

Supplementary Data

A: Foundations I Course Goals and Objectives

Foundations I (F1)

- **Description:** Longitudinal flipped classroom course targeting post-graduate year (PGY) 1 learners that provides a systems-based review of fundamental knowledge and can't miss diagnoses within the The Model of the Clinical Practice of Emergency Medicine (EM Model). Learning Pathways provide content for asynchronous review prior to 30 classroom meetings (50 minutes) where 3 small group oral boards style cases are discussed with focused teaching points. Coordinated assessments after each meeting reinforce weekly content and aid resident assessment.
- **F1 Goals**
 - To create free, open access, high-quality EM PGY-1 resident education, providing fundamental core content that is aligned with the EM model.
 - Incorporate innovative, learner-centric strategies into all curricula including flipped classroom and vetted multi-modal asynchronous resources.
 - Organize coordinated paired assessments to identify learner knowledge gaps and demonstrate progression of learning
 - Provide educator support to optimize program implementation
- **F1 Objectives**

Upon completion of the Foundations I Course, learners will be able to:

 - Identify clinical features, diagnostic strategy and initial management of specific disease processes within the EM Model
 - Practice self-directed study for at least 1 hour per Foundations I Course unit using vetted resources from Foundations Learning Pathways
 - Demonstrate diagnostic and medical decision-making skills for selected high-yield EM disease processes
 - Compare medical decision-making approaches for selected high-yield disease processes with that of peers and the standard of care
 - Apply diagnostic and medical decision-making skills learned during didactic meetings to the clinical environment.

B: Foundations II Course Goals and Objectives

Foundations II

- **Description:** Advanced curriculum targeting post-graduate year (PGY) 2 learners that mirrors Foundations I but includes more complex diagnoses and critical care management within The Model of the Clinical Practice of Emergency Medicine (EM Model). Learning Pathways provide content for asynchronous review prior to 30 classroom meetings (50 minutes) where 2 small group oral boards style cases are discussed with focused teaching points. Coordinated assessments after each meeting reinforce weekly content and aid resident assessment
- **F2 Goals**
 - To create free, open access, high-quality EM PGY-2 resident education, providing advanced content that is aligned with the EM model.
 - Incorporate innovative, learner-centric strategies into all curricula including flipped classroom and vetted multi-modal asynchronous resources.
 - Organize coordinated paired assessments to identify learner knowledge gaps and demonstrate progression of learning
 - Provide educator support to optimize program implementation
- **F2 Objectives**

Upon completion of the Foundations II Course, learners will be able to:

 - Identify clinical features, diagnostic strategy and initial management of advanced disease processes within the EM Model
 - Practice self-directed study for at least 1 hour per Foundations II Course unit using vetted resources from Foundations Learning Pathways
 - Demonstrate diagnostic and medical decision-making skills for selected high-yield EM disease processes
 - Compare medical decision-making approaches for selected high-yield disease processes with that of peers and the standard of care
 - Apply diagnostic and medical decision-making skills learned during didactic meetings to the clinical environment.

Moore KG, Ketterer A, Wheaton N, et al. Development, implementation, and evaluation of an open access, level-specific, core content curriculum for emergency medicine residents. *J Grad Med Educ.* 2021;13(5):699–710. <http://dx.doi.org/10.4300/JGME-D-21-00067.1>

C: Foundations of Emergency Medicine Implementation Resources

Summary of Implementation Resources for Site Leaders and Learners

Site Director Foundations Guide	covers essential components of year-long planning and implementation
Lead Instructor Foundations Guide	covers essential components of weekly planning and running Foundations meetings
Course Schedule Templates	tool to organize course units and manage course small group instructors
Small Group Instructor Guide	reviews expectations and best practices to facilitate small group case-based learning
Small Group Organizers	tool to plan for small groups and assign learner roles for case collaboration
Tracking Google Form Example and Instructions	tracks resident compliance and attendance
Instructor Flag Google Form Example and Instructions	tool for instructors to notify leadership of learners in need
Learner Guidelines for Foundations Cases	reviews expectations and best practices for learners to strategically navigate oral boards style cases and reflect true clinical practice
Example Foundations Cases	used for reference by leaders and learners
Learner Case Note Sheets	used for reference or documentation during Foundations cases

Moore KG, Ketterer A, Wheaton N, et al. Development, implementation, and evaluation of an open access, level-specific, core content curriculum for emergency medicine residents. *J Grad Med Educ.* 2021;13(5):699–710. <http://dx.doi.org/10.4300/JGME-D-21-00067.1>

D. Foundations of Emergency Medicine 2018-2019 Annual Survey Instrument

Stanford Medicine Qualtrics

Default Question Block

This survey is designed for quality improvement and research. Information gathered here will be used to guide the ongoing development and refinement of Foundations of Emergency Medicine content. We hope to disseminate our findings through publication. Your completion of this survey will serve as your consent to have your responses included in this research study. Thank you in advance for your thoughtful and honest feedback.

Leader Survey Questions

Site Name (select one)

How many total learners at your site have participated in Foundations this year (include resident learners, resident instructors, NP/PAs)? (text box)

Which Foundations content have you used and for which learner types? How many learners at your site have participated in each Foundations course this year (include resident instructors)?

	PGY1	PGY2	PGY3	PGY4	PA/NP	Medical students	Total#
Foundations 1	0	0	0	0	0	0	0
Foundations 2	0	0	0	0	0	0	0
Foundations 3	0	0	0	0	0	0	0
EKG 1	0	0	0	0	0	0	0
EKG 2	0	0	0	0	0	0	0
Frameworks	0	0	0	0	0	0	0
In-training exam review	0	0	0	0	0	0	0
Imaging	0	0	0	0	0	0	0
Resident instructors	0	0	0	0	0	0	0

Moore KG, Ketterer A, Wheaton N, et al. Development, implementation, and evaluation of an open access, level-specific, core content curriculum for emergency medicine residents. *J Grad Med Educ.* 2021;13(5):699–710. <http://dx.doi.org/10.4300/JGME-D-21-00067.1>

Please rate your satisfaction with Foundations of Emergency Medicine. (select one)

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Extremely dissatisfied

What are the barriers to using additional Foundations courses at your site? (select all that apply)

- Limited time in conference schedule
- Available faculty oversight
- Faculty resistance
- Resident resistance
- Quality of content
- Awareness of available content
- I don't know
- Other (text box)

How can we make it easier to implement Foundations at your site? (text box)

How many hours did you spend each week COORDINATING meetings for Foundations core courses (F1, F2, F3)? *Coordinating refers to planning, organizing, and/or communicating with learners and instructors prior to each meeting.

(sliding scale, 0-5 hours, N/A option)

Foundations I (F1) small group cases have helped our residency leadership identify learners who might benefit from additional support.

- Agree (please describe)
- Disagree
- N/A

What do you like most about Foundations? (text box, optional)

How can we improve Foundations? (text box, optional)

Learner Survey Questions

Site Name (select one)

What best describes you? (select one)

*PGY=postgraduate year, PA=physician Assistant, NP=nurse practitioner

- PGY1
- PGY2
- PGY3
- PGY4
- PA/NP

Please rate your satisfaction with Foundations of Emergency Medicine. (select one)

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Extremely dissatisfied

On average, how many hours do you spend on Learning Pathway (independent study) assignments prior to Foundations I or II meetings?

(sliding scale, 0-5 hours per week, N/A option)

On average, what percentage of your chosen Learning Pathway (independent study) assignments do you complete prior to Foundations I or II meetings?

(sliding scale, 0-100%, N/A option)

What do you like most about Foundations? (text box, optional)

How can we improve Foundations? (text box, optional)