ILLINOIS DEPARTMENT OF PUBLIC HEALTH

DIVISION OF EMS & HIGHWAY SAFETY

5 YEAR STRATEGIC PLAN

March 18, 2021

Table of Contents

Page

EMERGENCY MEDICAL SERVICES SYSTEMS (EMSS) HISTORY, OVERVIEW AND EXTERNAL FORCES

Prior to 1970, EMS in the United States was inconsistent and fragmented. There was no standardized education or credentialing of EMS providers beyond basic first aid and ambulances were designed without standards. There were no systems in place to coordinate the care and transport of the sick and injured.

This began to change in 1966 with the publication of the landmark white paper **"Accidental Death and Disability: The Neglected Disease of Modern Society"** from the National Research Council of the National Academy of Sciences. That same year, the Highway Safety Act (Public Law 89-564) was passed to reduce the number of fatalities and injuries that occur on US roads and highways. After this paper, we started to use the term "EMS", established standards of training for EMTs and paramedics, created design criteria for ambulances and talked about "systems" for delivering service rapidly and consistently (Robbins, 2017). On July 1, 1971, then-Governor Richard Ogilvie, by executive order directed the Illinois Department of Public Health (IDPH) to establish the Division of Emergency Medical Services and Highway Safety

In August of 1996, the National Highway Traffic Safety Administration (NHTSA) and the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau published the **Emergency Medical Services Agenda for the Future**. The "AGENDA" envisioned EMS Systems of the future as being community-based and fully integrated within the over-all health system. They believed that EMS personnel should have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow up, and contribute to the treatment of chronic conditions and community health monitoring. These practices were to be developed from redistribution of existing health care resources and integrated with other health care providers and public health and safety agencies. The proposed design was meant to improve community health and result in a more appropriate use of acute health care resources. EMS would remain the public's emergency medical safety net.

Emergency Medical Services at the Crossroads (2006) was the work of the Committee on the Future of Emergency Care in the United States Health System. The committee was tasked with examining the full scope of emergency care, from 911 and medical dispatch to hospital-based emergency and trauma care. They discovered that insufficient progress had been made in implementing the AGENDA and envisioned a system in which all communities would be served by well-planned highly coordinated emergency care services that are accountable for their performance. All EMS and public safety offices should be interconnected to ensure that each patient receives the most appropriate care, at the optimal location, with the minimum of delay.
The Federal Interagency Committee on EMS (FICEMS) supported a major revision of the AGENDA.

The ***EMS Agenda 2050: A People Centered Vision for the Future of Emergency Medical Services*** was released by the National Highway Traffic Safety Administration (NHTSA) in January 2019 (Report No. DOT HS 812 664).

The Illinois House of Representatives Task Force on EMS Funding was completed in November of 2012. Seventeen different hearings were held across Illinois. The Task Force made the following recommendations:

1. The combined (collective) EMS organizations, stakeholders, and EMS providers should consider having an annual meeting to consider developing legislation for the following session of the legislature.
2. The formation of a combined Fire and EMS Caucus in the legislature to help advance issues for EMS could be helpful.
3. The establishment of a special House Committee for EMS or EMS and Fire could be helpful.
4. The Task Force also recommended that a $40 million annual revenue stream be established from future gaming proceeds in Illinois that is dedicated for various EMS needs. This would be in addition to the $46 million gaming revenue that has been proposed by earlier legislation to fund several agricultural programs. The funding of EMS needs should consider, but not be limited to, such programs and items as follows: grants to EMS providers towards the purchase of equipment; the interest-free loan program for the purchase of ambulances; grants for 911 call centers for the purchase of needed equipment, training of staff and for temporary emergency supplies and costs incurred to be a Resource Hospital and increased Medicaid reimbursement rates to ambulance providers. The actual distribution or division of the annual $40 million appropriation for the various EMS needs and the designation of the administering agency, agencies or entity should be made by the Illinois General Assembly.

FORWARD

On March 15, 2018, the Illinois Department of Public Health (IDPH), Division of Emergency Medical Systems & Highway Safety, convened a multi-disciplinary group through the State Emergency Medical Services Advisory Council. The goal was to create a new 5-year Illinois IDPH Emergency Medical Systems (EMS) Strategic Plan. Core participants included were Emergency Medical Services (EMS), Trauma and Stroke stakeholders.

Originally, the organizational structure of the Illinois EMS Strategic Plan mirrored the suggested format of the Federal Interagency Committee on EMS (FICEMS) Strategic Plan (December 2013). The United States Congress mandated creation of FICEMS in 2005 to ensure coordination among Federal agencies supporting local, regional, tribal, and territorial EMS and 911 systems. The FICEMS was created to improve the delivery of EMS throughout the nation. FICEMS accomplishes its mission by coordinating projects across the Federal government, predominately for pre-hospital issues. Accordingly, FICEMS responsibilities include the following:

- Identifying EMS and 911 needs
- Recommending new or expanded EMS and communication technologies
- Identifying ways to streamline the process through which the Federal agencies support EMS
- Assisting local, regional, state, tribal, and territorial EMS in setting priorities
- Advising, consulting, and making recommendations on matters related to implementation of coordinated State EMS programs

ILLINOIS EMERGENCY MEDICAL SERVICES

The Illinois EMS Strategic Planning group recommends that the Illinois Department of Public Health adopt the following Mission and Vision Statements along with the Core Values to guide their efforts.

Mission Statement
Emergency Medical Services is committed to ensuring, promoting and improving the health of all Illinois residents and visitors through an integrated, collaborative, data-driven and evidence-based care approach that is value driven and supports state, regional and community initiatives.

Vision Statement
Through integration and collaboration our vision will be an EMS system that is highly educated, responsive to the needs of our customers, compliant with state laws and rules, competent in our practice while using defined continuous quality improvement measures.

Values:	**I**nnovation:	We search for creative solutions and manage resources wisely
	Collaboration:	We use teamwork to achieve common goals and solve problems
	Accountability:	We perform with integrity and respect
	Responsiveness:	We achieve our mission by serving our customers and engaging our partners
	Excellence:	We promote quality patient care outcomes through a rigorous education and continuing education process, established quality measures and continuous quality improvement

Below are the strategic goals that have been used as a framework within this Illinois EMS Strategic Plan (originally accessed from the FICEMS Strategic Planning Guide):

1. Coordinated, regionalized, and accountable EMS and 911 systems that provide safe and high-quality care
    a. Identify and promote the development and use of EMS performance measures and benchmarks
    b. Promote the comprehensive identification and dissemination of best practices in regionalized EMS and emergency medical care, including treatment for time -critical and sensitive conditions
    c. Promote measurement and reporting of the relationship between EMS care and outcomes, especially for time-critical and sensitive conditions
    d. Identify and promote best practices to reduce regional disparities in care, including supporting States in improving data quality
    e. Develop partnerships with State regulatory agencies to promote regionalized and accountable care systems

2. Data-driven and evidence-based EMS systems that promote improved patient care quality
    a. Support the development, implementation, and evaluation of evidence-based guidelines (EBGs) according to the National Pre-hospital EBG Model Process
    b. Promote standardization and quality improvement of pre-hospital EMS data by supporting the adoption and implementation of NEMSIS-compliant systems
    c. Develop relationships with Federal and non-Federal stakeholders to support the development of scientific evidence for pre-hospital care
    d. Improve linkages between NEMSIS data and other databases, registries, or other sources to measure system effectiveness and improve clinical outcomes
    e. Promote the evaluation of the characteristics of EMS systems that are associated with high-quality care and improved patient outcomes
    f. Explore the use of technology that enables enhanced information sharing for increased situational awareness, operational efficiency, and scene safety

3. EMS systems fully integrated into State, territorial, local, tribal, regional, and Federal preparedness planning, response, and recovery
    a. Develop and use reliable and consistent measures of EMS system preparedness
    b. Develop a rapid process for providing guidance on emerging EMS issues
    c. Improve EMS system preparedness for all-hazards, including pandemic influenza, through support of coordinated multidisciplinary planning for disasters
    d. Develop strategies to close the gaps identified in the preparedness component of the “National Assessment”
    e. Develop training and exercise standards within NIMS guidance to promote interoperability

4. EMS systems that are sustainable, forward looking, and integrated with the evolving health care system
    a. Foster EMS participation in regional and State Health Information Exchanges (HIE)
    b. Foster and evaluate the development of innovative delivery models for EMS systems that could lead to changes in the reimbursement model
    c. Provide coordinated Federal support for the incorporating enhanced EMS and 911 technology for both the patient and provider
    d. Apply lessons learned from military and civilian incidents to the EMS community
    e. Address the challenges of emergency care in areas where there are special concerns by geography or in which access may be limited

5. An EMS culture in which safety considerations for patients, providers, and the community permeate the full spectrum of activities
    a. Promote the reporting, measurement, prevention and mitigation of occupational injuries, deaths, and exposures to serious infectious illnesses in the EMS workforce
    b. Evaluate factors within EMS practices that contribute to medical errors or threaten patient safety
    c. Support the development and use of anonymous reporting systems to record and evaluate medical errors, adverse events, and “near misses”
    d. Evaluate FICEMS role in supporting implementation of the “Strategy for a National Culture of Safety”
    e. Promote the use of detection equipment, training, and personal protective equipment known to enhance the safety of EMS personnel

6. A well-educated and uniformly credentialed EMS workforce
    a. Promote implementation of the “EMS Education Agenda for the Future” to encourage more uniform EMS education, national certification, and state licensing
    b. Support State, territorial and tribal efforts to enhance interstate recognition and reciprocity of EMS personnel
    c. Work with State EMS Offices to support the transition of military EMS providers to civilian practice
    d. Provide the implementation of the “EMS Workforce Agenda for the Future” to encourage data-driven EMS workforce planning

In addition, the EMS Agenda 2050 sets forth the following Guiding Principles that provide a framework for developing people-centered EMS Systems moving forward:

- Inherently safe and effective
- Integrated and seamless
- Reliable and prepared
- Socially equitable
- Sustainable and efficient
- Adaptable and innovative

Strategic Plan Development

Work groups were convened and assigned to each of the above specific goals. Within their goal assignment, each workgroup was tasked with evaluating what had not been accomplished in the 2010 Strategic Plan. They were to determine whether the unaccomplished goal was still relevant to improving EMS in Illinois according to the FICEMS planning format and current standards. Furthermore, within each goal as defined by FICEMS, each workgroup had the ability to address expanded objectives. Over the next several pages, each goal and its corresponding objectives are outlined. Each objective has been assigned a timeline for completion using the following color-coded criteria.

Color Code	Assigned Priority	Timeline
	Short term	Less than 12 months
	Intermediate	1 to 3 years
	Long term	3 to 5 years

GOAL 1: Coordinated, regionalized, and accountable EMS and 911 systems that provide safe and high-quality care	
PC1	Advocate each EMS region to develop policies for hospitals to go on bypass, including systems of care bypass with standards that define when can go on/off. Each hospital shall update EMResource when a hospital goes on peak census and bypass.
PC2	IDPH will monitor and ensure compliance with bypass rules on an ongoing basis.
PC3	Encourage public education and training in the community (i.e. CPR, AED/PAD, Stop the Bleed programs).
PC4	IDPH shall develop a format for each Regional Advisory Council to submit an annual report to IDPH and the State EMS Advisory Council.
PC5	Support legislation that will allow Illinois to apply to become a REPLICA state.

GOAL 2: Data-driven and evidence-based EMS systems that promote improved patient care quality	
D1	Maintain statewide EMS electronic data collection consistent with the national standard for EMS data, currently NEMSIS, primarily for the purpose of allowing EMS System Medical Directors and Coordinators to evaluate and improve EMS practice within their Systems
D2	All EMS stakeholders shall continue to ensure accuracy, validity, and record level completeness of data being submitted
D3	All EMS data collected is secure, and all data transmitted via web service is encrypted to provide assurance of security
D4	Use collected data to support post-EMS continuity of care, disease/injury surveillance, quality improvement, public reporting and research
D5	Collect 100% of NEMSIS national required data elements
D6	100% submission of NEMSIS 3.4 data with minimal delay, having 90% of records submitted within 24 hours, and 100% of total records submitted within 7 days of collection.
D7	Continue to collect NEMSIS state recommended data elements as identified by IDPH and the EMS community via a collaborative process.
D8	Work with clinical partner organizations/agencies to support linkage with other datasets (i.e. trauma registry, crash data).
D9	Continue to support EMS provider agency access to IDPH web resources such as hospital bypass, licensing and other EMS applications and information systems
D10	Use all enforcement mechanisms available for IDPH and EMS Systems to ensure data collection and submission by ambulance service providers.
D11	Continue to allow EMS System Medical Directors to specify additional data elements for local purposes
D12	IDPH will be compliant with submission of data to NEMSIS in the current version.
D13	Identify mechanisms for EMS obtaining Automatic Crash Notification (ACN) data from motor vehicle crashes, for EMS inclusion in the NEMSIS data submission to IDPH
D14	Encourage linkage of EMS databases with hospital Electronic Medical Record (EMR) systems, to allow collection and submission of NEMSIS eOutcome elements and make use of EMS ePCR data in hospital EMR programs
D15	Encourage EMS agencies and systems to collect and submit data directly to CARES.
D16	Continue to produce data driven reports, such as the monthly “Bypass” Reports and provide to the EMS and Trauma Advisory Councils as well as other organizations/agencies (i.e. hospitals).
D17	IDPH will be ready to accept the newest version data within six months after NEMSIS begins accepting the new version data, and all EMS agencies will have eighteen months to begin submitting data compliant with the new NEMSIS version.

GOAL 3: Quality Improvement	
Q1	EMS Systems shall determine aspects of care to be studied based on identified needs, national/state/regional and/or local criteria, and/or new processes or interventions. They shall determine benchmarks or thresholds that should be met; define indicators, generate measurement tools, accurately collect data; analyze the data in comparison to thresholds, determine root causes for process disconnects or outcomes less than targets, suggest tactics to improve performance, and construct reports to be published to system members and stakeholders.
Q2	IDPH and EMS Systems will emphasize the value and importance of information and data and recognize the role of information at all levels of sophistication. Further, we shall highlight widespread application of information within EMS agencies and across all components of healthcare and public safety and clarify the role and purpose of national and statewide data collection efforts (Becknell, 2016).
Q3	A data driven information culture shall be based on the following priorities: ▪ EMS-wide prioritization of information, i.e. national data reporting via organizations such as National Association of EMS State Officials (NASEMSO), National EMS Information System (NEMSIS) ▪ Strong motivation using data to improve our practice ▪ Leaders who champion the use of information ▪ A data- and information-savvy workforce ▪ A continuous feedback loop

GOAL 4: EMS systems fully integrated into State, territorial, local, tribal, regional, and Federal preparedness planning, response, and recovery	
P1	Identify communication interoperability capabilities between agencies (Police, Fire, EMS).
P2	Support implementation of FIRSTNET within the State of Illinois.
P3	Identify state and federal grant availability for EMS.
P4	EMS Resource Hospitals shall establish written protocols for the practice of restocking and replacing Personal Protective Equipment (PPE) supplies and equipment for EMS personnel that transport to their hospital location or are affiliated with their EMS System (both private and public providers) during disaster situations.
P5	Approve pilot programs allowing EMS to transport to alternative care facilities/sites.
P6	Promote dissemination and adoption of Federal and National best practices in EMS.
P7	Identify and approve both system policies and/or pilot programs to address treatment and non-transport of non-critical patients (to include during a state declared disaster), i. e. Mobile Integrated Healthcare (MIH).
P8	Develop an application and survey process to review/assess each of the 11 IDPH-designated RHCC hospitals on a regular basis, similar to other state designations

GOAL 5: EMS systems that are sustainable, forward looking, and integrated with the evolving health care system	
S1	Assess the EMS workforce sustainability by identifying issues associated with loss of EMS providers and personnel.
S2	Foster and evaluate the development of innovative delivery models and emerging technology for EMS systems that could lead to changes in reimbursement models, including but not limited to MIH/CP and telemedicine.
S3	Continue to advocate for funding levels from currently available and new State and Federal funding mechanisms.
S4	Pursue a dedicated funding source for Illinois EMS as new revenue is explored for Illinois, i.e. cannabis, gambling.
S5	Support funding/reimbursement efforts that are currently being explored such as Ground Emergency Medical Transportation (GEMT), Emergency Triage, Treat, and Transport (ET3)
S6	Review and revise current rules and laws governing patient disposition, including transportation to alternative licensed healthcare facilities.
S7	Broaden and secure specific language in the EMS Act and/or EMS Administrative Code to continue and expand EMS “pilot programs”.
S8	Collaborate with National professional organizations to identify EMS sustainability initiatives, including recruitment and retention strategies.
S9	Explore & identify sustainable funding models for EMS systems.
S10	Create partnerships with other allied health professionals/organizations that impact EMS.
S11	IDPH should identify a dedicated grant writer within OPR.

GOAL 6: An EMS culture in which safety considerations for patients, providers, and the community permeate the full spectrum of activities	
C1	Promote the reporting, measurement, prevention and mitigation of occupational injuries, deaths, and exposures to serious infectious illnesses and injuries in the EMS workforce.
C2	Require EMS providers to designate an agency health facility of their choice [Designated Infection Control Officer (DICO) or Occupational Healthcare Facility (OCC Health Facility)].
C3	EMS Systems shall evaluate factors within EMS practices that contribute to medical errors or threaten patient safety.
C4	Publish mental health and well-being resources on the Division of EMS website for EMS, Fire, Law Enforcement and Dispatch personnel.
C5	Support implementation of the “Strategy for a National EMS Culture of Safety.”
C6	Create a Safety Subcommittee of the EMS Advisory Council to promote a culture of safety for EMS providers.
C7	EMS Advisory Council shall identify a subcommittee to review, validate safety and efficacy, and recommend equipment, supplies and resources available for EMS use. These resources shall then be posted on the IDPH EMS website.
C8	Review and revise EMS Administrative Code changes that reflect national ground ambulance specification recommendations, and update inventory list of required equipment and supplies.
C9	Research and review best practices for adoption in safety in the aero medical industry. Recommend best practices in the EMS Administrative Code and incorporate CAMP standards.
C10	EMS Systems shall support the use of anonymous reporting systems to record and evaluate medical errors, adverse events, and “near misses.”
C11	Develop a clearinghouse of all statewide injury prevention activities and educational materials (public and provider) on the Division of EMS web site.

GOAL 7: A well-educated and uniformly credentialed EMS workforce	
E1	The Illinois EMS Education committee discusses best practice models and proactively explores trends of the future and works with stakeholders to focus on providing forward-thinking solutions by: ▪ Creating a knowledge hub via collaborative planning so we do the right things at the right level with hardwired roles and responsibilities with built-in accountability for key stakeholders. ▪ Inviting input & participation from EMS educators at all levels. ▪ Providing EMS education thought leadership. ▪ Providing high quality educational resources and mentoring so we effectively navigate through change. ▪ Providing structures that encourage alignment with national guidelines and discourage outlier/counterproductive behavior.
E2	**Educators** shall be mentored and held accountable for maintaining a service driven culture as they model excellence and comply with national guidelines. ▪ Each EMS program will have a primary instructor with Illinois Lead Instructor certification. ▪ Educator competency shall be measured through evaluations that meet NAEMSE, CoAEMSP, and/or CAPCE criteria as applicable. Programs are encouraged to use the Danielson Framework for Teaching as a model for defining instructional domains and evaluating faculty competency. ▪ All EMS educational programs shall have IDPH site code approval in compliance with submission criteria outlined in the EMS Rules. Commission on Accreditation for Prehospital Continuing Education (CAPCE) approval also recommended for EMS CE offerings.
E3	Professional ethical standards and adult learning principles shall govern all educational programs. Achieving educational objectives in all domains of learning (cognitive, psychomotor, and affective) is fundamental to professional growth and clinical excellence and will be objectively measured for educational offerings that hold an IDPH site code and/or CAPCE approval number.
E4	Curriculum design, lesson plans, teaching methods, assessments and outcomes measurement for EMD, EMR, EMT, AEMT-EMT-I, paramedic, PHRN, PHARN, PHPA, ECRN, TNS, and CE classes shall be based on education standards for that professional discipline and reflect best-practice models. This includes but may not be limited to ensuring that programs meet or exceed the minimum recommended number and distribution of educational hours, core content, and patient care contacts, skill revolutions/competencies, medical director oversight, and use valid and reliable measurement tools that are mapped to objectives. Once outcome data is collected, programs shall create and post action plans for each domain of learning.
E5	By 12-31-2020: All Paramedic programs shall achieve CoAEMSP accreditation or be under a Letter of Review. A review will be conducted by IDPH to ensure compliance, with appropriate correspondence sent to the program director and EMS System.
E6	Programs will maintain records on graduate retention/attrition, pass rates, and job placement. Any program failing to achieve 70% in any of these areas shall conduct a root cause analysis of performance gaps and explore methods to achieve desired

GOAL 7: A well-educated and uniformly credentialed EMS workforce	
	outcomes for practice competency and learning outcomes, and shall submit this documentation to IDPH.
E10	EMS Systems will identify and implement innovative methods to provide EMS education and/or continuing education including digitized offerings, i.e. virtual format (synchronous vs non-synchronous), simulation.
E7	Expanded bridge programs take advantage of and supplement veterans' military medical training and experience, ensuring that veterans are adequately prepared and appropriately credentialed to work in non-military EMS environments.
E8	Continuing education is tailored to the needs of patients, communities and EMS providers. EMS CE offerings maintain and expand core competencies. Content presented is based on a local needs assessment to reinforce core concepts tied to the education standards, present new or novel advances based on high quality research or advances in the profession, and/or is tied to quality management outcomes/findings and clinical practice gaps. The number of state-approved contact hours by topic and sources of approved offerings is reviewed bi-annually and published by IDPH.
E9	Educational programs shall validate that participants have achieved conceptual, technical, contextual, integrative, innovative, and adaptive competence as outlined in the Agenda 2050 in addition to skills related to teamwork, diplomacy, and professionalism.
E11	By 12-31-22, all paramedic programs shall have CoAEMSP accreditation. A review will be conducted by IDPH to ensure compliance, with appropriate correspondence sent to the program director and EMS System.
E12	All new graduates of EMT, AEMT and Paramedic education programs shall pass the National Registry of EMTs cognitive exam (and psychomotor exams if required) for licensure eligibility in Illinois. This does not impact those licensed prior to this date nor must NREMT certification be maintained as a criteria for state re-licensure.
E13	EMS programs advocate for and advance innovative methods for currently licensed and future EMS practitioners to achieve Associate or Bachelor's degrees in EMS or healthcare-related discipline.
E14	The EMS community should encourage members of the EMS workforce to pursue further education while remaining clinical providers, through the creation of EMS subspecialty and leadership education programs, as well as the further integration of EMS with other healthcare professions
E15	By 2026, ensure that 90% of EMS agencies have a designated individual who coordinates pediatric emergency care (Pediatric Emergency Care Coordinator- PECC). This can be an individual designated for a single EMS agency or multiple EMS agencies, to serve as a resource/advocate for pediatric education, protocols, quality improvement, and family-centered care. Based on Federal EMSC Performance Measure 02 that all states need to attain.
E16	By 2026, ensure that 90% of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment (equal to a score of 6 or more on a 0-12 scale defined by the Federal EMSC program and as outlined in EMSC Performance 03 that all states need to attain).