

2021-01-28: The Non-physical Exam: Teaching Examination Skills at a Distance
Topic and Questions courtesy of the Consortium of Neurology Clerkship Directors

The following links were shared during the chat:

- Will COVID-19 Kill the Routine Physical Exam? <https://blogs.scientificamerican.com/observations/will-covid-19-kill-the-routine-physical-exam/>
- Telehealth Physical Exam Training Videos for Students and Providers <https://icollaborative.aamc.org/resource/5127/>
- Physical Diagnosis PDX <http://physicaldiagnosispdx.com/>



MedEd Chat (hosted by ACE) @MedEdChat8 hours ago

TOPIC 1: Teaching of physical examination skills has been a particular challenge during the coronavirus pandemic. How has preclinical and clinical examination teaching changed at your institution? #MedEdChat #meded



Jake Prunuske, MD, MSPH @jprunuske8 hours ago

Joining from @MedicalCollege of #Wisconsin #mededchat



Rachel Salas MD, MEd @RachelSalasMD8 hours ago

#mededchat @RachelSalasMD from Baltimore @HopkinsMedicine <https://t.co/hHDV1g45ot>



Furniture Assembly Experts - DC MD VA Baltimore @DC_MOVERS8 hours ago

RT @RachelSalasMD: #mededchat @RachelSalasMD from Baltimore @HopkinsMedicine <https://t.co/hHDV1g45ot>



Jeff Dewey, MD, MHS @DeweyLovesNeuro8 hours ago

@MedEdChat T1 the biggest disappointment for me has been suspending our bedside neuro exam teaching for each block of rotating students #mededchat



Jake Prunuske, MD, MSPH @jprunuske8 hours ago

Halted preclerkship hands-on skills in Nov-Dec while the #pandemic raged, now as things have improved we're adding smaller, in some cases 1:1 sessions to catch up. #mededchat



Alexander Rand @AlexanderRandMD8 hours ago

I wonder how the recent elimination of USMLE Step 2 CS will change the teaching of the physical exam. Does everyone do OSCEs? #mededchat



Alliance4ClinEd @Alliance4ClinEd8 hours ago

T1 This provocative piece points out physical exam skills have been on the decline & COVID may cause this practice to come to an end. Thoughts? <https://t.co/ap64gE6W4a> #MedEdChat



Rachel Salas MD, MEd @RachelSalasMD8 hours ago

#MedEdChat t1: had to convert to teaching the in person neuro ex virtually. Confusion bw teleneuro vs Inperson neuro exam



MedEd Chat (hosted by ACE) [@MedEdChat8 hours ago](#)

RT [@Alliance4ClinEd](#): T1 This provocative piece points out physical exam skills have been on the decline & COVID may cause this practice to...



Jake Prunuske, MD, MSPH [@jprunuske8 hours ago](#)

Converted an OSCE from live to virtual format with the help of colleagues [@k_for_kinga](#) [@AKaletMD](#) and others. [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan8 hours ago](#)

[@AlexanderRandMD](#) T1 Someone actually commented to me today there is concern that OSCEs and clinical skills trng may suffer due to budget woes....and since there will no longer be an exam that is a real threat. What do you all think? [#mededchat](#)



Paul Haidet [@myheroistrane8 hours ago](#)

We added a telehealth osce to practice the critical telehealth triage decision: A) go ahead and manage over telehealth B) bring into clinic for an in-person visit C) send to emergency dept Varied cases and visible findings to give clues pointing toward certain ones [#MedEdChat](#)



Gary Beck Dallaghan [@GLBDallaghan8 hours ago](#)

T1 When in class pre-clinical sessions started again I don't think they included any physical exam training. [#mededchat](#)



Alliance4ClinEd [@Alliance4ClinEd8 hours ago](#)

T1 Has anyone used these videos to assist with teaching physical exam skills in a virtual format? <https://t.co/muu41o9pfv> [#MedEdChat](#)



Jeff Dewey, MD, MHS [@DeweyLovesNeuro8 hours ago](#)

[@jprunuske](#) [@k_for_kinga](#) [@AKaletMD](#) Losing the help of standardized patients has been tough. Our preclinical students did a virtual+sim doll OSCE as well. [#MedEdChat](#)



MedEd Chat (hosted by ACE) [@MedEdChat8 hours ago](#)

RT [@Alliance4ClinEd](#): T1 Has anyone used these videos to assist with teaching physical exam skills in a virtual format? <https://t.co/muu41o9...>



Jake Prunuske, MD, MSPH [@jprunuske8 hours ago](#)

Exam skills are underused and undervalued. Need to explore risks, benefits, and comfort with uncertainty in context of clinical exam and other diagnostic modalities [#mededchat](#)



Nina Browner, MD [@NinaBrowner8 hours ago](#)

[@MedEdChat](#) T1 [#mededchat](#) For neuro residents on subspecialty outpatient rotations we had to modify so much of teaching because appointments moved to telehealth - less doing more seeing was the slogan



Jake Prunuske, MD, MSPH [@jprunuske8](#) 8 hours ago

Maybe - I think it may create challenges for some institutional OSCE "centers" and lead to more home-grown, departmental, or local OSCEs to educate as much as assess. [#MedEdChat](#)



Jake Prunuske, MD, MSPH [@jprunuske8](#) 8 hours ago

RT [@myheroistrane](#): We added a telehealth osce to practice the critical telehealth triage decision: A) go ahead and manage over telehealth...



Jake Prunuske, MD, MSPH [@jprunuske8](#) 8 hours ago

RT [@DeweyLovesNeuro](#): [@jprunuske](#) [@k for kinga](#) [@AKaletMD](#) Losing the help of standardized patients has been tough. Our preclinical students d...



MedEdBot [@MedEdBot8](#) 8 hours ago

RT [@MedEdChat](#): The [#mededchat](#) topic & questions will be announced in a moment...for now, please introduce yourselves [#meded](#)



MedEdBot [@MedEdBot8](#) 8 hours ago

RT [@MedEdChat](#): We will assume that all of your tweets during [#mededchat](#) are your own during this hour unless otherwise stated [#meded](#)



MedEdBot [@MedEdBot8](#) 8 hours ago

RT [@MedEdChat](#): T1 about to come up in a few moments [#meded](#) [#mededchat](#)



MedEdBot [@MedEdBot8](#) 8 hours ago

RT [@MedEdChat](#): TOPIC 1: Teaching of physical examination skills has been a particular challenge during the coronavirus pandemic. How has p...



Jake Prunuske, MD, MSPH [@jprunuske8](#) 8 hours ago

We're planning to vaccinate our SPs as employees; still, not yet there... [#MedEdChat](#)



Gary Beck Dallaghan [@GLBDallaghan8](#) 8 hours ago

[@jprunuske](#) T1 I agree. I honestly see CS going away as an opportunity for medical schools to truly refine their OSCEs to assess those skills based on their program objectives. AND....students don't have to spend a ton of money to fly off somewhere to take the test! [#MedEdChat](#)



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TOPIC 2: What adaptations have you made in examination teaching that have been particularly successful? [#MedEdChat](#) [#meded](#)



Jake Prunuske, MD, MSPH [@jprunuske8](#) 8 hours ago

RT [@MedEdChat](#): TOPIC 2: What adaptations have you made in examination teaching that have been particularly successful? [#MedEdChat](#) [#meded](#)



Sateesh Arja, M.B.B.S., MHPE, MSPH [@ArjaSateesh8 hours ago](#)

[@MedEdChat](#) [#mededchat](#) T1 we are doing SP encounters online in the preclinicals by Google Meet. Students are encouraged to practice on family members and or friends available. We also shared self-examination videos to students [#meded](#)



Jake Prunuske, MD, MSPH [@jprunuske8 hours ago](#)

Having our m1s talk through an exam has been enlightening; describing exam techniques and expected findings or abnormal findings elucidates their cognitive and conceptual understanding better than watching them do the exam [#MedEdChat](#)



Jasminka Criley MD, FACP, FHM [@criley_md8 hours ago](#)

[@Alliance4ClinEd](#) T1 It should never end [#MedEdChat](#)



Gary Beck Dallaghan [@GLBDallaghan8 hours ago](#)

[@MedEdChat](#) T1 [@JeffreyAMcQueen](#) did an incredible job at UNC adapting the OSCEs into a virtual format. He's quite creative and the process ran extremely well [#MedEdChat](#)



Nina Browner, MD [@NinaBrowner8 hours ago](#)

[@MedEdChat](#) T1 [#mededchat](#) at some point only limited people were going to bedside to decrease the exposure, so a lot of teaching of neuro exam teaching of med student moved to one on one with resident or attending in the afternoon or during am pre-rounds



Jake Prunuske, MD, MSPH [@jprunuske8 hours ago](#)

RT [@criley_md](#): [@Alliance4ClinEd](#) T1 It should never end [#MedEdChat](#)



Jake Prunuske, MD, MSPH [@jprunuske8 hours ago](#)

Not end, probably, but evolution is possible. Integration of new technology, eg [#POCUS](#), wearables, etc... [#MedEdChat](#)



Alliance4ClinEd [@Alliance4ClinEd8 hours ago](#)

T2 Are any of your schools still excluding students from direct patient care? I heard of one school that removed students again earlier this month. [#MedEdChat](#)



Jasminka Criley MD, FACP, FHM [@criley_md8 hours ago](#)

[@jprunuske](#) Love that. [#MedEd](#) [#mededchat](#)



MedEd Chat (hosted by ACE) [@MedEdChat8 hours ago](#)

RT Sateesh Arja, M.B.B.S., MHPE, MSPH [@ArjaSateesh](#) Replying to [@MedEdChat](#) <https://t.co/FFIYMHg7fy> this website is useful. Please check it out and free for everyone. [#MedEdChat](#)



Jasminka Criley MD, FACP, FHM [@criley_md](#) 8 hours ago

[@jprunuske](#) Interesting perspective. Wonder what would that evolution look like? And what parts of physical exam would be integrated with [#technology](#) [#edtech](#) [#Wearables](#) [#mededchat](#) [#meded](#)



Nina Browner, MD [@NinaBrowner](#) 8 hours ago

[@RachelSalasMD](#) [@MedEdChat](#) The residents took it in stride only because they were excited to see the novelty and challenges of telemedicine. They also had to continue with their longitudinal clinic so any skills acquired were immediately implemented [#MedEdChat](#)



Security Testing [@sectest98](#) 9 hours ago

RT [@criley_md](#): [@jprunuske](#) Interesting perspective. Wonder what would that evolution look like? And what parts of physical exam would be in...



raid Aljelaify [الجليفي فهد راند](#) [@RaidAljelaify](#) 8 hours ago

RT [@MedEdChat](#): RT Sateesh Arja, M.B.B.S., MHPE, MSPH [@ArjaSateesh](#) Replying to [@MedEdChat](#) <https://t.co/FFIYMHg7fy> this website is useful. P...



Jake Prunuske, MD, MSPH [@jprunuske](#) 8 hours ago

Also - distinguish between applied practice and things taught early on to emphasize pathophys or anatomic principles. eg, JVP for assessing CVP - valuable re: pathophys, but in practice likely to listen to lungs, assess LE edema, and get an echo. [#MedEdChat](#)



Jake Prunuske, MD, MSPH [@jprunuske](#) 8 hours ago

RT [@criley_md](#): [@jprunuske](#) Interesting perspective. Wonder what would that evolution look like? And what parts of physical exam would be in...



Cyber Security News [@CyberSecurityN88](#) 8 hours ago

RT [@criley_md](#): [@jprunuske](#) Interesting perspective. Wonder what would that evolution look like? And what parts of physical exam would be in...



Jasminka Criley MD, FACP, FHM [@criley_md](#) 8 hours ago

RT [@criley_md](#): [@jprunuske](#) Interesting perspective. Wonder what would that evolution look like? And what parts of physical exam would be in...



MedEd Chat (hosted by ACE) [@MedEdChat](#) 8 hours ago

TOPIC 3: How can we effectively assess student examination skills, formatively or summatively, within current limitations? [#MedEdChat](#) [#meded](#)



Nina Browner, MD [@NinaBrowner](#) 8 hours ago

[@MedEdChat](#) T2 [#MedEdChat](#)

One on one teaching at the bedside on inpatient service

longer debrief after each telemedicine clinic to go over nuances of exam we saw

videos with examples of the neurological exam

MedEd Chat (hosted by ACE) @MedEdChat8 hours ago



RT @NinaBrowner: @MedEdChat T2 #MedEdChat One on one teaching at the bedside on inpatient service longer debrief after each telemedicin...

Jake Prunuske, MD, MSPH @jprunuske8 hours ago



The limitations are interesting, what is "essential" when does benefit outweigh risk? early clinical? clerkship? intern? resident? At what point do trainees engage in patient care? Real-time assessment at that point for sure! #MedEdChat

Gary Beck Dallaghan @GLBDallaghan8 hours ago



@jprunuske T3 Ultimately an assessment of skill must be done. Colleague of mine & I were discussing the FM residency program doing a skills assessment to ensure interns are ready to hit the ground running. It's a good idea, esp if remediation plans are in place to skill build #mededchat

Nina Browner, MD @NinaBrowner8 hours ago



@MedEdChat T2 #MedEdChat I think in clinical setting adaptation was #telehealth, so understanding what types of exams we can and cannot do/teach fully was very important: movement, sleep, some of the headache neurology exam parts were easy to teach virtually,

neuromuscular - not so much

Jake Prunuske, MD, MSPH @jprunuske8 hours ago



#Simulation is essential. Separating cognitive and technical aspects of evaluation may be helpful. Also #PPE and live sessions. #handwashing saves lives! #MedEdChat

Jake Prunuske, MD, MSPH @jprunuske8 hours ago



RT @GLBDallaghan: @jprunuske T3 Ultimately an assessment of skill must be done. Colleague of mine & I were discussing the FM residency program...

Sateesh Arja, M.B.B.S., MHPE, MSPH @ArjaSateesh8 hours ago



@MedEdChat #mededchat Clinical Skills to provide some evidence-based, consistent application and assessment of clinical skills on a regular basis. At least students verbalizing the maneuvers and SPs reporting back the findings. students coming up with differential and plan #meded

MedEd Chat (hosted by ACE) @MedEdChat8 hours ago



TOPIC 4: While there is light at the end of the tunnel, we may still face significant limitations to examination teaching for some time. What would an ideal virtual resource for examination skill teaching look like? #MedEdChat #meded

Jake Prunuske, MD, MSPH @jprunuske8 hours ago



Agree - diagnostic reasoning is critical for learners to develop. #MedEdChat



Sateesh Arja, M.B.B.S., MHPE, MSPH [@ArjaSateesh8 hours ago](#)
[@MedEdChat](#) [#mededchat](#) T2 we are conducting online SP-based encounters and online OSCEs (Google Meet) Stakeholders are quite happy with planning and implementation [#meded](#)



Alliance4ClinEd [@Alliance4ClinEd8 hours ago](#)
 T4 Perhaps it's not an ideal virtual only resource, but one that creates a complementary physical exam curriculum to teach in person and then learn how to apply via telemedicine [#mededchat](#)



Jake Prunuske, MD, MSPH [@jprunuske8 hours ago](#)
 This entire [#mededchat](#) emphasizes the need for [#publichealth](#), patient-centered [#communication](#), addressing [#SDOH](#), [#vaccines](#) and ending the [#pandemic...](#) so we can learn and be ready for the next one.



MedEd Chat (hosted by ACE) [@MedEdChat8 hours ago](#)
 We have about 5 more minutes left in our discussion. Please feel free to give some final thoughts [#meded](#) [#mededchat](#)



MedEd [@TelehealthBot8 hours ago](#)
 RT [@MedEdChat](#): We have about 5 more minutes left in our discussion. Please feel free to give some final thoughts [#meded](#) [#mededchat](#)



MedEd Chat (hosted by ACE) [@MedEdChat8 hours ago](#)
 That's a wrap...I will post the [#mededchat](#) transcript tomorrow morning on <https://t.co/mJivoKroXx>. Thanks everyone for participating! [#meded](#)



MedEd Chat (hosted by ACE) [@MedEdChat8 hours ago](#)
 Join us again next week at 9 pm Thursday. Don't forget to suggest topics by DM or email [#meded](#) [#mededchat](#)



Sateesh Arja, M.B.B.S., MHPE, MSPH [@ArjaSateesh8 hours ago](#)
[@MedEdChat](#) [#mededchat](#) T4 <https://t.co/fyXE1Wxasa>



Nina Browner, MD [@NinaBrowner8 hours ago](#)
[@MedEdChat](#) T4 [#MedEdChat](#) I noticed that in current very restrictive environments- telehealth, Zoom, one on one bedside teaching - having small tangible goals in learning exams work

best. goal 1: learn the motions of "how" to examine - literally where to place and
 stethoscope 1/



Oana Rosenthal [@AnatomyCurls8 hours ago](#)

How to help students remember CN X and XII deviations: CN 12 are the front wheels of a -
 front right tire blows and skids to the right CN 10 are the breaks of a - right break locks
 up and skids to the left [#anatomyed](#) [#anatomy](#) [#MedEdChat](#) [#cranialnerves](#) [#MedTwitter](#)

Nina Browner, MD [@NinaBrowner7](#) 7 hours ago



[@MedEdChat](#) T4 [#MedEdChat](#) Goal 2: tell me “what” you are expecting to see/ feel goal
3: tell me “why” you are examining this body parts as one system and “why” you are noting this
particular findings goal 4: tell me what would it mean if the exam finding differs in ... way 2/

Nina Browner, MD [@NinaBrowner7](#) 7 hours ago



[@MedEdChat](#) T4 [#MedEdChat](#) Then we will be able to fist give the students the feeling of
accomplishment of goals. We will make sure not o ku the motions of exam are understood but also
how the exam parts are connected to each other and then how it informs our clinical decision making
3/

MedEdBot [@MedEdBot7](#) 7 hours ago



RT [@MedEdChat](#): Join us again next week at 9 pm Thursday. Don't forget to suggest topics by DM
or email [#meded](#) [#mededchat](#)

Jorge Patino-Murillas [@jepatinom7](#) 7 hours ago



[@FurrStimming](#) [#MedEdChat](#) [@RachelSalasMD](#) [@DeweyLovesNeuro](#)

@mmteacherdoc [@mmteacherdoc6](#) 6 hours ago



RT [@myheroistrane](#): We added a telehealth osce to practice the critical telehealth triage decision: A)
go ahead and manage over telehealth...

AskAnatomist [@AskAnatomist4](#) 4 hours ago



RT [@AnatomyCurls](#): How to help students remember CN X and XII deviations: CN 12 are the front
wheels of a - front right tire blows and ...

Dr.Ahmad Alamro [@asamro18](#) minutes ago



[#MedEduCafe](#) [#mededchat](#) [#meded](#) for registration <https://t.co/Aekom5r0jS> <https://t.co/fhj5Xnl2nl>

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Highest Impressions

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 [@sectest9](#) 34.2K

 [@jprunuske](#) 26.0K

 [@asamro](#) 25.9K

 [@MedEdBot](#) 13.5K

 [@CyberSecurityN8](#) 11.1K

 [@GLBDallaghan](#) 8.4K

 [@NinaBrowner](#) 7.8K

 [@drmiketodorovic](#) 5.8K

The Numbers

314.809K Impressions

98 Tweets

43 Participants

12 Avg Tweets/Hour

2 Avg Tweets/Participant

Twitter data from the [#MedEdChat](#) hashtag from Thu, January 28th 2021, 9:05PM to Fri, January 29th 2021, 5:30AM (America/New_York) – Symplur.