

TITLE: Are physical exam skills important? A survey of medical student and resident perceptions.

ABSTRACT:

Physicians have been discussing the deterioration of physical exam skills in medicine since 1946, when x-rays became instantaneous and blood gas measurement was the new laboratory test. As clinicians embraced newer technologies, they may unknowingly have changed the way physical exam skills are used in the diagnosis of patients. Literature indicates that physical exam skills have become less important in the academic schedules of medical students and residents. The Association of American Medical Colleges indicates that clinical skills are ignored in medical school and resident training and should be taught on a longitudinal basis. The purpose of this research is to examine the perceptions of physical exam skills such as pulmonary and cardiac exams in medical students, family practice and internal medicine residents. The survey would query opinions of their academic training and perceptions about the importance of physical exam skills in the current medical era, where more advanced methods of testing are available, including ultrasound, computed tomography(CT) and magnetic resonance imaging(MRI). We are also interested in surveying their beliefs about physical exam skills in achieving the correct diagnosis. These data could be used to identify areas for education and support in our medical school and residency programs. These data could also serve as a first step in determining areas for training and how current and future doctors perceive physical exam skills in patient care.

AUTHORS AND PARTICIPANTS:

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M3, M4 – will obtain both a 3rd year and 4th year medical student to serve as a liaison

PROPOSAL:

Recent task forces such as the Association of American Medical Colleges have indicated that clinical skills are being ignored in medical and resident training and that clinical skills should be taught on a longitudinal basis, throughout medical school and residency. There is recent evidence that pulmonary and cardiac auscultation skills are declining after a medical student's third year of training. In some reports, family practice and internal medicine residents were no better than medical students in sound recognition, disease identification, and basic knowledge of lung auscultation. Data suggest clinical skills can remain the same or sometimes decline as the clinician continues his or her practice. These data raise many questions about the importance of teaching physical exam skills in current medical school and residency programs. The purpose of this research is to examine the perceptions and opinions of medical students, family practice and internal medicine residents regarding the importance and role of physical exam skills.

METHODS:

A literature search using terms; pulmonary, heart, cardiac, lung, auscultation, clinical competence, physical examination, internship, residency, auscultation, medical students, questionnaires was conducted. The literature search was limited to the last 15 years and only a small number of articles were identified that fit the indicated criteria. Of these articles, there were no articles that investigated medical student or resident opinions about physical exam curriculum or importance in diagnosing patients. Participants of the research

project will be those who are members of the Creighton University School of Medicine graduating classes of 2011 and 2012 as well as Creighton University Medical Center Internal Medicine Residents (PGYI-PGYIII) and Family Medicine Residents (PGYI-PGYIII). The total number of eligible participants is approximately 355 according to current enrollment figures provided by the Medical Dean's Office and the Departments of Internal Medicine (IM) and Family Medicine (FM). Participation will be optional but – given its educational nature – strongly encouraged. We will notify potential participants of the survey through email or during daily report. Reminders with encouragement to participate will be sent by the appropriate educational coordinators for each subset of participants (students and residents). A website server will be used for hosting the survey. Anonymity will be the highest priority. The results will include no specific individual identifiers; only demographic data will be collected and all surveys will be anonymous. Data will be gathered and entered into a database, quantified, and reported.

TIMELINE:

January 2011: Finalize the survey tool. Pilot the survey, n=10, individuals to advise about ease of reading, grammar, and appropriateness of the questions with regard to the goal of the study. Recruit M3, M4, and resident liaisons for each group studied. Once the survey has been finalized, initiate the process of requesting participation in the survey. Begin writing the abstract, background, methods, inclusion and exclusion criteria sections of the proposed paper for publication.

February 2011: Continue to collect data. Send out a second request for participation. Before or on February 17th, a progress report to the academic excellence committee will be submitted with preliminary survey data.

March 2011: Submit the final request to participate in the survey. Start to finalize data collection.

April 2011: Finalize data collection. Start the statistical analysis of the data.

May 2011: Continue to analyze data, continue statistical analysis and preparation of data for summary and report. At this time, all funds must be spent.

June to August 2011: Finalize results. Finish the results, discussion, and limitations section of the proposed paper. Prepare for the public presentation in September.

September 2011: Present the data publically for the Academic Excellence Committee. Start the submission process for poster and podium presentations for local and national medical association meetings.

SCHOLARLY ACTIVITIES:

We would like to present our results at both the local and national level including poster presentation, podium and or lecture presentation and journal publication.

SUSTAINABILITY OF EDUCATIONAL CHANGES:

This project would provide excellent insight into our current curriculum that has not been previously solicited in either our medical student or residency programs. This project could provide several opportunities to enhance our medical school's education by eliciting opinions from both current and future physicians. The results could be used to enhance or add to current curriculum or the results could be used to develop new curriculum goals.

BUDGET:

Technical support for creation of survey website: \$125

Computerized software to store and document student/resident completion of the survey: \$500

Statistician: \$500

Secretarial support to advertise survey, train them how to use survey software, and have them remind residents/students of their survey requirements: \$125

Software comparisons for simulation: \$250

Total: \$1500