

# **Three Rivers Curriculum**

## **Phase Three Final Report**



### **Curriculum Reform Task Force**

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## I. Overview

With the Curriculum Committee's approval of the Phase 2 plan in June 2022, work immediately began for Phase 3. On August 23, 2022, the Steering Committee and Working Groups (over 250 members) gathered and were provided mandates with a deadline of March 1, 2023 to complete their tasks and deliver final reports\*. Due to the tight deadlines, some working groups whose role in the curriculum would not be needed for two or more years after the new curriculum rolled out were delayed, making way for the foundational structure needed for the Fall of 2023. This phase focused on the details of the new curriculum: the educators, staff, and technology needed to execute the curriculum; instructional methods and integration of content throughout all four years; management of the students in the new curriculum as well as those in the legacy curriculum; and much more.

Each working group was assigned to one of four clusters: Foundations, Clerkships & Bridges, Threads, and Support. Clusters were designed to allow working groups in similar arenas to work together and ask questions on a regular basis. Each cluster was led by a mixed group of Steering Committee members, creating a link between the working groups and the full Steering Committee. Some groups brought questions or complicated concepts to the Steering Committee to discuss, gather feedback; others brought deliverables that required a vote of approval.

The Steering Committee held two retreats (November 2022 and February 2023) to gather Steering and working group leads together to get consensus on inter-cluster needs. At these retreats, calendars and weekly scaffolds were created, faculty hiring options were discussed, and content topics and course titles were identified and assigned.

Over six months, working groups gathered and worked through the deliverables from each mandate, meeting as a cluster periodically.

Overall, this new curriculum is anchored in a major change that includes a contraction of the current first two years into an integrated case-based 15-month period focused initially on basic science fundamentals, then transitioning to a series of organ systems-based periods. Beyond case-based learning, a second major change is the transition to a set of dedicated educators who will serve both in the areas of clinical skills development and knowledge focused learning. These Clinical Skills Preceptors (CSPs) and Longitudinal Educators (LEs) will establish longitudinal relationships with the students that persist through the first 15 months of medical school. In addition, there will be a cohort of content area and program leaders charged that will work with the CSPs and LEs to deploy an integrated curriculum focused on bringing the students to demonstrate the level of competence they need to become physician advocates, innovators, and leaders. Four standing threads, Clinical Reasoning, Interprofessional Education, Leadership, and Social Medicine will weave through the entire curriculum and will include stand-alone content and full integration into the cases and course in all four years.

Coordinated with these structural changes in the preclinical curriculum are the development of innovative programs including the Primary Care Accelerated Track (PCAT) and the Community Alliance Program (CAP) as well as broader implementation of established programs like the Longitudinal Alliance Program (LAP). Along with these structural and administrative changes, careful thought was put into the budget to support this reform, including investment in the staff and infrastructure necessary for success.

On behalf of the Steering Committee, we describe this new curriculum anchored in the experience of Medical Students and Faculty.

*\* The Working Group Final Reports are considered internal working documents for our Curriculum Reform Process and as such are available for review by internal UPSOM parties, but are not for general distribution. Contact Michelle Sergent ([mls142@pitt.edu](mailto:mls142@pitt.edu)) for access.*

## **II. Structure and Content**

### **Foundations**

The preclinical Foundations Segment is based on active learning strategies guided by longitudinal educators through weekly integrated cases. Keystone Fundamentals and Patient-centered Care are the first blocks of the curriculum. All students begin with one week of Introduction to Being a Physician to center their thoughts on their future career. Once completed, students move into 3 weeks of dedicated anatomy linked with embryologic mini-cases (see Appendix B for a full list of weekly Keystone Fundamentals case content). A block of coordinated small group facilitation on Evidence, Discovery, and Reasoning or Patient, Physician, and Society occurs each Wednesday. Each afternoon, one third of the class will meet within the Patient Centered Care to practice clinical skills. Clinical Skills Preceptors will guide and teach medical students using active learning strategies as well as simulated and real opportunities for practice (see Appendix C for a full list of PCC content). As the first semester winds down, students will transition into three weeks of deeply organ system-linked cases. The Keystone Fundamentals block ends with winter break.

The Organ Systems block begins in January of the first year and will march through 12 organ systems. The same basic structure continues with small group facilitation in the morning and one afternoon of Patient Centered Care content each week. Patient-centered Care and Organ Systems blocks end, followed by 5.5 weeks of dedicated study time for Step 1.

Throughout the Foundations phase, students will be exposed to four key content areas threaded throughout the curriculum, either within cases or as standalone content. These threads, Clinical Reasoning, Interprofessional Education, Leadership, and Social Medicine will continue to be prominent in the Clerkship and Bridges phases as well. In addition, students will be exposed to other specific organ systems, such as Ophthalmology and Otolaryngology.

Foundations assessments include weekly multiple-choice question exams each Friday morning. The majority of these will be formative assessments in the 20-30 question range. Assessments will include material from the main learning objectives current content as well as a variety that link clinical skills content, previous cases, and upcoming case content. These assessments will not be part of the final grade, but will be used for advisement by content leads.

Keystone Fundamentals will include three summative assessments. Organ Systems will include eight summative assessments. Patient-centered care content will be interleaved into these assessments as well. The Assessment Subcommittee of the Curriculum Committee will vet and approve all summative exam questions. In some cases, the summative assessment may contain content from different organ systems. Here, mapping of individual questions will be crucial, as students will be graded on specific content and would need to pass each section. For example, a student who passes the Dermatology content but fails the Rheumatology content will be required to remediate in Rheumatology only.

Progress testing will occur three times during the Foundations segment. All students will take the NBME Comprehensive Basic Science (CBSE) Exam in Week 12 (Monday morning of Flex Week), Week 42 (Monday morning at the beginning of Summer Recess), and Week 69 (Monday morning prior to Thanksgiving). Progress testing is a good check-in with knowledge retention, offers an opportunity to sit for a long exam, and can be used to gauge Step 1 readiness. Students will continue to be offered vouchers for Comprehensive Basic Science Self Assessments (CBSSA) in preparation for Step 1.

Remediation includes informal and formal formats. If a student is struggling in formative assessments, longitudinal educators and content leads will discuss options with the student. If a student fails an assessment, they will formally enter the remediation process. Students may use independent learning time, flex weeks, breaks and/or summer for remediation. Students will only remediate in areas where they failed. See Appendix F for remediation flow chart.

## Clerkships

Students begin the Clerkship segment of the curriculum with two weeks of Preclerkship work. Phase 3 launched two working groups from the Clerkships and Beyond cluster: Legacy and Longitudinal Clinical Experiences. The remaining working groups, Diagnostics, Integrated Life Sciences (ILS), Credit Systems, and MS3/4 Assessment, will launch in Phase 4. Thus, the deliverables for the clinical phases mostly mirror recommendations from Phase 2. In the coming months, the Clerkship and Bridges segments will be reviewed and built.

We note below changes to core clerkships that were approved in Phase 2 and will be focused on in Phase 4.

### *Change in Clerkship Length*

Phase 1 recommended minimal change to the clerkship segment of our curriculum. To better achieve learning objectives, the Surgery Clerkship will move to a full eight-week rotation. Obstetrics and Gynecology Clerkship will expand from four to six weeks. Family Medicine, Neurology, and Psychiatry will continue as four-week rotations. Adult Inpatient Medicine and Pediatrics will continue as eight-week rotations. A diagnostic course will be required during the Clerkship segment.

### *Change in Clerkship Designation*

In reviewing clerkships, some content was shifted from Clerkships to Bridges. Specialty Care Clerkship, made up of Adult Emergency Medicine, Ophthalmology, Otolaryngology, and Dental Medicine, will be discontinued. Adult Emergency Medicine will join Critical Care Medicine as a fourth year elective. Ophthalmology and Otolaryngology will become two or four-week electives. Adult Outpatient Medicine will become a four-week elective.

### *Changes in Scheduling*

The Clerkship and Bridges segments will be scheduled in eight-week chunks. This will allow the Registration team flexibility of scheduling courses of various lengths. An example of how these blocks could be scheduled is seen here:

1	2	3	4	5	6	7	8
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Surgery Clerkship		
OBGYN Clerkship		2-week elective
Family Medicine Clerkship	Neurology Clerkship	
4-week elective	2-week elective	2-week elective

Phase 2 recommended changing grading scheme for clinical courses from Honors/High Satisfactory/Satisfactory/Low Satisfactory/Unsatisfactory to Honors/High Pass/Pass/Fail to follow a growing national standard. More discussion with the Office of the Provost will be needed to change the scheme. Phase 3 recommends continuing this discussion for the possible change.

## Longitudinal Clinical Experience

A longitudinal clinical experience (LCE) will span the Bridges curriculum. This one-year ambulatory experience will place students at sites a minimum of two times per month in one of six specialties (including subspecialty clinics): Internal Medicine, Family Medicine, Pediatrics, Surgery, Obstetrics & Gynecology, and Psychiatry. Students who choose to participate in the Internal Medicine track may be exempt from the Adult Outpatient Medicine elective in the Bridges phase.

## Bridges

Once core clerkships are completed, students will transition into Bridges, their final segment. Additional elective/selective offerings will await post-clerkship medical students. Students will be required to take one Acting Internship, an Integrated Life Science (ILS) course, and two weeks of Anesthesiology. Students will have a variety of different electives of different lengths to choose from. In addition, students will be encouraged to take one “perspective” elective that is outside of their residency trajectory. Further development of the Bridges curriculum will occur in Phase 4.

## Simulation

The Simulation Working Group developed plans and processes to continue both human and non-human simulation experiences. Simulation at the University of Pittsburgh School of Medicine is an important and well-regarded area of study split between the WISER center and the Standardized Patient Program. The Working Group developed a system to maintain and add simulation activities within the new curriculum. Additional activities in interprofessional education and the use of ultrasound were also explored.

## Interface with Legacy Curriculum

The Class of 2026 is the final class to complete the current (Legacy) curriculum. The Class of 2027, beginning in August 2023, will usher in the Three Rivers Curriculum (3RC). There will be a 10-week period of overlap (February 9 – April 21, 2024) between the Legacy curriculum and 3RC, leading to a lack of enough clinical slots to accommodate both years. The Legacy working group has suggested several options to handle this overlap period and school administrators are weighing changes to both Legacy and 3RC once the Class of 2027 rotates into clerkships. Strategic restructuring of the clinical rotation schedule for the Legacy curriculum and the 3RC may help alleviate overlap problems and this will continue to be discussed in Phase 4.

### III. The Medical Student Experience

Medical students in the Three Rivers Curriculum will need a strong foundation in self-directed learning and self-discipline. They will grow to see themselves as change agents working toward continuous quality improvement in themselves, their classmates, their curriculum, and their community. This balancing act between self and others is a trait that will continue far beyond medical school.

Students will spend most of their structured time in small group learning environments with dedicated educators who they will come to know over time as teachers, mentors, and collaborators. The weeks within the Foundations (preclinical) segment follow the same structure and cadence. Generally, students can rely on at least 18-24 hours of independent learning time per week during the day.

A first-year student in Keystone Fundamentals will have a week that looks similar to this:

Hour	Monday	Tuesday	Wednesday	Thursday	Friday
8	IL	Differential Diagnosis discussion	Treatment Options (e.g. drugs vs surgery)	effects of surgery	Summative Exam
9	IL	Intro to autoimmunity and Graves Disease	New symptoms: thyrotoxicosis + Atrial fibrillation	hypothyroid treatment and management	
10	Team Based Learning: growth and metabolism of hypothalamus-pituitary Thyroid axis	Visual Human Atlas Lab Thyroid, parathyroid histology Graves histopathology, Goiter	Clinical Reasoning: Graves disease	Social Medicine topics: Difficulty with compliance	IL
11			IPE Graves Care	Health Insurance	IL
12	IL	IL	IL	IL	IL
13	Introduction to Physical Exam  Head  Neck	IL	IL	IL	Exam Review
14		IL	IL	IL	IL
15		IL	IL	IL	IL
16		IL	IL	IL	IL

Sample detailed weekly schedule for a student

Using Keystone Foundations Case 6 (Grave's disease) as an example of what a typical week would look like, the first-year student begins with a case introduction on Friday after the weekly assessment. This initial introduction may begin with a brief patient description, history, and chief complaint. This sets the stage for the next week of integrated education.

Monday morning, students will begin with team-based learning (TBL) followed by independent learning and a patient panel. Patient centered care content will occur one afternoon a week, facilitated by clinical skills preceptors. Tuesday will begin the small groups with longitudinal educators followed by lab time with content leads and potentially other lab session facilitators. After discussing treatment options and

new symptoms Wednesday morning, students will switch to time dedicated to thread, research, and society content. Thursday's small groups send students to prepare for the summative assessment Friday morning. This 90-question exam will be written by faculty and approved by the Assessment Subcommittee which utilizes criterion-referenced standard setting methods. The students will gather for a review following the assessment. Friday afternoons are open for remediation, independent learning, or case review. In this example, the next week is a flex week.

During a Flex Week, students may remediate past cases and skills, shadow, work on a research project, complete community service, complete an elective course (PEC) or design their own week. Flex Weeks are not curricular units, but will be required and tracked. There are multiple flex weeks each year at various points in the curriculum. Students are encouraged to use the Flex Week in innovative ways.

## **IV. The Faculty Experience**

Phase one of curriculum reform recommended the use of dedicated or longitudinal educators within the curriculum. In Phase three, the Longitudinal Educator Working Group developed job descriptions for both the Longitudinal Educators and Clinical Skills Preceptors. The group also brought forth selection processes, interview rubric, encouraged faculty to apply, and oversaw the selection committee.

With the new role of longitudinal educators, the faculty experience will begin in the summer prior to the formal start of the semester with faculty development focused on small group learning and the integrated, longitudinal character of the new curriculum.

The Faculty Leadership Working Group worked within a new model where content leads will also follow the cohort of medical students through the Foundations segment. No longer will a course director only work within their course. Instead, this team-based approach will allow for better integration within the cases. The faculty serving in the content area leadership roles will also begin in the summer to integrate their content area into the new curriculum. The content leads in many cases have roles very similar to course directors, and now they will be able to contribute beyond a specific time period focused on their content area (i.e. outside of a block of specific content). These faculty will serve as leaders for content integration across the case-based education.

Once the term begins, the longitudinal educators will get into the routine of facilitating small group learning activities on the Tuesday, Wednesday and Thursday mornings where this structure is present. They will be with groups of students who they come to know over time. At specific points throughout the year, the groups will be reorganized to refresh the small group environment and expose students to different teaching styles.

The content leads will take responsibility for coordinating each week of case-based learning. Ideally, two content leads would join together to ensure the activities for a given week are aligned with the learning objectives, and that there are materials in place to support both the students' independent learning and structured activities. They will also help to make sure longitudinal educators have the resources they need to adequately facilitate the small groups.

There are many faculty leadership roles (Appendix G), and each will have different times during the 15 months of foundations when the content they are charged with will be more or less intense. The faculty leadership will work together to balance out their responsibilities in order to focus time on the more

intense periods and also support the general activities of all leaders at other times (e.g. working with other leadership to plan and execute the integrated curriculum, develop materials to support students and longitudinal educators, focused oversight of specific case weeks).

We firmly believe that by bringing together this array of faculty leaders in a collaborative environment, we will be able to have a more integrated curriculum in which our students can learn. Because this is a big change for all of the faculty, there will be several opportunities for development as they work with each other to both understand the learning objectives related to different content areas, and figure out how to deploy that for the students.

## **V. Administrative Structure**

### **Program Evaluation**

The role of program evaluation is an important one for the new curriculum. Mechanisms will be needed to review the curriculum in segments and a nimbleness will be required to make changes when needed. The Office of Medical Education is adding a program evaluation segment to oversee this process. Led by a Director of Program Evaluation, CQI, and Accreditation, it will liaise with a 0.2FTE faculty lead and employ an analyst covering both program evaluation and curriculum mapping. A more finite review of formative and summative assessments, outcome monitoring, and more focused student evaluations will begin Fall 2023. In parallel with LCME requirements, the curriculum will be reviewed at three levels: Tier 1 (individual courses, case sets), Tier 2 (curricular segments), and Tier 3 (the curriculum as a whole). Subcommittees with these directives will be built. Weekly meetings with faculty, medical students, and Program Evaluation staff will act to review the week, track progress, and pivot as needed.

### **Staffing**

A number of new staff positions are required to manage the day-to-day operations of the new curriculum. These positions will be within the Office of Medical Education, Health Sciences IT, and the newly formed Community Alliance Program Office. In addition, the Office of Medical Education will modify the majority of their current positions and will restructure to better serve the mission of the curriculum and the School.

### **Finance**

The Three Rivers Curriculum will require an increase in funding. The first year of curriculum is expected to cost approximately \$6.5 million in additional funds, increasing to approximately \$9 million in subsequent years. One of the largest changes in finance is the elimination of Educational Credit Units (ECUs) tracking, a system designed to track hours of faculty teaching, mentoring, advising, etc. Effective this current academic year, departments will continue to receive a supplement from the Dean's Area (based on a three-year average of past ECU collections) but they will not be required to track and submit this information to the Office of Medical Education. The money will fund educational roles and activities within the department.

### **Educational Technology and Mapping and Integration**

It was determined that a new Learning Management System (LMS) is required to deliver the best curriculum to our students. This system, Elentra, will replace our current homegrown system, Navigator. It will be used immediately for course content, calendars, and other activities that were already provided by Navigator. Other features, such as assessment and course evaluations, may be integrated at a later time. Elentra will also be used to map curriculum and ensure content integration. A number of items will be used to map curriculum including educational program objectives (EPOs), keywords, and assessment methods.

In addition to Elentra, ProgressIQ will be used to track student performance, Slack is being used for student communications, and it is being determined how to best integrate augmented reality/virtual reality into our curriculum.

## **Policy**

Of the 62 current policies currently published, 34 required updates (Appendix D). These policies are in the process of being rewritten and submitted for approval to the Curriculum Committee. A Policy Review Committee will also be created and will conduct an annual review of one third of published policies.

## **Scheduling/Logistics**

An overview map of the four-year curriculum was created (Appendix A), keeping in mind the right time to hold certain courses and flex weeks, registration needs, and special student programs. In Phase 4, work will continue with Education Technology Core to streamline processes like registration and the lottery as well as with the University Registrar to ensure compliance with University policies and procedures.

## **VI.Changes Made from Final Working Group Reports**

In a few instances, the submitted final report and the Task Force Report differ.

### *Flex Weeks and Progress Testing*

The Flex Weeks working group recommended that the entire week be devoted to its varied activities. The Foundations Working Group recommended three progress tests in the Foundations Segment. After much discussion of where the first progress test could be offered, Steering agreed with the Foundations Assessment recommendation to have a progress test take place Monday morning in Week 12's Flex Week. This will leave 4.5 days of Flex Week opportunities and will allow for the progress test, an important assessment for both the students and the school, to go on with minimal interruption. This is the only infringement where a mandatory school activity lands in a Flex Week.

### *Difference in Faculty Leadership Positions*

Beginning in October, the Faculty Leadership working group and Steering Leadership discussed the list of future faculty needs in the new curriculum. While there was widespread agreement on most of the content leads and thread leads, there were some places where consensus was not found.

Excluding Block Directors or Directors within offices, both groups brought forth 42 positions. The major differences are below:

- Faculty Leadership: added Introduction to Being a Physician content lead, Global Health content lead, and a Neurology lead.
- Steering Leadership: added Ophthalmology content lead, Otolaryngology content lead, and an Introduction to Clinical Medicine content lead.

Steering felt that the Global Health lead could be integrated into the Population and Community content lead, and the Neurology content could be covered by the Neuroscience content lead. Additionally, the Ophthalmology and Otolaryngology content leads were added to ensure representation of the content of both specialties in the curriculum, and an Introduction to Clinical Medicine lead was added to fulfill multiple roles in the PCC Block.

#### *Difference in Number of Faculty Leadership Positions/Amount of FTE*

Faculty Leadership offered a range of 0.1FTE slots for many positions and allowed for two faculty to share one 0.1FTE slot. After several discussions with the Finance working group, Steering Leadership determined that all faculty leadership positions should be standardized and set at 0.1FTE (on average, four hours per week). Job-sharing (two faculty sharing one 0.1FTE) was approved.

Currently much of a course director's time is spent on recruiting faculty to deliver lectures and small group facilitation. In the new model, the facilitators are already available and there will be no lectures. While the roles and responsibilities of these positions are vital to the curriculum's success, it was felt that in a team-based model, (where block directors and multiple content leads work together) the load could be shared evenly at 0.1FTE.

Tracks and Streams and Program Evaluation Working Groups also submitted requests for faculty leadership, a Director of Programs of Distinction, a Director of the Professional Enrichment courses, and a Director of Program Evaluation. In discussions with Steering Leadership, a Programs of Distinction Director is tabled and will be discussed in Phase 4. The Director of the Professional Enrichment Courses is a current role and will be integrated into the new faculty contracting structure. The faculty program evaluation position will be filled this Spring.

#### *Differences in Patient Centered Care faculty*

Faculty Leadership and Patient Centered Care (PCC) working groups put forth a need for ten content lead positions. After discussions with PCC and Faculty Leadership, Steering Leadership felt that PCC Content, supported by the PCC Block Director and two CSP Leads, could be overseen by three content lead positions at 0.1FTE each: Medical Interviewing, Physical Exam Skills, and Introduction to Clinical Medicine. This fit the finance model provided by the Finance working group and also fit well with the team-based approach of the new curriculum. We will continue to monitor this area and all areas, to ensure the leadership model is accurate to successfully deliver curriculum. Further negotiations or changes are likely based on the needs of the curriculum, and we are committed to adjusting where needed.

#### *Tracks and Streams*

The Tracks and Streams working group recommended rebranding existing Areas of Concentrations (AOC) as “Programs of Distinction”. While that title does highlight the distinct difference and framing of certain content streams, Steering Leadership preferred the Streams title used in Phase 2. The spirit of the Phase 2 recommendation, and backed up by current medical student feedback, calls for a re-examination and recreation of these activities. Streams will receive a more in-depth and directed look in Phase 4.

### *Ophthalmology and Otolaryngology*

While the Steering Committee appreciates the reach toward a clerkship requirement including these two critical disciplines in the fourth year, we will choose to endorse the elective opportunities of varying lengths with the retention of the 4-week electives and the creation of the 2-week electives that the working group proposed.

This working group articulated a list of UPSOM learning objectives (see Appendix E) with a crosswalk from where they are now and where they are currently planned. This list highlights that there needs to be intentional work to figure out where the critical ophthalmology and otolaryngology content will occur in the new curriculum. We recommend that this be used as a guide for future development in these areas.

## **VII. Working Group Reports and Recommendations**

Organized by Cluster, the summarized recommendations from the working groups are listed below. For access to final working group reports, contact Michelle Sergent at [mls124@pitt.edu](mailto:mls124@pitt.edu).

### **Foundations Cluster**

- *Keystones Working Group, led by Lisa Borghesi, PhD and Martin Schmidt, PhD*
  - Recommends overall structure of the Keystones Fundamentals block, to include three weeks of Embryology mini-cases during the Anatomy phase, eight week-length case week, three hematology-related cases and an additional two transition block cases.
  - Recommends future use of the 13 unanimously approved cases in the order submitted
  - Recommends integration with Organ Systems, Patient-centered Care, and all four threads
  - Recommends use of weekly scaffold
- *Organ Systems Working Group, led by Mohan Ramkumar, MD*
  - Recommends organ system courses in the order submitted
  - Recommends use of weekly scaffold
  - Recommends clinical case development by newly hired Course Directors
  - Recommends integration with Keystone Fundamentals, Patient-centered Care, and all four threads
  - Recommend that all cases prioritize active learning modes
- *Simulation Planning Working Group, led by Tom Dongilli, AT, CHSOS, FSSH*
  - Recommends 2023-27 Overlap Plan for simulation
  - Recommends use of identified roles
  - Recommends new simulation or standardized patient activities utilize an activity development process
  - Recommends increases in POCUS education

- Recommends continued emphasis on interprofessional education
- *Patient Centered Care Working Group, led by Beth Bollinger, MD*
  - Recommends content in the order submitted
  - Recommends integration with Keystone Fundamentals, Organ Systems, and all four threads
  - Recommends use of weekly scaffolds
  - Recommends the PCC Block Director, CSP Leads, and Clinical Skills Preceptors as Faculty
  - Recommend continued use of standardized patient assessments (CIA, CSA)
- *Assessment: MS1/2 Working Group, led by Andrea Carter, MD, MS*
  - Recommends appointing faculty member as Director of Assessment and Assessment Subcommittee
  - Recommends consolidating assessment functions into Elentra platform
  - Recommends locally developed assessments and faculty development within this area
  - Recommends that weekly formative assessments consist of 20-30 high quality, vignette-based multiple-choice questions that do not count toward final grade
  - Recommends 90+ question, high quality, vignette-based multiple choice question summative assessments at regular intervals throughout the Foundations Segment and that these assessments will form the basis of the course's grade
  - Recommends criterion-based methods for standard setting
  - Recommends progress testing using the Comprehensive Basic Science Examination (CBSE)
  - Recommends developing and validating post-remediation assessments for each course
  - Recommends successful remediation by July 31 of Year 1 and by the start of the Preclerkship course in Year 2 to progress
- *Faculty Leadership Working Group, led by Peter Drain, PhD*
  - Recommends slate of faculty leadership positions
  - Recommends thread integration by way of eight Thread Leads
  - Recommends three Block Directors
  - Recommends selection process for Faculty leadership positions
- *Longitudinal Educator Working Group, led by Robert Arnold, MD*
  - Recommends job descriptions, selection process, and development framework for Longitudinal Educators and Clinical Skills Preceptors

## Support Cluster

- *Staffing Working Group, led by Katie Maietta, MPPM*
  - Recommends OMED restructure
  - Recommends new staff/adjusted role completion by July 1, 2023
- *Policy Working Group, led by Jason Rosenstock, MD*
  - Recommends creation of Policy Review Committee
  - Recommends 1/3 of policies are reviewed each year
  - Recommends substantive revision on listed policies
- *Scheduling/Logistics Working Group, led by Allison Serra, MD, MPH*
  - Recommends continued review of registration requirements
  - Recommends 'side-by-side' comparison calendars for both 3RC and Legacy curricula
  - Recommends Flex Week monitoring, policy, and process used by students and Advisory Deans
  - Recommends continued engagement with parallel programs (MSTP, CSTP, PTSP, Dean's Research Year, OMFS)

- *Mapping/Integration Working Group, led by Marie Defrances, MD, PhD and William Walker, PhD*
  - Recommends Elentra Software for curriculum mapping
  - Recommends the following categories: UPSOM EPOs, AAMC/LCME Keywords, USMLE, Assessment Methods, Patient characteristics and Threads
  - Recommends increasing monitored keywords from 54 to 69
- *Educational Technology Working Group, led by JB McGee, MD*
  - Recommends Elentra software for Learning Management System and ProgressIQ for academic performance monitoring
  - Recommends consolidating learning platforms
  - Recommends Slack, Amboss, and UWorld as external resources
  - Recommends training plan development for all new systems
- *Finance Working Group, led by Mike Gaber*
  - Recommends elimination of ECU tracking
  - Recommends paid educators
  - Recommends for tuition revenue deficit for PCAT students
  - Recommends cost in Year 1 to \$6.5m and Year 2 to \$8.8m
- *Program Evaluation Working Group, led by Aaron Brown, MD*
  - Recommends monitoring at course, segment, and whole curriculum
  - Recommends staff Director of Program Evaluation through OMED
  - Recommends faculty director of Program Evaluation
  - Recommends standing committees to review outcomes for Clerkship and Foundations Segments
- *Primary Care Accelerated Track Working Group, led by Amanda Casagrande, MD*
  - Recommends submitted selection process, objectives, competencies, and outcomes
  - Recommends submitted curriculum adjustments
  - Recommends instruction beginning in July
  - Recommends PCAT Steering Committee
- *Flex Weeks Working Group, led by Michael McDowell, MD*
  - Recommends six flex weeks in Foundations segment
  - Recommends flex weeks at intervals in Clerkships and Bridges segments
  - Recommends flex week review by Advisory Deans
  - Recommends little in way of monitoring/enforcement of this experience
  - Recommends Flex Week Director and administrator positions

## **Thread Cluster**

- *Social Medicine Working Group, led by Eloho Ufomata, MD, MS*
  - Recommends further considerations of the School's Mission Statement
  - Recommends a keyword list to accurately tag Social Medicine topics
  - Recommends creation of Teaching Social Medicine certificate program
  - Recommends interweaving social medicine questions into weekly assessments
  - Recommends recruiting local expertise from our local community
- *Leadership Working Group, led by Suzi Templer, DO*
  - Recommends objectives, aims, and curricular approach submitted
  - Recommends baseline surveys beginning in Year 1, repeated in Year 2
  - Recommends embedding questions linked to specific didactic content delivered in clinical years
- *Interprofessional Education Working Group, led by Ankur Doshi, MD*
  - Recommends early introduction of IPE themes

- Recommends experiential learning opportunities with other health professionals
- Recommends all longitudinal programs contain IPE themes
- Recommends co-learning with other Health Science students
- *Clinical Reasoning Working Group, led by Eliana Bonifacino, MD, MS*
  - Recommends expansion and enhancement of Evidence, Discovery, and Reasoning content
  - Recommends integration into Keystone Fundamentals, Organ Systems, and Patient-centered Care blocks
  - Recommends creation of online educational modules and case scenarios
  - Recommends creation of Clinical Reasoning Student Workshops three times per term
  - Recommends faculty development within this area
- *Tracks/Streams Working Group, led by Andrew Wickerham, MD, MPH*
  - Recommends rebranding current Areas of Concentration with Programs of Distinction
  - Recommends continuation of Professional Enrichment Courses (PECs)
  - Recommends continued financial support for faculty supporting program
- *Ophthalmology/Otolaryngology Working Group, led by Jake Waxman, MD, PhD and Melonie Nance, MD*
  - Recommends goals, objectives, EPOs, and mapping of Ophthalmology and Otolaryngology topics and conditions
  - Recommends use of specialty society endorsed objectives and USMLE content outline
  - Recommends one week experience in Ophthalmology and Otolaryngology for all third year students
  - Recommends permanent committee to steer content in these areas
- *Community Alliance Program Working Group, led by Twee Bui, MD*
  - Recommends an increase in relationship building, reciprocity practice, and civic participation skills
  - Recommends direct community partner organization support
  - Recommends longitudinal, coordinated service learning

## **Clerkship/Bridges Cluster**

- *Legacy Working Group, led by Eric Hager, MD, and John Szymusiak, MD, MS*
  - Recommends shortening overlap portion of core clerkships for Legacy and possible 3RC students
  - Recommends clerkships consider options to allow for student expansion without sacrificing quality
  - Recommends allowing Legacy students the ability to choose extracurricular time to meet individual learning needs
- *Longitudinal Clinical Experience Working Group, led by Amar Kohli, MD*
  - Recommends starting Longitudinal Clinical Experience in the third year for a one year experience
  - Recommends student attending on site two times per month
  - Recommends piloting with Legacy curriculum
- *Assessment: MS3/4, Diagnostics, ILS, Credit System Working Groups*
  - The above working groups have been delayed due to their timing in the curriculum. All groups will begin their work September 1, 2023.

## **VIII. Other Key Program Areas**

### **Longitudinal Alliance Program (LAP)**

The Longitudinal Alliance Program has been an established activity at UPSOM that focuses on connecting a student with a patient in the student's first year of medical school. A core idea of this program is that a student will develop a longitudinal relationship with the patient in which the student can learn what the experience of a chronic health condition is like from the patient perspective – especially with regards to how it intersects the health care system. Students have periodic small group debriefings to share information about their experience, and also receive input from a cadre of interprofessional practitioners. Having demonstrated the value in such an experience on a small scale, the decision was made to expand LAP to all students as part of Curriculum Reform.

### **Community Alliance Program (CAP)**

The Community Alliance Program (CAP) at the University of Pittsburgh School of Medicine (UPSOM) is a uniquely innovative program that aims to partner with community organizations to engage students and faculty in communities of practice to address social and structural determinants of health (SSDH). Each group of 8-10 students and their faculty advisor/longitudinal educator will forge an alliance with a community partner organization (CPO) to learn and support the work of the partner over a one-year period. CAP plans to facilitate continued student connection with the community partner beyond the first year of medical training. UPSOM through CAP will develop long-term partnerships with 16 CPOs to facilitate engagement for 150 students each year. Students and faculty in these communities of practice will learn to intervene on SSDH, develop community engagement skills, and advocate to change healthcare and social care systems. It is our hope that longitudinal, intentional, respectful and large-scale engagement with communities and neighborhoods around Pittsburgh, we will demonstrate improvement in community engagement, health equity indicators and ultimately health impacts.

We recommend the creation of a Community Alliance Program implementation working group to convene immediately as soon as the Faculty Leadership roles are settled. This team will be mandated to, by the end of May 2023, develop a plan for implementing this program in its initial form for the fall of 2023.

### **Primary Care Accelerated Track (PCAT)**

PCAT is a joint program between the University of Pittsburgh School of Medicine and UPMC Medical Education (residency programs). Accepted students will finish medical school in three years and will be eligible to enter into one of UPMC's primary care residency programs (Internal Medicine, Family Medicine, and Pediatrics) if all requirements are met.

Students who seek admission into PCAT will proceed with the usual process for admission to UPSOM; if appropriate, they will be invited to submit a secondary application for PCAT, which will include a special essay and additional interviews as well as identification of the specialty track of interest (internal medicine, pediatrics, or family medicine). A final decision will be made with input from residency programs. Admitted students will be expected to commit by mid-May for a matriculation date of July 1, to allow them to begin the summer curriculum before the start of the traditional first year. PCAT

students will retain autonomy of choice—they can drop out of PCAT at any time, pursue non-UPMC residencies if they wish, and ultimately practice wherever and however they wish.

# IX. Appendix

## Appendix A: Overview Calendar

UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE

### CURRICULUM OVERVIEW

YEAR 1

AUGUST													MAY						
Intro to Being a Physician	Keystone Fundamentals	FLEX WEEK	Keystone Fundamentals		FLEX WEEK	Keystone Fundamentals		Cardiology		FLEX WEEK	Nephrology		FLEX WEEK	Pulmonology		Digestion & Nutrition		Rheumatology	Dermatology
	Patient, Physician, and Society																		
	Medical Interviewing			Physical Examination				Introduction to Clinical Medicine 1											
	Evidence, Discovery, and Reasoning																		
	Longitudinal Alliance Program																		
Community Alliance Program																			

YEAR 2

AUGUST													MAY		
Endocrinology	Reproduction, Sexual Health, and Gynecology	Musculoskeletal	FLEX WEEK	Neuroscience	Psychiatry	Oncology	Testing	FLEX WEEK		Preceptorship	Block 1	Block 2			
Introduction to Clinical Medicine 2															
Longitudinal Alliance Program								Longitudinal Research Project							
Community Alliance Program															

YEAR 3

AUGUST					MAY			
Block 3	FLEX WEEK	Block 4	Block 5	Block 6	Block 6	FLEX WEEK	Block 7	Block 8
Longitudinal Research Project								
Longitudinal Alliance Program								
Community Alliance Program								

YEAR 4

AUGUST					MAY			
Block 9	FLEX WEEK	Block 10	Block 11	Block 12	Block 12	FLEX WEEK	Block 13	Block 14
Longitudinal Research Project								
Longitudinal Alliance Program								
Community Alliance Program								

## Appendix B: Keystone Fundamental Cases

Case and Order	Content Overview
<b>Case #00: Embryology mini-cases</b>	Normal embryologic development of CNS, heart and digestive tract; congenital malformations; diagnostics
<b>Case #01: Inborn errors of metabolism - glycogen storage, urea cycle defect</b>	Intro to cell structure/function; Homeostasis of glucose/glycogen levels and protein levels; Inheritance, pedigree analysis, and screening. Treatments.
<b>Case #02: Diarrhea/Bacterial gastroenteritis case</b>	Basic gut function; histology of tissue layers, Intro to bacteriology and intro to the immune system, C. difficile, consequences of antibiotic treatment, microbiome
<b>Case #03: Breast lump/Breast cancer case</b>	Normal and cancer genetics, histology of glands/basement membrane/connective tissues/lymph system; intro to pharm and cancer treatments
<b>Case #04: Diseases of Proteostasis/Protein folding case (Sickle Cell; CF)</b>	RBC, CBC, anemia; protein quality, <u>misfolding</u> , disease; cell injury and cell death; Basic lung form and function.
<b>Case #05: Shortness of Breath/Bacterial pneumonia</b>	Lung infections; inflammation. pharmacology of antibiotics; vaccines
<b>Case #06: Weight loss-fatigue/Grave's disease</b>	Endocrinology: hormones signaling, systemic feedback; thyroid anatomy/histology; thyroid function; surgical and pharm treatments; Intro to autoimmunity
<b>Case #07: Weakness of extremities/MS case</b>	Neuron histology and function; CNS vs PNS; Intro to brain and eye anatomy; Autoimmunity; pharmacology of autonomic nerve system
<b>Case #08: Elevated A1C/Type II Diabetes case</b>	Metabolism, hyperglycemia, kidney damage, loss of sight, nerve damage; foot infection; treatments
<b>Case #09: Chest pain/Coronary artery disease-MI</b>	LDL receptor biology & lipids; blood vessel histology and function; cardiac and striated muscle; atherosclerosis; thrombosis; infarct/necrosis; treatments
<b>Case #10: Trauma case – including DVT/PE</b>	Cartilage/bone histology; thrombosis, embolism & shock; transfusion
<b>Case #11: Transition case: Hematology</b>	Anemia, thrombosis, hemophilia
<b>Case #12: Transition case: Tuberculosis and HIV</b>	Mycobacteria, HBV, HIV, opportunistic infections; chronic inflammation, acquired & inherited <u>immunodeficiencies</u> ; antiviral and antimicrobial disease treatments
<b>Case #13: Transition case: Lupus</b>	Innate & adaptive immunity: autoimmunity; transplantation (kidney failure); multi-organ disease manifestations

## Appendix C: Patient-centered Care Cases

week 1	No PCC content
week 2	MI 1 (SG) [Intro, CC, HPI] or IL
week 3	MI 2 (SG) [dealing with emotions] or IL
week 4	MI 3 (SG) [PMH, PSH, FH] or IL
week 5	Flex Week
week 6	MI 4 (SG) [SH] or IL
week 7	MI 5 (SG) [CIA] or IL
week 8	MI 6 [Honing Skills Part 1] or IL
week 9	PE 1 (SG) [Intro & HEENT] or IL
week 10	PE 2 (SG) [vital signs & skin] or IL
week 11	PE 3 (SG) [thorax & heart - SP?] or IL
week 12	Flex Week
week 13	PE 4 (SG) [abdomen] or IL
week 14	PE 5 (SG) [neuro] or IL
week 15	PE 6 (SG) [draping, evidence-based PE, Putting It Together] or IL
week 16	No PCC content
week 17	PE 7 (SG) [MSK] or IL
week 18	PE 8 (SG) [SP exam round 1] or IL
week 19	PE 9 (SG) [SP exam round 2] or IL
week 20	Winter Recess
week 21	Winter Recess
week 22	PCC
week 23	ICM1 or IL
week 24	PCC
week 25	ICM1 or IL
week 26	Flex Week
week 27	ICM1 or IL
week 28	ICM1 or IL
week 29	ICM1 or IL
week 30	Flex Week
week 31	ICM1 or IL
week 32	ICM1 or IL
week 33	ICM1 or IL
week 34	Spring Break
week 35	ICM1 or IL
week 36	ICM1 or IL
week 37	ICM1 or IL
week 38	ICM1 or IL

<b>week 39</b>	<b>ICM1 or IL</b>
<b>week 40</b>	<b>ICM1 or IL</b>
<b>week 41</b>	<b>ICM1 or IL</b>
<b>week 42</b>	<b>Summer Recess</b>
<b>week 43</b>	<b>Summer Recess</b>
<b>week 44</b>	<b>Summer Recess</b>
<b>week 45</b>	<b>Summer Recess</b>
<b>week 46</b>	<b>Summer Recess</b>
<b>week 47</b>	<b>Summer Recess</b>
<b>week 48</b>	<b>Summer Recess</b>
<b>week 49</b>	<b>Summer Recess</b>
<b>week 50</b>	<b>Summer Recess</b>
<b>week 51</b>	<b>Summer Recess</b>
<b>week 52</b>	<b>Summer Recess</b>
<b>week 53</b>	<b>ICM2 or IL</b>
<b>week 54</b>	<b>ICM2 or IL</b>
<b>week 55</b>	<b>ICM2 or IL</b>
<b>week 56</b>	<b>ICM2 or IL</b>
<b>week 57</b>	<b>PCC</b>
<b>week 58</b>	<b>ICM2 or IL</b>
<b>week 59</b>	<b>Flex Week</b>
<b>week 60</b>	<b>ICM2 or IL</b>
<b>week 61</b>	<b>ICM2 or IL</b>
<b>week 62</b>	<b>ICM2 or IL</b>
<b>week 63</b>	<b>ICM2 or IL</b>
<b>week 64</b>	<b>ICM2 or IL</b>
<b>week 65</b>	<b>ICM2 or IL</b>
<b>week 66</b>	<b>ICM2 or IL</b>
<b>week 67</b>	<b>ICM2 or IL</b>
<b>week 68</b>	<b>ICM2 or IL</b>
<b>week 69</b>	<b>PCC</b>
<b>week 70</b>	<b>Flex Week</b>
<b>week 71</b>	<b>Step 1 Dedicated Study</b>
<b>week 72</b>	<b>Step 1 Dedicated Study</b>
<b>week 73</b>	<b>Winter Recess</b>

## Appendix D: Policies

Revised Substantively	Reviewed
Absence/Attendance	Authoring of MSPE
Academic Remediation	Clinical Supervision
Calendar/Scheduling	Counter-sig of MS entries
Completion of Course Evaluations	Grade Appeals
Narrative Assessment	Impaired Students
Mistreatment	Midrotation feedback
Performance/Progress	Non-involvement of providers
Shelf make-ups	Alternative Site Assignment
Parental Accommodation	Resident Prep for Teaching
Timing of procedure changes	Student attendance during emergency
USMLE	Timeliness of evals
Timing of procedure changes	Academic Observation
Appeals of promotions	Access to MS records
Code of Professionalism	Authorship
Drug Free Workplace	Code of Conduct
Exposure to hazards	FERPA
HC related absences	Immunizations
International	LOA
Non-discrimination	Requirements for insurance
Notice of non-discrimination	Duty Hours
Official communication	Tuition charges refunds
Requirements for MD	COI faculty
Research involving MS	COI Pitt
Structure Promotions	Consultant COI
Student challenges of record	Faculty Appointment for preceptors
Bloodborne pathogens	Policy Creation
Time limitations for MD	Industry relations
Transportation to sites	
Visiting students	
International MS	
MS financial aid	
MS transfer	
professionalism/background check	
technical standards	
Terms for matriculation	
Title IV refunds	

## Appendix E: Ophthalmology mapping

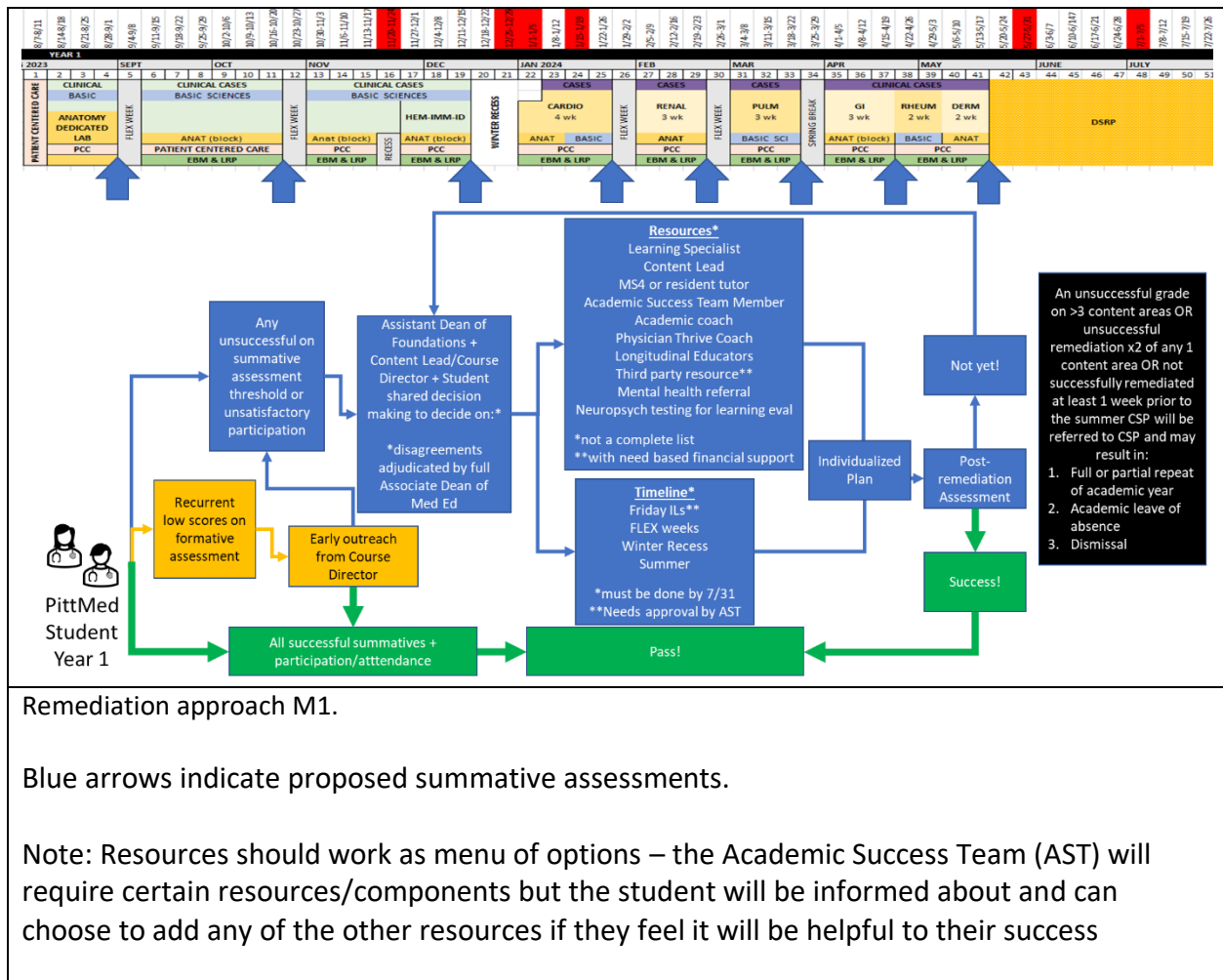
Objective	Source	EPO	Current home	New home
Describe the anatomy of the eye and the visual system including the external eye, conjunctiva, sclera, cornea, anterior chamber, ciliary body and aqueous drainage system, iris, lens, optic nerve, retina, extraocular muscles, CNS visual pathways.	Graubart et al USMLE Content outline	1-14 1-15	Pharmacology course Neuroscience course Specialty Care Clerkship	Keystones Fundamental Diabetes and MS cases
Obtain a focused history for complaints of vision loss, eye pain and redness or diplopia	Graubart et al USMLE Content outline	6-1	Advanced Physical Exam Specialty Care Clerkship	Clinical skills sessions?
Perform a basic eye exam <ul style="list-style-type: none"> <li>• Measure and record visual acuity</li> <li>• Examine pupillary responses</li> <li>• Examine ocular motility</li> <li>• Examine visual fields</li> <li>• Examine the anterior segment of the eye</li> <li>• Examine the optic nerve and retina</li> </ul>	Graubart et al USMLE Content outline	7-3 7-4 7-6 7-7 7-8	Advanced Physical Exam Specialty Care Clerkship	Clinical skills sessions?
Describe common causes of acute vision loss with regard to etiology, presentation, evaluation and treatment, association with systemic disease and impact on the patient and society for conditions including: <ul style="list-style-type: none"> <li>• Retinal vein occlusion</li> <li>• Retinal arterial occlusion</li> <li>• Optic neuritis</li> <li>• Ischemic optic neuropathy</li> <li>• Retinal detachment</li> <li>• Macular degeneration</li> </ul>	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1 13-2 14-1 14-2 14-3 14-4 15-1 16-1 16-3 32-1	Specialty Care Clerkship	Unknown
Describe common causes of chronic vision loss with regard to etiology, presentation, evaluation and treatment, association with systemic disease and impact on the patient and society for conditions including:	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1	Specialty Care Clerkship	Unknown

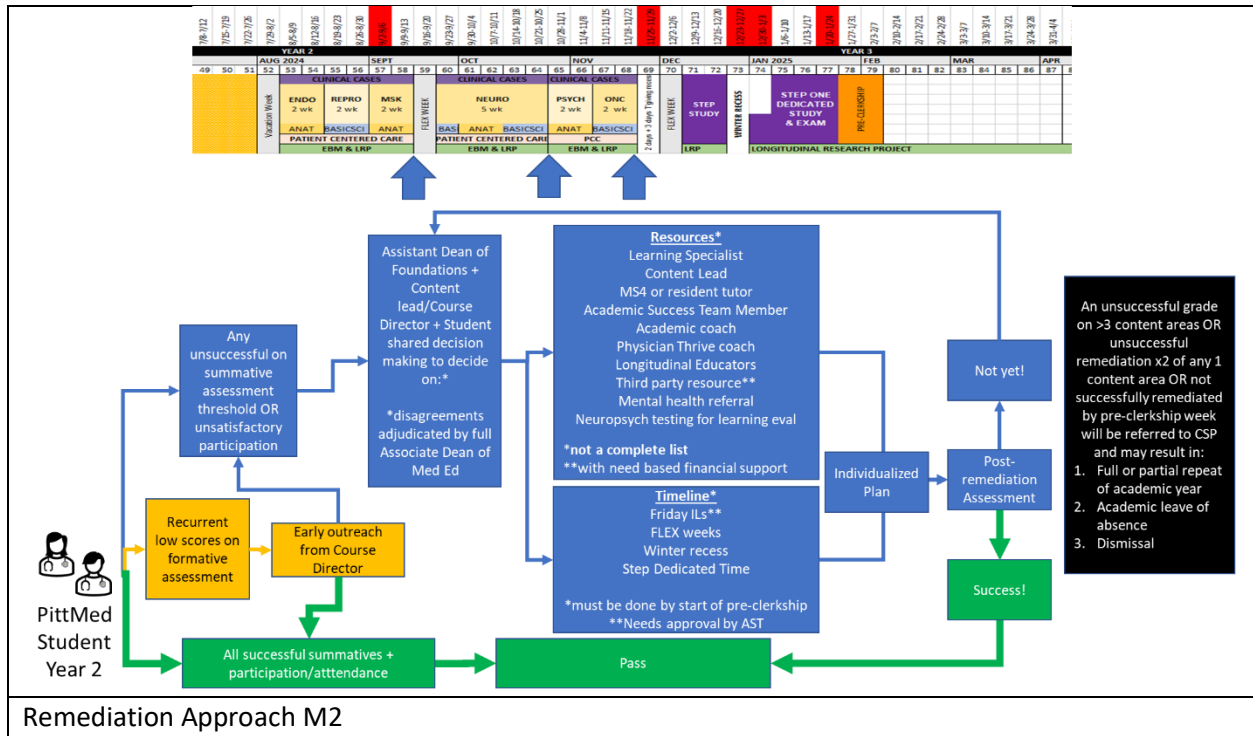
<ul style="list-style-type: none"> <li>• Refractive error</li> <li>• Cataract</li> <li>• Glaucoma</li> <li>• Macular degeneration</li> <li>• Diabetic retinopathy</li> </ul>		13-2 14-1 14-2 14-3 14-4 15-1 16-1 16-3 32-1		
Describe common causes of eye redness and pain with regard to etiology, presentation, evaluation and treatment, association with systemic disease and impact on the patient and society for conditions including: <ul style="list-style-type: none"> <li>• Conjunctivitis</li> <li>• Keratitis</li> <li>• Ocular inflammatory disease</li> <li>• Subconjunctival hemorrhage</li> </ul>	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1 13-2 14-1 14-2 14-3 14-4 15-1 16-1 16-3 32-1	Specialty Care Clerkship	Unknown
Describe common causes of diplopia with regard to etiology, presentation, evaluation and treatment, association with systemic disease and impact on the patient and society for conditions including <ul style="list-style-type: none"> <li>• Stroke</li> <li>• MS</li> <li>• Childhood strabismus</li> </ul>	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1 13-2 14-1 14-2 14-3 14-4 15-1 16-1 16-3 32-1	Specialty Care Clerkship	Unknown
Describe the ocular manifestations of systemic conditions including: <ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Multiple sclerosis</li> <li>• Hypertension</li> <li>• Sickle Cell Disease</li> <li>• Graves Disease</li> <li>• Stroke</li> </ul>	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1 13-2 14-1	Specialty Care Clerkship	Unknown

<ul style="list-style-type: none"> <li>• Autoimmune conditions</li> <li>• HIV</li> <li>• Pregnancy</li> <li>• Intracranial Hypertension</li> </ul>		14-2 14-3 14-4 15-1 16-1 16-3 32-1		
<p>List the common ophthalmic medications that can cause systemic side effects and common systemic medications that can have ocular side effects including:</p> <ul style="list-style-type: none"> <li>• Corticosteroids</li> <li>• Hydroxychloroquine</li> <li>• Anti-cholinergic medications</li> <li>• Beta-blockers</li> <li>• Adrenergic agonists</li> </ul>	Graubart et al USMLE Content outline	2-8 4-2 12-4 16-6	Pharmacology Specialty Care Clerkship	Unknown
<p>List and describe the pathophysiology of the most important ophthalmic problems in children including:</p> <ul style="list-style-type: none"> <li>• Refractive error</li> <li>• Amblyopia &amp; strabismus</li> <li>• Congenital cataract</li> <li>• Congenital glaucoma</li> <li>• Retinoblastoma</li> <li>• Retinopathy of prematurity</li> </ul>	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1 13-2 14-1 14-2 14-3 14-4 15-1 16-1 16-3 32-1	Specialty Care Clerkship	Unknown
<p>List and describe the manifestations of ocular trauma, describe initial management and urgency for entities including:</p> <ul style="list-style-type: none"> <li>• Corneal abrasion</li> <li>• Corneal foreign body</li> <li>• Corneal or scleral laceration</li> <li>• Chemical injury</li> <li>• Hyphema</li> </ul>	Graubart et al USMLE Content outline	2-1 2-14 4-1 4-3 12-4 13-1 13-2 14-1 14-2 14-3 14-4 15-1 16-1 16-3 32-1	Specialty Care Clerkship	Unknown

Present a patient with an eye problem, communicate with an ophthalmic consultant, interpret ophthalmic documentation	Graubart et al USMLE Content outline	10-1 10-2 10-4	Specialty Care Clerkship	
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## Appendix F: Remediation concept





## Appendix G: Current Faculty Leadership Roles

Anatomy	Biochemistry	Physiology
Genetics	Microbiology/Infectious Disease	Pathology/Histology
Immunology	Pharmacology	Statistics for Clinicians and Biomedical Researcher
Population and Community	Reproduction, Sexual Health, and Gynecology	Racism in Medicine
Neuroscience	Research Design/LRP	Digestion and Nutrition
Ethics/Law	Musculoskeletal	Radiology
Introduction to Clinical Medicine	Physical Exam Skills	Medical Interviewing
Cardiology	Pulmonology	Ophthalmology
Dermatology	Oncology	Hematology
Otolaryngology	Psychiatry/Behavior	Nephrology
Endocrinology		Rheumatology
Leadership Thread	Clinical Reasoning Thread	Interprofessional Education Thread
Social Medicine Thread	Clinical Skills Preceptor Leadership	Longitudinal Educator Leadership
Primary Care Accelerated Track Leadership	Community Alliance Program Leadership	Longitudinal Alliance Program Leadership
Keystone Foundations Block Leader	Patient Centered Care Block Leader	Organ Systems Block Leader