#### Submission Id: 2883

### Title

Randomized Controlled Trial of an Audit and Feedback Cycle to Improve Adherence to Choosing Wisely Canada Recommendations

# **Priority 1 (Research Category)**

Dissemination and implementation research

#### Presenters

Alexander Singer, MD, CCFP, Leanne Kosowan, MSc, Katrina Leong, BSc, Alan Katz, CCFP, MBChB, MSc, MBChB, Elissa Abrams, MD, FRCPC, MPH, Lisa Lix, PhD

# Abstract

Context: Choosing Wisely Canada (CWC) aims to engage healthcare providers to reduce unnecessary care. Reducing overuse of antimicrobials and antipsychotics in patients with dementia in primary care settings remains an ongoing challenge. Audit and Feedback (A&F) interventions can facilitate practice change but can be improved by understanding factors affecting the likelihood of uptake of the feedback. Objective: To assess the impact of A&F interventions to reduce unnecessary prescribing of antibiotics and antipsychotics use and evaluate whether practice changes remain stable over time. Design: Clustered randomized controlled trial. Dataset: The Manitoba Primary Care Research Network (MaPCReN), a practice-based network that includes a repository containing de-identified EMR data from over 288,000 Manitobans. Population: Primary care providers participating in MaPCReN were randomized to three A&F groups: 1) Information on the relevant CWC recommendations; 2) practice specific data along with general information regarding the CWC recommendations 3) No CWC information. Outcome Measures: Statistics demonstrating changes in target prescriptions. Multivariate regression assessed characteristics of providers with improved prescribing. Results: 182 primary care providers were evaluated, 86.3% decreased the number of target prescriptions. More providers decreased prescribing in group1 (88.9%) or group2 (94.0%) compared to the control group 3 (76.7%) (pvalue 0.02). There was no statistically significant difference between practice specific feedback and generic CWC information. An average of 46 antibiotic medications per provider were prescribed for viral indications in 2014/2015. This dropped to 15 in 2016/17 and was 18 in 2018/19. An average of 3 antipsychotic medications were prescribed for patients with dementia in 2014/2015. This dropped 7% in 2016/17 and remained stable in 2018/19. There were no statistically significant provider characteristics when considering all providers with improved prescribing, but male, rural and fee for service providers were more likely to decrease prescribing greater than the mean. Conclusion: Both practice specific and generic A&F information sent directly to primary care providers by a trusted source reduced potentially unnecessary prescriptions. This supports ongoing engagement with primary care providers in practicebased research networks to improve care and promote sustained practice changes.