Curricular Learning Communities

Impact on Clinical Reasoning

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Acknowledgments

- Clinical Method Curriculum Program Evaluation Team
- 26 Learning Community Faculty Members and 4 Staff members
- Associate Dean of Curriculum
Disclosures

- None
Clinical Method Curriculum

Longitudinal Skills Development

Core Chief Complaints, Diagnoses, Clinical Tests & Imaging, Procedures

CEPAER 1a: History
CEPAER 1b: Physical
CEPAER 2: Clinical Decision Making
CEPAER 3: Clinical Testing
CEPAER 4: Orders & Prescriptions
CEPAER 5: Clinical Documentation
CEPAER 6: Oral Presentation
CEPAER 7: EBM
CEPAER 8: Handoffs
CEPAER 9: Inter-professional Teamwork
CEPAER 10: Critical Care
CEPAER 11: Informed Consent
CEPAER 12: Procedures
CEPAER 13: CQI

Setting

Phase I
CMC I
Clinical Skills Lab
Case-Based Patients

Phase II
CMC II-IV
ELO experiences
Clinical Skills Lab
Case-Based Patients

Phase III
CMC V
Clerkships
MED U

Phase IV
CMC VI
Core Sub-I's
Critical Care
Advanced IM
Specialty Simulation

Background

Description
Program Evaluation
Results
Discussion
Clinical Reasoning
Dual Process Theory

Croskerry, Acad Med. 2009; 84(1022-1028)
Clinical Reasoning Instruction

Hypothesis

- Clinical Method Curriculum (CMC) students would demonstrate superior diagnostic reasoning compared to non-CMC students as measured on a script concordance test administered at the end of the clerkship curriculum.
Diagnostic Reasoning Instruction
Illness Scripts & Problem Representation

- Patient’s Story
- Data Acquisition
  - Accurate ‘problem representation’
- Hypothesis Generation
- ‘Illness Script’ Search & Selection
- Diagnosis

Knowledge
Context
Experience

Bowen, NEJM. 2006; 355(21)
A 77 year-old man is being evaluated for a recent transient ischemic attack.

<table>
<thead>
<tr>
<th>If you were considering an etiology of:</th>
<th>Key information</th>
<th>The Etiology would be:</th>
</tr>
</thead>
</table>
| carotid stenosis                       | And you found an ipsilateral carotid bruit | -2: very unlikely  
-1: somewhat less likely  
0: unaffected by the data  
+1: somewhat more likely  
+2: almost certain |
| thromboembolism                        | And the ECG revealed: (Image) | |
| atherosclerosis                        | And the MRI reveals a small contralateral MCA aneurysm | |
CMC vs. non-CMC Students
No Difference in Performance
Limitations & Uncertainties
Clinical Reasoning Instruction & Assessment

- Underlying Cognitive Processing
- Instructional Methods
- Assessment Strategies
Curricular Learning Communities
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- There was no difference in end of clerkship Script Concordance Test performance between CMC and non-CMC students.
- Next Steps
  - Refine Script Concordance items and scoring based on best available clinical evidence.
  - Identify alternative evaluative impact measures.