

CHAPTER 1

Introduction

Background

Triage is a system of clinical risk management employed in Emergency Departments worldwide to manage patient flow safely when clinical need exceeds capacity. Systems are intended to ensure care is defined according to patient need and in a timely manner. Early Emergency Department triage was intuitive, rather than methodological, and was therefore neither reproducible between practitioners nor auditable.

The Manchester Triage Group was first set up in November 1994 with the aim of establishing consensus among senior emergency nurses and emergency physicians about triage standards. It soon became apparent that the Group's aims could be set out under five headings.

- Development of the common nomenclature
- Development of common definitions
- Development of a robust triage methodology
- Development of a training package
- Development of an audit guide for triage

Nomenclature and definitions

A review of the triage nomenclature and definitions that were in use at the time revealed considerable differences. A representative sample of these is summarised in Table 1.1, where the priority categories are shown on the left and the maximum respective times (in minutes) to first contact by a treating clinician are listed in the right-hand columns.

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Table 1.1

Hospital 1		Hospital 2		Hospital 3		Hospital 4	
Red	0	A	0	Immediate	0	1	0
Amber	<15	B	<10	Urgent	5–10	2	<10
		C	<60	Semi-urgent	30–60		
Green	<120	D	<120				
Blue	<240	E	–	Delay acceptable	–	3	–
		FGHI					

Despite this enormous variation, it was also apparent that there were a number of common themes running through the timings of these different triage systems, and these are highlighted in Table 1.2.

Table 1.2

Priority	Max. time (minutes)			
1	0	0	0	0
2	<15	<10	5–10	<10
3		<60	30–60	
4	120	<120		
5	<240	–	–	–

Once the common themes of triage had been highlighted, it became possible to quickly agree on a new common nomenclature and definition system. Each of the new categories was given a number, a colour and a name and was defined in terms of ideal maximum time to first contact with the treating clinician. At meetings between representatives of Emergency Nursing and Emergency Medicine nationally, this work informed the derivation of the United Kingdom triage scale shown in Table 1.3.

Table 1.3

Number	Name	Colour	Max. time (minutes)
1	Immediate	Red	0
2	Very urgent	Orange	10
3	Urgent	Yellow	60
4	Standard	Green	120
5	Non-urgent	Blue	240

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As practice has developed over the past 20 years, five-part triage scales have been established around the world. The target times themselves are locally set, being influenced by politics as much as by medicine, particularly at lower priorities, but the concept of varying clinical priority remains current.

Triage methodology

In general terms a triage method can try and provide the practitioner with the diagnosis, with the disposal or with a clinical priority. The Triage Group quickly decided that the triage methodology should be designed to allocate a clinical priority. This decision was based on three major tenets. First, the aim of the triage encounter in an Emergency Department is to aid both clinical management of the individual patient and departmental management; this is best achieved by accurate allocation of a clinical priority. Second, the length of the triage encounter is such that any attempts to accurately diagnose a patient are doomed to fail, as this activity requires a consultation rather than a triage assessment. Finally, it is apparent that diagnosis is not accurately linked to clinical priority, the latter reflects a number of aspects of the particular patient's presentation as well as the diagnosis; for example, patients with a final diagnosis of ankle sprain may present with severe, moderate or no pain, and their clinical priority must reflect this.

In outline, the triage method put forward in this book requires practitioners to select from a range of presentations, and then to seek a limited number of signs and symptoms at each level of clinical priority. The signs and symptoms that discriminate between the clinical priorities are termed *discriminators* and they are set out in the form of flow charts for each presentation – the *presentational flow charts*. Discriminators that indicate higher levels of priority are sought first, and to a large degree patients who are allocated to the standard / 4 / green clinical priority are selected by default.

The decision-making process is discussed in chapter 2, and the triage method itself is explained in detail in chapter 3.

Priority and management

It is easy to become confused between the clinical priority and the clinical management of a patient. The former requires that enough information is gathered to enable the patient to be placed into one of the five defined categories as discussed above. The latter may well require a much deeper

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understanding of the patient's needs, and may be affected by a large number of extraneous factors, such as the time of day, the state of the staffing and the number of beds available. Furthermore, the availability of services for particular patients will fundamentally affect individual patient flow. Separately staffed 'streams' of care for particular patient groups will run at different rates. This does not affect underlying clinical priority which affects the order of care within, rather than between, streams in such a system. These issues are discussed in more detail in chapter 5.

Training for triage

This book, in conjunction with the accompanying Manchester Triage Provider Course, attempts to provide the training necessary to allow introduction of a standard triage method. This process has been highly successful, not only in the UK where the system originated, but across many countries that sought a standard for triage in their health care systems. It is not envisaged that reading the book and attending a course can produce instant expertise in triage. Rather, this process will introduce the method and allow practitioners to develop competence at using the material available as a first step towards competence in using the system. It must be followed up by audit of individual triage practitioners and evaluation of their use of the system.

Triage audit

The Triage Group spent considerable time trying to pin down 'sentinel diagnoses' – that is diagnoses that could be identified retrospectively and which could be used as markers of accurate triage. For the reasons outlined above, it soon became apparent that even retrospective diagnosis could not accurately predict actual clinical priority at presentation.

Successful introduction of a robust audit method is essential to the future of any standard methodology, since reproducibility between individual practitioners and departments must be shown to exist. This is discussed in more detail in chapter 6.

Beyond triage in the Emergency Department

The concept of triage (determining clinical need as a method of managing clinical risk) and the process outlined in this book (presentational

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recognition followed by reductive discriminator seeking) is applicable in other settings. In some of these, for example medical, surgical or paediatric assessment units, the system can be implemented in exactly the same way as it is in the Emergency Department. In other settings, for instance Primary Care or Out of Hours Units, many contacts may be made by telephone. A modification of the Manchester Triage System (MTS) can be used and this is outlined in chapter 7.

The information gained during the triage process can also be used in other ways to improve patient care. It is important, for instance, that clinicians recognise any change in the patients' status as early as possible. Early Warning Scores have been applied in many settings to formalise this function. In the Emergency Department the ABCDE discriminators from the MTS can be used in exactly this way, and the monitoring of physiological parameters, as outlined in chapter 8, is an intuitive way for triage practitioners to put into practice the original exhortation for dynamic triage and that 'every intervention is a triage intervention'.

Finally, many users of the MTS have recognised that the outcome of the presentation selection–priority assignment process is to place individual patients into one of 265 slots in a 53×5 presentation–priority matrix. This 'pigeon-holing' can be used to drive pathways of care in systems that have taken to 'streaming'. Particular presentation–priority combinations (e.g. wounds–green, chest pain–orange) may be appropriate to particular streams (minor injuries and resuscitation, respectively, in the examples given). This concept is discussed in more detail in chapter 8.

Summary

Triage is a fundamental part of clinical risk management in all departments when clinical load exceeds clinical availability. Emergency triage promulgates a system that delivers a teachable, auditable method of assigning clinical priority in emergency settings. It is not designed to judge whether patients are appropriately in the emergency setting, but to ensure that those who need care receive it appropriately quickly. MTS has been shown to have functions beyond the initial concept when used to monitor care and to signpost streams of care determined by local provision and actual availability.