I. PURPOSE, SCOPE, and STANDARDS

A. Medical records are used to track events and transactions between patients and health care providers. EMS patient care reports (PCRs) provide details of the patient encounter for handoff to other healthcare providers and data necessary for ambulance coders to create a bill to reimburse for care provided. EMS data is also used in legal investigations, trauma, stroke, and CPR registries, state and national databases, research, and QI initiatives. EMS documentation serves an important role as a data repository. (Short & Goldstein, 2022).

B. This policy establishes the System standard for the collection, handling, storage, use, retrieval, evaluation, reporting, and submission of data within the NWC EMS System.

C. This policy applies to all EMS agencies, hospitals, and individuals with permission to access the System's ePCR software, written PCRs, and/or EMS data.

D. A national EMS Data Summit convened in July 2016 by The National Highway Traffic Safety Administration (NHTSA) renewed emphasis on the following:

1. The National EMS Information System (NEMSIS) needs to be the data standard.
2. All decisions in EMS should be based on available data (evidence-based)
3. Field providers must understand the importance of accurate and thorough data input and analysis.
4. Recordkeeping should be person-centric versus incident-specific to enhance patient care longitudinally.

E. **IDPH Rules Section 515.330 EMS Program Plan - Data collection and evaluation methods** must include:

1. The process that will facilitate problem identification, evaluation, patient care gaps, disease/injury surveillance, and monitoring in reference to patient care and/or reporting discrepancies from hospital and pre-hospital providers;
2. A policy identifying any additional required data elements that the EMS provider shall include in their PCR;
3. Identified benchmarks or thresholds that should be met;
4. A copy of the evaluation tool for the short reporting form, if used, pre-hospital reporting form; and
5. A sample of the required information and data submitted by the provider to be reported to the Department summarizing System activity (see Section 515.350).
6. Pursuant to Sec. 515.310(k), EMS Systems utilizing an approved EMS provider **short patient care report form** will require, at a minimum, the following data elements to be left at the receiving hospital: Name of patient; Age; Vital Signs; Chief complaint; List of current medications; List of allergies; all treatment rendered; Date; and Time. (Program plan g) 6) (Amended at 46 Ill. Reg. 20898, effective December 16, 2022).

F. **IDPH Rules** Section 515.350 DATA COLLECTION AND SUBMISSION; Amended at 25 Ill. Reg. 16386, effective September 20, 2018)

1. A PCR shall be completed by each Illinois-licensed transport vehicle service provider for every inter-hospital transport and pre-hospital emergency call, regardless of the ultimate outcome or disposition of the call.
   a. One PCR shall be provided (paper or electronic) to the receiving hospital emergency department or health care facility before leaving this facility.
   b. Each EMS System shall designate or approve the PCR to be used by all of its transport vehicle providers. The report shall contain the minimum requirements listed in Appendix E.
2. All **non-transport vehicle providers** shall document all medical care provided and shall submit the documentation to the EMS System within 24 hours. The EMS System shall review all medical care provided by non-transport vehicles and shall provide a report to the Department upon request.

3. The **transport vehicle provider** shall submit PCR data to the EMS System. When an EMS System is unable to import data from one or more providers, those providers may, with EMS System approval, submit their patient care report data directly to the Department. The Department will make the patient care report data available to the EMS System upon request. Every EMS System and EMS provider approved to submit data directly shall electronically submit all patient care report data to the Department by the 15th day of each month. The monthly report shall contain the previous month's patient care report data. Third party software shall be validated by the Department to ensure compatibility with the Department's data specifications. Third party software shall not be used until the Department's validation is complete.

II. **DEFINITIONS**

A. **CARS** – Computer Aided Reporting System

B. **EMS Medical Director or EMS MD** – the physician, appointed by the Resource Hospital, who has the responsibility and authority for total management of the EMS System. (EMS Rules, Section 515.100 Definitions.

C. **ePCR or EHR:** Electronic Patient Care Report or Electronic Health Record is any record of patient assessment or care that is created on an electronic device and stored in an electronic data storage system and will serve as a medical record of the encounter.

D. **EMS medical records**: Include, but may not be limited to information related to a patient's physical or mental health or condition including individually identifiable data that are collected, recorded and stored and directly used in documenting EMS care in any health-related setting. They also include all communications that are recorded in any form or medium between EMS and medical personnel. EMS records may be used for healthcare, administrative, business, payment, and QI purposes and may be paper based, electronic or computer based, or a hybrid of the two. An EMS MD-approved Image*Trend* ePCR, NWC EMSS paper Short Form, hospital Communication Log, images of the patient or scene taken by EMS personnel, and OLMC recordings of calls to emergency responders are considered EMS medical records.

"Medical records do not include investigations or reports that are prepared in connection with utilization review, peer review, or quality management activities" What Constitutes a Medical Record? What are Oversight and Management Considerations? | Lorman Education Services.

E. **Patient:** A person who requests, potentially needs, and/or receives "Pre-hospital care" as defined by the EMS Act: "*Those medical services rendered to patients for analytic, resuscitative, stabilizing, or preventive purposes, precedent to and during transportation of such patients to health care facilities.*" It is the EMS provider's responsibility to ensure all potential patients regardless of the size of the incident are offered the opportunity for evaluation, treatment, and/or transport. Practically speaking, a patient means a person encountered by EMS who meets any one of the following criteria:

1. "A person with any sort of [medical] complaint, possible illness, or mechanism of trauma that could suggest injury" (System Policy A-1)
2. Has signs or symptoms of illness or injury that can be assessed by EMS personnel
3. Appears to be disoriented, impaired, and/or lacks decisional capacity
4. Has evidence of a behavioral health emergency and/or suicidal risk/intent
5. Is apparently deceased and requires EMS assessment to confirm their status.

F. **PBPI:** Provider-based performance improvement committee

G. **Protected health information (PHI)**: Information that is a subset of health information, including demographic information collected from an individual and; is created or received by a health care provider, health plan, employer, or health care clearing house; and relates to the past, present or future physical or mental health or condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual. This information identifies the individual or there is a reasonable basis to believe the information can be used to identify the individual.

H. **SuperUser:** A designated member of a System EMS Agency who has demonstrated a high level of knowledge, experience, and expertise in the use of ePCR hardware and software.

I. **Spoliation*:*** The "intentional or negligent destruction, mutilation, alteration or concealment of evidence that includes records relevant to a legal proceeding with both criminal and civil consequences.

III. **POLICY**

A. **Patient contact:** A PCR, approved by the EMS MD, shall be completed for every EMS patient encounter regardless of the ultimate outcome or disposition of the call.

1. **Transported patients:** An ePCR or the paper Short Form must be provided to the receiving health care facility before the crew leaves that facility. See below.

2. **Non-transported patients**: Document all assessments, care given, disclosure of risk provided to the patient or legal decision-maker, and patient refusal statements on the ePCR. EMS agencies may use the written Refusal of Service form approved by the EMS MD if the electronic form is not available to them at the point of patient contact. The ePCR shall be posted within 24 hours of patient contact.

B. **Required ePCR software for all NWC EMSS agencies**: Image*Trend*™ Elite or Elite Field platform (Effective October 3, 2016)

C. PCRs shall contain sufficient, objective and accurate information to identify the pt, support EMS impressions, justify treatment, document the time course and results of the encounter, and promote continuity of care among health care providers.

D. All are responsible for maintaining the integrity and security of EMS data and medical records in their possession under federal and state statutes and System policies.

E. **Non-patient contact**: EMS contact with persons who do not meet the criteria for a patient shall be recorded in the agency's incident reporting system to document that response or assistance. The agency's reporting requirements concerning personal identification information should be followed.

IV. **PROCEDURE**

A. **Completing an ePCR:** Enter all patient information into Image*Trend* software in compliance with system documentation standards.

1. **REQUIRED DATA/VALIDITY SCORES:** The System requires entries in all data fields required by local, state and national datasets (NEMSIS) before a record can be scored as 100% valid. Reports must have a 100% validity score to be downloaded to Illinois Data Systems. A report with a 100% validity score does not necessarily constitute a complete or accurate medical record. There should be no blanks, gaps, inaccurate, or contradictory statements in the report.

2. **SIGNATURES**: Each ePCR must be signed by a minimum of two EMS personnel holding the level of licensure required for the patient's acuity and level of care provided. (See Policy S3 EMS Staffing requirements 2/1/22)

a. **BLS:** Must be signed by 2 licensed EMTs or higher, or if a prescheduled interfacility transfer of a low-risk stable patient and an IDPH-approved staffing waiver is in place: 1 EMT and 1 EMR.

b. **ALS categorized as critical, emergent, and/or unstable** shall be signed by 2 licensed paramedics/PHRNs/PHAPRNs/PHPAs.

c. **ALS categorized as lower acuity and stable**, must be signed by at least one PM/PHRN/PHAPRN/PHPA and one other EMT, PM. or PHRN.

d. Each signee shall review the record to ensure that it is factual, accurate, and complete with times listed as accurately as possible before signing.

e. Each signature must be accompanied by the person's full printed name and the signee must be listed as a crew member on the ePCR.

B. **Providing an EMS PCR to the receiving facility**

1. **Image*Trend* report:** This may be done via printed paper copy, fax, or electronic submission using System-approved processes. Posting a record to the cloud does not satisfy the IDPH rule requirement. Provide a written report directly to a healthcare professional or place in a receptacle specifically noted for EMS PCRs that complies with HIPAA privacy rules.

2. **Paper Short Form:** If leaving the approved Short Form prior to completing the ePCR, EMS must also provide copies of ECG and $EtCO_2$ tracings, medication lists, stroke, sepsis, decisional capacity, or suicide checklists; advance directives/POLST form, and transfer orders as applicable . See above for ways to leave written reports.

   Make a copy of the completed Short Form before giving the original to the receiving facility. The EMS copy shall be used to generate the ePCR and for QI purposes. EMS has up to two hours to complete, post, and submit a full ePCR to the receiving facility via usual and customary procedures authorized for that agency.

C. **Posting ePCRs:** All ePCRs of transported patients must be uploaded to Image*Trend's* data storage system within two hours of leaving the facility via the software's posting process.

1. To closely control document integrity, optimize accuracy, and generate an automatic audit trail of all changes, **reports shall be locked upon post.**

2. If the ePCR cannot be posted due to a technical malfunction and the provider's technology support provider is unable to resolve the issue locally or the malfunction affects multiple providers, a CARS Trouble report must be submitted to:

   a. System CARS Committee Chair - contact info on System website)
   b. Provider Agency SuperUser
   c. Receiving hospital's EMS Coordinator

D. **Data analysis for quality measurement and improvement; problem identification, evaluation, patient care gaps, disease/injury surveillance, and monitoring in reference to patient care and/or reporting discrepancies by System members**:

1. **Quality improvement (QI)** is used to systematically improve care and seeks to standardize processes and structures to reduce variation, achieve predictable results, and improve outcomes for patients, healthcare systems, and organizations. Structure includes technology, culture, leadership, and physical capital. Process includes knowledge capital (e.g., standard operating procedures) or human capital (e.g., education and training).

2. **ePCR and paper Short Form QI review:** The System shall conduct quality measurement and improvement reviews and disease/injury surveillance audits as defined by IDPH and the Provider Based Performance Improvement (PBPI) Plan.

3. QI monitoring and disease/injury surveillance audits shall be done internally by each EMS agency and System-wide via screens and tools established by the PBPI Committee, EMS MD or his designee.

4. Thresholds to be met shall be determined by national measures where they exist and local targets established by the PBPI committee and agreed to by the EMS MD.
5. Data from QI analyses and disease/injury surveillance is reported to governmental entities, system leaders, committees, and providers as appropriate and applicable.

E. **Correcting or editing an entry**

1. Apparent nonconformities due to errors or omissions in documentation should be corrected promptly once detected through QI monitoring using proper methodology. A locked report may be **unlocked and corrected or edited** by approved agency administrators (nonclinical entries) and/or those who were listed as EMS responders on the original record (any entries within their scope of practice).
2. All changes to the original record after it is locked will be automatically noted on an electronic **audit trail**. The edited report shall be uploaded to cloud storage via usual and customary processes.
3. If the edits provide new information that could impact continuity of patient care, the amended report shall be provided to the receiving healthcare facility.
4. Records involved in any open investigation, audit or litigation should not be modified or destroyed. Each agency shall ensure that they have a **"litigation hold" program** in place to preserve all evidence and documentation existing at the time in the event of a known investigation or litigation being filed (https://www.lorman.com/resources/medical-records-law-in-illinois-17231).

F. **Data submissions to IDPH**

1. On or before the 15th of each month, each EMS provider agency shall submit all PCR data from the preceding month to the Illinois Department of Public Health (IDPH) based on the current Illinois State Schematron. This data shall be electronically transmitted via the designated secure, encrypted, transmission medium to Illinois Data Systems.
2. Data validation by IDPH is required prior to submission to ensure compatibility with their data specifications.
3. **Data reporting elements for IDPH:** Starting in 2023, IDPH will accept NEMSIS 3.5 data elements. For information on the Illinois Data Program and NEMSIS specifications see https://dph.illinois.gov/topics-services/emergency-preparedness-response/ems/prehospital-data-program/illinois-nemsis-specifications.html . Information regarding transition to new specifications will be coordinated by the CARS Committee and communicated to all System members.

G. **End of year data reporting to the EMS System**

1. The PBPI Committee shall compile summative yearly data reports for all System ePCRs stored on the Image*Trend* site.
2. The report shall include adult and pediatric demographics; patient dispositions, receiving facilities, primary impressions; medications given; interventions performed; pediatric cardiac arrests; run times; vehicles with highest PCR generation numbers, and the number of PCRs stored by each agency.
3. The report shall serve as the basis for annual ImageTrend run storage fees.

H. **Security and control relative to ePCR software and hardware**

1. Any person or entity that creates, receives, obtains, maintains, uses, or transmits protected health information (PHI) shall adhere to laws regarding the protection of and confidential access to EMS medical records. These include the Illinois Medical Records Retention laws, the Health Insurance Portability and Accountability Act (HIPAA), and Policies C7 Confidentiality of Patient Records and E-5 Code of Ethics.

2. Each EMS agency and its employees are responsible for insuring that all entered data, and electronic resources are appropriately protected against preventable or foreseeable mistakes in data entry, processing, intentional or inadvertent losses, and purposeful malfeasance.
3. Each EMS agency is responsible for insuring that devices running ePCR software are maintained with all manufacturer mandated updates that prevent breaches in data security and integrity.
4. Usernames and passwords used to access ePCR software or hardware shall not be transmitted through unencrypted email or other unsecure communications mediums.
5. PHI, printed PCRs, or other ePCR data that contains patient identities shall not be transmitted through unencrypted email or other unsecure communications mediums.
6. EMS Agencies may specify a limited number of users to have agency level administrator access to the ePCR software. The System reserves the right to limit the number of users with administrative permissions to maintain system security.
7. No individual shall make any unauthorized changes, additions, deletions, or corrections to any hospital or provider templates, ImageTrend files, or PCRs.
8. Each ePCR software user is responsible for maintaining the security of ePCR and associated data when using agency software and hardware. These actions include, but are not limited to:
    a. Logging out of the ePCR software when not in use.
    b. Securing, locking out, or logging out of the ePCR device when not in use.
    c. Creating passwords that meet agency, ePCR software vendor, and/or system complexity requirements.
    d. Keeping hardware and software login credentials (username/password) strictly confidential.
    e. Changing passwords if breeched or suspected to have been breached.
    f. Maintaining physical control of ePCR hardware at all times.
9. EMS agencies are encouraged to enhance the security of ePCR software by implementing additional security measures, including:
    a. Configuring automatic lockout/sleep when a user/device has been idle
    b. Require a password, pin, or other credentials to access hardware after lockout or sleep periods
    c. Require complex passwords that include combinations of upper case, lower case, numbers, symbols, etc.
10. **ePCR Software user management**
    a. User management of ePCR software is primarily the responsibility of the EMS agency and their designated administrators.
    b. Only the EMS System and System level administrators are permitted to permanently inactivate a user account from the ePCR software.
    c. **Creating users**: Once an EMS clinician is approved to work in the System, the EMS agency must create a user account that contains the individual's name and license number, along with a username and password. Users with exiting accounts within the Region 8/9/10 shared ePCR software shall not have more than 1 account associated with their license number.
    d. **User account permissions**: Users of the ePCR software may must be assigned the most appropriate level of access for their role in the agency. These permission levels include:
        (1) EMS User; EMS QI User; EMS Agency secretary
        (2) Billing Company | EMS Service Administrator

e. **Associating with another region account:** Users who have existing accounts within the region 8/9/10 Image*Trend* consortium must have their account associated (linked) with each provider that employs them. Only the EMS System and System level administrators may associate user accounts. Submit requests to the EMS System that is adding the provider.

f. **Inactivating users:** EMS agencies shall inactivate an employee's account at the time they leave the System or have practice privileges suspended. The EMS System shall inactivate a Provider Agency's account at the time they leave the System or are suspended from operation.

g. Only EMS System and System level administrators are permitted to reactivate a user account.

h. Agency administrators may have to perform additional user account maintenance that includes:

(1) Resetting passwords
(2) Restoring locked-out accounts
(3) Updating license expiration dates
(4) Updating demographics

I. **Security and control of printed PCRs**

1. Security of printed PCRs shall be maintained at all times by EMS agencies, their employees, and receiving facilities.
2. Monitor print queues for failed or inadvertent ePCR print requests that may be cached from a failed printing attempt.
3. Securely dispose of inadvertently printed PCRs in compliance with privacy policies.
4. Printed ePCRs should not be routinely transported between facilities, agencies, stations, or offices. If additional ePCRs are needed for records, billing, QI, or other approved reasons, they should be printed upon arrival to the next secure location.
5. ePCRs should not be sent to remotely located printers unless they are under the control of the provider or another authorized party.
6. PHI, printed PCRs, or other ePCR data that contains patient identities shall not be transmitted through unencrypted email or other unsecure communications mediums.
7. When faxing PCRs to a receiving facility, or other authorized recipient, a secure means must be used and the device approved by the facility to receive PHI.
8. The system provides a PCR print option with identifiable information redacted to be used by paramedic students, QI reviewers, and other authorized parties.

J. **Appropriate uses of facility computers**

1. Use of all electronic systems and devices must be compliant with facility policies and not in violation of any legal regulations.
2. Users must not deliberately act in a manner that would negatively impact the operation of electronic devices or systems. This includes, but is not limited to:
   a. tampering with components of the facility computers or network
   b. Installing or uninstalling applications that affect system operability
3. Users must not unfairly monopolize a computer or system resources that prevents others from completing their assigned duties.
4. Users shall not use facility equipment to access, store or publish materials which are pornographic, sexual, racist, sexist, or otherwise offensive.
5. Facilities reserve the right to monitor, filter, or track communications on their networks or systems.

6. Facilities will audit system and application logs and processes as required by HIPAA and other applicable regulations.
7. All network traffic is subject to the acceptable use policies of the network through which it flows.

V. **Policy distribution:** All current NWC EMSS members, students, and other users of NWC EMSS ePCR software will be given access to a copy of this policy via the System website. The NWC EMSS reserves the right to change this policy at any time.

VI. **Violation of policy:** All allegations of misconduct relative to this policy shall be investigated in compliance with the System Just Culture framework. Any person found to have willfully or grossly violated this policy shall be in noncompliance with the System's Ethics Policy, and shall be subject to the provisions of System Policy D1 Due Process: Corrective coaching/Disciplinary action.

VII. **Immunity provisions**

A. All information contained in or relating to any medical record audit performed by an authorized party and/or by the EMS MD shall be afforded the same status as information concerning medical studies in Article VIII, Part 21 of the Code of Civil Procedure. Disclosure of such information to IDPH shall not be considered a violation of that Code.

B. Hospitals and individuals that perform or participate in medical audits pursuant to the EMS Act shall be immune from civil liability to the same extent as provided in Section 10.2 of the Hospital Licensing Act.

VIII. **Medical records retention period in Illinois:** The System and its members shall preserve EMS-related medical records in a format and for a duration established Illinois law and by policy and **for not less than 10 years**, unless notified in writing by an attorney before the expiration of the 10 year retention period that there is litigation pending involving the record of a particular patient. In such case, follow direction from the Agency's legal counsel.

IX. **Requesting older archived records**: ImageTrend is completing the migration of EMS records from the Service Bridge site to their Vault archive. Patrick Sennett signed the contract on behalf of all covered entities within our collaborative to provide ongoing access to NEMSIS v2 records (created up to mid-late 2016). Patrick will remain the curator of these reports. Forward requests for old reports to him until a plan is created to allow each EMS Resource Hospital access. Patrick.Sennett@aah.org

Distinctions to using Vault as compared to the use of Service Bridge or Elite.

A. The Vault PCR format is a unified generic form that cannot be changed, Thus, the archive copy will not have the same format as the original PCR.

B. There is aggregate reporting of v2 data available via the regular Elite Report Writer, but some PHI elements are not in the report writer engine, meaning you can report on NEMSIS elements but not patient-identifiable elements.

C. Any attachments created remain intact on the Vault v2 records.

Patrick Sennett, Good Samaritan EMS System; O – (630) 275-1378 | M – (331) 223-9555

References:

Short, M. and Goldstein, S. (2022). EMS documentation. StatPearls [Internet]. Accessed online: https://www.ncbi.nlm.nih.gov/books/NBK448107/#:~:text=The%20primary%20purpose%20of%20EMS,in%20patient%20care%20will%20understand.

Varone, C. (2023). Photos from the scene: Understanding fire/EMS department records retention. Accessed on line Feb. 24, 2023 from Photos from the scene: Understanding fire/EMS department records retention (ems1.com)

Matthew T. Jordan, MD, FACEP
EMS System Medical Director

Connie J. Mattera, MS, RN, PM
EMS Administrative Director