### TRADITIONAL CLINICAL TRAINING MODEL

- A model of medical education by which students complete consecutive clinical blocks, meeting core clinical competencies in one discipline before advancing to the next.
- Each block is a highly structured clinical experience occurring over a set period of time, typically 4 – 8 weeks.
- By the end of their clinical blocks, students develop a broad foundation of clinical knowledge and have broad exposure to the multiple fields of medicine.
- This model has been widely accepted since the Flexner Report on medical education in 1910.

### TRADITIONAL CURRICULUM MODEL

<table>
<thead>
<tr>
<th>Block</th>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7:00 AM</td>
<td>ROUNDS</td>
<td>ROUNDS</td>
<td>ROUNDS</td>
<td>ROUNDS</td>
<td>ROUNDS</td>
<td>ROUNDS</td>
</tr>
<tr>
<td>2</td>
<td>9:00 AM</td>
<td>SURGERY/ OR</td>
<td>L&amp;D</td>
<td>FM CLINIC</td>
<td>IM CLINIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>12:00 PM</td>
<td>SMALL GROUP</td>
<td>SMALL GROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4:00 PM</td>
<td>OB/GYN CLINIC</td>
<td>PEDIATRICS CLINIC</td>
<td>INDEPENDANT STUDY</td>
<td>IM CLINIC</td>
<td>CHART AUDITS JOURNAL CLUBS</td>
<td>BEDSIDE TEACHING CARE PRESENTATIONS TEAM-BASE LEARNING</td>
</tr>
<tr>
<td>5</td>
<td>5:00 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ROTATING STUDENT CALL FOR INPVENT SERVICES, EMERGENCY, SURGERY AND L&amp;D</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6:00 – 10:00 PM</td>
<td>INTERMITTENT EMERGENCY, SURGERY OR L&amp;D CALL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INTEGRATED CLINICAL TRAINING

- A model of medical education by which students participate in comprehensive care of patients over time, meeting core clinical competencies across multiple disciplines simultaneously.
- Clinical experiences in all core disciplines are tightly integrated into a longitudinal schedule.
- By the end of their integrated clinical experience, students develop a broad foundation of clinical knowledge and have broad exposure to the multiple fields of medicine.
- This model has been shown to be equally effective in training medical students in multiple clinical setting across the country (e.g., Harvard, UCSF, Duke, Minnesota, Washington and South Dakota).

### STUDENT EXPERIENCE

- The traditional model is often considered ‘tried and true’ and well understood by students.
- By engaging in daily clinical and educational activities on a given clinical block with set faculty, students are immersed in the discipline.
- Students are expected to demonstrate competence in each area of content before progressing to the next block.

### FACULTY AND COMMUNITY EXPERIENCE

- Most faculty are very familiar and comfortable with the traditional model.
- The traditional model accommodates faculty who want to block their teaching time (i.e., clinical lectures, small group facilitation, clinical teaching…)
- When ‘on service,’ faculty provide or share daily education during the entire time.
- Community faculty often are only ‘on service’ for a limited number blocks per year due to the potential impact on their practice.
- The traditional model integrates well with large academic health care systems.

### LONGITUDINAL INTEGRATED CURRICULUM (LIC) MODEL

- Creating a curriculum that works for the Colorado Springs community: Where on the spectrum should we be?

<table>
<thead>
<tr>
<th>Block</th>
<th>Time</th>
<th>Monday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>7:00 AM</td>
<td>Adult Ambulatory Care</td>
</tr>
<tr>
<td>2.</td>
<td>9:00 AM</td>
<td>Emergency Care</td>
</tr>
<tr>
<td>3.</td>
<td>12:00 PM</td>
<td>Infant, Child &amp; Adolescent Care</td>
</tr>
<tr>
<td>4.</td>
<td>4:00 PM</td>
<td>Hosipitalized Adult Care</td>
</tr>
<tr>
<td>5.</td>
<td>5:00 PM</td>
<td>Musculoskeletal Care</td>
</tr>
<tr>
<td>6.</td>
<td>6:00 – 10:00 PM</td>
<td>Neurologic Care</td>
</tr>
<tr>
<td>7.</td>
<td>7:00 AM</td>
<td>Perioperative Care</td>
</tr>
<tr>
<td>8.</td>
<td>9:00 AM</td>
<td>Psychiatric Care</td>
</tr>
<tr>
<td>9.</td>
<td>12:00 PM</td>
<td>Rural Community Care</td>
</tr>
<tr>
<td>10.</td>
<td>1:00 PM</td>
<td>Women’s Care</td>
</tr>
</tbody>
</table>

### STUDENT EXPERIENCE

- Students participate in the comprehensive and longitudinal care of patients, providing them with a more authentic clinical experience.
- By engaging in an LIC, students have continuous learning relationships with faculty that mature over time, resulting in fairer evaluations and overall greater student satisfaction.
- Students are expected to demonstrate competence in core clinical areas over time and across multiple disciplines simultaneously.

### FACULTY AND COMMUNITY EXPERIENCE

- Faculty are intricately involved with student professional development.
- The LIC model accommodates faculty with busy clinical practices by distributing teaching time over the longitudinal experience.
- Student have great integration into a given clinical practice with less impact on clinical flow.
- Graduates are better prepared to care for patients: greater understanding of ethical decision-making and how social context affects patients.
- It has been suggested that an LIC leads to greater retention of students in community following training.
AM Last Page: Longitudinal Integrated Clerkships

Professor Jennene Greenhill, PhD, MSPD, associate dean and director, Flinders University Rural Clinical School and Associate Professor Lucie Walters, PhD, MBBS, Rural Medical Education, Flinders University Rural Clinical School

Longitudinal integrated clerkships (LICs) represent a pedagogical and theoretical paradigm shift in health professional student clinical education. They occur when short block rotations are replaced by longer clinical immersion experiences (of at least a semester) during which “students... 

- participate in comprehensive care of patients over time,
- participate in continuing learning relationships with these patients’ clinicians, and
- meet the majority of the year’s core clinical competencies across multiple disciplines simultaneously through these experiences.”

Continuity and symbiosis are key LIC concepts.

Continuity facilitates symbiotic relationships at multiple system levels:

The microsystem—At the personal level LICs help clinician-to-patient relationships and shape physicians’ professional identity.

The mesosystem—At the nexus between health services and the university, LICs improve quality and safety and facilitate research partnerships.

The macrosystem level—LICs promote community–government relationships and provide social and human capital by involving students in community-engaged learning that attracts and retains clinicians.

The relationships fostered by LICs among students, faculty clinicians, and communities have wide, lasting outcomes.

Sound theory underpins LICs.

Cognitivism
- Continuity in clinical learning reduces cognitive load. Learners are more familiar with their surroundings, which results in greater working memory to learn while in the clinical environment.
- Integrating knowledge and skills in the care of each patient provides emotional cues for recalling knowledge and develops schema for clinical reasoning.

Situated learning
- Knowledge is meaningful when acquired within a clinical community of practice with specific norms, symbols, and rituals of power (such as clinical notes, investigation results, and ward rounds).
- Students learn to be doctors by applying knowledge and skills rather than learning about medicine.

Transformative learning
- Students begin to transition to clinicians when they experience a disorientating process that takes them out of their comfort zone and when they reflect on their experiences.
- Students change their worldviews (values, personal identity, and self-expectations) guided by peers and clinical supervisors; they try different roles and engage in critical discourse to become work-ready clinicians.

References

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