

Improving mental health assessments and follow-up in a pediatric ED

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Background: Although the number of children presenting to emergency departments (ED) with mental health (MH) concerns has been on the rise, EDs have not in turn responded with approaches that address patient needs. A lack of standardized processes for risk stratification, assessment, and follow-up poses barriers for providing safe care. With PRIHS funding, our team endeavored to improve how ED-based MH care is delivered through the implementation of an evidence-based care bundle that involves risk screening at triage, streamlining MH assessments, and eliminating gaps in follow-up care by booking all patients in need into post-ED visit appointment within 96 hours.

Methods: A quality improvement (QI) approach was chosen for implementation. We used the Model for Improvement to test and implement each bundle practice: a suicide-risk screening tool (Ask Suicide Screening Questions [ASQ]) at ED triage; a standardized MH assessment tool (HEADS-ED); and an urgent, single-session ‘Choice Appointment’ with a MH professional for patients lacking access to appropriate and timely MH follow-up care. Each new practice was introduced sequentially over a 2- week period. For each practice, we identified 1 to 2 improvement aims, developed key driver diagrams, and selected primary outcomes and measures. Each practice was implemented using Plan-Do-Study-Act (PDSA) cycles with initial tests of change starting small and becoming larger as learning accrued from previous cycles. Our implementation team included families with lived experience, patient care and unit managers, nurse educators, frontline healthcare providers, content experts, and clinical leaders who supported staff and led change management strategies. A nurse was hired as a QI lead to support execution of PDSA cycles. A sustainability plan was developed and involved embedding education regarding new practices in new healthcare staff orientation, having a measurement strategy to ensure that improvement was maintained, and transition of responsibility for new processes to operational and medical leadership. Patient surveys conducted by the Emergency and Addiction and Mental Health SCNs informed the selection and prioritization of bundle components. The new care bundle was further refined during a ESCN Quality and Innovation Forum Presentation Proposal • 3 meeting with patient representatives and implementation team members at an in-person (pre-COVID) meeting in Red Deer. Patient partners helped select the outcome measures, assessment tools and timelines. During bundle implementation, feedback on care and processes was collected from youth and parents/guardians during each PDSA cycle. This feedback informed the development of new patient resources (brochures, handouts), change management strategies with healthcare staff, and revisions to clinical workflows. Patient resources were developed in consultation with patient advisors and partners from Edmonton-

based Children Youth and Families Advisory Councils. Implementation results from the PDSA cycles were communicated regularly with frontline healthcare staff.

Evaluation Methods: We used clinical data from Connect Care and experience data collected via surveys to determine if the aims for each practice were achieved. We included balancing measures to test whether changes in care in one part of the system introduced unintended consequences in other parts of the system. We calculated results for the primary outcomes using run charts to rapidly detect signals of improvement according to established rules for detecting special cause. The results from each PDSA cycle were discussed in the context of existing healthcare resources to support each bundle practice. The two ED-based bundle elements do not require additional resources or funding and are expected to reduce length of stay. The follow-up clinic option for ED patients without resources is intended to prevent crisis escalation and match patients with supports. Results from the larger PRIHS initiative, including patient impacts, will be reported upon initiative completion.

Results: All three bundle practices have been implemented. Tests of change for use of ASQ screening began February 1st, 2021 with the tool fully implemented by April 2021. Initial use of ASQ was 77% of target patients, and over time, improved to 93% (shift noted in September 2021). Tests of change to introduce the HEADS-ED began February 16th, 2021. Initial performance upon implementation was 81% and improved to 87% (shift detected beginning August 2021). The new option for post-ED follow-up care, an urgent, single-session 'Choice Appointment', was offered to patients who did not have timely and access to urgent follow-up with an existing mental healthcare provider. Of eligible patients, 86.9% had an appointment booked for within 96 hours of the ED visit.

Advice and Lessons Learned

1. A robust strategy to develop proposed changes based on best evidence combined with patient and staff engagement;
2. A comprehensive QI strategy to test, measure, and implement changes; and
3. Regular communication and collaboration among ED staff, mental healthcare staff, patients/families, and hospital leadership.