

# How should trauma surgeons be trained?

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Controversies: 2014: UP



# What is trauma surgery?

Trauma surgery encompasses a range of conditions and procedures that are at present in many instances adequately covered by the current general surgical training curriculum, and many of these conditions can be managed quite adequately by the well trained general surgeon. It is therefore accepted that the general surgeon who has had an appropriate exposure to trauma surgery as part of the general training can adequately manage procedures such as uncomplicated blunt and penetrating injury.

However, a substantial number of conditions and therapeutic modalities in trauma surgery require highly specialised knowledge and training in order to achieve satisfactory patient outcomes. Training and certification in the sub-specialty discipline of Trauma Surgery addresses the need for these more specialised skills in the diagnosis and management of all trauma conditions, and focuses particularly on achieving improved outcomes in these aspects of trauma disease where less than optimum management may result in high peri-operative mortality and morbidity.

This is particularly important in the management of multi-system trauma injury, and in the specialised critical care of the trauma patient.

# Who is a trauma surgeon?

## General Surgery

- Primary
  - Applied basic sciences
- Intermediate
  - Principles of surgery in general
  - Principles of surgical specialty disciplines
- Final
  - Theory and practice of general surgery

## Trauma Surgery:

- Completed FCS – general surgery
- 2 year programme
  - 1 year trauma surgery
  - 1 year critical care

# What has happened in the USA?

- Incidence of penetrating abdominal trauma decreased by 60% (1992 – 2002)
- Incidence of blunt abdominal trauma decreased by 20% (1980 – 2010)

[decrease in operative experience of residents and trauma surgeons]

- CT technology: 1980 – 2000: nonoperative management of solid organs in stable patients

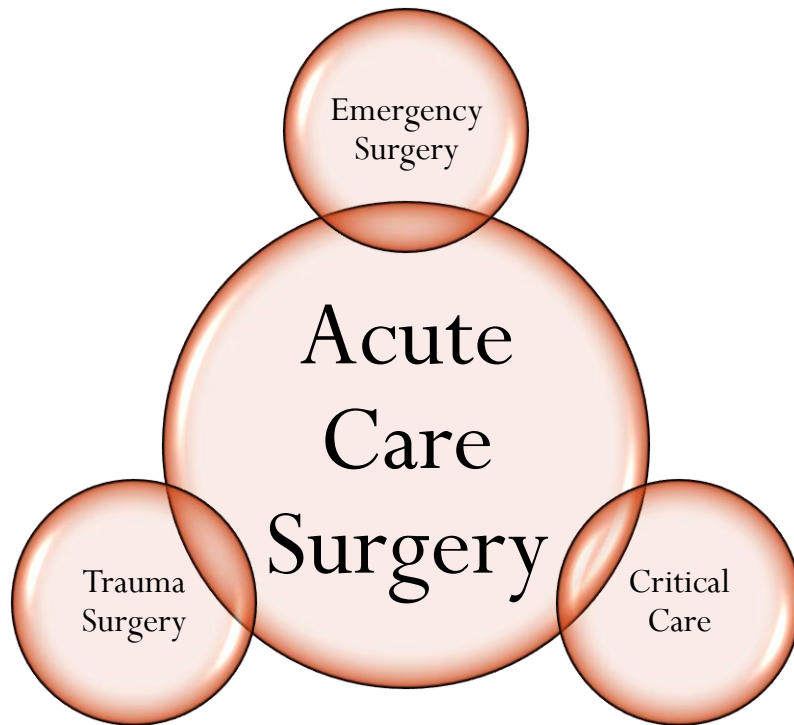
[further reduced the need for exploratory laparotomy]

- Impact of the 80 – hour week (2003)
  - Reduces the training time over a 5-year period by 6 months – 1 year
  - Elective surgery has a minimum impact on elective surgical experience
  - Most time is lost during weekends and at night

# Acute Care Surgery: The natural evolution of trauma surgery

- Born out of the need to improve the care of the non-trauma emergency patient
- It seems intuitive that trauma teams will assume the responsibility of managing all SURGICAL emergencies.

# The triad of trauma, emergency surgery, and critical care

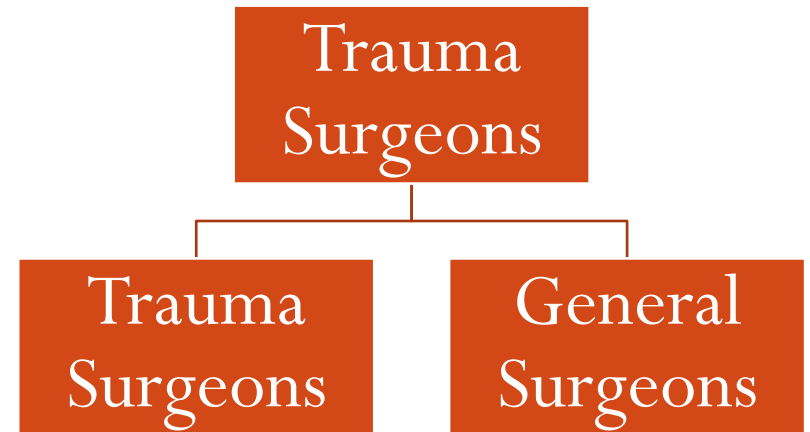
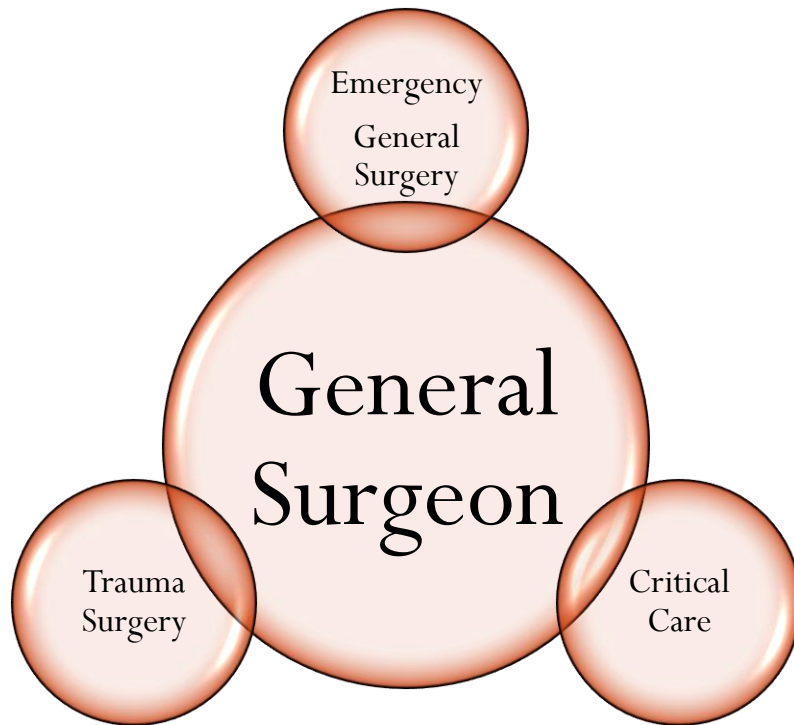


- 2 year training programme
  - 6 months trauma
  - 3 months critical care
  - 15 months general surgery

# In the South African context.....

- There is a critical shortage of General Surgeons in the state sector (Kahn et al SAJS Aug 2006)
- Focus on primary health , poor remuneration, long hours - stress, strain on family – life
- OSD (2009)
- Greater interest in General Surgery

# In the South African context.....





# Trauma Surgeons

- Surveillance and prevention

Develop and promote standards of injury surveillance systems, so that efforts to improve injury prevention and treatment can be based on solid facts and can be monitored; engage with government

- Pre-hospital care — develop EMS systems, cost-effectiveness

- Hospital-based care

Promote recommendations in the Guidelines for EsTC

Develop trauma training programmes for rural doctors

Trauma quality improvement audits at large hospitals