Web-based Immediate Course Session Feedback System
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INTRODUCTION
Timely and accurate feedback is an essential component in the evolution of medical education. There are multiple methods to obtain feedback quickly - verbal, written, or electronic. Student satisfaction with the evaluation process is significantly higher with electronic versus paper evaluation [1]. This is likely due to the ease and speed with which one can complete an evaluation. Additionally, an electronic evaluation system allows for rapid collection, compiling, and analysis of results.

Accurate feedback is another component of a complete evaluation. To ensure accuracy, feedback must be obtained fairly soon after a course session is complete. Obtaining feedback at the end of a course does not guarantee timely or accurate feedback especially for earlier course sessions. One study showed that immediate student feedback improved overall course ratings and showed higher ratings given to instructors who received and used the immediate feedback throughout the rest of the course [2]. The increased ratings for the course and instructors carried into the following year. With immediate feedback, students see their comments and suggestions put into action.

RATIONALE
Data from survey of 69 VMS 2009 medical students:
- Students may not remember individual course sessions or instructors at the end of the year
- 78% of students found it difficult to recall specific strengths and weaknesses of instructors at the time of the end-of-semester evaluation
- 81% felt their responses would be more accurate if provided immediately following the course session
- 74% of students are frustrated by the length of feedback at the end of the year because they have completed the course and the evaluations are lengthy
- 78% of students think it is difficult to recall specific strengths and weaknesses of instructors at the time of the end-of-semester evaluation
- 81% felt their responses would be more accurate if provided immediately following the course session
- 74% of students are frustrated by the length of feedback at the end of the year because they have completed the course and the evaluations are lengthy

GOALS
To provide immediate feedback to instructors about course sessions (lecture, small group, laboratory, review session, problem session, etc.). The feedback will not be seen by the medical education committee or be a part of an instructor’s performance evaluation. The system will not replace the end of the course evaluation system. Instructors and course directors will not have to do any additional work to analyze the feedback data.

SAMPLE ELECTRONIC QUESTIONNAIRE

RATIONALIZATION
- Sampling / Solicitation
  - The system employs a computer algorithm that uses the principle of matrix sampling to sample students based upon # of students, # of course sessions, and statistical threshold
  - Solicitation via email after course session

- Confidentiality
  - All raw data are stored in a secure database accessible only by the student curriculum committee who filters free response data.
  - All results are accessible by the course director and individualized results are accessible by the instructor

- Record Retention
  - All raw data and filtered data are stored in a secure database

- Feedback Analysis
  - Cumulative and individual course session results in graphical display
  - Automatic calculation of relevant statistics

- Research
  - Optimal timing of survey release
  - Type and number of questions on survey
  - Longitudinal analysis of instructor performance
  - Overall course analysis

REFERENCES

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Figure 1. Lecture feedback form
Figure 2. Feedback system process diagram