

APPLICATION OF AIMS DATA TO THE DEVELOPMENT OF AN OPTIMAL CARE SCORE FOR ANESTHESIOLOGISTS

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Introduction: Evaluation of care provided by physicians is an important part of pay for performance (P4P) and ongoing professional practice evaluation (OPPE). An optimal care score is an “all or none” summary score which combines several recommended treatment components. Optimal care scores are calculated at the level of the individual patient or patient encounter and then summarized at the physician, service or hospital level. Optimal care protocols have been developed for diseases such as diabetes and heart failure management. We report the development of an optimal care score anesthesia related care delivered to surgical patients.

Methods: A computerized query was developed to assess five anesthesiology related treatments of surgical patients.(Table 1) Data was obtained from an existing AIMS database. Optimal care was deemed to have been delivered if all five items were either successfully achieved or not applicable. An example of not applicable would be antibiotics N/A for patients on continuous abx or for those where . Anesthesiology attending physicians were then ranked on the percentage of their patients who received optimal care based on these criteria.

Results: Utilizing a custom developed computer query, it was possible to combine the four indicators of anesthesiology care into a unified optimal care score (Fig 1). We were further able to rank our providers in percentage of patients who received optimal care. The report was developed with hyperlinks to the relevant clinical documentation.(Fig 2) Physicians can use these links for validation and examination of cases which did not meet optimal care.

Table 1: Criteria selected for optimal care

Criteria
Prophylactic antibiotic administration
CDC central line compliance bundle
Severe vomiting
Pain control (postoperative)
Core body temperature management

Figure 1: Provider listing showing each anesthesiologist and their % of cases achieving optimal care

Anesthetic Care Score Summary (11/1/2010 - 11/15/2010)

Provider Name	Percent of Cases Meeting Criteria
XXXXXXXXXX	81.3
XXXXXXXXXX	70.2
XXXXXXXXXX	86.7
XXXXXXXXXX	76.9
XXXXXXXXXX	60.7
XXXXXXXXXX	76.5
XXXXXXXXXX	88.5
XXXXXXXXXX	63.6

Figure 2: Individual practitioner report showing hyperlinks to documentation for each surgical case along with individual component scoring for each of the optimal care score parameters.

Anesthesia Quality Details for XXXXXXXXXX (11/1/2010 - 11/15/2010)

AnesCaseNumber	Preop	ACR	Postop	Antibiotic	Central Line	Severe Vomiting	Pain Control	Temperature
102XXXXXX	Preop	ACR	Postop	+	N/A	+	+	+
102XXXXXX	Preop	ACR	Postop	+	N/A	N/A	N/A	N/A
102XXXXXX	Preop	ACR	Postop	+	N/A	+	+	N/A
102XXXXXX	Preop	ACR	Postop	+	N/A	+	+	+
10XXXXXX	Preop	ACR	Postop	+	N/A	+	+	N/A
10XXXXXX	Preop	ACR	Postop	+	N/A	+	+	+
10XXXXXX	Preop	ACR	Postop	+	N/A	+	N/A	

Conclusion: An optimal care score for anesthesiologists represents a novel methodology for assessing performance. Further work will examine if provision of the optimal care score incentivizes physicians to examine and improve their practice performance on these key indicators.