

# MCS Selective

## Telehealth: Docs, Data and Disruptive Technologies

**Description:** In the era of disruptive technologies in healthcare, clinicians will reach a new frontier in medical practice. With more data, technology and medical literature than ever before, how will the physicians role adapt to the changing environment of the greatest reforms in healthcare? This selective will serve to introduce the topics of telehealth and telemedicine and discuss the advances in field as well as the laws, ethics, regulations and the evolving doctor-patient relationship. The course will aim to review the applications of telemedicine and future implications to the practice of medicine.

### Instructors



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### Educational Objectives:

At the conclusion of this course you will have the ability to:

- 1 Discuss the basic terminology and principles in the telehealth field
- 2 Access and comprehend information on telehealth standards, guidelines, laws and regulations
- 3 Examine the clinical applications of telehealth
  - a. Explore the role of telehealth in patient care outcomes, Quality Metrics and a discussion on Value Based Medicine (Telehealth and MACRA/MIPS/APC)
  - b. Understand the advances in Big Data/ Precision Medicine
  - c. Review applications of Image Based Diagnosis, Remote Patient Monitoring, mHealth, live visits
- 4 Demonstrate evaluation of telehealth technologies and their utilization.
- 5 Explore the physician role in each application of telehealth, ethics and impact on the doctor-patient relationship.

### Requirements and Outline:

#### Session 1 (Sept 26 2017): Telehealth 101

- a. What is Telehealth vs Telemedicine
- b. Defining Telehealth terms: live video/real-time, store-and-forward, remote patient monitoring (RPM), and mobile health (mHealth)
- c. Understanding the laws regulations and guidelines for telehealth including Dilemmas:
  - a. HIPAA ( Health Insurance Portability and Accountability Act)
  - b. Clinician Licensure
- d. Data Analytics and Telehealth

- e. Telehealth in Value Based Care and Quality Improvement

**Session 2 (Oct 10): Clinical Applications of Telehealth Part 1**

1. Introduction of Live (Synchronous) visits and Remote Patient Monitoring (RPM)
  - a. Review of diagnostic follow up procedures (imaging, labs, etc) and timelines for common telehealth presentations (unstable HTN, Hyperglycemia, COPD exacerbation, Heart Failure Exacerbation, rashes/skin lesions, URI, UTI, prescription refills)
  - b. Managing the signs of early clinical decompensation in RPM
    - i. Managing emergency encounters (MI, Stroke, Intracranial Bleed, Peritonitis)
  - c. Palliative care, aiding dying patients within the home
  - d. Telepsychiatry and Telepsychology

**Session 3 (Oct 24): Clinical Application of Telehealth Part 2**

1. mHealth: Using Mobile Health for Chronic Disease Management
  - a. motivational interviewing
  - b. using apps for behavior change
2. Global Health and Telehealth
  - a. Humanitarian Drone use: case study from the Stony Brook Global Health Institute in Madagascar

**Session 4 (Nov 21): Evaluating Telehealth Technologies**

- a. Introduction to the National Telehealth Technology Assessment Resource Center (TTAC)
- b. FDA's Role in Healthcare Technology
  - a. Food and Drug Administration Safety and Innovation Act of 2012
  - b. FDA's Center for Devices and Radiological Health
- c. Federal Trade Commission (FTC) Mobile Health Apps Interactive Tool

**Evaluation**

**Evaluation:**

1. Attendance and active participation in discussion
2. Reflections after each session
3. Compose a short (5 minute) presentation on a telehealth topic of interest

**Class Size**

Minimum 6 / Maximum 12