BEST SEDATIVE AND ANTIPSYCHOTIC USE FOR THE ELDERLY (B-SAFE)
(Utilization of a multi-pronged strategy for physician engagement and change management)

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Background: The use of antipsychotic, sedative and anxiolytic medications in seniors is common without clear evidence of efficacy and safety. Several national specialty societies participating in the Choosing Wisely campaign have identified anti-psychotic medications as a target for re-evaluation.

Aim: The '*Best Sedative and Antipsychotic use For the Elderly' (B-SAFE)* project was initiated to provide participating Calgary Zone hospitalists feedback in the form of individualized and aggregate prescribing data on antipsychotics and sedatives for senior patients. The aim is to promote knowledge translation of guidelines and evidence into practice through the use of prescribing report and educational interventions.

Innovation: The innovation within the B-SAFE project is centered on the use of prescription data, in the form of individual and aggregate prescribing reports. These prescribing reports inform the design and provision of educational interventions addressing the appropriate use of antipsychotic and sedative medication use in seniors. Knowledge translation strategies in the form of cycles of educational interventions and feedback were undertaken, with the goal to promote application of the knowledge into individual clinical practice. A unique aspect of the project design is the utilization of prescribing data as both an intervention and a measure. The project is centered on the retrieval of electronic prescribing data at various time points, both baseline and post intervention. This serves to provide individualized reports that capture both individual prescribing practice and comparisons to physician peers via aggregate data. CME sessions around prescribing practice guidelines, which include education and promotional material around acute care admissions, act as a further intervention towards changing physician behaviour.

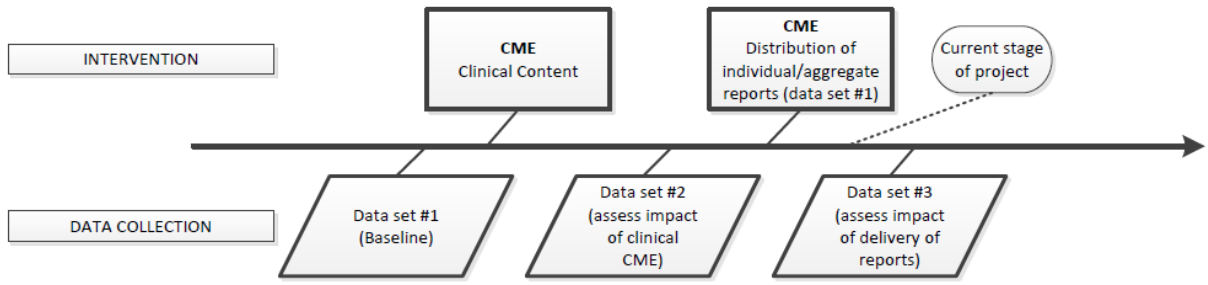

Figure 1: Timeline of project

Figure 1 illustrates the timeline of the project design. Hospitalist physicians received Continuing Medical Education (CME) sessions on appropriate antipsychotic and sedative medication use in seniors. Educational/promotional material was created to further educate on the appropriate use of these medications, as well as spread awareness of the quality improvement initiative. Hospitalists were asked to provide consent to receive their individualized prescribing reports. An initial collection of electronic

prescribing data was done for the time period of one year prior to these CMEs and promotion of the QI project to serve as a baseline for individual and aggregate performance.

The individual and aggregate reports obtained from the first data set were delivered to participating hospitalist physicians in the format of another CME. These reports contained the baseline aggregate prescribing data for all Calgary Zone hospitalists, as well as the individual prescribing data. This allowed hospitalists to compare their prescribing practice to their colleagues within the same patient population.

A second data draw for the time period immediately prior to the distribution of the initial reports will allow for the change in prescribing trends from the initial CMEs to be measured. A third data draw for the time period that followed the distribution of the individual reports will allow for the change in prescribing practices following the reports to be measured.

Partnerships with the Seniors Strategic Clinical Network and Nursing leaders and educators were established, recognizing that multiple factors beyond guidelines and literature influence prescribing practices. Education and communication interventions related to non-pharmacologic approaches to management were provided; a workshop on the appropriate use of antipsychotics and informal hospitalist to nurse education on appropriate use of these medications (for example, specifically stating in the order for what behaviours a prescribed PRN medication should or should not be used).

Measures: The patient visits and inpatient medication data were retrieved from Sunrise Clinical Manager (electronic medical record used at all Calgary acute care sites). Dispensed outpatient medication data was pulled from the Pharmaceutical Information Network administrative database (provincial database capturing 95% of all pharmacists' submission for dispensed outpatient medications) Data was collected for two time periods - 3 months before the patients' admission and 3 months after discharge. The final reports provided the participants with a snapshot of their prescribing practice with aggregate data. The categories of particular interest were the instances where the hospitalist physician prescribed antipsychotics or sedatives during the hospital stay in which the patient has not been prescribed/taking 3 months prior to the admission as well as the instances where the hospitalist discontinued antipsychotics or sedatives during the hospital stay in which the patient was prescribed/taking 3 months prior to the admission.

Figure 1, 2 and 3 show examples of the data that was presented within the individual prescribing reports

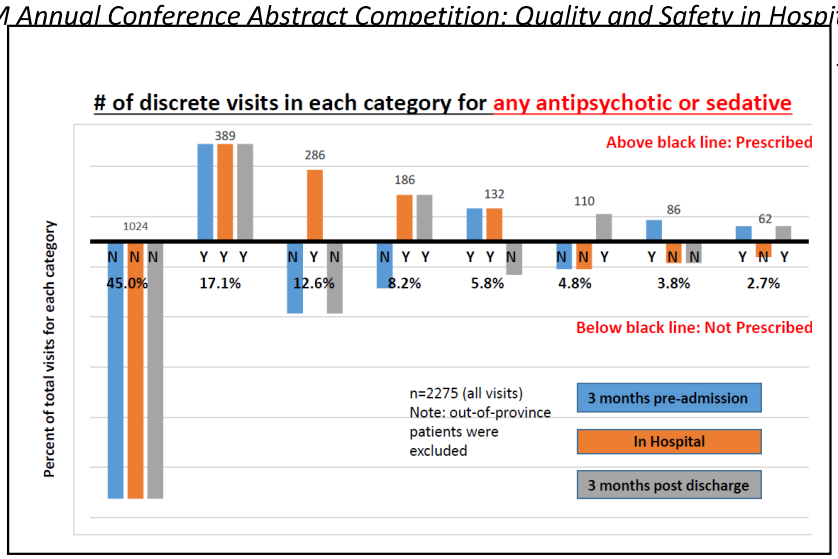

Figure 1: Aggregate data for prescriptions

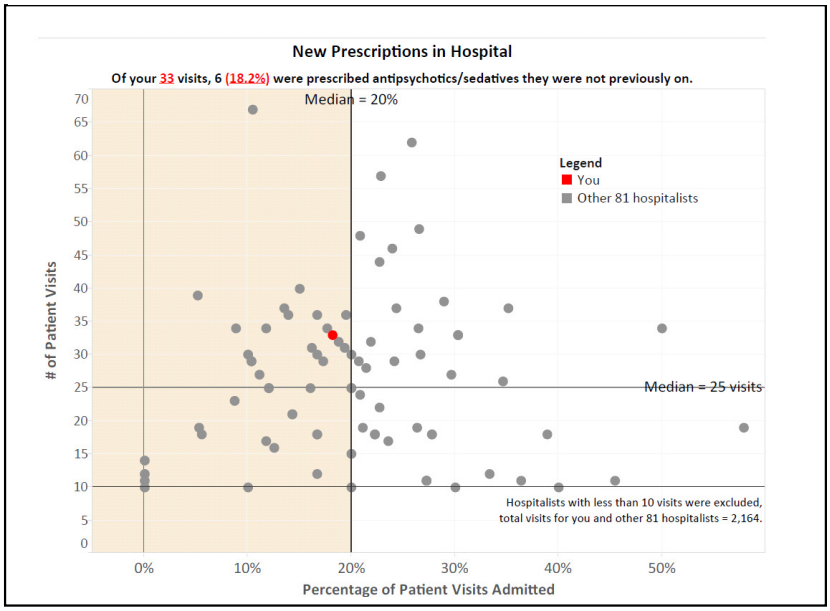

Figure 2: Aggregate data for all visits

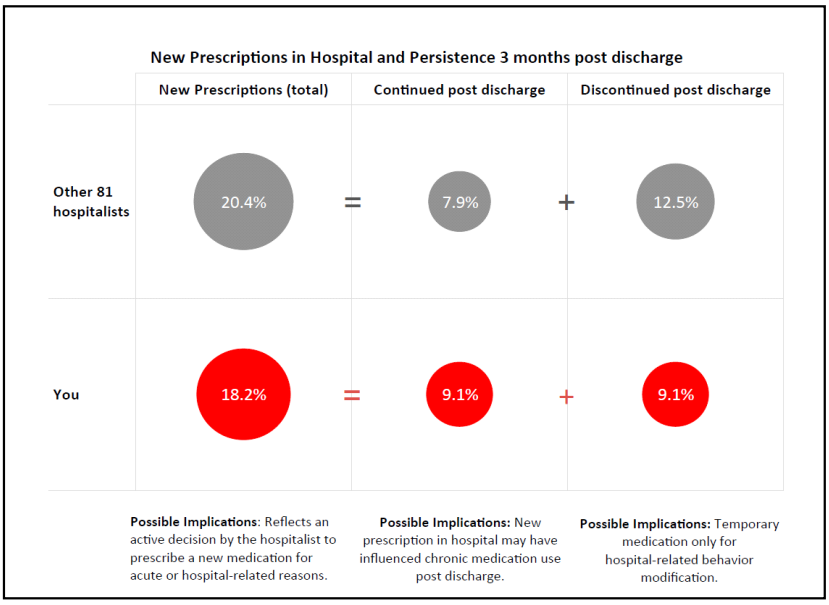

Figure 3: Individualized report comparing to aggregate data

Expected Project Impact: Through the use of CMEs on appropriate antipsychotic and sedative use, nursing education and the distribution of individual and aggregate prescribing data reports, this project is expected to have the following benefits/improvements:

- To allow physicians to better understand the use of anti-psychotic and sedative/anxiolytic medications in seniors before, during and after an acute care hospital admission
- To re-evaluate practice and prescribing changes after an educational and/or clinical intervention
- To provide non-pharmacologic education and management strategies for nurses, patients and families
- To promote physician engagement in quality improvement initiatives

Lessons Learned: Although this project is in the intervention stage (currently in the time period following the first distribution of the individualized reports), many lessons have already been learned.

Multi-pronged approach to QI
While this project was initiated with the aim of reducing the use of antipsychotics and sedatives within the senior population, it became apparent that the objective was the context for a unique, multipronged strategy for physician engagement in quality improvement initiatives. Individual prescribing feedback that could be compared to colleagues in the program combined with educational strategies provided a unique way for physicians to critically reflect on their practice. Providing overall aggregate data also allowed physicians to view themselves as part of a larger system where quality improvement is valued and outcome driven with visible leadership support.

Anticipating concerns at commencement of project
At the commencement of this project, individual physician consent was required to participate in the program and receive the individualized prescribing reports. Some physicians resisted enrolling, stemming from a fear that the reports would be used for purposes other than individual reflection. This was an unexpected reaction to the initiative and the learning point is that creating an effective communication strategy, which proactively identifies and addresses potential concerns, is required to maximize physician engagement in quality improvement.

Considering a broader participant base to invoke change
While this project focused specifically on physician prescribing practices, there was also recognition that front line care providers may impact the utilization of these agents and sustained change would not occur in isolation. Physicians are often contacted (and at times perceived as pressured) by caregivers for "as needed" antipsychotic and sedative orders which may not be necessary or effective in the management of the patient. Quality improvement initiatives focusing on physician practice need to take into consideration and create strategies to address other influences and environmental factors (such as nursing staff education), which may support or impede change.

Next Steps

Comparison of the next set of prescribing reports to the initial set of reports will provide a measure of impact of these interventions on antipsychotic and sedative prescribing. This project has generated discussion and critical thinking around the use of these medications. Even in the cases where the antipsychotic or sedation medication is still prescribed, we anecdotally recognize that stronger consideration and direction was given to related non-pharmacologic strategies and current guidelines. It has also prompted hospitalists to be more detailed in their discharge summaries, providing more detail to the community family practitioners to explain why the medication was continued or discontinued. This helps ensure these medications continue to be prescribed in a safe manner post discharge.

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