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Improving Lethal Means Counseling Documentation for Youth Admitted to a Pediatric Behavioral Health Service



Introduction: Firearm injuries are the leading cause of death for children aged 0-19. Evidence shows that physician counseling plus the provision of a tangible tool (e.g. cable lock) increases safe storage of firearms in the home, potentially mitigating the risk of harm. A multidisciplinary team launched a quality improvement (QI) project with the aim to increase lethal means counseling during the history and physical (H&P) for children admitted with psychiatric concerns at Monroe Carell Jr Children's Hospital at Vanderbilt.

Methods: All children admitted to the Behavioral Health service with any admitting diagnosis were included. Children transferred from the PICU, PHM or another medical team were excluded. The primary measure was lethal means counseling defined as the percentage of H&Ps with documentation including the terms "gun" or "lethal means" AND "counseling". Twenty charts were reviewed per week as a denominator. Data were analyzed using Shewhart statistical process control charts in continuous weekly cohorts. Special cause variation was indicated by 8 points above or below the mean.

Results: Baseline mean lethal means counseling from August-December 2021 was 1.8%. Initial interventions included informal and formal didactics to pediatric trainees and having educational materials as well as firearm storage devices (cable locks) available to provide families. Special cause variation with 8 points above the mean line resulted in a centerline shift from a mean of 1.8% to 22.3% in mid-March following these interventions.

Conclusions: Initial interventions of trainee education and distribution of family education and storage devices led to an increase in lethal means counseling documentation. However, these are low reliability interventions unlikely to result in a substantial or lasting change to the system. Next steps will include identifying interventions to help providers counsel effectively and consistently.