



Not Kidding Around: Home Firearm Safety Screening at a Community Pediatrics Clinic

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Background

- Among children age 10-18 years, firearm-related fatalities are a top 3 cause of death nationally¹.
- In Colorado between 2005 and 2012 among ages 0-19:
 - Unintentional firearm deaths accounted for 4.7% of firearm-related deaths
 - Suicide and homicide accounted for 49.7% and 41.0% of firearm-related deaths respectively².
- From 2004-2015, El Paso county had a state-leading 110 suicides among children ages 10-19, of which 48.2% were completed with firearms³.
- Firearm-related deaths, especially from suicide, are therefore an important public health topic in this community.
- According to the American Academy of Pediatrics Policy Statement on firearm-related injuries, pediatricians have a vital role to play in providing firearm home safety screening.
- One important element of this primary prevention strategy is assessing home firearm storage methods, as certain storage methods (e.g. locking firearms and separating from ammunition) are more effective at preventing firearm-related injury/death.
- Previously, there was no standard practice in place to assess for home firearm safety at our community-based pediatrics clinic.

Aim Statement

- We endeavored to increase the percentage of families seen by our practice for well-child checks who are screened for home firearm safety to 80%.

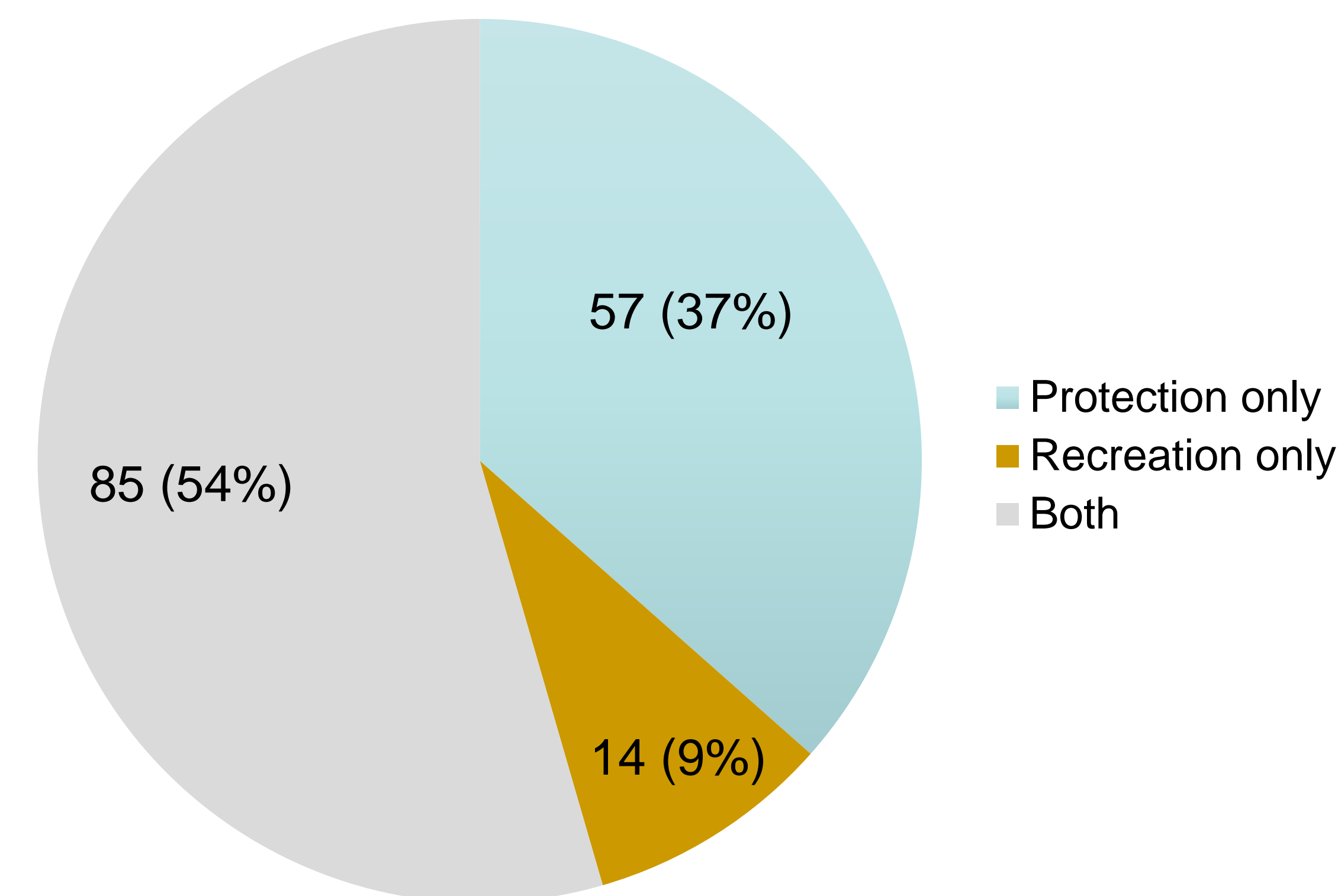
Intervention Description

- An anonymous paper survey inquiring about home firearm ownership and storage methods was distributed to parents/caregivers of patients at the start of well-child check visits.
- Data were collected from 11/07/2018-2/20/2019 and entered into an electronic Excel database at the end of every month.
- Weekly check-ins with clinic staff facilitated refinement of screening procedure.

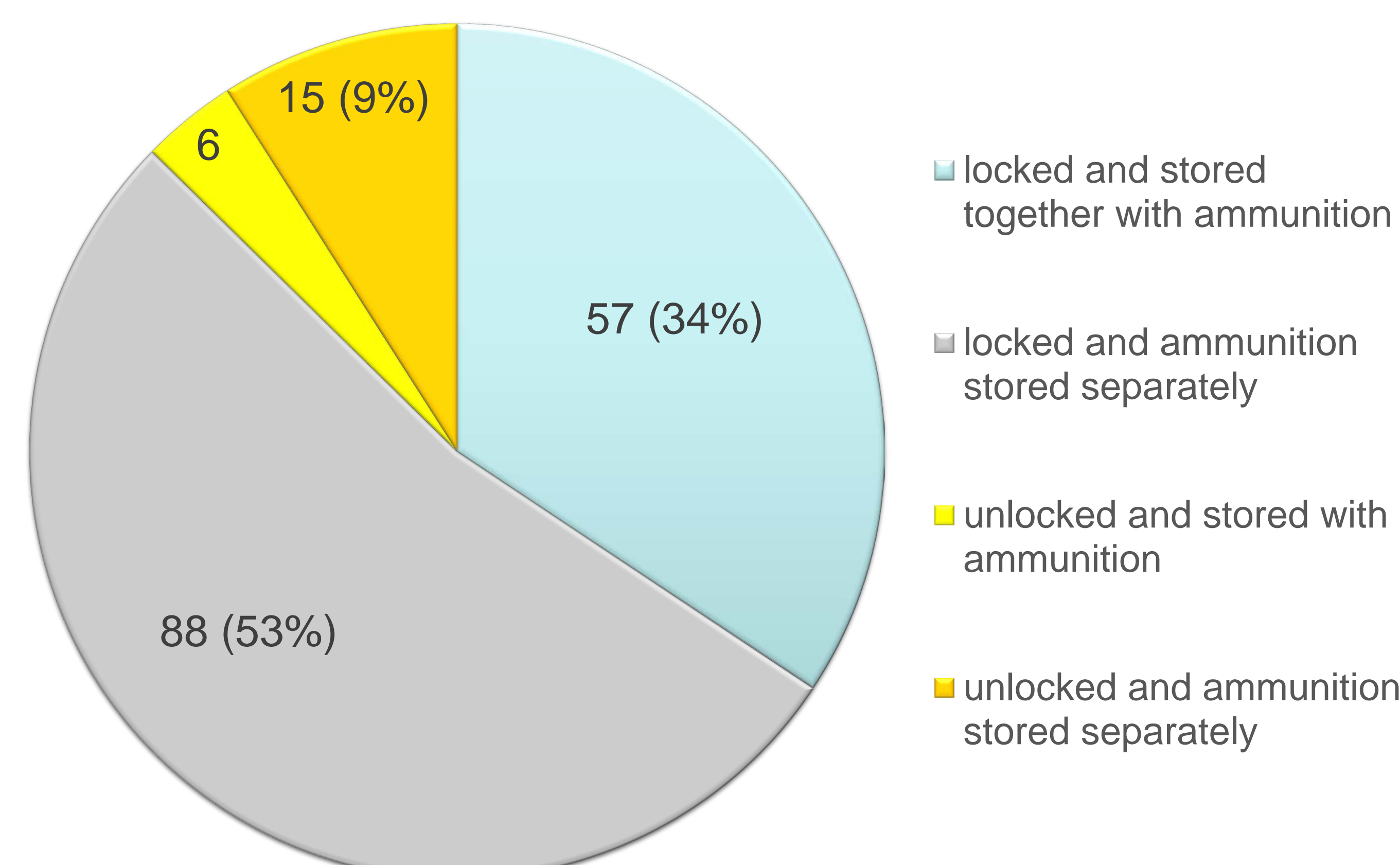
Survey Results

Number of families screened	306
Number of refusals (% total)	10 (3.2)
Total number of children in screened families (avg.; SD; min, max)	674 (2.21;1.02;1,6)
Average age in years of children in screened families (SD; min, max)	6.4y (5.1y; 3d-22y)
Number of families with firearms in the home (% total)	156 (51%)

Reasons for Firearm Ownership (n = 156)



Home Firearm Storage Methods (n = 166)



Discussion

- Anonymous home firearm safety screening was successfully implemented among one provider at a large community-based pediatrics clinic in Colorado Springs, and well-received by families. Only 3% refused the survey.
- 51% of screened families endorse firearm ownership, which is significantly higher than the national average of 43%⁴
- The vast majority of families had not been previously asked about home firearm safety, suggesting a significant need for firearm safety counseling in this community.
- Further investigation should be done to better assess unique needs of families served by this practice, including possible need for better storage methods, firearm safety training, etc.
- Additional analyses may provide insights into needs for higher-risk populations (e.g. adolescents).

Future Directions

- Integration of firearm screening questionnaire with standard health maintenance questions already found in EMR.
- Selection of appropriate educational materials and counseling strategies for home firearm safety counseling, with attention being paid to family values and attitudes, and with a focus on reducing firearm-related suicide.

Reference

1. CDC Ten Leading Causes of Death 2017 from the WISQARS Database
2. Firearm Deaths in Colorado 2005-2012. Colorado Department of Public Health and Environment
3. Interactive Data Visualization Dashboard from the CVDERS. Colorado Department of Public Health and Environment
4. Gun ownership in the U.S. 1972-2018 | Statista. (2018, October). Retrieved March 17, 2019, from https://www.statista.com/statistics/249740/percentage-of-households-in-the-united-states-owning-a-firearm/