



VACCINE: Piloting a cure for the common clerkship

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Introduction

- The VA Core Clerkship Integrated Experience (VACCINE) pilot program was designed to integrate IM, Surgery, Psychiatry, and Neuroscience over a 24-week longitudinal third year clerkship at the Cleveland VA in order to enhance continuity of patient care, student-faculty interactions, professional development, and cross-disciplinary learning.
- Longitudinal integrated clerkships represent a clear break from traditional compartmentalized experiences in core specialties that have remained largely unchanged over the last 50 years.
- These longitudinal clinical curricula, based on the principle of continuity in patient care and learning relationships, promise to provide unique opportunities for personal and professional growth while maintaining conventional standards of student achievement.
- The Cleveland VA system provides a unique opportunity for developing a new longitudinal integrated clerkship design with the advantages of a fully functioning electronic medical record, focused teaching faculty, engaged residency programs, geographic localization of care and services, system support for quality in patient care, and an established priority for medical education.



Description of Program

Participants:

- Offered to all upcoming third year CWRU medical students.
- Subset of volunteers randomly selected to participate.
- Remainder serve as control group.
- Comparability of groups determined by MCAT scores, USMLE Step 1 scores, and end-of-second year OSCE performance.

Clinical Faculty Preceptors:

- Students paired with one preceptor per discipline.
- Students work with preceptors in both outpatient and inpatient settings.

Non-clinical Faculty Advisors:

- Students paired with one advisor over the 24-week course.
- Advisor will not provide direct clinical supervision.

Resident Mentors:

- Students paired with a senior resident in each specialty.
- Provides an additional layer of depth and continuity in clinical experience.

Patient Panel:

- Students will follow a panel of patients across all clinical settings.
- Students will act as the primary point of contact for their patients.
- Develops longitudinal student-patient relationships.
- Helps foster patient-centered care.

Structured Curriculum:

- Longitudinal Didactic Sessions.
- Core Conferences.
- Clinical Discussion Sessions.
- Self-Directed Learning.

Discipline Immersions:

- 4 inpatient immersions over the 24-week rotation.
- 4 weeks Internal Medicine.
- 4 weeks Surgery.
- 1 week Neuroscience.
- 1 week Psychiatry.

Student Evaluation:

- Self-reflective assessments.
- Formal/informal preceptor assessments.
- Comprehensive NBME exams.
- OSCEs.

Sample of 4 week block with discipline immersion

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
AM	IM Clinic	Self-directed	Surgery Clinic	IM Clinic	Surgery Clinic	ED
PM	Core Conf.	Neuro Clinic	Self directed	Psych Clinic	PBL	
AM	Discipline Immersion Week					
PM	Clinical Disc.				PBL	
AM	Discipline Immersion Week					
PM	Core Conf				PBL	
AM	IM Clinic	Self-directed	Surgery Clinic	IM Clinic	Surgery Clinic	ED
PM	Clinical Disc	Neuro Clinic	Self-directed	Psych Clinic	PBL	



Program Evaluation Tools

Comparisons will be made between VACCINE participants and control students:

- Clinical skills and fund of knowledge will be compared utilizing standardized tools, including comprehensive NBME exams, USMLE Step 2, and OSCEs.
- Student attitude towards patient-centered care will be measured by the Patient-Practitioner Orientation Scale (PPOS).
- Perceived value of each respective clerkship will be assessed via independently conducted student, faculty, and patient focus groups.

Distinguishing Features and Lessons Learned

Distinguishing Features	Rationale
Immersion rotation on the in-patient service linked with corresponding discipline-specific outpatient attending and resident mentor.	To address the perceived need to enhance student inpatient experience without sacrificing continuity relationship.
Surgery inpatient immersion experience of 4 weeks total (two 2-week rotations).	To address the perceived difficulty in providing an appropriately substantive Surgery experience.
Electronic Medical Record System (CPRS).	To address need to maintain communication and continuously update patient panel registry.

These curricular design approaches attempted to build on lessons learned from existing longitudinal clerkships.

Future Directions

- Enhanced coordination with resident training programs.
- Discussion with other hospital sites with the goal of developing similar efforts and coordinating curriculum.
- Collaborating on education research with nationally and internationally.