

Establishing a unified emergency medical service in Latvia

Overview

In 2009, in response to the fragmented organization of prehospital emergency medical services and disparities in access, the Government of Latvia established the State Emergency Medical Service to introduce a unified national policy on emergency and disaster medicine and to improve organization of prehospital emergency medical services across Latvia. The existing 39 separate organizations delivering emergency medical services across the country were merged in the late 2000s to develop one unified service. On the 1st July 2010, the merging process and new design for emergency medical services, along with the necessary institutional adjustments, were successfully completed. Key changes focused on establishing a unified system for managing resources, developing equipment and medicine standards, training providers and improving services in rural and underserved areas. The State Emergency Medical Service now employs all necessary medical personnel to deliver prehospital emergency medical care. A network of five regional centres coordinates 190 ambulance teams stationed at 100 locations across the country. The State Emergency Medical Service is responsible for emergency medical care provision throughout the state and transportation of patients to the nearest appropriate hospital in accordance with guidelines. Ambulance teams are required to respond to calls within specified time limits stated in national legislation. Ongoing monitoring ensures targets continue to be met. An electronic information system has been introduced for call reception and processing, dispatching, communication, quality supervision, reporting, and status monitoring among health providers. Overall, a high level of satisfaction with services is reported among both patients and providers; 86.3% of patients surveyed said they were satisfied with ambulance services. Today, the State Emergency Medical Service continues to direct and manage the delivery of prehospital emergency medical services, using monitoring and evaluation to continue quality improvements.

Problem definition

In the early 2000s, 39 municipal institutions in Latvia were separately responsible for contracting emergency medical services within their defined area. Over time, this organizational structure was found to contribute to increasing regional disparities in care access and an inequitable distribution of resources (Box 1). Furthermore, decentralization restricted effective coordination and planning for emergency medical services and posed geographical limitations on patient transfers.

Box 1

What problems did the initiative seek to address?

- Decentralized provision and management of prehospital emergency medical services resulting in fragmentation, lack of coordination and service inefficiencies.
- Regional disparities in access to ambulance services and inequitable distribution of resources.
- Lack of standardized care guidelines for prehospital emergency medical services.

Health services delivery transformations

Timeline of transformations

In 2009, the government established the State Emergency Medical Service as the central organization to manage and deliver prehospital emergency medical services across Latvia (Table 1). Doing so required the gradual merging of 39 previously distinct municipal-based entities, establishing the new State Emergency Medical Service as the sole national provider for prehospital emergency medical services. At present, the State Emergency Medical Service is the main institution providing prehospital emergency medical services in Latvia.

Table 1

What were the chronological milestones for the initiative?

1990s–2000s	Period of health care reform in Latvia; project in cooperation with the World Bank in the early 2000s advanced health reforms that proved critical to the later development of the State Emergency Medical Service.
2009	State Emergency Medical Service established; 39 separate emergency medical service organizations gradually merged under this single organization.
2010	Merging of emergency medical service organizations completed, establishing the State Emergency Medical Service as the sole organization responsible for emergency medical services in Latvia.
Present	State Emergency Medical Service continues to provide all emergency medical services and direct improvements in service quality.

Description of transformations

Selecting services. Prehospital emergency medical services are provided free of charge across the country. Provision of emergency medical care, including transportation services, has been standardized to ensure the whole population has access to the same package of high-quality emergency medical care.

Designing care. Standardized guidelines and regulations have been implemented across the country for prehospital emergency medical services. Standardized guidelines have ensured decisions on tactics, treatment and transportation are consistently delivered and streamlined.

Organizing providers. The State Emergency Medical Service has centralized management of incoming calls and dispatching in two call centres and five regional centres across Latvia to direct care as needed. Emergency services can be accessed through two common emergency phone numbers (113 for emergencies or 112). Services are available at all times. Ambulances are stationed at 100 locations

across the country and provide prehospital emergency medical care and transport patients to the nearest appropriate hospital for their care needs. Through the unified service, patients are now directed to hospitals based on a countrywide network map of hospitals and specialized facilities, irrespective of municipal boundaries.

There are 190 ambulance teams in the State Emergency Medical Service, each consisting of two medics and one driver. Ambulance teams may also include a physician and one or two physician assistants. Ambulance teams can consult remotely with specialists at the Centre of Specialized Medicine as needed, such as cardiologists and neurologists, via phone conferencing systems to receive guidance on medical interventions and assistance determining which hospital patients should be transported to. The Centre of Specialized Medicine, as one of the structural units of the State Emergency Medical Service, also has in place four specialized ambulance teams that can be sent to the emergency site or other hospitals to assist in complicated cases.

Managing services. The State Emergency Medical Service is the sole organization responsible for the provision and organization of prehospital emergency medical care according to a fixed budget set by the Ministry of Health. Centralized management of services has enabled administrative activities to be streamlined.

Strict performance targets have been established within the State Emergency Medical Service and providers are monitored and assessed according to these. The quality of services delivered is monitored daily to ensure consistent delivery according to standards in place and timely identification of any red flags. Standardized data reporting enables comparisons among regional centres, service quality assessment, research activities and regular reporting to the Ministry of Health and other health care institutions. Basic performance indicators include the number of ambulance visits resulting with patient transportation to hospital, number of patient transfers and average response time interval in urban and rural areas for highest priority cases, among others.

Improving performance. Qualified physicians and physician assistants lead trainings for providers in the capital city. Trainings are provided on a regular basis to ensure emergency service providers have opportunities to maintain and regularly update their skills and knowledge. In addition, regular real-life simulations are organized in cooperation with other emergency public services, including rescue and police services, to ensure the provision of high-quality care. While trainings and seminars are not mandatory, they contribute towards credit points needed for professional recertification. Every year, emergency medical care providers are required to pass both a theoretical and practical examination.

Table 2

How was the delivery of health services transformed through the initiative?

Before	After
Selecting services	
Availability of prehospital emergency medical services variable across regions.	Free, standardized package of services available across all regions.
Designing care	
Absence of standardized care guidelines or protocols across local organizations.	Common set of standards, guidelines and protocols in place.
Organizing providers	
Individual emergency care providers contracted at municipal or institutional level with wide discrepancies in organization of care teams; emergency care providers (municipal organizations and hospitals) highly fragmented.	State Emergency Medical Service coordinates all prehospital emergency care providers – 194 ambulance teams located at 100 locations across the country, two call centres, five regional centres and a Centre of Specialized Medicine; phone conferencing allows communication between emergency care teams and specialists.
Managing services	
Delivery of emergency care services managed by 39 different organizations.	State Emergency Medical Service manages delivery of all emergency services, streamlining administrative activities; quality management systems now in place; strict performance targets in place.
Improving performance	
Inconsistent availability of trainings; variations in emergency service providers' skill level across the country.	Trainings and seminars regularly provided; trainings contribute towards credits needed for professional recertification.

Health system enabling factors

The Ministry of Health has provided considerable support to the initiative to centralize emergency medical services (Table 3). A number of policy changes supported the initiative and contributed to the legislative base for the State Emergency Medical Service, notably the passing of government order number 547 in 2002, which first enabled its development and, in 2005, orders 444 and 854, each contributing to the legislative base for the development of the State Emergency Medical Service by introducing quality and accessibility standards for emergency medical care

across the country and formalizing prehospitalization emergency care guidelines. Furthermore, investments from the Ministry of Health and European Regional Development Fund enabled the State Emergency Medical Service to acquire the necessary resources and the new information technology system, once implemented, will allow for enhanced monitoring. Additionally, to ensure sufficient professional capacities, the Medical Qualification and Training Centre has been established as a structural unit within the State Emergency Medical Service to offer certified seminars and training courses for providers.

Outcomes

Bringing the management of emergency medical services under the oversight of one central organization has contributed to several positive outcomes. Informal reports indicate that the unification of emergency medical services has led to improvements in quality, efficiency and cost-effectiveness, with central management of services resulting in patients receiving services quicker and in the most appropriate location. Widespread satisfaction with services has been reported, with over 80% of patients indicating they are pleased with services provided.

Table 3.

How has the health system supported transformations in health services delivery?

System enablers	Example
Accountability	<ul style="list-style-type: none"> • Policies and legislation adopted by the Ministry of Health support the functioning of the State Emergency Medical Service.
Incentives	<ul style="list-style-type: none"> • Financial support assisted in centralizing services, enabling important resource and technology investments.
Competencies	<ul style="list-style-type: none"> • Medical Qualifications and Training Centre established within the State Emergency Medical Service to offer certified seminars and training courses for providers.
Information	<ul style="list-style-type: none"> • Development of an electronic information system currently underway.

Change management

Key actors

The State Emergency Medical Service was established in 2009 by the government to lead necessary changes in the organization and delivery of emergency medical services (Box 2). This organization became the central actor in this transformation, working with each of the various municipal governments and institutions previously charged with delivering emergency medical services. The Ministry of Health provided support throughout the transition process, giving authority to proposed changes and ensuring necessary resources were available. The State Emergency Medical Service is now established as the sole organization responsible for the

management and delivery of prehospital emergency medical services.

Initiating change

Development of the initiative was triggered by health reforms in the 1990s and early 2000s, creating a platform on which the initiative would develop. Public relations efforts providing information on proposed changes for local governments, institutions and people, as well as an information campaign on the benefits of centralizing emergency medical services, helped win stakeholder support for the initiative. An important factor in gaining widespread population support was that services would be made free of charge. Challenges during the merging

process included resistance to change among local governments, as well as providers' concerns over new stricter quality standards. However, with strong government support behind them, the State Emergency Medical Service was able to direct necessary changes through a top-down approach and set clear rules and regulations.

Implementation

With all emergency service providers merged under a single organization, the State Emergency Medical Service implemented a standardized quality management system, streamlined administrative structures and sharply reduced the number of dispatch centres. There was a strong focus on achieving uniformity and efforts were made to evenly distribute resources and strengthen providers' skills where needed.

Moving forward

The State Emergency Medical Service continues to oversee and manage the delivery of emergency medical services, closely monitoring performance and making adjustments to the system where necessary. A unified electronic information system is currently being developed as a new tool to improve performance and facilitate monitoring of services.

Box 2

Who were the key actors and what were their defining roles?

- **Ministry of Health.** Established the State Emergency Medical Service as the central agency to oversee emergency medical services; provided funding for initiative; supported centralization through policy and legislative changes.
- **State Emergency Medical Service.** Central agency responsible for the merging process of emergency medical care providers, negotiations with municipalities and providers, and communication with society; currently the sole organization responsible for the management and delivery of prehospital emergency medical services.

Highlights

- Implementing a unified structure for the provision of prehospital emergency medical services reduced fragmentation, standardized care and improved coordination of services.
- Formalizing provider training and education embedded new practices as the professional norm and helped ensure high-quality care delivery according to guidelines in place.
- Strong national leadership, along with a clear narrative and communication plan, helped gain stakeholder support for the initiative.