ESSENTIAL HOSPITALS: COMMUNITY ANCHORS IN VIOLENCE PREVENTION

JENNIFER STEPHENS, MPH
ELENA THORPE
JANELLE SCHRAG, MPH
KALPANA RAMIAH, DRPH, MSC

KEY FINDINGS
• Violence is a social determinant of health that affects health risks and outcomes for individuals, communities, and the hospitals who serve them.

• Interpersonal violence disproportionally affects vulnerable populations, youth, and those in metropolitan areas.

• Essential hospitals use population health approaches to combat interpersonal violence in the communities they serve.

INTRODUCTION
Essential hospitals and health systems—those that treat a large proportion of vulnerable patients—have a vested interest in and are uniquely positioned to drive population health improvements, particularly related to interpersonal violence. Interpersonal violence is considered a social determinant of health because it results in injury, chronic health conditions, and adverse health outcomes for individuals, communities, and the hospitals that serve them.1,2,3,4,5 Several members of America’s Essential Hospitals have worked to reduce interpersonal violence as part of community-integrated health care. For example, essential hospitals teach community members to treat wounds in emergency situations, provide structured counseling in the emergency department (ED) to prevent further violence or retaliation, and develop partnerships to refer patients to community resources following interpersonal violence incidents.

UNDERSTANDING INTERPERSONAL VIOLENCE
Interpersonal violence includes a broad scope of acts and can be defined as “the intentional use of physical force or power against another person that results in injury, death, or psychological harm.”6,7 These acts include, but are not limited to, the use of a firearm, physical assault, suicide, rape, abuse, and homicide.8 Interpersonal violence can lead to costly physical and mental consequences, including death. In 2015, homicide—defined as interpersonal violence resulting in death—was one of the five leading causes of death for age groups between 1 to 44.9,10 Across all age groups, interpersonal violence resulted in more than 15,000 homicides that year.11,12 But death is not the only outcome of interpersonal violence. In 2015, nearly 2.7 million people in the United States ages 12 and older (almost 1 percent of the population) experienced at least one violent victimization, such as rape or sexual assault, robbery, aggravated assault, or simple assault.13 The Centers for Disease Control and Prevention reported nearly 1.6 million nonfatal injuries that year related to assault.14

Cost of Interpersonal Violence
Interpersonal violence has both direct and indirect costs to hospitals, payers, and communities. Direct costs include medical treatment (physical and mental health), legal services, law enforcement, incarceration, foster care, and security.15 Homicides resulted in $177.9 million in medical costs in 2010.16 Hospitals reported 1.4 million ED visits related to assault in 2013, with an average cost of $20,989 to $23,497 per admission—more than double that of an average hospital stay.17,18,19 Medicaid and Medicare beneficiaries and uninsured patients account for 65 to 80 percent of assault hospitalizations related to gun violence.16,19 For essential hospitals with high rates of uninsured, Medicaid, and Medicare patients, the costs of interpersonal violence can be particularly high.20 Indirect costs related to interpersonal violence include losses to earnings,
time, investments in human capital and tourism, and productivity, as well as life insurance and psychological costs. 

Disparities
The impact of violence differs across various demographics. Metropolitan and urban areas experience higher rates of violent crime and crime victimization than rural areas.13,26, 27 Additionally, individuals ages 15 to 34 and males experience higher rates of murder, nonfatal assault injuries, and victimization from intentional injuries.14,17 Further, disadvantaged populations are disproportionately affected by interpersonal violence:

• non-Hispanic blacks, non-Hispanic American Indian/Alaska Natives, and Hispanics are 7.84, 3.74, and 1.84 times more likely, respectively, than non-Hispanic whites to be murdered;40 and

• households at or below the poverty line between 2008 and 2012 reported violent crime at a rate more than twice that of higher-income households, or those making more than four times the federal poverty level (FPL).23,24

Essential hospitals and health systems serve populations that experience higher rates of interpersonal violence and thus are uniquely positioned to drive population health improvements, including efforts to decrease such violence. Ninety-five percent of America’s Essential Hospitals members are in urban areas, and racial and ethnic minorities accounted for nearly half of essential hospitals’ inpatient discharges in 2015.28 Also, more than 4.6 million families in essential hospitals’ communities live below the poverty line.28 Essential hospitals must consider social determinants of health to effectively serve these populations.

Violence as a Social Determinant of Health
Violence is a social determinant of health that affects individual and community wellness and can result in injury, chronic health conditions, and adverse health outcomes requiring treatment by hospitals.29 Adverse childhood experiences were associated with negative consequences and health outcomes. For example, children exposed to interpersonal violence might be more likely to experience or perpetrate violence and engage in unhealthy risk-taking behaviors, including unprotected sex, use of alcohol and drugs, smoking, or driving too fast.29,31 In turn, such behaviors increase these individuals’ risk of sexually transmitted infection, alcoholism, drug abuse, and high health care utilization as adults.29,32,33,34

Violence also can have longstanding effects on a community’s health,
including reducing social support and access to community resource and negatively affecting the perception of the neighborhood among residents and community members.\textsuperscript{3,5} Fourteen violence prevention objectives are included in federal Healthy People 2020 initiative to “increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.”\textsuperscript{2} Violence can compound other social determinants—including living conditions, poverty, employment, culture, and education—and often perpetuates a cycle of negative economic and health outcomes for affected communities.\textsuperscript{3,6} Thus, a community-integrated, population health–based approach is necessary to mitigate the effects of interpersonal violence on individuals and communities.

**ESSENTIAL HOSPITALS’ STRATEGIES FOR IMPROVING CARE**

Essential hospitals maintain a mission to care for disadvantaged populations and mitigate social determinants of health, and many act as anchors in their communities, with deep economic and social ties to the residents. As such, they are leading the charge in combating interpersonal violence in their communities.

Essential hospitals are using a population health approach to address violence as an individual and community social determinant of health. This approach allows providers to respond to the broader social needs of their communities, which can improve clinical and nonclinical outcomes and reduce unnecessary and preventable hospital visits.\textsuperscript{37} Essential Hospitals Institute, the research arm of America’s Essential Hospitals, in 2016 developed a population health road map to guide hospitals and health systems in implementing population health activities in their institutions and communities. The *Population Health at Essential Hospitals: A Road Map to Community-Integrated Health Care* provides operational objectives and strategies for organizations that are just beginning work on population health, advancing their population health initiatives, or tackling a specific social determinant of health, such as interpersonal violence.

Essential hospitals historically have employed a population health approach to target interpersonal violence. In fact, in a 2016 survey of 108 health systems, representing 262 hospitals that fill a safety-net role, interpersonal violence was one of the top three population

---

**HOMICIDE INJURY DEATHS AND RATES PER 100,000 BY RACE/ETHNICITY—2015\textsuperscript{14}**

* Rates are age-adjusted using data from 2015

Source: Centers for Disease Control and Prevention National Center for Injury Prevention and Control

**RATE OF VIOLENT VICTIMIZATION, BY HOUSEHOLD POVERTY LEVEL PER 100,000 PERSONS AGE 12 OR OLDER—2008-2012\textsuperscript{21}**

* Rate per 100,000 persons age 12 or older

MEMBER EXAMPLES

Several members of America’s Essential Hospitals have developed programs to prevent and reduce interpersonal violence. These programs largely focus on injuries related to interpersonal violence in general, but some specifically target gun violence. The programs are aimed at communities with high rates of violence and a subset of youth ages 10 to 30. Individual interventions identify patients who might benefit from such programs and link them to brief interventions in the hospital, as well as community resources. Working with community partners, these programs also might provide broader services to promote nonviolent behavior outside the hospital’s walls. Funding for these programs comes from a variety of sources, including operational support, local and federal government agencies, and private foundations. Where available, program evaluation primarily measures and highlights changes in patient and community beliefs. Additional outcomes could include lower rates of recidivism among program participants and reduced overall community violence.

Contra Costa Health Services: Beyond Violence

In 2010, Contra Costa Health Services collaborated with John Muir Medical Center’s health trauma department and community organizations to develop the Beyond Violence program, modeled after Highland Hospital’s Caught in the Crossfire program. Through the Beyond Violence program, trauma patients ages 14–25 who have experienced violence are referred to an intervention specialist when they are treated at the hospital. These specialists are community members who understand the struggles these young people face. They work with the patient and their family to help them cope with the injury and provide community resources to promote behavior change and healthy living. A study conducted in 2014 found 100 percent of the targeted patients consented to services and 82 percent completed the program or continued their participation. Further, 87 percent of the participants avoided reinjury, 96 percent avoided re-arrest, and 100 percent remained alive.

TABLE 2

ADDITIONAL EXAMPLES OF INTERPERSONAL VIOLENCE PROGRAMS AT ESSENTIAL HOSPITALS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violence Intervention Advocacy Program</td>
<td>Boston Medical Center</td>
</tr>
<tr>
<td>At Risk Intervention and Mentoring program</td>
<td>Denver Health</td>
</tr>
<tr>
<td>Prescription for Hope</td>
<td>Wishard Health Services (Eskenazi Health)</td>
</tr>
<tr>
<td>Caught in the Crossfire</td>
<td>Highland Hospital</td>
</tr>
<tr>
<td>Kings Against Violence Initiative</td>
<td>NYC Health + Hospitals</td>
</tr>
<tr>
<td>Wraparound Project</td>
<td>San Francisco General Hospital</td>
</tr>
</tbody>
</table>
Henry Ford Hospital: Violence and Injury Prevention
Detroit’s Henry Ford Hospital in 2007 launched a program aimed at reducing recidivism rates among youth in the community. The Violence and Injury Prevention program offers a hospital-based violence prevention workshop for youth ages 11 to 17 who have experienced violent injuries. Participants tour the level I trauma center to increase awareness of violence-related injuries, empower positive conflict resolution, and provide exposure to medical career opportunities. At the end of the program, 84.2 percent of participants who responded to an anonymous poll reported greater awareness of the consequences of violence.46

Hurley Medical Center: Project Synch
At Hurley Medical Center in Flint, Michigan, a program funded in part by the Centers for Disease Control and Prevention provides a 30-minute counseling session to youth ages 14 to 20 who enter the emergency department (ED) seeking medical or injury-related care. This brief intervention with a therapist focuses on anger management, conflict resolution, and steps to change behavior. Researchers from the University of Michigan public health and medical schools conducted a cohort study of 409 youth. Two months after their ED visit, program participants reported a 10 percent lower rate of aggressive, violent behaviors and an 8 percent increase in ability to avoid fighting behaviors, compared with a cohort that only received a brochure.45

MetroHealth Medical Center: Violence Interrupters
MetroHealth Medical Center in November 2016 began working with the Cleveland Peacemakers Alliance to curb retaliation of violence for assault victims ages 15 to 25 seeking care in the emergency department (ED). Based on the CureViolence model, the medical center’s pilot program—funded for one year by the United Way—uses a mediator or “interrupter” to offer resources to patients in the ED and mediate conflicts to reduce community violence. As former criminals and gang members, the mediators have “street credibility” and keen awareness of the issues and tensions assault victims must overcome to break the cycle of violence. A case manager also is available to refer affected patients to local social services.

Natividad Medical Center: CHOICE
Natividad Medical Center’s CHOICE program provides services to victims of intentional violence ages 13 to 30. A CHOICE intervention specialist will visit the patient at their bedside and provide counseling, advocacy, and support. After the patient is released from the hospital, they have the option of continuing to work with a case manager for six to 12 months. The case manager functions as a mentor, connects the patient with community resources, and encourages patients to make positive changes in their life. CHOICE works to prevent retaliatory violence and reinjury using the patient’s experience as a “teachable moment” that encourages nonviolent behaviors. CHOICE is primarily funded by donations and grants.
Regional One Health: Rx for Change
Regional One Health in 2013 developed Rx for Change to end the cycle of violence and rehabilitate injured youth. When violence victims ages 14 to 24 enter the hospital after surviving intentional injuries, they are approached by a violence intervention liaison, who provides emotional support and an opportunity to share their story. After a brief counseling session, the liaison offers to enroll patients in the no-cost program. The liaison also conducts a home visit after the patient’s release from the hospital. The program collaborates with 25 community partners to provide patients jobs, training, education, and other opportunities. The liaison will work with the patient six to 12 months, depending on the severity of the injury and the participant’s experiences. Through mid-2017, a single liaison enrolled 180 patients in Rx for Change. Just 4 percent of program participants were readmitted to the hospital—much lower than the average 44 percent readmission rate following violent crime. Rx for Change initially was funded by grants from Regional One Health, BlueCross BlueShield of Tennessee Foundation, and Bloomberg Philanthropies; it eventually became part of the hospital’s operational budget.

Santa Clara Valley Medical Center: Trauma to Triumph Program
Santa Clara Valley Medical Center collaborates with City of San Jose Parks, Recreation & Neighborhood Services for their Trauma to Triumph Program. The program provides violence intervention services to patients who have received medical treatment for their injuries at the hospital. Participants are trauma patients ages 13 to 30 who are approached by a peer intervention specialist at their bedside within 48 hours of entering the hospital. The intervention specialist coordinates services for the patient and family. After release from the hospital, patients continue to work with peer interventionists and faith-based volunteers through the program for continued support and positive role modeling for up to one year.

University of Illinois Hospital & Health Sciences System: CureViolence
The University of Illinois’ CureViolence initiative uses an evidence-based approach to reduce violence. First launched in West Garfield Park in 2000, the program since has expanded to sites across the United States. The program helped reduce shootings and killings in Chicago by 32 percent, per a report published in 2012. Another study of targeted neighborhoods in Baltimore showed 34 to 56 percent reductions in fatal shootings between 2009 and 2012. The CureViolence program relies on five methods: outreach and conflict mediation, community mobilization, public education, faith leader involvement, and law enforcement participation. Partnering with faith leaders and law enforcement enhances the community-integrated focus and supports community connections to preach nonviolence. CureViolence emphasizes the importance of direct services to clients to change individual behavior, as well as group and community norms. Direct services engage community partners to offer counseling, crime victim compensation, employment, housing, education assistance, and case management services. CureViolence works in the community by employing “interrupters,” staff members whose primary role is to mediate conflicts and attempt to prevent violence within the community. Violence interrupters are trusted and known within the community, and they often are former gang members. The Robert Wood Johnson Foundation in 2013 pledged $7.2 million over three years to fund CureViolence.
Temple University Health Systems: Four-Pronged Approach

The Temple University Health System uses a four-pronged approach to violence prevention and survival and improve population health and health outcomes in North Philadelphia. The Cradle to the Grave and Safe Bet programs work toward violence prevention while the Turning Point and Fighting Chance programs improve survival.

Cradle to Grave Program

First implemented in 2006, the Cradle to Grave Program seeks to influence attitudes and provide alternatives to violence. Nearly half of gun violence victims in Philadelphia are younger than 25. This hospital-based violence prevention program identifies and selects at-risk youth through schools and juvenile justice centers to participate in a two-hour mixed media educational workshop on the realities and repercussions of gun violence. Participants visit various areas of the hospital, hear stories from young victims of violence, and listen to surviving family members speak about deceased victims. The program had more than 1,300 participants and is evaluated using pre- and post-program assessments using the Attitude Toward Gun and Violence Questionnaire (AGVQ). The evaluation showed that participants’ beliefs about the severity and repercussions of violence changed after taking part in the program.47

Safe Bet

The Safe Bet program was developed in 2016 to reduce the number of children unintentionally harmed by firearms. Temple partnered with local transit police and community organizations to distribute free gun locks to anyone interested—no questions asked—at transit stops and community events. Approximately 2,000 gun locks were distributed as of 2016, in partnership with transit police, the City of Philadelphia, and various community organizations.

Turning Point

The Turning Point program began in 2012 to reduce rates of retaliatory violence and offer violence victims resources to make positive changes in their lives. This intervention often begins with the patients watching a video of their own resuscitation or visiting a gun violence survivor. The program then connects participants with a case manager to direct them to therapy, drug and alcohol support, or vocational training. Results of pre- post-AGVQ assessments published in 2016 demonstrated a “50 percent reduction in aggressive response to shame, a 29 percent reduction in comfort with aggression, and a 19 percent reduction in overall proclivity toward violence.”48

Fighting Chance

The Fighting Chance program started in 2016 to teach community members to administer first aid to gunshot victims. Volunteer hospital staff from the emergency and trauma departments travel to community organizations—such as churches, schools, and recreation centers—and train Philadelphia residents to act as first responders after an incident of gun violence. The program aims to increase gunshot survival rates using community members to treat patients until emergency medical providers arrive. Roughly 25 participants attended each training session in 2016.
**VCU Health: Bridging the Gap**

VCU Health in 2007 initiated Bridging the Gap to reduce rates of reinjury and retaliatory violence. Patients ages 10 to 24 admitted with intentional injuries—such as gunshots, stab wounds, and assaults—are visited by a counselor to discuss their experience and help them move forward. Counselors help participants and their families coordinate follow-up care after discharge. Participants also are provided a case manager who connects them with housing assistance, access to educational and vocational programs, mental health services, and other community resources. The program is housed under VCU’s Injury and Violence Prevention Program, a nonprofit organization that is a part of VCU Medical Center’s division of trauma, critical care, and emergency surgery.

**Ventura County Medical Center: Emergency Entry to Exit**

Ventura County Medical Center is a member of the Oxnard ALLIANCE for Community Strength, a coalition of organizations that seek to decrease youth violence and create a safer community. The coalition created the Emergency Entry to Exit (EEE) program, a tiered approach to decreasing youth violence. Participants are identified in one of three ways: victims of violence ages 15 to 24 with related injuries who enter the Ventura County Medical Center are referred to the program; community partners, such as health agencies, police, and the justice department, refer individuals; and community members with gang experience and bilingual case managers identify participants through community outreach efforts. Participants are assigned to an EEE team that includes a social worker, mental health clinician, and case manager. The team engages program participants in trauma-focused therapy, healing circles, moral recognition therapy, and other activities. This program is funded by the California Victim Compensation Board.
Notes


22. Centers for Disease Control and Prevention Web-based Injury Statistics Query and Reporting System. Assault All Injury Cases Nonfatal Injuries and Rates per 100,000. 2015.


27. Number of Crimes per 100,000 Inhabitants. FBI. https://ucr.fbi.gov/crime-in-the-u.s/2015/


