



The STOPP/START Criteria: International Synthesis and Local Contextualization

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TVN MindMerge

TVN Improving care for the frail elderly

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STOPP/START Criteria

STOPP = Screening Tool of Older Person's potentially inappropriate Prescriptions

START = Screening Tool to Alert doctors to the Right Treatment

- Evidence-based set of explicit criteria
- STOPP - 65 criteria and START - 22 criteria
- Developed in Ireland using a modified Delphi process that involved 18 experts in geriatric pharmacotherapy¹
- Organization by drug classes/physiological systems
- Reliability and validity have been demonstrated, but without documented or graded evidence²

¹Barry et al, 2007; ²Gallagher et al, 2008

What was the evidence that using STOPP/Start criteria improves patient outcomes?

As of January 2012:

- Limited evidence that STOPP/START optimized prescribing
- STOPP criteria identified more medications associated with adverse drug events than Beers criteria
- Observational studies reported prevalence of potentially inappropriate prescribing (PIP) varied from 21 - 79%
- PIP associated with age and sex, definitely associated with polypharmacy
- Heterogeneity of population and application precluded meta-analysis

STOPP/START Systematic Review

- Objective: to describe research experience and examine evidence of impact of criteria in adults aged 65 years and older
- English articles only from Jan 2007 - Jan 2012 identified by searching
- 13 trials were included (one RCT and 12 observational studies) reflecting experience from:
 - 345,000 persons
 - Europe, North America and Asia
 - Community-dwelling, acute care and long-term care

Hill-Taylor B, Sketris I, Hayden J, Byrne S, O'Sullivan D, Christie R. Application of the STOPP/START Criteria: A systematic review of the prevalence of potentially inappropriate prescribing in older persons and evidence of clinical, humanistic and economic impact *Journal of Clinical Pharmacy and Therapeutics*. 2013;38:360-372.

Do Nova Scotia prescribers adhere to STOPP criteria for benzodiazepine/zopiclone use in older adults?

- In 2010, 24.1% of study population had claimed at least one prescription of benzodiazepine/zopiclone
- 18% claimed \geq 90 days supply
- Increasing age and female sex predicted higher rates of claims
- In 2006, over 30% of female NSSPP beneficiaries \geq 90 years old claimed a benzodiazepine/zopiclone

Hill-Taylor BJ, Sketris IS, Gardner DM, Thompson K, Haughn C. Benzodiazepine and Zopiclone Prescription Claims by Older adults in Nova Scotia: Trends and Concordance with the Screening Tool of Older Persons' Potentially Inappropriate Prescriptions (STOPP) International Symposium on Health Information Management Research (ISHIMR) 2013 Conference Proceedings, Halifax, NS. June 26-28, 2013.

Do Nova Scotia prescribers adhere to STOPP criteria for benzodiazepine/zopiclone use in older adults following falls?

- 74% of patients continued to claim for benzodiazepine/zopiclone following discharge from a fall-related hospitalization
- Younger age and female sex were predictors of continuing benzodiazepine/zopiclone post-fall
- Discordance with STOPP criterion relating to benzodiazepine/zopiclone use in fall-prone older adults
- Highlights a significant potentially inappropriate and modifiable fall-risk prescribing behaviour

Hill-Taylor BJ, Sketris IS, Gardner DM, Thompson K. Concordance with a STOPP (Screening Tool of Older Persons' Potentially inappropriate Prescriptions) criterion in Nova Scotia: Benzodiazepine and zopiclone claims by older adults with fall-related hospitalizations. Draft Manuscript, 2014.

Integrated KT

With the Drug Evaluation Alliance of Nova Scotia, Nova Scotia Department of Health and Wellness

- Research question refinement
- Data support
- Funding assistance
- Secondary use of administrative data to examine practice variation and create cognitive dissonance
- Research fits with decision-makers direction and informs policy action (Sleepwell NS)



Future/Ongoing work

- Antipsychotic medications, concordance with STOPP criteria
- Updating STOPP/START systematic review
 - Beers updated in 2012
 - STOPP/START updated in October, 2014
 - Expanding therapeutics evidence base as it applies to older people
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- **Disclaimer:** Although this research is based on data obtained from the Nova Scotia Department of Health and Wellness, the observations and opinions expressed are those of the authors and do not represent those of either Health Data Nova Scotia or the Department of Health and Wellness.