

Using Electronic Medical Records Features – Are Hard Stops the Way to Improve Documentation?

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Introduction: The development and meaningful use of Anesthesia Information Systems (AIS) has increased over the past decade, improving timing and accuracy of data recording, compared to handwritten records (1,2,3). It is the anesthesiologists' ultimate responsibility to confirm the record's completeness and accuracy. For this reason, some AIMS have developed features to assure completeness through automatic monitoring alerts (4), messaging (4), or use of Hard-Stops (1); which prevents the record from being finalized before all critical information is completed.

Methods: The anesthesiologists of the University provide coverage at multiple centers with different AIMS. We retrospectively analyzed the data for all surgeries and documentation completeness in 3 random months (April-June-September 2014), at 2 different hospitals: Center A uses PICIS and does not allow for hard-stops and Center B, which uses INNOVIAN, and allows for hard-stops.

We measured completeness of documentation at 48 hours, based on 7 variables required by our department for documentation and billing compliance. These variables were: start of anesthesia care, end of anesthesia care, patient re-evaluated immediately prior to induction, attending present for induction, attending present for emergence, attending present for critical events and attending present during positioning.

Because hard-stops utilized in Center B do not allow the record to be printed or closed, we assumed 100% compliance for these 7 events at the end of each case and when reviewed. Further, we found no reports of cases still opened at 24 to 48 hours in Center B.

Results: The number of cases with completed documentation in April 2014 was 1265/1327 (95.3%) in hospital A vs. 992 (100%) patients in hospital B. In June 2014, the number of cases with completed documentation were 1255/1317 (95.3%) in hospital A vs. 938 (100%) patients in hospital B. The number of cases with completed documentation in September 2014 were 1232/1279 (96.3%) in hospital A vs. 976 (100%) patients in hospital B.

Conclusion: As the tendency to implement AIMS increases, we must consider the different reporting capabilities and features such as hard-stops that each vendor offers, as this has implications for departments and billing compliance offices. Driscoll et al. stated, "An ideal AIMS should have the ability to detect the absence of essential information" (1).

We compared the use of hard-stops for billing and documentation completeness between 2 different centers with different AIMS, but used by the same group of providers. Although >95% compliance after 48 hours might be considered adequate, the implications for the billing department are important. Being able to customize an AIMS to a center's needs is important, and the value of knowing that anesthesia records are 100% compliant before "case

closure" is critical. Ultimately, eliminating errors and missing information, improving billing revenue and enhancing anesthesia performance are all desirable results.

References:

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4. Anesth Analg 2006;103:390-5