



# Early Clinical Experience and Supporting Instructional Approaches: Evaluation of a Curriculum Pilot Test

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## INTRODUCTION

The College of Human Medicine (CHM) implemented a six-week educational program to pilot test the feasibility of implementing an early clinical experience (ECE) for 21 medical students.

Students worked in small learning communities with faculty integrating basic and social science with the clinic experience. Each week of the pilot curriculum involved: 3 half days in clinic; ½ day in simulation lab; participation in instructional methods designed to integrate science and clinical material.

The evaluation focused on the feasibility of the ECE curriculum and the scalability of the instructional model to the entire CHM system of six community campuses and 200 students/class.



### Logic Model for Early Clinical Experience (ECE) Pilot Curriculum Evaluation

Goal: To determine if ECE is feasible and scalable to a community-based education program with a class size of 200 students.

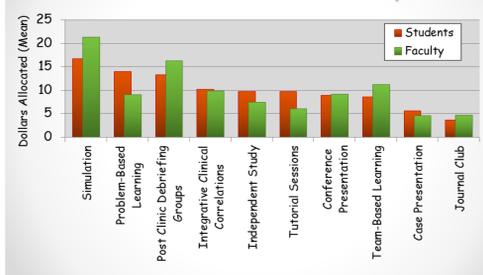
Groups	Evaluation Questions	Methods	Measures	Program Outputs
Medical Students	Does ECE affect how students learn basic and social science? How do the instructional methods compare in supporting learning?	Focus groups Surveys Portfolios Observations	<b>Satisfaction with:</b> Instructional Methods Clinical Skills Clinic Contribution	ECE Program Planning Retreat
Faculty	What are faculty development needs for instructional methods? How does each instructional method promote learning? How do ECE experiences support educational objectives? Are faculty comfortable in new roles with the students?	Focus groups Surveys Journals	<b>Satisfaction with:</b> Instructional Methods Professional Roles Integration of clinic experience & science  <b>Faculty Preparedness &amp; Development Needs</b>	New Curriculum Design Group New Curriculum Advisory Group College Curriculum Committee College Town Hall Meetings
Clinic Staff	How do student's impact clinic operations and patient care? What prerequisites do students need to work in the clinic? What is clinic capacity for ECE students?	Focus groups Surveys	<b>Feasibility of:</b> Patient Flow Productivity Cost/Benefits of ECE  <b>Satisfaction with:</b> Clinical Operations Professional Roles	OMERAD Newsletter

The ECE evaluation addressed three key questions:

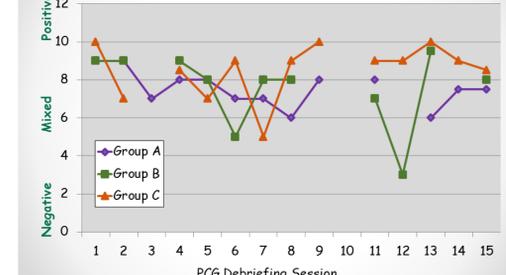
- Do students feel that the clinical experiences and learning experiences were complementary?
- How do students and faculty rate the quality of the learning experiences?
- How do clinic personnel perceive the impact of training novice medical students on clinic operations?

An evaluation logic model was developed integrating the three key questions, the three stakeholder groups and using multiple data collection strategies.

### 1 Valuing of Instructional Approaches: Students versus Faculty



### 2 Faculty members' daily characterization of the mood of the students in Post Clinic Group



## SELECTED OUTCOMES

Students were oriented from the beginning to their role as informants. The curriculum design team participated in the ECE for firsthand experience, however they were likely not representative of faculty overall as to their investment and educators skills.

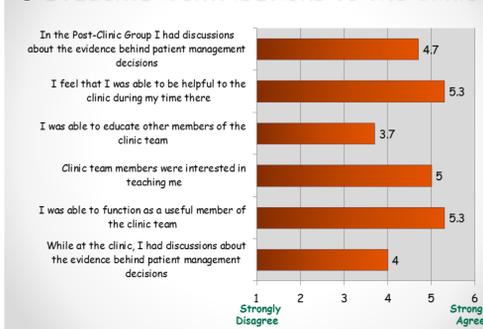
Chart 1: The instructional methods varied in terms of the value perceived by students and faculty. Faculty and students didn't always agree on the value of the instructional methods: both groups most valued simulation and post-clinic groups as instructional approaches. Students favored PBL; faculty favored TBL.

Chart 2: There was a gradual decline in the mood of the students in the post clinic group until the midpoint at which faculty reported increasing positive mood. Students reported feeling overwhelmed saying that adult learning ideals "go out the window" in the face of multiple deadlines.

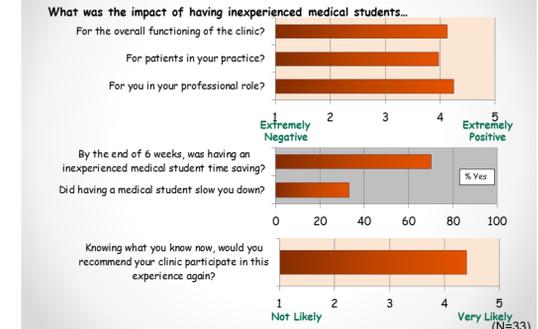
Chart 3: Students felt that they were able to function as useful members of the clinic team and learned from their experiences.

Chart 4: Clinic staff reported students made contributions to clinic functioning and were positive about their interactions with them. Clinic staff viewed the ECE through a Business Lens; faculty an Educational Lens, leading to different expectations of students. Initially engaged with medical assistant tasks, by Week 6 students requested more advanced tasks and physician supervision.

### 3 Students' Contributions to the Clinic



### 4 Clinic Staffs' Experiences of ECE Students



## CONCLUSIONS

### Feasibility

- All instructional methods deemed feasible-some more preferable
- ECE students did not disrupt clinic patient care or flow
- Teaching basic science through ECE is a challenge for clinical and science educator teams; faculty development required

### Scalability

- Managing clinic scheduling will be daunting for 200 new ECE students plus existing clerkship students
- Faculty development needed to replicate skill set of faculty who led learning societies. What are the essential skills?
- Resource intensive learner-centered instructional strategies would be required to scale up this model.