A LIC in an Urban Setting with Regular Clerks: Organizational Challenges and Solutions

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Outline

• Background
  – Existing LICs
  – Our challenge

• Innovation
  – Underlying principles
  – Implementation

• Evaluation
  – Assessment of Clerks
  – Evaluation of Implementation

• Take-home message
BACKGROUND
Longitudinal Integrated Clerkships (LICs)

- Widely implemented internationally
- Recognized as an effective pedagogical alternative to standard clerkship rotations

But

- Implementation thus far has mainly been in rural settings without the presence of regular clerks
Université de Sherbrooke
School of medicine

• Established in 1961 in Province of Québec (Eastern Townships), Canada
  – 1st cohort of students in 1966 (n = 32)
• Currently ~ 200 students / year
• 3 sites since 2006:
  – Sherbrooke (150)
  – Saguenay (32)
  – Moncton (24)
Sherbrooke Site

- Population: 162,000
- One teaching hospital- 2 locations
  - Tertiary care
- 2 Family Medicine teaching units
  - Small: 6 Residents
  - Large: 18 Residents
- Regular clerkship rotations are ongoing in every mandatory discipline
Regular clerkship: Clinical Activities

- 18 months duration beginning in January:
  - 3 electives at the beginning
  - 1 elective at the end
  - 1 period each of:
    - Pediatrics, Obs-Gyn, General Surgery, Internal Medicine, Specialty Medicine, Psychiatry, Public health
  - 2 periods:
    - Family and Emergency Medicine
  - 3 selectives
- On call activities
Regular clerkship: Academic Activities

• 2 periods (1 week each) for integration activities
• 1 period for final exam preparation
• 56 clinical reasoning activities
  – Specific number for each discipline
  – 1h30 hr each
Our Challenge

• To develop a LIC for 8 clerks within an urban setting in a large teaching hospital and family medicine teaching unit where regular clerkship rotations are ongoing.
INNOVATION
LIC: 5 Principles of Continuity

- Continuity of Care
- Continuity of Supervision
- Continuity of Assessment
- Continuity of Context
- Continuity of Learning

Ellaway R. et al. Medical Teacher (2013)
Application of Principles

• Each LIC clerk:
  – Is paired with another LIC clerk to build a specific “patient panel” for which they will provide care and follow-up over 40 weeks (continuity of care)
  – Has a longitudinal relationship with supervisors in each of the disciplines (continuity of supervision)
Application of Principles (cont’d)

• Each LIC clerk:
  – Benefits from frequent direct observations (continuity of assessment)
  – Receives regular formative feed-back after each day or week from each supervisor, including residents (continuity of assessment)
    • This is an implementation challenge!
Application of Principles (cont’d)

• Each LIC clerk:
  – Works with a team in a particular learning environment but this is fractioned over time instead of being a block experience (continuity of context)
  • Perceived as a challenge during initial implementation
Application of Principles (cont’d)

• Each LIC clerk:
  – Has an academic advisor whose role is that of a “coach” (continuity of learning)
    • Meetings every 6 weeks (verify log book and ensure adequate exposure, etc.)
    • Link learners’ experiences with global program objectives
  – Attends the same 56 clinical reasoning activities as regular clerks but these are not discipline-linked (continuity of learning)
    • This is a challenge
Proposed Solutions

• Modification of existing clerkship governance
  – Establishment of a new LIC governance structure with specified roles
  – Implementation of an academic advisor for LIC clerks
Implementation: Sherbrooke Site

• Beginning in January
  – 3 electives, 1 selective
    • Same as regular clerkship

• End of April
  – Beginning of LIC
  – Duration: 40 weeks (equivalent to 10 four-week periods)
    • Divided in 2 blocks of 20 weeks

• End of February the next year
  – Finish as regular clerks with:
    • 1 month specialized medicine
    • 1 month preparation for final clerkship exam
    • 1 month of electives
Simulation of regular and LIC clerkship rotations for 2016-2017
SHERBROOKE site

<table>
<thead>
<tr>
<th>3rd Year</th>
<th>A1</th>
<th>A2</th>
<th>B1</th>
<th>B2</th>
<th>C1</th>
<th>C2</th>
<th>D1</th>
<th>D2</th>
<th>E1</th>
<th>E2</th>
<th>F1</th>
<th>F2</th>
<th>LIC Block</th>
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<tr>
<td>Jan 4th - Mar 24th 2016</td>
<td>ELE 1</td>
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<td>Mar 28th - Apr 24th 2016</td>
<td>INT MED</td>
<td>SPE MED</td>
<td>PSY</td>
<td>PUBLIC HEALTH</td>
<td>SURG</td>
<td>SEL #2</td>
<td>FAM MED</td>
<td>FAM MED</td>
<td>OBS-GYN</td>
<td>SEL #3</td>
<td>PED</td>
<td>SEL #1</td>
<td>PED</td>
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<td>Apr 25th - May 22nd 2016</td>
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<td>INT MED</td>
<td>PUBLIC HEALTH</td>
<td>PSY</td>
<td>SEL #1</td>
<td>SURG</td>
<td>FAM MED</td>
<td>FAM MED</td>
<td>OBS-GYN</td>
<td>SEL #2</td>
<td>PED</td>
<td>SEL #1</td>
<td>PED</td>
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<tr>
<td>May 23rd - July 15th 2016</td>
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<td>SEL #1</td>
<td>INT MED</td>
<td>SPE MED</td>
<td>PUBLIC HEALTH</td>
<td>PSY</td>
<td>SEL #1</td>
<td>SURG</td>
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<td>FAM MED</td>
<td>OBS-GYN</td>
<td>SEL #1</td>
<td>PED</td>
</tr>
</tbody>
</table>

Summer vacation July 15th to July 24th 2016

| Jul 25th - Aug 21st 2016 | OBS-GYN | SEL #3 | PED | SEL #1 | INT MED | SPE MED | PSY | PUBLIC HEALTH | SURG | SEL #2 | FAM MED | FAM MED |
| Aug 22nd - Sept 16th 2016 | SEL #3 | OBS-GYN | SEL #1 | PED | INT MED | SPE MED | PSY | PUBLIC HEALTH | PSY | SEL #1 | INT MED | SPE MED |

Integration week I from September 19th to September 23rd 2016 | CARMS deadline |

| Sept 26th - Oct 24th 2016 | FAM MED | FAM MED | OBS-GYN | SEL #3 | PED | SEL #1 | INT MED | SPE MED | PSY | PUBLIC HEALTH | SURG | SEL #2 |
| Oct 25th - Nov 20th 2016 | FAM MED | FAM MED | SEL #3 | OBS-GYN | SEL #1 | PED | INT MED | SPE MED | PSY | PUBLIC HEALTH | PSY | SEL #1 |
| Nov 21st - Dec 18th 2016 | SURG | SEL #2 | FAM MED | FAM MED | OBS-GYN | SEL #3 | PED | SEL #1 | INT MED | SPE MED | PSY | PUBLIC HEALTH |

Christmas vacation December 17th to January 2nd 2017

| Jan 2nd - Jan 29th 2017 | SEL #2 | SURG | FAM MED | FAM MED | OBS-GYN | SEL #3 | PED | SEL #1 | INT MED | PUBLIC HEALTH | PSY |
| Jan 30th - Feb 26th 2017 | PSY | PUBLIC HEALTH | SURG | SEL #2 | FAM MED | FAM MED | OBS-GYN | SEL #3 | PED | SEL #1 | INT MED | SPE MED |
| Feb 27th - March 26th 2017 | PUBLIC HEALTH | PSY | SEL #2 | SURG | FAM MED | FAM MED | OBS-GYN | SEL #3 | PED | SEL #1 | INT MED | SPE MED |
| March 27th to April 28th 2017 |准备 for final clerkship exams |

Integration week II from May 1st to 5th 2017 (OSCE) and LMCC

| May 8th to June 2nd 2017 | ELE 4 |
Major Change

- Replacement of 2 selectives (2 x 4 weeks) by two integrated clerkship rotations (A and B)
<table>
<thead>
<tr>
<th></th>
<th>Block 1 (20 weeks)</th>
<th>Block 2 (20 weeks)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Psychiatry</td>
<td>OBGYN</td>
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<tr>
<td></td>
<td>Public Health</td>
<td>Pediatrics</td>
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<tr>
<td></td>
<td>Internal medicine</td>
<td>Surgery</td>
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</table>

**Integrated clerkship rotation A:**
- 1 wk of family med hospitalization;
- 1 wk emergency;
- 1 wk geriatrics;
- 1 wk selectif (orthopedics/urology)

**Integrated clerkship rotation B:**
- 1 wk of family med hospitalization;
- 1 wk emergency;
- 1 wk psychiatry/OBGYN
- 1 wk according to pedagogical needs of clerk

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**Figure 2**

*Integrated clerkship rotation A could be during Block 1 or Block 2, but it must be during the first block done by the clerk.*
« Marketing » of the LIC

• High level support from the dean and vice-dean

• Statutory point at each clerkship committee meeting early in the process

• Presence of students on the LIC planning committee

• Presentation to future students by current LIC clerks
Faculty Development

• For the 3 years prior to LIC implementation:
  – During regular faculty development workshops with clinical supervisors, once a year
    • 5-10 minutes for LIC information and questions

• The year prior to LIC implementation:
  – One 3 hr workshop with academic advisors and LIC disciplinary rotation directors
EVALUATION
Assessment of Clerks

• Same evaluation process as for regular clerkship (summative)

PLUS

• Regular formative feed-back after each day or week from each supervisor, including residents
  – Use of a Lime survey...One/45 tool “fiche de continuité” to enhance continuity (documentation of progression in each discipline)
    • For clerks
    • For supervisors

……………..Still a challenge!
Fiche du continuité

Rappel: Le contenu de ces fiches sera vu en intégralité par les externes ELI ainsi que par leur accompagnateur académique

Veuillez sélectionner une discipline

*Veuillez sélectionner une réponse ci-dessous

- Anesthésie
- Chirurgie
- Chirurgie spécialisée
- Gériatrie
- Médecine de famille
- Médecine interne
- Médecine spécialisée
- Obstétrique-gynécologie
- Ophtalmologie
- ORL
- Orthopédie
- Pédiatrie
- Psychiatrie
- Santé communautaire
- Urgence
- Urologie
- Stage intégré A
- Stage intégré B

Moment de la supervision

*Veuillez sélectionner une réponse ci-dessous

- AM
- PM
- Toute la journée
- Soir
- Nuit
- Ne s’applique pas

*CONTINUER à faire plus de … (points forts)

*COMMENCER à faire ou MODIFIER (points à améliorer)

Commentaires descriptifs (incluant info sur les ARCs, gardes)

Soumettre
Evaluation of Implementation

• Regular monitoring of clinical exposure

• Focus groups to better understand:
  – Perceived quality of supervision
  – Challenges of integrating LIC clerks within each of the disciplines
  – Perceived advantages/challenges compared to the traditional clerkship
Initial Focus Group with Clerks at 12 weeks (n = 8/8)

• **Perceived advantages** compared to the traditional clerkship:
  – They are told they function as residents
  – They are more aware of existing community resources and make links
  – For Family Medicine: definitely patient follow-up
Results of Focus Group - cont’d

• Quality of clinical supervision:
  – Currently seems fine
  – Clerks appreciate the written feedback they receive on the “fiche de continuité”
  – We need to ensure residents are informed and fill out these forms
Results of Focus Group - cont’d

- **Perceived challenges** compared to the traditional clerkship:
  - Formative assessment
    - Some technical difficulties with the timing that will have to be clarified
  - In psychiatry, they find it difficult to be on the ward for only one day at a time
    - Eventually, in the next block when they are scheduled for a single day in psychiatry, they will not be scheduled on the ward
Messages of New LIC Clerks to the Next Cohort (May 2016)

• Advantages perceived:
  – Varied schedule
  – Academic activities shared with regular clerks
  – Major change related to replacement of 2 selectives (2 x 4 weeks) by two integrated clerkship rotations (A and B) much appreciated
    • One benefit of this change is an increased number of emergency shifts (at least 8)
Messages of New LIC Clerks to the Next Cohort
(May 2016)

• Challenges:
  – Adaptation !
  – Supervisors not necessarily well informed
    • Often supervise both regular and LIC clerks
Corridor Talk
With Academic Advisors

• Seem very happy and impressed
  – General quality of the clerks
  – Autonomy
  – Take responsibility for their own learning
  – Learning stance rather than evaluation stance

• Wish they could keep them as residents
  – Sometimes feel LIC clerks are “better than residents”

• Describe meetings with LIC clerks as motivating and “easy”
What’s to Come

• Questionnaires and focus groups with:
  - LIC clerks
  - Disciplinary directors
  - Academic advisors
  - Clinical supervisors
  - Residents
    • Family Medicine
    • Specialty
Take-home Messages

• A LIC in an urban setting with regular clerks is feasible and a promising alternative to the traditional approach

• High level support (dean, vice-dean) is essential

• Early implication of all potential stakeholders is important
QUESTIONS
OR
SUGGESTIONS FOR US?
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EXTRAS
LIC: Goals and expected Outcomes of Educational Continuity

<table>
<thead>
<tr>
<th>Continuity</th>
<th>Goals</th>
<th>Specific Objectives</th>
<th>Operational Requirements</th>
<th>Expected Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care</td>
<td>Learning through patient connection, caring, and advocacy</td>
<td>Involvement with patients at the site and time of initial medical decision making and during the full course of illness</td>
<td>Longitudinal patient care experiences</td>
<td>Promotion of a full range of clinical skills, including chronic-disease management</td>
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<td></td>
<td></td>
<td>Custom-designed patient enrollment</td>
<td>Collaborative, interdisciplinary delivery of care</td>
<td>Enhanced professionalism</td>
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<td></td>
<td>Ability to identify, track, and follow patients across care venues</td>
<td>Patient-centered health care</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Learning in an integrated fashion to promote foundational knowledge and clinical skills</td>
<td>Acquisition of relevant competencies in a structured, developmental fashion Application of biomedical science to clinical problem solving Developmentally appropriate, competency-based assessment</td>
<td>Interdisciplinary curriculum design and management “Horizontal” and “vertical” curriculum integration Continuous formative assessment Interdisciplinary summative assessment and grading</td>
<td>Promotion of core doctoring skills, including communication and clinical reasoning Enhanced evidence-based practice and lifelong learning Learner-centered education and assessment</td>
</tr>
<tr>
<td>Supervision</td>
<td>Learning from close and serial connection with the most able educators</td>
<td>Community of learners, educators, and caregivers engaged in a transparent dialogue about patient care and medical science Faculty coaching, role modeling, and mentorship</td>
<td>Longitudinal student oversight and assessment Protected time for teaching and faculty development</td>
<td>Promotion of medical colleagueship and interdisciplinary values Interprofessional understanding and collaboration Enhanced pedagogy and learning</td>
</tr>
</tbody>
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(N Engl J Med 356;8 feb22 2007)
Example of a month schedule
Governance Structure
**Identification du contributeur**

<table>
<thead>
<tr>
<th>Nom</th>
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<tbody>
<tr>
<td>Prénom</td>
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</table>

**Veuillez sélectionner votre discipline**

**Veuillez sélectionner une réponse ci-dessous**

- Veuillez choisir ...

**Identification de l’externe**

**Veuillez sélectionner une réponse ci-dessous**

**Date ou durée de la supervision**

- Moment de la supervision (am, pm, toute la journée, soir, nuit, n/a)
- Évaluation formative mi-stage (oui ou non)
- Continuer à faire plus de ....
- Commencer à faire ou Modifier.....
- Commentaires descriptifs (incluant info sur les ARCs, gardes)