Chapter 2.2.4

BUILDING CAPACITY FOR INTEGRATED CLINICAL LEARNING IN RURAL SETTINGS

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What is community-engaged integrated clinical learning (CEICL) – and why now?

Shifting away from one-on-one precepting[2] and uni-professional clinical teaching is prominent in efforts to transform health professional education around the world. The increasing complexity of disease, co-morbidities and health systems, require new methods of teaching, new ways of working together, and new ways of learning about not only the diseases but how we teach our learners to manage patient care and manoeuvre within our complex health care systems. These challenges are even more complex in rural settings where health professional resources and services may be scarce.

CEICL brings learners and teachers in health and social services together to learn about, from and with each other through an exchange of knowledge, skills, values, ideas and experiences. Learning can occur in multiple directions across disciplines and levels of learners. It occurs through a process where health care learners and providers, patients, and their families learn from each other to the benefit of all, and develop individual and team-based competencies to improve the quality of care provided to patients and communities.

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2 A preceptor - or clinical instructor/adjunct faculty – is a clinician (person with core clinical skills) who offers clinical teaching at a distant (rural) site.

Through focused discussions with a variety of clinical faculty[3] at the Northern Ontario School of Medicine (NOSM) in 2009, Berry and Pavelich (1) described integrated clinical learning (ICL) as a model of clinical education that:

- is non-hierarchical in teaching and learning;
- includes formal and informal learning opportunities;
- benefits patients, families and providers;
- shares competencies (knowledge, values, skills and behaviour) across disciplines;
- provides meaningful team experiences maximising inter-professional synergies embracing all levels of learners;
- capitalises on the strength of the learner, the environment, the community, intraprofessional and interprofessional collaboration for student-centred learning; and
- provides flexible, adaptable, culturally sensitive learning, maximising community-based learning settings (1).

The concept of integrated teaching and learning is supported by the earlier work of Boyer who, in 1990, advocated for 'scholarship of integration' (2,3) which he described as 'making connections across disciplines and, through this synthesis, advancing what we know'. In subsequent work, he identified and argued that the scholarship of engagement requires collaboration with communities and that 'engaged scholarship stresses that the public can itself contribute to academic knowledge' (4).

Boyer's work was furthered by others such as Calleson (2005) and Bender (2008) who also advocate for the recognition of community-engaged scholarship (5, 6). The dimensions of scholarship, which includes principles related to integration and community-engagement, support the premise that faculty are doing scholarly work when they creatively integrate patients as informed decision-makers for health care *and* as teachers into the education forum. CEICL is thus the intentional and experience-based learning that occurs beyond institutional walls, notwithstanding that it is structured within universities, hospitals, and community formal learning forums.

3 'Faculty' is another term for members of academic staff.

Worley (2000) and Strasser (2010) convey that through community engagement, community members become actively involved in hosting students and contributing to their educative experience, particularly regarding the relevance and specifics of the social determinants of health in rural, remote and Aboriginal communities in Canada and Australia (7,8). Strasser suggests that 'successful community engagement depends on empowering the community to be a genuine contributor to all aspects of a medical school' (7).

In interviews with rural physician teachers in Northern Ontario in 2009, Berry and Pavelich described integrated clinical learning as comprising more than *what* the learner learns, but also including *who* the teachers are and *how* learning is focused. CEICL involves the physician in numerous roles: a teaching role inclusive of teaching about community practice, the patients and their families; a role as scholar with the learners; a role as a clinical expert sharing knowledge with other colleagues; and a role as a collaborator with community health professionals and learners. As eloquently conveyed by a rural family physician, integrated clinical learning is about 'transforming learners and transitioning learners into leadership roles, including scholarly, academic and teaching roles' (1). These principles hold true also for other disciplines involved with medical learners and learners from other disciplines.

What to do when practicing the CEICL approach? Why do rural health professionals and practices exemplify the high qualities of CEICL?

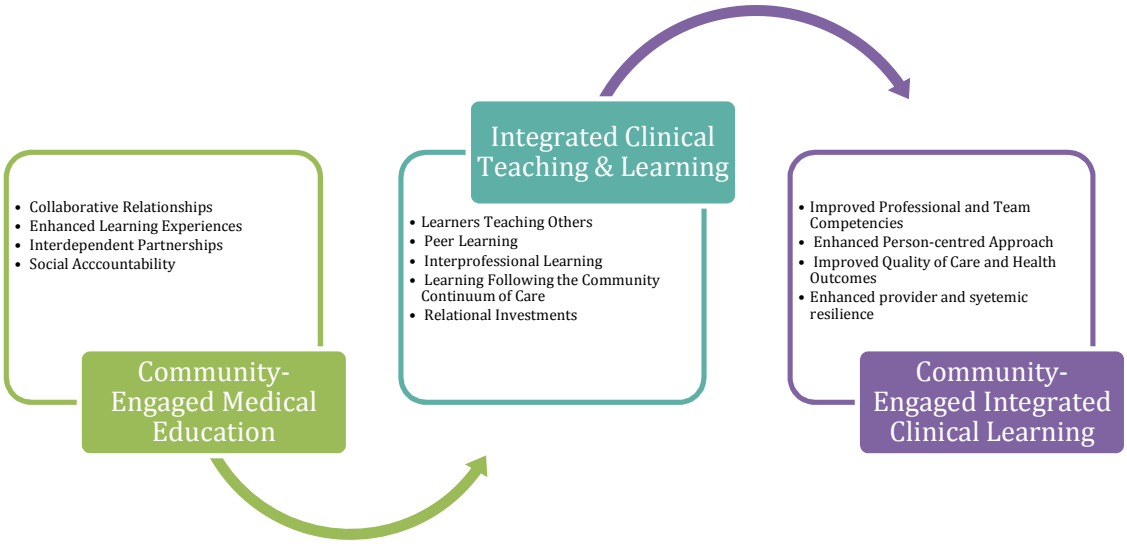
CEICL in practice can look different depending on the setting and resources available. It can include the traditional model of one learner to one preceptor, but also includes models with multiple learners and/or preceptors. Learners may be from the same profession or from different professions. They may be at different levels in their training. They may be on placement together, overlap at certain times, or come together around specific projects or care issues. Learning opportunities may be formal or informal, planned or arise in the situation, and can include learning together as a team.

Ladyshewski argues that by creating situations where paired learners observe each other, talk together and experience conflict between their own ideas and the ideas of others, their skills in understanding and resolving conflicting thoughts and ideas, and restructuring knowledge will increase (9). He also claims that when theory, demonstration, practice and non-evaluative feedback are combined with coaching, statistically significant gains in performance are achieved.

Notwithstanding these differences, community-engaged integrated clinical learning opportunities have the following common features:

- CEICL exemplifies shared principles of professionalism through inter- and intra-professional, collaboration and reciprocal learning. Learners learn not only from their teachers, but also from each other, their peers and colleagues, team members, and patients and families.
- Through community engagement, teachers encourage the inquiry and responsibility of the learner through practice environments that are supportive, respectful, collegial, and collaborative.
- Community-engaged teaching/learning capitalises on the unique strengths and attributes of learners, teachers, and practice environments, in order to provide effective learning experiences.
- Using a community engagement approach in and with rural communities, CEICL becomes the mechanism through which a community works together in providing a thorough and comprehensive approach to health professional learning in the rural context.

Figure 1
Conceptual Model of CEICL (1)[4]



4 Figure modified by Berry and Briggs (2013) for this chapter.

How does resistance to integrated clinical learning emerge?

While we believe CEICL is supportive of individuals and communities, we acknowledge that CEICL can be challenging both conceptually and logistically in the development phase. Resilience is a key characteristic required of individuals and communities that choose to commit to this model of teaching and learning and to practitioner wellness in rural/remote settings. Resilience is a dynamic, evolving process whereby individuals (in the context of their own personal coping and in their interdependent relationships with others) maintain positive attitudes about and effective strategies to respond to life stressors (10, 11, 12).

Building resilience

In the next section we offer suggestions for how to build resilience - but first, we consider common issues that challenge family physicians in rural and remote practice and that can lead to burnout, loss of resilience, and resistance to change, including the adoption of new teaching models such as CEICL. We consider these challenges in three categories - personal circumstances, conventional approaches, systemic issues - and provide representative examples under each.

Personal circumstances

- Low tolerance of clinical uncertainty, combined with high workload and inherent uncertainty associated with primary care; low compassion satisfaction, inability to set personal limits (10).
- Loss of a sense of importance of medicine; lack of leadership training (13).
- Limited adaptability to change (12).
- Concerns about continuing professional development (14).
- Inadequate personal support, lack of exercise, spiritual void, lack of self-awareness (11).

Conventional approaches

- Tradition of one-on-one preceptor/learner pairing.
- Generational differences in teaching/learning preferences.
- Resistance to the power imbalance between academic and clinical contributions to the education of physicians; the impact of hidden curriculum and practices (13,15).

Systemic issues

- Disconnect between university and clinical education sites and academic and clinical faculty (13,16).
- Lack of role models (17).
- Inadequate practice and administrative management structures (11).
- Social isolation from peers (11,14,16).
- Lack of mentors/role models (17).
- Intellectual, social isolation (14, 17).

Following Bourdieu's concept of 'habitus' (the tendency to act in particular ways), we suggest that practitioners who encounter personal, historical and systemic challenges to resilience will tend to act in ways that resist change and demonstrate a lack of resilience (18). These behavioural patterns arise from the very complex ongoing relationships with others in multiple contexts, hence the emphasis on the dynamic and evolving nature of resilience (10,11,12,19).

We do not intend to imply that the practitioner is somehow deficient if s/he displays a lack of resilience or resistance to change. Instead, we have tried to show a much greater degree of complexity than would be explained by a purely individualistic approach. Effective approaches to developing resilience must therefore take into account and address individual *and* systemic challenges, including strategies that strengthen and deepen the sense of community.

Lessons learned: Turning resistance into fostering resilience

Multiple strategies are advocated for turning resistance into resilience. We offer a wide range of representative, evidence-informed strategies that have been shown to support the emergence of resilience in both individual practitioners and the interpersonal and interprofessional networks (personal, practice, administrative, research and educational) in which they function. Our intent is to emphasise both individual *and* community aspects of resilience. The need to invoke multiple strategies together would support a natural evolution to CEICL.

The points below specify strategies reported in the literature as positively influencing the development of resilience in rural primary care practices, with an emphasis on academic practices – that is, those with a specific commitment to teaching and/or scholarly work in addition to providing primary care for a defined patient population. These strategies are grounded in community engagement and social accountability, and support the emergence of CEICL grounded in relevant pedagogical, scholarly, and leadership commitments.

Honour the role, value and challenges of rural generalist practice in academic medicine:

- Legitimise and promote generalism (11,13).
- Create realistic opportunities for academic advancement (13).
- Ensure rural academic leaders can contribute to university committees, including curriculum planning (13).

Connections: Bridge the clinical and academic through interprofessional clinical, teaching and research networks

- Establish practice-based research networks (PBRNs) or health improvement networks (13, 16, 20, 21, 22, 23).
- Establish mechanisms to ensure promotion based on community-engaged, integrated scholarship (4,24,25,26).
- Offer training in interprofessional education and collaborative practice (27).
- Engage other disciplines and community partners as teachers (1).

Practitioner, academic units and community health services share commitment to, and accountability for, practical, relevant and integrated continuing professional development

- Provide training and mentorship on: self-awareness; identifying and accepting personal limits; setting limits; attitudes and perspectives; valuing physician role; honouring self through recreation and exercise, vocation and avocation, spirituality; importance of nurturing supportive relationships including professional support, peer support, consultant support, interprofessional teams, and personal support, including partner, family, friends; having own family physician (10,11,12).
- Provide training in academic skills such as curriculum development and assessment, leadership, and student support (13, 16).
- Support academic clinical leadership development with specific continuing education regarding understanding and meeting the needs of learners (13).
- Train all types and levels of health disciplines in clinical leadership roles; train and assess in interdisciplinary teams (13).

- Address informal and hidden curriculum (13).
- Provide mentorship and seek/highlight/connect role models (17).
- Support expanded general practitioner (GP) scope of practice (e.g. surgery, anesthesia, geriatrics) through formal curriculum (as opposed to leaving the curriculum in the hands of the practitioner) (17).

Develop supportive systems

- Attend to practice management style and culture (10).
- Develop social networking infrastructure and processes (16).
- Office management personnel, computer systems, community/regional connections (11).

Improving the diversity and breadth of CEICL experiences

Generating community-relevant clinical curriculum, teaching, and practice experiences are key to preparing today's medical students for rural practice globally. In moving from traditional education of one-on-one teaching to a much broader situational and experiential learning that fosters transformational education (28), the following are teaching tips for improving the diversity and breadth of a CEICL experiences.

Ten CEICL practice points

1. Engage community resources to assist with a learner's rural experience and facilitate aspects of curriculum content or skills acquisition. Build on relationships and expertise within the community.
2. Build social learning opportunities for students – e.g. house learners together; group social events.
3. Expect peer interaction, teaching, and/or coaching between pairs of learners.
4. Ensure health professional and medical learners practice and learn together.
5. Foster opportunities for co-facilitation of teaching between teacher and learner or encourage senior learners to teach junior learners.
6. Expect learners to actively participate in cultural and community social activities and to contribute to the community through projects or service learning.
7. Co-locate different levels of learners and/or the type of learners.

8. Engage patients as teachers (29, 30).
9. Engage in reflective discussion after any educational experience or critical incident (31). (Refer to Zeus and Skiffington's sample questions below).
10. Coach the learner in making sense of their experiences through dedicated short bursts of **protected** time during each day to connect, discuss and reflect on CEICL.

Zeus and Skiffington's sample reflective questions for coaching learners *(31)*

How questions:

- How did you react to that?

What questions:

- What might you do differently next time?
- What did you learn from that?

When questions:

- When did you realise / decide to …?

Where questions:

- Where did it all go wrong?

Why questions *(wisely and cautiously used to avoid defensive reactions from the learner):*

- Why do you think that happened?

How to sustain a CEICL model

- Share learners between communities for a greater breadth and depth of medical and community experiences and perspectives.
- Share teaching roles and responsibilities with other disciplines and resources within your community.
- Share teaching stories of the diversity of learning experiences with other clinical teachers and learners – what worked and what didn't and why.
- Develop a teaching resource database / directory specific for your community.
- Profile and market your rural community as a vibrant community-engaged integrated teaching and learning site.

Reflective concluding thoughts

Community-engaged integrated clinical learning can become a pathway for rural medical teachers interested in pursuing and being recognised for their scholarship of integration or engagement. While academic institutions are increasingly engaging rural communities in health professional education and training, it is imperative that the rural medical teachers be recognised and promoted for such scholarship in changing and refining models of clinical training.

Creativity and innovation in CEICL experiences can garner profound transformative learning experiences for learners through involving the broader community (interprofessional and lay) in the education of health professions, engaging patients in a teaching role, better preparing learners for learning in rural and small community context and, enhancing learner-teacher relationships. Importantly, CEICL can act as a catalyst and strategy for learners in becoming and preparing them for roles as future faculty members and clinical teachers who are resilient and embrace the concept and practice of community-engaged scholarship.

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