Physician Update on Appropriate Use of Antipsychotics (AUA) Project

The AUA project resources have now been rolled out to all 170 long term care sites in Alberta. There are plans to extend to Supportive Living and Acute Care.

What is the goal of the AUA project? The *RAI 2.0 Quality Indicator for Appropriate Use of Antipsychotics* is the key performance indicator for this project. In 2011-12, this indicator was 26.8% for Alberta (national average 32.5%). The 5-year goal is a provincial average at or below 20% by 2018, reflecting improved quality of life and *appropriate* antipsychotic use in older adults.

Does the AUA project include those with chronic mental health conditions? *Antipsychotics are appropriate* for use with individuals who have underlying diagnoses such as schizophrenia, bipolar or delusional disorders and distressing psychoses. For these people, antipsychotics enhance quality of life and protect safety and well-being. Cautious reductions should only be considered when side-effects or over-sedation compromise health and quality of life. Psychiatrist consultation is strongly recommended.

Appropriate use of antipsychotics in dementia, according to the AUA Guideline:

- Short term treatment of brief psychotic disorders (e.g. delirium)
- Physical aggression that places the resident or others at risk of injury. Note that placebo-controlled trials suggest 5 to 14 people need to be treated for 12 weeks for *one* additional person to show significant improvement in aggressive symptoms associated with dementia.[i]

In both cases, a trial dose reduction and discontinuation should be considered as soon as possible once behaviour stabilizes, or within 3 months.

What have been the outcomes of discontinuing antipsychotic medications?

- **The most common report is no change.** For some, this means no new behaviours; for others, behaviours are not worsened – but may remain the same.
- **Improved quality of life and social engagement.** As the antipsychotics slowly clear the brain over weeks to months, residents show increased alertness and social engagement; many become less agitated. Residents may speak again, feed themselves, sleep better, walk and recognize family members.
- **Improved job satisfaction, no increase in staff requirements.** Care often becomes easier when underlying needs are addressed and person-centred strategies implemented. Some teams have suggested they could benefit from additional recreation staff to engage residents, who are more alert and active.

Has safety been a concern?

- **Falls**: Reduced antipsychotics may *temporarily* increase falls in those capable of mobility – especially where there is long-term muscle deconditioning. However, studies show falls are often *caused* by antipsychotics[ii] especially when prescribed for wandering.[iii]
- **Increased agitation or aggression:** In the Alberta LTC sites involved in the AUA project, increased behaviours with antipsychotic reductions have been reported to occur less than 10% of the time. This outcome is supported by a 2013 Cochrane review[iv]. Strategies for management include:
    - **Address underlying reasons** such as pain, disease (e.g. low blood sugar), delirium, depression and polypharmacy/drug side-effects.
    - **Modification of staff approach and environmental stressors**: With collaboration, education and leadership support, care teams often discover more effective approaches, and address stressors such as bed alarms, call bells, fatigue, overstimulation and inconsistent staffing / routines.
    - **Continue or restart** the antipsychotic at the lowest effective dose – while looking for more effective approaches and strategies. Re-attempt a gradual dose reduction after 3 months.

In a small number of cases of increased agitation, previously undiagnosed mental health conditions (e.g. hallucinations) are exposed. Low dose antipsychotic medication is re-started to reduce suffering and support quality of life.

Continued support is requested in the following key areas:

- **Discuss benefits versus risks of antipsychotic administration with families:** There is a 60% increased risk of **aspiration pneumonia**[v], increased risk of **acute renal injury**[vi] and a 1.6 fold-increase in **death rate** due to heart related events (e.g. heart failure, sudden death) or infections (mostly pneumonia) in patients treated with antipsychotics[vii]. Resources have been developed to support these discussions with families: antipsychotic side-effects, responsive behaviours, and the Choosing Wisely brochure "Treating disruptive behaviour in people with dementia". Families may have ideas to support care.
- **Discuss the treatment plan & document family/alternate decision-maker consent for antipsychotics** in accordance with the AHS Consent to Treatment policy and AUA Guideline. In situations where the person is at risk of harming themselves or others, seek out the family/alternate decision maker as soon as possible after the initiation of treatment.
- **Reduce antipsychotic doses gradually** (1/4 to 1/2 of the dose reduced per month).[viii] Reductions in long-standing dosages may occasionally induce side-effects such as tardive dyskinesia or dystonia, which can be very painful. For further information, see AUA FAQs for prescribers and pharmacists.

- **Review and consider antipsychotic reductions for residents admitted from acute care,** when there is no appropriate chronic mental health condition. The acute care environment magnifies agitation in dementia. Often, antipsychotics are appropriately started to manage the disturbing psychosis associated with delirium. Once the delirium is treated, these antipsychotics should be reduced and discontinued.

Benefits of Thoughtful Deprescribing

Some physicians wonder if the effort to discontinue antipsychotics in LTC residents is worth the effort. Consider this:

- Behaviours stabilize over time, with adjustment to a new environment and with person-centred approaches – often without antipsychotic administration.
- Incidences of serious drug side-effects are very high in older adults.
- Many symptoms for which antipsychotics have historically been prescribed are unsupported by evidence. These include resistance to care (grabbing, biting, hitting), restlessness, wandering, calling out / repetitive questions, anxiety, sexually inappropriate behaviours, sleep disturbances and spitting.
- Inappropriate antipsychotic use complicates dementia care. Antipsychotics often worsen agitation by adding confusion, restlessness, sleep disturbances, and cognitive impairment equivalent to 1 year disease progression[ix].
- Many families and care teams involved in the AUA project report enhanced quality of life for residents who have been taken off antipsychotics.

For more information, see the Prescribing Antipsychotic Medication and Responsive Behaviours sections of the AUA Toolkit.

[i] Schnieder LS, Dagerman K, Insel P. Efficacy and adverse effects of atypical antipsychotics for dementa: met analysis of randomised, placebo-controlled trials. Am J Geratr Psychiatry 2006;14:191-210.

[ii] Mehta S, Chen H, Johnson ML, Aparasu RR. Risk of falls and fractures in older adults using antipsychotic agents: a propensity-matched retrospective cohort study. Drugs Aging. 2010 Oct 1;27(10):815-29. http://www.ncbi.nlm.nih.gov/pubmed/20883062

[iii] Songul B, Doupe M, Kozyrskyj A, Grymonpre R and Mahmud S. Atypical antipsychotic drug use and falls among nursing home residents in Winnipeg, Canada. Int J Geriatr Psychiatry, doie:10.1002/gps.4223.

[iv] Declercq T, Petrovic M, Azermai M, Vander Stichele R, De Sutter A, van Driel ML, Christiaens T. Withdrawal versus continuation of chronic antipsychotic drugs for behavioural and psychological symptoms in older people with dementia. Cochrane Database Syst Rev. 2013 Mar 28;3. http://www.ncbi.nlm.nih.gov/pubmed/23543555 April 26, 2014.

[v] Knol W, van Marum R, Jansen P, Souverein P, Schobben A, Egberts A. Antipsychotic Drug Use and Risk of Pneumonia in Elderly People. J Am Geriatr Soc 2008;56(4):661-666.

[vi] Hwang YJ, Dixon SN, Reiss JP, Wald R, Parikh CR, Gandhi S, Shariff SZ, Pannu N, Nash DM, Rehman F, Garg AX. Atypical antipsychotic drugs and the risk for acute kidney injury and other adverse outcomes in older adults: a population-based cohort study. Ann Intern Med. 2014 Aug 19;161(4):242-8. http://www.ncbi.nlm.nih.gov/pubmed/25133360

[vii] Health Canada; Atypical Antipsychotic Drugs and Dementia – Advisories, Warnings and Recalls for Health Professionals. http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2005/14307a-eng.php

[viii] http://www.health.gov.bc.ca/library/publications/year/2012/bpsd-guideline.pdf

[ix] Vigen CL1, Mack WJ, Keefe RS, Sano M, Sultzer DL, Stroup TS, Dagerman KS, Hsiao JK, Lebowitz BD, Lyketsos CG, Tariot PN, Zheng L, Schneider LS. Cognitive effects of atypical antipsychotic medications in patients with Alzheimer's disease: outcomes from CATIE-AD. Am J Psychiatry. 2011 Aug;168(8):831-9