More than half of patients admitted to trauma centers have musculoskeletal injuries. Providing optimal care for these patients is an essential task for all involved in their care.

In North America, the definitive musculoskeletal care provider is an orthopaedic surgeon. Training in this specialty provides the requisite knowledge and skills for treating patients with fractures, dislocations, and injuries of ligaments, muscles, tendons, and cartilage.

Specialization within orthopaedic surgery has led to significant advances in the treatment of musculoskeletal conditions, but the distribution of expertise and skills is not uniform in the orthopaedic community. The care of severely injured patients with musculoskeletal injuries has become an orthopaedic subspecialty. While all residency-trained, board-certified orthopaedic surgeons have a general level of knowledge about the evaluation and treatment of skeletal trauma, residency alone may not prepare one to provide definitive care for the seriously injured patient.

The requisite skills to care for these patients can be obtained through fellowship training as well as through residency training, self-study, continuing medical education and collaboration with others who are practicing in the field of orthopaedic traumatology. These skills must be maintained and refined through practice. Caring for injured patients may be personally inconvenient, and orthopaedic surgeons should demonstrate a commitment to providing this care even if it interferes with elective care of other patients or personal pursuits.

The goal of a well-organized trauma system is to ensure that each injured patient is promptly and safely delivered to a hospital that provides optimal, timely care for all injuries. This care continues until the process of rehabilitation has been completed.

It is impractical to expect that every trauma center will have continuous coverage by fellowship-trained orthopaedic trauma surgeons. There are not enough trauma surgeons available, and many other orthopaedic surgeons consistently do an excellent job of providing care. Each trauma center must develop its own solution for delivering optimal orthopaedic care for injured patients, and this will require some surgeons with expertise and commitment to orthopaedic traumatology. Collaboration will be required to ensure that care is optimal for those patients whose injuries go beyond the area of concentration of one orthopaedic specialist.
The designation of one surgeon as the Chief of Orthopaedic Trauma is an effective method to ensure the provision of quality orthopaedic trauma care and collaboration with the Trauma Medical Director (the surgeon in charge of the General Surgery Trauma Service). The nature of this position is different between institutions, and this individual may not be the Chief of Orthopaedic Surgery.

Consistent with its institutional resources and needs, a trauma center should establish its own policies for orthopaedic trauma care. Continuing reassessment of these resources and how well the needs are being met is the joint responsibility of the Chief of Orthopaedic Surgery and the Trauma Medical Director. Requirements for certification, education and meeting attendance are specific to each hospital, a list of examples can be found on the OTA website (link).

The current edition of Resources for the Optimal Care of the Injured Patient, published by the American College of Surgeons, should be consulted as a guide to the organization of a hospital's trauma program. This text includes specific recommendations regarding orthopaedic trauma surgery (Chapter 9), and many other important features of trauma systems and trauma centers.

Surgeons participating in the orthopaedic trauma on-call roster should be a recognized group, communicating among themselves, and meeting as appropriate, under the direction of the Chief of Orthopaedic Trauma. This group might be called the "Orthopaedic Trauma Service."

A trauma center must provide the essential resources to ensure that quality care is provided for patients with musculoskeletal injuries. The Orthopaedic Trauma Association believes essential supporting resources for optimal care of patients with musculoskeletal injuries include the following categories:

1. Staff
2. Staff development resources
3. Space
4. Services
5. Equipment and supplies as outlined in Minimum Requirements for Certification as an OTA Level 1 Trauma Center.
6. An orthopaedic relevant Trauma Registry is essential for performance improvement and clinical knowledge development.