Good morning. My name is Dr. Theodore Corbin and I am assistant professor in the Department of Emergency Medicine at the Drexel University College of Medicine in Philadelphia. At Drexel University I also direct a trauma-informed violence intervention program called Healing Hurt People. This program focuses on victims of interpersonal injury that were seen in the emergency department and are at risk for recurrent injury or death. The program uses trauma assessment, intensive case management and trauma treatment to address both the physical and psychological wounds of trauma. Today I will be speaking from my experience as an emergency medicine physician in the city with a high rate of violent injury. My goal in this testimony is to put forth, as clearly as possible, my belief that there is a strong link between early childhood adversity and exposure to violence, and this types of violence that we see among young people in the emergency department, most of whom are young men of color.

As you know, homicide is the leading cause of death for black men between the ages of 15 and 24. In 2009, this group suffered almost 92,000 nonfatal injuries. According to CDC data for 2007, this group suffered 2,916 homicides, or 79% of all homicides in this age group.

According to the CDC, in 2005 63,715 individuals under the age of 30 were hospitalized for assault related injuries. The medical cost of these injuries exceeded \$1.2 billion, and the work loss cost of these injuries exceeded \$4.2 billion. Yet we know that only one in 10 victims of assault who present to the emergency department are hospitalized. In 2005 903,856 persons under the age of 30 were seen in emergency departments and released for assault related injuries. The medical cost of these assaults was \$1.39 billion and the work loss cost was \$2.78 billion.

We also know that violence is a chronic recurrent problem. Sims and colleagues documented in Chicago that 44% of victims with a penetrating injury suffered a recurrent penetrating injury in the subsequent 5 years. This study also showed that the mortality rate at 5 years from all causes in this cohort was 20%, and in 70% of the deaths substance abuse was listed as a contributing cause on the death certificate.

From my perspective, and that of my colleagues, I consider this the cycle of violence. I understand that when I see a patient in the emergency department who has suffered a violent injury he/she is at risk for being injured again. While typically, the risk of re-injury is attributed to individuals behavior, we now understand that the consequences of trauma - specifically hypervigilance, re-experiencing, dissociation, and avoidance - combined with the often toxic social environments in which many of our impoverished young people live to create the conditions for reinjury. Similarly, because these young people do not feel safe, they often feel pressure to retaliate against their assailants in order to demonstrate that they are not weak and will not tolerate victimization.

The growing science of stress, allostatic load, the biological effects of posttraumatic stress disorder confirms what we have observed for years. Our approach has been to incorporate this new science into an intervention that capitalizes on the vulnerable moment of injury and hospitalization to heal the wounds of trauma and to help the victim enter a path toward recovery. While several well-designed studies have demonstrated the positive impact of hospital-based interventions on criminal justice involvement for victims of violence, relatively few of these programs have been implemented across the country. Because the initial studies utilized randomization, we now consider it unethical to randomize participants to a *no intervention arm* as we seek new approaches to incorporating trauma informed methods with the goal of demonstrating a decrease in recurrent injury. This poses a challenge for evaluation of these programs however the fact that such programs have already been demonstrated as effective continues to lift our efforts.

At this point I fully believe that such interventions are effective and are a critical component of healthcare for this vulnerable population. The greatest challenge to the success of these programs is the lack of funding support. Currently supports for the vast majority of such programs comes from limited foundation or government grants. I believe that given the cost of injury and the potential to interrupt the cycle of violence,

these services should be reimbursed by Medicaid and private insurers. Effective intervention would not only decrease medical costs but could conceivably decrease costs in the criminal justice system by decreasing retaliation and other illegal behaviors.

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. 1 Since then, other studies of retrospective chart reviews have noted similar rates.² 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 that address the unique needs of" violently injured adolescents.³ 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

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¹ Sims, D. W., B. A. Bivins, (1989). "Urban trauma: a chronic recurrent disease." J Trauma 29(7): 940-946.

² Reiner, D. S., J. A. Pastena, (1990). "Trauma recidivism." Am Surg 56(9): 556-60.

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

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

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

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

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

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. Similarly, a 2001 report from the Surgeon General identified hospital emergency departments as an important source for data about youth violence.

Each year, over 1.5 million victims are treated in hospitals nationwide for nonfatal gunshot, stabbing, and other physical assault injuries; approximately 30% are males of color. In 2009, hospital emergency departments, a key point of contact for young males of color, treated a total of 940,000 young people aged 15–34 years for nonfatal injuries sustained from assaults.⁶ A national study found 44% of those under age 24 and hospitalized for violent injuries were later readmitted due to violence and 22% became victims of homicide.⁷ Violence is the leading cause of death for young African American males between the ages of 15 and 34, and the second leading cause of death for young Latino males. By contrast, violence ranks as the fifth leading cause of death among white males in the same age group.

To compound this health disparity, young male victims of interpersonal violence, particularly African-American and Latino victims, face barriers to health and human services that undermine their future life chances, health and well-being. Consequences of violent injury too often hurt victims long after initial treatment and hospital discharge, especially young victims of color. ^{8 9} The impact on these victims can be

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⁴ Finkelhor et al., *Children's Exposure to Violence: A comprehensive national study.* 2009, Juvenile Justice Bulletin, Office of Justice Programs.

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.

⁶ http://www.cdc.gov/ViolencePrevention/youthviolence/stats at-a glance/index.html

⁷ Bonderman J. 2001. Working with victims of gun violence. OVC Bulletin, U.S. Department of Justice, Office for Victims of Crime.

http://www.ncjrs.gov/ovc_archives/bulletins/gun_7_2001/welcome.html

⁸ Cunningham R, Knox L, Fein J, et al. 2008. Before and after the trauma bay: the prevention of violent injury in youth. *Annals of Emergency Medicine*. 53(4):490-500

profound, affecting mental and physical health and altering their interactions with others. In addition, as experts in the field explain, "[t]he health and human service systems that serve boys, young men and their families are fragmented, do not share common knowledge or language, compete for limited resources, and are under stress." When these victims interact with staff in these stressed systems, trauma-related issues can negatively affect service access and success. ¹⁰

In 1998, the U.S. Department of Justice's Office for Victims of Crime (OVC), in response to an American Academy of Pediatrics' report on youth violence, "recommended that hospital-based counseling and prevention programs be established in medical facilities that provide services to gang violence victims." The OVC also reported that health care and criminal justice systems respond less sympathetically to violently injured youth, particularly African-American male victims of gun violence, than to other crime victims. They noted that, "[w]hatever the reason for the disparate treatment of these victims, we must not ignore them. Assumptions about the blameworthiness of young African-Americans and Hispanics shortchange a large segment of the population and perpetuate racial stereotyping." 12

Hospital-based programs have started to change the traditional approach to working with this vulnerable population. Today, the National Network of Hospital-based Violence Intervention Programs (NNHVIP), founded in 2009, connects 16 member programs from Boston, Chicago, Oakland, Philadelphia, and other cities across the country to continue improving services. ¹³ NNHVIP supports the notion that there is a

 $^{^{9}}$ Bonderman J. 2001. Working with victims of gun violence. OVC Bulletin, U.S. Department of Justice, Office for Victims of Crime.

http://www.ncjrs.gov/ovc_archives/bulletins/gun_7_2001/welcome.html

¹⁰ Rich, Corbin, Bloom et al. (2009) Healing the hurt: Trauma-informed approaches to the health of boys and young men of color. The Center for Nonviolence and Social Justice, Drexel University. http://www.calendow.org/uploadedFiles/Publications/BMOC/Drexel%20-%20Healing%20the%20Hurt%20-%20Full%20Report.pdf

¹¹ New Directions From the Field: Victims' Rights and Services for the 21st Century at the Office for Victims of Crime site.

 $^{^{12}}$ Bonderman J. 2001. Working with victims of gun violence. OVC Bulletin, U.S. Department of Justice, Office for Victims of Crime.

http://www.ncjrs.gov/ovc archives/bulletins/gun 7 2001/welcome.html

¹³ NNHVIP 16 member programs are in these cities: Antioch/Richmond, CA, Baltimore, MD, Boston, MA, Camden, NJ, Chicago, IL, Cincinnati, OH, Davis, CA, Indianapolis, IN, Las Vegas, NV, Milwaukee,

demonstrated need to improve access to services for this population; to connect with violently injured youth at the hospital bedside (*the teachable moment*), stick with them after discharge, and ensure that traditional service providers (hospitals, schools, mental health, job training, etc.) as well as the criminal and juvenile justice systems can fully help them heal.

NNHVIP History

Fifteen years ago, at the height of the cocaine wars when this cycle was nearing a frenzy, medical staff and community representatives in Oakland, California (Youth ALIVE!'s Caught in the Crossfire) and in Milwaukee, Wisconsin (Project Ujima) launched intervention programs starting at the hospital bedside to interrupt this cycle of violence. They recognized that the period of time when a wounded young person is lying alone and scared in a hospital bed provides a window of opportunity to start the work to prevent retaliation and reinjury. Subsequently, other deeply affected medical and community workers in several other cities established hospital-based intervention programs to intervene in this "cycle of violence."

In 2008, Youth ALIVE! (the agency which established the first of these programs), applied for and received funding to bring nine hospital-based intervention programs from around the country together to discuss common issues and to establish common ground. At this first symposium, the group unanimously agreed to form the National Network of Hospital-Based Violence Intervention Programs (NNHVIP). By the end of the symposium, participants identified and agreed to serve on working groups — Steering Committee; Research; Policy; and Workforce Development - of the NNHVIP and find the resources needed to support the work of those groups. Since then NNHVIP has grown to 16 programs across the country including Boston, San Francisco, Baltimore, Chicago, Philadelphia, Camden, Las Vegas, Davis, Richmond, Savannah, Milwaukee, Indianapolis, Antioch, and Sacramento.

WI, Oakland, CA, Philadelphia, PA, Richmond, VA, Sacramento, CA, San Francisco, CA, and Savannah, GA.

As the Network expanded the decision was made to relocate the NNHVIP headquarters from Youth Alive! to a setting where a more diverse range of shared resources would be able to sustain the work. The NNHVIP Steering Committee solicited proposals from its member organizations and ultimately selected to relocate the leadership to Philadelphia, under a shared collaboration between the Center for Nonviolence and Social Justice (CNSJ) at Drexel University, the Philadelphia Collaborative Violence Prevention Center (PCVPC) at Children's Hospital of Philadelphia (CHOP) and the Firearm Injury Center at the University of Pennsylvania (FICAP). In transferring the leadership of the NNHVIP to this Philadelphia collaborative, the Steering Committee recognized that these three organizations have a proven track record of collaboration in youth violence prevention science, practice, and policy. Each brings independent and complementary strengths to this collaborative.

Existing programs that are part of the NNHVIP have developed a range of best practice interventions to engage victims of interpersonal violence in an array of health, human service, education/ employment training services. Frontline field staff of these hospital-based programs help young victims of violence access, engage in, and navigate health and human services as well as criminal/juvenile justice systems before and after they leave the hospital. Such programs have been found effective in linking violence survivors with community-based services and reducing re-injury and criminal activity.¹⁴

While each of these programs produces positive outcomes,¹⁵ they have identified barriers both external to and within their own programs to providing more positive outcomes, such as "vicarious trauma" experienced by staff members. Within hospital-based violence intervention programs, lack of knowledge about trauma and

¹⁴ Liebschultz H et a.. 2010. A chasm between injury and care: Experiences of black male victims of violence. Journal of Trauma 69(6):1372.

¹⁵ Becker MG et al (2004) "Caught in the Crossfire: the Effects of a Peer-based Intervention Program for Violently Injured Youth." *Journal of Adolescent Health:* 2004; 34:177-183.

¹⁶Cooper, 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.

¹⁷Shibru, Daniel MD, MPH, Zahnd, Elaine PhD, Becker, Marla MPH, Bekaert, Nic MSW, Calhoun, Deane MA, Victorino, Gregory P MD, *Benefits of a Hospital-Based Peer Intervention Program for Violently Injured Youth,* Journal of the American College of Surgeons 2007;205: 684–689.

trauma informed skills too often impedes the ability of staff members, particularly those who have experienced severe trauma themselves, to serve their clients. Within the traditional service providers and justice systems with which these staff members attempt to engage clients, this lack of understanding about trauma further impedes success. Too many providers see young male victims of color this way: "He didn't just get shot; he got himself shot." Hospital-based violence intervention staff members repeatedly encounter barriers that undermine their clients' access to and engagement in services. The circumstances, stigma, and reactions to injury for these victims of violence exacerbate existing cultural and racial disparities in access to traditional services. Such repeated "failures" affect program staff and injured youth. In a larger context, these "failures" also increase health care costs and impact the mental, physical and economic well-being of fragile communities in which widespread interpersonal violence persists.

The challenges young male victims of color face in accessing services and in successfully connecting with services that work for them are in part influenced by their life experiences, including exposure to significant trauma. Dr. John Rich and I, NNHVIP leaders and authors of *Healing the Hurt: Trauma-Informed Approaches to the Health of Boys and Young Men of Color*, ¹⁸ describe these life experiences as complex and powerful, and suggest that attempts to address the health of boys and men of color must consider the impact of these social determinants. When trauma's impact is poorly understood, interactions between providers and victims often result in a spiral of dysfunctional interactions that raise barriers to successful use of services. In their report, Corbin and Rich explained it this way: *As a result [of the effect of trauma on individuals and institutions], parallel processes occur among traumatized clients, stressed staff, frustrated administrators and pressured organizations. Service delivery*

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¹⁸ Rich, J. (2009) *Wrong Place, Wrong Time: Trauma and Violence in the Lives of Young Black Men*, Johns Hopkins University Press.

¹⁹ Liebschultz 2010.

²⁰ Rich, J, et al (2009). *Healing the Hurt: Trauma-Informed Approaches to the Health of Boys and Youth Men of Color*. Center for Nonviolence and Social Justice at Drexel University Schools of Public Health and Medicine, Philadelphia. (p. 14)

can often mimic the traumatic experiences that have proven so harmful to the clients served.¹⁹

Again I fully believe that such interventions are effective and are a critical component of healthcare for this vulnerable population. The greatest challenge to the success of these programs is the lack of funding support. I also fully believe that healing is possible by addressing the trauma that our young men and boys have encountered.

²¹Rich, J, et al (2009). *Healing the Hurt: Trauma-Informed Approaches to the Health of Boys and Youth Men of Color*. Center for Nonviolence and Social Justice at Drexel University Schools of Public Health and Medicine, Philadelphia. (p. 21)