Organisation of primary emergency care

Audit Report No 2-5/04/104 of September 14, .2004

Executive summary

The State Audit Office (SAO) has audited the organisation of primary emergency care. In the course of the audit, efficiency in the utilization of the existing resources for emergency medical service was investigated, as well as whether the ambulance service performs the duties for which it has been called and how the emergency dispatch centres manage emergency medical staff. Further, administration in the field of emergency medical services by the Ministry of Social Affairs and by the Health Care Board was audited.

Emergency medical care means out-patient health services for the initial diagnosis and treatment of a life-threatening condition, injury or poisoning and, if necessary, for transportation to medical facilities of the person requiring such care. Emergency service is provided by 90 ambulance crews, for whose funding 173 million kroons were allocated from the state budget in 2004. However, according to the estimate of costs prepared by the Ministry of Social Affairs, emergency service requires approximately 215 million kroons annually. Such a major difference between the actual funding and the cost estimate drawn up by the Ministry of Social Affairs calls for a critical review and revision of the organisation and provision of emergency medical services. Since ambulance service is not the sole provider of primary emergency care, its organisation needs to be examined in conjunction with the family physician system and hospital emergency departments.

Relevant observations

The current system does not grant optimal access to emergency medical care. Unless there is a life-threatening condition, injury or poisoning, referral for emergency service is not justified. At the same time, people have little possibility of having adequate access to medical care beyond normal working hours of a general practitioner. Until now the family physician telephone consultation service has not been instituted, information about the functions and opportunities of hospital emergency departments is insufficient, transportation is not provided to patients in need of it.

Operation of ambulance crews is too expensive. Almost half (41) of the ambulance crews are manned by physicians, although the work could in most cases be managed by nurses. Further, all crews consist of three members though elsewhere in the world lower staffing levels are common. All ambulance crews are on alert for 24 hours, irrespective of the twice smaller number of calls at night. By changing the existing work organisation of emergency service it would be possible to save tens of millions of kroons.

About one fourth of the calls do not require an emergency response. Non-serious calls which do not require immediate intervention account for about 70 % of emergency calls. The proportion of clearly non-emergency aid is approximately 27 %, of which at least 10 % belongs to the competence of a family physician and 6 % is simply transportation of patients to and from hospital.

The functioning of emergency dispatch centres is not always efficient. There are no harmonized guidelines on handling emergency calls, therefore emergency centres work according to different directions and prioritize calls for service differently. The lack of unified guidelines enables to start an ambulance too readily, for there is no ground for declining a call. Furthermore, the dispatch centres are not able to adhere to the time limits allowed for dealing with a call and occasionally the actual response time in case of urgent calls exceeds the established standards by times.

Administration in the field of emergency services is inadequate in places. There are no sufficient national statistics collected, neither are there analyses conducted to provide an overview of the performance of emergency service. Shortage of elementary statistical data and analyses attests to the lack of systematic management. For more than a year, the relevant entities have failed to adopt a final decision on the contest for emergency service providers. Several issues pertaining to emergency medical service are unregulated (medical coverage at a mass gathering event, organisation of advanced life support services). Furthermore, the instrument drawn up on emergency aid logistics has not been followed.

Main recommendations to the Minister of Social Affairs

In order to facilitate access to and enhance the administration of emergency medical care the SAO recommends the following:

- Develop a model for the provision of primary emergency care which would take into account the cumulative effect of all system components on the accessibility of medical care.

- Introduce the family physician telephone consultation system during 2004 to facilitate patients' access to primary medical care and thereby reduce the workload on emergency service.

- Actively inform people of different possibilities for and facilities of primary emergency care (incl. at night and at weekends).

- In collaboration with the Minister of Internal Affairs ensure the possible fastest elaboration and adoption by all emergency dispatch centres of the unified guidelines on handling emergency calls.

- Periodically review the logistics schemes and regulations for the number of ambulance crews proceeding from health political decisions and changes in the population and hospital networks.

In order to reduce expenditures on ambulance crews and to better utilize the resources for emergency service, the SAO recommends the following:

- Deliberate the necessity for crews manned by physicians and gradually start the staffing of ambulance crews with nurses instead of physicians.

- Deliberate the introduction of two-member crews. Two-member crews could be used first and foremost in bigger towns where it is easy, if necessary, to alert an additional crew.

- Introduce part-time crews in bigger towns (Tallinn, Tartu, Pärnu, Narva). The system of part-time crews will translate into cost savings at the time when call volumes are low.

- Stop the practice of using ambulances for transportation of patients, unless there is emergency.

The replies of the Ministers of Internal Affairs and of Social Affairs have been appended to the report.

Märt Kivine
Chief Auditor of the Performance Audit Department