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Alpert Medical School

Assessing Clinical Reasoning in the Internal Medicine Clerkship Using a Clinical Pathological Conference

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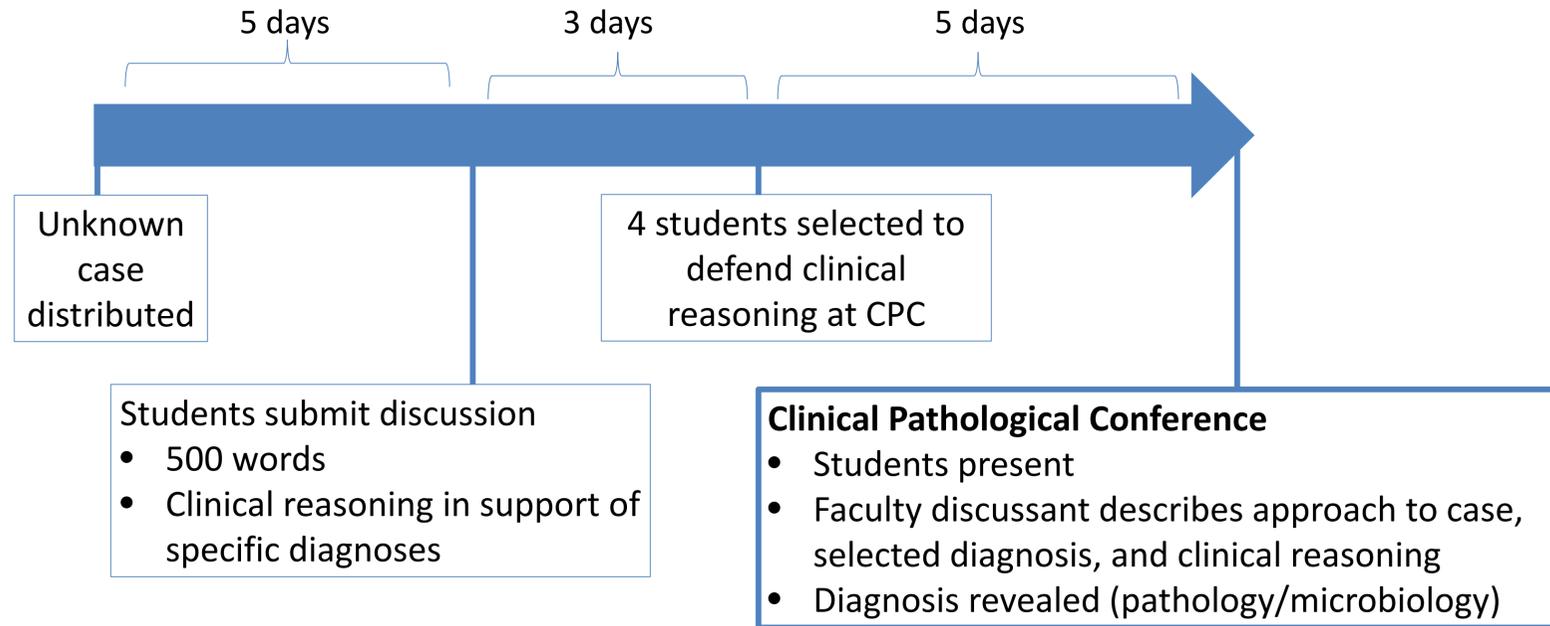
Problem Identification

- Internal medicine clerkship directors seek additional methods for assessment of students in the clerkship
- Assessing clinical reasoning in a systematic fashion can be particularly challenging due to lack of uniform clinical experiences (variability in patients, clinical sites, and supervising faculty)

Description of Innovation

- A Clinical Pathological Conference (CPC) is held during each internal medicine clerkship cycle
- The CPC requires students to think about a real-life, complex case, and describe their clinical reasoning, including differential diagnoses, arguments for and against these diagnoses, and a plan for further diagnostic work up
- See **Figure 1** for timeline
- Student submission evaluated by faculty
 - Degree of clinical reasoning
 - Exploration of differential diagnosis
 - Next steps

Figure 1. Timeline for Clinical Pathological Conference



Results

- After 3 quarters (n=82 students), the average score on the CPC was **8.1**, with a standard deviation of **1.5**
- Inter-rater reliability using the Intra-class correlation coefficient (ICC) was **0.71**
- Correlation of CPC scores with the shelf exam, objective structured clinical exam (OSCE), clinical evaluations, and a submitted history & physical write up each had an ICC of **0.67** (**Table 1** and **Figure 2**)

Discussion

- Incorporating a CPC submission into clerkship grading is feasible and has face validity
- Inter-rater reliability for scoring the CPC was good, and likely could be improved with specific faculty development
- The CPC correlated well with other standard assessments of learners
- Further areas of study include an exploration of the breadth of diagnoses considered; correlation of students' with faculty discussants' diagnoses; and correlation with confirmed pathological diagnoses

Table 1. Correlation between CPC write-up score and other clerkship assessments

	Pearson	Spearman	ICC
Shelf exam	0.63	0.44	0.67
OSCE	0.64	0.40	0.67
Overall clinical evaluations	0.80	0.62	0.67
History & Physical submission	0.50	0.40	0.67

Figure 2. Agreement of CPC write-up score and A) Shelf score, B) H&P score, C) OSCE Score, and D) Overall clinical evaluations

