Are self-reported patient encounter data accurate?

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Abstract: Introduction: Medical education programs are using Personal Digital Assistants (PDA’s) to facilitate the recording of encounters between students and patients during clinical rotations. Wichita State University Physician Assistant Program (WSU-PA) uses PDA’s to track clinical patient encounters during its clinical year. The WSU-PA clinical rotation at Pratt Regional Medical Center Emergency Department (PRMC-ED) provided an opportunity for a comparison of medical records and PDA entries made by students who spent 4 to 6 weeks at that site. Purpose: The purpose of this study was to verify the self-reported data submitted by students with the actual documentation on the medical record and identify any significant inconsistencies. Methods: Student submitted data of all patient encounters by WSU-PA students at PRMC-ED were compared to data obtained through review of medical records for patients seen by the student. The age and sex of the patient as well as the diagnosis of each visit were compared for consistency using HandEchart® Software and Microsoft Excel® Spreadsheets. Results: 32.16% of reported diagnosis matched the medical records, 24.69% of patient age matched the medical records, and 31.18% of patient sex matched the medical records. Conclusion: Data revealed an inconsistency between medical charts and PDA entries of patient encounters during clinical rotations at PRMC. The data that represented the age, sex, and diagnosis of patients encountered in clinical rotations by 2nd year PA students was consistent 1/3 of the time.

Introduction
The second year of Physician Assistant (PA) education at Wichita State University (WSU) allows the student an opportunity to practice principles of medicine presented and studied during the 1st didactic year of training. In a clinical setting under the supervision of a mentor, the student experiences patient encounters that demonstrate the application of previously presented medical concepts and reinforces the principles of sound practice. As a way to track patient encounters, WSU-PA has used paper based tracking systems and web-based tracking systems in the past. Each has been valuable at tracking patient encounters. Since the fall of 2003, the program has implemented the use of Personal Digital Assistants (PDA) to track patient encounters by students. PDA’s have grown in popularity among medical care providers themselves over the past 10 years. It is estimated that by the year 2008, 60% of medical care providers will incorporate a PDA into their clinical practice [1] The use of PDA’s in the past has been found mostly in event planning, calculations, and address directories. [2] It is evident that PDA’s are becoming a very important part in the practice and education of medicine in The United States of America. Medical Programs are using PDA’s as resources to track patient encounters experienced by their students. WSU-PA has implemented PDA’s into its program as a way to track the encounters of its students and stay current in its teaching methods.

Experiments, Results, Discussion, and significance
The population of this study consisted of the medical charts of patients that were seen and treated under supervision by 2nd year WSU-PA students at Pratt Regional Medical Center (PRMC) in Pratt, Kansas. This was a convenience sample of students assigned to PRMC. The demographics of each patient encounter were collected by the 2nd year students by using drop down boxes included in HandEchart software. The author used drop down boxes included in HandEchart software to collect the data that represented the demographics of each patient visit included in the medical chart. The collected information from the student and the author were separately uploaded into Microsoft XL spreadsheets. Microsoft XL spreadsheets were made and data was categorized by dates in order to facilitate the comparison of student data and data collected by the author. Auto Filters were used to separate the data according to the date of the patient encounter. Once the dates of patient encounters were matched between the student data and the medical chart data, a comparison of patient demographics was performed. The names of the students were omitted and replaced by representing letters A, B, C, and D. The data was analyzed by comparing the diagnosis, age, and gender of patients who were seen by students A, B, C, and D.

compared. Tables were created to represent the final results of the analyzed data. A table representing the final results of this comparison is shown below.

Table: 1
Totals from all student encounters

<table>
<thead>
<tr>
<th></th>
<th>Matched</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>237</td>
<td>35%</td>
<td>672</td>
</tr>
<tr>
<td>Age</td>
<td>182</td>
<td>27%</td>
<td>672</td>
</tr>
<tr>
<td>Sex</td>
<td>169</td>
<td>35%</td>
<td>477</td>
</tr>
</tbody>
</table>

Conclusions
The comparison of data from the medical charts and the PA student’s data revealed that less than 1/3 of the uploaded information from 2nd year WSU-PA students’ PDA’s during their rotations at Pratt Regional Medical Center were consistent with medical records. The recorded sex of the patient and diagnosis of the patient were inconsistent 65% of the time. The recorded age of the patient was inconsistent 73% of the time. This information highlights the inaccuracy of student reported patient encounters.

Acknowledgments
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References