Block 8 Leader Report and Action Plan
Academic Year 2016-2017

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Foundations of Clinical Medicine (FCM)

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Program Leaders:

Tuesday Seminars (TS): Kathy Cole-Kelly, MSW, MS and Ted Parran, Jr., MD
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Interprofessional Education (IPE): Ellen Luebbers, MD
Procedures Curriculum (PC): Anastasia Rowland-Seymour, MD

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Additional Design Team Members: Susan Padrino, MD, Mimi Singh, MD, Alexis Dunning, MSII and Amy Wilson-Delfosse, PhD

1. Please address last year's Action Plan. Did you accomplish the goals that you listed?

Specific Block 8 program goals for 2016-17 included:

a) Re-organization of Block 8 to address process issues such as scheduling, credentialing and training that were outlined in the PEAC recommendations from 2015-16;
b) More concerted curricular integration with Blocks 3-7, while maintaining and further developing already achieved integration with Blocks 1 and 2;
c) Identification of effective and creative methods for recruitment and retention of PBP sites;
d) Reassessment of our Block 8 assignments and assessments to maximize learning in our students, aiming to address concerns from the PEAC report of 2015-16, that student assessments are low stakes throughout the majority of the FCM curriculum until the very end when they are assessed using the high stakes OSCE.

1a) Last year was focused on transition and we had several staff members turn over. This year, with the help of a full complement of staff, under the able leadership of Jennifer Lennon, the staff of Block 8 has been able to organize the programs in such a way as to iron out many of the procedural challenges of managing such a varied and comprehensive longitudinal preclinical program. Last year, we pledged to focus on streamlining the assignments and assessments to maximize learning. We now have a comprehensive picture of when each program assignment and assessment is due (Appendices 1 and 2). As is not surprising, this is a process that is still ongoing.

1b) While our theme last year was transitioning and restructuring, our theme this year has been integration. Block 8 sought to integrate within the block (between individual Block 8

programs), as well as within the WR2 curriculum (between all the other blocks of the curriculum) (Appendix 3). We focused on taking an inventory of all the offerings from the various programs so that we might layer the curricular exposures that address similar content. This is particularly important when we begin to focus on the content of the longitudinal threads: Bioethics and Health Systems Science. We have worked diligently with each thread leader to focus on where we our content currently intersects, as can be found in Appendices 4 and 5.

We additionally sought to focus on the integration of Block 8 with the other blocks. We initially focused on the low hanging fruit of identifying relevant Block 8 material into each Block course guide, as well as the polishing of our own course guide to more explicitly map Block 8 activities in each of the blocks. As was demonstrated in the Block 8 Report 2015-2016, Tuesday Seminars and the Communications Workshops have been particularly successful in layering and complementing the curricular content of Blocks 1 and 2. We sought to use this as a model upon which we would build our intersection with other Blocks.

Further, we were inspired by the speed dating session of the November 2016 retreat and sought to expand on the curricular opportunities to collaborate. To that end, we restructured our meetings to accommodate longer speed-dating sessions, which we called "Brainstorming" sessions with each of the blocks in turn. This allowed us to create 2 separate inter-block curricular integration exercises.

i. Physical Diagnosis/Ultrasound and Radiology integration on the Abdominal Anatomy during Block 3
ii. Communication Seminar on Adherence and Congestive Heart Failure during Block 4.

These exercises were overall well received, with the first of the two offerings being important as it was a pilot and precursor to the upcoming restructuring of Anatomy and Radiology that will include a Physical Diagnosis and Ultrasound component (known as Living Anatomy). Block 8 has been working diligently to collaborate with Block 7 on the new GARLA (Gross Anatomy, Radiology and Living Anatomy) curriculum that will be deployed next academic year 2018-2019, in anticipation of our move to the new Health Education Campus.

1c) Securing preceptors for PBP and PD3 has historically been a challenge, and as the number of preclinical trainees (NEOMED, PA, NP, etc) increases across the greater Cleveland region, we find ourselves needing to be creative in procuring and maintaining sufficient and consistent preceptors for both PBP and PD3. This was the first year of the Patient Navigator and the Aging in Place pilot programs, both of which provided novel community learning opportunities for our students, as well as offset the number of PBP spots needed. While this model is still in the process of being thoroughly sorted out, it does offer a novel approach to providing Community Based Programs to all of out students. With the advent of a dedicated and combined PBP/PD3 director, we are able to be more cognizant of which preceptors are being tapped for which programs, thus decreasing the risk of over-recruiting the same cadre of faculty preceptors for multiple programs. While we are by no means comfortable with the number of preceptors that we have been able to secure- it is still a challenge - we do have a more coordinated approach to seeking potential faculty. We are continually reminded that the re-organization of Block 8 and its re-design will be an ongoing process.

1d) We took to heart the feedback from the PEAC report and have focused on streamlining our assignments, ensuring they are of maximal educational value. We have also sought to bolster our assessment of students prior to the summative OSCE. 2016-2017 was the first year of the Formative OSCE being moved from the end of the first year to the beginning of the second year curriculum. This move was orchestrated to allow for more students to have the opportunity to strengthen their history taking and physical exam skills during PBP. This change in timing also allowed for students to feel more prepared for the OSCE - which occurs 3 months later at the end of the second year. An unintended consequence of moving the Formative OSCE was that our medical students would have a nine-month period of time (December of 1st year to September of 2nd year) without having their clinical skills assessed. This created a concern that students would experience a regression of skills during this time. To address this concern, we have begun creating an additional assessment during first year that will assess communication and clinical decision-making skills.

While by no means is our work done, we have made a concerted effort to address each of these four goals: re-organization, integration, recruitment and assessment, across the multiple programs of Block 8.

2. Please comment on 2-4 aspects of the Block that went particularly well. Do you have plans to expand/increase/improve these aspects of the Block?

We believe there are numerous aspects of the Block that are working well. Block 8 programs continue to garner high ratings throughout the majority of the end of Block evaluations. Here we will highlight four aspects of the Block 8 curriculum that we think were particularly successful.

The **first** aspect that we think went well was *Communication Skills*. For the last four years, the Communication Skills Workshops during Block 1 have received high marks, with 94% of students rating these as good or excellent. During subsequent blocks, the Communication Skills sessions have successfully taught the communication procedures of patient education using Teach Back, Health Behavior Change using Motivational Interviewing, and Delivering Difficult News, with each having between 73%-81% of students rating their preparation after these sessions as good or excellent. With the understanding that communication skills are continually being perfected, and that these are difficult topics, it is not surprising that our students rated their level of preparation lower than in other FCM areas.

While we understand there are many factors that contribute to a student's success or failure on the national Step 2 Clinical Skills exam, we noted of the students who failed the CS exam, it appeared that their downfall was interpersonal communication skills, specifically in the arenas of showing empathy and seeking the patient's perspective. For this reason we developed a Communication Seminar during Block 4 on Adherence. This Communication Seminar was focused on heart failure and adherence to medication, thus integrating Block 4 curricular content with communication skills. The communication skills that students focused on during this session were understanding the patient's perspective as it pertains to adherence and demonstrating empathy, thus addressing a curricular need as demonstrated by high stakes exam failures.

Tuesday Seminars is the **second** aspect of Block 8 with which we are particularly pleased. As a result of the 2015-2016 PEAC report, there were some concerns that students were moving into their third year feeling unprepared for their clerkships. This concern is something that as a Block we are keenly interested in addressing. In addition to bolstering our physical diagnosis programs, expanding our communication procedures, and adding a clinical procedures program, we sought to ensure that Tuesday Seminars prepares our students for clerkship. It is noteworthy that in this year's FCM End of Block 3 feedback 77% of students rated Tuesday Seminars as good or excellent for "offered opportunities for reflection on challenging patient situations and skills to address them." Additionally, FCM End of Block 6 Feedback from 2016-17 revealed that 83% of students rated Tuesday Seminars as good or excellent on "provided opportunity to reflect on issues of professionalism and preparation for clerkships". The individual comments for Tuesday Seminars on the End of Block 2 Feedback were particularly rich and speak to the safe learning environment for the exploration of difficult topics. We are reassured that while this sense of being unprepared for their clinical rotations appears to be the case, it is not due to their experience in Tuesday Seminars.

The **third** aspect of Block 8 that we feel is working well is *Physical Diagnosis*. Physical Diagnosis, which is comprised of PD1, PD2 and PD3, has on the whole been well received. 85% of students in the End of Block 2 Feedback noted to a degree of good or excellent that PD1 "prepared you to perform a basic complete physical exam on an adult." Several of the PD2 sessions received similarly high ratings. PD2 Abdominal received ratings between 77% and 92% in the End of Block 3 Feedback, when asked if the agreed or strongly agreed with the following statements: "perform abdominal exam maneuvers; identify the relationship of symptoms and abdominal exam and special maneuvers in a patient with abdominal pain; and develop a differential diagnosis for a patient with abdominal pain." These high ratings were maintained into the second year. In the End of Block 5 Feedback, when asked "how well the curriculum prepared you to do or perform the following skills:" 83% of students rated PD3 'physical exam skills' as well or very well. When reviewing the individual comments on the last year's End of Block 6 Feedback in answering the question, "what area of the [entire] curriculum prepared you well for core clinical rotations?" 41% of students highlighted PD3; it was the single most popular response.

Physical Diagnosis has been undergoing revision and expansion. PD1 has been further streamlined so that the checklists all align and show an iterative building of skills, highlighting the Core Skills that are hard stops on the OSCE. PD2 has been expanded as well. The PD2 Abdominal session at the SIM center in Block 3 more explicitly focused on clinical decision-making and differential diagnoses. The new integrated Gross Anatomy, Radiology and Living Anatomy (PD and Ultrasound) session allowed for alignment of PD curriculum with Block 3 content as well as that of Gross Anatomy. The Pelvic/Rectal/Breast session in Year 2 has been restructured slightly to complement the new Block 8 Procedures curriculum. The Pediatric Inpatient session and Newborn session have been improved and a Dermatology session will be added for the year 2017-18. Additionally, now that all of the medical students have purchased their own ophthalmoscopes, the Ophthalmology PD sessions in Block 6 are required.

We continue to be particularly proud of the *Interprofessional Education* curriculum. It was heralded in the 2015-2016 PEAC report as "integration par excellence and stands alone." The IPE curriculum has been formally imbedded in Block 8. The Foundational course is a required component to successful completion of FCM. Additional IPE electives such as ILEAP have been piloted and in the year 2017-2018 will be included in the Community Based Programs that will receive partial PBP credit. IPE has been weaved through several other FCM sessions including the Block 1 IPE Panel on Palliative Care that complemented the discussion of the Atul Gawande summer reading Being Mortal. Additionally, as Block 8 has been having speed dating sessions with each Block, IPE has been at the table considering novel opportunities for weaving the IPE thread throughout the first and second year curriculum.

3. Please comment on aspects of the Block that received decreased ratings when compared to previous years. What are possible explanations? How will you address these?
While we are very proud of the majority of our curriculum, it is clear that there are some aspects on which we would like to focus our attention.

While the PD2 sessions overall have been well received, PD2 Newborn and Peds sessions historically been receiving notably lower ratings than the other PD2 offerings, with most being in the range of 50-60% of students rating the sessions as good or excellent. Our director of PD has been working closely with the newborn and pediatric session leaders and there has been a modest increase in scores from '15-'16 to '16-'17, particularly in documenting pediatric visits. PD2 Newborn is being streamlined and made more clinically relevant to general clinical care. In addition to the ongoing revisions, for 2017-2018, there will be an additional pediatric session focused on recognizing developmental milestones for children. It is our expectation that this additional exposure will increase student's ability to approach and examine children, as well as interact with parents. We will continue to work closely on these PD2 programs to better prepare students for their clerkships.

This year formal curriculum on Oral Presentations was introduced into Tuesday Seminars sessions in the beginning of Block 3. Despite this training, after the Block 3 PD2 abdominal exam session 66% of students rated their ability to "present a patient with abdominal pain (improve oral presentation skills)" as good or excellent. This is in direct contrast to the year prior where 89% of students rated the session as good or excellent. In an effort to get a better understanding of where students are in the development of this skill, for 2017-2018 we are creating an additional clinical skills exam to assess oral presentation skills at the end of the first year. For this reason we seek to create more critical thinking exercises in PD2 where students have to correlate physical exam findings with the history and develop differential diagnoses, thus fostering the transition from reporting to interpreting (RIME framework).

Following the Year 2 OSCE 75% of students rated the OSCE as good or excellent in "identified clinical skills to improve prior to clerkships". While this is adequate, we hope that more students will perceive the OSCE as a teaching tool to frame students' ongoing development. For this reason, we have adjusted the reflection prompts that are used in conjunction with the OSCE and once again linked the OSCE reflection to the Portfolio, to allow for the full cycle of reflection and experimentation (Kolb's cycle) that we hope will drive continued practice improvement.

4. Please comment on any new curricular innovations that you introduced or will introduce into the Block this year. If already introduced, did they work well? Will you continue them? If not already introduced, how will you assess them?

Last year we focused on creating an iterative standardized checklist for Physical Diagnosis and Communication Skills that more clearly delineates the history taking skills and physical exam maneuvers that students will be scored on for the Summative OSCE. We found however that this tool was too long and confusing for preceptors to use while scoring students on the OSCE. This led us to revise and streamline our current tools to allow for standardization of what our students learn and serves as a framework to guide how our preceptors are teaching our students.

Additionally, last year we sought to augment our already robust Communications Workshops with additional resources from Doc.com, a collaboration between Drexel University College of Medicine and the American Academy on Communication in Healthcare (AACH). We had the opportunity to get some very careful and thoughtful feedback from 4th year students about relevant Doc.com modules that will guide our inclusion of selected modules in the curriculum.

In keeping with our theme of integration and expansion, for the academic year 2017-2018 we are introducing a number of curricular innovations.

- Block 1: Inclusion of 2 questions on the history taking checklist screening for environmental Medicine- precursors to the WHACS screening tool.
- Block 2: Inclusion of additional information to focus on Health Systems Science and Interprofessional Education learning objectives during the Week 8 Retinoblastoma case where the patient is lost to follow-up.
- Block 3: Inclusion of learning objectives to address Health Systems Science and High Value Care during the Week 10 Anita Park Pancreatitis case. We are also hoping to include another High Value Care case in Week 6 on PPI use in Peptic Ulcer Disease.
- Block 5: We introduced an hour long panel on "Prevention as Care" revisiting Block 1 curricula on social determinants of health, incorporating Health Systems Science and Interprofessional Education in a panel on HIV, needle exchange, 'Safe on the Scene' HIV testing, and the role of Community Health Workers. In 2018-19, we are also planning to collaborate with Bioethics and include learning objective on Health Systems Science and health care utilization in the Block 5 Week 6 Elaine Goodman case on Endocarditis.
- Block 6: We have been seeking to focus on the intersection between basic science and communication skills. We found an opportunity to further teach patient education skills in creating a Communications Workshop revisiting delivering bad news and teaching shared decision making around the use of medication for Parkinson's Disease.

In considering this question of how we might better prepare our students for clerkships, we have sought to increase the skill building portion of our curriculum.

- Procedures: We have created a robust procedures curriculum focusing on basic and advanced clinical skills:
- Year 1 Basic Skills:

    Time Out & Informed Consent

Donning and Doffing & Glove Sizing
Airway Management
Male and Female Foley Placement

- Year 1 Advanced Skills:
  Scrub Sink
  Sterile Gowning and Gloving
  Surgical Prep
  Incision and Drainage
- Year 2 Basic Skills:
  Revisiting Donning and Doffing
  IM injections
  SQ injections and IV's
- Year 2 Advanced Skills:
  Sterile Prep & Maintaining a Sterile Field
  Suturing
  Knot Tying
- First Five - Optional:
  Airway & Breathing: Jaw-thrust / chin lift, OPA, NPA, BVM PPV techniques
  Access and intervention: IV placement & Naloxone and EpiPen administration
  CPR: Chest compression technique & AED
  Primary and secondary assessment: "ABCDE", ED scenario- cardiac arrest, and Inter-professional communication / handoff
  Hemorrhage control: Pressure dressing, Tourniquet placement, Hemostatic agents, and Wound packing
  Scene safety: Assessment &Optimization

Our Patient Based Program is being adjusted as well. In particular, we are including a chapter from the Health Systems Science book that was used extensively in Block 1, to once again highlight the relationship between HSS and direct patient care. We have additionally been expanding our Patient Based Program partnership with the Community Based Programs and will be offering partial credit for the Patient Navigator Program, Aging in Place as well as ILEAP, in the hope of including more opportunities for students to get real time practice in Health Systems Science and Interprofessional Learning.

Our hope is that through all of these innovative curricular experiences our students will have a better sense of the integration of the WR2 curriculum and will feel better prepared for their clerkships.

5. Please summarize the quantitative evaluation data.

For the previous 4 years most students (75-90%) rated Block 8 (each component in each Block) "good" or "excellent'.

End of Block 1 Feedback: Integration of Block Concepts and Longitudinal Themes. 94% of student respondents rated the Communications Workshops that took place in Block 1 as "good" or "excellent".

End of Block 2 Feedback: Communications Workshops continued to be rated well in addition to Physical Diagnosis 1. Greater than 79% of students rated Block 2 FCM components as good or excellent in all aspects assessed.

End of Block 3 Feedback: Tuesday Seminars, Physical Diagnosis (PD1 MOSCE and PD2 Abdominal) and Communications Workshops were all rated fairly highly. Greater than 75% students rated each component as good or excellent, except for the oral presentation skills as noted above with a 66% rating.

End of Block 5 Feedback: Patient Based Programs (CPCP) was rated well, as was PD2 Pelvic/Rectal/Breast and PD3, all with 81-97% of students rating each component as good or excellent. Tuesday Seminars and Communication Workshops, while improved compared to previous years, were not in line with other Tuesday Seminars and Communications Workshops ratings. This may be due to the difficult nature of the content of the sessions. Finally, the PD2 Pediatric (Toddler) and Newborn sessions received ratings in the 50-76% range. This is lower than most other PD2 sessions which are typically in the 80-90% range.

End of Block 6 Feedback: Tuesday Seminar and PD3 were rated particularly highly by students. 98% of students rated PD3 as good or excellent for "improved your communication and history gathering skills." By the end of Block 6, 86% of students rated PD3 as good or excellent in "improved your oral presentation skills." The OSCE was generally seen as a moderately useful educational component with a 75% rating for "identified clinical skills to improve prior to clerkships" and 68% rating for "improved your confidence for going into clerkships."

In sum, Block 8 has been overall well received for the academic year 2016-17 with some key areas for improvement including: pediatric PD2 sessions and oral presentations that entail clinical decision making.

6. What additional information of comments do you want to share about Block 8?

Action Plan for 2017-2018

Academic year 2017-2018 brings the theme of integration into sharper view. We have a long list of innovative programs that we have and will be putting into place as a result of our Brain Storming sessions with each block in turn (we have met with all but Block 4 to date). We look forward to the opportunity to grow these collaborations further. As we consider ways to intersect across blocks, we will be mindful of interweaving the threads- Bioethics and Health Systems Science into the tapestry that is Foundation of Clinical Medicine.