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Medical Costs of Non-Fatal Shootings and Other Assaults in Rochester

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Introduction

Community violence has a large financial impact that often goes unrecognized. In Rochester the majority of gunshot wound victims are treated at Strong Memorial Hospital as are victims of blunt trauma assault and stab wounds. Between January 1, 2008 and May 29, 2008, Strong Hospital treated 36 patients for gunshot wounds, 66 for stab wounds, and 42 for blunt trauma assault. 63.9 percent of gunshot wound victims had no health insurance, 57.6 percent of stab wound victims had no health insurance, and 33.3 percent of blunt trauma assault victims had no health insurance. As of 2005, only 6 percent of those living in Monroe County were without health insurance.

Table 1. GSW subjects treated at SMH 1/1/08-5/29/08	
N	36
Insurance (%)	
No Ins	63.9
Medicaid	19.4
Commercial	16.7

Table 2. Stabbing subjects treated at SMH 1/1/08-6/1	
N	66
Insurance (%)	
No Ins	57.6
Medicaid	21.2
Commercial	15.2
Medicare	4.5
Work Comp	1.5

Table 3. Assault subjects treated at SMH 1/1/08-6/1	
N	42
Insurance (%)	
No Ins	33.3
Medicaid	16.7
Commercial	40.5
Medicare	7.1
Work Comp	2.4

Trends

Over the past eight years, Rochester has had an average of 50 homicides annually; with the number of shootings ranging from a high of 273 in 2006 to a low of 133 in 2000. Rochester has continued to have a steady number of violent crimes. At a rate based on 100,000, the total violent crime rate in Rochester in 1980 was 1,213; in 1990 it was 1,236.9; in 2000 it was 742.6; and in 2005 it was 1,029.2.

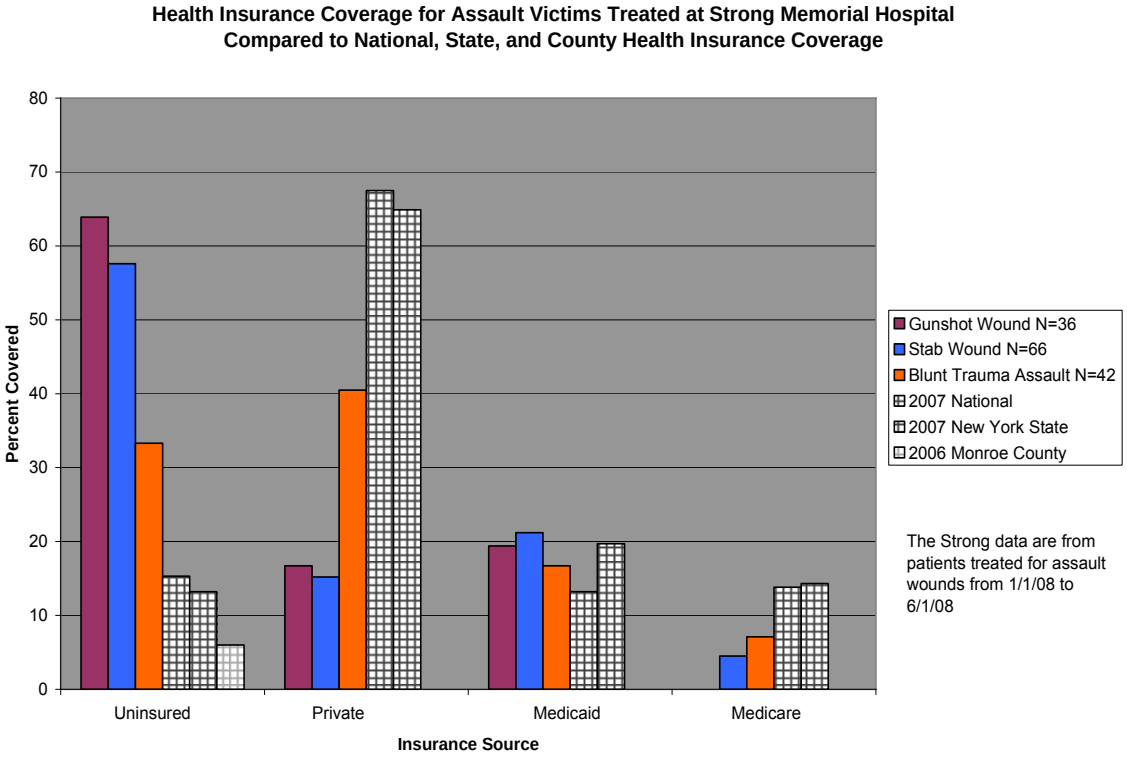
Cost

Few recent studies are available on the medical costs associated with community violence in Rochester. It is for this reason that current research at RIT's Center for Public Safety Initiatives is being conducted to determine the costs more accurately. The most recent nationally available research shows that the average medical costs for treatment of a gunshot wound in 1994 were estimated to be at $17,000 (Cook et.al., 1999). Cook used data from hospitals in South Carolina, Maryland, and New York. With increasing technology since 1994, it is reasonable to assume that costs have increased. Applying the $17,000 estimate to Rochester, in 2007 the 198 local shootings are estimated to have cost $3.4 million in medical costs. These shootings do not include the fifty homicides that occurred that year as well.

Estimate of Annual Medical Costs of Rochester Shootings

Year	Number of Shootings	Estimate of Total Medical Costs (in millions)	Estimated Uncompensated Costs (in millions)
2002	164	$ 2.8	$ 1.8
2003	226	$ 3.8	$ 2.5
2004	191	$ 3.2	$ 2.1
2005	251	$ 4.3	$ 2.7
2006	273	$ 4.6	$ 3
2007	198	$ 3.4	$ 2.2

The following graph shows health insurance coverage and the number of assault victims treated at Strong Memorial Hospital:



This chart shows that the vast majority of victims of assault in Rochester are uninsured; yet the majority of people living in Monroe County (94%) have some form of health insurance. Fewer Monroe County residents are uninsured than the national average, which is at 15.3% uninsured. However, the rate of being uninsured for assault victims in Rochester was at least twice the national average. Further, 40.5% of blunt trauma assault victims had private insurance. Though this still remains far below the national average inn terms of private health insurance coverage, it should be noted that nearly 60% of the blunt trauma victims treated were White compared to 16.7% of gunshot wound victims treated whom were White. African American victims are far less likely to be insured.

Who Pays? How are Costs Covered?

Because over half of those who suffer from both gunshot and stab wounds in Rochester do not have health insurance, insurance companies, those with private insurance, and taxpayers are paying for the medical treatment of these victims. According to the research, it is estimated that between 56-80% of the costs of gun injuries are paid for by public financing or not paid at all. When the bills are not paid by patients, they are then absorbed by taxpayers and through higher insurance premiums (Waters, 2004). Private health insurance premiums are an estimated 8.5% higher to cover this cost (Garson, 2007).

New York State's Health Care Reform Act (HCRA) enacted in 2000 maintains an Indigent Care Pool which is used to disperse monies to New York State medical facilities (i.e. trauma centers) to cover the cost of the uncompensated care. Uncompensated care is medical care received by an individual without health insurance that is never recovered by the medical facility from the patient. Health insurance companies are essentially "taxed" an 8.95% on every bill in order to contribute to the HCRA. In June of 2008 the HCRA was extended through 2011.

Intervention

Research had been conducted on numerous models of planning and intervention, with varied results. Some possible interventions include curriculum in the schools, programs at after-school clubs, and mentoring. School-based programs such as Think First San Diego specifically address violence prevention and are incorporated into the lesson plans. Cities, such as Kansas City, Baltimore, and Minneapolis as well as countries such as Scotland and the U.K. have created their own strategic plans to reduce violence. Some cities have created violence prevention programs that are hospital-based (Oakland, Chicago, and Baltimore). The program in Oakland was enacted in 1994 and formally evaluated twice, both times showing positive results. Calgary has created a violence prevention coordinator position within the school district. Cities have created a violent injury reporting system (Boston, New York City, Philadelphia) to track the number of injuries. States such as Missouri and Wisconsin have begun innovative approaches in dealing with juvenile offenders regarding placement issues. Cities such as Chicago have created specific violence prevention initiatives; Simi Valley, CA has created a community gang task force. Other cities are doing innovative things to address the reduction of violence in their communities.

A key difference between the communities noted above and ours is that those communities have enacted comprehensive planning approaches to address the problem of violence and its related costs. In Rochester we remain largely fragmented and uncoordinated in our efforts to develop a comprehensive approach to addressing violence

References

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