Reviewer’s report

Title: Chemotherapy prescribing errors: an observational study on the role of information technology and computerized physician order entry systems

Version: 1 Date: 6 November 2013

Reviewer: Kunal C. Kadakia

Reviewer’s report:

Dear Dr. Aita et al.,

This retrospective observational single institution study, unlike other similar studies which largely documented the incidence of standardized prescribing practice errors, focused beyond the incident of errors (the primary end point) to importantly assess the type of error, degree of preventability, and severity (secondary endpoints).

The researches observed two important findings. First, prescribing errors occur despite the use of CPOE (computerized order entry). Second, a 20% incidence of errors were observed in the studied cohort, however, a majority of these errors were due to systems issues.

Strengths:

The researchers appeared to use a variety of definitions (based on previous reported research) for the number, type, severity, and preventability of errors (notably, no validated tools are available and this was aptly acknowledged by the researchers).

The authors provided a concise analysis of their results.

The conclusions were articulate and they provided an extremely salient point regarding the reporting of medical errors, in that, to improve this field of addressing CPOE related issues, standardization for definitions of errors ("error classification") could systematize reporting of this type of data and assist in cross-study comparisons between diverse institutions/systems.

The authors appropriately acknowledge the inherent limitations of the observational design.

Limitations:

Suggested Discretionary Revisions:

1. What projects if any are planned to build upon these findings? Given that the systems errors were corrected by the authors, as noted in the discussion, it would be interesting to have a follow up manuscript using similar methodology to assess if other system errors have since arisen. It is noted in the discussion section that revisions to the current CPOE are in place, if a repeat analysis is
being planned, please acknowledge this in the discussions section.

2. The overwhelming majority of errors (101 of 181) were noted to be the lack of administration route. If these errors were included in the post-hoc a priori errors, this should be acknowledged clearly in the results or discussion section.

Suggested Essential Revision:

1. If the secondary endpoints (type of error, degree of preventability, and severity) were planned at the time of protocol development prior to collection and analysis of data, this should be noted in the methods as this adds to the validity of the observed findings.

2. Strongly consider the addition of a table to highlight the observed findings.

3. Page 12 “…a figure similar to those reported in previous studies.” Please provide references for this statement.

Suggested Major Compulsory Revisions:

None

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests