

## TOP 5 Low-value practices and interventions

The Australian and New Zealand Society for Geriatric Medicine (ANZSGM) has reviewed the evidence and consulted with its expert members to develop the following recommendations to support best patient care and reduce the use of unnecessary or ineffective practices within a given clinical context.

**1** Do not use antipsychotics as the first choice to treat behavioural and psychological symptoms of dementia

---

**2** Do not prescribe benzodiazepines or other sedative-hypnotics to older adults as first choice for insomnia, agitation or delirium

---

**3** Do not use antimicrobials to treat bacteriuria in older adults where specific urinary tract symptoms are not present

---

**4** Do not prescribe medication without conducting a drug regimen review

---

**5** Do not use physical restraints to manage behavioural symptoms of hospitalized older adults with delirium except as a last resort

EVOLVE is a physician-led initiative to ensure the highest quality patient care through the identification and reduction of low-value practices and interventions.

EVOLVE is patient-centred and evidence-based, with rigorous and transparent processes. Its focus is to stimulate clinical conversations – between colleagues, across specialties, and with patients – to ensure the care that’s delivered is the best for each patient.

EVOLVE is part of a worldwide movement to analyse medical practices and reduce unnecessary interventions. It is an initiative in partnership between the RACP and the Specialty Societies, Divisions, Faculties and Chapters.

# **1 Do not use antipsychotics as the first choice to treat behavioural and psychological symptoms of dementia**

People with dementia may exhibit aggression, resistance to care and other challenging or disruptive behaviours. In such instances, the modest effectiveness of atypical antipsychotics may be offset by the higher risks for adverse events and mortality. Non-pharmacological interventions can be an effective substitute for antipsychotic medications. Use of these drugs should therefore be limited to cases where non-pharmacologic measures have failed and patients pose an imminent threat to themselves or others.

# **2 Do not prescribe benzodiazepines or other sedative-hypnotics to older adults as first choice for insomnia, agitation or delirium**

There is strong evidence that use of benzodiazepines is associated with various adverse effects in elderly people such as falls and fractures. Older patients, their caregivers and their providers should recognize these potential harms when considering treatment strategies for insomnia, agitation or delirium. Thus these drugs should be prescribed with caution, and their use monitored closely.

# **3 Do not use antimicrobials to treat bacteriuria in older adults where specific urinary tract symptoms are not present**

Studies have found that asymptomatic bacteriuria frequently resolves without any treatment. Antimicrobial treatment studies for asymptomatic bacteriuria in older adults demonstrate no benefits and, in fact, often show increased adverse antimicrobial effects.

## 4 Do not prescribe medication without conducting a drug regimen review

Older patients disproportionately use more prescription and non-prescription drugs than other populations, increasing the risk of side effects. Evidence shows that polypharmacy is associated with adverse drug reactions and an increased risk of hospital admissions. Medication review with regular, scheduled follow ups are recommended for improving quality of life in older adults with polypharmacy.

## 5 Do not use physical restraints to manage behavioural symptoms of hospitalised older adults with delirium except as a last resort

There is little evidence to support the effectiveness of physical restraints to manage people with delirium who exhibit behaviours that risk injury.

Physical restraints can lead to serious injury or death and may worsen agitation and delirium. Restraints should therefore be used as a last resort and should be discontinued at the earliest possible time, particularly given that effective non-pharmacological alternatives are available.

### *How this list was developed...*

Members of the Australian & New Zealand Society for Geriatric Medicine completed an online survey asking them to choose the 5 most relevant 'low value' practices from a list of 11. Respondents were also asked to nominate any additional practices which they regarded as overused, inappropriate or of limited effectiveness in the specialty of geriatric medicine. A total of 196 responses were received.

The list of items were then subject to consideration by the Federal Council. Specifically, members of Federal Council were asked to rate each of these 16 items in terms of their strength in meeting 7 criteria: Is there a reasonable evidence base upon which to drive change? Are older people likely to benefit from work we might do to change practice? Is the problem sizeable? Are there opportunities and a willingness within geriatric medicine to lead practice change? Are there opportunities to collaborate with other organisations with a shared interest in the area? Will this promote a positive profile for ANZSGM? Is this an area of potential conflict with other Societies?

Based on the ratings they assigned to these items the 'Top 5' list items were chosen and reformulated as recommendations for clinicians.

## The Australian and New Zealand Society for Geriatric Medicine – Top 5 recommendations

### EVIDENCE SUPPORTING RECOMMENDATION 1

Ballard C, Waite J. The effectiveness of atypical antipsychotics for the treatment of aggression and psychosis in Alzheimer's disease. *Cochrane Database Syst Rev* 2006; (1): CD003476

Declercq T. Withdrawal versus continuation of chronic antipsychotic drugs for behavioural and psychological symptoms in older people with dementia. *Cochrane Database Syst Rev* 2013; 3: CD007726

Ma H. The efficacy and safety of atypical antipsychotics for the treatment of dementia: a metaanalysis of randomized placebo-controlled trials. *J Alzheimers Dis* 2014; 42(3): 915-37

Richter T. Psychosocial interventions for reducing antipsychotic medication in care home residents. *Cochrane Database Syst Rev* 2012; 12: CD008634

Schneider LS. Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. *New England Journal Med* 2006; 355(15): 1525-38

### EVIDENCE SUPPORTING RECOMMENDATION 2

Allain H. Postural instability and consequent falls and hip fractures associated with use of hypnotics in the elderly: a comparative review. *Drugs Aging* 2005; 22(9): 749-765

Finkle WD. Risk of fractures requiring hospitalization after an initial prescription for zolpidem, alprazolam, lorazepam, or diazepam in older adults. *Journal of the American Geriatric Soc* 2011; 59(10): 1883-90

Sithampanathan K. Adverse effects of benzodiazepine use in elderly people: A meta-analysis. *Asian J Gerontol Geriatr* 2012; 7: 107-11

Stockl KM. Clinical and economic outcomes associated with potentially inappropriate prescribing in the elderly. *American Journal Manag Care* 2010; 16(1): e1-10

### EVIDENCE SUPPORTING RECOMMENDATION 3

Masumoto T. Urinary tract infections in the elderly. *Curr Urol Rep* 2001; 2(4): 330-3

Mody L, Juthani-Mehta M. Urinary tract infections in older women: a clinical review. *JAMA* 2014; 311(8): 844-54

Nicolle LE. Prospective randomized comparison of therapy and no therapy for asymptomatic bacteriuria in institutionalized elderly women. *American Journal of Medicine* 1987; 83(1): 27-33

Nicolle LE. Infectious Diseases Society of America Guidelines for the Diagnosis and Treatment of Asymptomatic Bacteriuria in Adults 2005.

### EVIDENCE SUPPORTING RECOMMENDATION 4

Fried TR. Health outcomes associated with polypharmacy in community-dwelling older adults: a systematic review. *Journal of American Geriatric Society* 2014; 62(12): 2261-72

Hajjar ER. Polypharmacy in elderly patients. *American Journal Geriatr Pharmacotherapy* 2007; 5(4): 345-51

Jodar-Sanchez F. Cost-Utility Analysis of a Medication Review with Follow-Up Service for Older Adults with Polypharmacy in Community Pharmacies in Spain: The conSIGUE Program. *Pharmacoeconomics* 2015; Mar 15

Lu WH. Effect of polypharmacy, potentially inappropriate medications and anticholinergic burden on clinical outcomes: a retrospective cohort study. *CMAJ* 2015; 187(4): e130-7

### EVIDENCE SUPPORTING RECOMMENDATION 5

Flaherty J. Matching the environment to patients with delirium: lessons learned from the delirium room, a restraint-free environment for older hospitalized adults with delirium. *Journal of the American Geriatric Soc* 2011; 59 Suppl 2: S295-300

Maccolli GA. Clinical practice guidelines for the maintenance of patient physical safety in the intensive care unit: use of restraining therapies, American College of Critical Care Medicine Task Force 2001-2002. *Critical Care Medicine* 2003; 31(11): 2665-76

Mott S. Physical and chemical restraints in acute care: their potential impact on the rehabilitation of older people. *Int J Nurs Pract* 2005; 11(3): 95-101

Park M. Changing the practice of physical restraint use in acute care. *J Gerontol Nursing* 2007; 33(2): 9-16