Supporting Secure Firearm Storage in Under-Resourced Communities through Provision of Storage Devices during Routine Clinical Care



Margaret Carney, MD; Kristen Humphrey, MD; Nick DeBlasio, MD, MEd; Michelle March, MD, MPH; Matthew Zackoff, MD, MEd; Joseph Real, MD, MEd

Background

- Firearm-related injury is the leading cause of death in American children.
- Morbidity and mortality disproportionately affect people of color and communities living in poverty.
- The American Academy of Pediatrics recommends that pediatricians **counsel caregivers** on firearms and recommend secure storage.
- Secure storage counseling has been efficacious in enhancing secure storage practices in households.

Objectives

Improve access to firearm storage devices for children who seek care at Pediatric Primary Care Center (PPCC) and Hopple Street Neighborhood Health Center (HSHC) and explore family preferences for type of firearm storage device.

Results

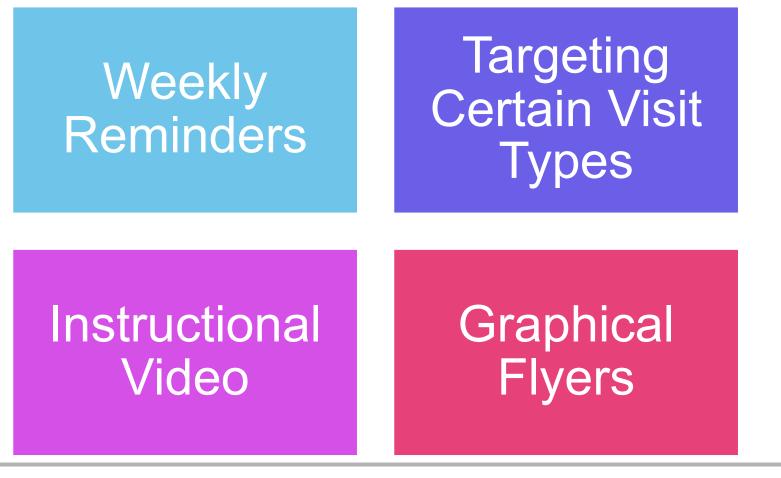
- 51 devices were distributed in 5 months.
- The mean number of devices distributed per week increased to 3 after several PDSA cycles, but this increase did not establish a trend (Figure 1).
- Most families preferred lockboxes (62%), followed by unsure/no preference (34%), with a minority of families preferring cable locks (4%).



• Clinician-completed surveys (n=51) indicated that the top barriers among families to secure firearm storage included: cost, preference for firearms to be accessible, and lack of knowledge about storage devices.

Methods

- We conducted a quality improvement (QI) study to increase firearm storage device distribution
- Interested families were given a choice of a lockbox or cable lock.
- Clinicians completed a survey documenting familyreported firearm safety device preference, original firearm storage method, and barriers to secure storage.
- Several PDSA cycles were implemented to support device distribution including:



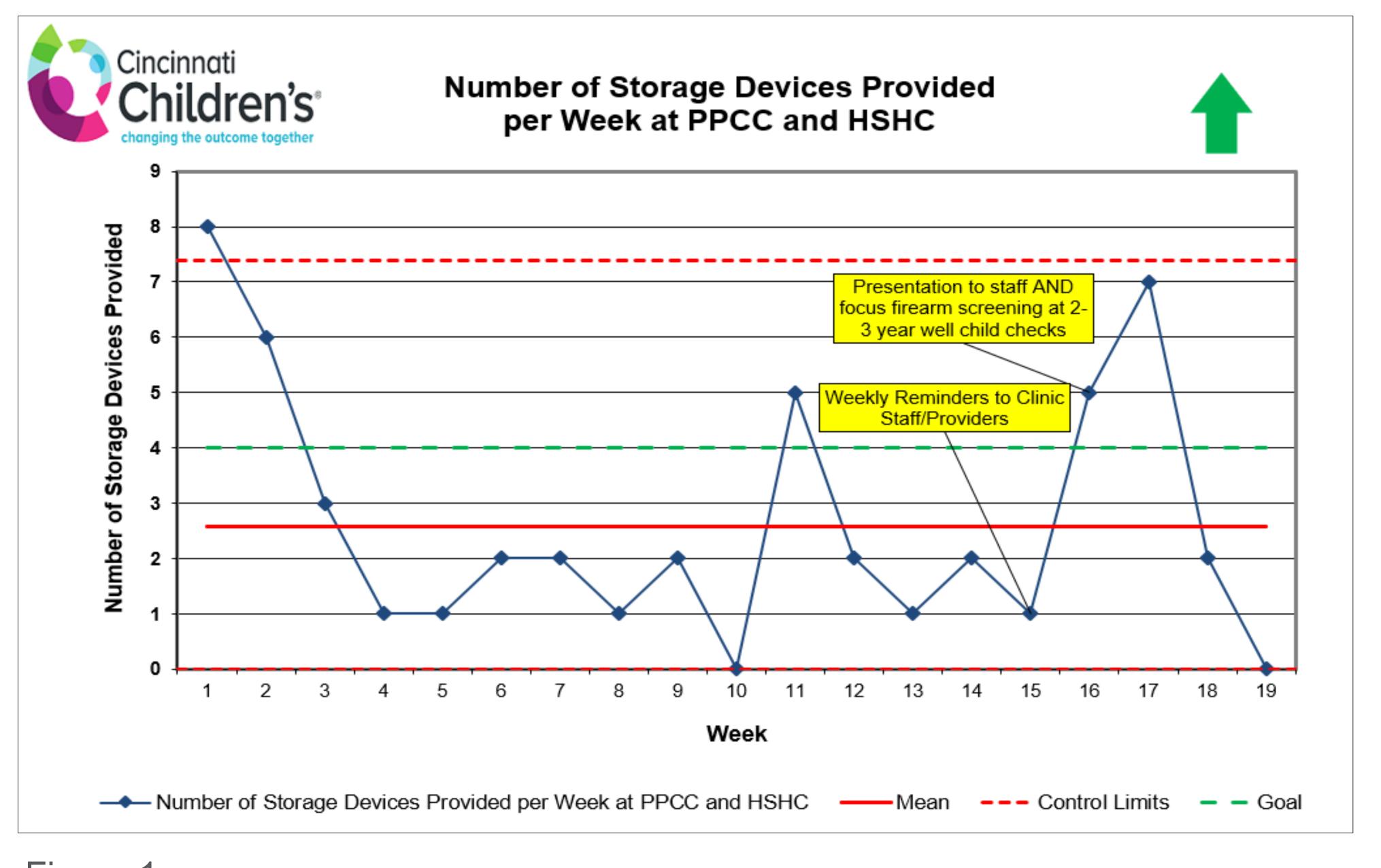


Figure 1

Discussions

- Families indicated a strong preference for lockboxes
- Fewer devices were distributed than expected given reported prevalence of firearm ownership and storage practices among households with children
- Pediatricians cite lack of time and lack of formal education concerning firearm safety as barriers to firearm safety conversations which may have impacted distribution rates
- Ongoing provider education and efforts to reduce provider cognitive load are needed to encourage regular firearm safety counseling

Conclusions

- Future efforts to support firearm safety device distribution should prioritize lockboxes as an available device type and combine it with patient education
- Enhancing clinicians' skills on firearm safety counseling will be critical to support device distribution
- Further studies may help elucidate the type of provider (nurse, physician, medical assistant, etc.) that could support distribution of safety devices