CROSS-COUNTRY CHECK-UP

LICs in Canada
Disclosures

- Drs. Cummings, Graves and Myhre have no conflicts of interest to declare.
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Objectives

- Compare and contrast existing LICs in Canada
- Describe with attention to the contextual factors associated with decisions made for each model
- Discuss internationally recognized research stemming from the Canadian LICs experience
- Explore critical questions related to LIC model of clerkship.
Agenda

- Introduction
- Setting the stage
- The Canadian context
- LIC models in Canada
- Moving Forward
- Wrap up
Introductions (tour de table)
Let’s think about…

Integration, continuity and longitudinality
Activity #1

- Why are the concepts of integration, continuity and longitudinality important to medical education?
- Why does this matter to you?
Setting the stage

Background

- Review of the literature
  - 265 titles
  - 95 addressed curricular issues related to IC&L
    - 37 addressed longitudinality
    - 14 addressed continuity
    - 64 addressed integration
    - 3 addressed all three
    - 14 addressed 2 topics
    - 78 addressed only one topic
What we did...

- Academic year 2013-2014
- Structured interviews
  - IC&L in program as a whole
  - IC&L in specific program activities, program resources
  - nature of clerkship(s)
  - LIC if offered
Results

- 23 interviews (2x7 schools; 7 single and 1 with 2 individuals)
- Senior administrators from every Canadian medical school (n=17)
- Thematic analysis – 3 coders
Canadian Clerkships

- Different class sizes – from 64 to 294 per year
- Many different clerkship models and duration
- LIC generally seen as epitomizing IC&L
  - 12 of 17 schools have an LIC
  - Only 1 of 17 has a mandatory LIC
Integration

- Integration of clinical disciplines
  - Continua of how much integration
  - Mostly episodic integration

- Program level integration
  - Mechanisms:
    - CANMEDs
    - Themes
    - Integration committee in one school
Continuity through..

- Patients
- Teaching
- Location/Geography
- Peers
Longitudinality

- No LIC provided a single longitudinal experience
- Episodic longitudinal activities common
- Encounter logs, spiral curricula
IC&L typology of clerkship designs

- Complete separation of clerkship blocks, no overall objectives or connecting concepts to provide integration, continuity, and/or longitudinality.
- Separate blocks but limited integration, continuity, and/or longitudinality in the form of common objectives, encounter logs, assessments.
- Integration, continuity, and/or longitudinality expressed in discrete clusters or episodes in an otherwise RBC model.
- Significant optional clerkship experience is integrated, has continuities, and/or is longitudinal (some students, some of the time).
- Significant mandatory clerkship experience is integrated, has continuities, and/or is longitudinal (all students, some of the time).
- All clerkship experiences are integrated with substantial continuities and longitudinality throughout (all students, all of the time).
Learners in different IC&L clerkship types

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Medical Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blocks quite separate - no overall objectives or connecting concepts,</td>
<td>1200</td>
</tr>
<tr>
<td>complete separation</td>
<td></td>
</tr>
<tr>
<td>Separate blocks but common objectives, encounter tracking, assessments</td>
<td>1000</td>
</tr>
<tr>
<td>Some principles of IC&amp;L in otherwise block-based model (clusters and</td>
<td>400</td>
</tr>
<tr>
<td>episodes) as well as common components</td>
<td></td>
</tr>
<tr>
<td>IC&amp;L informs a significant amount of clerkship experience, LIC optional</td>
<td>200</td>
</tr>
<tr>
<td>and/or minority of students involved</td>
<td></td>
</tr>
<tr>
<td>IC&amp;L informs a significant amount of clerkship experience, LIC mandatory</td>
<td>100</td>
</tr>
<tr>
<td>and/or majority of students involved</td>
<td></td>
</tr>
<tr>
<td>IC&amp;L informs all aspects of the clerkship experience, no blocks or other</td>
<td></td>
</tr>
<tr>
<td>forms of separation</td>
<td></td>
</tr>
</tbody>
</table>

Designs associated with rotation block clerkships (RBCs)                  Designs associated with longitudinal integrated clerkships (LICs)
New definitions
Longitudinality

the persistence of educational components, participants and/or contexts over time in a training program
Continuity

the flow between components, participants and/or contexts in a training program so that the learner experience is seamless and without abrupt changes
Integration

the conceptual and practical connections between components, participants and/or contexts in a training program so that they function as part of a larger educational construct
Implications

- Retheorising program design
- Function rather than structure
- Inclusive model for ALL medical education practice
The Canadian Context
### Tables and Figures

<table>
<thead>
<tr>
<th>School</th>
<th>Enrollment (per year)</th>
<th>Clerkship duration (weeks)</th>
<th>Type of LIC (% of class taking an LIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dalhousie University</td>
<td>108</td>
<td>48</td>
<td>optional (3.6%)</td>
</tr>
<tr>
<td>Memorial University</td>
<td>80</td>
<td>48</td>
<td>optional (3.7%)</td>
</tr>
<tr>
<td>McGill University</td>
<td>184</td>
<td>56</td>
<td>optional (6.3%)</td>
</tr>
<tr>
<td>McMaster University</td>
<td>203</td>
<td>46</td>
<td>no LIC</td>
</tr>
<tr>
<td>Northern Ontario School of Medicine (NOSM)</td>
<td>64</td>
<td>56</td>
<td>mandatory (100.0%)</td>
</tr>
<tr>
<td>Queen's University</td>
<td>100</td>
<td>44</td>
<td>optional (18%)</td>
</tr>
<tr>
<td>University of Alberta</td>
<td>152</td>
<td>57</td>
<td>optional (11.4%)</td>
</tr>
<tr>
<td>University of British Columbia</td>
<td>288</td>
<td>50</td>
<td>optional (8.0%)</td>
</tr>
<tr>
<td>University of Calgary</td>
<td>155</td>
<td>44</td>
<td>optional (12.9%)</td>
</tr>
<tr>
<td>Université Laval</td>
<td>232</td>
<td>53</td>
<td>optional (11.2%)</td>
</tr>
<tr>
<td>University of Manitoba</td>
<td>110</td>
<td>56</td>
<td>no LIC</td>
</tr>
<tr>
<td>Université de Montréal</td>
<td>294</td>
<td>56</td>
<td>optional (4.6%)</td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>156</td>
<td>44</td>
<td>no LIC</td>
</tr>
<tr>
<td>University of Saskatchewan</td>
<td>100</td>
<td>48</td>
<td>piloting optional (4.0%)</td>
</tr>
<tr>
<td>Université de Sherbrooke</td>
<td>205</td>
<td>32</td>
<td>no LIC</td>
</tr>
<tr>
<td>University of Toronto</td>
<td>259</td>
<td>48</td>
<td>piloting optional (3.1%)</td>
</tr>
<tr>
<td>Western University</td>
<td>171</td>
<td>34</td>
<td>no LIC</td>
</tr>
</tbody>
</table>

Table 1: **class size, duration of clerkship, and presence of an LIC in each of the 17 Canadian medical schools in the 2013-2014 academic year.** † data from AFMC (2014), ‡ data from AFMC (2014) mandatory only (excluding electives, selectives, and non-clinical time), ‡‡ data from this study – 2013-2014 academic year (note that student numbers taking an LIC reflect activity in the first 12 months of each program’s clerkship).
Canadian undergraduate medical education – 4 year or 3 year intensive graduate entry programs, 3 French schools – variations on 2+2 model
Let’s think about...

The new definitions
Activity #2

- Do the definitions of integration, continuity and longitudinality resonate in your context?
- Do you have examples from your LIC curriculum / experience?
- Do you have examples from a non-LIC curriculum / experience?
Let’s think about…

Moving forward
Final thoughts