Hospital EHRs Role in Integration

E. Rolland Phillips, MD, FACEP
Executive Physician Strategist – Emergency Medicine, Cerner
Medical Director of EM Informatics, Atrium Health
January 29, 2020
Emergency Medicine

~ 1,000 Emergency Department’s utilizing Cerner FirstNet

133,908,096 Dynamic Documents signed annually

Recently released...
- LaunchPoint checkout list & additional icons
- Results Call Back checkout filter
- RTLS Integration with Capacity Management
- Follow Up search enhancements

What’s to come...
- LaunchPoint condensed view
- Chronological View – orders, filters, usability improvements
- Emergency Event (Trauma) Documentation

Efforts have been made to ensure system related data returned is complete and accurate, but no guarantee is made to that effect.
The Joint Commission – Record of Care Standard
ED Documentation Requirements - RC.02.01.01.EP 2

PRELIMINARY
02. The medical record contains the following clinical information:
   - The reason(s) for admissions for care, treatment, and services
   - The patient’s initial diagnosis, diagnostic impression(s), or condition(s)
   - Any findings of assessments and re-assessments (See also PC.01.01.01, EP 1 and 5)
   - Any allergies to food
   - Any allergies to medications
   - Any conclusions or impressions drawn from the patient’s medical history and physical examination
   - Any diagnoses or conditions established during the patient’s course of care, treatment, and services (including complications and hospital-acquired infections). For psychiatric hospitals using Joint Commission accreditation for deemed status purposes, the diagnosis includes intermittent diseases (diseases that occur during the course of another disease, for example, a patient with AIDS may develop an intermittent bout of pneumonia) and the psychiatric diagnoses.
   - Any consultation reports
   - Any observations relevant to care, treatment, and services
   - The patient’s response to care, treatment, and services
   - Any emergency care, treatment, and services provided to the patient before he or her arrival
   - Any progress notes
   - All orders
   - Any medications ordered or prescribed
   - Any medications administered, including the strength, dose, route, date and time of administration
   - Any access site for medication, administration devices used, and rate of administration
   - Any adverse drug reactions
   - Treatment goals, plans of care, and revisions to the plan of care (See also PC.01.01.01, EP 21)
   - Results of diagnostic and therapeutic tests and procedures
   - Any medications dispensed or prescribed on discharge
   - Discharge diagnoses
- The patient's response to care, treatment, and services
- Any emergency care, treatment, and services provided to the patient before his or her arrival
- Any progress notes
Prearrival Documentation

LaunchPoint & Tracking

- Can be utilized for any prearrival patient
- EMS Prearrival
- Completed by clinician receiving patient information
- Universally available

![Pre-Arrival Form](image-url)
Prearrival Documentation
LaunchPoint & Tracking

- Prearrivals highlight and indicate critical information face up
Prearrival Documentation
LaunchPoint & Tracking

- On patient arrival, prearrival document is linked to patient’s record
- Icon indicates prearrival document is available to view
EMS Run Sheet Access
EMS Run Sheet Access
EMS Run Sheet Access
EMS Run Sheet Access
EMS Run Sheet Access
PDF View of Run Sheet
PDF View of Run Sheet
High Fidelity Customary View of ECG
High Fidelity Customary View of ECG
Atrium Health Cabarrus Results

• Run Sheet Uploads ~ 96-98% (~ 40% baseline)
• Time to EHR ~ On EMS Departure (~ 2 hrs prior to summary view)

• Abstractor Savings
  • Trauma Registry
  • Code Stroke
  • Code STEMI
  • Code Sepsis
  • Code Cool

• HIM Savings
  • Faxing and Scanning
  • Manual matching of records
  • Securing missing EMS Run Sheets
Summary: EHR Current State

- Widely Disparate Capabilities
- EMS Documentation Frequently Missing from Hospital EHR
- Rarely Contemporaneous
- EMS Run Sheets Predominately Blog Text (i.e. PDF)
- Discrete Data Mapping is Resource Intensive (limited availability)
- Mapping Interfaces must be Rebuilt for Each System – NonStandard
  - Staggering number of ePCR and EHR vendors
- KPI Abstraction – Manual in absence of Discrete Data Mapping
  - Code Stroke, Code Sepsis, Code STEMI, Trauma Registry, etc.

- Limited Outcome & Demographic Data Communicated Back to EMS
- Most ePCR’s are not able to Push a Pre-Hospital Encounter
  - Pre-Hospital Encounter must be manually reconciled
Summary: Hospital EHR Role

• Collaborate on Standard Mapping of Discrete Data
  • Outbound & Inbound Designated Data Decks
  • Turnkey Implementation

• Pre-Registration

• Integrate EMS Information into ED Trackers Realtime
  • i.e. ETE/ETA, Patient Complaint, Vital Signs, Treatment Received

• Contemporaneously Integrate EMS Run Sheets into the EHR

• Merge Pertinent Discrete Patient Data into EMR
  • i.e. Vital Signs, Medications Received, IV Fluids Administered, ECG, etc.

• Throughput Discrete Registry Data
  • i.e. Code Stroke, Code Sepsis, Code STEMI, Trauma, etc.