The Middle Clinical Experience

The MCE Workgroup: Robin DeMuth, Sue Barman, Pat Brewer, Colleen Bush, Len Fleck, Marilee Griffith, Churlsun Han, Tibor Kalnoki-Kis, Joel Maurer, Richard Miksicek, Deb Sleight, Teresa Soldner, Sath Sudhanthar, Sheila Teunissen, Angela Thompson-Busch, William Wonderlin

Rationale

- Goal for the MCE is to continue the integrated necessary science/bioethics and clinical skills learning, built around experiences with real patients. In the ECE there is the core for clinical activity is the central and core primary care practice. In the MCE the students will experience other settings and join other interdisciplinary teams for rotations, all while studying the necessary science that relates to these teams and these patients.
- Clinically, focus remains on having the students be useful whenever possible -- to give the best experience to students, patients, and preceptors.
- Academically, the students remain within their academic home for small groups, simulation, and mentoring, through the Learning Society system.

Curriculum Objectives

- To expand skills in interviewing, physical examination, diagnostic reasoning, communication, and documentation in expanded settings including the emergency department, newborn nursery, inpatient wards, and outpatient clinics.
- To gain further understanding of the necessary biological and social science and bioethics knowledge necessary to comprehend and interpret the clinical data gathered in evaluation of common complaints in these settings.
- To begin to perform hypothesis-driven histories and physicals.
- To develop further understanding of the health care system and the patient experience.
- To expand skills as a member of interprofessional teams.
- To prepare students for national licensing examinations, including Step 1 of the USMLE.

Description of Curriculum

Chief Complaints and Concerns (C3) Topics for the MCE:
- Substantial in number
- Chosen for relationship to rotations planned for MCE
- Some will be covered as Weekly Topics, covered by all MCE students no matter their rotation; others will be Rotational Topics, covered by students while on a specific, related rotation.

Clinical Rotations planned for the MCE

The clinical time for these weeks will be arranged to most sensibly interact with the clinical team the student will work with during the rotation.

Ex: Adult inpatient medicine requires continuity for best experiences, so students will have daily morning clinical time while they are working with the team, including weekend time.

On social work or nutrition, mornings or afternoons may be equally useful and continuity less critical than spreading out the numbers of students assigned to the service.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>4 wks</td>
</tr>
<tr>
<td>Office OB/Gyn</td>
<td>4 wks</td>
</tr>
<tr>
<td>Adult Inpatient Medicine (IM or FM)</td>
<td>4 wks</td>
</tr>
<tr>
<td>Pediatric Inpatient Medicine</td>
<td>4 wks</td>
</tr>
<tr>
<td>Newborn Nursery</td>
<td>2 wks</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>2 wks</td>
</tr>
<tr>
<td>Nutrition</td>
<td>2 wks</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>2 wks</td>
</tr>
<tr>
<td>Pharmacy (e.g. dosing service)</td>
<td>2 wks</td>
</tr>
<tr>
<td>Social Work</td>
<td>2 wks</td>
</tr>
<tr>
<td>Palliative Care/Pain Management</td>
<td>2 wks</td>
</tr>
</tbody>
</table>

Typical Week in Life of an MCE Student - on Physical Therapy

<table>
<thead>
<tr>
<th>Day</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Clinical activity: PT (4 hrs)</td>
<td>Guided independent learning</td>
</tr>
<tr>
<td>Tu</td>
<td>Clinical activity: PT (4 hrs)</td>
<td>Guided independent learning</td>
</tr>
<tr>
<td>W</td>
<td>Clinical activity: PT (4 hrs)</td>
<td>Guided independent learning</td>
</tr>
<tr>
<td>Th</td>
<td>Guided Independent learning</td>
<td>PT Rotation (4 hrs)</td>
</tr>
<tr>
<td>F</td>
<td>Clinical activity: PT (4 hrs)</td>
<td>Guided independent learning</td>
</tr>
<tr>
<td>Sa</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other examples: Students on Adult Medicine will roll 6 days in a row in the mornings, to allow for team continuity. Their increased clinical time in these weeks will be balanced with a week with increased guided independent learning.

What is involved in Guided Independent Learning?

1. Setting the stage: a Patient’s story
   + Similar to ICC in sharing of patient experience as fundamental to learning
   + Recording stories can allow intentionally diverse and illustrative choices of patients
2. Prerequisites
   + Formative Assessment and Review Materials
3. Objectives for Week
4. Major Resources (and Supplemental)
5. Prepare for Post Clinic Group activity and for Team Based Learning
   + PCG may involve bringing a patient story/case from rotation
   + TBI: Individual & group readiness assessment to start
6. Reinforced by simulation activities
7. At end of week: Formative assessment items with feedback

Next Steps

Development of Interdisciplinary Rotations
- Needs collaboration with hospital system partners
- Creation of skills lists that will allow students to be useful
- Development of related necessary science and bioethics topics

Development of OB/ED/Adult Medicine/Nursery/Pediatrics Rotations
- Build on work of MCE Group in these rotations
- Work with related departments in developing clinical sites
- Further coordination between necessary scientists, ethicists, and clinicians in developing related content

Development of flow of weekly C3 topics to best tell the “stories” of necessary science
- Choose topic order that will guide students through necessary science in a developmental way
- How do we keep students organized in their understanding?
  - Concept maps?
  - Linkage to other/prior material
  - Use of a coordinated set of resources