



MEDICAL MANAGEMENT OF  
**COVID-19 COURSE**



# Course Acknowledgements

## Directors

Sarah Smithson, MD, MPH

Johanna Foster, MPA

Steve Bogdewic, PhD

Julie Golding

## Contributors

Sofia Aliaga, MD, MPH

Leon Bacchus, MD

Kristy Borawski, MD

Jim Bedford, MD

Wesley Burks, MD

Julie Byerley, MD, MPH

Iris Cheng, MD

Catherine Coe, MD

Amy Denham, MD, MPH

Sue Estroff, PhD

Ana Felix, MD

Jim Fiordalisi, PhD

William Fischer, MD

Gary Gala, MD

Adam Glover, MD

Gail Henderson, PhD

Marcia Hobbs, PhD

Edward Iglesia, MD

Sheryl Jordan, MD

Benny Joyner, MD, MPH

Susan Keen, MD

Meg Kihlstrom, MD

Andrea Knittel, MD, PhD

John Lewis, MBA

Erin Malloy, MD

Katrina McGinty, MD

Peggy McNaull, MD

Samantha Meltzer-Brody, MD,  
MPH

Lee Miller, MD

Melissa Miller, PhD

Emily Moorefield, PhD

Raul Necochea, PhD

Matthew Nielsen, MD, MS

Jon Oberlander, PhD

Cristy Page, MD, MPH

Luigi Pascarella, MD

Robert Pease, MD

Deborah Porterfield, MD, MPH

Barry Saunders, MD, PhD

Allison Schad, LCSW

Crystal Schiller, PhD

Amy Shaheen, MD, MSc

Nate Sowa, MD, PhD

David Weber, MD, MPH

Amy Weil, MD

Karina Whelan, MD

Sarah Towner Wright, MLS

Meg Zomorodi, PhD, RN

## Small Group Facilitators

Amy Weil, MD – Lead Facilitator

Shannon Aymes, MD, MPH

Ben Blomberg, MD

Mara Buchbinder, PhD

Erik Butler, DO

Paul Chelminski, MD, MPH

Amy Denham, MD, MPH

Andrea Dotson, MD, MSPH

Sue Estroff, MD, PhD

Kenneth Fortier, MD

Edward Iglesia, MD

Tom Linden, MD

John Lykes, MD

Mallory McClester Brown, MD

Katharine Meacham, PhD

Raúl Necochea, PhD

Rimma Osipov, MD, PhD

Paul Ossman, MD, MPH

Afsaneh Pirzadeh, MD Marilynn

Prince-Fiocco, MD

Barry Saunders, MD, PhD

Jasmine Shell, MD

Ira Sloan, MD

Sarah Smithson, MD, MPH

LaClaire Stewart, MD, MPH

Heather Tarantino, MD

Ashley Weiner, MD, PhD

Karina Whelan, MD

Sandra Whitlock, MD

## Catalogue

This course catalogue was compiled by Natalie Spach, Sarah Smithson, MD, MPH, Jill Forcina, PhD, RN, and Meg Zomorodi, PhD, RN.

The creators of this course have requested that these materials not be replicated on any social media platforms, including Instagram, Facebook, YouTube and Twitter.

## COURSE DESCRIPTION

The University of North Carolina at Chapel Hill (UNC-CH) School of Medicine's **Medical Management of COVID-19 Course** was originally created to prepare students to re-enter the clinical setting knowledgeable about COVID and equipped with clinical skills to deliver care in an evolving health care system. The UNC-CH School of Medicine (SOM) has partnered with NC Area Health Education Centers (NC AHEC) to create a flexible program for an interprofessional audience, that includes current healthcare professionals as well as health professional students. Educators can choose to use all or parts of the topics and activities. The entire course can be delivered virtually and includes various virtual modalities including recorded speakers, small group activities, readings, modules, and reflective writing. In the original design, participants attended synchronous lectures 1-2 times per week and virtual small group sessions. Faculty can review these taped recordings and engage students in discussion questions aimed to elicit thinking about their roles in their specific profession and also how teamwork through interprofessional practice can enhance health. This course content was developed in late March 2020.

**Given the rapid pace of discovery around COVID-19, it is imperative to review the latest recommendations from leading organizations (CDC, NIH, etc.) and update content as indicated and to best suit the needs of one's learners.**

In the basic science component, students will learn about the virology, pathogenesis and impact of the SARS-CoV-2 virus on the host immune response. The basic science section provides foundational knowledge about the clinical manifestations, progression of the illness, laboratory and image findings of COVID-19 as well as vaccine development and treatment clinical trials. Participants will gain a robust understanding of current recommendations for triage, evaluation, outpatient, inpatient and ICU management and treatment of COVID-19 infections with attention to special subpopulation management (pregnancy,

pediatrics, geriatrics, comorbidities, low resource settings).

The course will prompt participants to explore the broader social and economic impact of the virus on various populations. Participants will examine the public health implications of the pandemic and the allocation of resources (PPE, ventilators, healthcare providers, hospital beds), and will explore the various methods of patient encounters during a time of 'social distancing' as well as sustained implementation of these strategies. The virtual care components of this elective provide skills in virtual care, triage, and patient education. The COVID-19 course emphasizes personal wellness; participants are encouraged to build a weekly schedule for wellness activities and reflect upon their own wellness goals.

The final component of the original SOM COVID-19 course included an emphasis on service learning and community engagement. To fulfill this component, the UNC-CH SOM partnered with the Office of Interprofessional Education and Practice to form the Carolina COVID-19 Service Corps (CSSC). Carolina CSSC is an interprofessional service-learning program that increases the capacity of health professions students to address the needs of health systems and communities across NC. As part of the original course, students were asked to complete 2 hours of service per week (8 hours total) through the Carolina CSSC. More information about the Carolina CSSC can be found [here](#).

### **The UNC-CH SOM COVID-19 course and the Carolina CSSC can be integrated or implemented individually:**

- For more information about bringing the COVID-19 course to your school, region, or community, please contact **Kaitlin Smith** at [Kaitlin\\_smith@med.unc.edu](mailto:Kaitlin_smith@med.unc.edu) .
- Individuals interested in the Carolina CSSC can contact **Meg Zomorodi** at [meg\\_zomorodi@unc.edu](mailto:meg_zomorodi@unc.edu) for more information.

## COURSE OUTLINE

### GOAL

To prepare students to re-enter the clinical setting knowledgeable about COVID and equipped with clinical skills to deliver care in an evolving health care system.

### LEARNING OBJECTIVES

- ☑ Describe basic biology and epidemiology of novel SARS-CoV-2 virus
- ☑ Implement efficient strategies for identifying and putting into practice the latest scientific information in a rapidly evolving field of study
- ☑ Describe at least two systems-level challenges in pandemic management.
- ☑ Articulate the value of teamwork in a pandemic within an overburdened health care system.
- ☑ Articulate the disease progression of COVID-19 from triage, to outpatient, to inpatient and ICU management.
- ☑ Explain the difference between telehealth, telemedicine, virtual visits, and e-visits (Mychart)
- ☑ Demonstrate appropriate interview technique via the telephone or computer.
- ☑ Formulate a personal plan for supporting wellness.

### GRADE BREAKDOWN

The course will be graded as Pass/Fail and will not contribute to class rank. Students will need to obtain a 70% cumulative score to pass the course. The weighing of assessments will be as follows:

- Small Group Attendance and Participation = **40%**
- Quizzes = **20%**
- Assignments = **40%**
  - Module Thought Questions = 10%
  - Wellness Reflection = 10%
  - Telehealth Personal Plan = 10%
  - Service-Learning Reflection = 10%

### COURSE CONTENT

The 4-week course has a total of 45 modules. Here is a weekly breakdown of the content:

#### Week 1 (10 modules)

- Basic Science of COVID Overview
- Social Health Systems: Processing the Moment
- Social Health Systems: Population Health Epidemiology of COVID
- Webinar series with guest speakers: Dr. David Weber, MD and Dr. Melissa Miller, PhD
- Vaccine Development and investigative Therapeutics
- Clinical Science General Overview of COVID19 Disease
- Outpatient Management and Triage of COVID19
- Health Sciences Library Conducting an Accurate Search
- Introduction to Virtual Care: History of Virtual Care, Integration into Clinical Setting
- Wellness workshop

## Week 2 (7 modules)

- Virtual Health: Communication Considerations
- Social Health Systems: Duty to Care & Resource Allocation
- Mental Health and Well-Being Survival Guide for COVID-19
- Social Health Systems; Governmental Public Health Response in SARS-CoV-2 Pandemic and the Interface of Physicians with Public Health
- Clinical Science: Emergency Triage and Management
- Clinical Science: UNC Emergency Department Workflow Pathways
- Inpatient Management for the Hospitalist

## Week 3 (15 modules)

- Clinical Science: Radiology
- Critical Appraisal of the Literature
- Social Health Systems Population Health: Journal Club Part 1
- Social Health Systems: Social Contributors to Health
- Telehealth Workshop: Practicing Telehealth
- Dr William Fischer - UNC Intensivist, World Health Organization Expert on Global Responses to Pandemics
- Basic Science In-Depth Review of Renin-Angiotensin-Aldosterone System
- Pharmacology: Science of Investigational Therapeutics
- Clinical Science: Point of Care Ultrasound (POCUS) in COVID
- Clinical Science: Intensive Care Unit (ICU) Management and Acute Respiratory Distress Syndrome (ARDS) in COVID
- Basic Science: Science of Extracorporeal Membrane Oxygenation (ECMO)
- Clinical Science: Pneumonia: ARDS and the Role of ECMO
- Webinar series: Leadership in a Healthcare System During Pandemic Response, Intensivist response to a novel pandemic
- Webinar: Population Health Panel on Government "Prevention Strategies and Public Health Decision Making in Time of Uncertainty
- Public Health in China: UNC's Dr. Gail Henderson's Public Health Experience in China

## Week 4 (12 Modules)

- Telehealth in Subspecialties: Psychiatry and Neurology
- Social Health Systems: History of Epidemics
- Leadership in Crisis
- Clinical Science Sub population care: OB-GYN
- Clinical Science Sub population care: Pediatrics
- Clinical Science Sub population care: Geriatrics
- Quality Improvement and COVID
- Discussion Panel with UNC School of Medicine Deans
- Grand rounds with Dr. David Weber, Associate Chief Medical Officer of UNC Health Care
- Clinical Science Subpopulation Care: Mental Health
- Clinical Science Subpopulation Care: Substance Abuse
- Clinical Science Subpopulation Care: Incarcerated Patients

## COURSE SCHEDULE BY WEEK

### WEEK 1

#### WEEK 1 ASSIGNMENTS (DUE FRIDAY AT 5:00 PM)

##### *Basic & Clinical Science Thought Questions*

Please upload a word doc of your answers for the following thought questions based on Monday and Wednesday Basic Science Material and Thursday Clinical Science material.

1) The previous SARS-CoV that emerged from animals into humans in 2002 and spread briefly in 2003 did not cause a widespread pandemic, such as the one we are experiencing now. What virologic differences between SARS-CoV-1 and SARS-CoV-2 most likely explain these epidemiologic differences?

2) Compare CDC guidelines for investigation and testing strategies to other international guidelines (eg: WHO, Public Health England, or others). Complete a brief reflection summarizing differences.

#### WEEK 1 SCHEDULE

DAY	CONTENT	ASSIGNED MATERIALS
MONDAY	Basic Science of COVID Overview	<ul style="list-style-type: none"> <li>Harvard Medical School Module 1 Bench to Bedside: Read First Section on "Virology and Immunology"</li> <li>COVID19 Basic Virology and Pathogenesis (Marcia Hobbs)</li> </ul>
	Social Health Systems: Processing the Moment SMALL GROUP READINGS	<ul style="list-style-type: none"> <li>Social Health Systems Week 1 FACILITATOR Guide</li> <li>Social Health Systems Week 1 STUDENT Guide</li> <li>UNC School of Medicine's Dr. Amy Weil's Kayak Notes</li> <li>That Discomfort You're Feeling is Grief, Scott Berinato, Harvard Business Review, March 23, 2020</li> <li>Handwashing: A Grateful Practice</li> <li>Why Doctors and Nurses are Anxious and Angry, Danielle Ofri, NYT, March 20, 2020</li> <li>How will the Pandemic End?, Ed Yong, The Atlantic, March 25, 2020</li> </ul>
TUESDAY	Social Health Systems: Population Health Epidemiology of COVID	<ul style="list-style-type: none"> <li>Corona Virus Infections – More Than Just the Common Cold. Paules, Martston, and Fauci, JAMA, Feb 25, 2020</li> <li>Harvard Medical School Module 2: SARS-CoV-2 Epidemiology Principles Module</li> </ul>
	SOCIAL HEALTH SYTEMS AFTERNOON SMALL GROUP DISCUSSION	
WEDNESDAY	Webinar series featuring <i>Dr. David Weber and Dr. Melissa Miller</i>	<ul style="list-style-type: none"> <li>Dr. David Weber, UNC Healthcare Epidemiology). <b>See Dr. Weber's PowerPoint</b></li> <li>Dr. Melissa Miller, Director of the Clinical Molecular Microbiology Laboratory.Topic: UNC Development of a Diagnostic Test for COVID-19</li> <li>Link to Recordings</li> <li>Password: COVID-19Update</li> </ul>
	Vaccine Development and investigative Therapeutics	<ul style="list-style-type: none"> <li>Harvard Medical School Module 1 Bench to Bedside: Read Fourth Section "Investigational Therapeutic and Vaccine Development"</li> <li>Science News: To Tackle the new Corona Virus, Scientists are Accelerating the Vaccine Process, Saey, TH, February 21, 2020</li> <li>COVID-19: Diagnostics, Therapeutics &amp; Vaccines: Microbiology Perspectives (Marcia Hobbs)</li> </ul>
THURSDAY	Clinical Science General Overview of COVID19 Disease	<ul style="list-style-type: none"> <li>Harvard Medical School Module 1 Bench to Bedside: Read Second and Third Sections on "Diagnosis of COVID-19 and Management of COVID-19"</li> <li>CDC Clinical Guidance for Management of Patients with confirmed COVID-19</li> </ul>
	Outpatient Management and Triage	<ul style="list-style-type: none"> <li>Interim Guidance for Public Health Personnel Evaluating Persons Under Investigation (PUIs) and Asymptomatic Close Contacts of Confirmed Cases at Their Home or Non-Home Residential Settings</li> </ul>

		<ul style="list-style-type: none"> <li>• <a href="#">Interim US Guidance for Risk Assessment and Public Health Management of Person with Potential Coronavirus Disease 2019 (COVID-19) Exposures: Geographic Risk and Contacts of Laboratory-confirmed Cases</a></li> <li>• <a href="#">Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19)</a></li> </ul>
	<b>Health Sciences Library Conducting an Accurate Search</b>	<ul style="list-style-type: none"> <li>• <a href="#">There is so much information on the coronavirus produced on a daily basis. This lesson is designed to help you conduct an effect search for literature.</a></li> </ul>
	Supplemental materials (optional)	<ul style="list-style-type: none"> <li>• <a href="#">Apple COVID-19 Screening App – Developed in Partnership with CDC, Tool for Patients to Use:https://apps.apple.com/us/app/id1504132184</a></li> <li>• <a href="#">UNC Respiratory Diagnostic Center (RDC) Testing Criteria</a></li> <li>• <a href="#">CDC Person Under Investigation (PUI) and Case Report Form</a></li> <li>• <a href="#">NC Department of Health and Human Services Guidance for PUI Form Infection Prevention Recommendation Form</a></li> <li>• <a href="#">UNC COVID-19 Lab Ordering for RDC Sites</a></li> <li>• <a href="#">WHO Testing Guidelines</a></li> <li>• <a href="#">Public Health England Guidance for COVID-19 Investigation and Initial - Clinical Management of Possible Cases</a></li> </ul>
<b>FRIDAY</b>	<b>Introduction to Virtual Care:</b> History of Virtual Care, Integration into Clinical Setting	<ul style="list-style-type: none"> <li>• <a href="#">The Evolution of Telehealth: Where Have We Been and Where Are We Going?</a></li> <li>• <a href="#">Virtually perfect? Telemedicine for Covid-19, Hollander JE. V, The New England Journal of Medicine. 03/2020</a></li> <li>• <a href="#">Instructions for Accessing EPIC LMS Module</a></li> </ul>
	<b>Wellness workshop</b> with Alli Schad, LCSW, LCAS, SEP, UNC School of Medicine Director of Student Wellness	<ul style="list-style-type: none"> <li>• <a href="#">Coping with COVID Uncertainty, Alli Schad, UNC SOM Director of Student Wellness</a></li> <li>• <a href="#">Participate in Alli's Wellness Workshop</a></li> <li>• <a href="#">Use Alli's guide to develop a Personal Plan for Wellness</a></li> </ul>

## WEEK 2

### WEEK 2 ASSIGNMENTS (DUE FRIDAY AT 5:00 PM)

- 1) *Telehealth Quiz*
- 2) *Wellness Assignment:*

Coping with COVID Uncertainty: How will you focus on personal wellness?

Being intentional about personal wellness is particularly important during times of high stress. Having an individualized plan can increase your likelihood of prioritizing personal wellness.

Please review the COVID Wellness Plan Workshop, Coping w COVID Wellness Q&A document, and complete the COVID Wellness Plan Worksheet (this is a private document for you to keep).

After completing the worksheet, please upload a one-page Wellness Reflection describing a wellness practice that has worked for you or that you plan to try this month. Why are you optimistic about it? What may be challenging about giving it a try or maintaining it? What strategies will you use to optimize success?

### WEEK 2 SCHEDULE

DAY	CONTENT	ASSIGNED MATERIALS
<b>MONDAY</b>	<b>Virtual Health:</b> Communication Considerations	<ul style="list-style-type: none"> <li>• <a href="#">American College of Physician modules: Telemedicine: A Practical Guide for Incorporation into your Practice: Do Modules "Why Telehealth?" going through the end of "Use Cases for Telemedicine"</a></li> <li>• <a href="#">Harvard Module 4: Communicating Information about COVID-19</a></li> <li>• <a href="#">VitalTalks Communication Guide</a></li> </ul>



	<p><b>Social Health Systems Week 2 FACILITATOR Guide</b></p> <p><b>Social Health Systems Week 2 STUDENT Guide (with discussion questions: Duty to Care and Resource Allocation)</b></p> <p><b>Social Health Systems:</b> Ethics: Duty to Care and Resource Allocation</p> <p>For your small groups, you will be subdivided into two subgroups:</p> <p>1) Duty to Care and 2) Resource Allocation.</p> <p>Each subgroup has its own readings to complete and should be prepared to discuss in the Tuesday small group.</p> <p>Your small group facilitator will give you more information on this arrangement.</p> <p><b>General Readings:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">In stressful times make stress work for you</a>, NYT, April 2020</li> <li>• <a href="#">Health Care Professionals Are Under No Ethical Obligation to Treat COVID-19 Patients</a>, BMJ, April 2020</li> <li>• <a href="#">Frightened Doctors Face Off With Hospitals Over Rules on Protective Gear</a>, NYT, March 2020</li> <li>• <a href="#">The U.S. Tried to Build a New Fleet of Ventilators. The Mission Failed</a>, NYT, March 2020</li> <li>• <a href="#">The Hardest Questions Doctors May Face: Who Will Be Saved? Who Won't?</a>, NYT, March 2020</li> <li>• <a href="#">Hospitals Consider Universal Do-Not-Resuscitate Orders for Coronavirus Patients</a>, WaPo, March 2020</li> </ul> <p><b>Duty to Care Readings:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Marcus R. Nurses and doctors are the heroes of this moment</a>, Washington Post, March 27, 2020. (2 pgs)</li> <li>• <a href="#">Orentlicher D. The physician's duty to treat during pandemics</a>, Am J Public Health 2018; 108(11): 1459-1461. (3 pgs)</li> <li>• <a href="#">Sokol DK. Virulent epidemics and the healthcare workers' duty to care</a>, Emerging Infectious Diseases 2006; 12(8): 1238-1241. (3 pgs)</li> <li>• <a href="#">Tomlinson T. Caring for risky patients: duty or virtue?</a> J Med Ethics 2008; 34:458-462. (4 pgs)</li> </ul> <p><b>Resource Allocation Readings:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Allocation of Scarce Critical Care Resources During a Public Health Emergency</a></li> <li>• <a href="#">Ethical Considerations for Decision Making Regarding Allocation of Mechanical Ventilators during a Severe Influenza Pandemic</a></li> <li>• <a href="#">Clinical Ethics Recommendations for Admission to Intensive Care and Its Suspension in Exceptional Conditions of Imbalance Between Needs and Available Resources</a></li> </ul>
<b>TUESDAY</b>	<p><b>Mental Health and Well-Being Survival Guide for COVID-19 Video</b></p> <p><b>Guest Speaker,</b> Dr. Samantha Meltzer-Brody, UNC Department of Psychiatry</p> <p><b>Mental Health and Well-Being Survival Guide for COVID-19</b> Samantha Meltzer-Brody, MD, MPH, Gary Gala, MD, Crystal Schiller, PhD</p> <p><b>Dr. Samantha Meltzer-Brody's Live Talk</b> Password: hM6kGU5b</p> <p><b>Social Health Systems/Population Health:</b> Governmental Public Health Response in SARS-CoV-2 Pandemic and the Interface of Physicians with Public Health</p> <ul style="list-style-type: none"> <li>• <a href="#">Governmental Public Health Response in SARS-CoV-2 Pandemic Primer</a></li> <li>• <a href="#">Barry, E. 'It's Totally Ad Hoc': Why America's Virus Response Looks Like a Patchwork</a>, New York Times. 3.15.20</li> <li>• <a href="#">Parodi, S &amp; Liu, V. From Containment to Mitigation of COVID-19 in the US</a>, JAMA. 3.13.20.</li> <li>• Review the <a href="#">State Center for Health Statistics</a> website and explore what data are available. You may want to explore the "<a href="#">North Carolina Health Atlas</a>" section of the SCHS website, where there are maps showing the distribution of various diseases across the state.</li> <li>• Also, the "<a href="#">North Carolina Social Determinants of Health by Regions</a>" page has interactive maps in which you can explore the distribution of various social indicators linked to health across the state.</li> </ul> <p style="text-align: center;"><b>SOCIAL HEALTH SYTEMS AFTERNOON SMALL GROUP DISCUSSION</b></p>
<b>WEDNESDAY</b>	<p><b>Clinical Science: Emergency Triage and Management</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Donning and Doffing video (if not already completed)</a></li> <li>• <a href="#">Nasopharygeal Swab Procedure Video</a></li> <li>• <a href="#">CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings</a></li> </ul>



	<b>Clinical Science: UNC ED Workflow Pathways</b>	<ul style="list-style-type: none"> <li>• <a href="#">Tent Triage Workflow</a></li> <li>• <a href="#">ED COVID pathway</a></li> <li>• <a href="#">UNC COVID-19 Emergency Medicine Airway Management</a></li> <li>• <a href="#">COVID-19 Testing Guidelines for all hospitals using EPIC and Lab Ordering – ED and Inpatient</a></li> </ul>
<b>THURSDAY</b>	<b>Inpatient Management for the Hospitalist</b>	<ul style="list-style-type: none"> <li>• <a href="#">JAMA Insight Clinical Update: Care for Critically Ill Patients with COVID-19</a></li> <li>• <a href="#">Module 1: Airway Management</a></li> <li>• <a href="#">Module 2: Non-Invasive Positive Pressure Ventilation</a></li> <li>• <a href="#">Review UNC Non-ICU COVID Care Card (pdf)</a></li> <li>• <a href="#">CDC Guideline: Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance)</a></li> <li>• <a href="#">University of Washington ID Treatment Guideline</a></li> <li>• <a href="#">CDC Guideline - Information on Clinicians on Therapeutic Options for COVID-19 Patients (goes through medication options)</a></li> <li>• <a href="#">JAMA Outcomes Article: Characteristics and Outcomes of 21 Critically Ill Patients with COVID-19 in Washington State</a></li> </ul>
<b>FRIDAY</b>	<b>Wellness Day</b>	

## WEEK 3

### WEEK 3 ASSIGNMENT (DUE FRIDAY AT 5:00 PM)

Population Health **Journal Article Appraisal** – PowerPoint critical appraisal of one article (see Social Health Systems Week 3 STUDENT GUIDE: Instructions for Population Health Article Appraisal)

### WEEK 3 SCHEDULE

DAY	CONTENT	ASSIGNED MATERIALS
<b>MONDAY</b>	<b>Clinical Science: Narrated PPT on Radiology</b>	<ul style="list-style-type: none"> <li>• <a href="#">Chest imaging of COVID 19: Drs. Jordan, MD and Bacchus, MD, UNC Radiology</a> See a PDF of Drs. Jordan and Bacchus' slides <a href="#">here</a></li> <li>• <a href="#">Practice Imaging of COVID: UNC's Drs. Leon Bacchus and Adam Glover, UNC Radiology</a></li> </ul>
	<b>Critical Appraisal of the Literature</b>	<ul style="list-style-type: none"> <li>• <a href="#">Dr. Amy Denham's Narrated Talk Part 1 on Critical Appraisal</a> <ul style="list-style-type: none"> <li>▪ <a href="#">Narrated Talk Part 2 on Critical Appraisal</a></li> </ul> </li> <li>• See Dr. Amy Denham's PowerPoint</li> </ul>
	<b>Social Health Systems Population Health: Journal Club Part 1</b>	<p><b>Instructions for Population Health Article Appraisal</b></p> <p><b>Journal Club Articles to Choose from (DO NOT READ ALL OF THESE, SELECT only 1 to critically review):</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Are surgical masks as effective as N-95 respirators in preventing transmission of COVID-19 to healthcare workers?</a></li> <li>• <a href="#">Is quarantine of patients who had contact with patients with COVID-19 an effective strategy for preventing spread of COVID-19?</a></li> <li>• <a href="#">Does corticosteroid treatment improve clinical outcomes for patients with COVID-19?</a></li> <li>• <a href="#">Does hydroxychloroquine improve clinical outcomes for patients with severe symptoms of COVID-19 infection?</a></li> <li>• <a href="#">Does lopinavir-ritonavir improve clinical outcomes for patients with severe symptoms of COVID-19 infection?</a></li> <li>• <a href="#">Does convalescent plasma improve clinical outcomes for patients with severe symptoms of COVID-19 infection?</a></li> <li>• <a href="#">Does anakinra improve clinical outcomes for patients with severe symptoms of COVID-19 infection?</a></li> <li>• <a href="#">Do inhibitors of the renin-angiotensin-aldosterone system worsen clinical outcomes for patients with COVID-19 infection?</a></li> </ul>

**Social Health Systems:  
Social Contributors  
to Health**

- [Social Health Systems Week 3 FACILITATOR Guide](#)
- [Social Health Systems Week 3 STUDENT Guide](#)

**General:**

- [The Virus is a Reminder of Something Lost Long Ago](#)
- [Socioeconomic Disparities and the Physician's Role: The Role of Physicians in Addressing Social Determinants of Health \(JAMA\)](#)

**Racial Disparities**

- [Racism and discrimination in COVID-19 responses \(Lancet\)](#)
- [The Racial Time Bomb in the Covid-19 Crisis \(New York Times\)](#)
- [Early Data Shows African Americans Have Contracted and Died of Coronavirus at an Alarming Rate \(ProPublica\)](#)
- [What the Racial Data Show \(The Atlantic\)](#)

**International Disparities**

[Do not violate the International Health Regulations during the COVID-19 outbreak \(Lancet\)](#)

**Economic and Labor Disparities**

- [Drivers of Health and the Coronavirus \(The Incidental Economist\)](#)
- [As Coronavirus Deepens Inequality, Inequality Worsens Its Spread: \(New York Times\)](#)
- [Social distancing puts most vulnerable for health disparities at risk: The Hill](#)
- [Health Justice Strategies To Combat COVID-19: Protecting Vulnerable Communities During A Pandemic \(Health Affairs\)](#)
- [US: Address Impact of Covid-19 on Poor \(Lancet\)](#)

**Educational and Digital Access Disparities**

- [College Made Them Feel Equal. The Virus Exposed How Unequal Their Lives Are \(New York Times\)](#)
- [Coronavirus exposes digital disparities between students as learning goes online \(Digital Trends\)](#)

**Age and Disability**

- [My Life Is More 'Disposable' During This Pandemic \(NY Times\)](#)
- [May Hospitals Withhold Ventilators from COVID-19 Patients with Pre-Existing Disabilities? Notes on the Law and Ethics of Disability-Based Medical Rationing \(SSRN\)](#)
- [UN working to ensure vulnerable groups not left behind in COVID-19 response \(United Nations\)](#)
- [Confronting Disability Discrimination During the Pandemic \(The Hastings Center\)](#)

**Language/Health Literacy Disparities**

[Equitable Access To Health Information For Non-English Speakers Amidst The Novel Coronavirus Pandemic \(Health Affairs\)](#)

**Healthcare Disparities**

[Yes, covid-19 treatment must be free for all. But that's not enough \(Washington Post\)](#)

**Disparities for the Incarcerated**

[Coronavirus and Carcerality \(Somatosphere\)](#)

**Disparities for Refugees**

[Here's what the COVID-19 response looks like in refugee camps \(DevEx\)](#)

**Disparities for Women and Children**

[A Gender Lens on COVID-19: Pandemics and Violence against Women and Children \(Center for Global Development\)](#)

<b>TUESDAY</b>	<p><b>Telehealth: COVID Conversation Guide for Outpatient Care</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Video Example of Telemedicine Conversation</a></li> <li>• <a href="#">Audio Example of Telemedicine Conversation</a></li> </ul> <p><b>Telehealth Workshop:</b> Practicing Telehealth</p> <p><b>Telehealth Assignment Instructions</b> <b>Telehealth Assignment Cases:</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;"><b>Case 1</b></td> <td style="width: 33%;"><b>Case 2</b></td> <td style="width: 33%;"><b>Case 3</b></td> </tr> <tr> <td>Patient</td> <td>Patient</td> <td>Patient</td> </tr> <tr> <td>Provider</td> <td>Provider</td> <td>Provider</td> </tr> <tr> <td>Evaluator</td> <td>Evaluator</td> <td>Evaluator</td> </tr> </table>	<b>Case 1</b>	<b>Case 2</b>	<b>Case 3</b>	Patient	Patient	Patient	Provider	Provider	Provider	Evaluator	Evaluator	Evaluator
	<b>Case 1</b>	<b>Case 2</b>	<b>Case 3</b>										
	Patient	Patient	Patient										
Provider	Provider	Provider											
Evaluator	Evaluator	Evaluator											
<p><b>Dr William Fischer</b> UNC Division of Pulmonary Diseases and Critical Care Medicine</p> <p>Dr. William Fischer, an expert on critical care virology and global response to pandemics, provides insights in his recorded lecture</p>													
<p><b>SOCIAL HEALTH SYTEMS AFTERNOON SMALL GROUP DISCUSSION</b></p>													
<b>WEDNESDAY</b>	<p><b>Basic Science In-Depth</b> <b>Review of the Renin-Angiotensin-Aldosterone System (RAAS)</b></p> <p>Dr. Emily Moorefield, PhD (UNC Department of Cell Biology): <a href="#">The interaction between RAAS and COVID-19</a></p>												
	<p><b>Pharmacology:</b> <b>Science of Investigational Therapeutics</b></p> <p>Dr. Jim Fiordalisi, PhD: <a href="#">Identifying Pharmacologic Approaches to Treating COVID-19 by Targeting the SARS-CoV-2</a></p>												
	<p><b>Clinical Science:</b> <b>Point of Care Ultrasound (POCUS) in COVID</b></p> <ul style="list-style-type: none"> <li>• <a href="#">POCUS Lung Imaging with Drs. Jordan and McGinty, UNC Radiology</a></li> <li>• <a href="#">POCUS (ATS/University of Toronto): Lung module</a></li> <li>• <a href="#">POCUS Article 1: Findings of lung ultrasonography of novel corona virus pneumonia during the 2019–2020 epidemic</a></li> <li>• <a href="#">POCUS Article 2: Point-of-Care Lung Ultrasound findings in novel coronavirus disease-19 pneumoniae: a case report and potential applications during COVID-19 outbreak</a></li> </ul>												
	<p><b>Acid-Base disorders and blood gas interpretation review</b> <a href="https://www.thoracic.org/professionals/clinical-resources/video-lecture-series/critical-care/">Acid-Base Disorders Video https://www.thoracic.org/professionals/clinical-resources/video-lecture-series/critical-care/</a></p> <p><b>The ABC's of ABGs:</b> Teaching Arterial Blood Gases to Adult Learners, Deborah DeWaay and Joel Gordon, MedEdPortal, 2011</p> <p>Review "Worksheet for Solving Acid-Base Problems" Complete Arterial Blood Gas <a href="#">Practice Questions</a> and <a href="#">Review Answers</a> (ungraded)</p> <p><b>Mechanical Ventilation</b> <a href="#">UNC MICU COVID-19 Intubation Video</a> <b>Society for Hospital Medicine modules:</b> <a href="#">Mechanical Ventilation Part I – The Basics</a> <a href="#">Mechanical Ventilation Part II – Beyond the Basics</a></p> <p><b>Acute Respiratory Distress Syndrome (ARDS)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">The Acute Respiratory Distress Syndrome: Pathogenesis and Treatment, Michael A. Matthay and Rachel L. Zemans, Annual review of Pathology, 2011</a></li> <li>• <a href="#">Treatment for severe acute respiratory distress syndrome from COVID-19, Michal A Matthay, J Matthew Aldrich, Jeffrey E Gotts, The Lancet, 2020</a></li> <li>• <a href="#">Society for Hospital Medicine Mechanical Ventilation Part III: ARDS module</a></li> <li>• <a href="#">European Respiratory Society ARDS module and quiz</a></li> </ul> <p><b>Intensive Care Unit (ICU) Management Overview</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Managing COVID-19 in the ICU, Harvard Module (70 minutes)</a></li> <li>• <a href="#">UNC COVID ICU Care Card</a></li> </ul> <p>On your own, identify at least 2 questions or topics to do a brief evidence search or topic review (e.g., how to recognize vent dyssynchrony, sedation in the ICU <a href="#">UNC quick reference: Head to Toe – A look at the other organ systems commonly involved in COVID-19</a></p>												

	<p><b>Other ICU resources – American Thoracic Society Brief Videos</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Introduction to mechanical ventilation, Resistance/compliance and ARDS The Berlin Definition</a></li> <li>• <a href="#">Acute kidney injury and shock/perfusion</a></li> </ul> <p><b>Supplemental ICU and COVID Resources:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Cases: HSL Case Files Collection</a> Review cases such as: Acid-Base Disorders I and II, airway management/respiratory failure, ventilator management, and non-invasive ventilator support for hypoxia respiratory failure</li> <li>• <a href="#">Society for Critical Care Medicine COVID-19 Resources</a></li> </ul> <p><b>Procedures Videos</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Thoracentesis</a></li> <li>• <a href="#">Arterial Blood Sampling</a></li> </ul>
THURSDAY	<p><b>Basic Science: Science of Extracorporeal Membrane Oxygenation (ECMO)</b></p> <p><a href="#">Basic Aspects of Physiology during ECMO Support</a></p>
	<p><b>Clinical Science: Pneumonia: ARDS and the Role of ECMO</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Presentation on ECMO from UNC's Dr. Luigi Pascarella</a></li> <li>• <a href="#">Preparing for the Most Critically Ill Patients With COVID-19: The Potential Role of Extracorporeal Membrane Oxygenation, Graeme MacLaren, et al.</a></li> <li>• <a href="#">Outcomes and survival prediction models for ECMO, Rozencajg, et al</a></li> </ul>
	<p><b>Webinar: Leadership in a Healthcare System During Pandemic Response</b></p> <ul style="list-style-type: none"> <li>• <a href="#">UNC Leadership: Creativity in Crisis</a></li> </ul> <p><a href="#">Panel Recording Link</a> Password: COV1Dpanel</p>
	<p><b>Webinar: Intensivist response to a novel pandemic</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Dr. William Fischer and his work on COVID</a></li> </ul> <p><a href="#">Dr. Fischer Recording Link</a> Password: Dr.F1scher</p>
FRIDAY	<p>Recorded Panel of NCDHHS and Local CDC Officials <b>Prevention Strategies and Public Health Decision Making in Time of Uncertainty:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Student Guide</a></li> <li>• <a href="#">Gottlieb S, McClellan M, Rivers C, et al. National Coronavirus Response: A Roadmap to Reopening. American Enterprise Institute White Paper.</a></li> <li>• <a href="#">Fineberg H. Ten Weeks to Crush the Curve. NEJM.</a></li> <li>• <a href="#">Bradford, T. T. Tweetorial. Mar 18, 2020.</a></li> <li>• <a href="#">The Atlantic: Tufekci – Don't Believe the covid-19 Models</a></li> <li>• <a href="#">StatNews: Lipsitch - We Know Enough Now to Act Decisively Against covid-19</a></li> <li>• <a href="#">Barcelona Institute of Global Health: Chaccour - COVID-19: Five Contrasting Public Health Responses to the Epidemic</a></li> </ul> <p><b>Briefly Peruse:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">IHME Model</a></li> <li>• <a href="#">Covid-19 NC Collaborative Model</a></li> </ul>
	<p><b>Public Health in China: UNC's Dr. Gail Henderson's Public Health Experience in China</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Overview of Dr. Henderson's Presentation</a></li> <li>• <a href="#">Narrated Presentation by Dr. Gail Henderson</a></li> </ul> <p><b>Supplemental Readings</b></p> <ul style="list-style-type: none"> <li>• <a href="#">China Created a Fail-Safe System to Track Contagions. It Failed., NYT, Myers, March 2020</a></li> <li>• <a href="#">Pandemic Calls for Global Unity, not Lies about China, China Daily, Sieff, March 2020</a></li> <li>• <a href="#">Characteristics of and Important Lessons from the Coronavirus Disease 2019 Outbreak in China, JAMA, Wu, et al, February 2020</a></li> <li>• <a href="#">China Ends Wuhan Lockdown, but Normal Life is a Distant Dream, NYT, Zhong and Wang, April 2020</a></li> </ul>

## WEEK 4

### WEEK 4 ASSIGNMENTS (DUE FRIDAY AT 5:00 PM)

#### ***Population Health Article Appraisal:***

Now that you've had a chance to review an original research article related to COVID-19 care, it's time to share what you've learned and learn from your peers' analysis.

Your assignment for this week is to review one of your peers' journal club presentations and provide feedback. This is an opportunity to learn from your peers' work, ask questions, and practice providing supportive, constructive feedback.

To determine which presentation you're assigned to review, look at the list of articles in the journal club assignment. Go down the list and find the next article after the one you originally presented, and review your peers' presentation on that article. For example, if your journal club presentation was on article # 1 (Surgical Masks vs N-95 Respirators) then you would provide feedback on the presentation on article #2 (quarantine). If no one in your small group reviewed article #2, you would move down the list to article #3 (corticosteroids). Students who did their presentation on article #8 will review the presentation on article #1.

When you're doing your peer review, consider the following questions:

1. Did the presentation comment on how appropriate the study design was to address the research question?
2. Did the presentation comment on the appropriateness of the statistical analysis? Do you agree with your peers' comments?
3. Did the presentation comment on threats to internal validity, including measurement bias, selection bias, and confounding? Do you agree with your peers' analysis of internal validity?
4. Did the presentation comment on generalizability (external validity)? Do you agree with your peers' assessment of generalizability?
5. Did the presentation draw a conclusion on how the study should affect clinical practice?
6. What conclusions do *you* draw? How should this study affect clinical practice?

#### ***Telehealth Assignment***

*After roleplaying the provider and patient roles in your virtual group, complete the reflection below.*

##### **PROVIDER QUESTIONS:**

What are your overall feelings about your interviews with your patients?

What challenges did you identify as a result of conducting this encounter as a telehealth visit rather than a face to face visit?

Identify ONE thing you would like to improve for a future visit?

Describe ONE thing about your visit that went really well:

##### **PATIENT QUESTIONS:**

From the patient perspective, describe ONE challenge do you perceive from the patient perspective when you engage in a telehealth encounter.

#### ***Service-Learning Reflection***

##### **REQUIREMENTS:**

1. Identify a service-learning opportunity that benefits health systems, their patients, workforce, and/or communities facing the COVID-19 pandemic.
2. Review the pre and post service reflection questions.
3. Participate in at least 8 hours of service.
4. Complete and submit the reflection 5pm on the last day of the course.

Service Learning Reflection Guide Consider the following questions pre-service:

1. What is the identified problem/community need?
2. How is your service learning site/activity addressing that need?
3. Why are you needed?
4. What fear, if any, do you have about participating in this service?
5. What do you hope to gain from this experience?

Please answer one of the following prompts in a one-page post-service reflection: *What have you learned about yourself through this service experience? How will it change your professional practice moving forward? OR Describe a person you encountered through this service experience who made a strong impression on you, either positive or negative. Why did the person make a strong impression? OR What did you contribute to the community you served? Why was your service important, specifically in your role as a health professions student?*

### WEEK 4 SCHEDULE

DAY	CONTENT	ASSIGNED MATERIALS
MONDAY	Telehealth in Subspecialties: Psychiatry and Neurology	<ul style="list-style-type: none"> <li>• <a href="#">Narrated Neurology Telehealth with Dr. Ana Felix</a>, UNC Department of Neurology</li> <li>• <a href="#">Narrated Psychiatry Telehealth with Dr. Erin Malloy</a>, UNC Department of Psychiatry</li> <li>• Article: <a href="https://bostonreview.net/science-nature/jeremy-greene-telemedicine-surges-will-community-health-suffer">https://bostonreview.net/science-nature/jeremy-greene-telemedicine-surges-will-community-health-suffer</a></li> </ul>
	Social Health Systems: History of Epidemics	<ul style="list-style-type: none"> <li>• <b>Social Health Systems Week 4 FACILITATOR Guide</b></li> <li>• <b>Social Health Systems Week 4 Student Guide</b></li> <li>• Watch Dr. Oberlander's Talk on US Health Insurance. Dr. Oberlander, PhD, is with the UNC Department of Social Medicine</li> </ul> <p><b>Learning From and Making History Assigned Readings:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">The 3 Equations for a Happy Life, even during a Pandemic</a>, The Atlantic, April 2020</li> <li>• Dr. Amy Weil's <a href="#">Kayak Notes – Fecundity</a></li> <li>• <a href="#">Talk on "The 1918 Influenza Pandemic: History, Narrative and Context," by Dr. James Leloudis, UNC Professor of History at the Gillings School of Global Public Health "Going Viral" workshop.</a> His talk, which deals with the pandemic in North Carolina, begins at 51:30.</li> <li>• <a href="#">Public Health Reports 125, 3 (2010): Special supplement on the 1918-1919 US influenza pandemic.</a></li> </ul> <p>Two repositories of primary historical sources:</p> <ul style="list-style-type: none"> <li>• <a href="#">The Influenza Encyclopedia</a></li> <li>• <a href="#">Going Viral: Impact and Implications of the 1918 Flu Pandemic in North Carolina</a></li> </ul>
TUESDAY	Leadership in Crisis	<p>Student Guide</p> <ul style="list-style-type: none"> <li>• <a href="#">Leading Health Systems Through Crisis Primer (40 minutes)</a></li> <li>• <a href="#">Engaging Doctors in the Health Care Revolution</a>. Harvard Business Review. (30 minutes)</li> <li>• <a href="#">Ensuring and Sustaining a Pandemic Workforce</a>. New England Journal of Medicine. (20 minutes)</li> <li>• Watch Dr. Don Berwick <a href="#">Responding to the COVID-19 crisis</a>: How leaders can take care of themselves and their teams. Dr. Berwick is a former administrator for the Centers for Medicare &amp; Medicaid Services (CMS) and President Emeritus at the Institute for Healthcare Improvement (2 minutes)</li> <li>• Watch <a href="#">"What Disease Are We Treating": Why Coronavirus Is Stumping Many Doctors</a> (7 minutes)</li> </ul> <p><a href="#">Watch Health Leaders Panel</a>  <b>Health Care Leader's Panel:</b>            Annette DuBard, MD MPH, VP of Clinical Strategy at Aledade, Inc. <a href="#">Profile</a></p> <p><b>Crisis Management Leadership during Tropical Storm Allison</b></p>

	<p>Peter Butler, MHSA, Professor at Rush University College of Health Sciences, former president of Rush University Medical Center as well as former President and CEO of Houston Methodist. <a href="#">Profile</a></p> <p><b>Social Determinants, Primary Care Delivery and Staff Management</b> Mark Rabiner, MD, former Medical Director of NYU-Langone Family Health Centers and PCP serving the NYC undomiciled population <a href="#">Profile</a></p> <p><b>Leading Dartmouth Hitchcock into a Value-Based World</b> Jim Weinstein, DO, SVP Microsoft Healthcare, former CEO and President of Dartmouth-Hitchcock. Trained in orthopedics and specialized in spine surgery. <a href="#">Profile</a></p> <p style="text-align: center;"><b>SOCIAL HEALTH SYTEMS AFTERNOON SMALL GROUP DISCUSSION</b></p>
<b>WEDNESDAY</b>	<p><b>Clinical Science Sub population care: OB-GYN</b></p> <p><b>Pregnancy</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Information for Healthcare Providers: COVID-19 and Pregnant Women</a></li> <li>• <a href="#">Considerations for Inpatient Obstetric Healthcare Settings</a></li> <li>• <a href="#">International Society of Ultrasound in Obstetrics and Gynecology Interim Guidance on 2019 novel coronavirus infection during pregnancy and puerperium: information for healthcare professionals. LC Poon, H Yang, et al. March 2020.</a></li> <li>• <a href="#">Coronavirus in pregnancy and delivery: rapid review. Ultrasound in Obstetrics and Gynecology, E Mullins, D Evans, et al. March 2020.</a></li> <li>• <a href="#">UNC Cesarean Section video (9 min)</a></li> <li>• <a href="#">Universal Screening for SARS-CoV-2 in Women Admitted for Delivery. NEJM, Desmond Sutton, Karin Fuchs, et al. April 2020.</a></li> </ul> <p><b>Neonatal Care</b></p> <ul style="list-style-type: none"> <li>• <a href="#">American Academy of Pediatrics guidance on infants born to mothers with suspected or confirmed COVID-19</a></li> <li>• <a href="#">Neonatal Early-Onset Infection with SARS-CoV-2 in 33 Neonates Born to Mothers With COVID-19 in Wuhan, China. L Zeng, S Zia, et al. JAMA Peds, March 2020. (pdf)</a></li> </ul> <p><b>Supplemental</b> <a href="#">Society for Maternal Fetal Medicine: COVID-19 in Pregnancy: Update on Societal Guidance and Real Life Experiences (~40 min long lecture then 20 min of Q&amp;A)</a></p> <p><b>Pediatrics</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Information for Pediatric Healthcare Providers</a></li> <li>• <a href="#">Talking with children about Coronavirus Disease 2019</a></li> <li>• <a href="#">Coronavirus Disease 2019 in Children – United States, February 12 – April 2, 2020. CDC COVID-19 Response Team. Morbidity and Mortality Weekly Report, April 2020.</a></li> <li>• <a href="#">Novel Coronavirus Infection in Hospitalized Infants Under 1 Year of Age in China. Min Wei, Jingping Yuan, et al. JAMA, April 2020.</a></li> <li>• <a href="#">Epidemiological Characteristics of 2143 Pediatric Patients with 2019 Coronavirus Disease in China. Yuanyuan Dong, Xi Mo, et al. Pediatrics, April 2020.</a></li> <li>• <a href="#">Clinical and CT features in pediatric patients with COVID-19 infection: Different points from adults. Wei Xia, Jianbo Shao, et al. Pediatric Pulmonology, February 2020.</a></li> </ul> <p><b>Supplemental</b></p> <ul style="list-style-type: none"> <li>• <a href="#">COVID-19: The Seattle Children’s Experience (~1 hour webinar)</a></li> <li>• <a href="#">UNC Pediatrics COVID-19 Resources</a></li> </ul> <p><b>Clinical Science Sub population care: Pediatrics</b></p>
<b>THURSDAY</b>	<p><b>Clinical Science Sub population care: Geriatrics</b></p> <ul style="list-style-type: none"> <li>• <a href="#">GEMCAST: Why COVID-19 is a Geriatric Emergency, 23 min podcast</a></li> <li>• <a href="#">COVID-19 in Older Adults: Key Points for Emergency Department Providers, Michael L Malone, Teresita Hogan, et al. Geriatric Emergency Department Collaborative, March 2020</a></li> <li>• <a href="#">Appendix 3: Key Points for ED Clinicians (pdf)</a></li> <li>• <a href="#">CDC Guideline: Preparing for COVID-19: Long-term Care Facilities, Nursing Homes</a></li> <li>• <a href="#">Epidemiology of COVID-19 in a Long-Term Care Facility in King County Washington. Temet McMichael, Dustin Currie, et al, Public Health – Seattle and King County EvergreenHealth, CDC COVID-19 Investigation Team. NEJM March 2020</a></li> </ul>



	<p><b>Supplemental</b></p> <ul style="list-style-type: none"> <li>• <a href="#">GeriPal Podcasts</a>. There are several on COVID including overview, COVID in Long Term Care, Therapeutic Presence, Hospice, Palliative Care, and COVID in New York</li> <li>• <a href="#">Pandemic forces family members into new role: Caregivers for elderly loved ones</a></li> </ul>
	<p><b>Quality Improvement and COVID</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Innovation During a Public Health Crisis</a></li> <li>• <a href="#">QI basics</a></li> <li>• <a href="#">Dr. Whelan's narrated PowerPoint</a></li> </ul>
	<p><b>Discussion Panel with UNC School of Medicine Deans: Drs. Wesley Burks, Cristy Page, and Julie Byerley</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Watch the panel with Drs. Burks, Page and Byerley</a></li> </ul> <p>Password: 2DeanTalk</p> <ul style="list-style-type: none"> <li>• <a href="#">Learn more about Dr. Wesley Burks</a></li> <li>• <a href="#">Learn more about Dr. Cristy Page</a></li> <li>• <a href="#">Learn more about Dr. Julie Byerley</a></li> </ul>
	<p><b>Dr. David Weber's Grand Rounds Talk on COVID-19: April 2020 Updates</b></p> <p><a href="#">Dr. Weber's PPT</a> <a href="#">Recording Link</a></p> <p>Password: DrW3b3rTalk</p>
FRIDAY	<p><b>Clinical Science Subpopulation Care: Mental Health</b></p> <p><b>Mental Illness</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Webinar: How to Address COVID 19 Across Inpatient, Residential and Other Non-ambulatory Care Settings (60 min)</a></li> <li>• <a href="#">Patients with SMI in the Age of COVID-19: What Psychiatrists Need to Know. Jeffrey Geller and Margarita Abi Zeid Daou. Psychiatric News, American Psychiatric Association, April 2020</a></li> <li>• <a href="#">Learning to do Telemental Health – Adapting Your Practice in Telepsychiatry. American Psychiatric Association</a></li> </ul>
	<p><b>Clinical Science Subpopulation Care: Substance Abuse</b></p> <p><b>Substance Abuse</b> American Society of Addiction Medicine Webinar – Caring for Patients During the COVID-19 Pandemic (need to register for the webinar)</p> <p><b>Supplemental</b> <a href="#">American Psychiatric Association Telepsychiatry Toolkit</a></p>
	<p><b>Clinical Science Subpopulation Care: Incarcerated Patients</b></p> <p><b>Incarcerated Patients</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Recorded Lecture by Andrea Knittel (~20 min)</a></li> <li>• <a href="#">See Dr. Andrea Knittel's PowerPoint Slides</a></li> <li>• <a href="#">The Challenge of Preventing COVID-19 Spread in Correctional Facilities. Rita Rubin, JAMA, April 2020. (pdf)</a></li> <li>• <a href="#">Correctional Facilities In The Shadow of COVID-19: Unique Challenges and Proposed Solutions. Brie Williams, Cyrus Ahalt, et al. Health Affairs Blog, March 2020</a></li> <li>• <a href="#">NC Department of Public Safety Prisons Info on COVID-19</a></li> </ul> <p><b>Supplemental</b></p> <ul style="list-style-type: none"> <li>• <a href="#">CDC Guideline: Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities</a></li> <li>• <a href="#">Podcast from NC Department of Public Safety: Prison Actions in COVID-19 (~30 min)</a></li> </ul>