Introduction:
Pain, agitation, and delirium (PAD) are commonly encountered by patients in the Intensive Care Unit (ICU). Delirium is associated with adverse outcomes, including increased mortality and morbidity. Clinical guidelines suggest that routine assessment, treatment and prevention of PAD is essential to improving patient outcomes. Despite the well-established improvements on patient outcomes, adherence to clinical guidelines is poor in community hospitals. The aim of this quality improvement project is to evaluate the impact of a multifaceted and multidisciplinary intervention on PAD management in a Canadian community ICU.

Methods:
A PAD advisory committee was formed and involved in the development and implementation of the intervention. The 4-week intervention targeted nurses (educational modules, visual reminders), family members (interviews, educational pamphlet, educational video), physicians (multidisciplinary round script), and the multidisciplinary team (poster). An uncontrolled, before-and-after study methodology was used. Adherence to PAD guidelines in the assessment of PAD by nurses was measured 6 weeks pre-intervention and 6 weeks post-intervention.

Results:
Data on 430 patient-days (PD) and 406 PD were available for analysis during the pre- and post-intervention, respectively. The intervention significantly improved the proportion of PD with assessment of pain and agitation at least 4 times per 12-hour shift from 68.0% to 87.5% and from 69.7% to 82.2%, respectively. Proportion of PD with delirium assessment at least once per 12-hour shift did not significantly improve.

Conclusion:
A multifaceted and multidisciplinary PAD intervention is feasible and can improve adherence to PAD assessment guidelines in community ICUs. Quality improvement methods that involve front-line staff can be an effective way to engage staff with PAD.

Image:

Pre-intervention and post-intervention PAD assessment rates