Optimising the management of all medication in dementia can:
• improve quality of care
• reduce inappropriate medication
• enhance non-medication management pathways
• enhance the healthcare professional/patient relationship through empowerment

Medication management includes:
• evidence based prescribing and administration
• person centered medication review
• information/education
• the capacity to communicate with multiple health providers
• ensuring access to medications

Principles of Medication Management

Dementia affects cognition, behaviour, functional activities, and caregiver burden; these are key targets for therapeutic interventions
Medication management of non-cognitive symptoms and behaviours that challenge

Non-cognitive symptoms include hallucinations, delusions, anxiety, marked agitation and associated aggressive behaviours. In addition to anxiety, depression is grouped within psychological symptoms.

Behaviours that challenge, also known as responsive behaviours, can include, but are not limited to: aggression, agitation, wandering, hoarding, sexual disinhibition, apathy and shouting.

Management comprises of:
- accurate and comprehensive assessment
- first line treatment with non-pharmacological interventions
- where necessary initiation and close review of pharmacological interventions.

Remember – People with dementia and their caregivers require appropriate information and guidance on the management of non-cognitive symptoms and behaviours that challenge. They have an important role in the assessment of Behavioural and Psychological Symptoms of Dementia (BPSD) and providing feedback on the effectiveness of any implemented interventions.

Medication Administration

Medication administration complexities include an individual’s lack of cognitive capacity to self-administer, swallowing difficulties and caregiver burden associated with ensuring safe administration and noticing and managing side-effects.

Supporting people with dementia, families/carers and healthcare staff in navigating the difficulties associated with medication administration has potential to improve the quality of care, lessen caregiver burden and clarify medication administration decision-making processes for healthcare professionals.

1. People with dementia should be supported to maintain independence in taking medications for as long as it is safe to do so.
2. A medication management risk assessment should be performed to determine the extent to which a person can either self-administer or requires support in taking medication.
3. Family/carers require guidance on practical strategies to assist medication administration and adherence to a drug regimen.
4. Healthcare professionals should be aware of the practical, ethical and legal considerations with respect to changing the form of a prescribed medication (crushing) or covert medication administration.

This factsheet has been developed based on Irish Hospice Foundation Dementia Palliative Care Guidance Document No 7. Medication Management. Developed by Lehane et al. (2016). Available from www.hospicefoundation.ie
Mrs M, an 84-year-old woman, living in long-term care (LTC) for two years, was diagnosed with Alzheimer’s disease ten years ago.

She is functionally dependent and scores 6/30 on an SMMSE suggesting severe dementia. Her past history includes hypertension, hypercholesterolaemia and depression. She has a history of agitation and aggression but these have settled in recent months. She takes 12 medications including aspirin 75mg, perindopril 5mg, atorvastatin 40mg, escitalopram 10mg, memantine 20mg and donepezil 10mg. Routine blood tests and a mid-stream urine test return normal. You are asked to review her care.

**Defining treatment goals**

Regular review (three monthly) of medication, including a clarification of doses and duration of treatment, is important for all people in LTC. In this case, Mrs M receives more than five medications suggesting polypharmacy and given her severe dementia one should consider deprescribing strategies. In principle, only medications with symptomatic benefit should be continued.

**Person-centred approach**

You meet with her husband to discuss her management. Mrs M and her husband have previously discussed together that if she ever got to the point where she was unable to recognise her family or needed assistance with all the basic activities of daily living, that she would want a palliative approach to care for any life threatening illness. He tells you that in that case she would not want to extend her life with any invasive or burdensome treatments. Her swallow has deteriorated in recent months and her medications are now crushed. She often refuses medications and her husband says her appetite is reduced and has noticed occasional vomiting.

**Assisted decision-making**

Use of medications in dementia depend on the person’s characteristics, particularly response to treatment and side effects. The decision to discontinue should be made in consultation the person with dementia. Discussions may also take place with the person’s caregivers and family. As Mrs M has severe dementia her capacity to participate in certain medication related decision making processes may be compromised. While the person with dementia retains their right to be involved in decision making as far as possible, assessment of capacity must be undertaken and assisted decision-making processes initiated. (Please refer to guidance documents 1, 2 and 6 for guiding principles relating to capacity, communication and legal/ethical issues). Her husband agrees that given her previously expressed wishes and possible medication side effects the number of medications could be reduced.

**Medication review**

Several of Mrs M’s medications are for secondary prevention including aspirin, atorvastatin and perindopril. Use of cholinesterase inhibitors (ChEIs) and memantine, in advanced dementia is particularly controversial. While memantine is licensed for moderate to severe AD, the rationale for ChEIs is less clear. Recent evidence suggests that people with severe dementia, including residents in LTC benefit from ChEIs. The use of these medications in end-of-life care remains uncertain. Many believe that these medications are ineffective and most recommend discontinuation. 20% believe they reduce caregiver burden, stabilise cognition and maintain function. The majority feel their discontinuation would be resisted by family. The main challenge is determining whether these medications are helping. In general, if a person remains stable there is a risk of deterioration when ChEIs are discontinued but if treatment failure occurs, discontinuation may be appropriate. The recommendation in this case would be to search for an alternative cause of vomiting such as constipation. If no explanation is found, medications associated with gastro-intestinal side effects, particularly those prescribed for secondary prevention such as statins and ChEIs, should be discontinued first.
The NO TEARS* Mnemonic to Aid Medication Review in a 10 Minute Consultation

N  Need and indication

O  Open questions

T  Tests and monitoring

E  Evidence and guidelines

A  Adverse effects

R  Risk reduction or prevention

S  Simplification and switches

**Need and indication**
Does the person know why they take each drug? Is each drug still needed? Is the diagnosis refuted? Is the dose appropriate? Was long term therapy intended? Would non-pharmacological treatments be better?

**Open questions**
Allows the person to express views. Helps to reveal any problems they may have.

**Test and monitoring**
Assess disease control.
Any conditions under-treated?
Use appropriate reference for monitoring advice e.g. BNF

**Evidence and Guidelines**
Has the evidence base changed since initiating drug?
Are any drugs now deemed ‘less suitable’? Is dose appropriate? (Over or under-treatment, extreme old age)
Are other investigations now advised e.g. echocardiography?

**Adverse Events**
Any side effects?
Any over the counter or complementary medicines?
Check interaction, duplications or contra-indications.
Don’t misinterpret an adverse reaction as a new medical condition.

**Risk Reduction or Prevention**
Opportunistic screening.
Risk reduction e.g. Falls – are drugs optimised to reduce the risks?

**Simplification and Switches**
Can treatment be simplified?
Does person know which treatments are important?
Explain any cost effective switches.

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