

Why base violence intervention services at a hospital?

Violence is a major public health issue in California, disproportionately affecting young people, males, and people of color. In 2009, there were over 13,071 nonfatal hospitalizations for violent injury in California.1 There were another 2,055 fatal hospitalizations.2 Male victims accounted for 84% of these hospitalizations. Young people, ages 10-24, are disproportionately represented in these numbers, accounting for 4,729 non-fatal and 782 fatal hospitalizations. In fact, homicide is the second leading cause of death for California youth and young adults ages 10 to 24 years old, and the number one cause of death for African-American youth and young adults, whose rate of death by violence is more than 14 times higher than that of white victims.3 Hispanic victims were killed at a rate nearly four times higher than white victims.

While there are many strategies to intervene in the cycle of violence, identification in an emergency department and hospitalization presents a unique opportunity to intervene with a population at highest risk. A 1989 study found hospital readmission rates for youth for recurrent violent injuries are as high as 44% due to assault and 20% due to homicide over a 5-year follow up.⁴ Since then, other studies of retrospective chart reviews have noted similar rates.⁵⁶⁷⁸⁹ Without intervention, hospitals discharge violently injured patients to the same violent environments where they were injured, without a prescription for how to stay safe and with community pressure to seek revenge. Too often, this results in a revolving door of violence, causing even more injuries, arrests, incarcerations, and, sadly, deaths. In 1996, The American Academy of Pediatrics (AAP) published report pointing out that, while "it has been routine to treat victims of child abuse, suicide attempts, and sexual assault via multidisciplinary care protocols, … no care guidelines exist

¹ Source: California Office of Statewide Health Planning and Development, Inpatient Discharge Data. Prepared by: California Department of Public Health, Safe and Active Communities Branch. Report generated from http://epicenter.cdph.ca.gov on: October 03, 2011

² Source: CDPH Vital Statistics Death Statistical Master Files. Prepared by: California Department of Public Health, Safe and Active Communities Branch. Report generated from http://epicenter.cdph.ca.gov on: October 03, 2011.

³ Lost Youth: A County-by-County Analysis of 2009 California Homicide Victims Ages 10 to 24, Report issued by Violence Policy Center, Washington, DC: January 2011.

⁴ Sims, D. W., B. A. Bivins, (1989). "Urban trauma: a chronic recurrent disease." J Trauma 29(7): 940-946.

⁵ Reiner, D. S., J. A. Pastena, (1990). "Trauma recidivism." Am Surg 56(9): 556-60.

⁶ Poole, G. V., J. A. Griswold, (1993). "Trauma is a recurrent disease." Surgery 113(6): 608-11.

⁷ Morrissey, T. B., C. R. Byrd, (1991). "The incidence of recurrent penetrating trauma in an urban trauma center." J Trauma 31(11): 1536-8.

⁸ Goins, W. A., J. Thompson, (1992). "Recurrent intentional injury." J Natl Med Assoc 84(5): 431-5.

⁹ Claassen, C. A., G. L. Larkin, (2007). "Criminal correlates of injury-related emergency department recidivism." J Emerg Med 32(2): 141-7.



that address the unique needs of" violently injured adolescents.¹⁰ Two years later, the U.S. Department of Justice's Office for Victims of Crime took the next step by recommending that hospital-based counseling and prevention programs be established in communities grappling with gang violence.

Emergency departments are resource rich settings for identifying young victims of violence, collecting data to help craft best practices, and intervening. According to "Children's Exposure to Violence: A Comprehensive National Survey," clearly more needs to be done at all levels of policy and practice to identify young people at risk from exposure to violence and to coordinate the delivery of services to them. This study mentions the need to involve emergency room physicians, nurses, and social workers in responding to the needs of these youth and in connecting with other service providers in the young person's life to coordinate services.¹¹ Similarly, a 2001 report from the Surgeon General identified hospital emergency departments as an important source for data about youth violence.¹²

In the mid-1990's, two organizations – Youth ALIVE! in Oakland, California, and Project Ujima in Milwaukee, Wisconsin – developed the nation's first hospital-based violence intervention programs (HVIPs). These programs combined the efforts of medical staff and community-based partners to intervene with violently injured young people as soon as possible after hospitalization. HVIPs reach those caught in the cycle of violence immediately after they have been hospitalized. At this critical moment, this vulnerable population is at a crossroads: they can either encourage retaliation for the violence committed against them, or they can turn their traumatic experience into a reason to take themselves out of "the game." Breaking the cycle of violence means that each patient can begin working with a highly trained "Intervention Specialist" – a paraprofessional from the community-based services, mentoring, home visits, and follow-up assistance designed to promote health, including mental and physical recovery from trauma.

The successes of Youth ALIVE!'s program – called "Caught in the Crossfire" – have been the subjects of two published studies. ^{13, 14} A similar program in Baltimore – the Violence Intervention Program – was featured in the largest concurrent case-control study to date on intentional victims of violence, which was also the first randomized, prospective

¹⁰ American Academy of Pediatrics, *Adolescent Assault Victim Needs: A Review of Issues and a Model Protocol*, Pediatrics, Vol.98, No.5, 1996:991-1001.

¹¹ Finkelhor et al., *Children's Exposure to Violence: A comprehensive national study.* 2009, Juvenile Justice Bulletin, Office of Justice Programs.

¹² U.S. Department of Health and Human Services. (2001). *Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.

¹³ Becker et al. Caught in the Crossfire: The effects of a peer-based intervention program for violently injured youth. Journal of Adolescent Health 2004; 34(3): 177-183.

¹⁴ Shibru et al. Benefits of a Hospital-Based Peer Intervention Program for Violently Injured Youth. Journal of the American College of Surgeons 2007; 205(5): 684-689.



evaluation of a hospital-based violence prevention program.¹⁵ This study that looked at repeated exposure to violence concluded that the multiplicity of interrelated risk factors mandated a comprehensive approach to violence recidivism and called for hospital-based intervention strategies that address the complex needs of this population.

In recent years, the National Network of Hospital-based Violence Intervention Programs (NNHVIP), of which Youth ALIVE!'s Caught in the Crossfire, Project Ujima, and the Baltimore Violence Intervention Program are members,¹⁶ has developed as doctors, medical staff, and community-based members throughout the country recognize the necessity for developing unique treatment methods for victims of violence.¹⁷ Since the mid-1990s, these care guidelines have been established in fewer than two dozen medical facilities across the country and they are held in place by passionate advocates who struggle daily to sustain financial support for the intervention services that give substance to the screening and referral protocols in place.¹⁸

Hospital-based violence intervention (HVIP) is based on seizing the rare opportunity for intervention — the *teachable moment* — at the hospital bedside when a person is most open to addressing the risk factors associated with intentional injury. Several studies have demonstrated the effectiveness of interventions at these moments.¹⁹

The HVIP model is inspired by "Jason," a Wisconsin youth. In 1988, when he was just 9 years old, Jason was treated in the Children's Hospital Emergency Department in Milwaukee for an "accidental" injury. Two years later, the hospital treated him again for multiple contusions and abrasions resulting from an assault. In 1992, at 13 years of age, he was treated for multiple stab wounds. Then, in early 1994, at age 15, the hospital treated him for a bullet wound in his leg. By the end of that year, he was dead, shot in the chest and

¹⁵ Cooper, Carnell MD; Eslinger, Dawn M. MS; Stolley, Paul D. MD. Hospital-Based Violence Intervention Programs Work. The Journal of Trauma: Injury, Infection, and Critical Care: September 2006 - Volume 61 - Issue 3 - pp 534-540.

¹⁶ NNHVIP Members (founding members denoted by asterisk*): Beyond Violence (Antioch/Richmond, CA);

^{Bridging the Gap (Richmond, VA); Camden GPS (Camden, NJ); Caught in the Crossfire* (Oakland, CA); Caught in the Crossfire (Los Angeles, CA); CeaseFire* (Chicago, IL); Healing Hurt People* (Philadelphia, PA); Massachusetts Violence Intervention Advocacy Program*; Out of the Crossfire, Inc. (Cincinnati, OH); Prescription for Hope (Indianapolis, IN); Project Ujima* (Milwaukee, WI); Rochester Youth Violence Partnership (Rochester, NY); Sacramento Violence Intervention Program (Sacramento, CA); UC Davis Wraparound (Sacramento, CA); UMC Trauma Services HVIP (Las Vegas, NV); Violence Intervention Program* (Baltimore, MD); Violence Intervention Program (Savannah, GA); Within Our Reach (Chicago, IL), Wraparound Project* (San Francisco, CA)}

¹⁷ While many NNHVIP member programs focus only on children or youth only, others also serve adults of varying ages.

 ¹⁸ This refers to the programs that make up the National Network of Hospital-Based Intervention Programs. See the Network's website at: <u>http://www.nnhvip.org/</u>

¹⁹ Monti PM, et al. Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department. *J Consult Clin Psychol*. Dec 1999;67(6):989-994. Longabough R, et al. Injury as a motivator to reduce drinking. *Acad Emerg Med*. 1995;2:817-825. Madras, B.K, et al. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later. *Drug and Alcohol Dependence 99* (2009) 280-295



killed at the age of 16. While medical staff expertly cared for his physical wounds each time, not once were his community health needs and risk factors addressed post-discharge. Tragically, every community across the country that has started a hospital-based violence intervention program knows many victims of violence like "Jason." Youth ALIVE!'s own program, the first in the nation, was founded by Sherman Spears, a young man who suffered an intentional injury, a gunshot wound, that left him as a wheelchair-bound paraplegic.

Making initial contact with intentionally injured patients at the hospital, referred either through trauma activation or the emergency department, not only provides the opportunity to address their immediate health crisis, but also helps them begin attending to a myriad of existing and potential health issues. Because almost all intentionally injured patients live in low-income, highly dysfunctional communities, the vast majority suffer or face emergent health conditions such as COPD, hepatitis, heart disease, diabetes, obesity, substance abuse, depression, and sexually transmitted diseases.²⁰ A 2008 study by the CDC identified the significant long-term health effects of exposure to violence "across the lifespan," particularly noting the potential for long-term damage to the brain.²¹ Few have regular contact with a medical provider for a variety of reasons including no insurance and, perhaps more importantly, a profound distrust of institutions including medical centers that have repeatedly failed to meet their needs.

The HVIP model enhances the *teachable moment* by engaging Intervention Specialists who can quickly gain the trust of traumatized patients and their family members at the bedside. All have good people skills, *street smarts*, and cultural sensitivity; reflect the racial and ethnic diversity of their clients; and many have a history of exposure to violence and/or have family members with similar histories.

The HVIP model also strengthens the positive outcomes of the bedside intervention by developing a discharge plan with each patient and working closely with them in the community for months, and sometimes years, following discharge. The average HVIP patient/client receives services for six to twelve months. HVIP Intervention Specialists develop these discharge and ongoing service plans with patients and their family members based on formal assessments of individual, family, and community risk factors for re-injury. The plans are amended as the patients progress and conditions change. HVIP Intervention Specialists help a discharged patient do what they need to do to stay healthy and safe, which usually includes physical and mental health services; substance abuse treatment; academic support; vocational and recreational programs; and housing assistance. HVIP Intervention Specialists generally carry caseloads of 20 patients/clients, regularly conduct home visits, and take clients to appointments as needed, often to ensure that culturally less competent providers fully understand client needs and to ensure attachment to a primary

²⁰ Felitti, V., et al. The relationship of adult health status to childhood abuse and household dysfunction. *American Journal of Preventive Medicine*, 1998. 14(4): 245-258

²¹ Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.



care physician or clinic for ongoing care. This intensive case management approach increases client access to services and improves outcomes.

For example, in the Oakland, California HVIP, Intervention Specialists develop discharge plans with patients, focusing initially on immediate safety needs such as enrolling in a safer school or living situation. Once safe, the HVIP quickly links young patients with school-based health clinics to begin regular attention to health needs, connects mothers with the WIC (Women, Infants, and Children) program to support good nutrition, and enrolls adults in anger management programs, job training, and mental health treatment for PTSD if indicated. Over time, the process of building a web of support around each patient carries over into their broader network of family and friends, improving more than the just individual's health and well-being.

The combination of brief intervention at the hospital bedside followed by communitybased case management has been shown to significantly reduce risk factors for hospital recidivism and to significantly improve health and morbidity outcomes among patients. A study published in 2011 found significantly better service utilization and risk factor reduction at 6 weeks and 6 months after injury among violently injured patients who received both bedside intervention and community case management. Also, none of the 75 clients served were seriously re-injured or died, while, during the same period, 28 unserved violently injured patients died.²²

A 2006 study of an HVIP in Baltimore found that the program saved \$598,000 in hospital recidivism costs and only 5% of the treatment group recidivated, compared with 36% of the control group. The average cost of hospital care for violent injury was \$46,000.²³ A study comparing the medical treatment costs of interpersonal injury with the costs of providing intervention services through San Francisco's Wraparound Project in 2007 found that providing intervention services is cost neutral if just one re-injury is prevented and saves money if it prevents two or more re-injuries.²⁴ Published research has shown that Oakland, California's HVIP produces **savings of \$750,000 to \$1.5 million per year**; patients are 70% less likely to be arrested and 60% less likely to have any criminal involvement than a comparison group.²⁵

²² Aboutanos, M.B. et al. Brief Interventions with Community Case Management Services are Effective for High-Risk Trauma Patients. J Trauma. 2011;71: 228–237

²³ Cooper, C. et al. "Hospital-Based Violence Intervention Programs Work." J Trauma. 2006: 61: 534-540

²⁴ An Ounce of Prevention: Comparing the Cost of Treating Victims of Interpersonal Violence to the Cost of a Violence Prevention Program at an Urban Trauma Center at http://violenceprevention.surgerv.ucsf.edu/research.aspx

²⁵ Becker MG, et al Caught in the crossfire: the effects of a peer-based intervention program for violently injured youth. J Adolesc Health. 2004;34:177–183