

**Template for Curriculum Submission to STFM's National Clerkship Curriculum
Curricular Focus: Acute, Chronic, Preventive Care**

I. **Title of Curriculum:** Case Based Learning, Family Medicine Clerkship Didactic Session, Common Dermatoses

II. **Abstract**

This is a case based learning session on common dermatoses that can be used during the Family Medicine Clerkship (FMC). At the Florida International University Herbert Wertheim College of Medicine, the FMC is a required 8 week outpatient clinical experience consisting of approximately 20 students on each block. Students are in an outpatient clinic Monday through Thursday and have didactics on campus Fridays. This didactic session is led by one faculty member and may take from 1-2 hours (2 hours earlier in the third year and 1 hour in the later rotations). Contents of this posting include a facilitator guide, the core case excerpt from our syllabus, and our student participation rubric. The goal of this didactic is to increase student understanding and allow students to apply dermatology knowledge. This didactic takes the student through a case in which a 29 year old female comes to the clinic with a new skin lesion on her leg. The students are asked to develop differential diagnoses, obtain a hypothesis-driven history, define dermatology terms, use dermatology terms to describe a skin lesion, and recommend treatment options.

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III. Has this Curriculum been published elsewhere?

Yes	
No	X

IV. Curricular Focus

Acute	x
Chronic	X
Preventive	
Other	

V. National Clerkship Curriculum Objectives addressed

The following NCC objectives are addressed:

At the end of the clerkship, for each common symptom, students should be able to:

- Differentiate among common etiologies based on the presenting symptom.
- Recognize “don’t miss” conditions that may present with a particular symptom.
- Elicit a focused history and perform a focused physical examination.
- Describe the initial management of common and dangerous diagnoses that present with a particular symptom.

Common skin lesions

- Describe a skin lesion using appropriate medical terminology.

VI. Structure of clerkship in which curriculum has been used

At the Florida International University Herbert Wertheim College of Medicine, the FMC is a required third year rotation. Approximately 20 students are in the FMC simultaneously. Students rotate in outpatient clinics during the week and participate in didactic sessions Fridays on campus. Didactic sessions cover a wide variety of topics, from prevention to chronic illnesses to test questions to student rounds. The outpatient clinical experience is a varied family medicine rotation (including private care, uninsured care, and care for patients with HIV) with students spending all 8 weeks at one location. Some students rotate with full time faculty working in local clinics and many students rotate with community preceptors.

VII. Program Content and Educational Methods

Experiential Learning	
Small Group Sessions	X
Simulation/Standardized Patients	
Skill Development Sessions	
Case-Based Learning	X
Self-Study	
Reflection	
Products and Projects	

The goal of this didactic is to increase student understanding and allow students to apply dermatology knowledge. This didactic takes the student through a case in which a 29 year old female comes to the clinic with a new skin lesion on her leg. The students are asked to develop differential diagnoses, obtain a hypothesis-driven history, define dermatology terms, use dermatology terms to describe a skin lesion, and recommend treatment options.

The room must be reserved ahead of time. We require a room with a white board. Supplies required include the room with white board, dry erase markers, eraser, and a ruler. Ahead of time, the coordinator must make color copies of the skin lesion ahead of time and we also give a ruler for the student to use to give an accurate description of the lesion.

VIII. Assessment Strategies to achieve outcomes

The overall assessment strategy for this assessment includes student participation in the session and shelf testing. Students who do not participate in the didactic sessions may lose a clerkship director point.

IX. Lessons Learned

Description of lessons learned, barriers and facilitators to curricular implementation, description of program evaluations completed or planned, and description of scholarly products produced or planned as a result of the curriculum.

- It can be challenging to engage a group of 20 students at one time. Additionally, knowing all students is also challenging. We have found that name plates are very helpful, as using students' names helps to engage students. We also use a photo page, listing all student names, their clinical assignment, and their photo.
- We have considered using a standardized patient for the case. Alternately, the faculty facilitator acts as the patient when students obtain the patient's history.
- Giving time to students during the session to write their own list of differentials and to describe the lesion helps to engage those students who may not speak up during the small group session.
- At the beginning of the year, this session takes about 2 hours, whereas at the end of the year, the session takes about 1.25 hours.

X. Explanation of Appendices

Clearly describe for someone who is not familiar with your curriculum how each of your appendices should be used. Label the appendices A, B, C, etc. In the description refer to these labels as you describe each Appendix. Examples of useful appendices include copies of evaluation and instructional tools used in the curriculum.

- A. Facilitator Guide: Case Based Learning, FM Clerkship Didactic Session, Common Dermatoses

The facilitator guide is a guidebook for the faculty to lead the session. In this guide, we include our core case information for the dermatology didactic session, so that the faculty has respective section of the syllabus, in case this may be helpful to the faculty. We distribute a chart from Access Medicine on the treatment of psoriasis near the end of the session. We are not placing this here due to copyright issues. Our College of Medicine does have access to this tool on our website, thus all students have access and we avoid copyright issues.

B. Core Case: Common Skin Disorders

This is the core case excerpt from the syllabus.

C. Participation Rubric

This is the rubric used to assess student participation.

XI. References

Please follow the format outlined in the uniform requirements for manuscripts submitted to biomedical journals at www.icmje.org

Lui H. Plaque Psoriasis. [Medscape](http://www.medscape.com) [Internet]. [Updated: 2014 Apr 28; cited 2014 June 13]. Available from: <http://emedicine.medscape.com/article/1108072-overview#aw2aab6b6>
 (This is the website that has the photo of a plaque that we use during this session)

Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, Wolff K. Fitzpatrick’s Dermatology in General Medicine. McGraw-Hill; 2012.

Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL, Loscalzo J, editors. 18th edition of Harrison’s Principles of Internal Medicine. McGraw-Hill; 2012.

Esherick JS, Clark DS, Slater ED. Current Practice Guidelines in Primary Care 2014. McGraw-Hill; 2014.

(This source has an excellent chart of psoriasis treatment that we use at the end of the case; All student’s have access online through our College of Medicine’s Access Medicine).

Appendix A.

Facilitator Guide: Case Based Learning, FM Clerkship Didactic Session, Common Dermatoses

Beforehand, draw this chart on the board at the end of the table, so less students’ backs are to you and write basic information on the wall:

VINDICATE	Diagnoses	Pathophysiology if applicable	Relevant History for Category	Relevant Physical for Category
Vascular				
Infectious				
Neoplasm				
Degenerative				
Ingestion/Drugs				
Congenital				

Autoimmune				
Trauma				
Endocrine/Metabolic				

Basic information: 29 year old female comes to the clinic with a new skin lesion on her leg.

Check in: Ask “how’s the week been?”

After checking in, “Please go ahead and put phones or noise-making devices in the quiet mode at this time. I will do the same.” (put your phone on vibrate at this time) Give the students just this basic information and let them know that you are using the diagram to help to teach them to use a framework for how to approach a skin lesion:

29 year old female comes to the clinic with a new skin lesion on her leg.

Ask for differential diagnoses and probe to help them come up with more. Fill in the chart, going around and calling on students to help those more timid students be involved. Students appreciate faculty going to the board, so faculty can work on filling in the diagram.

Ask the students “What questions do you ask to elicit a hypothesis-driven history?” and only give them that history they ask for. Ask a student to scribe at this point. Rotate the scribe position throughout the rest of the case. If you feel comfortable, act out the role of the patient and have students actually ask the questions they wish to ask.

Location: L knee; not on face or back

Timing: 1 week

No change in shape or size or color

No pain

+ itching

No bleeding

No hx injury

No hx dm

No hx swelling of area of lesion

No discharge from the lesion

No history of bites

6 sunburns in her life and uses sunblock when she goes out all day

Ass’d sx: gradual intermittent knee and wrist and finger swelling with some pain occurring every 2-3 months for about the last year; worse in the morning for a while, can’t say how long, but maybe 30 minutes or so.

No fever

No hx hiv, weight loss

No history of rhinorrhea, postnasal drip or sneezing

Sick contacts: child at day care with chicken pox

No recent travel

Born in the US

Vaccines are up to date, including chicken pox, which she has never had

Allergies: NKDA

Meds: using naproxen (last used 1 month ago), albuterol (last used 2 months ago), multivitamin (daily)

FHx: sister has psoriasis

Soc Hx: works at day care center, + tob – 1 ½ ppd x 15 years, no alcohol or illicit drug use, enjoys jogging at the park near her home with her dog, Otis, a chocolate lab
Sexual Hx: has sex with one person at a time, men only, current partner x 2 years, 9 lifetime partners, currently using condoms for birth control. No hx of STI's. never has had a pap smear or pelvic exam. No hx of pregnancy.
PMH: asthma, last used albuterol 2 months ago
PSH: appendectomy age 16

Ask the students “What diagnoses can be crossed off of the list?”

Ask “Frame the case to this point – give me one sentence with the relevant positives that must be explained with a diagnosis.” For example: This is a 29 yo female with a skin lesion and arthralgias

Ask “What is her current problem list?”

1. Skin lesion
2. Arthralgias
3. Tobacco use
4. Asthma

Ask the students to define the following terms: plaque, patch, macule, papule, wheal, vesicle, bulla, nodule, pustule

Plaque: raised lesion, diameter > 0.5 cm (Fitzpatrick's Dermatology in General Medicine)

Patch: flat area of skin or mucous membranes, different color, diameter > 2 cm (Harrison's); >0.5 cm (Fitzpatrick's Dermatology in General Medicine)

Macule: flat area of skin or mucous membranes, different color, diameter < 2 cm (Harrison's); <0.5 cm (Fitzpatrick's Dermatology in General Medicine)

Papule: solid, elevated lesion < 0.5 cm (Fitzpatrick's Dermatology in General Medicine)

Wheal: raised, erythematous, edematous papule or plaque, usually representing short-lived vasodilation and vasopermeability (Harrison's); aka hives or urticarial (Fitzpatrick's Dermatology in General Medicine)

Vesicle: fluid-filled cavity or elevation, diameter < 0.5 cm (Harrison's)

Bulla: fluid-filled cavity or elevation, diameter > 0.5 cm (Harrison's)

Nodule: solid, round or ellipsoidal, palpable lesion, 0.5-5 cm (Harrison's); >0.5 cm (Fitzpatrick's Dermatology in General Medicine)

Pustule: circumscribed, raised cavity in the epidermis or infundibulum containing pus

Resources above accessed 11/2/12 on www.accessmedicine.com

Ask the students: “What PE would you like to confirm or refute your hypothesis? Let's do this systematically as if you are seeing the patient.”

Just give them what they ask for on PE:

General – healthy appearing female who appears to be her stated age, NAD

Vitals- nl

Extremities: no edema, no effusions, no erythema, full ROM in hands, fingers, elbows, shoulders, knees, ankles, hips.

Nails – pitting

Lesion:

If the students don't bring it up, ask "What is Auspitz Sign?" For this patient, it is positive (when the lesion is scraped, it has pinpoint bleeding).

Give out the page with the lesion on it to the students.

Note: You may use any photo of psoriasis. We color print the lesion at the following website and give rulers to the students for measuring the lesion. Also, on the printed photo, I place an arrow and write "knee is here" so that the students are oriented as to the location of the lesion. <http://emedicine.medscape.com/article/1108072-overview#aw2aab6b6>

Ask the students to "Individually write a description of the lesion above using the appropriate dermatologic terminology." Give them a few moments. Then, ask each person what they wrote. Go to the board and write "ABCDE" and go through the mnemonic with the students in describing the lesion and come up with a best description. 14 x 10 cm asymmetrical plaque with erythema and scaling inferior to the knee, near the tibial tuberosity, with distinct borders with 2 nearby 2 cm scaly round symmetric plaques with distinct borders

Ask the students "Frame the case again - give me one sentence with the relevant positives that must be explained with a diagnosis."

"Has the problem list changed?"

"What is your most likely diagnosis?"

"Why does this not look like a malignancy? What is the ABCDE tool and how can it be used in this case?"

After the students have a diagnosis, ask "What is the next step in treatment?"

Discuss as time allows

CURRENT Practice Guidelines in Primary Care 2012 (from AccessMedicine, Current Practice Guidelines in Primary Care) has an excellent chart on treatment options for psoriasis

Give out the treatment pages and the Core Case from the syllabus.

"The core case is on the back page. Which objectives did we cover?"

Excerpt from the syllabus:

Core Case: Common Skin Diseases

Description:

- Students will be expected to participate in the care of at least 1 patient with a common skin disease, such as atopic dermatitis, contact dermatitis, acne or tinea pedis.
- An alternative to seeing a patient will be completion of a web-based simulation case: fmCase #16
- Reading: Sloane, PD, et al., Essential of Family Medicine, Chapter 39, pg. 467-476

Students should be able to:

- Diagnose common and important lesions, including acne, atopic dermatitis, psoriasis, contact dermatitis, candidiasis, cellulitis, melanoma and non-melanoma skin cancer. (Harrison's Online, Chapter 52)
- Demonstrate knowledge of basic pharmacology and administration of medications commonly used for treatment of skin diseases, particularly steroids, topical and oral retinoids, topical and oral antimicrobial agents and emollients. (Harrison's Online, Chapter 52)
- Identify at least 5 risk factors for melanoma and non-melanoma skin cancer (total body nevi, family or personal history, dysplastic nevi, light skin/hair/eye color, poor tanning ability, freckling, UV exposure/sunburns/tanning booths, CDKN2A mutation, MC1R variants). (Harrison's Online, Chapter 87)
- Define the following dermatologic terms used in describing morphology of skin lesions and eruptions: plaque, patch, macule, papule, wheal, vesicle, bulla, nodule, pustule.
- Accurately describe skin lesions using terms that describe the morphology, shape and pattern of skin lesions.
- Apply the ABCDE tool in the evaluation of hyperpigmented lesions.

Appendix B

Excerpt from the syllabus:

Core Case: Common Skin Diseases

Description:

- Students will be expected to participate in the care of at least 1 patient with a common skin disease, such as atopic dermatitis, contact dermatitis, acne or tinea pedis.
- An alternative to seeing a patient will be completion of a web-based simulation case: fmCase #16
- Reading: Sloane, PD, et al., Essential of Family Medicine, Chapter 39, pg. 467-476

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- Demonstrate knowledge of basic pharmacology and administration of medications commonly used for treatment of skin diseases, particularly steroids, topical and oral retinoids, topical and oral antimicrobial agents and emollients. (Harrison's Online, Chapter 52)

- Identify at least 5 risk factors for melanoma and non-melanoma skin cancer (total body nevi, family or personal history, dysplastic nevi, light skin/hair/eye color, poor tanning ability, freckling, UV exposure/sunburns/tanning booths, CDKN2A mutation, MC1R variants). (Harrison's Online, Chapter 87)
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- Accurately describe skin lesions using terms that describe the morphology, shape and pattern of skin lesions.
- Apply the ABCDE tool in the evaluation of hyperpigmented lesions.

Appendix C

Family Medicine Clerkship Didactics Participation Rubric (2014-2015)

Student's Name: _____

Faculty: _____

Date: _____

Didactic Session: Please
 Circle
 Geriatric
 Derm
 ADA/DASH Diet
 Prevention & Health
 Maintenance
 Psychiatry
 Student Rounds
 Student Teaching

0 Points	1 Point	2 Points
Student not an active participant in group, student does not engage in group process or was somewhat engaged. Student is disrespectful, rude, dismissive, and significantly late to activity. Student does not remain on task or inhibits other members of group to remain on task (looking at phone, texting, etc)	Student has appropriate level of participation. Acceptable. Remains on task, engages in group process.	Excellent and engaged student. Asks questions, works well with peers. Remains on tasks. Demonstrates great team leadership. Facilitates group functioning.