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Introduction:
Our objective was to determine the feasibility of employing family-administered tools to detect delirium in the critically ill. The use of family-administered delirium detection tools has not been assessed in the ICU where patients are critically ill and frequently intubated. Family members may be able to detect changes in patient cognition and behavior from pre-illness levels earlier than unfamiliar providers. These tools may be a valuable diagnostic adjunct in the ICU.

Methods:
Consecutive patients and family members (dyads) in the largest adult ICU in Calgary, Canada were recruited (Aug. 9-Sept. 11, 2017). Inclusion criteria were: patients with a Richmond Agitation Sedation Scale (RASS) ≥3; no primary brain injury and Glasgow Coma Scale score of <9; ability to provide informed consent (patient/surrogate); and remain in ICU for 24 hours. Data were collected for up to 5 days. Family-administered delirium assessments were completed once daily (Family Confusion Assessment Method & Sour Seven). To assess feasibility, we assessed proportion of eligible patients and percent family member enrollment. Barriers to enrollment were categorized.

Results:
Of 99 admitted patients with family, 37 (37%) met inclusion criteria and 17 (46%) dyads consented. 20% of admitted patients did not have family and were thus ineligible. 73% of enrolled dyads assessed delirium at least once, with a median of 5 (of 10 total) assessments. The most common reason for non-enrollment was refusal by the family, who commonly reported feeling overwhelmed by the ICU environment. Barriers with nursing staff were encountered, including not providing access to patients and patient exclusion.

Conclusion:
These data suggest that employing family-administered delirium detection tools in the ICU is feasible for a subset of the population. Future studies will validate the use of these tools in the ICU, decrease modifiable barriers to enrollment, and test strategies to overcome attitudinal barriers towards employing these tools.