TITLE: SIMPLE SOLUTION TO A BIG PROBLEM: THE BIRTH OF THE SOUTHERN MINNESOTA REGIONAL TRAUMA ADVISORY COMMITTEE (SMRTAC)

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Introduction:

Trauma remains the #1 cause of death of young people in Minnesota and total 2,400 trauma-deaths per year costs >$500 mil/yr. When compared to the metropolitan area, the rural area shows an increase in death rate from 44.2 vs 48.05/ 100,000. Multiple factors are responsible: remoteness, lack of resources and funding, volunteerism vs professional personnel, lack of communication; lack of standardization of care and lack of coordination. Recognizing the importance of regionalization and creating a new system to overcome these factors, SMRTAC was born.

Objective:

To describe the creation of a unique trauma system to coordinate care among the trauma centers in rural Southern Minnesota and report outcomes achieved in a 2 year period.

Methodology:

The Mayo Clinic Level I Trauma Center, as the main referral center for rural Southern Minnesota, took leadership. Contact was made with all hospitals and ambulance systems to establish a regional trauma system with $10,000 of State funding. In December 2009, SMARTAC received State approval, becoming the first Regional Trauma Advisory Committee (RTAC) in Minnesota. RTAC meetings were strategically scheduled after each State trauma meeting to disseminate new information. The first RTAC web site for live broadcasting was created to facilitate communication across facilities. A very specific agenda was created uniquely for the necessities of the rural community, including creation of trauma-related performance improvement projects, injury prevention, education and outreach, disaster preparedness, pre-hospital and emergency medical services, data registry, pediatric specialty, trauma program managers, administration and rehabilitation.

Results:

From 2009-2011 in SMRTAC, the percent of hospitals receiving state designation as trauma centers increased from 25% to 100%. Four regional practice management guidelines (PMG's) were published specifically designed by and for use in Level IV and rural trauma centers. There are 6 more PMG's under development; each one designed to address a deadly problem. The number of patients transferred to our level 1 trauma center

has been increasing per year (838 vs 998) while there is a significant decrease in the transfer time, from 7.22hr to 5.93hr ($p=0.019$) and no difference in mortality.

Conclusions:

The recognition of different needs between the rural and metro trauma population is necessary. Systems should be developed taking into consideration those differences and necessities. In a short period of time and modest funding a unique trauma system was created in rural Minnesota which already demonstrates a decreasing trend in transfer time, while referral rates to definitive trauma care increased; supporting the importance of the creation of SMRTAC.