

Family Medicine Virtual Clerkship Curriculum

- 1) Complete all DD2-DD5 readings (required + “optional”) in the syllabus <https://tuftsmedicine.pressbooks.pub/familymedicineclerkship/>
- 2) Complete all 33 Aquifer Family Medicine cases https://tufts-md.meduapp.com/document_sets/8916
- 3) Complete the End of Life / 5 Wishes assignment as in the syllabus, due April 10. (*Home Visit, Information Mastery Exercise, PACT, DOC cards, and Takeaways will be done along with the clinical rotation in 4th year.*)
- 4) Create a 5 minute Final Pearl Presentation (details to follow) to present on April 17
- 5) Attend and be engaged in all virtual Didactic sessions via Zoom:
Fri March 20: come prepared having done DD2 readings
Fri March 27: come prepared having done DD3 readings AND Virtual Cases 5, 13, 14 (see below)
Fri April 3: come prepared having done DD5 readings AND Virtual Cases 9, 10 (see below)
Mon April 6: come prepared having done DD4 readings
Fri April 17: come prepared having done Virtual Cases 1, 2, 3, 4, 6, 7, 8, 11, 12, 15, 16, 17, 18, 19, 20 (see below) AND be ready to present your Pearl
- 6) Achieve the following objectives along with their accompanying readings and cases:

By the end of the Virtual Clerkship, the successful student will be able to:

Cardiovascular Disease

- Describe how to correctly take a blood pressure
- Define the JNC8 blood pressure goals for essential hypertension
 - o JNC8: <http://jamanetwork.com/journals/jama/fullarticle/1791497>
- Use the ASCVD calculator to assess risk for cardiovascular disease and guide statin use
 - o ASCVD Calculator: <http://tools.acc.org/ASCVD-Risk-estimator/>
 - o **CASE 1**
- Name 2 macrovascular and 3 microvascular complications of type 2 diabetes and their corresponding testing or interventions
 - o Hand of Diabetes: <http://www.aafp.org/afp/2014/0215/p256.html>

Health Maintenance

- Apply USPSTF guidelines in order to offer age- and gender-appropriate preventive interventions
 - o USPSTF: <https://www.uspreventiveservicestaskforce.org/BrowseRec/Index>
 - o Age/Gender Calculator: <http://epss.ahrq.gov/ePSS/search.jsp>
 - o **CASE 2**
 - o **CASE 3**
- List the components of a complete newborn or infant encounter
 - o Part I <http://www.aafp.org/afp/2014/0901/p289.html>
 - o Part II <http://www.aafp.org/afp/2014/0901/p297.html>
 - o Bright Futures Parent Handouts <https://patiented.solutions.aap.org/handout-collection.aspx?categoryid=32031>
- Determine age-based indicated immunizations
 - o CDC Immunization Schedule: <https://www.cdc.gov/vaccines/schedules/>
 - o **CASE 4**

- ❑ Describe how to counsel a teen on a sensitive issue (bullying, drug use, sexuality, contraception or suicidality)
 - AAP: <https://www.healthychildren.org/English/ages-stages/teen/>
 - **CASE 5**
- ❑ Apply a Choosing Wisely Campaign principle to a patient
 - www.ChoosingWisely.org
 - **CASE 6**
- ❑ Describe how to perform a geriatrics assessment (Medicare Annual Wellness Visit)
 - Annual Wellness Visit: <https://www.medicare.gov/coverage/preventive-visit-and-yearly-wellness-exams.html>
- ❑ Administer and interpret the Montreal Cognitive Assessment (MoCA)
 - MoCA: www.MoCAtest.org
- ❑ Analyze a medication list with ≥ 7 prescriptions for polypharmacy reduction opportunities
 - Beer's Criteria: <http://www.americangeriatrics.org/files/documents/beers/BeersCriteriaPublicTranslation.pdf>
 - **CASE 7**
- ❑ Complete End of Life planning for oneself, and describe how to discuss this with patients
 - Five Wishes: <https://www.agingwithdignity.org/five-wishes/>

Mental Health

- ❑ Develop a management plan for Major Depressive Disorder or Dysthymic Disorder using PHQ-9
 - PHQ-9: <https://www.uspreventiveservicestaskforce.org/Home/GetFileByID/218>
 - Pharmacologic Management: <http://www.aafp.org/afp/2008/0315/p785.html>
 - **CASE 8**
- ❑ Describe how to screen for Intimate Partner Violence; develop a management plan for positive screens
 - IPV: <http://www.aafp.org/afp/2016/1015/p646.html>
- ❑ Describe how to screen for Alcohol Misuse; develop a management plan for positive screens
 - Alcohol: <http://www.aafp.org/afp/2013/0715/p113.html>
 - **CASE 9**
- ❑ Use a standardized screening tool (M-CHAT, PEDS, or PSC) to screen for child development
 - M-CHAT: <https://www.m-chat.org/references/mchatDOTorg.pdf>

Musculoskeletal Pain

- ❑ Describe how to perform a complete knee and shoulder exam and identify landmarks for joint injection
 - Knee Part 1: <http://www.aafp.org/afp/2003/0901/p907.html>
 - Knee Part 2: <http://www.aafp.org/afp/2003/0901/p917.html>
 - Shoulder Part 1: <http://www.aafp.org/afp/2000/0515/p3079.html>
 - Shoulder Part 2: <http://www.aafp.org/afp/2000/0601/p3291.html>
 - Optional: additional [videos](#) on knee/shoulder/hip (see end of the document)
- ❑ Describe how to perform a joint injection
 - Knee: <http://www.aafp.org/afp/2002/1015/p1497.html>
 - Shoulder: <http://www.aafp.org/afp/2003/0315/p1271.html>
 - <https://www.youtube.com/watch?v=nHGsn1ZeWrl> Can watch on 1.25 speed; start at 55s
- ❑ Develop a management plan for chronic or acute low back pain
 - Acute: <http://www.aafp.org/afp/2012/0215/p343.html>
 - Chronic: <http://www.aafp.org/afp/2009/0615/p1067.html>
 - **CASE 10**

Respiratory Illness

- ❑ Describe evidence-based and patient-centered treatment for URI, acute bronchitis or acute sinusitis
 - CDC: <https://www.cdc.gov/getsmart/community/materials-references/print-materials/hcp/adult-tract-infection.pdf>
 - Centor Score: <https://www.mdcalc.com/centor-score-modified-mcisaac-strep-pharyngitis>
- ❑ Distinguish COVID19 from influenza, influenza-like illness, common cold
- ❑ Develop and distinguish between management plans for COPD and asthma exacerbations
 - Asthma: <http://www.aafp.org/afp/2016/0915/p454.html>

- COPD: <http://goldcopd.org/gold-2017-global-strategy-diagnosis-management-prevention-copd/>
- **CASE 11**

- Describe how to counsel a patient on tobacco cessation

Skin

- Identify common skin lesions including **atopic dermatitis, acne vulgaris, contact dermatitis, seborrheic keratosis, dysplastic pigmented lesions, neonatal acne**
 - DermNet: <http://www.dermnetz.org/browse/> (use quiz function to practice)
- Apply the ABCDE melanoma screening framework to a suspicious pigmented lesion in order to identify lesions indicated for biopsy or excision
 - <https://www.melanoma.org/understand-melanoma/diagnosing-melanoma/detection-screening/abcdes-melanoma>
 - **CASE 12**

Women's Health

- Apply the ASCCP algorithm to determine appropriate cervical cancer screening
 - ASCCP: <http://www.asccp.org/asccp-guidelines> -- click "The updated algorithms in PDF"
 - **CASE 13**
 - **CASE 14**
- Describe the various contraception options; identify appropriate methods for various patients
 - Reproductive Access: <http://www.reproductiveaccess.org/key-areas/contraception/>
 - IUD insertion: Mirena: <https://www.youtube.com/watch?v=zgi3mbW2YdA>
- Describe how to counsel on at least one women's health issue: menopause, preconception preparation, infertility, prenatal care, postpartum care, breastfeeding, or early positive pregnancy test options counseling.
- Distinguish Bacterial Vaginosis from Candidal Vaginitis <https://www.aafp.org/afp/2018/0301/p321.html>
- Describe how to treat uncomplicated and complicated urinary tract infections
 - **CASE 15**

Neurologic Symptoms

- Perform the Dix-Hallpike and Epley maneuvers <https://www.aafp.org/afp/2017/0201/p154.html>
- Describe how to assess dizziness in terms of a differential diagnosis
 - **CASE 16**
- Name treatments to abort acute migraine <https://www.aafp.org/afp/2018/0215/p243.html>
- Name first line treatments for migraine prophylaxis <https://www.aafp.org/afp/2019/0101/p17.html>
 - **CASE 17**

Gastrointestinal Symptoms

- Work up and diagnose Irritable Bowel Syndrome.
 - <https://www.mdcalc.com/rome-iv-diagnostic-criteria-irritable-bowel-syndrome-ibs>
 - <https://www.aafp.org/afp/2012/0901/p419.html>
 - **CASE 18**
- Describe differential diagnosis of acute abdomen and initial workup of common acute conditions
 - <https://www.aafp.org/afp/2008/0401/p971.html>
 - **CASE 19**
- Describe workup and management of H. pylori infection <https://www.aafp.org/afp/2015/0215/p236.html>
 - **CASE 20**

ACCOMPANYING VIRTUAL CASES

Case 1

Diego Santiago is 61 years old and has high blood pressure.

Medications: Lisinopril 30mg a day

Labs:

BUN 19, Cr 1.0

HDL 33, LDL 164, Trigs 208, Total Cholesterol 216

A1c 5.4

According to ASCVD, what medications, if any, should be started today?

Case 2

Antoine Pierce is 54 year old who quit smoking at age 32 and comes in for his physical today. He asks about colon, prostate, and lung cancer screening. What cancer screenings and preventive health interventions does he need?

Case 3

Jackie McHale is a 22 year old gender nonbinary patient here for an annual physical. What cancer screenings and preventive health interventions are needed?

Case 4

Ashley O'Brien is a healthy 1 year old here for her 12 month well child check.

What vaccines is she due for?

Find the age-appropriate parent education handout from Bright Futures and be able to counsel parents on those issues.

Case 5

Tanya Pierce is a 17 year old here for abdominal pain. After taking a careful social history without her mom in the room, you discover she is being bullied at school and has been using marijuana frequently. Her twin sister is aware of the bullying but her parents are not. How do you approach this case? What should you tell her parents?

Case 6

Selena Martinez is 5 years old and has been complaining of left ear pain. She is afebrile but has definitely been whining more in the last 2 days. She has runny nose. Her mom asks if she can have antibiotics for her ear infection.

On exam, her left tympanic membrane is red and bulging. She is nontoxic, afebrile, playing happily, and eating a candy bar. Use Choosing Wisely (AAFP) to decide what to do.

Case 7

Margarita Santiago is an 81 year old woman with these lab results. Her chief concern is "I take too many pills."

Labs: Cr 1.5, BUN 16, Hct 34, A1c 7.2, TSH 0.9, LDL 64, HDL 45

Can you deprescribe and remove any of these medicines from her list?

Metformin 1500mg daily
Aspirin 81mg daily
Gabapentin 300mg nightly
Zolpidem 10mg nightly
Levothyroxine 12.5 mcg daily
Amlodipine 10mg nightly
Rosuvastatin 40mg nightly
Triamcinolone cream 0.1% PRN

Case 8

Visnuth Keo is a 24 year old feeling blue. He has been out of work and had to move back in with his mother. His PHQ9 score was 19 and you prescribed him fluoxetine, but he hasn't felt any better. What should you do?

Case 9

Jose Martinez is a 32 year old man who has a problem with drinking. His AUDIT-C is positive. What do you do?

Case 10

Paul Spencer is a 48 year old man with low back pain. It has been on and off for several years but in the last few weeks it's really flared up. What do you suggest?
(No matter what you suggest, Paul said he's tried that already and wants something better.)
Now what do you suggest?

Case 11

Timothy Lee is a 34 year old nonsmoker who has had asthma since childhood. He was never hospitalized or intubated, but had several emergency department visits in childhood. He comes in now with 2 days of tightness in his chest, cough, and wheezing after having had a cold for several days prior. He had his influenza vaccine this year. He takes fluticasone 110 mcg twice a day and has needed his PRN albuterol inhaler up to 6 times a day.

His father Quang Lee is a 63 year old ex-smoker who had latent TB and has probable COPD. He never had pulmonary function tests but does get shortness of breath about once a year. He now comes in after the same cold Timothy had with shortness of breath and cough.

How do you treat these two patients?

Case 12

Practice quiz: <https://reference.medscape.com/features/slideshow/suspicious-skin-lesions>
(Avoid having to make a Medscape username by typing into Google search: "Can you recognize benign skin lesions from cancerous ones?" → click right from the link)

Case 13

Savorn Lee is a 29 year old female G4P3 (1 miscarriage) with ASCUS on her pap smear. She has never had an abnormal pap smear before. She has an IUD. What is your next step for her?

Case 14

Linda Walker is a 43 old female G1P1 whose pap smear shows negative cytology but HPV positive. She asks how she got HPV and asks if her husband is cheating on her. What is your next step for her, and how do you answer her question?

Case 15

Peggy O'Brien is a 36 year old female G1P1 with discomfort when she urinates. She has not seen blood in her urine. She has vaginal discharge and itch. How do you approach her symptoms? How do you distinguish UTI from vaginitis, and BV from candida?

Case 16

Catherine Woods is a 61 year old grandmother with dizziness. How do you approach her? What history questions will you ask; what physical exam maneuvers will you perform; how will these history and physical features impact your diagnosis and management?

Case 17

Linda Walker is a 43 year old woman with headaches. They are throbbing, usually on the left side, and accompanied by nausea. Lights and sounds bother her. Frequency is about twice a week and the typical headache lasts 24 hours. What do you suggest for pharmacotherapy?

Case 18

Julia Santiago is a 30 year old with intermittent belly pain. It is sometimes gnawing, sometimes sharp, and sometimes crampy. She sometimes has constipation and sometimes has loose stools. Her pain doesn't seem to be better or worse with particular foods, but dairy does seem to induce diarrhea. She hasn't seen blood, weight loss, or fevers. She isn't sure if there's a family history of Crohn's disease or colon cancer. What is your working diagnosis, how do you know, and what workup should you initiate? What is your treatment plan?

Case 19

Lakhena Keo is a previously healthy 56 year old with sharp abdominal pain for the last 2 hours. She has trouble localizing it but thinks maybe it's in right upper quadrant. What is your approach?

Case 20

Hong Xui is a 59 year old man with epigastric abdominal pain worsening over the last 2 months. He's been taking a lot of TUMS for the last 2 weeks but it hasn't helped. What is your workup?

SUPPLEMENTAL MUSCULOSKELETAL VIDEOS

Shoulder Exam:

Inspection and Palpation:

<https://www.youtube.com/watch?v=Xf52jbNA7wg&index=2&list=PLB2E91E9C20E30B25>

Range of Motion:

<https://www.youtube.com/watch?v=d7HfaAlgaro&index=3&list=PLB2E91E9C20E30B25>

Scapular Control:

<https://www.youtube.com/watch?v=pEY93k5XXL0&index=4&list=PLB2E91E9C20E30B25>

AC Joint Examination:

https://www.youtube.com/watch?v=-y_NUVmHe-E&list=PLB2E91E9C20E30B25&index=5

Exam for Impingement (rotator cuff):

https://www.youtube.com/watch?v=r8Rl0_KE30A&index=8&list=PLB2E91E9C20E30B25

Testing for instability:

<https://www.youtube.com/watch?v=Fz2g5gI3RGg&list=PLB2E91E9C20E30B25&index=9>

Knee Exam:

Inspection, Standing:

<https://www.youtube.com/watch?v=MpWVqi6C9RY&index=2&list=PLAD99E958AC0F43B1>

Walking: <https://www.youtube.com/watch?v=8FTtoHsom980&list=PLAD99E958AC0F43B1&index=3>

Knee Examination, Supine:

<https://www.youtube.com/watch?v=wFB9WxfPFWI&list=PLAD99E958AC0F43B1&index=6>

Range of Motion, Part 1:

<https://www.youtube.com/watch?v=z33P1xBpBt0&index=7&list=PLAD99E958AC0F43B1>

Range of Motion, Part 2:

<https://www.youtube.com/watch?v=9c4ePN7hOdE&list=PLAD99E958AC0F43B1&index=8>

Inspection and Palpation, Supine:

https://www.youtube.com/watch?v=ONA_y0znCoU&index=9&list=PLAD99E958AC0F43B1

Effusion (subtle):

<https://www.youtube.com/watch?v=ViMiwP5w-yE&index=11&list=PLAD99E958AC0F43B1>

Lachman Test - ACL:

https://www.youtube.com/watch?v=dH_jnTy1rNk&index=12&list=PLAD99E958AC0F43B1

Posterior Drawer - PCL:

https://www.youtube.com/watch?v=rP_1cZgMEq0&index=13&list=PLAD99E958AC0F43B1

MCL:

<https://www.youtube.com/watch?v=NMi2RsAohSw&list=PLAD99E958AC0F43B1&index=14>

McMurray's Test:

<https://www.youtube.com/watch?v=fkt1TOn1Ufl&index=18&list=PLAD99E958AC0F43B1>

Patellar Apprehension and ROM:

<https://www.youtube.com/watch?v=BDJXSYlMK4k&list=PLAD99E958AC0F43B1&index=20>

ACL Assessment - Small hands, large thigh – Pillow Technique:

<https://www.youtube.com/watch?v=hXU-TbyNZmg&list=PLAD99E958AC0F43B1&index=23>

ACL Assessment Small hands, large thigh – Provider Knee Technique:

<https://www.youtube.com/watch?v=MJgfajhsnCM&list=PLAD99E958AC0F43B1&index=25>

ACL Case Examination – Pathology:

<https://www.youtube.com/watch?v=44-Of-664DU&list=PLAD99E958AC0F43B1&index=26>

Additional Knee Exam

Apley's Test:

<https://www.youtube.com/watch?v=w57I1cYXlCA&list=PLAD99E958AC0F43B1&index=19>

Pivot Shift:

<https://www.youtube.com/watch?v=ZWEGB0ToXZo&index=22&list=PLAD99E958AC0F43B1>

Pearls and Pitfalls:

<https://www.youtube.com/watch?v=ysj5rIAcaA0&index=27&list=PLAD99E958AC0F43B1>

Hip and Groin Exam

Introduction and Back Exam:

<https://www.youtube.com/watch?v=VuHsa4kxT0s&index=1&list=PL7017BA66D8D597CB>

Inspection and Range of Motion:

<https://www.youtube.com/watch?v=WpM8h4mCLCc&index=2&list=PL7017BA66D8D597CB>

Patient History and Palpation:

https://www.youtube.com/watch?v=Y_EZvm0iSno&list=PL7017BA66D8D597CB&index=3

Range of Motion:

<https://www.youtube.com/watch?v=UfjQmhoCM5A&index=4&list=PL7017BA66D8D597CB>

Manual Muscle Testing:

<https://www.youtube.com/watch?v=Mdg1uP0kMbc&index=5&list=PL7017BA66D8D597CB>

Special Tests:

<https://www.youtube.com/watch?v=HzlAUaovrKY&list=PL7017BA66D8D597CB&index=6>

Labral Tear:

https://www.youtube.com/watch?v=Rtp4oz0_3YY&list=PL7017BA66D8D597CB&index=7

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