The TCD Data Group met by conference call at 1pm 9/21/18.
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Data group "asks":

1. Critical data elements
    a. Different sets of elements for needs of concurrent data (narrow set) vs. retrospective data (broader set)
    b. Need to get data sets for stroke, STEMI, trauma that are already being collected and crosswalk with NEMSIS/EMS data points to facilitate efficiency as noted below. Create 1:1 relationship between data points across registries and EMS to limit redundancy/inefficiency
    c. For EMS, considering mirroring Arizona NEMSIS data points as required /optional fields
    d. Potential hospital data elements of interest could include:
        i. ED LOS
        ii. Hospital LOS
        iii. ICU LOS
        iv. Procedures within <24 hours, deaths within 24 hours of hospital arrival
        v. Patient discharge to home / nursing home / rehab
        vi. Patient functional status at discharge
        vii. Admitting diagnosis / ED diagnosis
        viii. Discharge diagnoses
        ix. Current medication list
        x. Most recent EKG / labs

2. Desires for system functionality that currently do not exist
    a. Integration:
        1. Between EMS and hospital records, possible role of HIDI / HIE, EMS info into hospital EMR (including EKG, vitals / capnography data etc)
            a. What does integration at first medical contact mean to EMS:
                i. Using the HIE to push back toward EMS, but hospitals can also see. This would be helpful for the recurring patients that call with chest pain. Could alert the EMS of what prior tests have shown.
                ii. EMS can't even see what they have done with recurring patients in the past. They can't access the prior files or see outcome data. They need to find a way to facilitate outcome data within EMS. This would also be beneficial for EMS to see if they are treating correctly in the field since they don't diagnose they just respond to the symptoms they see.
                iii. Like to see past 12 leads. Great to have this data, but EMS have to decide if they are going to have time/access to this prior data on patients. EMS have to submit data within 36 hours and must have access to outcome data within 72 hours.
        i. Between various existing TCD registries, being able to put data in and get reports out. AHA registry works very well internally, but would benefit from integration cross-platform as well

ii. Throughout continuum of care, beginning at first medical contact (FMC) through at least hospital discharge
iii. Potential for incorporation of patient tracking capability –
1. Single patient identifier cross-platform, utilization for daily care but also for disaster (see HHS monograph previously uploaded to Box regarding single patient identifier issues)
2. For disaster have capacity to track patient destination, but also to be able to pull records to facilitate uninterrupted care of chronic medical problems, prescriptions etc that are otherwise unavailable.
3. Ability to track last hospital/facility, discharge info, and next / transfer hospital

b. Bidirectionality
i. Concurrent: limited data set to facilitate EMS decision-making in the field, i.e. discharge diagnoses, prior EKG / cardiac eval
ii. Retrospective: within fairly short timeframe (72 hr in current EMS reg for hospital followup), possibly up to 30 days to get discharge information, but not longer. Critical component for allowing quality work, reviews, feedback, to inform EMS education

c. Timeliness:
i. Information must be available in time to be meaningful to patient care and feedback as well as system monitoring.
1. EMS record submission timeframe of 36 hours too long?
ii. Consider necessary timeframes for uploading / refreshing data points to be of use for concurrent vs. retrospective uses

d. Analytics
i. Must have built in quality metrics (that align with/mirror national metrics)
ii. Must be easy to use: Need functional report writer / customization capability above and beyond built in metrics
iii. Must have data dictionaries to assure meaningful input and output
iv. Need realtime data / dashboard capability for some markers
v. Must be able to benchmark / aggregate / have system-level views as well as individual (see below best practices)

3. Best practice considerations
a. Capability/functionality:
i. To provide regional-level aggregation and benchmarking between regions or systems, including capability for measuring effectiveness of regional TCD plans or potentially compliance with plans
ii. To perform individual (internally focused) and external / system-level (deidentified) assessments and benchmarking with peers

b. Efficiency: eliminate need for redundant or unnecessary entries into different systems (hospital EMR, EMS EMR) and TCD registries, automate as much of this entry as possible from data already collected in hospital EMRs if possible.

Questions:

1. Terry Ellsworth (Bureau of EMS)
a. Current status of EMS reporting regulations under revision. Requirement for first response agencies to report (need this for FMC data).

b. What is cost of TCD report capability in ImageTrend – consensus of this group is that it doesn't work and/or is inadequate. "ImageTrend is not it". Hospitals are supposed to have sign-ins but capability for access is inconsistent
c. What is timeframe for implementation of NEMSIS 3.0 (issue of data loss from agencies that cannot report once they upgrade their own EMR)
d. Experience of requested data elements for tool did not match request (i.e. request to include last known well time was translated to symptom onset time which is not the same)

Additional information:

1. National Model EMS Guidelines provide quality measures for protocols – trauma, stroke, STEMI protocols uploaded to Box
2. MHA survey results expected 9/26, should be available for 9/27 meeting

Additional considerations:

1. Identify best practices / needs first, then figure out how to pay for it.
2. Group noted critical importance of getting buy-in of all stakeholders once draft information / plans have been created by this group. Lack of buy-in prior to implementation creates high risk of failure.
3. ImageTrend contract expires 2019
4. Keep in mind potential future ability to expand to meet other needs, i.e. disaster patient tracking, community paramedicine / home health initiatives
5. Meet after 9/27 meeting to discuss:
    a. SHINE/KAMMCO/HIDI/MHA work requested by Dr Williams
    b. Review survey