Making the Most of Data: Turning Raw Data Into Useful Information

Reporting on PONV an Exercise

Aim:

Develop a system to track and report on you groups rate of postoperative nausea and vomiting (PONV). The system should have the following components

- 1) Definition of PONV the numerator
- 2) Definition of a Case the denominator
- 3) System for capturing/counting events (PONV)
- 4) System for capturing/counting cases
- 5) System for Storing the Data
 - a. HIPAA Compliant
 - b. Appropriate Data Security Plan
- 6) System for reporting on the data
 - a. Appropriate data security
 - b. Analysis plan
 - c. Plan for dealing with risk stratification and co-variates

2 Groups:

Health System Integrated EMR: This group will design the reporting based on an integrated EMR within a health system. In this environment the anesthesia group does not "own" or have access to all of their data, but rather must partner with other stakeholders inside the health system to get the data that the need. Thus, in addition to the technical aspects of the proposal they should discuss

- 1) The business case for getting these data as it applies to the health system and other physicians
- 2) How will be data architecture/governance be established? I.e. who will have access to the data that is collected and how will that access be controlled?
- 3) Who will create and maintain the infrastructure (i.e. servers etc.)? Similarly ,who will fund the costs including the necessary programmers etc.?

Group without an EMR: This group will design the reporting based on a data collection process other than the EMR. They should assume that either no EMR exists in their practice, or that their practice uses several different EMRs (i.e. AIMS, Lab systems, etc) that cannot be linked effectively. Thus, in addition to the technical details described above they should discuss

- Which external players (vendors, billing companies, etc.) will you engage?
- 2) How will you reconcile the data from different sources?
- 3) How will you make the necessary business case(s) and obtain the needed funds?
- 4) Where will the data be shared and submitted?