non-psychotic symptoms and three months at a treatment dose for psychotic symptoms.

Anticholinergic medications, benzodiazepines and beta-blockers as prophylactic medicines for extra-pyramidal side effects should not be routine because of the added risks of polypharmacy and the likelihood of side effects. However, these medicines may sometimes be indicated. See specialist advice if required.
8. Using antipsychotics for maintenance treatment: Deciding whether to continue or not.

Maintenance treatment may be appropriate when people have demonstrated a clear benefit from antipsychotic treatment without undue side effects. As effectiveness may decline and/or side effects may arise late in treatment, formal monitoring for changes in effectiveness and side effect burden must be initiated. Regular review of the ongoing benefits and side effects of medications should be carried out at least 3 monthly by the prescriber. Routine monitoring for adverse effects such as constipation, sedation, postural hypotension, extra-pyramidal side effects, body weight changes, blood glucose, lipid profile and full blood count should be carried out depending upon the agent used.

Non-pharmacological treatment approaches should be combined with antipsychotic treatment, even if these were not able to prevent or resolve the problem in the first instance. They may be more effective after an antipsychotic has induced a period of fewer symptoms, even to the point of eventually replacing the medication.

The risk of challenging behaviours or symptoms may persist over time or symptoms may only partially remit. Therefore not everyone on antipsychotics should have their medication changed or stopped. Reasons for continuing antipsychotics include:

- An assessment of high risk of adverse consequences if they are withdrawn, especially if treatment has only been partially effective or there is a history of prior relapses
- When the consequences of symptom relapse are deemed to be unacceptably severe
- When no alternative treatment approaches have been possible or effective in the past.

Decisions to continue antipsychotics should be documented including the risks and benefits.

Some people arrive in residential care already on maintenance treatment with antipsychotic medication. These prescriptions should also be subject to regular monitoring and review and the indications questioned.

When a decision has been made to continue an antipsychotic, the general effect of ageing upon psychotropic medication pharmacokinetics and pharmacodynamics is that side effects become more likely even on stable doses and effectiveness may be possible at lower doses. Therefore some people on chronic antipsychotic therapy require gradual decreases in their antipsychotic dose, carefully titrating side effects against signs of relapse and never rapidly changing doses. The longer a person has been on a stable dose of an antipsychotic, no matter how small, the more cautiously partial dose withdrawals should occur.

Antipsychotics should be withdrawn if there has been no demonstrated benefit or if there are undue side effects. Trial of an alternate antipsychotic medication may be reasonable in these circumstances.

Consideration may be given to a trial of cessation of antipsychotics if a person has been symptom/target behaviour free for a period of time, (e.g. three to six months) because a proportion of these people do not relapse. Withdrawal should be considered no less than annually in all cases.

Withdrawal of antipsychotics is very often indicated when the treatment was initiated to treat a behavioural or psychological symptom of dementia, even after a successful treatment trial. This is because the brain changes of the illness lead to altered symptom profiles with time, altered side effect risks with time, and because studies have shown that careful planned withdrawals are often successful.

Withdrawal should not be sudden and should never occur without the involvement of a secondary care mental health team when such a team is still involved in providing care to the individual.

Withdrawal of antipsychotics should be done gradually, for example by reducing the dose by 50% every two weeks then stopping after two weeks on the minimum dose, with monitoring for recurrence of target symptoms or behaviours or emergence of new ones. The longer a medication has been prescribed, no matter at what dose, and the less the concern over current adverse drug reactions, the slower the withdrawal.
Secondary care means a specialist psychogeriatric service. The constitution of these services varies considerably throughout New Zealand and tempers what can be offered to residential care facilities and General Practitioners.

Referral to secondary care follows:
(a) these recommendations having been followed with regard to identifying and targeting a behavioural problem or symptom;
(b) non-pharmacological and pharmacological intervention has not had sufficient effect; and
(c) the general practitioner and nursing staff of the residential care facility have collaborated in the assessment and treatment of the problem and have reached the limits of their confidence with regard to managing the issue further.

Indications for referral include:
• A failure for antipsychotic medications to effect a change in a resident’s psychopathology be it:
  • symptoms the resident complains of or experiences distress from;
  • behaviour that either draws negative attention to the person or represents considerable risk to their safety or places the person’s ongoing placement at the residential care facility in jeopardy; and
  • distress and/or potential burnout exhibited by caregiver staff.
• Antipsychotic medication was unable to be tolerated by the resident and no other effective interventions appear to exist, but intervention is still warranted.
• To discuss progress to date for reassurance that the health professionals are on the right course and that their interventions are reasonable.
• To address team work conundrums within the residential care facility, such as, differences of opinion between health professionals; differences in understanding of the formulation and where facilitation of a case conference might be helpful.

Referral does not necessarily mean that secondary care services assess the situation in person nor that the individual’s care passes into secondary services. The aim of psychogeriatric services in New Zealand is to support primary care services to manage older people in their residential care facilities.
**Young people in residential care.**

Generally speaking the indications for antipsychotic medication for adults under the age of 65 in residential care, including those with intellectual disability, are no different to those of older people. The precautions taken with older people as outlined earlier in these recommendations should apply, although doses may need to be somewhat higher especially when dementia is not present. There are substantial psychological and social issues around younger adult people in residential care because the environment is dominated by the needs of older people. These issues, such as the need to be working and the need for age-appropriate company, can be a challenge to care staff used to thinking about the issues of older residents and should be addressed as part of a review of challenging behaviours and symptoms.

**Parkinsonism and Dementia with Lewy Bodies.**

People with Lewy Body Disease, Parkinson’s disease, Parkinson’s-like syndromes and the various dementias associated with these conditions have an increased sensitivity to the side effects of antipsychotic medication. Typical antipsychotics should never be used and even atypical antipsychotic medications should be avoided if possible. However, if there are definite indications for their use, increased caution is required at all times. There is evidence supporting the role of Clozapine for the treatment of psychotic symptoms in these conditions and permanent Specialist Psychiatrist prescription is required. There is less evidence supporting quetiapine but the lesser concerns about adverse effects (both with regard to haematological side effects of clozapine and the extra-pyramidal side effects of the typical antipsychotics). Easier access to quetiapine often means this is the preferred medication. Low doses and considerable caution are required and specialist advice should be sought sooner rather than later, especially if pro-dopaminergic medicines are also being used. Olanzapine, ziprasidone and aripiprazole should not be used without specialist advice. Injectable antipsychotics should never be used for this group. A particular primary care role may be coordinating communication between neurology / geriatric care and psychiatric care to ensure potentially dangerous treatment decisions are not made in isolation by one part of the secondary care service.

**People with chronic psychiatric conditions who age: “Graduates”.**

Generally speaking these people will come with considerable history around their illness and the treatments they have had. Whatever psychotropic medication has been used effectively in their maintenance treatment should be maintained; however, reviewing medication regimes and repeating the risk/benefit analysis regarding lowering doses should be undertaken regularly. Pharmacokinetic and pharmacodynamic changes with ageing frequently mean that lower doses are necessary to avoid side effects and may still be effective. If new phenomenology is noted and new antipsychotic medication is going to be initiated, the same precautions of administering medication to older people in residential care facilities apply. This group of patients is more likely to accumulate other medical conditions with consequent interactions with their psychiatric condition and its treatment, therefore caution is required when introducing medications for physical conditions and/or making adjustments to medications for psychiatric conditions. Significant changes should not be made without the involvement of any actively involved secondary care mental health teams. It may be important for primary care health professionals to advocate for caution when people require secondary care services for non-psychiatric problems, especially during hospitalizations, as secondary care non-psychiatric clinicians may wish to adjust psychiatric medications of long standing without understanding the context of their ongoing prescription.
The following international guidelines and practice recommendations are important precursors that underpin this New Zealand publication.


The following papers review the relevant literature, expert opinion and research findings to outline the potential benefits and risks of antipsychotic treatment for Elders in the context of a wider package of care.


These resources review non-pharmacological management of various symptoms in dementia.


These final references deal with specific issues in these recommendations.

Younger adults in residential care.


Parkinsonism.


‘Graduates’.

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