Case Western Reserve University – University Program Block 1:

Action Plan <u>2024-2025</u>

Phase 1: Foundations of Medicine and Health Phase

Year 1 (July)	**Becoming a Doctor** Block 1 (5 Weeks) Population Health, Epidemiology, Biostatistics, Bioethics, Health Disparities *Field Experiences* *Assessment Week*	Anatomy Bootcamp	**The Human Blueprint** Block 2 (11 Weeks) Endocrinology, Reproduction, Development, Genetics, Molecular Biology, Cancer Biology *Assessment Week*	**Food to Fuel** Block 3 (10 Weeks) Gastrointestinal, Nutrition, Biochemistry *Assessment Week*	**Homeostasis** (May) Block 4 (14 Weeks) Cardiovascular, Pulmonary, Renal, Cell Physiology, and Pharmacology *Clinical Immersion Week* *Assessment Week*

Bioethics, Diversity in the Curriculum, Pharmacology, Professionalism
Structure (Anatomy, Radiology, and Histopathology); Research and Scholarship
Foundations of Clinical Medicine (Doctoring Seminars, Communications, Physical Diagnosis, Procedures, Patient Based Experiences)

Year 2	Research (Parts I, II, III) (12 Weeks)	(August) **Host Defense & Response** Block 5 (14 Weeks) Immunology, Microbiology, Hematology, Oncology, Infectious Diseases, Rheumatology, Musculoskeletal, Dermatology *Assessment Week*	(March) **Cognition, Sensation & Movement** Block 6 (13 Weeks) Neurology, Mind *Assessment Week*	**Step 1 Board Study** (6 weeks)

Bioethics, Diversity in the Curriculum, Pharmacology, Professionalism
Structure (Anatomy, Radiology, and Histopathology)
Foundations of Clinical Medicine; MD Research & Scholarship Thesis

1. <u>Course Description</u>:
Block 1, Becoming a Doctor, provides an understanding of population health and the role of the physician in society. At CWRU SOM, the first five weeks of the curriculum focus on how physicians act as advocates for patients in health care systems; how social and environmental factors impact health and the value and importance of population health. Students are introduced to the city of Cleveland as their first patient and provided with historical and social context for the epidemiological distribution of disease as well as examples of how community organizations contribute significantly to community health. Through a variety of experiential and longitudinal learning experiences, students are introduced to six core disciplines:

Health Systems Science (HSS), Population Health, Health Drivers, Epidemiology and Biostatistics, Bioethics, and Professional Identity Formation (PIF).

The block initiates students' life-long learning in medicine, developing competency in Research & Scholarship, Reflective Practice, Teamwork and Interprofessional Collaboration, Patient Care, Knowledge for Practice, Professionalism, Interpersonal & Communication Skills, Personal and Professional Development and Systems-Based Practice. During Block 1 students are also introduced to content from longitudinal Blocks 7 (Structure) and 8 (Foundations of Clinical Medicine). These sessions are addressed in separate block action reports.

2. <u>Block Leader(s)</u>:

Block Co-Leader: Karen B. Mulloy, DO, MSCH
Block Co-Leader: Kimberly Gifford, MD

Block Co-Leader: Vikas Gampa, MD, MPH

3. Design Team:

<u>Section Leaders</u>
        Douglas Einstadter, MD, MPH – Epidemiology/Biostatistics
        Johnie Rose, MD, PhD– Health Systems Science
        Nicole M. Deming, JD, MA – Bioethics
        Heidi Guillett, MD, MPH – Population Health

<u>Design Team Members</u>
Jacqueline Curtis, PhD
Prakash Ganesh, MD, MPH
Kristine Kang, MD, MPH
Melissa Klein, MD
George Matar, MD, MPH
Anastasia Rowland-Seymour, MD
Phillip Rowland-Seymour, MA
Zenobia Tayeb, MD, MPH
Pauline Terebuh, MD, MPH

Course Manager: Deidre Gruning
Field Experience Manager: Kurtis Hoffman
IQ Manager: Celinda Miller
<u>Course Objective:</u> Please fill in the table below for your Course Objectives.

4. **Course Objectives**

Competency & Definition	Educational Program Objective (EPO)	Course Objective Block 1	Recommended Changes
Systems-based Practice Demonstrates an understanding of and responsiveness to health care systems, as well as the ability to call effectively on resources to provide high value care	Applies knowledge of health care systems to patient care discussions.	**Health Systems Science:** Link domains of Health Systems Science in health care structure, policy, value and economics, health systems improvement, and health informatics	No recommended changes
	Demonstrates awareness of context of care, patients' values, health care system, and environment in clinical care.		
	Applies principles of quality improvement and safety to patient care.		
Knowledge for Practice Demonstrates knowledge of established and evolving biomedical,	Demonstrates ability to apply knowledge base to clinical and research questions	**Population Health**: Illustrate effective means to measure, understand, and	No recommended changes

Competency & Definition	Educational Program Objective (EPO)	Course Objective	Recommended Changes
clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient care	Demonstrates appropriate level of clinical, basic, and health systems science knowledge to be an effective starting resident physician.	affect the health of populations	
Knowledge for Practice Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient Care	Demonstrates ability to apply knowledge base to clinical and research questions	**Health Determinants:** Apply a framework for social, behavioral, structural, and environmental determinants of health to patient care and population health	Recommended word change better reflects recent research **Health Drivers:** Apply a framework for social, behavioral, structural, and environmental drivers of health to patient care and population health
	Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician		
Professionalism Demonstrates commitment to high standards of ethical, respectful, compassionate, reliable and responsible behaviors in all settings, and recognizes and addresses lapses in behavior	Commonly demonstrates compassion, respect, honesty and ethical practices	**Bioethics:** Utilize a framework for implementation of bioethical principles in the practice of public health, population health, health systems science and clinical medicine	No recommended changes
	Meets obligations in a reliable and timely manner		
	Recognizes and addresses lapses in behavior		

Competency & Definition	Educational Program Objective (EPO)	Course Objective	Recommended Changes
Research & Scholarship Demonstrates knowledge and skills required to interpret, critically evaluate, and conduct research	Analyses and effectively critiques a broad range of research papers	**Epidemiology and Biostatistics:** Utilize principles of epidemiology and biostatistics to interpret scientific literature and clinical cases.	No recommended changes
Personal and Professional Development Demonstrates the qualities required to sustain lifelong personal and professional growth	Critically reflects on personal values, priorities, and limitations to develop strategies that promote personal and professional growth	**Professional Identity Formation:** Explore professional values and career paths to create a foundation for professional identity development.	No recommended changes
	Identifies challenges between personal and professional responsibilities and develops strategies to address them		
	Recognizes when personal views and values differ from those of patients, colleagues, and other care givers and reflects on how these can affect patient care and research		
Interpersonal and Communication Skills Demonstrates effective listening, written and oral communication skills with patients, peers, faculty and other health care professionals in the classroom, research and patient care settings	Uses effective written and oral communication in clinical, research, and classroom settings	Understand and demonstrate effective communication skills for learning and clinical practice environments.	None
	Demonstrates effective communication with patients using a patient-centered approach		
	Effectively communicates knowledge as well as uncertainties.		

Common to all Blocks:			
Knowledge for Practice Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient Care	Demonstrates ability to apply knowledge base to clinical and research questions	Recognize and analyze ethical problems in clinical medicine and biomedical research using the principles of autonomy, beneficence, nonmaleficence and justice.	None
	Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician		
Teamwork & Interprofessional Collaboration Demonstrates knowledge and skills to promote effective teamwork and collaboration with health care professionals across a variety of settings	Performs effectively as a member of a team	Develop and practice the knowledge and skills that promote effective teamwork across a variety of settings.	None
Professionalism Demonstrates commitment to high standards of ethical, respectful, compassionate, reliable and responsible behaviors in all settings, and recognizes and addresses lapses in behavior	Commonly demonstrates compassion, respect, honesty and ethical practices	Understand and practice the behaviors of an ethical, respectful, compassionate, reliable, and responsible physician.	None
	Meets obligations in a reliable and timely manner		
	Recognizes and addresses lapses in behavior		
Interpersonal & Communication Skills Demonstrates effective listening, written and oral communication skills with patients, peers, faculty and other health care professionals in the classroom, research and patient care settings	Uses effective written and oral communication in clinical, research, and classroom settings	Understand and demonstrate effective communication skills for learning and clinical practice environments.	None

Competency & Definition	Educational Program Objective (EPO)	Course Objective	Recommended Changes
	Demonstrates effective communication with patients using a patient-centered approach		
	Effectively communicates knowledge as well as uncertainties		
Research & Scholarship Demonstrates knowledge and skills required to interpret, critically evaluate, and conduct research	Analyses and effectively critiques a broad range of research papers	Analyze, critique and present research studies from the primary literature.	None
	Demonstrates ability to generate a research hypothesis and formulate questions to test the hypothesis Demonstrates ability to initiate, complete and explain his/her research		

5. In the grid below, please list the specific course changes you made this year based on last year's report.

What changes were made 2024-2025?	How did the changes work?	What would you like to change next year 2025-2026?
All class during the first week of Block 1 and lectures in week 2 that introduced major goals and concepts were made mandatory attendance. More interactive sessions added and were made mandatory.	Improved participation by the students during Q & A sessions and with discussion with the lecturers.	New interactive sessions would be made mandatory.
Integration of the 5 disciplines (goals) of the Block with the development of an interactive task and group exercise (My Population)	Helped students to better comprehend complex concepts and to see the connection between the disciplines of the Block	Continue to refine the interactive task and group session to better link the goals.
Expanded PIF introduction in orientation and linked PIF with My Population exercise in Block	Helped students to start applying course goals to real-world examples that were of interest to them.	Continue to expand on the My Population exercise.

Bioethics ALT created to have student apply bioethics concepts to specific problems.	Well received with students wanting more sessions that have more complex bioethical problems.	Continue to work with bioethics leader to create more interactive sessions.
Reviewed all reading materials to consider other multi-media resources for preparation for all sessions and to be sure all pre-readings were targeted for the session.	Readings were replaced with pod-casts and videos. Feedback from students was positive. Better preparation for some sessions than in previous years.	Continue to evaluate readings and to consider other multi-media resources.
Evaluated all large group session Learning Objectives (LOs) to ensure the alignment with course objectives and desired outcome of the content covered.	Improvement in alignment of the course goals with 96% of the students stating that they agree or strongly agree that the block met its stated goals.	Continue to evaluate all large group sessions and to make more interactive or have interactive components.
Worked with orientation group to improve TBL training.	The students were better prepared to participate actively in the TBL.	Continue to work with the orientation group on preparing students for specific learning sessions.
Assigned roles for each student several days before pandemic exercise.	Students were able to read their specific role and to be able to participate more fully.	Continue to assign roles to the students several days before the exercise.
Added clinical scenarios during the pandemic for the primary care providers.	Students responded positively.	Update the roles and the scenarios for the pandemic.
Climate change TBL updated and was changed to take place in NE Ohio.	The students were able to do more specific research on risks of climate change for their patient population and design mitigation and adaptation strategies.	The conclusion on the climate change was improved from previous year but will continue to make the issues on adaptation and mitigation more interactive.

6. What additional changes do you anticipate making to the Block in the next academic year (lectures, TBL, IQ cases, other)?

Changes anticipated for next academic year	Reason for changes (evidence/feedback)
Explore concepts of critical dialog and other models to enhance perspective taking in TBL and other course activities.	When our design team reflected on feedback about perspective taking activities, some wondered if our approaches (such as in TBL – group answers and consensus answers) created a tendency for dominant perspective to try to persuade others rather than exploring and surfacing alternative perspectives.

Develop more guidance for TBL discussions/additional questions for TBL sessions, especially for Large-group discussion period to ensure the conversation is productive and focused on creating a learning-oriented sessions.	In student feedback, it was noted that some of the large-group discussion periods were repetitive and not productive, and sometimes not conducive to learning.
Better integrate My Population activities into class and other longitudinal activities beyond block 1.	Some students were not able to see the connections between class material and the My Population activities so saw it more as busy work. Many students wanted to work on it beyond block 1.
Provide specific office hours with course directors	Students were encouraged to use the discussion board for questions, but other blocks found that in-person and/or Zoom-based office hours were important in meeting some students' learning needs.

7. What successful, innovative components of your block that are best practices that you would like to share with the other Blocks?

We continued to have presenters introduce themselves and spend a few minutes describing their journey as they developed their professional identity and practice. This provided students a wide variety of perspectives and was introduced to them as a way for them to start their professional identity journey. Some students couldn't relate to the profession journey of those in Becoming a Doctor, other Blocks may consider including this strategy or others to encourage students to continue to explore and develop their professional identity in ways that link with their block. Continue to work with Block 8 on incorporating more PIF.

We also are working on strategies for students to keep working on My Population through the other blocks. We do not yet have best practices fully defined but are happy to share some approaches and would welcome other ideas about how to continue to help students develop their professional identity in each course.

8. Describe how faculty teaching quality was reviewed for your block. What faculty development opportunity was offered in response to student feedback?

Co-leaders attended all lectures to help in the evaluation of content. Content-specific Block 1 evaluations are reviewed by the Block 1 Design Team annually. Added review of large group LOs will be conducted this year. Individual faculty evaluations are reviewed by the Block 1 Leaders who directly address specific concerns with individual faculty when necessary. We provide annual Team Based Learning training to Block 1 faculty and facilitators. Individual IQ facilitator training and feedback is handled separately by the IQ evaluation team. We will work with the team to provide improved training of EBIQ for all new IQ facilitators. All Block 1 faculty are encouraged to participate in the Center for Advancement of Medical Learning professional development workshops.

Block 1 Becoming a Doctor Highlighted Faculty Responses to Student Feedback	
Student Feedback	**Action Items**
Multiple issues with Elentra	Work with the Elentra team and course manager to provide introduction during orientation, a guide to using Elentra, ensuring match between lecture LOs and what is present on Elentra, generate discipline headings on Elentra.
There was a lot of variability of experiences in TBL/ALT – some students loved it and others thought sessions were too long and not conducive to further learning.	We will continue to work with the TBL that is presented during orientation to discuss expectations and goals of learning during TBLs. And as per above, we will add additional guiding questions to make student discussions more robust.
PIF not well integrated with the overall block. PIF assignments not explicitly linked to Block Objectives. Revisit PIF topics in later Blocks (some felt it was too early for PIF)	We will make explicit the connection between Block Objectives and each PIF assignment. Have presented My Population exercise to other Block leaders for possibly revisiting the My Population exercises in later blocks.
More guidance for assignments during the course; for example, with My Population exercise.	We will provide exemplars for assignments like the My Population exercise and elevator pitch to provide clearer idea of expectations.
Students felt that the content was spread throughout the Block and as consequence, it was difficult to learn about each Block disciplines/goals.	We will work with the lecturers to link concepts from other disciplines into their presentations.
Ensure Interactive Field Experiences	Encourage students to be better prepared by reading about their assigned field experience sites and preparing questions for their presenters. We will contact all field sites to ensure they employ active-learning techniques.

9. What changes have you have made, or you anticipate in making to better prepare students to care for diverse population.

This year	Next Year
Mandating attendance for all community panels.	Continue to expand representation of wide diverse populations in NE Ohio.
Field site visits to expand student's experiences with a wide group of diverse population.	Expand on examples of diverse populations' experiences.
Students delivered the Bias in Med Ed lecture and led the panel discussion.	We will discuss with our design team about how to create more space for students to share their expertise related to aspects of their identity without forcing/requiring that they share things they may not yet be ready to share.

Discussion during IQ cases on the zip code that is part of the patient identity card completed by probing questions.	Add Official Learning Objective (OLO) on the zip code and how that related to patient diversity to several of the IQ cases.
Exposure to Educators and Physicians from diverse backgrounds	Invite physicians, providers, panelists from diverse backgrounds to share their journeys in Medicine.

10. Acknowledgement

Block 1 core disciplines of Bioethics, Population Health, Health Determinants, Health Systems Science and Professional Identity Formation encompass continually evolving and developing fields of study, and we are tremendously grateful to the tireless commitment of our Block 1 design team and core faculty for continually updating and adjusting both content and delivery.

We would also like to thank the M1 and M2 students for their work on the Block 1 curriculum and suggestions for inclusions and improvement.

We'd like to thank our incredible staff and coworkers who make this course possible. First, we are immensely grateful to Deidre Gruning for her invaluable contributions as our course manager. Her deep knowledge of the curriculum's complexities, combined with her exceptional organizational and leadership skills, were crucial to the successful delivery of Block 1. She truly is a rock star! Thank you, Deidre!

In addition, a special appreciation to the staff that came in early for the pandemic exercise, Patti Qualich, Kaeli Milam, Lisa Allen, and the TBLs, Nivo Hanson, Kurtis Hoffman, Patti Qualich, Carol Chalkley, Beth Day, Lisa Allen, and Natalie Scala to make sure the rooms were set up appropriately and make sure the faculty and community members knew what room they were going to. We cannot thank you enough.

We would also like to express our great appreciation to Kurtis Hoffman. His exceptional organizational skills and prompt, professional communication with our community partners were vital in making the field experiences—a key component of Block 1—possible. We will miss him and wish him all the best in his new role. Thank you, Kurtis, for everything you've done!

We also thank Celinda Miller for her tremendous work in coordinating the IQ experiences and helping to get a reduction in the amount of paper used. We are grateful for the help of all members of UTech. But a special appreciation for Victor Guinto, Darin Johnson, Diana Nguyen, and Paul Salzgeber for all their help in making sure the lecturers got the right PowerPoint and helping to make everything run so smoothly.

We would also like to thank Kelli Qua, Yifei Zhu, Lisa Allen, Kathy Dilliplane and Xiaomei Song and the entire assessments team. We remain so grateful for the tremendous teamwork that is necessary for the students to have an optimized learning experience in Block 1.

Last, but certainly not least, Dr. Gifford and Dr. Gampa would like to thank Dr. Karen Mulloy for her generosity, leadership, and guidance in co-leading Block one. Her institutional knowledge and contributions to the course have left an indelible imprint on the content, structure, and curriculum of the entire pre clerkship curriculum. She will still

maintain a fundamental role in shaping Block 1, through her roles as a design team member, IQ facilitator, and lecturer. She also continues to mentor Dr. Gampa as he assumes the role of Block1 Co-Leader.

11. Response to Program Evaluation Committee (PEC) Repo

We reviewed the PEAC report and it was noted that that the overall block rating has steadily increased from 82% to 85%. The recommendations for improvement are in alignment with the plans for changes and improvements that are noted in this report. Specifically plans for improvement on PIF, assessment preparation, field site experiences, TBLs and expansion of individual support for students.

Longitudinal Data

Block 1, Becoming a Doctor
AY 2024-25

Class of 2028 was asked questions of Block 1 components. Results are reported below as compared to results of previous three years. Responses/Expected: 183/183 (100%)

Percentage of Students who rated "Good" or "Excellent"

Block 1: Becoming a Doctor				
General Block Aspects				
Block Components	2021-22	2022-23	2023-24	**2024-25**
Case-based small group discussions (IQ)	94	91	93	91
Lectures	49	66	68	82
Team-based learning (TBL)	54	57	65	68
Active Learning in Teams (ALT)	--	72	67	71
My Population of Interest Assignment	--	--	--	45
Elevator Pitch activity	--	--	--	42
Overall quality of this Block	71	81	82	85
Block Concepts/Integration of Block Concepts and Longitudinal Themes				
Epidemiology and Biostatistics	75	92	85	91
Population Health	78	71	85	84
Health Determinants	90	92	94	96
Health Systems Sciences	73	80	82	89
Professional Identity Formation	--	--	67	59
Bioethics	71	87	80	83
Pharmacology	--	30	30	20

Starting from 2022 the scale changed from 5-point scale "Poor-Fair-Average-Very good-Excellent" to 4-point scale "Poor-Fair-Good-Excellent"