

UCLA-OLIVE VIEW INTERNAL MEDICINE RESIDENCY
CLINICAL INFORMATICS ELECTIVE

Target: PGY 2-3
Updated May 2021
Site Director: Luis Lovato, MD

A. EDUCATIONAL OVERVIEW

Residents taking the Clinical Informatics elective will obtain firsthand experience in the field of clinical informatics through a variety of educational experiences. They will obtain background knowledge to establish a foundational understanding of the field and its role in the delivery of healthcare within DHS.

B. ROTATION DESCRIPTION AND STRUCTURE

On this rotation, residents will work one-on-one with our Chief Medical Informatics Officer, Dr. Luis Lovato, as he addresses various issues throughout the hospital. You will encounter day-to-day operational challenges within Olive View and participate in larger DHS committees that address big-picture issues within the system. You will meet other key informaticians that hold a variety of roles and perform different functions to allow DHS to provide continuously improving, high-quality care.

C. GOALS & OBJECTIVES

- 1. Describe the discipline of biomedical informatics and how clinical informatics fits within it.**
- 2. Outline the framework of core concepts in clinical informatics.**
- 3. Explore career pathways into the field of clinical informatics.**

D. CORE TOPICS IN CLINICAL INFORMATICS

- History of the Health System
- Clinical Decision Making and Care Process Improvement
 - Clinical Decision Support
 - Clinical Workflow Analysis, process redesign, Quality Improvement
- Health Information Systems
 - Information Technology systems
 - Health Information Systems
 - Clinical Data Standards
- Leading and Managing Change
 - Leadership Models, Processes, and Practice
 - Effective Interdisciplinary Teams
 - Effective Communication
 - Project Management
 - Change Management

E. TEACHING METHODS

The resident will be invited to and expected to attend institutional and departmental meetings, have one-one-one conversations with other informaticians, read independently and directly participate in ongoing projects.

F. SUPERVISION AND EVALUATION

The resident will be supervised by Dr. Luis Lovato, CMIO of Olive View-UCLA Medical Center. Additional supervisors for specific meetings and projects may be appointed by the CMIO. The resident will be evaluated based on participation and performance of assigned tasks, achievement of learning objectives, and completion of required reading. Written evaluation is expected at the end of the rotation.

G. EDUCATIONAL RESOURCES

Electronic resources are also available through the internet at Olive View-UCLA Medical Center and through UCLA.

Reading before starting rotation:

- Gardner RM, Overhage JM, Steen EB, et al. Core Content for the Subspecialty of Clinical Informatics. *Journal of the American Medical Informatics Association*. 2009;16(2):153-157. doi:[10.1197/jamia.M3045](https://doi.org/10.1197/jamia.M3045)
- Herasevich V, Gajic O, Pickering BW. Principles of Medical Informatics and Clinical Informatics in the ICU. In: Hall JB, Schmidt GA, Kress JP, eds. *Principles of Critical Care*. 4th ed. McGraw-Hill Education; 2015. Accessed March 23, 2021. accessmedicine.mhmedical.com/content.aspx?aid=1107711109

Required reading during rotation:

- Kulikowski CA, Shortliffe EH, Currie LM, et al. AMIA Board white paper: definition of biomedical informatics and specification of core competencies for graduate education in the discipline. *Journal of the American Medical Informatics Association*. 2012;19(6):931-938. doi:[10.1136/amiajnl-2012-001053](https://doi.org/10.1136/amiajnl-2012-001053)
- EHRIntelligence. EMR v. EHR: Electronic Medical, Health Record Differences. EHRIntelligence. Published May 30, 2017. Accessed March 23, 2021. <https://ehrintelligence.com/features/emr-v.-ehr-electronic-medical-health-record-differences>
- Wall MJ, Dudas J. Data in Healthcare: Where It Comes From, How It Is Structured, How to Govern It, and How to Get Your Hands on It. In: Howell MD, Stevens JP, eds. *Understanding Healthcare Delivery Science*. McGraw-Hill Education; 2020. Accessed March 23, 2021. accessmedicine.mhmedical.com/content.aspx?aid=1167644567
- The Science of Informatics | AMIA. Accessed March 23, 2021. <https://www.amia.org/about-amia/science-informatics>
- Kannry J, Sengstack P, Thyvalikakath TP, et al. The Chief Clinical Informatics Officer (CCIO). *Appl Clin Inform*. 2016;7(1):143-176. doi:[10.4338/ACI-2015-12-R-0174](https://doi.org/10.4338/ACI-2015-12-R-0174)

Other resources:

- Detmer DE, Lumpkin JR, Williamson JJ. Defining the Medical Subspecialty of Clinical Informatics. *J Am Med Inform Assoc*. 2009;16(2):167-168. doi:[10.1197/jamia.M3094](https://doi.org/10.1197/jamia.M3094)
- SMART on FHIR. Accessed March 23, 2021. <https://docs.smarthealthit.org/>