

COPIC Tip:**The Dangers of “Copy and Paste” in EHRs*****Contributing factors and recommendations to address these.***

A recent JAMA Internal Medicine article¹ highlighted research by a group at the University of California San Francisco Medical Center that examined the prevalence of copying and pasting with electronic health records (EHRs). Using a software update, the group was able to identify what characters were manually entered, what information was imported from another source (labs and medication lists) and what was copied/pasted from a previous note.

Approximately 22,630 inpatient notes were examined over the course of eight months. On a typical inpatient note, 18% was manually entered, 46% copied/pasted, and 36% imported. Medical residents averaged 11.8% manually entering information while attending hospitalists averaged 14.1% (though they wrote the shortest notes).

“The traditional goal of progress notes is to provide a concise, up-to-date reflection of the patient’s condition and the clinician’s thought process,” said the researchers. “However, copying or importing text increases the risk of including outdated, inaccurate, or unnecessary information, which can undermine the utility of notes and lead to a clinical error.”

There are limitations to this study since it is based on a single hospital, single service evaluation, and it occurred at a major teaching hospital. However, results are consistent with previous medical literature and COPIC’s experience. Identified challenges include:

- **The “signal to noise” issue**—The sheer volume of information is overwhelming and makes it difficult to sort out what the key issues are and what one should be concerned about. A routine ED visit is typically five pages, yet there are often only a few lines of the clinician’s thought process that are really important. In a previous *Copiscope* article (“Counting Mouse Clicks,” January 2015), we described that in a typical private ED, approximately 44% of the time was spent on data entry and 28% was spent on direct patient care.
- **The problem of inaccurate information**—When over 80% of what is in the record comes from somewhere else, there is a greater chance of an error being documented. We have seen records where the patient has been extubated for five days while the records still say the patient is intubated. There is also the issue of the wrong acronym or wrong extremity being carried forward. Outdated and inaccurate notes may impact patient safety, lead to patient errors, and make a record hard to explain and defend.
- **New software can track how much of a note is original**—As this new capability becomes more available, there are concerns with what Medicare, other insurance payors, and the legal system will accept as a reasonable amount of copying and pasting. Will there be regulatory fraud and abuse claims around this practice?

Earlier this year, a National Institute of Standards and Technology (NIST) report² raised similar issues with the overuse of “copy and paste.” The report outlined the following recommendations in terms of improvements that could be made with EHR design and training:

- **Provide a mechanism to make “copy and paste” material easily identifiable**—EHR systems should be designed to enhance the visibility of the information being selected for “copy and paste” to prevent users from inadvertently copying only part of the information that was intended to be copied. In addition, systems should provide a concept for reconciling that the copied information was read

consciously and edited by the clinical provider which would promote the attribution of the source of the information.

- **Areas where “copy and paste” should be locked**—The “copy and paste” function should not be used when entering any information into a blood bank information system due to the extreme risk involved in blood transfusion. Demographic information should never be copied, but needs to be autopopulated in all the interfaces within a patient’s chart. And copying of demographic data from one chart to another should not be allowed, and dates should never be copied and pasted.
- **Ensure that the origin of “copy and paste” material is readily available**—User interface must display the “chain of custody” of the information associated with the use of “copy and paste.” However, this information should not be displayed by default, and only be shown on user demand to avoid the possibility of overwhelming clinical users and contribute to errors of commission (taking an incorrect action).
- **Ensure adequate staff training and education regarding the appropriate and safe use of “copy and paste.”**—Most of the research study participants that the report was based on said that training raises awareness of the error prone actions while using the “copy and paste” function, and would increase their efficiency as well as help them use the functionality in a safe way.

¹ *JAMA Intern Med. Published online May 30, 2017. doi:10.1001/jamainternmed.2017.1548*

² <http://nvlpubs.nist.gov/nistpubs/ir/2017/NIST.IR.8166.pdf>