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Case: Covid19 Pandemic Project

Instructions
During the next two weeks, you will work with your assigned group on the following activity. Each group will consist of 4-5 students. You will work together with your team (remotely) to complete this project. At the end of these two weeks you should be ready to submit your work.

Part 1: Each group can choose a clinical scenario, either the emergency department or private practice scenario described below. The clinical scenario project can be completed and submitted using PowerPoint and additional supplement documents as needed.

Part 2: The 2nd assignment consists of answering a set of questions. The questions can be submitted as (as a team) in a word document.

At the end of the project you will also be completing peer evaluations based on your collaboration and effort.

Please use a minimum of three resources. Please cite all sources. We encourage the use of figures and supplement documents such as checklists or handouts that your team has modified or developed. The powerpoint should not have less than 15-20 slides.

Start Date: Monday, March 16th, 2020

Due Date: March 29th, 2020

Part I:

A. You are the lead physician in a 4-physician Internal Medicine private practice. There is a Covid19 pandemic. You will need to put in place all patient/staff safety protocols, work flow, patient flow, testing protocols (who gets tested and how) and reporting measures.

You have the flexibility to design the practice environment, the number of personnel, the number of rooms, the equipment in place (inventory) or needed.
B. You are the medical director of an emergency department in a 200 - bed community hospital. There is a Covid19 pandemic in the United States. There are 2 confirmed cases Florida. You need to put in place all patient safety protocols, workflow, patient flow, testing protocols (who gets tested and how) and reporting measures.

You have the flexibility to design the environment, the number of personnel, the number of rooms, the equipment in place (inventory) or needed.

- Identify key safety factors that need to be considered in a clinical setting during a pandemic to protect patients, families and medical personnel.
- Collaborate as a team to organize the protocols that consider the patient education, patient/staff safety, clinical space, workflow and patient flow.
- Identify the equipment needed and protocols for appropriate use, taking into account limited resources.
- Identify key policies and protocols that need to be put in place regarding triage, testing and reporting during a pandemic.
- Recognize and manage differences in protocols based on patient age, comorbidities and risk factors.

Part 2:

Group Questions – Each group will be assigned one of the three sets of questions

Set 1 - About Covid19

- Describe the human coronaviruses.
- Describe the virion structure of Covid-19.
- Describe the epidemiology and clinical characteristics of Covid19.
- Describe how we test for Covid-19, are there “surrogate markers” e.g.: wbc, ESR, CRP, etc.
- Describe the treatment and management of patient’s with confirmed Covid19.
- Describe differences between MERS, SARS, H1N1, Influenza A/B and Covid19. How is Covid19 different (molecular biology, pathophysiology, clinical presentation, transmission, disease progression, severity)?
- Describe features of the immune response in patients with Covid19 compared with other viruses. What makes Covid19 unique? What are the confounding variables? Why is this more lethal in elderly and those with co-morbidities?

Set 2 - A historical review of past responses – lessons learned

- Describe differences between MERS, SARS and Covid19. How is Covid19 different (molecular biology, pathophysiology, clinical presentation, transition, disease progression, severity)? How should these differences guide our response and containment efforts?
- Describe the response in China compared with the outbreak response in the US.
- Describe the response to MERS and SARS. What were the lessons learned? What factors made those responses successful?
Set 3 - Responding effectively

• How can one recognize a potential outbreak?
• What initial measures should be taken?
• What resources are available?
• How does one report?
• Identify and describe the various perspectives and contributions of local health departments, hospitals, private physicians and first responders in responding to a pandemic situation.
• Explain barriers that health care workers must overcome to maintain delivery of essential services under crisis conditions.
• Discuss the ways in which the social determinants of health impact how patients and communities are experiencing COVID19. Consider literacy, insurance status, economic status, medicolegal issues, sex/gender and the built environment.