



EHR Downtime/Recovery Planning: Panic Prevention

Flo Mielcarek, MSMIS, RN-BC
Manager, Operational Informatics
Kathleen Gall, MS, RN, NE-BC
Project Manager Sr, Operational Informatics (Retired)
Martha K. Badger, MSN, RN-BC, CPHIMS
Clinical Analyst Sr, Operational Informatics

Purpose

Describe the successful implementation of a downtime and recovery process for the electronic health record (EHR).

Objectives

- Objective 1:
 - Describe the journey taken by a large multi-facility Midwest healthcare organization in establishing an effective downtime and recovery process.
- Objective 2:
 - Discuss the barriers and challenges to establishing enterprise-wide communication strategies.
- Objective 3:
 - Outline the essential actions for downtime and recovery preparedness.

Background

Following an EHR software upgrade in February 2015, the Clinical Ops Informatics team led by Nursing Informatics Specialists conducted timely and informative multi-disciplinary "lessons learned" sessions. It was noted that the just-in-time preparation prior to the upgrade did not leave the healthcare system well-prepared for the downtime even though it was a planned outage.

Problems Identified

- Process gaps identified during lessons learned sessions included:
 - 1) lack of clarity of downtime/recovery policy;
 - 2) lack of understanding and preparedness regarding resources necessary for downtime/recovery;
 - 3) communication gaps before, during and after the planned outage;
 - 4) data integrity concerns that arose because it took close to three days for healthcare system staff to back-enter clinical notes and data into the EHR.

Actions

1. An extensive review and revision of the Downtime and Recovery Policy was undertaken in 2015 to reflect real-time experiences and correct inconsistencies identified during the upgrade debrief.
2. In collaboration with each site's emergency preparedness committee, tabletop drills were executed. The drills emphasized the need to preplan, include leaders and front-line caregivers and will be held annually. Planned and unplanned downtime scenarios and recovery steps were included in the drill.
3. Solutions have been identified to address communication issues across all venues. The downtime and recovery process has been incorporated within the Emergency Preparedness Committee's purview to improve communication and provide leadership. Device agnostic communication software will be implemented. This software incorporates multiple communication modes and has a backup strategy should the healthcare system lose internet access.
4. For easy transition to and from paper during downtime and again during recovery, three solutions were identified:
 - a. a downtime/recovery toolkit for an easy transition to paper;
 - b. a process to flag gaps in the EHR caused by downtime documentation;
 - c. streamlined expectations for data back-entry versus scanning documentation.

Implications

- Providing increased process standardization, improved communication and preparedness for downtime and recovery has multiple advantages. It has the potential to increase quality of patient care, mitigate the risk of lost resources during transitions to and from downtime and recovery, and to improve employee satisfaction.

3 Questions for Attendees :

Take these back to your organization

- Where is your organization in your downtime planning ?
- What understanding do your leaders have re: the importance of having a contingency plan?
- How and to whom does your organization communicate the status of a downtime or recovery situation?

References

- Ash, A., Singh, H., & Sittig, D. (2014, January). SAFER: Safety Assurance Factors for EHR Resilience. Retrieved from <https://www.healthit.gov/safer/guide/sg003>
- Bonin, I. (2015, April 22). Planning for the unexpected EHR downtime: 4 Key Steps. Retrieved from <http://meetings.hayesmanagement.com/blog/planning-for-the-unexpected-ehr-downtime-4-key-steps>
- Dieckhaus, T. (2014, March 10). Reviewing Downtime Procedures Are Essential. Retrieved from <http://www.himss.org/News/NewsDetail.aspx?ItemNumber=28669>
- Freeman, R., & Forinash, M. (2014, March 10). Downtime challenges: Keep the Focus on Patient Safety. Retrieved from <http://www.himss.org/News/NewsDetail.aspx?ItemNumber=28668>
- Minghella, L. (2013, August 30). Be Prepared: Lessons from an Extended outage of a Hospital's EHR System. Retrieved from <http://www.healthcare-informatics.com>
- Nelson, N. (2007). Downtime Procedures for a Clinical Information System: A Critical Issue Journal of Critical Care, 22(1), 45-50.
- Sittig, D., Gonzalez, D., & Singh, H. (2014). Contingency planning for electronic health record-based care continuity: A survey of recommended practices. International Journal of Medical Informatics 83(11), 797-804.