NATIONAL PRE-HOSPITAL & HOSPITAL DATA INTEGRATION LISTENING SESSION SUMMIT

WHAT WE HEARD

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JW Marriott Hotel

Washington, DC

WHAT WE HEARD

- **Data Integration**
  - What is the most important data? How does it change based on the setting (e.g., in the field vs. in the emergency department (ED))?
  - Where does the electronic patient care report (ePCR) land in the electronic health record (EHR)? In what format?
  - Blog text vs. discrete data readily parsed (e.g., PDF vs. XML)
  - Mapping data from one standard to another; from one software vendor to another is challenging
  - Push vs pull: Emergency medical services (EMS) typically enters data, but does data show up in the EHR automatically (push) or does clinician or someone else have to pull it in to the EHR? Technical details can touch on trade-secrets.
  - Culture and workflows can be barriers—deep-set and difficult to change
  - Quality control is hard, time/resource consuming, and necessary
  - Data collected once is more efficient than re-telling the story at every step
  - "Sources of truth" — Multiple sources of the same data / Multiple places to send data

WHAT WE HEARD

- **Data sharing: legal and technical barriers**
  - Misconceptions about the Health Insurance Portability and Accountability Act (HIPAA) rules regulating what data hospitals can share with EMS (what EMS should routinely receive)
  - Software/technological limitations in ability to segment EHR to share information EMS should routinely receive
  - Communication with stakeholders (e.g., HIPAA coordinator, hospital general counsel) on what's allowed (e.g., patient outcomes specific to EMS encounter vs. prior medical history)
  - Defining and implementing sharing of data "minimally necessary for care"
  - Managing access and credentialing

WHAT WE HEARD

- **Standards**
  - Multiple types of standards/families of standards exist (and continue to evolve) to serve individual purposes (NEMSIS, HL7, FHIR, etc.). Disagreement exists about:
    - how well data can be integrated between standards
    - how well standards can meet requirements outside the target environment
  - Are the standards unknown or not implemented? Is it a communication issue or a feasibility/resource issue?
  - Each role in the continuum of care may have different flavor of implementation if not a different standard.
  - NEMSIS has been a success in driving data collection nationally and exchange within EMS; doesn't ensure data exchange between pre-hospital and hospital
  - Need for standards around outcomes to close the loop/provide feedback
  - Standards change over time: systems need to be agile to move with them

WHAT WE HEARD

- **Understanding requirements in pre-hospital care vs. rest of the healthcare system**
  - Pre-hospital care
    - EMS personnel need a deeper understanding of how they are integrated in the healthcare system from 911 triage through post-acute care
    - Short patient interactions with limited information and little feedback makes improvement in field diagnosis and treatment difficult
    - EMS standards and EHR standards developed independently (e.g., leads to difficulty identifying John/Jane Doe)
    - Patient-matching is major issue
  - Healthcare system
    - Need for better understanding of how other health care clinicians could/would use the EMS information (not just data)

WHAT WE HEARD

- **Incentivizing Change**
  - Clear, documented authority from the Health and Human Services, Office of Civil Rights on HIPAA rules regulating what hospitals can share with EMS (e.g., what EMS should routinely receive)
  - San Diego as a model example that other orgs can follow; HIEs across the country to learn from
  - Incentives for the EMS providers and hospitals entering the data
    - Ensure data quality
    - Avoid data black-hole
  - Creating bridges between "islands of success" (including law enforcement data)
  - Need to balance top-down requirements vs. local, state, regional successes
  - Linking reimbursement system to sharing and use of integrated data
  - Evolving payment models and changing incentive structures
  - Linking Centers for Medicare & Medicaid Services and private insurance reimbursement to data exchanges

WHAT WE HEARD

- **Value propositions**
  - Improving time-sensitive care
    - Need for contemporaneous data following (or leading) the patient
    - Saving time collecting/re-collecting information from the patient
  - Close the loop
    - Systemic improvements in EMS care by providing timely feedback and patient outcomes
    - Mental health of EMS personnel (validate their role/help them improve)
    - Benchmark performance: Quality and improvement of EMS system
    - Can only improve what you measure well: collect the right data
  - Improvements in education, research, and public health

WHAT WE HEARD

- **Emphasis on patient care beyond the data**
  - Need for real-time communication component to accompany data: data might appear in a chart, but still important to communicate between pre-hospital and hospital care on most clinically relevant information
  - Making the right data/information presented to the right person at the right time
  - Communicate back to the patient

WHAT WE HEARD

- **Patient matching as pre-requisite for many data-integration goals**
  - Patient matching is not a panacea, however
  - HHS still prohibited by law from issuing national patient identifier
  - Takes resources to manually match patients if there's ambiguity; risks of mismatch may not be well understood
  - Legitimate concerns around safety and privacy remain
  - ONC directed by Congress to report on issues of national patient identifier
- **Provider identification is important for tracking/integrating data**