arrow under DCFNE and the services rendered are limited to the medical forensic exam. The green arrow labeled "yes" from DCFNE to NVRDC represents a patient choosing to meet with a NVRDC representative to learn more about the services being offered thus matriculating to stage 3 of the process, learning more about the services being offered from the case managers themselves.

If the patient chooses to participate or hear more about PC they proceed to stage 3 where the FNE refers them to the NVRDC case manager who follows up with the patient referral from FNE within 24 hours. Stage 3 represents intake and assessment and commitment to the program. At stage 3, an NVRDC representative either meets the patient in the hospital the next day, circumstances permitting, or contacts the patient to schedule an appointment. If the patient decides to access PC services they must undergo an intake and assessment process by which NVRDC determines their eligibility for Crime Victim Compensation (CVC) and other program services. The green arrow extending from NVRDC to stage 4 represents an eligible patient now matriculating to stage 4 of the helping process, linkages to community based-service providers. The red arrow below NVRDC indicates the refusal or ineligibility of a patient to engage in the case management services being offered by NVRDC effectively ending their matriculation through the helping process at stage 3. Two factors may affect a survivor's decision to participate in PC. First, some survivors may be barred from drawing from the CVC fund if they are under the suspicion of law enforcement to have been participating in the offense in which they were injured. Although being barred from CVC does not preclude a survivor from receiving case management and referral services from NVRDC, according to program staff, the expectation of some financial compensation is the biggest draw of male survivors to PC. Secondly, prior criminal involvement becomes an issue for NVRDC if the person was an offender in a case for which the agency represented the victim. In this instance, NVRDC would be ethically obligated to recuse themselves out of concern of a possible conflict of interest. If the survivor completes the intake and assessment procedure and is able to move forward with the case management services, the NVRDC case manager then links the patient with community service providers as depicted in stage four of figure 1. and intensive case management begins.

Gap Analysis

Most of the male victims refusing to take part in Program CHANGE do so at stages two and 3. Reasons cited by program stakeholders for the low male participation rate include a) lack of staff who reflect the cultural disposition of the victims, b) mistrust of mainstream institutions, and c) the interference of law enforcement. Gaps "a" and "b" constitute intrinsic barriers to services and gap "c" is characterized as an extrinsic barrier. Consistent with previous research, intrinsic barriers are conceptualized as participant's perceptions and attitudes that prevent them from engaging in health promoting behaviors and extrinsic barriers are defined as interpersonal structural barriers outside the participants control that prevents them from engaging in health promoting behavior (Ravenell, Whitaker, & Johnson, 2008).

Stage 2: Intrinsic Barriers

One of the main reasons gleaned from program stakeholders surrounding the lack of male participation was that case managers approaching the men for participation in the project did not look like them. The majority of the men presenting as polyvictims in trauma units in the District of Columbia are poor, Black/African-American males, who have substance abuse and mental health problems, no health

insurance and live in neighborhoods where violence is pervasive (Buss & Abdu, 1995; Reiner, Pastena, Lindenthal, &Tischler, 1990). The majority of the PC case managers are middle-class women.

Furthermore, compounding the lack of diversity is a skepticism of mainstream institutions as well as perceived racism on the part of the patient. Historically, actions taken by those in power positions in the U.S. have been rooted in racist and discriminatory practices and have frequently led to mistrust on the part of Blacks such as the aftermath of the Tuskegee experiment where men were intentionally infected with syphilis (Cheatham, Barksdale, & Rodgers, 2005). Perceived racism and mistrust have been cited as causes for the underutilization of health services by African American men (LaVeist, Isaac, & Williams, 2009; Ravenell, Whitaker, & Johnson, 2008; Whaley, 2004; Fowler-Brown, Ashkin, Corbie-Smith, Thaker, and Pathman, 2006). In one study Black respondents reported more distrust of the medical establishment than their racial counterparts and were more likely to believe that a similar study to Tuskegee could happen again (Brandon, Isaac, & LaVeist, 2005).

Stage 3: Extrinsic Barriers

Currently, at stage two of the PC matriculation process, law enforcement officers follow the FNE into a patient's room prior to the FNE conducting the forensic exam. This can affect the development of rapport with the patient because the patient may feel as if the FNE is working with law enforcement and this may preclude the patient from wanting to share information with the FNE or engage in a productive exchange where the FNE can obtain information surrounding the injury and make a pitch about the services PC has to offer. The building of trust between the FNE/other representatives of PC and patients can be threatened if patients confuse violence intervention services with law enforcement (Karraker, Cunningham, Becker, Fein, & Knox, 2011). Furthermore, access to CVC for patients is dependent on survivor's cooperation with law enforcement. This serves as a barrier to financial compensation and somewhat of a sanction for patients who choose to not cooperate with law enforcement efforts.

Recommendations

Figure 2. incorporates suggestions for the expansion of services (purple boxes) based on the gaps identified in the former section. The suggestions/recommendations provided in this section were generated through a triangulation of the information gleaned with stakeholder interviews and a review of the academic literature. The recommendations are as follows:

[Figure 2. About here]

Not allowing law enforcement into the room with the DCFNE would increase the likelihood of program participation and rapport building by male survivors

Violently injured patients, especially those from marginalized and poor communities, are distrustful of professionals and other authority figures (Karraker, Cunningham, Becker, Fein, & Knox, 2011). Previous research has reported that Black males feel that their personal space is infringed upon by the police; that they perceive they are being racially profiled, and that police officers often use protective measures to protect each other when they engage in inappropriate conduct (Amutah, Ramos, Hammonds, &

Syndor, 2016). *Allowing the police to walk into the patient room with the FNE threatens the credibility of PC with potential program participants.* Some young men who are approached in medical settings to either participate in research or offered social services often perceive such approaches as threatening and related to law enforcement efforts to extract information (Schwartz, Hoyte, James, Conoscenti, Johnson, & Liebschutz, 2010). DCFNE and PC should work together with the DC MPD to come up with rules and expectations on how patients of violent injury should be engaged. Both PC and DC MPD play different roles and sometimes those roles can conflict. Laying out a plan of action that includes MPD suggestions would be helpful in this regard.

Legal Cooperation should not be a pre-requisite for access to Crime Victimization Compensation services.

The hinging of criminal compensation to cooperation with law enforcement makes accessing criminal compensation a particularly unattractive option to young men concerned with not violating cultural codes of conduct associated with speaking to law enforcement. The requirement that CVC is contingent upon cooperating with the police further marginalizes male patients from poor neighborhoods governed by "street codes" that frown upon those viewed as providing information to law enforcement (Anderson, 1994). *It is recommended that the acceptance of services not hinge on cooperating with law enforcement investigations.* Victims of sexual assault are not required to report to law enforcement. If they participate in the forensic assault sexual exam they get access to crime compensation without having to talk to the police. The same courtesy should be extended to male victims of violent injury to boost participation in Project CHANGE.

Cultural Competence should extend to "street" attitudes and not be limited to gender or race.

At the bottom of figure 2. Cultural competence extends across the bottom of the figure suggesting that it should be infused throughout the Project CHANGE model. At this juncture, considerable energy should be focused on increasing the number of men who accept and receive even a modicum of services. Any attempt at making patients more comfortable and feeling valued and validated may endear them to the program. Because the vast majority of the patients are young, Black men of low socio-economic status, one may view cultural competence from a gender and race lens and conclude that a Black male may meet the condition of cultural competency for this demographic. However, being black and/or male does not ensure a fluency and comfortability with another Black male. Just because two individuals may share demographic features that doesn't mean that the cultural barrier curtain between them just drops to permit a free flowing exchange of information.

It is recommended for the purposes of Project CHANGE-MS (PC MS) that the term cultural competence which usually assumes matching on race/ethnicity or gender be expanded to include competence in the areas of masculinity ideologies, code of the street, and dealing with members of marginalized groups. In other words, those who work with the male survivors must be prepared to work at the intersection of gender, race, and class to successfully communicate with these men. With regard to gender, research has shown that young men are more likely to engage in high risk behaviors leading to higher rates of risk-taking behavior mortality and morbidity in comparison to their female counterparts (Rich, 2001; Courtenay, 2000). Since DCFNE began responding to trauma calls, over 90% of the trauma cases have been men.

The prevalence and unwillingness of men to engage in help-seeking behaviors in contrast to women has prompted researchers to invoke gender role socialization paradigms to understand men's help-seeking behaviors (Addis & Mahalik, 2003). In other words, launching from the assumption that men and women learn how to perform gender through messages they receive from society (Levant & Pollack, 1995; Pleck, 1981), men's help-seeking behavior and their responses to efforts of help-seeking by others on their behalf is tempered by the degree they internalize gendered societal messages. For example, seeking help involves engaging in tasks such as relying on others and admitting a need for help that conflicts with messages men receive about the importance of self-reliance, physical toughness, and emotional control (Addis & Mahalik, 2003). A number of studies have found that adherence to masculine ideologies results in more negative attitudes toward seeking professional help.

Another cultural orientation or belief system that may influence the attitudes of Black men toward help-seeking is a term coined the "Code of the Street." Anderson (1994) argues that "the street culture has evolved what may be called a code of the streets, which amounts to a set of informal rules governing interpersonal behavior, including violence. The rules prescribe both a proper comportment and a proper way to respond if challenged. They regulate the use of violence and so allow those who are inclined to aggression to precipitate violent encounters in an approved way. The rules have been established and are enforced mainly by the street-oriented and is viewed as a cultural adaptation to a profound lack of faith in the police and the judicial system (Oliver, 2006). This alternative cultural system also frowns upon those who cooperate with law enforcement and it has also been suggested that adherence to this "code" increases the likelihood for victimization (Stewart & Simons, 2006).

Both the "streets" and traditional masculinity ideologies serve as barriers to help-seeking behavior among Black men who have experienced violent injury. *Skill acquisition and training for PC personnel engaging directly with violently injured men should take these concepts under consideration.*

Additional Suggestions

Follow-up with service providers to make sure they are appropriate for the clients being referred

While it is important to ensure cultural competence for patient buy-in at the front end of the program, it is also important to secure culturally competent social service providers on the back end to ensure program retention. This means, identifying those practitioners and service providers who have the most success with this population or those practitioners and agencies who are rated favorably by former patients. Also consider whether an agency and its staff will be able to communicate clearly and meaningfully with the patient and family caregiver in a language they are comfortable with and in a culturally sensitive manner.

Recruit female partners and family members who may have experienced injury or health problems

A number of studies have found that Black males were more likely to seek care if it was suggested by a female family member because the men believed them to be trustworthy and concerned about their well-being (Plowden & Young, 2003; Griffith, Allen, & Gunter, 2010). Additionally, if Black males have friends that they look up to that engage in help-seeking behaviors, than they are more likely to do the same (Cheatham, Barksdale, & Rodgers, 2007).

NVRDC advocates should meet the patient with the FNE to determine if approaching patients for services during the "Golden Hour" will actually increase the number of male victims who access services.

The "Golden Hour," is the widely accepted theory that trauma patients have better outcomes if they are provided definitive care within 60 minutes of the occurrence of their injuries (Lerner & Moscati, 2001). This belief justifies many of the current practices in trauma systems which assume that time is a critical factor in the management of physically injured patients. Advocates of Hospital Based Violence Intervention Programs (HBVIPs) have extended this concept to psychological wounds incurred after experiencing a violent incident. Healing Hurt People, an HBVIP in Philadelphia directed by Dr. Ted Corbin suggests that approaching patients shortly after their injury took place increases the likelihood that they will accept services. Corbin argues that three crucial areas are neglected once the physical wounds of a victim are stabilized and neglect of these areas may likely lead to re-injury: 1) Someone probably still wants to do the injured person harm, 2) The injured person might be planning to retaliate against the assailant, and 3) The psychological trauma of being the target of attempted murder might contribute to behaviors that increase risk of re-injury and retaliation. Currently, the NVRDC advocate does not meet the patient on-site with DCFNE. The FNE presents Project CHANGE information to the patient and solicits interest. If the patient is interested, the referral is forwarded to NVRDC who then contacts the patient within 24 hours. Attempting to offer services within 1-3 hours of arrival at a trauma unit during the "golden hour" does not have empirical backing (Newgard, et al., 2010).

Project Change should consider offering housing services through a community service provider

Domestic violence is a leading cause of homelessness for women and their children in the U.S. and a lack of affordable housing is regularly reported by survivors as a primary barrier to escaping abuse. As a result, housing programs serve as a critical resource to women fleeing violence. The same service should be extended to the male survivors of PC who may experience the same fear of returning to the neighborhood where they have been victimized. In a study that examined the relationship between residential mobility and violence, Haynie and colleagues (2005) found that adolescents who experienced higher rates of residential mobility (residential mobility is measured by a dummy variable distinguishing adolescents who, as of the wave 1 interview, resided at their current address for fewer than two years from those who have lived there for two or more years) reported significantly higher mean levels of involvement in violence, higher levels of depression, and more experiences of victimization than their non-mobile counterparts. In another study (Richardson, St. Vil, Sharpe, Wagner, & Cooper, 2016) examining predictors of trauma recidivism, 55% of trauma recidivists were more likely to report living at their current residence for less than 1 year compared to 71% of non-recidivists. In a more recent study, that surveyed approximately 500 individuals experiencing homelessness in 5 cities across the U.S., it was found that nearly one-half of the sample reported experiencing violence and that prolonged duration of homelessness and being older increased the risk of experiencing a violent attack among men (Meinbresse, Brinkley-Rubinstein, Grassette, Benson, Hall, Hamilton, Malott, & Jenkins, 2014).

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Literature Review

Three bodies of literature were reviewed to inform this gap analysis: trauma recidivism, help-seeking behaviors, and evaluations of hospital based violence intervention programs.

Trauma Recidivism

It has been suggested by medical researchers over twenty years ago that it is inaccurate to consider trauma a single life-time event and that it is a recurrent problem for many individuals (Weisbeski-Sims, Bivens, Obeid, Horst, Sorensen, & Fath, 1989; Goins, Thompson, & Simpkins, 1992). Repeat violence-related trauma or recidivism constitutes between ten to 45% of all trauma admissions due to violence (Ford 2007; Goins, Thompson, & Simpkins, 1992). Up to forty-five percent of people who have had a penetrating injury, gunshot, or stab wound will have a similar injury within five years (Rich, 2009). Trauma recidivists are likely to be criminal recidivists, with extensive histories of criminal justice involvement (Claassen, Larkin, Hodges, & Field, 2007).

The state of the trauma recidivism literature is largely descriptive. Most studies seek to identify correlates or predictors of trauma recidivism. Methodologically these studies either disaggregate patients presenting to an emergency room by those who have been victimized and treated once versus those who have been victimized and treated for violent injury multiple times or retrospective case reviews conducted within a limited amount of years at a specific medical institution. Variables of interest in the trauma recidivism literature tend to be more of a medical nature. For example, a review of these studies found a significant number of the study designs including variables such as mean age of first hospital admission, mechanisms of injury, blood alcohol content, injury severity score, operative intervention, mean length of hospital stay, morbidity, mortality, and interval between hospitalization.

In general, contributors to repeat victimization include having been threatened with a knife or gun in the past, seeing someone else become a victim of violence, living in poverty, having a record of psychiatric problems, not having insurance (Buss & Abdu, 1995), being black, male, a median age of 31, unemployed, an annual income of less than $10,000, current drug use, past or present drug dealing, and a positive test for psychoactive substances on admission to the hospital (Cooper, Eslinger, Nash, Al Zawahri, & Stolley, 2000; Litaker, 1996), having less than 12 years of education, and a history of past arrests (Keough, Lanuza, Jennrich, Gulanick, & Holm, 2001; Claassen, Larkin, Hodges, & Field, 2005). Unequivocally, Black males are disproportionately represented among trauma recidivists and those experiencing a first time violent injury. A more recent study added the variables, having previously been in a fight or using a weapon in the past year and perceiving disrespect as a precursor to violence (Richardson, et al., 2016).

Overall, the trauma recidivism literature is still in its infancy. There is a need for the research in this area to go beyond descriptive analysis to identifying more causal factors.

Help-Seeking Behaviors/Barriers to Care among Men

A growing research body suggests that men are less likely than women to seek help from professional counselors for mental health problems and stressful life events and other health conditions (Addis & Mahalik, 2003; Courtenay, 2000). This body of literature seeks to identify variables that encourage help-seeking behaviors among men in general. This wide body of literature tends to identify barriers to help-

seeking for a wide range of physical, psychological, and cognitive outcomes ranging from depression (Moller-Leimkuhler, 2002) to intimate partner violence (Coker, Derrick, Lumpkin, Aldrich, & Oldendick, 2000) to prostate cancer (Echlin & Rees, 2002). Just as wide are the number of methodologies used to conduct these studies. A recent systematic review concluded that there is little evidence supporting effective interventions to tackle male reluctance to seek help (Galdas, Cheater, & Marshall, 2005).

There is a body of literature that examines the help-seeking behaviors of black men specifically. Black men in particular have low health care utilization rates, low rates of routine screenings, and delay seeking medical care until symptoms arise or begin to worsen (Griffith, Allen, & Gunter, 2010). Many of the barriers for men's help-seeking in general overlap with the barriers specific to Black men. The common theme for research that focuses on Black men specifically is the impact of perceived racism and institutional mistrust. Methodologically, most of the studies are qualitative taking the form of focus groups or semi-structured interviews and the majority of the studies have been conducted with men in the mid to late thirties. Overall, more research needs to be conducted that incorporates larger samples with younger men who fit the demographic of PC-MS.

Hospital Based Violence Intervention Programs

Hospital Based Violence Intervention Programs (HBVIP) have filled an enormous gap with regard to service provision within hospitals for victims of violence and the prevention of future victimization. The first program emerged in Oakland, California in 2009 and since then the National Network of Hospital Based Violence Intervention programs (NNHBVIP) has grown to over 30 programs across the country. Protocols and procedures are now being established at hospitals across the country to address the psycho-social needs of trauma survivors. However, the characteristics of such programs vary. While some may have the resources to offer case management and mental health services on site, others may have to rely heavily or solely on referrals and other community based services to provide a continuum of care to patients. Methodologically, violence intervention program studies in general use experimental designs with a control group who receives referral only versus an experimental group who receives referrals in addition to an intervention which is traditionally case management.

Research has indicated that linkages between social service agencies and emergency departments may result in an improved level of service for patients who have been violently injured and lead to a reduction in their risk of repeat victimization (Zun, Downey, & Rosen, 2003). Zun, Downey, and Rosen (2006) reported a significant reduction in self-reported re-injury for the treatment group, however, no differences were detected between the treatment and control with regard to self-reported arrests, state reported re-injuries, or state reported incarcerations. Another study examined the effect of a HBVIP serving youth who have been hospitalized for violent injuries on involvement in the criminal justice system, re-injury, and death after hospital discharge (Becker, Hall, Ursic, Jain, & Calhoun, 2004). Youth in the treatment group were 70% less likely to be arrested, and less likely to engage in any criminal involvement. However, there were no differences between the treatment and control with regard to re-injury and death. Cooper, Eslinger, & Stolley (2006), in contrast to the previous two studies, detected differences with regard to re-injury. The treatment group had a 5% recidivism rate in comparison to 36% for the control group. The control group was six times more likely than the intervention group to be hospitalized as a result of violent injury. These studies provide evidence of the effectiveness of HBVIPs. Only one study reported a significant impact on the rate of re-injury, and all three used case management models as the intervention. Another study found no significant differences between a

treatment and control group using a case management model (Zun, Downey, & Rosen, 2004). Overall, these results suggest that the findings are mixed in regard to the effectiveness of Hospital Based Violence Intervention Programs.

Annotated Bibliography of trauma recidivist, help-seeking behavior of Black men, and Hospital Based Violence Intervention Programs

Amutah, N.N., Ramos, L.J., Hammonds, K., Hughes, B., & Syndor, K. (2016). Staying alive: Men's health disparities in an urban context: The results of a pilot study. *International Journal of Men's Health*, 15(1), 68-79.

As a part of a larger study, a qualitative pilot exploration was conducted to investigate AAM's own perceptions of their paternal role, particularly throughout pregnancy, existing knowledge and attitudes regarding family planning, health care experiences, and perceptions of their neighborhoods and communities. Men were recruited from a non-profit organization in Baltimore that is centered on the goal of providing needed support and resources to pregnant women and young children of Baltimore City. Upon initial confirmation of interest from potential participants, (n = 15) additional screening methods were utilized to recruit men who met the following criteria: African American, ages 18–35, and were residents of Baltimore City. The final group of participants were chosen based on their relationship as partners to women or fathers of children enrolled in DRUM services, as well as their residence in specific neighborhoods. The results of this pilot investigation suggest that social support is valued and increases positive health behaviors. Results also demonstrate a need for health information specific to the medical and health needs of African-American men, and the need for structured ongoing relationships with primary care providers.

Addis, M.E., & Mahalik, J.R. (2003). Men, masculinity, and the contexts of help-seeking. *American Psychologist*, 58(1), 5-14.

Men are less likely than women to seek help for problems as diverse as depression, substance abuse, physical disabilities, and stressful life events. However, the authors argue that identifying and revealing sex differences in help-seeking behaviors does little to help us identify the biological, psychological, or cultural processes responsible for the observed gender differences. The authors argue that an alternative to the sex differences approach is to understand men's help-seeking as a product of masculine gender-role socialization. The authors argue that masculine gender roles create a natural focus for psychosocial treatments either tailored to more traditionally masculine ways of relating or aimed at helping individual men become less constrained by gender-role expectations. The authors suggest that for men, both the effects of gender socialization and the process of constructing masculinity in particular help-seeking contexts are moderated by basic social psychological processes. These include (a) perceptions of the normativeness of problems, (b) the perceived ego centrality of problems, (c) characteristics of potential helpers, (d) characteristics of the social groups to which individual men belong, and (e) perceived loss of control.

Calvert, W.J., & Issac-Savage, E.P. (2013). Motivators to engage in health promotion activities by low-income black fathers. *The Association of Black Nursing Faculty*, 24(4), 98-103.

The purpose of this research was to explore the motivations for Black fathers to participate in health promotion activities and learn more about health. Four focus groups were conducted between September and November 2010. Men were recruited from a non-profit organization in St. Louis, Missouri that specializes in father involvement. The sample consisted of a total of 22 men between 22

and 54 years of age with the median age being 37 years of age. Themes included avoiding specific diseases, helping others, a personal desire to learn, and modeling positive behaviors.

Cheatham, C.T., Barksdale, D. J., & Rodgers, S.G. (2008). Barriers to health care and health-seeking behaviors faced by black men. *American Academy of Nurse Practitioners*, 20, 555-562.

The authors of this study pose the question, "if all Americans can potentially be affected by the same barriers, why then is the health status of Black men drastically worse than that of other groups? The purpose of this article was to (a) identify barriers to health care and health-seeking behaviors unique to Black men, (b) make recommendations to healthcare providers for improving access for Black men. The authors conducted a literature review in PubMed for research articles published after 1999 using the terms African American, Black men, and access to health care. Eleven papers were reviewed that addressed barriers to healthcare faced by Black men. The literature review identified five themes that served as barriers to healthcare for Black men: (a) socioeconomic status, (b) masculinity, (c) lack of awareness of the need for care, (d) racism and distrust, (e) religion and spirituality, and (f) a criminal background.

Griffith, D. M., Allen, J. O., & Gunter, K. (2010). Social and cultural factors influence African American men's medical help seeking. *Research in Social Work Practice,* 21(3), 337-347.

Research on men's help-seeking behaviors and health care utilization tends to focus on initial service use or avoidance of services, while fewer studies attend to the issues of future health care seeking. Studies often do not inquire into reasons for physician visits beyond an annual checkup. This study took place in Flint and Ypsilanti, two cities located in southeastern Michigan. Both cities have a high percentage of African American residents, while the surrounding areas are predominantly White with little other ethnic diversity. One hundred and five African American men participated in 14 focus groups: 10 groups with a total of 63 men from Flint, Michigan, and 4 groups with a total of 42 men from Ypsilanti, Michigan. The sample had an age range of 33-77 with an average age of 55. Eighty-six percent of the sample was married and close to three quarters of the sample owned their home. African American men's medical help seeking seemed to be negatively influenced by social norms and patient-provider interactions but positively influenced by spouses and the desire to fulfill social roles.

Lindinger-Sternart, S., (2015). Help-seeking behaviors of men for mental health and the impact of diverse cultural backgrounds. *International Journal of Social Science Studies*, 3(1), 1-6.

A growing research body suggests that men are less likely than women to seek help from professional counselors for mental health problems and stressful life events (Komiya, Good, & Sherrod, 2000). Untreated mental health problems can have a significant impact on the health and development of the client as well as the client's family members. Various factors such as help-seeking attitudes influence men's help-seeking behaviors in regard to mental health services. Males demonstrate less positive attitudes toward seeking help in order to avoid talking about stressful events and painful feelings because of masculine norms and stigma. Help-seeking attitudes, masculine norms, and stigma are reviewed for their associations with men's opposition to seeking help when psychological problems occur. The author of this paper presents further literature about males from diverse cultural backgrounds to emphasize the particular factors that impact men's reduced willingness to seek counseling.

Lindsey, M.A., Korr, W.S., Broitman, M., Bone, L., Green, A., & Leaf, P.J. (2006). Help-seeking behaviors and depression among African American adolescent boys. *Social Work*, 51(1), 49-58.

The purpose of this study was to explore the help-seeking behaviors and mental health attitudes of depressed African American adolescent boys. Eighteen respondents ages 14 to 18 who were already participating in a broader study were recruited for this study. Participants (n = 10) were recruited from community-based mental health treatment centers and a mental health practitioner in private practice and from community based, nonclinical programs for high-risk youths (that is, a violence prevention program, truancy abatement center, and homeless shelter) (n = 8). Themes emerged in the following areas: type of problems experienced, descriptions of help-seeking behaviors, dealing with emotional pain, influence of the social network on help seeking, and perceptions of mental illness and mental health care.

Mansfield, A.K., Addis, M.E., & Mahalik, J.R. (2003). "Why won't he go to the doctor?": The psychology of men's help seeking. *International Journal of Men's Health*, 2(2), 93-109.

Despite all that is known about the ways in which masculine gender socialization can negatively impact men's help seeking, men's underutilization of services has only recently come to be perceived as problematic. As a result, few attempts have been made to bolster men's help seeking. Broad-based strategies that take masculinity ideologies and gender-role conflict into account are needed to increase men's help seeking. The best strategies are probably those that integrate masculine gender socialization, social constructionist, and social psychological perspectives on help seeking. Implementing these strategies would require education for health-care providers about masculine gender socialization and education for individual men about the importance of help seeking and the detrimental effects of masculine role socialization.

Plowden, K.O., John, W., Vasquez, E., & Kimani, J. (2006). Reaching African American men: A qualitative analysis. *Journal of Community Health Nursing*, 23(3), 147-158.

The goals of this study were to a) identify new data related to the health beliefs and practices of Black men, b) support other established hypotheses, and c) generate new research questions. The setting of the study was an urban Northeast community. Informants were recruited until the data reached a saturation point. Twelve key black male informants over the age of eighteen regardless of health status were recruited. The three dominant factors that influenced reaching Black men were as follows: a trusted and respected community member providing the outreach, a perceived safe and caring environment during the outreach, and a perceived benefit from participating in the outreach.

Ravenell, J.E., Johnson, W.E., & Whitaker, E.E. (2006). African-American men perceptions of health: A focus group study. *Journal of the National Medical Association*, 98(4), 544-550.

The purpose of this qualitative study was to identify and explore African-American men's perceptions of health and health influences through focus groups in Chicago. eight focus group interviews with select subgroups of African-American men, including adolescents, trauma survivors, HIV-positive men, homeless men, men who have sex with men, substance abusers, church-affiliated men and a mixed sample (N=71). Participants were primarily recruited from the community using alliances with community-based organizations (i.e., youth organizations, men's shelters, churches). Stress was cited as

a dominant negative influence on health, attributed to lack of income, racism, "unhealthy" neighborhoods and conflict in relationships. Positive influences included a supportive social network and feeling valued by loved ones.

Ravenell, J.E., Whitaker, E.E., & Johnson, W.E. (2008). According to him: barriers to healthcare among African-American men. *Journal of the National Medical Association*, 100(10), 1153-1160.

The aim of this study was to identify and explore African-American men's perceptions of barriers to health and primary healthcare services use through focus groups. Focus groups were conducted in the Woodlawn community, a low-income neighborhood in Chicago, IL. A purposive sampling technique was used to recruit 8 select subgroups: adolescents (age 16-18), trauma survivors, HIV-positive men, homeless men, men who have sex with men, substance abusers, church affiliated men and a mixed sample. Qualitative analysis of focus group transcripts yielded two major categories—intrinsic barriers and extrinsic barriers. Within the intrinsic barrier category, 5 subcategories emerged: lack of health awareness, fear, healthcare as needed, medical mistrust and fatalism. Extrinsic barriers included cost/benefit, clinic experience, and cultural and linguistic differences.

Rich, J.A. (2001). Primary care for young African American men. *Journal of American College Health*, 49, 183-186.

Young African American men in the inner city have higher rates of mortality and morbidity from potentially preventable causes than other American men of the same age. They suffer disproportionately high rates of preventable illness from violence, sexually transmitted diseases, and HIV infection. These young men present with problems related to sexual concerns, mental health issues, substance abuse, and violence. They also report substantial risk-taking behaviors, including unprotected sex, substance use, and weapon carrying, as well as exposure to violence. Access to and use of preventive primary care services has been limited for these patients in the past because of financial barriers and competing social issues. Racism and historical oppression have created barriers of mistrust for young men of color.

Stevens-Watkins, D., & Lloyd, H. (2010). Recent perceptions of health service providers among African American men: Framing the future debate. *Journal of Best Practices in Health Professions Diversity: Research, education, and policy*, 3(1), 59-69.

This article reviews the literature on African American men's perceptions of health service providers and their possible association with health disparities and decreased likelihood that these patients will seek outpatient and preventative health care. The literature suggests that barriers to receiving health care service include not feeling respected or heard by providers. A brief discussion of the dangers of a color-blind approach, findings from implicit association studies on race, and negative media portrayals are offered as possible explanations. Specific questions provide a starting point to increase the self-awareness of health service providers.

Treadwell, H.M., Northridge, M.E., & Bethea, T.N. (2007). Confronting racism and sexism to improve men's health. *American Journal of Men's Health*, 1(1), 81-86.

Two fundamental determinants of men's health are confronted—racism and sexism—that the authors believe underlie many of the health disparities documented between women and men and place men of

color at particular disadvantage in U.S. society. In doing so, the authors contend that race and gender, as well as racism and sexism, are social constructs and, therefore, amenable to change.

Vogel, D.L., Heimerdinger-Edwards, S.R., Hammer, J.H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, 58(3), 368-382.

The goal of this study was to explore the relationships between conformity to dominant masculine gender roles, self-stigma and attitudes toward seeking counseling for men from diverse racial/ethnic and sexual orientation backgrounds. Among a sample of 4,773 men from both majority and nonminority populations, results showed that there were important differences in the presence and strengths of the relationships between conformity to dominant masculine norms and the other variables in the model across different racial/ethnic groups and sexual orientations.

Wallace, S.C., Strike, K.S., Glasgow, Y.M., Lynch, K., & Fullilove, R.E. (2016). 'Other than that, I'm good': Formerly incarcerated young Black men's self-perceptions of health status. *Journal of Health Care for the Poor and Underserved*, 27(2), 163-180.

This mixed methods study examined perceived health status and health care utilization among recently released Black men ages 18–2 5 years. Qualitative interviews (N=20) and quantitative surveys (N= 170) were conducted. Qualitative findings described several health concerns, including chronic conditions. Quantitative results indicated most survey respondents rated their health status as excellent or good despite reporting having a health concern within the past year. Health status ranking was examined by how men felt vs. an objective measure such as a medical report. In addition, men indicated having problems finding health care since their release.

Whaley, A.L. (2001). Cultural mistrust and mental health services for African Americans: A review and meta-analysis. The Counseling Psychologist, 29(4), 513-531.

The underutilization of mental health services by African Americans may be due, in part, to their cultural mistrust. The purpose of this article is twofold: (a) to conduct a meta-analysis of the correlations between cultural mistrust in African Americans and their attitudes and behaviors related to mental health services use, comparing them to the correlations between cultural mistrust and measures relevant to other psychosocial domains, and (b) to test some methodological hypotheses about the Cultural Mistrust Inventory, the most popular measure of cultural mistrust. The meta-analysis suggests that the negative effects of Blacks' cultural mistrust in interracial situations are not unique to counseling and psychotherapy but represent a broader perspective.

Reiner, D.S., Pastena, J.A., Swan, K.G., Lindenthal, J.J., & Tischler, C.D. (1990). Trauma recidivism. *The American Surgeon*, 56, 556-560.

Trauma recidivists are patients who have a history of previous admissions for trauma. Based on the findings from this study, trauma recidivists are likely to return to a trauma unit for an injury equivalent to the one they were previously hospitalized for. At the time of this publication, the impact of trauma recidivists on health care facilities was unknown. The purpose of this study was to identify this subset of trauma patients and define its magnitude at an inner city level 1 trauma unit. The study site was the University of Medicine and Dentistry of New Jersey-New Jersey Medical School. The study design used a

concurrent case-control group with patient interviews. In other words, the patients were divided into three groups. The first group, the observation group, consisted of 150 consecutive admissions to the trauma service that were recruited as part of a prospective study. This observation group was the group of trauma patients. The other two groups served as control groups and consisted of 1) 138 randomly selected, non-trauma related hospitalized patients and 2) 138 randomly selected hospital visitors. Variables in the analysis included age (at time of admission), sex, race, mechanism of injury (penetrating versus non-penetrating), injury severity score (ISS), blood alcohol, hospital course, operative intervention, length of hospital stay, morbidity, and mortality. Of the 138 observation group patients, 32 (23%) had a history of a previous admission for trauma and this percentage was significantly different from both of the control groups which reported 13% and 15% respectively. While the mean age of the observation group was 29, comparable to the average age of the trauma patient in the U.S., the mean age of the trauma recidivists was 26. The mean age of the trauma recidivists at the time of their first admission for trauma was 20 years of age.

Goins, W.A., Thompson, J., & Simpkins, C. (1992). Recurrent intentional injury. *Journal of the National medical Association*, 84(5), 431-435.

In this study, the authors highlight that recurrent intentional injury (RII) is a phenomenon that is often noted by those who treat the injured. The authors of this study observed assault related injured patients at the District of Columbia General Hospital Level I urban trauma center to 1) determine the magnitude of RII in the patient population, 2) to examine the characteristics of RII patients, and 3) to identify risk factors that predispose patients to repeated assault-related injuries. The methods for this study consisted of two parts. First, the author's conducted a retrospective chart review of 232 consecutive patients that required laparotomy (a surgical procedure involving a large incision through the abdominal wall to gain access into the abdominal cavity, also known as a celiotomy) between July 1985 to June 1989 for penetrating abdominal trauma and did not include patients who would be a part of the prospective study. Demographic data such as age, sex, race, and employment status were noted. The second part of the study was prospective, with patients between the ages of 15-45 who were admitted to the Howard University Surgical Service at DC General Hospital as a result of assaultive injury between October 1988 and February 1989 (4 months). During this period, there were 103 general surgery admissions, 78 (76%) of which were due to assaults. The prospective study subjects were administered a questionnaire with a standardized set of questions. Questions include questions such as, mechanism of injury (shot, stabbed, assaulted) of previous hospitalizations due to assault, the dates and circumstances surrounding such occurrences, employment status, yearly income, highest level of formal education, age, sex, race, marital status, place of residence, and the number of children each patient had. The RII group consisted of 35 patients (49%) including 18 patients with one previous episode, 9 patients with two previous episodes, and 8 patients with three or more previous episodes. The mean age for the RII group was 28.3 years and the mean age for the non-RII group was 26.7 years. The median total hospital charges for those patients in the RII group was $9,673 versus $6,973 for the non-RII group (this difference was significant). Comparisons between the two groups with respect to marital status, mechanism of injury, educational level, place of residence, and the number of children showed no differences. However, there was a significant statistical difference between the two groups with regard to unemployment. 21 (75%) patients from the RII group were unemployed in comparison to 13

(38%) patients in the non-RII group. Overall, black males comprised 96% of assaulted patients in the retrospective group and 92% of assaulted patients in the prospective group.

Buss, T.F., & Abdu, R. (1995). Repeat victims of violence in an urban trauma unit. *Violence and Victims*, 10(3), 183-194.

This study sought to replicate the findings of other studies with regard to identifying the characteristics of hospital patients who are repeat victims of violence. Additionally, this study sought to examine the circumstances accompanying violent behaviors such as exposure to violence. The researchers completed this task through three methods: A review of patient records of adult urban violence victims (378) over a 24 month period (July 1, 1989 – September 30, 1991), telephone interviews of patients (279, n=131)) discharged from the hospital following admission to the trauma unit for victimization during the period of July 1, 1989 through September 30, 1991, and in –person interviews with urban trauma patients admitted consecutively through the emergency department from January 1, 1992 through June 30, 1993 (140, n = 102). The telephone and in-person interviews used employed identical questionnaires. The telephone and in-person survey samples were combined into one larger sample (n = 233). Patient charts were extracted to compare and validate both the telephone survey and in-person interview data. Variables of interest in the study include demographic characteristics such as age, race, gender, education including grade point average, marital status, poverty level, employment status and welfare participation. Variables used to reflect circumstances accompanying violent behaviors include: have they witnessed violent attacks to others in the past, have they been threatened in the past, do they own a gun, do they carry a gun or a knife, did they put up a fight during the attack, did they believe they would lose their life during the attack, have they ever used a weapon in self-defense, gang membership, did they know their attacker, had they seen their attacker since, did they believe they would be attacked again, could they have avoided the attack, did they blame themselves or the attacker for the attack, where they on drugs or drinking during the attack and was the attacker on drugs or drinking during the attack. Mechanism of injury, evidence of psychiatric disorders, and health insurance coverage were extracted from medical records. Victims who experienced prior attacks were more likely to be African-American or Hispanic, living below the federal poverty level, were more likely to witness violent acts on others and to have been threatened over the past year. They were more likely to carry a gun or knife and to put up a fight when attacked. They were also more likely to have a history of drug or psychiatric treatment and less likely to have health insurance. The multivariate analysis revealed that the largest contributors to repeat victimization were having been threatened with a knife or gun in the past, seeing someone else become a victim of violence, living in poverty, having a record of psychiatric problems, and not having insurance. Knowing these factors allowed analysts to correctly identify recidivism cases at 73% accuracy. African Americans were only slightly more at risk than others when circumstances surrounding violence such as exposure to violence were controlled for.

Cooper, C., Eslinger, D., Nash, D., Al Zawahri, J., & Stolley, P. (2000). Repeat victims of violence: Report of a large concurrent case-control study. *Archives of Surgery*, 135(7), 837-843.

The purpose of this study was to identify risk factors for repeated hospitalization. This study 200 trauma recidivists during a 16 month period and compared them to 224 randomly selected patients admitted

for unintentional, non-violent injury. The study utilized both structured interviews and medical record/chart review to acquire data on a number of variables listed in the table above. Risk factors associated with recidivism included being black, male, a median age of 31, unemployed, un-insured, annual income of less than $10,000, current drug use, past or present drug dealing, and a positive test for psychoactive substances on admission to the hospital. Additionally, 86% of trauma recidivist felt that disrespect was a factor that led to their hospitalization.

Keough, V., Lanuza, D., Jennrich, J., Gulanick, M., & Holm, K. (2001). Characteristics of the trauma recidivist: An exploratory descriptive study. *Journal of Emergency Nursing*, 27(4), 340-346.

This study sought to identify rates and characteristics of trauma recidivists in a suburban trauma center and compare those rates and characteristics with urban reports of trauma recidivism. The study used a convenience sample of 100 trauma patients admitted to a trauma unit. To be categorized as a trauma recidivist the subject must have sustained a traumatic injury within the past 5 years. Out of the 100 trauma patients, 36 reported previous hospitalizations for trauma within 5 years. Recidivists were more likely to be male, younger than 45 years, a member of a racial minority, single, uninsured, and have less than 12 years education. Behavioral characteristics associated with recidivism include a history of past arrests, illegal drug use, and having witnessed past violent injuries.

Rich, J.A., & Stone, D.A. (1996). The experience of violent injury for young African-American men: The meaning of being a "sucker." *Journal of General Internal Medicine*, 11(2), 77-82.

The goal of this study was to quantitatively explore the experiences of violent injury among young African American men with gunshots or stab wounds. The authors stated that qualitative inquiries are needed because just documenting the incidence and prevalence of violence, while useful, did not provide insight into the process of violent injury for victims, including what places individuals at risk for re-current violent injury. The study took place in Boston, Massachusetts at the Boston City Hospital which serves patients from the surrounding neighborhoods of Roxbury, Dorchester, and Mattapan, which together comprise 90% of the cities minority population. Participants were African American males between the ages of 18 and 25, admitted to the surgical service with a gunshot or stab wound inflicted by another person. The final sample consisted of 18 young men hospitalized between August 1992 and August 1994. Ages ranged from 19 to 24. The main theme of this study articulated by 14 of the 18 men was the concept of "being a sucker." The notion of "being a sucker" was contrasted with "tough guy" role (Oliver, 2006). The desire to avoid being seen as a sucker is driven by two major concerns: First, if you are a sucker, people will "disrespect you and take advantage of you," and second, you will lose your status in the community and be viewed as a "nobody."

Hedges, B.E., Dimsdale, J.E., Hoyt, D.B., Berry, C., & Leitz, K. (1995). Characteristics of repeat trauma patients, San Diego County. *American Journal of Public Health*, 85(7), 1008-1010.

The purpose of this study was to identify the characteristics of patients who repeatedly sustain major trauma. This study utilized a retrospective design and a review of the regional trauma system registry yielded 22,312 admissions between September 1, 1984 and April 19, 1991. Admissions listing the same first and last name, ethnicity, and date of birth were presumed to involve the same patient. For repeaters, the mean injury severity score was greater on the second admission (15.5) than on the first. 48% of the 185 repeaters were injured by the same mechanism on both admissions. The mean hospital

charges for repeaters on their first admission ($14,981) were significantly less than on their second admission ($24,142), and the latter admission was about as costly as that for the non-repeaters. Hospital charges of repeaters were more often paid by public (county or state) sources (52%) than were the costs of the comparison group (34%).

Litaker, D. (1996). Preventing recurring injuries from violence: The risk of assault among Cleveland youth after hospitalization. *American Journal of Public Health*, 86(11), 1633-1636.

The purpose of this study was to identify patients who were susceptible to interpersonal violence. This study took place in Cleveland and utilized a comparative retrospective design. The sample consisted of 998 patient records disaggregated into 3 groups: intentional injury, unintentional injury, and uninjured. The relative risk for subsequent assault among those previously treated for assault was four times greater than that for those admitted for an acute infectious illness or an elective surgery and more than two times greater than that for patients admitted for unintentional injuries. Sex, previous injury history, and drug use predicted subsequent treatment for assault among those admitted for assault. When the data for unintentional and intentional injuries were combined, exposure status, in addition to race, sex, injury history, and length of stay in the intensive care unit predicted subsequent assaults.

Claassen, C.A., Larkin, G.L., Hodges, G., & Field, C. (2005). Criminal correlates of injury-related emergency department recidivism. *The Journal of Emergency medicine*, 32(2), 141-147.

The goal of this study was to measure the strengths of the associations between several previously identified high risk behaviors and the outcome of ED and trauma recidivism. More specifically, this study sought to investigate criminal and high risk lifestyle factors that predict emergency department recidivism. A convenience sample of study participants (aged 18-65) were interviewed over a three month period in March-May 1998 using ED trauma service nursing logs. Recidivism was conceptualized as all ED visits for the full 3 years before the interview (March 1995-March 1998) and the 5 years after the interview (June 1998 – June 2003). To examine criminal correlates of trauma recidivism, the group was disaggregated into two groups; injury-related recidivists and non-injury related general ED recidivists. Injury-related recidivists were found to endorse multiple, high risk substance abuse related behaviors, problem drinking as measured by an AUDIT score of 8 or higher, and non-alcohol related substance use significantly more often than non-injury related general ED recidivists. High risk driving practices was not associated with either form of recidivism. Forty-four percent of injury-related recidivists reported that they had been involved in at least one fight in which they used a weapon of some kind. Previous suicide attempts were not correlated with either form of recidivism. Although safety seekers experienced less re-injury, they had a relatively equal number of return visits to the ED. Acknowledgment of multiple risk behaviors was correlated with injury-related recidivists but not non-injury related general ED recidivists. Of the 161 sample, 58.4% had a history of criminal conviction. Seventy percent of injury-related recidivists and 73% of non-injury related general ED recidivists had arrest histories. Patients with any previous arrest history were more likely to be general ED recidivists than those without such history. Study patients with property related arrests were more likely to re-present for general emergency care, whereas those with drug-related arrests tended to re-present more often to the trauma service. The results of the multivariate analysis reveal that in contrast to non-injury related general ED recidivists, traumatic injury recidivists were positively associated with multiple, self-reported substance-related behaviors and with a history of arrests for substance-related crimes. The

only predictor of non-injury related general ED recidivists was a history of property-crime related arrests. Overall, patients with an arrest history had a 57% recidivism rate whereas non-felons had only a 27% recidivism rate.

Davis, J.S., Pandya, R.K., Sola, J.E., Perez, E.A., Neville, H.L., & Schulman, C.I. (2013). Pediatric trauma recidivism in an urban cohort. *Journal of Surgical Research*, 182(2), 326-330.

The purpose of this study was to explore trauma recidivism among pediatric patients aged 0-19. Data was extracted from the Ryder Trauma Registry. Admissions with repeated names and medical record numbers were identified as recidivist admissions. Variables of interest in this study include age, sex, the Glasgow Coma Scale, Injury Severity Score, injury location, injury cause, disposition, length of stay, and mortality. Out of 12,235 aged 0-19 admitted to the trauma center between the years 1991 to 2010, 183 or 1.5% were classified as recidivists. Among those 0-16, only 0.9% were classified as recidivists. Of the 183 recidivists who were admitted to the trauma unit for a second time, 11 were admitted three times and one was admitted for four discrete traumatic incidents. Recidivists, as in other studies, tended to be male, but of similar ages and with comparable Glasgow Coma Scale scores. Additionally, the study compared recidivists aged 0-16 to those 0-19 and found that recidivist's patients were three times as likely to be in late adolescence compared with any other age group representing 60% of recidivist's cases among this sample. The recidivism rate for penetrating trauma was twice that of blunt trauma among both the 0-16 and the 0-19 age groups. There was also a contrast among recidivists and non-recidivists with regard to mechanism of injury. One in four non-recidivists were injured in a motor vehicle accident whereas about 10% were the victims of gunshot wounds. In comparison, 24% of all recidivists were injured by gunshot wounds in contrasts to only 19% who were injured through motor vehicle accidents. This relationship is in reference to the 0-19 year old age group and not the 0-16 age group. Recidivists were further evaluated to determine who had the same mechanism of injury on repeat admission. More than two-thirds of recidivists (69% aged 0-19 and 75% aged 0-16) of recidivists who were initially shot suffered from a repeat gunshot wound on their next admission. Repeat mechanisms of injury occurred in all other recidivists only 19%-22% of the time. Recidivists aged 0-19 left the ED against medical advice more than non-recidivists and there were no differences with regard to disposition or length of stay. 85% of all recidivist deaths were because of gunshot wounds. Recidivist death rates were highest for gunshot wounds, followed by stab wounds, and motor vehicle accidents.

Dowd, M.D., Langley, J., Koepsell, T., Soderberg, R., & Rivara, F.P. (1996). Hospitalizations for injury in New Zealand: Prior injury as a risk factor for assaultive injury. *American Journal of Public Health*, 86(7), 929-934.

This study sought to determine the degree to which injury hospitalization, especially for assaultive injury, is a risk for subsequent hospitalization due to assault. A retrospective cohort study design was used with data extracted from the New Zealand hospitalization database. The study was restricted to inpatient discharges from public hospitals. The study focused on patients who were "exposed." Exposed was defined as all persons who were discharged one or more times from a New Zealand hospital between January 1, 1990 and December 31, 1990 with a diagnosis of an acute injury or poisoning. The exposure group was disaggregated into three exposure groups: non-assaultive, assaultive, and undetermined. Non-assaultive injuries included all injuries that were unintentional (E800 through E869, E880 through E928) self-inflicted (E950 through E958), and due to legal intervention

(E970 through E976 and E978). Assaultive injuries were those injuries purposely inflicted by another person (E960 through E968). All those whose mechanism was undetermined (E980 through E988) constituted the third category of exposure. The unexposed/control group consists of the total population of New Zealand minus those who were hospitalized for an acute injury in 1990. The outcome of interest was one or more hospitalizations for an injury due to assault (codes E960 through E 968). Variables examined in the study included age, race, marital status, and employment status. The full exposure group consisted of 43,507 residents hospitalized for an acute injury. In both the assaultive and non-assaultive group males, Maori, and those who were single were represented in greater proportion than the control group. Younger patients aged between 10 to 19 and 20 to 29 were more highly represented in the hospitalized groups. Additionally, unemployed individuals was higher in the assaultive injury group than in either the non-injury group or the non-assaultive injury group. In total, 2,770 persons were hospitalized for an injury due to assault in the follow-up period, resulting in an incidence rate of 82.1 per 100,000 person years. If the previous injury was the result of an assault, the rate of subsequent assault increased to 6785.1 per 100,000 person years, 39.5 times the rate for the unexposed group. In more than half (53.3%) of the individuals with any injury who returned within the 12-month follow-up period for an assaultive injury admission (n = 289), the initial injury was due to assault.

Kwan, R.O., Cureton, E.L., Dozier, K.C., & Victorino, G.P. (2011). Gender differences among recidivist trauma patients. *Journal of Surgical Research*, 165(1), 25-29.

The purpose of this study was to examine trauma recidivism by gender and to determine the length of time to recurrence between repeat episodes of injury by gender. The design used for this inquiry was a retrospective analysis of all trauma patients treated at a trauma center from January 1999 to August 2008. Those with two or more unrelated trauma visits were identified as recidivist trauma patients. Variables examined in the analysis included gender, race, insurance status, age, mechanism of injury, outcome, and injury second to domestic violence. Out of 17,860 patients identified through the trauma registry, 689 (4%) met the criteria for trauma recidivism. Within the recidivist group 601 (87%) were male and 89 (13%) were female. Males in the recidivist group were younger on average (34 years) when compared to males who experienced only one trauma visit (36 years). Compared with single visit patients, recidivist were more likely to be male, uninsured, and have injuries secondary to assaults. Single visit patients experienced higher mortality than recidivist patients. Most recidivist (male and female) had only a second trauma visit. 133 (22%) recidivist males had three or more trauma visits and 2 recidivist females had three or more trauma visits. Contrary to what the authors hypothesized, the mean time to recurrence from their first to second trauma visit among female recidivists was shorter than for male recidivists (23 months versus 30 months). However, female recidivists were more likely to experience blunt trauma than were male recidivists (69% versus 43%). Females who experienced assault-associated injury had a shorter time to recurrence from their first to second traumatic injury than females with non-assault associated injuries.

Kaufmann, C.R., Branas, C.C., & Brawley, M.L. (1998). A population based study of trauma recidivism. *Journal of Trauma: Injury, Infection, and Critical Care*, 45(2), 325-331.

The purpose of this study was to develop a better understanding of individuals who experience repeat presentations to acute care hospitals (trauma recidivists). The design used for this study was a

retrospective chart review and the setting was all hospitals within the state of Nevada. Data were obtained through the Nevada Office of Emergency Medical and Trauma Services for all patients entered into the Nevada State Trauma registry during the years 1989 to 1993. Social security numbers were used to identify repeat patients. After the full selection/elimination procedure was employed, 10,137 individual patient charts remained for the analysis. Of the 10,137 patients, 210 had at least two visits to a trauma center. The mean interval time from first to second presentation for recidivists was 14 months. One-quarter of recidivists were readmitted within 3 months of their first injury and 57.1% of recidivists were re-admitted within 1 year of their first injury. More than half of the recidivists (52.3%) returned with the same mechanism of injury on their second presentation. Motor vehicle injuries had the highest rate of same-mechanism return. Recidivists were more likely to be male and young. Patients between the ages of 20 and 24 demonstrated higher rates of recidivism than patients in other age categories.

Cheng, T.L., Wright, J.L., Markakis, D., Copeland-Linder, N., & Menvielle, E. (2008). Randomized trial of a case management program for assault-injured youth. *Pediatric Emergency Care*, 24(3), 130-136.

The purposes of this study were to (1) assess receptiveness of families to violence prevention interventions initiated after an assault injury and (2) assess the effectiveness of a case management program on increasing service utilization and reducing risk factors for re-injury among assault-injured youth presenting to the emergency department. A randomized controlled trial of youth, aged 12 to 17 years, presenting to a large urban hospital with peer assault injury was conducted. Youth and parents were interviewed at baseline and 6 months to measure service utilization, risk behavior, attitudes about violence, mental health, and injury history. Intervention families received case management services by telephone or in person during 4 months by a counselor who discussed sequelae of assault injury and assessed family needs and facilitated service use. Controls received a list of community resources. Most parents and youth identified service needs at baseline, with recreational programs, educational services, mentoring, and counseling as most frequently desired. There was no significant program effect on service utilization or risk factors for injury. Although intervention families were satisfied with case management services, there was no significant increase in service utilization compared with controls. More intensive violence prevention strategies are needed to address the needs of assault-injured youths and their families.

Zun, L.S., Downey, L., & Rosen, J. (2004). An emergency department-based program to change attitudes of youth toward violence. *The Journal of Emergency Medicine*, 26(2), 247-251.

This study describes the attitudinal changes of youth enrolled in a program to reduce violence risk. Patients aged 10 to 24 years at a community, teaching Level 1 trauma center who were victims of interpersonal violence (excluding child abuse, sexual assault, and domestic violence) were randomly enrolled in the study. The control group was simply provided a list of available services, whereas the treatment group received an assessment and case management for 6 months. The study examined the change in attitude and behavior of the youths in the treatment and control groups over time, using a combination of chi-square and ANCOVA. A total of 188 victims, 96 subjects in the treatment group and the 92 in the control group, had an average age of 18.6 years and were mostly (82.5%) males. A majority were African-Americans (65.4%), followed by Hispanic (31.4%). There was no significant difference found in mother involvement, father involvement, mother support, father support, peer support or peer delinquency. There was a decrease in support from both parents over time, which was not affected by

the program. There was a decrease in peer delinquency for both the treatment group (67 to.41) and the control group (63 to.50). The results of this study demonstrate a lack of attitudinal changes. This may be attributed to limitations of study design and an inherent difficulty in dealing with high-risk inner city youth.

Zun, L.S., Downey, L., & Rosen, J. (2006). The effectiveness of an ed-based violence intervention program. *American Journal of Emergency Medicine*, 24(1), 8-13.

Patients aged 10 to 24 years who were victims of interpersonal violence (excluding child abuse, sexual assault, and intimate partner violence) were randomly enrolled in the study in level 1 trauma center. The control group was given a written list of services, and the treatment group received an assessment and case management for 6 months. Both groups were evaluated 6 and 12 months after enrollment in the study. The primary indicators of the success of the intervention were reduction of self-reported revictimization or arrest and state-reported incarceration and reinjury. One hundred eighty-eight victims of interpersonal violence met the criteria and had the initial evaluation completed. By chi (2) analysis, the treatment group (96 subjects) and the control group (92 subjects) were similar in age, sex, and racial composition. The average age was 18.6 years (range, 11-24), and 82.5% were boys. Most youth were African Americans (65.4%), followed by Hispanic (31.4%), whites (1.6%), or others (1.5%). A reduction in the self-reported reinjury rate was significantly reduced over time in the treatment group (chi (2) 3.87, P = .05). There were no differences between the groups in the number of self-reported arrests, state-reported reinjuries via the trauma registry, or state-reported incarcerations (P < .05).

Figure 1. Project Change-MS Flow Chart