

DEVELOPING DECISION SUPPORT FOR DUTCH MILITARY MEDICAL STAFF TO ALLOCATE CASUALTIES IN A COMBAT CONTEXT

Currently, the Royal Dutch Army is shifting its focus from main task 2 operations (peacekeeping) to main task 1 operations (combat). The shift in focus has uncovered that the 400 Medical Battalion is currently not capable of supporting the Army in Combat Operations. As a result, the 400 Medical Battalion is currently developing the Role 2 Basic Medical Treatment Facility.

During the development of the Role 2 Basic Medical Treatment Facility, the decision-making processes are copied from the context of Peace Support Operations. Resulting in the decision-making process in front of the facility being triage. Triage is done to prioritize patients, while analysis shows that the decision in a combat setting asks for a process to allocate patients (figure 1). As a consequence, the currently applied process is not suitable.

The goal of the medical chain in combat is to forward every casualty who can to the Ambulance Exchange Point for further transport and send as few casualties as possible in. The design goal was therefore to develop decision support for the functionary in the role of triagist, while stimulating a combat mindset.

The adult combat allocation protocol is a new way of working specially designed for the military medical staff at the Role 2 Basic (figure 2). The protocol is based on a set of guidelines that contribute to answering the statements. By following this protocol, all incoming patients can be allocated to either the Ambulance Exchange Point or the Medical Treatment Facility. Only the patients who will not make it to the next facility without treatment will be sent into the Role 2 Basic Medical Treatment Facility.

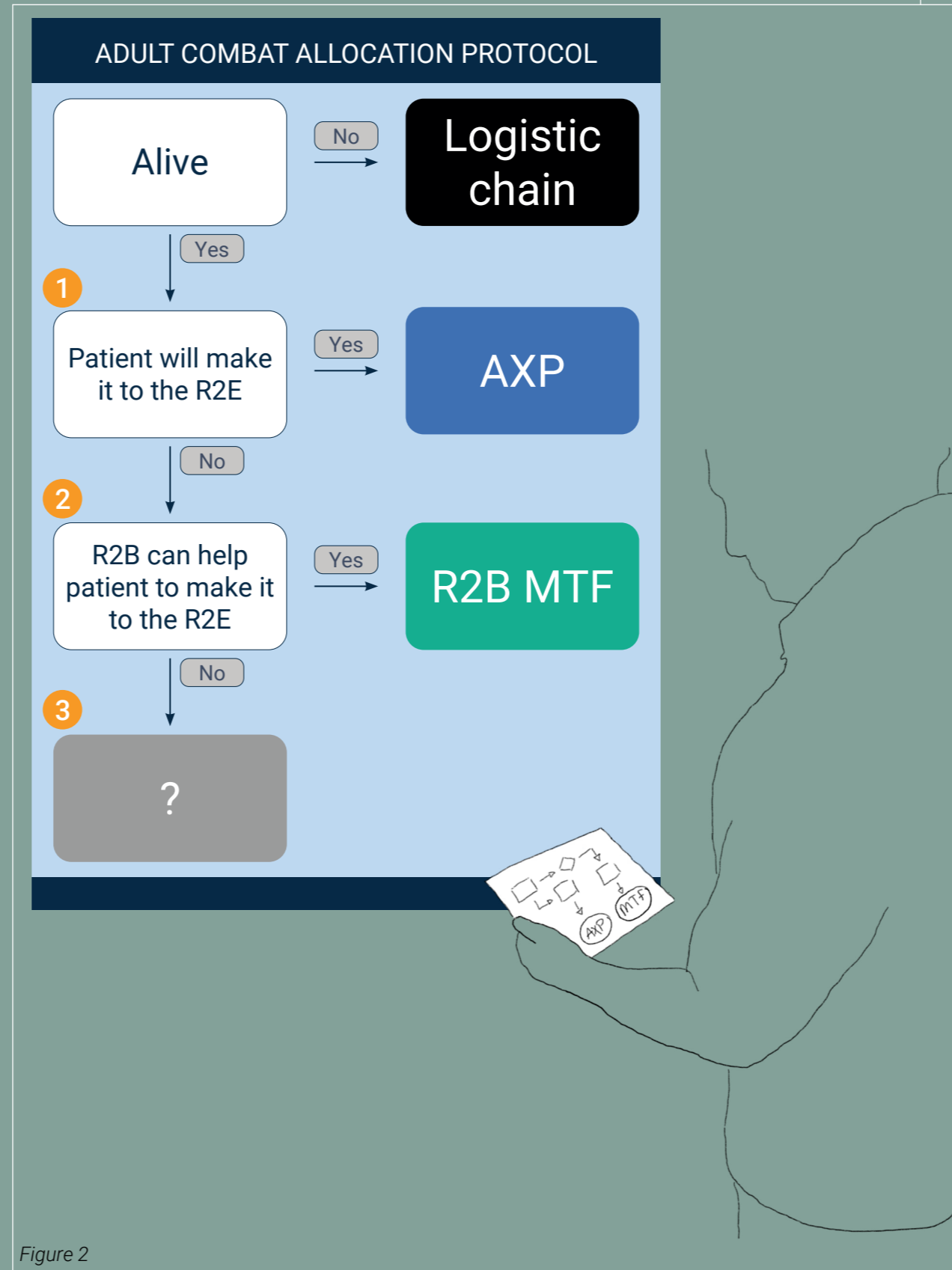
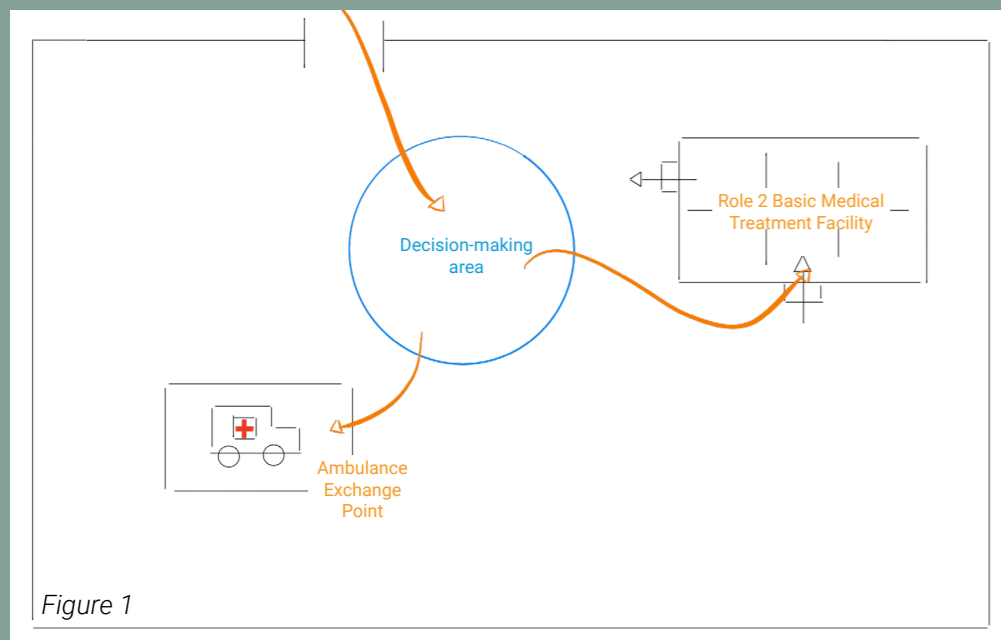


Figure 2

- 1 **A couple of vital signs**
 Heartrate is x
 Blood pressure is x
 Temperature is x
- 2 **MARCH**
 In case the answer to any of these medical questions is yes, the answer to the statement if the patient will make it to the Role 2 Enhanced is no.

 M Massive bleeding
 A Airway
 In case of a obstructed airway: no
 In case of an endangered airway: consult surgeon
 R Respiration
 C Circulation
 H Hypothermia
- Tactical and logistical**
 Besides patient and trauma data, the following tactical and logistical data is of importance:
 - 1 Distance to the Role 2 Enhanced expressed in time. The closer the R2E is, the more patients will make it there without treatment
 - 2 Type of transport. E.g., a ZAU (ambulance) with ICU capabilities offers the possibility of earlier transport, and therefore transport of patients who are less stable
 - 3 Transport availability. How many ZAU's are available, but more specifically: what type of places do they have? Patients lying down versus sitting patients
- 3 **What do we do in the Role 2 Basic?**
 What is treated?
 What is not treated?
 What cannot be treated?
 Depending on which surgeries are offered and the resources available in the Role 2 Basic