Case Western Reserve University – University Program Medical School

Block 1: Action Plan 2019-2020

Year 1 (July - May)

Becoming a Doctor	The Human Blueprint	Food to Fuel	Homeostasis
Block 1 (5 Weeks)	Block 2 (11 Weeks)	Block 3 (11 Weeks)	Block 4 (14 Weeks)
Population Health, Epidemiology, Biostatistics, Bioethics, Health Disparities	Endocrinology, Reproduction, Development, Genetics, Molecular Biology, Cancer Biology	Gastrointestinal, Nutrition, Biochemistry	Cardiovascular, Pulmonary, Renal, Cell Physiology, and Pharmacology
Field Experiences Assessment Week	Clinical Immersion Week Assessment Week	Clinical Immersion Week Assessment Week	Clinical Immersion Week Assessment Week
Structure (Anatomy, Radiology, and Histopathology) **Foundations of Clinical Medicine** (Tuesday Seminars, Communications, Physical Diagnosis, Patient Based Experiences)			

1. **Course Description:**

Block 1, also known as Becoming A Doctor, serves as the health systems science foundational course in the University Program. Content for each week builds upon content earlier in the block through the following themes.

Week 1: Population Health
Week 2: Determinants of Health
Week 3: Health Systems
Week 4: Patient-Centered care
Week 5: Bringing It All Together

Students are also introduced to concepts that build a foundation for learning in various disciplines throughout the course of medical school and residency, such as equity, bioethics, epidemiology, biostatistics, and health policy.

Block 1 also serves as an introduction to medical school as students learn the processes of IQ, team-based learning, and simulation experiential sessions. Students also each participate in 3 separate field experiences related to the theme of the week: social determinants of health, health systems, and chronic conditions. These experiences reinforce the content in the respective week and provide opportunities for students to reflect upon their first patient-based experiences of medical school.

Finally, students also begin to explore content from both Blocks 7 and 8 which are longitudinal blocks during the first 5 weeks of medical school. These sessions are addressed in separate block action reports.

2. **Block Co-Leaders:**

Block Co-Leader: Heidi Gullett, MD, MPH
Block Co-Leader: Karen Mulloy, DO, MSCH
Block C0-Leader: Vanessa Maier, MD, MPH
Course Manager: Julie Schneider, MA

3. **Design Team:**

Aaron Goldenberg, PhD, MPH (Bioethics)
Doug Einstadter, MD, MPH
Johnie Rose, MD, PhD
Lisa Navracruz, MD
Nicole Deming, JD, MA
Oliver Schirokaur, MD, PhD
Erika Trapl, PhD
Kathy Cole-Kelly, MS, MSW
Kurt Stange, MD, PhD
Mimi Singh, MD, MS (Assistant Dean for Health Systems Science)
Ellen Luebbers, MD
Joseph Williams, MPA
Farren Briggs, PhD, ScM
Amy Wilson-Delfosse, PhD
Anastasia Rowland-Seymour, MD

Adeola Fakolade, MD
Daniel Tisch, PhD
Ted Parran, MD
Britt Conroy, MD, PhD, JD, MS
Monica Yepes-Rios, MD

4. **Block Objectives:** Please fill in the table below for your Block Objectives.

Competency and Definition	EPO	Block Objective	Recommended Changes
Research & Scholarship Demonstrates knowledge and skills required to interpret, critically evaluate, and conduct research	Analyzes and effectively critiques a broad range of research papers (Objective 1-3)	1. Provide a strong epidemiology and biostatistics foundation to support effective application in clinical practice and interpretation of the scientific literature.	none
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 questions (Objective 1-4) Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician (Objective 1-4)	1. Illustrate effective means to measure, understand, and affect the health of populations. 2. Provide a basis for understanding social, behavioral, structural, and environmental determinants of health.	none
Interpersonal & Communication Skills Demonstrates effective listening, written and oral communication skills with patients, peers, faculty and	Uses effective written and oral communication in clinical, research, and classroom settings (Objectives 1-2)	1. Understand and demonstrate effective communication skills for learning and clinical practice environments.	none

other health care professionals in the classroom, research and patient care settings	Demonstrates effective communication with patients using a patient-centered approach (Objective 3-4) Effectively communicates knowledge as well as uncertainties (Objectives 2-4)		
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 (Objective 1)	1. Understand and practice the behaviors of an ethical, respectful, compassionate, reliable, and responsible physician.	none
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 (Objective 1,3) 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 (Objectives 1-3)	1. Understand and practice the behaviors of an ethical, respectful, compassionate, reliable, and responsible physician.	none

	Identifies challenges between personal and professional responsibilities and develops strategies to address them (Objective 1, 3)		
Patient Care Demonstrates proficiency in clinical skills and clinical reasoning; engages in patient-centered care that is appropriate, compassionate and collaborative in promoting health and treating disease.	Incorporates patient perspective, values, and goals into all aspects of the clinical encounter (Objectives 1-4, 6) Identifies and critically analyses relevant literature and practice-based guidelines to apply best evidence of patient care and management (Objective 5)	1. Emphasize continuous process and system improvement as a mechanism for limiting medical error and improving both individual and population outcomes. 2. Analyze, critique and present research studies from the primary literature	none
Teamwork & Interprofessional Collaboration Demonstrates knowledge and skills to promote effective teamwork and collaboration with health care professionals across a variety of settings	Respects and supports the contributions of individuals on an interprofessional health care team (Objectives 1-3)	1. Develop and practice the knowledge and skills that promote effective teamwork across a variety of settings.	none
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 the basic structure of health care systems to patient care discussions (Objectives 1-7) Considers economic and cultural factors, individual and family contributions and the availability of health care system resources in	1. Provide a broad understanding of health systems.	none

	clinical decision making to provide high value care (Objectives 1-2, 4-6) Promotes patient safety by analyzing errors within the health system and propose changes to prevent similar errors (Objectives 7-9)		
Reflective Practice Demonstrates habits of ongoing reflection and analysis to both identify learning needs and continuously improve performance.	Demonstrates habits of ongoing reflection using feedback form others as well as self-assessments to both identify learning needs and practice continuous quality improvement (Objective 1)	1. Analyze, critique and present research studies from the primary literature	none

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 2018-2019?	**How did the changes work?**	**How will you follow-up on these changes next year 2019-2020?**
EBIQ was modified last year with a review of the articles and updating the articles and worksheets to make them more relevant to the IQ cases. The feedback from the students and IQ facilitators noted that those articles met the LOs. However, the design team thought that spending an hour's lecture on EBIQ was not needed and the concepts and instructions about EBIQ was incorporated into the 1st lecture that dealt with an overview of the Block.	The EBIQ longitudinal data showed a worsening of the qualitative feedback from students. There was also feedback from the IQ facilitators indicating that a number of the IQ groups did not remember the discussion of EBIQ in the first lecture.	The block 1 design team will evaluate and decide how to introduce the concepts of EBIQ into the lecture schedule. The design team will also continue to work closely with Dr. Croniger to ensure that updates to critical appraisal and EBIQ, including the foundational framing via lecture and initial articles are worksheets are developmentally appropriate and fit into a larger strategic vision for this element of the curriculum.

An important part of Block 1 is the engagement of community members to share information about population health in Cleveland and community solutions to disparities and health inequities. The recruitment of new community members, including Dr. Boutros and Dr. Gilson (as recommended by student feedback), was achieved. Following student recommendations these sessions were required rather than optional.	These sessions received very positive feedback on the Block 1 evaluations. There was one problem that had not occurred in previous years, the representatives of Birthing Beautiful, showed up an hour late (although multiple emails and notices were sent to the presenters) and the students were not able to hear the presentation – we posted the PP presentation the next day for students to review.	We will continue to engage community members and recruit new community members to share the variety and breadth of programs with students during the block.
A new TBL was created on climate change. It introduced the concept map and gallery walk active learning experiences in addition to a case presentation. The TBL was reviewed by several members of the design team. It was Beta tested with members of the design team and several members of Block 2 design team.	The TBL feedback was very positive. The creation of the concept map went fairly smoothly. Some groups needed more time- some less. The gallery walk was more successful in one room as the instructions of how to do the gallery walk was more precise. The discussions from the groups that had the highest vote for their map was not as vigorous as the other discussions during the TBL. The “correct” answer for the case was picked by all but 1 group during the TBL. One of the major feedbacks from the students was wanting the TBL to go deeper into the subject of how adaption, mitigation and resilience and their role as futures doctors should be addressed in relation to climate change.	The climate change TBL will be reviewed, updated and rewritten to reflect the feedback of the students and faculty.

The move to the new HEC was accomplished.	Overall, most of the changes with the new campus worked. The students seemed to like the new facility and the various technology advances with the new campus. There were some areas where the technology did not work or did not work as expected. Two of the rooms for the Flu pandemic were too small.	Rooms for the pandemic exercise will be chosen early in the request process to be sure that the right size rooms are booked. Continue to work with UTECH on the technology issues.
Poverty simulation was moved to Block 8 in order to implement inter-professional training into that learning experience.	The simulation was able to include not only medical students but PA and nursing students. Feedback from students was positive for that interprofessional experience.	Continue to work with Block 8 and the IPE program on linking the LOs of Block 1 to the poverty simulation.

6. What changes do you anticipate making to the Block next year (AY 2019-2020)?

We do not anticipate making any significant changes to the block in 2019. The block will continue to coordinate with student affairs for orientation activities (many of which overlap into Block 1).

The leadership of Block 1 will continue to have Drs. Mulloy and Maier as Co-Leaders with Dr. Gullett stepping down as Block Co-Leader – Dr. Gullett will remain on the design team. Drs. Mulloy and Maier plan to start meeting with the design team early in 2020. The design team will be organized to have leaders of the themes and active roles defined for each design team member.

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

Our use of TBLs has proven effective in teaching and reinforcing the complex concepts of population health and health systems. By adding a 3rd TBL on climate change and expanding the active learning methods to include a concept map and a gallery walk was innovative. In addition, we were able to include new and complex material into the Block without having to use lecture time. This approach has been employed for 8 years in Block 1 and we have expanded the use of this technique over time. We also run a TBL faculty training workshop each June/July that is open to faculty from other blocks who would like to learn the technique.

We have also had tremendous success with using field experiences as the first patient-based experiences. Each student participates in 3 separate field experiences in the community, followed by a formal required reflection on Canvas which is shared with each students' IQ group. Time is also protected on Friday IQ during these 3 weeks to briefly discuss the correlation of the field experiences with the IQ case and weekly content. This has proven helpful in reinforcing content throughout the block and has served as an introduction to the community.

The use of community member panel discussions is able to introduce concepts in population health and health equity that have made those concepts more real to the students. It also introduces the students to community members that are working to solve health issues in Cleveland. This is another early link between students and patient settings.

8. **What specific changes (lectures, TBL, IQ cases, other) do you plan to make to the course next year?**

Changes anticipated for next year	**Reason for changes (evidence)**
Yearly IQ case updates	Routine case improvements from student and IQ facilitator feedback
Annual TBL content reviews	Need to update cases presented in the TBL/Routine faculty training/QI
Rewrite of climate change TBL	Important determinant of population health

9. Please review your Block objectives. Have you added or deleted major concept areas to your Block?

Deletions	Additions
none	none

The design team will consider whether Block 1 objectives should reflect EPOs that introduce students to lifelong learning techniques, such as self and group-derived learning objectives as demonstrated in the IQ process. An unstated goal of the block has been to introduce students to IQ, TBL, and medical school in general, but no specific goal or related learning objectives articulate this concept.

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

The block leaders review all faculty evaluations for block activities, including lectures, TBLs, and other simulation activities to ensure consistency in the quality of faculty participation. Individual IQ facilitator feedback is handled by the IQ team rather than the block leaders. The faculty reviews for new speakers was positive. Faculty are provided their individual feedback and the Block Leaders will talk with the lecturers for next year in preparation for their up-coming lectures. All block faculty are provided the opportunity for participation in CAML professional development workshops. The block leaders directly address specific issues with individual faculty members when necessary.

11. Response to PEAC Report

A detailed response to the PEAC report was presented in 2018 in the form of a 7-page document and question/answer session with the PEAC committee. This is a routine review of each block as part of the program evaluation and assessment committee's charge. We continue to refer back to the issues and recommendations presented in the PEAC report and in the response yearly to be sure we continue our continuous quality improvement. We are grateful for the opportunity to interact with the PEAC team and to receive continued feedback on improving the block.

12. Academic Productivity

Dr. Mulloy was awarded a University Center for Innovation in Teaching and Education (UNCITE) Learning Fellows scholarship. As part of her UCITE fellowship, she worked on designing an interactive learning session for 1st year medical students on climate change. She has submitted a manuscript (with co-authors Drs. Amy Wilson-Delfosse and Heidi Gullett) on the Climate Change TBL to the journal *Medical Education* whose audience includes both educators and health professionals both nationally and internationally.

13. Challenges

The biggest challenge this year was the move to the HEC campus. There were many unknowns and the difficulty with some of the technology, i.e. the student microphones in the TBL room only working for 20 seconds a time limiting the ability of fluid discussions during the TBL sessions, microphone systems not working at all, two of the rooms not large enough for the flu pandemic exercise and no ability to get other rooms. With time many of the unknowns and difficulties have been solved and will continue to work with the technology staff on issues as they arise.

There was also a technology challenge to the student assignment – Step Challenge- that was not supported by the University technology group. This activity is a health promotion project introducing the importance of an intentional focus on healthy activities as a means to contribute to overall health, how a public health initiative aimed at individuals can be effective at improving health outcomes for populations and individuals and how the support of a team can help an individual achieve a behavioral change goal. It has been an activity that has had excellent feedback from students in the past. However, this year the University technology no longer supported the on-line platform – even though they were contacted about the need for

support 4 months prior to the beginning of the Block. The activity for the first time did not get positive student reviews. The Block design team will work on coordinating with tech support to solve these issues.

Transition of leadership is always a challenge. Dr, Gullett has announced that she would be stepping down as Block Co-leader after the 2019 Block 1. Dr. Maier was brought on in Spring 2019 to be mentored during the 2019 Block 1 and to assume a role as Co-leader of Block 1 with Dr. Mulloy. This transition was worked out over the Block and during the fall with success.

14. Acknowledgements:

First and foremost, we want to thank Dr. Heidi Gullett for her leadership and guidance for the last 7 years as leader of Block 1. Her knowledge of population health and the social determinants of health and her vision for this Block has been outstanding. Through her hard work and dedication to excellence in education this Block has succeeded in meeting its goals.

Drs. Mulloy, Maier, and Gullett are incredibly grateful for the phenomenal individuals and teams that continually serve our students through Block 1. We wish to formally thank Julie Schneider for the outstanding work as the course manager. Julie did tremendous work in coordination the field experiences for each student last year and was wonderful in her mentoring of Kurt Hoffman who took over the co-ordination of the field experiences. We have to thank Kurt for his absolutely wonderful work in organizing the field experiences and working with students to make sure that their experience was meaningful. We also want to thank Molly Gillahan for her untiring commitment to ensuring coordination with the student affairs and orientation activities. This collaboration has improved coordination year after year and is a complex endeavor given all that must occur in the first few weeks of school. We thank Celinda Miller for her tremendous work in coordinating the IQ elements of the block and Paul Salzgeber and Megan Slabach and the new UTECH team, Darin Johnson and Eric Bloss in HEC for the outstanding IT support. We would also like to thank Katie Battistone for her amazing help. We remain so grateful for the tremendous teamwork that is necessary for the students to have an optimized learning experience in Block 1.

Class of 2023 was asked questions of Block 1 components. Results are reported below as compared to results of previous three years. Responses/Expected: 45/46 (98%)

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

Block 1: Becoming a Doctor				
General Block Aspects				
Block Components	2016-17** %	2017-18** %	2018-19	**2019-20**
Effectiveness of IQ cases	91	85	76	**87**
Effectiveness of sessions with live patients	87	78	83	**73**
Organization of this block (cohesiveness and integration of themes and activities)	65	78	67	**53**
Effectiveness of Lectures	--	61	61	**47**
Effectiveness of Team-based learning (TBL)	--	63	57	**51**
Overall quality of this Block	74	78	72	**67**
Block Concepts/Integration of Block Concepts and Longitudinal Themes				
Epidemiology and Biostatistics*	64	63	74	**67**
Population Health*	96	78	87	**84**
[+]Social Determinants of Health & Health Disparities*	100	93	96	**96**
[+]Health Systems Sciences*	68	80	78	**65**
Gross Anatomy***	63	65	67	**78**
Histopathology	70	85	70	**91**
Bioethics	85	83	76	**80**
EBIQ				
Rate the extent to which EBIQ contributed to your development of critical appraisal skills	65	48	52	**40**

*The rating scale has been changed from "Well" or "Very Well" to "Very Good" or "Excellent" since AY 17-18

[+]The wording of the question was slightly changed in AY 17-18

** The rating scale was "Good" or "Excellent"

***In AY 2019-20 Gross Anatomy/Radiology