

Performance Improvement for Rural Alaskan Trauma Centers

One of the key requirements for designation as a trauma center in Alaska is an ongoing performance improvement (PI) program that covers trauma care at that regional facility. The challenge for Level IV centers is to develop a program that is not just a paper exercise but that provides a forum for review and education. There are many ways to meet these goals, but this discussion presents a process that has worked for some facilities.

At Level IV centers, the primary focus is on the stabilization of seriously injured patients and movement of these patients through the system to definitive care. PI can help identify areas for education and improvement. By monitoring the process of care we can identify areas where resources may be more effectively utilized and care expedited. We can also see opportunities for staff training and education.

Each facility must have a multidisciplinary trauma committee that should consist of providers (physicians and nurses) taking care of trauma patients and should be chaired by a Trauma Director. This committee can be the same as the Emergency Department committee. However it must review all trauma deaths and should review care of seriously injured patients either transferred out or admitted to the hospital. Transfers should be reviewed for process (How long did it take to get to the patient? What is the emergency department time? Were there appropriate personnel and aircraft available? Should there have been a direct transfer to Anchorage from the accident scene?) In addition quality of care should be reviewed. (Was the care appropriate in the emergency department or hospital? Was care appropriate in the field? Were the necessary procedures to stabilize the patient done?)

Receiving facilities should be able to provide Level IV hospitals with feedback including the rural hospitals filters which have been developed by the Trauma System Review Committee. These include (1) Need for chest tube at receiving facility, (2) Need for intubation, (3) Inappropriate splinting and cervical spine immobilization, (4) Loss of IV access. These are filters that flag cases for review, not a judgment of care. They identify cases for closer review only and are meant to be an aid.

The multidisciplinary trauma committee should meet on a regular basis. A quarterly meeting at a minimum would be appropriate at most small facilities. Increasing the length of time between meetings may move the review too far from the events for meaningful discussion to occur. Minutes should be kept and issues identified. Case reviews documented. Issues should be tracked to "close the loop." Identification of areas for improvement, planning, implementation of change, and review of outcomes of change should all be tracked.

An example of this process might be a case with a problem airway in a small child. Case review identifies difficulty with finding the right equipment and with pediatric drug doses. As a result of the review, a pediatric airway cart is created and providers are trained in the use of the Broselow tape. To complete the loop a review of pediatric airway management should be conducted after these changes are implemented.

Looking at process, several facilities have identified scenarios where direct patient transfer to Anchorage from a village injury site may be more appropriate than transfer back to the regional facility. This

benefits the patient with time critical injuries but requires ongoing review of the care given by the medevac team and village health aides.

Yearly review of some rarely performed procedures (i.e., chest tube insertion, intubation) is also another area that the trauma committee may decide to review and identify as areas for staff education. Trauma coordinators, emergency department nurse managers, and nurse trauma registrars at your referral facilities are also good resources in developing a performance improvement program and it is important to have good communications with them.

Level IV trauma centers in Alaska are the key component of trauma care in the trauma system for rural Alaska. Developing a trauma performance improvement program that contributes to patient care but is sustainable and does not overwhelm hospital staffs that have many other demands on their time is the challenge we face.

A sample form for recording minutes from performance improvement reviews and meetings follows for your information. Feel free to adapt it for your own facility use as applicable. If you would like more information or clarification, please feel free to call the Trauma department at the Alaska Native Medical Center, (907) 729 2729.