



# **Curriculum Variation in Implementing a New Physical Diagnosis 2 Course through Learning Communities**

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## Background

- Physical Examination skills are some of the most fundamental clinical skills
- Academic leaders have issued a call for return to clear teaching of physical examination skills (Vergheze)
- Preclinical courses that teach physical examination skills enhance student comfort in adjusting to the clinical years (Whipple)
- Physical Diagnosis courses are designed to teach communication and physical exam skills
- There is disagreement about when certain clinical skills should be acquired (Corbett)
- The University of Massachusetts implemented a new curriculum in August of 2010 for First year Medical students.
- In 2011, a new Physical Diagnosis 2 curriculum was taught by Learning Community Mentors, focusing on the complete History and Physical examination performed on hospital inpatients largely in the Internal Medicine service
- Mentors are physicians from Internal Medicine, Family Medicine, Pediatrics, Emergency Medicine, Obstetrics and Gynecology, Psychiatry



**Aim: To describe the intended Physical Diagnosis 2 curriculum and the variation in its implementation as assessed through mentor survey and student feedback**

## **Methods**

### **Program Description (Intended Curriculum)**

- Mentors meet weekly with their 6 students over 15 weeks from November through February
- Course consisted of 5 modules, focusing on learning and practicing the advanced:
  - HEENT
  - Cardiac & Pulmonary
  - Abdominal
  - Musculoskeletal
  - Neurological exam
- While also performing a complete History, Physical Examination on a hospitalized patient, then performing an Oral presentation, and write up

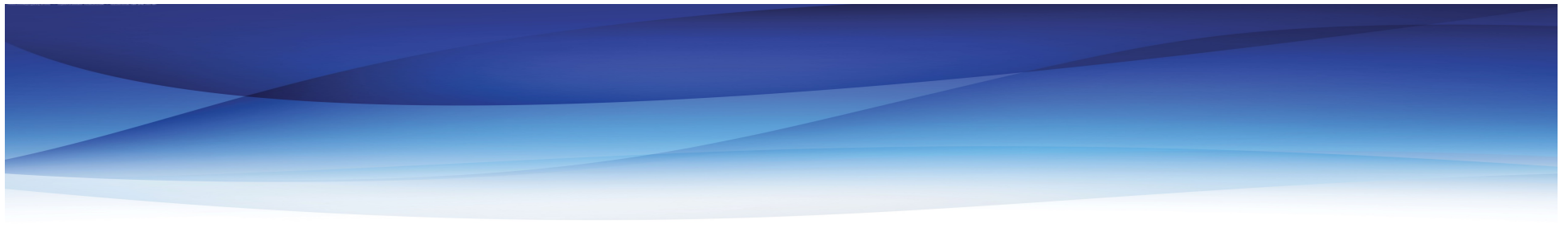


## **Individual Sessions from Students' Perspective**

- For each session there were:
  - 2 students who primary examiners, performing H&P
  - 2 students who were observers/coaches who gave feedback or aided in the performance of the exam through reminders or suggestions
  - 2 students who took part in separate Skills sessions, seeing patients with known abnormalities on physical examination
- It took 3 sessions for the whole group to finish the module, with each student filling each of the three roles in a given week

## **Individual Sessions from Mentor's Perspective**

- Each 2.5 hour session consisted of:
  - 30 minutes of exam preview
  - 1.5 hours of observed H&P practice (mentor either watching portions of both students' H&Ps or the full H&P for one)
  - 30 minutes of oral presentations/discussion of cases with problem solving practice/review of PE findings.



## **Program Evaluation**

### **Mentor perspective on curriculum implementation (Curriculum in Practice)**

#### **Results**

#### **Individual Sessions from Students' Perspective**

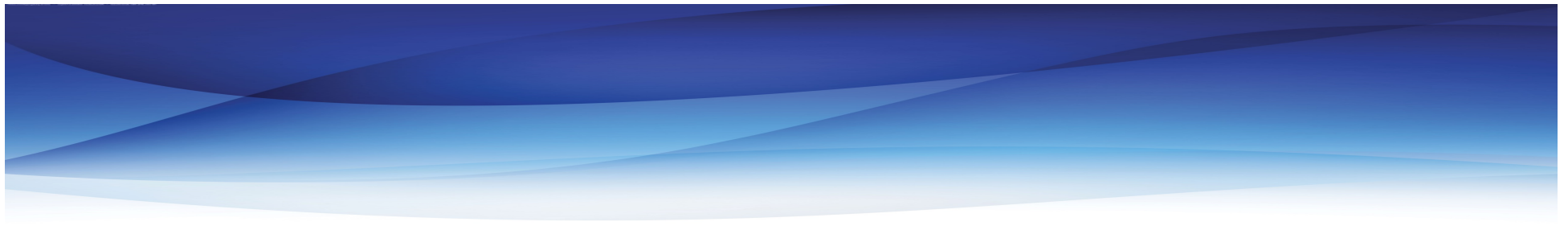
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#### **Individual Sessions from Mentor's Perspective**

- Each "2.5" hour session consisted of:
  - 0-45 minutes of exam preview
  - 90-120 minutes with patient
    - some mentors spent ½ time with each examiner/observer
    - some mentors spent whole time with one pair
  - 30-45 minutes of presentations/discussion & problem solving and physical exam review
- Some mentors had their students come in pairs for 90-150 minute sessions
- Mentor time in session varied from 2.5-5 hours
- Student time in sessions ranged from 1.5-3.5 hours

## **Session Structure often changed as the course progressed**

- 30 minutes of exam preview shrunk for most groups, some down to 0
- Oral presentation/discussion of cases with problem solving and review of PE findings at end of session ranged from 0-30 minutes
- Many students presented patient the week after H&P in first weeks of the course, transitioned to same week as course progressed: some had observing student present
- Many mentors brought increased focus to observing H&P's of individual or pair of students who were doing histories and physical exams in a given week.
- Mentors chose to move away from Complete H&Ps to focus on other tasks (problem solving/assessment and plan)
- Some mentors concentrated observation on PE > History as it "is a Physical Diagnosis Course"

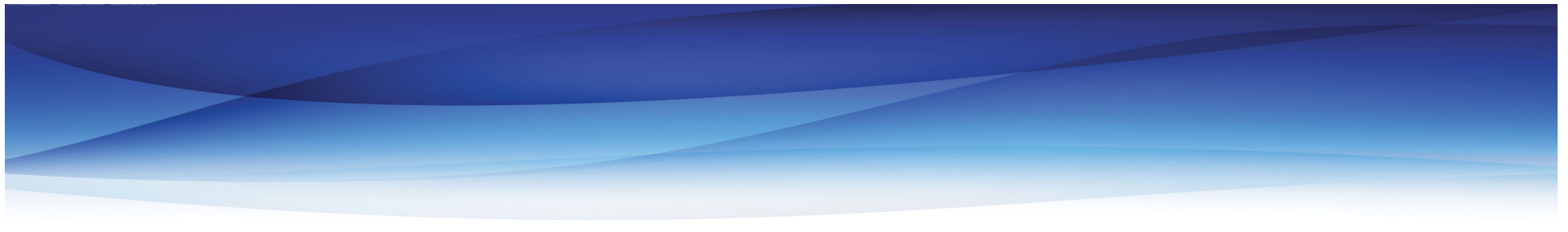


## **Some Tasks suggested were seen as “extra” by most**

- Chart review
  - task not focused enough and could be time consuming
  - worsened by transition to new inpatient EMR
  - Some encouraged students to focus on data they needed or to formulate what they were looking for
  - One mentor reported reviewing 7 separate sources of information
- Bedside presentations

## **Problem Solving Focus Varied**

- Some concentrated on problem lists, others on written assessment and plan
- Insufficient examples existed for students to grasp complexity of assessment and plan
- Some felt focused history and Physical examinations should be greater part of course



## Discussion

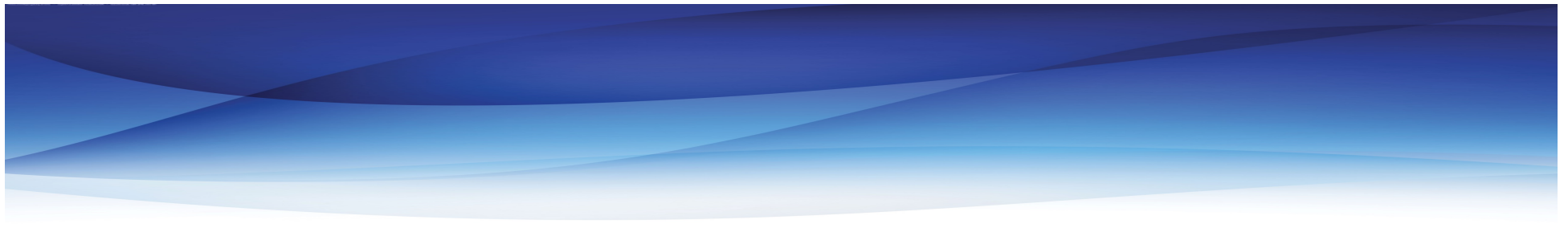
- Content and process of implementation of a Physical Diagnosis course varied in ways that were greater than expected
- Most mentors increasingly focused on ways to give them more focused time to observe their students:
  - some by limiting time to preview material to be practiced,
  - some by limiting review after the examination was done
  - some by having smaller numbers of students come in consecutive time blocks
  - some by making students spend more time in sessions
  - some by choosing to have students spend most of the prescribed time while they spent more than the prescribed time
- Some tasks were not consistently incorporated
- Some tasks like problem solving had varied implementation
- Students expressed overall satisfaction with the course and with their mentors, but discomfort in the variation in course implementation





## **Conclusions**

Physical Diagnosis 2 implementation varied in our first iteration of a new course within a new curriculum. Mentor choice about emphasis varied, yet we have little information about what informed mentor decisions about their choices. Next steps include the establishment of competencies for the core course skills, establishment of more points of evaluation and using evaluation data to inform curricular change.



## References

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3. Whipple M, et al. Early introduction of clinical skills improves medical student comfort at the start of third-year clerkships. *Acad Med.* 2006;81(10 Suppl):S40–S43.
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