

# Lessons Learned During Implementation of Perioperative Information System

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## Introduction

The National Institutes of Health Department of Perioperative Medicine implemented electronic documentation for statistical perioperative information in June of 2006 and implemented nursing clinical documentation in July of 2009, which interfaced with the Clinical Center's preexisting electronic medical record system.



Jose Miletti RN, DPM System Administrator reviewing electronic charting with process flow chart in the background.

## Description of Events

Since Executive Order 13335 mandated electronic patient care records in 2004, hospitals have been charged to implement an electronic medical record system, including a perioperative information system. Paper charting is fast becoming obsolete. Advantages of an electronic medical record include readability, consistency in charting, accessibility to care provider, simplicity, increased speed in charting, ease of obtaining data, and increased patient protection from human errors.



Donna Coplin OR Scheduler instructing staff on Perioperative Information System use.

## Purpose

The goal of this poster is to educate institutions regarding lessons learned from our implementation of a perioperative information system.

Paper Charting	Electronic Charting
Illegible	Legible
Non standardized free text	Standardized charting uses forced PNDs
Time consuming and difficult to retrieve health information	Instantaneous retrieval of health information
Statistical information is laborious to obtain	Statistical information is easy to obtain
Error correction is to draw a line through the error and write error and initial and date	Correction of documentation errors can be difficult and expensive to rectify
Collection of data is inefficient for quality improvement	There is efficient storage, manipulation, and displaying of information for quality improvement

## Outcomes

- Many lessons during this implementation project were learned.
- ❖ Institutional decisions are made for reasons which are not always shared with key players in the implementation.
  - ❖ If clinical staff will be involved with the implementation of the system, additional resources must be provided to assume clinical duties.
  - ❖ The institution needs to have a financial plan for unplanned costs.
  - ❖ If interfacing with an existing hospital information system, make sure information is compatible and fields match in both systems.
  - ❖ A change or upgrade in any system or process may require modifications in multiple applications.
  - ❖ A thorough change management process needs to be in effect in order to ensure valid testing of system changes.
  - ❖ The quick fix does not always work.

In conclusion, while there are many advantages for utilizing a perioperative information system, it must be realized that such an implementation is a complex process and the specific needs of the institution adopting such a system should be carefully considered.

## Perioperative Nursing Implications

- ❖ Downtime processes and education. To be used if system is not stable or is down.
- ❖ Delay in accessing patient information when interfaces not working.
- ❖ Charting is streamlined, easier, and saves time for perioperative nurses.
- ❖ Standardization of forms, terminology, abbreviations, and data input.
- ❖ Patient can receive more individualized attention from perioperative nurse.
- ❖ Maintain protection and security of information.
- ❖ Have a rapid and informed response to patient questions.
- ❖ Interconnects disciplines for Multidisciplinary Patient Care.
- ❖ Can work towards decreasing the potential for adverse events in the perioperative environment.
- ❖ Chemical cleaning of IT equipment to avoid cross contamination.
- ❖ Need not only to maintain technological advances education but IT education as well.



Michael Borostovik RN and Susan Rynders RN performing Quality Assurance activities through Perioperative Information System.

## Potential Pitfalls

- ❖ Proofreading electronic document is a must for accuracy of charting.
- ❖ Can delay charting since charting is sent electronically don't need to chart right now.
- ❖ Need to set up review board so system maintains currency with internal and external governing bodies and changes in rulings, regulations, and community standards.
- ❖ May act as a barrier in building a trust relationship with patient.

## Conclusion

While there are many advantages for utilizing a perioperative information system, it must be realized that such an implementation is a complex process and the specific needs of the institution adopting such a system should be carefully considered.



Jay Punzalan RN interpreting the OR schedule both the new electronic version and the old erasable board version.