

## Appendix A

### Examples of Electronic Health Record (EHR) User-related Errors

| <b>User-related Errors in EHR Systems</b> | <b>Examples</b>   |
|---|---|
| Data entry errors                         | Physicians, nurses, and technicians using the mouse and keyboard to enter notes and medication lists occasionally make errors in data entry that result in incorrect dates, quantities, vital signs, or other details.  |
| Cut and paste errors                      | Some EHR systems allow users to cut and paste details from previous notes. Occasionally a narrative section is brought forward under the assumption that the clinical situation has not changed, when in fact conditions, findings, and procedures mentioned in the old note no longer pertain or are inaccurate. Notes created in this way contain false, or at the very least inaccurate, data and may lead to inaccurate decision making.  |
| Chart management errors                   | Some medical practices “prestart” notes for patients prior to the visit. If the patient misses the appointment, these notes are typically deleted later. When deleting prestarted notes, however, other notes documenting actual patient visits may also be inadvertently deleted.  |
| Chart completion errors                   | One physician fails to complete and sign a chart note. Another physician, seeing the same patient at a later date, mistakenly completes the unfinished note with details of the new encounter.  |
| Order entry errors                        | EHR systems that feature computer-based order entry usually require clinicians to choose medication names from a list or master database. Because some new medications are not yet in the database, some systems allow users to enter unlisted medication names into the database so that they can write orders or prescriptions for them. If a clinician does not know the correct spelling for a new drug, he or she may enter it incorrectly. Over time, erroneous entries will fill the database, and other users may then prescribe incorrectly by clicking on incorrectly spelled and perhaps “sound-alike” versions of the desired medication. |

*Source:* Phillips, Win, and David Fleming. “Ethical Concerns in the Use of Electronic Medical Records.” *Modern Medicine* 106 (2009): 328–33.