

# **RVZ advice on Acute Care**

The core elements of the advice

## **Summary of advice on Acute Care**

### **A reorganization of acute care would enable more lives to be saved**

Acute care is usually a subject of great interest. That is hardly surprising, since an ambulance's wailing siren and flashing lights tend to make an impression on most people. Everyone knows that speed is of the essence. Television programmes reporting the number of casualties carried off to hospital in a typical weekend also show helicopters sometimes being used or additional personnel being rushed to the scene. Then there are newspaper photographs of massive traffic pile-ups, horrifying images that capture the imagination.

Besides those injured in road traffic accidents, there are many others who need rapid assistance. These include those who suffer a myocardial infarction, sudden intense pain or fever at home. From the patient's point of view, many ailments seem urgent. In medical terms, however, this does not necessarily mean that urgent care has to be provided. It is important to draw this distinction with regard both to the organization of acute care and to its financing. It is therefore essential to distinguish between the demand for acute care and acute care itself.

The Council for Public Health and Health Care (RVZ) defines a demand for acute care as a situation in which a patient/victim or bystander demands immediate assistance in relation to circumstances, either experienced as or seen to be serious or imminently life-threatening, resulting from a health problem or injury that has arisen or worsened very suddenly.

The RVZ defines acute care as a situation in which care must be provided as rapidly as possible, certainly within a period of several minutes to several hours, to prevent death or irreversible damage to health as a result of an acute life-threatening disorder or an accident. This concept excludes all types of care that can be planned in advance, such as the care and treatment of a patient requiring cataract surgery.

The pivotal issue addressed by the advisory report is how to structure acute care most efficiently. Change is in the air: there are plans to revise the health insurance system, to modify the care provided by GPs outside normal working hours, to reorganize hospitals' accident and emergency departments and to review the Ambulance Act. Accordingly, this is a particularly propitious moment at which to restructure the provision and organization of acute care.

### **What are the current problems?**

At present the quality of acute care is not all it should be in a number of respects. For example, according to international standards, it takes too long for professional help to reach a patient who has suffered a myocardial infarction or who has sustained serious injuries. What is more, not all patients who suffer a stroke are admitted to a specialized unit in a hospital fully equipped to deal with such cases. Yet according to current medical opinion, that is what is needed in order to provide the patient with the best treatment.

What is more, the way in which the chain of acute care is organized leads to inefficiency. For example, medical specialists are deployed to provide general medical care in accident and emergency departments. Almost three quarters of the patients who turn up at the accident and emergency department without being referred, could just as easily be treated by a GP. The judgement as to whether acute care is needed is not made cohesively or systematically enough and furthermore the relevant decisions are taken by three separate organizations. There is also a need for extensive consultation at administrative level to bring the many autonomous parties and organizations together in a unified approach that encompasses private and public ambulance services, hospitals, GPs, professional organizations from diverse disciplines and various levels of government (central, provincial and municipal).

The availability of acute care also leaves a lot to be desired. One of the reasons for this is that acute care has to make use of resources and personnel that are also used for less urgent types of care. If a patient is admitted to hospital with acute heart problems, in many cases the cardiologist has to be called away from his regular patients to attend to the new arrival. In the ambulance sector, too, emergency transport has to compete with transport that has been planned and ordered in advance. This can lead to the existing 15-minute norm being exceeded. In addition to all this, insufficient funds have been invested in the availability of acute care.

### **What improvements are needed with regard to acute care?**

By organizing acute care differently, between 1000 and 2000 more lives a year could be saved. What better reason could there be for reviewing the current situation?

In the opinion of the RVZ, acute care should be organized along the following lines:

- Two routes to acute care
  - A single national telephone service for patients who believe they are suffering from an acute medical problem. This service will ensure that a coherent approach is taken in response to requests for emergency GP and ambulance care.
  - A single regional location for acute care that can be reached by every citizen within a maximum of 30 minutes, to be created by the functional integration of general practices with hospital accident and emergency departments.
- Separating acute care from elective care
  - Patients who require acute care will be treated according to a different process than patients who require other kinds of care. In terms of ambulance transport this means distinguishing between emergency transport and transport that is scheduled in advance.
- Division of tasks and concentration
  - Certain categories of patients will not be taken to the nearest hospital but will be admitted to designated centres. For example, patients suffering from a myocardial infarction who can be treated using balloon angioplasty will only be taken to a hospital where such facilities are available.
- Utilizing technological developments
  - In the future, the organization of acute care will be determined to a large extent by technological developments. Greater advantage should be taken of new opportunities in this respect.

## **What measures need to be taken?**

The desired changes cannot be brought about from one day to the next. Accordingly, the Council is in favour of a step-by-step approach. It is also important to recognize that it is simply impossible to have qualified personnel on hand to provide immediate care for every Dutch citizen as soon as it is required. However, there are standards which indicate what citizens have a right to expect in this regard.

First of all, the RVZ believes that the government should draw up standards for the quality and accessibility of acute care, based on public health considerations. When producing standards from a public health perspective, the primary concern is how to obtain the greatest improvement in terms of health. As the RVZ sees it, opportunities in this respect are mainly to be found in the initial phase, from the report by a patient or a bystander to the arrival of an ambulance or other professional care provider. The primary concern is to speed up the process of providing assistance at the scene and only in the second instance should the focus be on transporting the patient to the appropriate location.

With the aim of providing help more rapidly, the RVZ recommends reducing the planning guideline for the ambulance services from 15 to 8 minutes. The 8-minute norm must allow scope for various options regarding the deployment of people and resources. In some areas, for example, ambulance transport might take the form of a cycle or motorcycle. Meanwhile a division between emergency and scheduled transport can enable help to reach the scene more rapidly.

In addition, the RVZ indicates what increasing the speed of assistance and transport to the appropriate location will mean in practical terms, using three health problems as an example (myocardial infarction, cerebrovascular accident (stroke) and serious trauma).

The implications for the initial care of patients suffering from a myocardial infarction are as follows:

- The government encourages a policy of training non-medical bystanders and first responders in resuscitation techniques. The objectives include: creating a situation in which 75% of non-medical bystanders at the scene of a collapse are able to carry out elementary resuscitation and ensuring that 75% of first responders such as first aid workers, police, firefighters and airline personnel are able to use an Automatic External Defibrillator (AED). Giving support to first responders in the form of telephone instruction if necessary.
- In cases where a patient has suffered a myocardial infarction and can be treated by means of balloon angioplasty, he or she should not be taken to the nearest hospital but to a hospital with the facilities to carry out such a procedure.

The implications for the initial care of patients suffering from a cerebrovascular accident (stroke) are as follows:

- The government encourages the setting up of a programme for early recognition of cerebrovascular accidents (CVA).
- Within a period to be agreed in conjunction with the professionals in the field, all patients who have suffered a CVA will be taken to a hospital with a suitably equipped stroke unit.

The implications for the initial care of patients suffering from a serious trauma are as follows:

- Within an agreed period (the RVZ is considering a period of one year) patients will be distributed among hospitals in the region according to criteria drawn up by the trauma centres. The protocols of the ambulance services will be adjusted accordingly.
- The government charges trauma centres with the task of establishing agreements with hospitals and ambulance services in the region in the short term to arrive at binding agreements on the introduction of a registration system for trauma patients.

In addition to providing care more rapidly at the scene and faster transport to the appropriate hospital, standards should also be drawn up for the accessibility of locations for acute care. The RVZ believes that the government should set 30 minutes as the maximum time it should take every citizen to travel to their local accident and emergency department using their own transportation. It is possible to achieve this with a total of 84 locations. The Netherlands National Institute of Public Health and the Environment (RIVM) has calculated for the RVZ that 84 accident and emergency locations provide just as much cover in terms of care as the existing 107 locations. In the Netherlands as a whole, 'only' 112,000 people will be unable to reach an accident and emergency location within 30 minutes using their own transportation. Over 90% will be able to reach one of the 84 proposed accident and emergency care locations in a shorter time, while over 50% will even be able to do so within 15 minutes.

Secondly, steps need to be taken to allow the measurement of performance in the acute care sector. A single registration system for all services and care providers involved in acute care is needed in order to be able to say more about quality and efficiency in the chain of acute care. If necessary, the government should introduce legal measures to support trauma centres in reaching their set objectives in this regard. The RVZ also recommends arriving at a system that makes performance in the acute care sector visible.

Thirdly, there is a need for measures which increase efficiency. The RVZ believes that 23 accident and emergency departments can be closed down. In addition, hospital accident and emergency departments can be functionally integrated with general practices. As well as gains in terms of quality, the resultant efficiency gains relate primarily to patients who were not referred being treated by GPs instead of medical specialists or doctors specialized in emergency care. The RVZ also sees gains in efficiency by staffing the centres with an appropriate mix of personnel: GPs, nursing staff, nursing practitioners, emergency care doctors and other support staff. Measures can also be taken in the ambulance sector. Increased efficiency can be attained by differentiation in the types of vehicles, using the motorcycle ambulance in addition to the traditional ambulance and more auxiliary ambulances for scheduled transport.

Fourthly, there is a need for measures with regard to the financing of acute care. The RVZ believes that the availability (necessary cover in terms of people and resources), infrastructure and stand-by should be financed separately in the acute care sector. In other words, there should be a separate price structure for availability and stand/by, and for actual provision of services (care and/or transport). For acute care in hospitals, the Council sees the Special Medical Procedures Act as the basis for the extra stand-by costs which acute care necessarily entails. Where ambulance care is concerned, the Council is thinking in terms of broad objective-based payments, like those used in youth care, or a subsidy scheme under the Exceptional Medical Expenses Act or the Health Insurance Act.

### **What will the measures cost?**

Step-by-step reduction of the planning norm for ambulance services from 15 to 8 minutes will require an initial investment of 198 million euros. This amount will be compensated for to some extent by between 90 and 140 million euros in savings generated by gains in efficiency, which can be used for this purpose. At a rough estimate, the integration of general practices and accident and emergency departments will result in 44 million euros of savings generated by efficiency gains. The closure of 23 accident and emergency departments will result in savings of between 15 and 30 million euros. The introduction of mobile stand-by will save between 25 and 45 million euros, while the deployment of auxiliary ambulances in scheduled transport will generate savings of between 9 and 18 million euros.

### **The core elements of the advice**

#### **Which problems does this report address?**

In this report, the RVZ outlines a proposal for the organization of acute care which will save between 1000 and 2000 more lives each year. Two key elements to achieve this aim are that ambulance services arrive to help the patient within 8 minutes and that the ambulance takes the patient to the most suitable location. In order to ensure that the patient receives the best possible care, the ambulance should take patients suffering from certain conditions to a centre specialized in treating acute problems.

#### **What are the consequences for the consumer?**

The consumer will receive help more quickly in cases when time is of the essence. The consumer will also receive clearer instructions about what to do in cases where acute care is needed: call 112 or go to a location where acute care is provided.

#### **What are the consequences for the care provider?**

A distinction between scheduled and emergency transport will be introduced in the ambulance sector. Hospitals will make agreements on division of tasks and concentration: in other words they will agree which patients can best be treated at which location. General practices will integrate with accident and emergency departments in hospitals.

#### **How much will it cost?**

The investment in providing more rapid assistance will initially cost 198 million euros. Gains in efficiency can generate savings of between 90 and 140 million euros.

#### **What is new?**

A coherent approach to the treatment of patients requiring acute care and greater variation within the ambulance services.