

# Implementing a Jordanian military and civilian trauma system

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## Introduction:

Hashemite Kingdom of Jordan (HKJ), its capital Amman, is an Arab country located in the East Bank of the Jordan River and has a population of 10.5 million. Until recently, the healthcare sector in Jordan was lacking a well-built trauma system.

There are 117 hospitals in Jordan offering services to Jordanian and non-Jordanian patients. The number of governmental hospitals is 31 hospitals, 15 hospitals for the Royal Medical Services (RMS), 2 university hospitals, and private sector has 69 hospitals. The RMS provides tertiary health care for >40% of its population. King Hussein Medical Centre (KHMC) is the largest medical institution in Jordan dedicated to providing the utmost in patient care and professional training with a capacity of 1414 beds. Although KHMC is a military hospital, it offers its services to military personnel and families as well as civilian citizens from Jordan.

There is a well-organized Aero-Medical Evacuation Centre established in 1987, it is the only medical facility in Jordan responsible for round the clock aero-medical evacuation of military and civilian patients on a national and international scale. It is manned by surgeons, nurses and paramedics.

The Jordan Civil Defense is a humanitarian institution and supported with advanced vehicles, equipment and high qualifications and can deal with all types of accidents that occur and require the intervention of the civil defense personnel.



## Conclusions

Jordan is a key ally of the United States and is known to have one of the best health care systems in the region.

Jordan has a sophisticated health care system that includes hospitals accredited by the Joint Commission International, reflecting the country's commitment to excellence in patient care and safety.

The trauma system development model the US team used in Jordan provided the assistance RMS needed to implement a viable Jordanian Trauma System to support the delivery of optimal trauma care to the injured Jordanian people.

Mentoring and training are in progress, as are discussions with the ACS-COT Verification leadership to ultimately reach ACS Level I verification in the future.

Implementation of such prototypes are necessary to have sustainable impact on the disproportionately high trauma related mortality rate associated with constrained resources worldwide.

## Project Design

Many upper-middle-income countries, including Jordan, lack resources and organizational leadership to develop functional trauma systems. A partnership was created between the US Air Force Central Command, Global Surgery Division, and the Jordanian Royal Medical Service (RMS) to address this issue.

This collaboration assisted with development of the Jordanian Trauma System and led to extraordinary strides in trauma system implementation. A trauma system gap analysis was conducted, multiple training courses such as ATLS, ATCN, PHTLS, TOPIC, residency education, and performance improvement processes were conducted.

A team of US and RMS health care providers met daily to conduct a virtual 4-day conference trauma conference and a subsequent two-week onsite mentoring visit. The RMS team developed a homegrown trauma registry which was sculpted to comply with the American College of Surgeons, Committee on Trauma (ACS-COT), National Trauma Data Standard (NTDS), and National Trauma Data Bank (NTDB).

There were multiple challenges in implementing a registry which included improper and incomplete prehospital care, no run sheets, poor communication between the EMS and receiving hospitals, inadequate documentation, funding issues, no built in ICD-10 diagnosis/AIS coding, inability to analyze data, and lack of training. Strategies were implemented to deploy a commercial trauma registry product.

