# Mass casualties tend to overrun any hospital is a common error!

## Roland Inglis, Ingo Marzi

# Frankfurt am Main University Hospital, Dtp. Trauma Surgery, Theodor Stern Kai 7, 60590 Frankfurt am Main

#### Introduction

In fact it is not the total amount of persons injured that brings a hospital down but it is the bottlenecks of a hospital usually unknown to the staff, and it is the lack of staff-members especially, when the scenario begins. The major bottleneck of a hospital is the diagnostic's department, this as well is the "timer" that influences the diagnostic speed as well as the flow of injured towards the operation theatre and the ICU.

That is why it is necessary to build up intermediate ICU's from

draft, when the scenario begins, the speed of the operating theatres impossible to raise.

## Methods

From our experiences during the last world soccer championship in Germany and drills following we found nonlinear correlations in the need of staff-members necessary during the time the scenario lasts.

That is why we employed Gantt-Charts to calculate the amount of staff-members necessary and found that it is the number of staff members and not the number of specialist that directly influences the hospital's capability, the staff members then logically distributed in

"bucket-chains" as "persons able to work" rather than specialists to be called.

#### Results

Following this procedure we present a means to be applicable to any hospital in mass-casualty-situations and even pandemic scenarios, no matter how large, how specialized or where the hospital's location might be.