

Kansas Board of  
Emergency Medical Services  
Strategic Plan  
FY-2001

Author:

Wayne Hollis, Ph.D., MICT, EMT-P  
Kansas Board of Emergency Medical Services  
August 1998, revised August 1999



**Neon Yellow Smiles**  
T-46104

©TREND





C O N T E N T S

Introduction.....ii  
Mission.....1  
Agency Philosophy.....1  
Goals.....3  
Accountability.....3  
Customers.....4  
Partners.....5  
Environment.....5  
Other factors influencing Emergency Medical Services.....7  
History of the Board of EMS.....8  
History of Strategic Planning.....9  
Definition of Objectives.....11  
Definition of Strategies.....11  
Definition of Action Plans.....11  
Definition of Outcome Measures.....11  
Definition of Output Measures.....11  
Action Plan for FY 2001 Strategic Goal  
    Goal.....12  
    Objectives.....12  
    Action Steps.....13  
    Output Measures.....13  
    Outcome Measures.....14  
Appendix A Glossary.....15  
Appendix B List of Abbreviations.....18



## Introduction

---

The development of emergency medical services (EMS) has been based on tradition and, to some extent, on scientific knowledge. Its roots are deep in history. For example, the Good Samaritan bound the injured traveler's wounds with oil and wine at the side of the road, and evidence of treatment protocols exists as early as 1500 B.C.

During the past 30 years, EMS in the United States has experienced an explosive evolution. In 1966, the white paper, Accidental Death and Disability: The Neglected Disease of Modern Society prepared by the Committee on Trauma and Committee on Shock of the National Academy of Sciences-National Research Council, provided great impetus for attention to be turned to the development of EMS. This document pointed out that the American health care system was prepared to address an injury epidemic that was the leading cause of death among persons between the ages of 1 and 37. It noted that, in most cases, ambulances were inappropriately designed, ill-equipped, and staffed with inadequately trained personnel.

Also in 1966, the Highway Safety Act established the Department of Transportation (DOT). The DOT was given authority to improve EMS, including program implementation and development of standards for provider training. States were required to develop regional EMS systems, and costs of these systems were funded by the Highway Safety Program.

The first nationally recognized EMT-A curriculum was published in 1969. Shortly thereafter paramedic education began, but training focused heavily on cardiac care and cardiac arrest resuscitation, almost to the exclusion of other problems.

Funding under the EMS Systems Act essentially ended with the Omnibus Budget Reconciliation Act of 1981, which consolidated EMS funding into state preventive health and block grants. Thus, states gained greater discretion in funding statewide EMS activities and regional EMS systems. Many of the regional EMS management entities established by federal funding quickly dissolved.

In 1985, the National Research Council's Injury in America: A Continuing Public Health Problem described the deficiencies in the progress of addressing the problem of accidental death and disability. Development of trauma care systems became a renewed focus of attention with passage of the Trauma Care Systems Planning and Development Act.



## Introduction

---

### Introduction (continued)

The act encourages the establishment of inclusive trauma systems and called for the development of a model trauma care system plan, which was completed in 1992.

The goal developed for this budget includes an action plan for the Kansas Board of Emergency Medical Services to be designated by the legislature as the lead agency for implementation of a statewide EMS/Trauma System Plan.

In April, 1994 the National Highway Traffic Safety Administration (NHTSA) conducted an assessment of Kansas emergency medical services and recommended the development of a statewide EMS/Trauma system for Kansas.

During the spring of 1995, 17 organizations with a stake in trauma care appointed representatives to the Kansas EMS/Trauma Planning Project Policy Group to develop recommendations for an EMS/Trauma System Plan.

From April 1995 to November 1997 this group met and emerged with a proposed EMS/Trauma System Plan reached through a consensus process by the Policy Group with members experienced in urban and rural trauma care.

This opportunity comes at a time when the Kansas Board of EMS is evaluating its role within a rapidly evolving health care system and during an era of fiscal restraint. Recognizing the need and potential impact, the Kansas Board of EMS selected to pursue lead agency designation for the Kansas EMS/Trauma System Plan.





## Mission and Philosophy

---

### Mission

The mission of the Kansas Board of Emergency Medical Services (BEMS) is to protect the public health and welfare by assuring appropriate out-of-hospital care and transportation of sick and injured people.

The board carries out its mission as provided in K.S.A. (Kansas Statutes Annotated) 65-6101 et seq. Duties of the board include: adopting rules and regulations; adopting a budget and reviewing and approving the expenditure of funds, regulating ambulance services, vehicles, training programs, conducting regulatory hearings and developing a state plan for emergency medical services.

### Agency Philosophy

The philosophy of the Board of Emergency Medical Services is to establish and enforce a minimum set of standards that are applicable for all entities regulated by the board. The board approves training programs, inspects ambulance services, monitors training programs, examines candidates for initial certification and provides technical assistance to ensure these minimum standards are met. The board also investigates and takes regulatory action when these standards are not met.

The board will act according to the highest standards of ethics, accountability and openness. In serving the public, the board will balance the interests of consumers, regulated entities and others, treating all with respect and dignity.

The board is committed to improving the health of the citizens of Kansas and ensuring that emergency medical services efficiently contribute to that goal. The board accepts the responsibility of investing the resources necessary to provide the state's population with emergency health care that is reliably accessible, effective, subject to continuous evaluation and integrated with the remainder of the health care system.

Emergency medical services (EMS) represents the intersection of public safety, public health and health care systems. A combination of the principles and resources of each is employed by EMS.

Additionally, the board recognizes emergency medical services will continue to be diverse at the local level. Heterogeneity among EMS systems is often a reflection of the diversity in



## Mission and Philosophy

---

### Agency Philosophy (Continued)

the communities they serve. Guiding principles are applicable to all EMS systems in the state. However, the methods for applying such principles and the ability to reach specific process benchmarks will continue to be influenced by the nature of communities and the resources they possess.

The Kansas Board of EMS has embraced the idea of Kansas Quality Management (KQM). The board and all of state government face the challenges of continually building upon the quality and value of services.

A quality approach systematically asks customers (both internal and external) what they need and expect. Because quality is defined by the customer, it varies from customer to customer from time to time.

The board solicits public involvement (external customers) during its six annual meetings. The board's use of a committee structure to discuss issues before board action allows participation from persons and entities regulated by the board, and concerns from the public at large.

As previously stated, emergency medical services do not stand alone. It is an integral part of a comprehensive health care system. The board recognizes that emergency medical services exist in a changing world and coordinates its activities with other state agencies and interested organizations.

Additionally, public policy makers must be well informed about EMS issues. Attempts will be initiated to educate public policy makers regarding important EMS related issues. These efforts will include plans to educate members of the legislature, county commissions and other state and local officials able to affect public policy that improves community emergency health care.



## Kansas Board of EMS Goals and Accountability

---

### Goals

The Kansas Board of Emergency Medical Services has established five goals for the strategic plan:

- \* To fulfill our role as a regulatory body- promptly, consistently and fairly.
- \* To support constant improvement in the Kansas emergency medical services system.
- \* To ensure that Kansas providers and attendants are appropriately equipped and professionally trained.
- \* To establish the board as the lead agency in the implementation of a statewide EMS/Trauma Plan.
- \* Improve the public image of the agency through frequent on and off-site technical assistance.

### Accountability

To become more accountable to the public, the board has adopted performance measurements and a schedule of significant upcoming program evaluations.

Beginning with the FY 2000 budget process, the board will produce annual performance plans and reports using outcome oriented measures. The agency will invest significant resources to data collection and analysis. Additionally, the agency will integrate performance planning with the budget process and link program measures to intermediate outcomes and the agency's overall outcomes.

The agency will use a three level hierarchy of measures to assess performance. BEMS will track these measures annually through performance plans and reports. The agency will integrate these performance outcomes into the budget document along with the strategic plan.

At the top of the hierarchy are the overall outcome measures. These are measures that the board can influence but over which it does not have control, such as public perception or awareness.

The second level, intermediate outcomes, are measures such as serving the needs of our customers. The agency has several programs aimed at educating and helping its customers.



## Accountability and Customers

---

### Accountability (Continued)

Third level measures are the program performance measures. These are the measures that programs can more easily control, such as the length of time it takes to process examination results. Each of the major programs will include program performance measures and their link to intermediate outcome and overall outcome measures.

Evaluations will play a major role in the board's planning and performance measurement system. The agency will be conducting evaluations; managing for outcomes will receive new emphasis. The agency plans an ambitious evaluation program.

### Customers

The board's customers are the citizens of Kansas. These customers do not speak with a single voice, but with many. Every day, from dozens of points in the state, they call into the board office and speak with board staff, send faxes and write letters. The board views its job of not just listening, but hearing. The board uses this participation to understand the current needs of customers more fully, and anticipate future needs. That is one way the board can innovate and focus its resources.

This strategic plan puts into action what has been heard from customers. The plan also shows how the board serves different customer segments. The many voices of the customer play a fundamental role in developing the board's strategic plan.





## Partners and Environment

---

### Partners

The board has used its leadership position in emergency medical services to form strategic alliances with important partners. The board has emphasized the need for enlisting new, non-traditional partners such as members and groups from the medical and allied health care professions and others:

- \* Educational Community
- \* State and local government
- \* Health Care Providers and Professionals
- \* Insurance Industry
- \* Professional Societies
- \* Public Health and Injury Control Organizations

These partners help build bridges to customers. Approaching partnership relations will produce benefits that are greater than could be achieved if parties operated independently. In an environment where cost-effective strategies are mandated, the board's approach to partnering resources will become increasingly important to achieving its goals.

### Environment

In attempting to reach its goals, the board must consider many factors, those that the agency can control, such as regulations and those outside the control of the board or "environmental factors." The environment is the set of forces and institutions that affect the board, but are not strongly affected by it. The environment consists of powerful, fundamental forces that create opportunities and shape the future strategic direction of the board. The Board of EMS must continuously adapt its strategies to change in the environment to achieve its goals.

The board uses environmental analysis to make informed assumptions about how environmental factors will influence the future of emergency medical services.

A summary of the assumptions used to make decisions about this plan are briefly described below.

### Demographics

Population: The U.S. Bureau of Census estimates the population of the state is 2,572,000 (1996).



## Environment

---

### Demographics (Continued)

Aging of the Kansas Population- The population of Kansans over age 65 will continue to increase. Currently, 352,000 or 13.7 percent of the population is estimated to be over the age of 65. While 48,000, or 1.9 percent, are estimated to be over the age of 85. Over a third (37 percent) of Kansas aged 65 and older reported they had been admitted to a hospital during the past five years. We have also seen an increase in the average age of Kansans being admitted to hospitals in the past five years.

Additionally, one-sixth (16 percent) of Kansans aged 65 and older reported they had fallen during the past 12 months, (KDHE, Health Risk Behaviors of Kansans, 1998) which commonly required EMS intervention.

These figures indicate the need for ambulance services. The aging population also reduces the number of volunteers available to provide that service.

Complete data on trauma emergencies in Kansas is not available. The acquisition of this data is proposed as a part of the EMS/Trauma Policy Project.

**Changing health care systems**- As a component of the health care system, EMS will be influenced significantly by its continuing evolution. The U.S. health care system is undergoing constant evolution, which seems more rapid now than ever. Recent changes have occurred in terms of regional system organization and finance. An increasing proportion of the U.S. population is participating in health plans (e.g., managed care) that compel patients to seek specific medical care providers and place a greater emphasis on prevention and health maintenance.

One-fourth (24 percent) of Kansans with health care coverage reported they receive Medicare. Among Kansans with health care coverage who were not covered by Medicare, 85 percent were covered by employer sponsored health care plans, nine percent were covered by plans bought by themselves or someone else, one percent are covered by Medicaid or Medical Assistance and five percent by other sources.

Often, both insurers and health care providers have established regional networks (e.g., managed care organizations) to enhance efficiency and reduce costs. Such



## Environment and Other Factors Influencing EMS

---

### Changing Health Care Systems (Continued)

changes will continue to occur and affect EMS health care delivery roles and logistical considerations.

**Decreasing federal funding/financial resources-** The appropriation of federal funding had a significant impact on initial EMS development. In an era of governmental fiscal restraint it is likely that federal funding for EMS activities will continue to decrease. Financial support for EMS systems will be, to an increasing extent, derived from unfound or undeveloped sources.

**Federal mandates-** During the past several years, many federal mandates have created serious financial burdens for operators of emergency medical services. Compliance with OSHA and FLSA requirements, for example, has significantly increased the cost of providing emergency medical services.

**Government-** Significant changes will occur in the way the state government, including regulatory agencies, interacts with local governments and individuals.

**Greater Personal Responsibility-** As the state and federal government's involvement in emergency medical services dwindles, local responsibility for serving the emergency medical needs of the communities will become paramount.

### Other factors influencing Emergency Medical Services

**Improvements in EMS services and Technology-** It is envisioned that by the year 2020, EMS will have evolved into a technologically advanced, community-based health management system that is fully integrated into the general U.S. health care system.

**EMS Research-** There is currently a lack of information regarding EMS systems and outcomes. Despite many years of experience, we continue to lack adequate information regarding how EMS systems influence patient outcomes for most medical conditions and how they affect the overall health of their communities. Research involves pursuit of the truth. In EMS, its purpose is to learn the efficacy, effectiveness and efficiency of emergency medical care. Ultimately, it is an effort to improve care and appropriately allocate resources.

EMS evolves with a scientific basis. Adequate investigations of EMS interventions/treatments and systems design must occur



## Environment

---

### Other Factors influencing Emergency Medical Services (Continued)

before they are advocated as EMS standards. Through research, the efficacy, effectiveness and cost-effectiveness of interventions and system designs are learned. This will include the identification of patients appropriate for transport and evaluation of the effects of alternative dispositions for patients.

### History of the Board of EMS

Kansas emergency medical services has been characterized by evolution and growth, beginning with the Bureau of Emergency Medical Services being placed within the Kansas Department of Health and Environment (KDHE). Later, legislation transferred EMS operations to the Kansas Highway Patrol and EMS training remained within the University of Kansas Medical Center. Established in 1988 by K.S.A. 65-6102, the current board assumed all powers, duties and functions concerning EMS.

During these times, the focus of EMS has been primarily on prehospital care. Thousands of prehospital providers have been trained and equipped and are regarded as providing high levels of care.

Recent efforts have included expanding medical advisor responsibilities in quality assurance, upgrading the statewide communication system and partnering with other state and federal agencies. There has been relatively little focus on measuring the outcome of these efforts, i.e., defining the impact these programs and services have had on the emergency needs of Kansans.

In 1994, the National Highway Traffic Safety Administration (NHTSA) conducted an assessment of Kansas Emergency Medical Services, the final report stated:

"...Kansas now needs to broaden its focus to encompass a comprehensive EMS system- from prevention and emergency access through acute care and rehabilitation. Planning, development and implementation of the Kansas EMS system will require a broadly focused EMS lead agency with the resources and vision to move Kansas to the next evolution in EMS systems development. This will require strong medical direction, quality assurance and measurement of patient outcomes."









## History of the Board of EMS, Strategic Planning, Goals

---

### History of the Board of EMS (Continued)

This strategic plan identifies where the Kansas Board of Emergency Medical Services is going. It serves as a "living document" to be used for planning, implementing and evaluating broad changes in Kansas EMS.

With the dedication and interest of the Kansas EMS community, clearly these efforts will result in an EMS system with coordinated excellence in care that takes Kansas into the next century with a quality of life that Kansans expect and deserve.

### History of Strategic Planning

Over the past few years, the board has developed broad strategies for Kansas emergency medical services. These efforts began with the NHTSA assessment in 1994.

These goals and objectives were first developed in December, 1994 and have been modified at later strategic planning sessions.

These strategies are the methods the board will employ for transforming inputs into outputs. Thus, objectives show what the agency wants to achieve and strategies show how objectives will be achieved.

### Board of EMS Goals

Goals are the general purposes toward which efforts are directed, reflecting the agency's priorities. These goals reflect the primary activities and strategic direction for the agency.

The Kansas Board of EMS has adopted five goals:

- \* To fulfill our role as a regulatory body- promptly, consistently and fairly.
- \* To support constant improvement in the Kansas emergency medical services system.
- \* To ensure that Kansas providers and attendants are appropriately equipped and professionally trained.



**Board of EMS Goals**

---

**Goals (Continued)**

- \* To establish the board as the lead agency in the implementation of a statewide EMS/Trauma Plan.
- \* Improve the public image of the agency through frequent on and off-site technical assistance.



## **Definition of Objectives, Strategies, Action Plans, Outcome Measures and Output Measures**

---

### **Definition of Objectives**

Objectives complete the "Where do we want to be?" part of the strategic planning process. Objectives are specific targets designed to achieve a particular goal. Objectives set the direction for action or strategies.

These objectives have been developed to meet the goals of the agency.

### **Definition of Strategies**

Strategies are the methods the Kansas Board of EMS will employ for transforming inputs into outputs. While the objectives show what the board wants to achieve and strategies show how objectives will be achieved.

### **Definition of Action Plans**

Action plans make up the "How do we get there?" part of the strategic planning process. The action plans contain the details of how objectives and consequently the goals, programs and missions of the board will be implemented.

### **Definition of Outcome Measures**

Outcome measures are directly derived from the objectives and indicate the effectiveness of the board's actions. They are expressed in quantifiable form and indicate the degree to which the board is achieving its objectives. Outcomes, as distinguished from outputs measure the ultimate result or effect of a service on the board's customers.

### **Definition of Output Measures**

Output measures are used to evaluate the effectiveness of the board's strategies and they measure efficiency by calculating the ratio of goods and services produced (output) divided by input. Outputs are what the board produces as an intermediate step to outcomes, which ultimately benefit the board's customers.





Action Plans for FY 2001 Strategic Goal

---

Goal

Improve the public image of the agency through frequent on and off-site technical assistance.

Objectives

- a. Respond favorably and timely to all requests for on-site technical assistance to ambulance services.
- b. Increase staff contact with instructor/coordinators and training officers during courses of instruction.
- c. Take a proactive role in facilitating training and delivery of up-to-date information to service directors and medical advisors.
- d. Meet at least quarterly with key EMS agencies in the state.
- e. Maintain a clearinghouse for information during FY 2000 for information regarding new regulations and possible statutory changes.
- f. Develop and maintain an accurate list of issues and "talking points" to be disseminated to each board member in order to keep them updated on issues and the board's position.
- g. Develop a close and mutually supportive relationship with the Kansas Medical Society (KMS).
- h. Develop strong cooperative ties with the Kansas Hospital Association.
- i. Develop strong cooperative ties with representatives from:

- \*Kansas Emergency Nurses Association
- \*Kansas Academy of Family Physicians
- \*Kansas Association of Counties
- \*Kansas Association of EMS Administrators
- \*Kansas Chapter-American Academy of Pediatrics
- \*Kansas Chapter-American College of Surgeons
- \*Kansas Society of Internal Medicine
- \*Kansas Department of Health & Environment
- \*Kansas Hospital Association
- \*Kansas Department of Transportation



Action Plans for FY 2001 Strategic Goal

---

Action Steps

- a. Develop a contact list of all stakeholders to include mailing addresses, telephone numbers and e-mail addresses.

Due Date: 1 January 2000  
Responsible Person: David Lake  
Budget: \$0.00

- b. Develop a mailing list of key legislators to include the legislative leadership. This will include mailing addresses, telephone numbers and e-mail addresses.

Due Date: 1 January 2000  
Responsible Person: David Lake  
Budget: \$0.00

- c. Develop "talking points" and graphics that can be delivered to any group outlining position and rationale for agency stances on issues.

Due Date: 1 January 2000  
Responsible Person: David Lake  
Budget: \$100.00

- d. Consolidate a list of all meetings held by stakeholders and attempt to be added to their agenda to speak on behalf of BEMS.

Due Date: As information is available  
Responsible Person: David Lake  
Budget: \$500.00

Output Measures

Output measures for this strategic plan will be derived from the number of contacts made while carrying out the action steps. These will include:

- a. Number of meeting attended and number of participants  
b. Number of newsletters generated and disseminated  
c. Number of questions/inquiries received  
d. Number of letters generated by stakeholders and others to support the goal



**Output Measures and Outcome Measures**

---

**Output Measures (Continued)**

- e. Number of educational meetings held and number of participants
- f. Number of stakeholders contacted
- g. Number of legislators contacted

**Outcome Measures**

Outcome measures for this strategic3 plan will indicate the effectiveness of the agency's actions. Outcomes measure the ultimate result or effect.

- a. Articles in publications favorable to BEMS.
- b. Letters from stakeholders expressing support for BEMS
- c. Actions from stakeholders supporting BEMS (i.e., addition as a speaker to their meeting agenda)
- d. Support of other kinds for BEMS activities (i.e., development of supporting letters)
- e. Positive responses to survey instruments
- f. Increased requests for agency personnel to assist or participate with stakeholders on various issues.



## Glossary

---

Academic	Based upon formal education; scholarly, conventional.
Component	An individual element, aspect, subgroup, or activity within a system. Complex systems (such as EMS) are composed of many components.
Cost-effective	Providing the maximal improved health care outcome improvement at the least cost.
Cost-effective Analysis	Analysis that determines the costs and effectiveness of an intervention or system. This includes comparing similar alternative activities to determine the relative degree to which they obtain the desired objective or outcome. The preferred alternative is the one that requires the least cost to produce a given level of effectiveness or provides the greatest effectiveness for a given level of cost.
Curriculum	A particular course of study, often in a special field. For EMS education it has traditionally included detailed lesson plans.
Effective	Capable of producing or designed to produce a particular desired effect in "real world" circumstances.
Efficacy	The effect of an intervention or series of interventions on patient outcome in a setting that is most likely to be positive (i.e., the laboratory or other "perfect" settings.)
Efficiency	The effect or results achieved in relation to the effort expended (resources, money, time). It is the extent to which the resources used to provide an effective intervention or service are minimized. Thus, if two services are provided that are equally effective, but one requires the expense of fewer resources, that service is said to be more efficient.
EMS personnel	Paid or volunteer individuals who are qualified, by satisfying formalized existing requirements, to provide some aspect of care or service within the EMS system.





## Appendix A

---

### Glossary

EMS system	Any specific arrangement of emergency medical personnel, equipment, and supplies designed to function in a coordinated fashion. May be local, regional, state or national.
Enabling EMS Legislation	Law that grants authority to specific entities to undertake activity related to the provision or establishment of an EMS system or a component of that system. Generally, enabling legislation represents a legislature's delegation of authority to a state agency to regulate some or all aspects of an EMS delivery system.
External Customers	The people outside state government who receive products and services.
Health Care Delivery System	A specific arrangement for providing preventive, remedial, and therapeutic services; may be local, regional or national.
Injury Prevention	Activities to keep injuries from ever occurring (primary), or reducing further injury once it has occurred through acute care (secondary) and rehabilitation (tertiary).
Internal Customers	In general, internal customers are people working in state government who are the next step in the work process.
Medicaid	A federal program, administered by the states, designed to provide health care coverage to the indigent. Established by Title XIX of the Social Security Act.
Medicare	A federal program designed to provide health care coverage to individuals 65 and over. Established on July 30, 1965, by Title XVIII of the Social Security Act.
Public Education	Activities aimed at educating the general public concerning EMS and health related issues.



Appendix A

---

Glossary (Continued)

Public Health            The science of providing protection and promotion of community health through organized community efforts.

Research                The study of questions and hypotheses using the scientific method.



Appendix B

---

List of Abbreviations

BEMS	(Kansas) Board of Emergency Medical Services
DOT	Department of Transportation
EMS	Emergency Medical Services
FLSA	Fair Labor Standards Act
KQM	Kansas Quality Management
K.S.A.	Kansas Statute Annotated
NHTSA	National Highway Traffic Safety Administration
OSHA	Occupational Safety and Health Administration

