

A Research Journey with a Hospital-based Violence Intervention Program (HVIP)

Sara Muramoto, BS¹, Katie Bakes, MD^{1,2}

University of Colorado Anschutz Medical Campus, School of Medicine, Aurora, CO¹, Denver Health and Hospital Authority²

Introduction

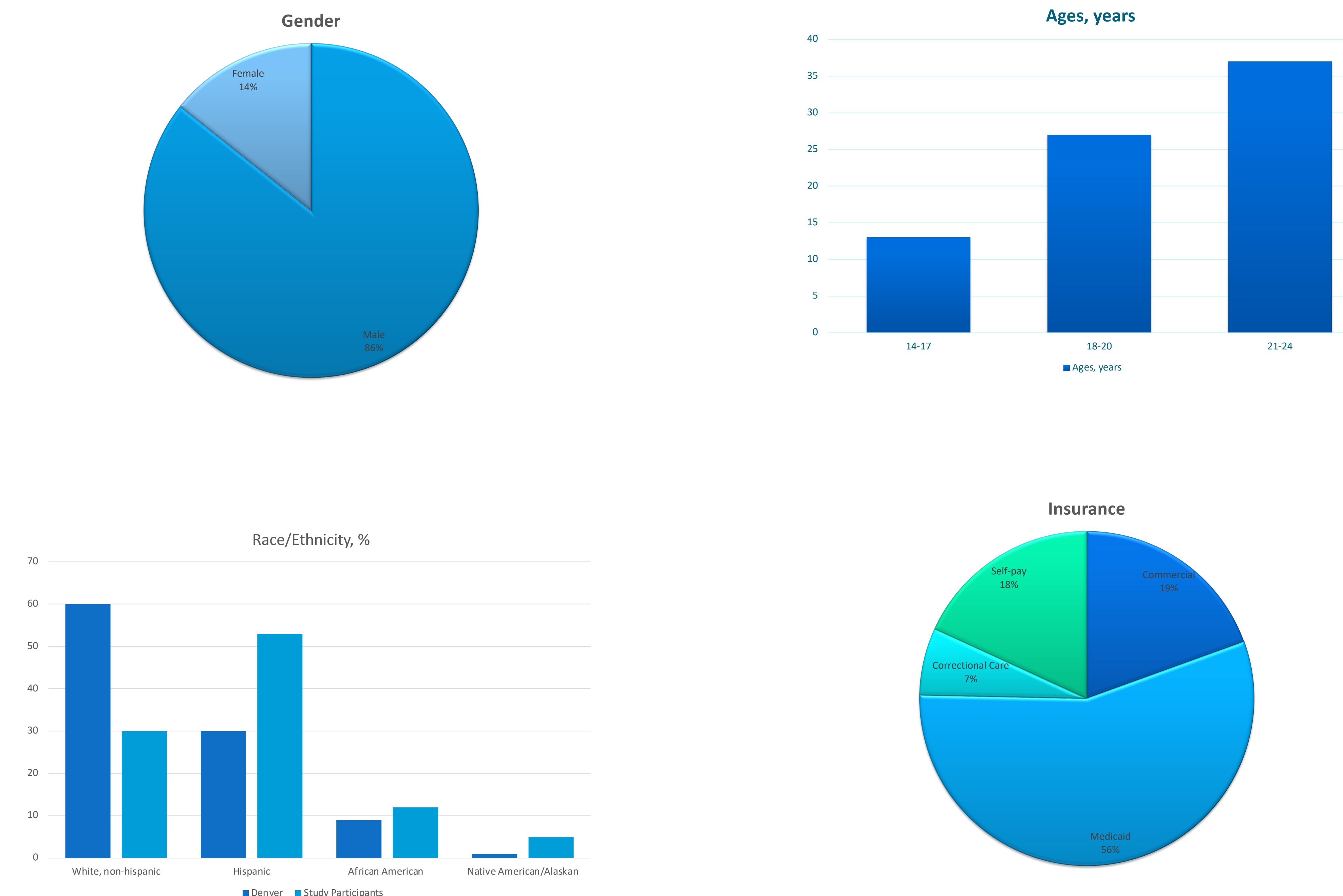
- Hospital-based violence intervention programs (HVIPs) have demonstrated reduced violence recidivism, but specific components for successful programs are not well defined.^{1,2}
- At-risk Intervention and Mentoring (AIM) used a semi-structured interview, validated in the criminal justice system, to determine if recidivism for violent injury could be predicted as use this measurement tool.
- In Colorado, males aged 15-24 years have the highest homicide rates in the state, with nearly 80% involving a gun and African Americans have 6x the homicide rate than that of their white counter-parts.³
- Denver has a juvenile arrest rate that is 24% higher than the national average and homicide rates are nearly double compared to the rest of the state.⁴
- Intervention and mentorship play a key role in reducing cyclic violence in communities. It is a major public health crisis that is often underfunded and overlooked.

Methods

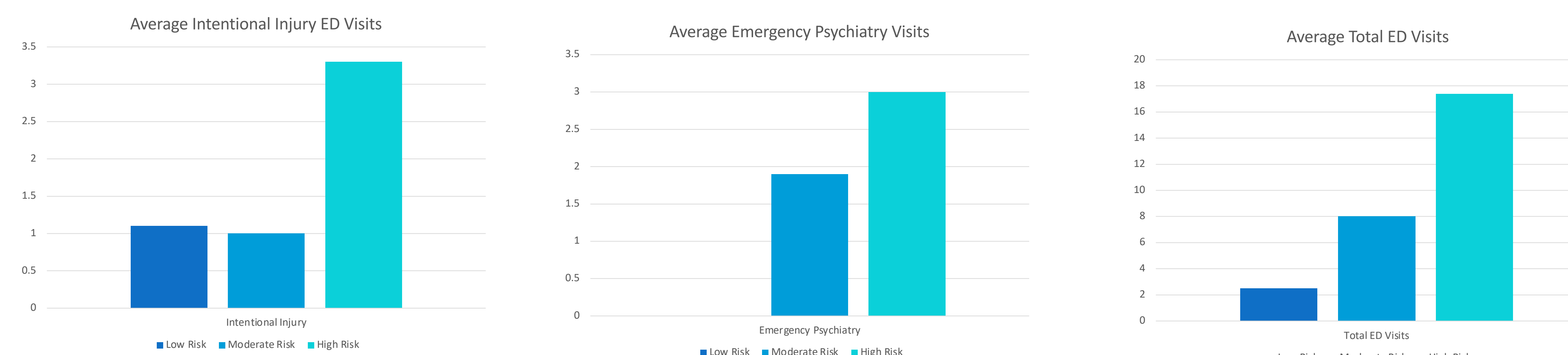
- This protocol was approved by COMIRB (#14-0313)
- Youth (aged 14-24) were enrolled during their hospital visit. The Violence Risk Scale (VRS) determined their risk level for criminal justice recidivism.
- Moderate and high-risk youth were randomized into one of three arms: 1) standard of care, 2) standard of care + bedside intervention, or 3) standard of care + bedside intervention + mentoring
- Youth enrolled in 2014-2016 were reviewed for emergency department visits prior to enrollment as well as visits to date (2021).

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Results



Emergency Department Visits After Enrollment



Conclusion

- The Violence Risk Scale may be predictive of not only intentional injury recidivism, but also of emergency department superusers.
- This population is clearly unique in its core demographics and may have disparities much more significant than what is presented.
- Despite the health insurance expansion, there is still an alarming percent of violently injured youth who remain uninsured.
- There are likely readily identifiable factors that can help direct recourses to the most at-risk groups.

Next steps

- This study has not been completed and has evolved over the past 7 years. No longer requiring a formal consent has allowed many more youth to participate and receive full services from AIM.
- Current IRB changes are to include a retrospective review of all participants and encompasses a more qualitative analysis of participant identified needs-assessment.
- National groups are working together to create and validate a measure of program success. This measure will need to be validated across several programs in the country.

¹Zun LS, Downey L, Rosen J. The effectiveness of an ED-based violence prevention program. Am J Emerg Med. 2006 Jan; 24(1):8-Cheng TL, Haynie D, Brenner R, Wright
²JL, Chung SE, Simons-Morton B. Effectiveness of a mentor-implemented, violence prevention intervention for assault-injured youths presenting to the emergency department: results of a randomized trial. Pediatrics. 2008 Nov; 122(5):938-46.
³Colorado Department of Public Health and Environment. Vital Statistics Program. <https://cdphe.colorado.gov/center-for-health-and-environmental-data/registries-and-vital-statistics/vital-statistics-program>. December 3rd, 2020.
⁴Puzzanchera, C and Kang, W. Easy Access to FBI Arrest Statistics 1994-2010. [Online] 2013. <http://www.ojjdp.gov/ojstatbb/ezaurc>. May 20th, 2020.

