Effects of Implementing Computerized Practitioner Order Entry and Nursing Documentation on Nursing Workflow in an Emergency Department

Gerald A. Banet, MSN, MPH; Donna B. Jeffe, PhD; Jennifer A. Williams, MSN, CCRN; and Phillip V. Asaro, MD

ABSTRACT

Nurses’ perceptions of effective use of their time are critical to the successful implementation of information system changes. We examined the effects of implementing computerized practitioner order entry and nursing documentation in our emergency department with an anonymous survey of nurses and repeated time-motion studies. Emergency care nurses were positive about effects of CPOE, reporting needing less time to complete medication, laboratory, and radiology orders and less time spent clarifying orders. Their perceptions of time spent were congruent with observations from time-motion studies where combined computer-and-paper time and direct-patient-care time did not change significantly. Nurses also reported supplementing template options with free text, and those who were more comfortable using computers reported supplementing template options more often than their counterparts, suggesting that assessments of users’ expertise in computer use may influence their ability to maximize their use of the functionality of emergency department information systems.

KEYWORDS

- Attitude regarding computerized medical records
- Electronic documentation
- Nursing documentation
- Clinical workflow
- Emergency department
- Information systems and utilization
- Computerized medical records systems
- Time and motion studies

Implementing a computerized documentation system lends itself to creative challenges and opportunities. Computerization of the medical record holds promise in terms of improving healthcare, but introducing computers into the workflow of healthcare providers is a complex process fraught with potential problems. This is particularly true in the emergency department, where patients come for treatment with highly varied, poorly differentiated problems, and providers are constantly challenged by time pressures and urgencies in a sometimes chaotic environment. Clinician
perception of the effect on the use of their time by imposed workflow changes is critical to successful implementation of clinical information system changes.

Other research has examined the effects that computerized documentation have had upon workflow processes and users’ perceptions and attitudes. Time-efficiency studies of computer vs. paper nursing documentation have shown variable results, depending on the setting, IS characteristics, and study methodology.

In a review of such studies, Poissant et al found that studies using the patient or patient encounter as the unit of measure did not show improvements in time-efficiency with computerized documentation, while those using the working shift as the unit of measure did. It may be that the working shift studies are measuring overall changes in workflow efficiency that is not directly measured by observing the time it takes to enter data on individual patients.

Little of the time-efficiency data published so far relates to computerized nursing documentation in the emergency department. In that unit, particularly an academic one, the complexity of multiple layers of care providers and the variety of patient presentations add unique dimensions to computerized documentation. The emergency setting creates challenges for communication of all patient care events and values clear, expedient methods for meeting these challenges. Other authors have discussed the outcomes of poor or inefficient communication.

**Background**

In May 2003, computerized practitioner order entry and full nursing documentation functionalities were added to a previously implemented commercial emergency department information system, HealthmaticsED, from A4 Health Systems, Cary, NC, in a large, academic emergency department and level one trauma center.

Before this time, triage nurses documented the triage process into a limited computerized record integrated with the electronic tracking board, but the balance of nursing documentation was completed on paper. Nurses processed handwritten physician orders; the nurses entered laboratory and radiology orders into a separate legacy computerized ordering system. Medication orders that could not be filled from emergency department stock were called in and faxed to the pharmacy by nurses. Many emergency orders were verbal ones taken by nurses and the timeliness of verbal order sign-off was a persistent problem.

The May 2003 implementation included direct computer entry of all patient orders by physicians; full nursing documentation, including the medication administration record; bi-directional interfaces with the laboratory and radiology information systems; automatic printing of laboratory specimen labels in the emergency department; and automatic printing of medication orders in the pharmacy for medications not stocked in the emergency department.

The bi-directional interfaces with the laboratory and radiology information systems eliminated entry of orders into the legacy ordering system and enabled result retrieval directly into the emergency department patient chart, where tracking board icons indicated their presence. While there were provisions for verbal orders, the mechanism for sign-off of verbal orders available at that time was somewhat cumbersome; and, during training, providers were encouraged to enter orders directly whenever possible. Nevertheless, documentation of patient-related information and EMS trip records in paper charts persisted. Paper charts persisted and included physician documentation, EMS trip records, and other patient-related information.

**Methods**

This study was associated with an ongoing project focusing on the quality of workflow in an Level 1 trauma center, affiliated with an academic medical facility, that was experiencing about 70,000 visits per year. The emergency department has 62 treatment rooms and six work areas for providers. There are approximately 100 computers in the department (see Table 1). Computers are located in every treatment room and throughout the work areas.

First, study data were collected using a self-administered

<table>
<thead>
<tr>
<th>Location</th>
<th>PC in patient care rooms</th>
<th>PC’s in nursing station/workrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma/Critical Care</td>
<td>6</td>
<td>7*</td>
</tr>
<tr>
<td>Emergent 1</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Emergent 2</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Observation</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Triage</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

* including 2 “roving” PCs

PC = personal computers.

**Table 1. Personal computers associated with patient treatment rooms—triage area and work stations in the Emergency Department at Barnes-Jewish Hospital.**
questionnaire measuring nurses' perceptions 12 months after the emergency department information system changes had been implemented. Also, data was collected through time-motion measures of ED physicians' and nurses' activities before and after the change in information systems. The institution's human studies committee approved the study.

A 12-item, self-administered questionnaire was designed that took less than five minutes to complete. Before administering the questionnaire to study participants, the wording of questionnaire items had been piloted to determine clarity and understanding, and it was revised as needed.

The first seven items of the questionnaire included questions about the time nurses spend documenting patient care; the amount of time from when orders for medication, lab tests, and radiology procedures were written to when they were carried out; the number of verbal orders; and the amount of time spent clarifying physician orders (see appendix). For these items, the following response options were used: Much less = -2, Less = -1, About the same = 0, More = 1, or Much more = 2.

With the next two items, the survey sought to determine if nurses believed that clickable template options were adequate and how often they felt compelled to supplement the template selections with additional typed information. For these items, a five-point scale was used with options Seldom = 1, Sometimes = 2, Fairly Often = 3, Often = 4, or Very Often = 5. The next item measured nurses' comfort level with using computers with response options Very Uncomfortable = 1, Uncomfortable = 2, Neutral = 3, Comfortable = 4, or Very comfortable = 5.

The final two open-ended items provided nurses with an opportunity to indicate how the information system changes made their documentation easier and to suggest ways to improve the system further. Responses to these open-ended questions were analyzed using thematic-analysis techniques for analyzing qualitative data, enabling researchers to identify themes from the data. Using analytic induction,

Registered nurses who had worked in the emergency department for at least four months prior to implementation of the information system changes and continued to work in the department after the changes were eligible to participate in the survey. Eligible nurses were surveyed about 11 months after the system changes had been implemented. An administrative secretary, who had no investigative role with the project, handed out the surveys to eligible nurses when they picked up their paychecks. To encourage participation, a brief overview of the importance of the project at the beginning of the questionnaire provided a modest incentive (a meal ticket) for participation. Questionnaires were completed anonymously.

A time-motion study was performed to obtain objective measures of the time-distribution of physician and nurse activities before and after system implementation. The study was performed with trained students serving as observers, using a handheld computer application described previously. There were 17 four-hour observation sessions completed approximately one month before the system implementation and an additional 17 sessions completed about six months after the implementation. The measurement approach was more of a work-shift approach rather than a patient or patient-encounter approach.

The activities observed during these four-hour sessions were grouped into categories relevant to the study, including working with paper, working on computers, offering direct patient care, searching for charts, and using a bedside computer. These categories do not incorporate all activities observed and are not mutually exclusive. For example, using a bedside computer is also included in direct care because it is used in the presence of the patient.

For statistical analysis, the first seven survey responses were coded as -2 to +2, anchoring the middle response to zero, indicating no change. One-sample t-tests were conducted on each item's mean score to evaluate whether the mean was significantly different from 0, the neutral response. Descriptive statistics were reported for the next three items, which were scored from 1 to 5. Bivariate correlations were tested among the first 10 questionnaire items using Spearman's rho. Using the Bonferroni correction for multiple comparisons, a p-value of less than .005 (.05/10 = .005) was required for significance. Finally, time-motion observations were summarized for selected activities before and after the information system changes, reporting mean percents with their associated 95 percent confidence intervals. All analyses were performed using SPSS 12.0.

Results

Participants in the survey had an average of nine years of nursing experience, including an average of 6.3 years of emergency department experience. During the study period, 84 nurses were employed by the department, and 65 met the inclusion criteria of having worked at least four months before and continuing to work in the department after information system changes were implemented. Of the 65 eligible nurses, 55 were approached and completed the questionnaire. The remaining 10 nurses were not available to participate either because they were on vacation or had scheduling conflicts.
Questionnaire responses indicated that the nurses thought they spent about the same amount of time documenting their patient care before and after the changes in the ED information system. Nurses perceived that less time was needed to complete medication, laboratory, and radiology orders, and to clarify orders after implementing the system changes (see Table 2). Spearman correlation coefficients were reported among 10 selected items on the survey in Table 3. Notable among these correlations was that nurses reporting greater comfort with computers were more likely

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time spent documenting patient care</td>
<td>-2</td>
<td>2</td>
<td>-.16</td>
<td>1.00</td>
<td>.23</td>
</tr>
<tr>
<td>Time from order to administration of medication</td>
<td>-2</td>
<td>1</td>
<td>-.50</td>
<td>.67</td>
<td>.00</td>
</tr>
<tr>
<td>Time from ordered to obtaining specimen</td>
<td>-2</td>
<td>2</td>
<td>-.40</td>
<td>.78</td>
<td>.00</td>
</tr>
<tr>
<td>Time to perform radiology test(s)</td>
<td>-2</td>
<td>2</td>
<td>-.33</td>
<td>.96</td>
<td>.02</td>
</tr>
<tr>
<td>Number of verbal orders</td>
<td>-2</td>
<td>1</td>
<td>-1.13</td>
<td>.83</td>
<td>.00</td>
</tr>
<tr>
<td>Time clarifying order</td>
<td>-2</td>
<td>2</td>
<td>-.78</td>
<td>.92</td>
<td>.00</td>
</tr>
<tr>
<td>Time to obtain patient medications from pharmacy</td>
<td>-2</td>
<td>2</td>
<td>.11</td>
<td>.96</td>
<td>.40</td>
</tr>
<tr>
<td>Template options adequate</td>
<td>1</td>
<td>5</td>
<td>3.06</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Type text + template options</td>
<td>1</td>
<td>5</td>
<td>3.95</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>Comfort with computer use</td>
<td>1</td>
<td>5</td>
<td>4.27</td>
<td>.78</td>
<td></td>
</tr>
</tbody>
</table>

Tests of significance were dependent-samples t-tests measuring the significance of the difference of the mean from 0, indicating no perceived change.

Table 2. Nurse responses to questionnaire items about twelve months after the EDIS changes had been implemented.

<table>
<thead>
<tr>
<th>Correlations Between Questions</th>
<th>Spearman’s rho</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions 1 and 2</td>
<td>0.288</td>
<td>0.035</td>
</tr>
<tr>
<td>Questions 1 and 6</td>
<td>0.299</td>
<td>0.027</td>
</tr>
<tr>
<td>Questions 1 and 9</td>
<td>0.057</td>
<td>0.677</td>
</tr>
<tr>
<td>Questions 1 and 10</td>
<td>-0.125</td>
<td>0.365</td>
</tr>
<tr>
<td>Questions 2 and 3</td>
<td>0.328</td>
<td>0.015</td>
</tr>
<tr>
<td>Questions 3 and 4</td>
<td>0.500</td>
<td>0.000</td>
</tr>
<tr>
<td>Questions 4 and 6</td>
<td>0.483</td>
<td>0.000</td>
</tr>
<tr>
<td>Questions 4 and 7</td>
<td>0.389</td>
<td>0.004</td>
</tr>
<tr>
<td>Questions 4 and 10</td>
<td>-0.293</td>
<td>0.030</td>
</tr>
<tr>
<td>Questions 9 and 10</td>
<td>0.378</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Table 3. Selected correlation coefficients from the Emergency Department Nurse Survey.
to report supplementing template selections with typed text.

Time-motion data (see Table 4) demonstrated that after implementing the information system changes, nurses spent less time on paper documentation and increased time using computers. The combined computer-and-paper documentation time and direct patient-care time did not change significantly. However, the time spent searching for medical records and documenting in patient rooms did change significantly after implementing the changes in the system. Searching for missing paper charts was observed 34 times in the 17 pre-implementation observation sessions, but only 12 times in the 17 post-implementation sessions.

Forty-six nurses, or 84 percent of respondents, had a response for at least one of the final open-ended questions; 29, or 53 percent, answered both questions. Specifically, 37 nurses' comments on the open-ended question revolved around several themes. Of these, 11, or 30 percent, noted improvements in the clarity of orders (such as, “easier to read physician orders” and “less clarification needed”) and 10, or 27 percent, reported ways in which the system helps them organize and time their tasks, primarily through icons on the tracking board (with comments such as, “the system reminds me of what needs to be done” and “more aware when orders are in”).

Additionally, 24, or 65 percent, of the nurses commented positively on the efficiency and standardization of documentation provided by the documentation templates, which prompts the user to enter certain information (such as “my documentation has a guide and still allows for added text” and “decreased double/triple charting”). There were 12 comments related to general improvement in emergency department processes, particularly the elimination of intermediary steps in laboratory- and radiology-order processing; they described the process as “more streamlined” and that they were “able to expedite patients faster.” Nine of the nurses wrote about the decreased number of verbal orders and the decreased need to search for charts.

Of the 38 nurses giving suggestions for improving the system, several themes were noted. Of these, 19, or 50 percent, made suggestions for additional terms and phrases for the documentation templates (such as “wound care needs irrigation as an option” and “some things needed for chief complaint like boil, complication from procedure, medication complication”). Fourteen, or 37 percent, commented on process issues that could not be affected by the ED application, such as delays in getting medications from the pharmacy and the need for certain telephone communications with the blood bank and radiology.

There were also nine complaints regarding technical
problems with the computer system, many of which did not relate directly to the ED system. Four nurses indicated suggestions for additional functionality, such as dose calculators and automated importation into the system of vital signs from the automated noninvasive blood pressure monitors.

Some 10 nurses wrote comments about the medication order icon on the tracking board. This icon remains unchanged until all ordered doses of all medications were administered, even if repeated doses over many hours had been ordered; as a result, recognition of new medication orders had been hampered. In response to these comments, a change was made to the system, and now an additional icon appears that is dismissed as soon as the nurse acknowledges a new medication order. Finally, two nurses commented on what they saw as a deficiency in the system’s formatting of orders for heparin, an anticoagulation medication; their suggestion was to “fix the way heparin is ordered.”

Discussion

The responses on the surveys indicate a generally positive perception of the system’s effect on patient care, but an essentially neutral perception of the effect on documentation time overall. The results of direct observation in time-motion study also revealed no change in the overall documentation time for nurses. Interestingly, correlations were not found between the perception of time spent documenting and supplementation of templated responses by typing in additional information nor between perception of time spent documenting and comfort level with computers. However, feeling comfortable with computers did correlate with typing additional information.

Perceptions of the users regarding time spent on documentation and value to streamlining work processes are keys to successful implementation of clinical information systems. The responses to the survey indicate generally positive nursing perceptions of the system’s effect on patient care, particularly regarding the efficiency of common patient care processes such as getting medications to patients and processing laboratory and radiology orders. Nurses also indicated essentially neutral perceptions of the effect on overall documentation time. While many nurses indicated that they typed in free text in addition to templated documentation, they indicated that they generally found the template options adequate.

The findings suggest that nurses who are more comfortable with computers are more likely to supplement templated documentation with free text. However, nurses indicating more supplementation of template documentation with typed text were not more likely to indicate increased time documenting. Although measuring the adequacy or quality of documentation was beyond the scope of this study, other studies have looked at the quality of documentation before and after implementation of templated electronic documentation and have generally found improvement.6,7,20

Observations of charting in the post-implementation period in the emergency department suggest that additional typed text entries often include documentation of non-procedural caregiver activities or communications between family and caregivers rather than documentation of patient assessments or patient-care procedures. Nonetheless, the finding of a correlation between comfort with computers and supplementing template documentation with typed text suggests that assessment of the basic computer skills of intended users of information systems is important.

Ongoing assessment and training is critical to maximize the benefits of the information system. In this case, the nursing management team looked for specific user patterns after implementing the system changes and provided additional one-on-one training and practice time to nurses having difficulty using the program so that they would be able to improve their comfort level with the computer and the program itself.

The results of direct observation in time-motion study revealed no change in the overall time spent by nurses on paper plus computer. Nor did it find a significant change in the time spent in direct patient care. There was a statistically significant decrease in the amount of time spent searching for charts. Although the absolute amount of time recollected for searching for charts was small, the frequency of having to do so may be of greater importance from a nursing perspective. In their responses to the open-ended questions, several nurses mentioned the decreased need to search for charts as an important benefit of computerized documentation.

There was a significant increase in the percentage of time nurses spent documenting in patient rooms, observed during the time-motion study, but this time remains a fraction of the overall documentation time. Nurses were observed using the bedside computers for documenting initial assessments and vital signs. Other research has reported that nurses find bedside computers useful for these types of numeric data entry.22

There was limited confidence in observers’ abilities to identify when nurses moved between actual documentation and reviewing of information during activities involving
either paper or computers, but they could easily distinguish paper, computer, and other activities. Therefore, all computer activities and all paper activities were grouped for analysis. Given the clear perception of nurses that their workflow efficiency improved, combined with essentially no change in overall time spent working on paper plus computers, it would have been interesting to measure the change in actual documentation versus changes in time spent in data gathering and planning of tasks. But this could not be done in this study.

The improvement in patient-care processes noted in responses to the scaled questionnaire items was reiterated in response to the open-ended questions, with many comments related to clarity of orders, better organization of workflow with tracking board icons as reminders of upcoming tasks, improved efficiency of their documentation, streamlining of laboratory- and radiology-order processing, and the decreased need to search for charts.

The theme of perceived efficiency is clearly a desired goal with the implementation of an information system and was frequently noted in narrative comments. Nurses also noted a decrease in frequency of verbal orders. Though there is not a direct measure for the frequency of verbal orders in the pre-implementation period, there appeared to the nurses to be a decrease in verbal orders. This decrease came, in part, by design. During training sessions, emergency department administrators created the expectation that physicians would enter orders whenever possible. The policy was further encouraged to remedy a rather cumbersome sign-off mechanism for verbal orders in the initial version of the system changes.

Some of the nurses’ comments illustrate how policy changes, such as the introduction of new policies or the enforcement of existing policies, can be confused with information system functionality. An example of this confusion centered on heparin orders. A hospital policy dictates that physicians should order heparin using weight-based orders, in terms of units per kilogram, and nurses are to use a nomogram to calculate the dose for the patient based on weight. Before the implementation of CPOE, most heparin orders in the emergency department were written with specific doses rather than being weight-based. Heparin orders in the CPOE system are in the weight-based format only, thus enforcing the policy. This limitation was initially interpreted by some nurses, and physicians, as a deficit in functionality of the CPOE system. There were even instances of physicians typing out specific dose orders as “unlisted orders” to circumvent the “deficiency” in the ordering system. It is interesting that 12 months after the changes in the information system, two nurses felt compelled to cite this issue. When information system implementations will be enforcing new or existing policies, it may be helpful to emphasize in training why and how such changes have come about to avoid similar misunderstandings and the need for ongoing training.

The study was limited to a single academic institution involving the implementation of one commercial emergency department information system. Some of the findings may not be fully generalizable to other systems or emergency settings. In addition, nurses’ perceptions were measured nearly one year after the EDIS changes were implemented. As a result, the survey may have reflected perceptions of the initial implementation and subsequent adjustments to the system. In addition, student observers were not consistently able to distinguish actual documentation time from other time spent on paper or computers. Thus, researchers were only able to determine the amount of time spent on paper and computer and not whether the time was actually spent on documentation or other activities requiring use of paper or computer.

Conclusion

The findings from this study indicate that users perceived no change in the total amount of time spent on documentation, a perception that was corroborated by the results of the time-motion studies. Nurses also perceived that certain processes, such as laboratory and radiology tests, were accomplished more efficiently after the implementation. Nurses’ comfort level with computers was correlated with supplementing template documentation with additional text. Therefore, basic computer skills should be assessed as a part of any implementation requiring increased use of computers.

Acknowledgements

The authors would like to thank and recognize the physicians, patients, and clinical staff who participated in the study.

About the Authors

Gerald A. Banet, MSN, MPH, was assistant director of research for the Division of Emergency Medicine while coordinating this research project. His research includes public health aspects of emergency care.

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Phillip Asaro, MD, is assistant professor of medicine at Washington University School of Medicine in the Emergency Medicine Division. His research interests include the study of patient care process data to evaluate clinical information systems and factors affecting healthcare delivery.
References

Appendix. Barnes-Jewish ED Nursing Survey

In May of 2003, HMED functionality increased to include full nursing documentation and physician order entry. Along with these changes came electronic interfaces with the lab and radiology which have streamlined some aspects of order processing and made the HMED tracking board more functional. In addition, some pharmacy orders print directly in pharmacy. We have attempted some measurements regarding the effect of these changes on workflow and order processing, but would also like to know from your perspective how things are now compared to the way things were before the HMED changes that took place in May, 2003. Your answers are confidential. Please circle a single response for each of the following items.

1. In general, the amount of time that I spend documenting my patient care is:

<table>
<thead>
<tr>
<th>Much less</th>
<th>Less</th>
<th>About the same</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
</table>

2. The time from when medications are ordered until the actual administration of medications is:

<table>
<thead>
<tr>
<th>Much less</th>
<th>Less</th>
<th>About the same</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
</table>

3. The time from when lab tests are ordered until the time specimens are obtained is:

<table>
<thead>
<tr>
<th>Much less</th>
<th>Less</th>
<th>About the same</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
</table>

4. The time from when radiology tests are ordered until tests are performed is:

<table>
<thead>
<tr>
<th>Much less</th>
<th>Less</th>
<th>About the same</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
</table>

5. The number of verbal orders is:

<table>
<thead>
<tr>
<th>Much less</th>
<th>Less</th>
<th>About the same</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
</table>

6. The amount of time I spend clarifying physician orders is:

<table>
<thead>
<tr>
<th>Much less</th>
<th>Less</th>
<th>About the same</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
</table>

7. For medications that come from pharmacy, the amount of time required to obtain medications for my patients is:
8. When documenting in HMED, I find the clickable selections of text adequate:

<table>
<thead>
<tr>
<th>Seldom</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

9. When documenting in HMED, I find that I type in text in addition to the clickable options:

<table>
<thead>
<tr>
<th>Seldom</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
</table>

10. In general, my comfort level with using computers could be described as:

<table>
<thead>
<tr>
<th>Very Uncomfortable</th>
<th>Uncomfortable</th>
<th>Neutral</th>
<th>Comfortable</th>
<th>Very Comfortable</th>
</tr>
</thead>
</table>

11. The changes in HMED have made my documentation easier in the following two ways:

➢ 

➢ 

12. My suggestions for additional improvements in the HMED system are:

➢ 

➢ 

Thank you for filling out this survey. Your responses are important to us!