

# Experiencing Rural Interprofessional Collaboration (ERIC) Project

Interaction, Inquiry, Integration and Impact – that's Interprofessional Learning.



Final Report submitted to Ministry of Health and Long Term Care

March 30, 2011

# Evaluation of the Experiencing Rural Interprofessional Collaboration (ERIC) Project: Implications for Teaching and Learning

March 21<sup>st</sup>, 2011

Report completed by:

Centre for Education and Research on Aging and Health (CERAH)

**Lakehead University** 

**Thunder Bay, Ontario** 

http://cerah.lakeheadu.ca





#### Acknowledgements

The ERIC initiative acknowledges HealthForceOntario's Interprofessional Care/Education Fund: Ontario Ministry of Health and Long-Term Care, and Ministry of Training, Colleges and Universities for the funding of this project.

The research team would like to thank the following:

- *Alesha Gaudet*, Project Manager, CERAH, for her pilot project to understand the experience of interprofessional care on rural palliative care teams that provided the basis for the rural competencies survey;
- *Sue Berry*, Director of Health Sciences and Interprofessional Education, Assistant Professor, Division of Clinical Sciences, Northern Ontario School of Medicine, for her ongoing support of the ERIC project and its evaluation;
- Staff members from NOSM IPE unit, NOSM Health Sciences unit, and NOSM Undergraduate Education unit for their determination and collaboration that contributing to the success of the ERIC project:

- Gayle Adams-Carpino
 - Siobhan Farrell
 - Susan Morhart
 - Kirsten Pavelich
 - Nicole Ranger
 - Sheila Renton
 - Holly Rupert
 - Lynne Sihvonen
 - Lisa Taipalus
 - David Thompson

- Kirsti Reinikka

Our special thanks go to all ERIC project participants, team members and students, who took the time from their busy schedule to respond to our surveys. Without their cooperation, the evaluation of the ERIC project would not be possible.

This report was completed by the Centre for Education and Research on Aging and Health (CERAH), Lakehead University, based on the evaluation conducted by CERAH.

Citation for this report is: Kelley, M.L., Parkkari, M., & Arseneau, L. (September 2010). Evaluation of the "Experiencing Rural Interprofessional Collaboration (ERIC) Project": Implications for Teaching and Learning". Centre for Education and Research on Aging and Health, Lakehead University, Thunder Bay, ON. www.cerah.lakeheadu.ca

# Table of Contents

1.0	Execu	tive Summary	<del>(</del>
2.0	Introd	uction	9
2.1	Вас	kground	9
2.2	Pur	pose	<u>c</u>
2.3	Lite	rature Review	10
3.0	Phase	1: Needs Assessment and Environmental Scan	11
3.1	Sec	ondary Analysis of ICL data	11
3	.1.1	Data Collection	12
3	.1.2	Data Analysis	12
3	.1.3	Results	13
3	.1.4	Conclusions	16
3.2	Rur	al Preceptor Survey	16
3	.2.1	Data Collection	17
3	.2.2	Data analysis	17
3	.2.3	Results	18
3	.2.4	Conclusions	26
3.3	Sun	nmary of Phase 1	27
4.0	ERIC p	roject plan	27
5.0	Phase	2: Results and outcomes	28
5.1	Inte	rprofessional activities for communities	28
5.2	Hea	lth care professionals perceived impact of ERIC project	28
5	.2.1	Data Collection	28
5	.2.2	Data analysis	28
5	.2.3	Results of Data Collection	29
5	.2.4	Conclusion	32
5.3	Lea	rner impact of ERIC project	32
5	.3.1	Data collection	32
5	.3.2	Data analysis	32
5	.3.3	Results	33

5.	3.4	Conclusions	.36
5.4	ERIC	Eproject staff impact of ERIC project	
5.	4.1	Data Collection	
5.	4.2	Data Analysis	.37
5.	4.3	Results of Data Collection	.37
5.	4.4	Conclusions	.43
5.5	Sum	ımary of Phase 2	. 44
6.0	Discus	sion	.44
7.0	Knowle	edge Dissemination	.46
8.0	Conclu	sions and Recommendations	. 47
9.0	Refere	nces	. 50
10.0	List of	Appendices	.52

# 1.0 Executive Summary

The Experiencing Rural Interprofessional Collaboration (ERIC) project was an initiative of the Northern Ontario School of Medicine (NOSM) to integrate interprofessional (IP) experiences into existing health professional learners' studies while undertaking clinical placements in rural communities. The goals of the ERIC project were to

- a) Increase the presence of interprofessional education (IPE) and collaboration (IPC) champions in rural communities,
- b) Initiate a variety of experiential IP learning situations,
- c) Explore competencies and skills required for entry-to-practice learners in rural community practice settings.

The ERIC project was conceived in two phases. In the first phase it was necessary to ensure the project met the IPE and IPC needs of each of the communities and determine the required elements for IP rural practice. The second phase sought to determine the extent the project was implemented and the impact of the project on health care professionals, health care learners, community and NOSM staff.

<u>Phase one results:</u> The ERIC project instigated two processes in order to fully address the gaps and assess the needs of communities for implementing IPE and IPC. The communities put an emphasis on varying the learning experiences and including a diverse group of health care professionals for learning activities. The communities also stressed the importance of modeling IPC to learners and suggested rural IPC may require an additional set of skills. There is a clear discrepancy between the skills and knowledge required for collaboration and the opportunity for development. The need for human and educational resources, solutions to organizational and interprofessional collaboration challenges, and professional development for IPE and IPC were also observed by health care professionals in the community.

<u>Phase two results:</u> ERIC empowered health care professionals in the 11 different communities to organize IP activities by providing educational, human and organizational resources to communities resulting in 13 various learning activities with an overall total of 331 participants involved. The community liaisons involved in planning and executing the learning activities responded with positive impacts on the community, organizations and on learners. The need for continued resources for sustainable IP learning activities was observed. Learners self-reported increases in competencies related to roles and responsibilities and overall satisfaction with the learning activity. ERIC project staff experienced a collaborative project supported by incorporating a web-based tool and other technologies that mirrored collaboration in the health care setting.

#### **Recommendations:**

# **Integrated Clinical Learning - Communicating and Coordinating with Communities**

It is recommended that student placements be synchronized in a placement mapping
process by teaching site or individual small community to provide greater opportunities for
learners to interact.

#### Strategies:

- establish connections in communities with the placement coordinator and other organizations/institutions to collaborate on learner placements
- contact FWFHT on their use of online calendars for student placements and determine if this method would be helpful for other organizations
- 2. It is recommended that NOSM create a calendar of upcoming faculty development sessions to provide communities with appropriate notice for attending interprofessional education and teaching sessions.

#### **Strategies:**

- create IP learning plan with IP PPC with at least 6-8 week's notice
- circulate list of events to ERIC participants community liaisons to distribute in their communities
- contributing to the CEPD faculty development syllabus

# **Knowledge Transfer**

3. It is recommended that NOSM continue with ERIC both with participating communities and expanding to other communities to increase IP opportunities.

#### Strategies:

- invite other potential communities to ERIC roundtable for more information on ERIC
- saved ERIC roundtable webcast to distribute to other potential communities
- market ERIC activities/resources to other communities for their use and focus on providing services (establishing cost-recovery based on needs)
- ensure that ERIC initiatives in the community interface with the developments and implementation of integrated clinical learning
- identify and highlight role models of IP practice in communities
- 4. It is recommended that methods to determine learner needs and ideal learning situations be developed and shared amongst distributed teaching communities.

#### Strategies:

- literature review on ideal learning situations for IP events
- consistent question on feedback forms of all NOSM IP events to determine most appropriate learning situation as well as provide a variety of learning situations
- learner placement form to identify learning needs to clinical placement organization
- utilization of a consistent learner feedback form

#### Social Networking and Sharing Expertise to Enhance Sustainability

- 5. It is recommended that NOSM maintain connections with communities to provide consultation and guidance for further IP education and organization materials.

  Strategies:
  - maintain contact list for ERIC contacts and distribute with all ERIC community participants
  - connect ERIC participants with IP leads on both campuses, IP PPC as a contact for NOSM
- 6. It is recommended the problems encountered by NOSM staff should be addressed and use of the WIKI should be suggested to communities as a vehicle to share information.

  Strategy:
  - determine the appropriateness of using the WIKI at the ERIC roundtable for information sharing between community members and NOSM providing resources to communities
  - determine with communications for guidance to preserve NOSM branding

# 2.0 Introduction

# 2.1 Background

The Experiencing Rural Interprofessional Collaboration (ERIC) project was an initiative of the Northern Ontario School of Medicine (NOSM) to integrate interprofessional (IP) experiences into existing health professional learners' studies while undertaking clinical placements in rural communities. The goal of the ERIC project was to increase the presence of interprofessional education (IPE) and collaboration (IPC) champions in rural communities, to initiate a variety of experiential IP learning situations, and to explore competencies and skills required for entry-to-practice learners in rural community practice settings.

Fifteen communities were originally approached for inclusion in the ERIC project. Due to competing projects and staff shortages, eleven northwestern and northeastern Ontario communities participated in ERIC, with one community declining part way through the project. Once community liaisons and contacts were established, NOSM ERIC project staff conducted education sessions. The education sessions included background information on IPE and IPC to support communities in initiating IP experiences. Communities determined the type and focus of the IP learning activity with the support and guidance of NOSM. NOSM also provided resources, including literature reviews, and developed toolkits and activity planning material.

The ERIC project was funded by the Ministry of Health and Long-Term Care, Health Force Ontario through the Interprofessional Care/Education Fund. The Centre for Education and Research on Aging and Health (CERAH) at Lakehead University was contracted by NOSM to evaluate ERIC. The CERAH evaluation team was led by Dr. Mary Lou Kelley and supported by her research associates and adhered to a project logic model (Appendix A).

#### 2.2 Purpose

The purpose of the evaluation is to determine the extent to which the ERIC project achieved the project objectives outlined in the proposal. The ERIC project objectives were:

- 1. To articulate the core IP competencies that health professional learners are currently acquiring while learning in IP environments in NOSM's distributed teaching sites in rural communities
- To identify core competencies either absent or limited from these experiences to add to the current IPE literature
- 3. To implement IP experiential learning situations and case-based tutorial experiences for health professional learners in distributed community teaching sites that best illustrate teamwork practice
- 4. To develop a toolbox to prepare learners for rural IP practice and roles

5. To use technology and web-based resources in support of project team and the communities in the development of IP learning

In order to evaluate the project and meet the outlined objectives, data were collected in two phases. The first phase was necessary to ensure the project met the IPE and IPC needs of each of the communities and determine the required elements for IP rural practice. The second phase sought to determine the extent the project was implemented and the impact of the project on health care professionals, health care learners, community and NOSM staff.

#### 2.3 Literature Review

Interprofessional education (IPE) and interprofessional collaboration (IPC) have been on the radar of policy makers provincially, nationally, and globally in order to address changes to the health care workforce and demands on health care systems (Health Force Ontario, 2007; World Health Organization, 1978; World Health Organization, 2010). Research indicates IPC has shown positive effects to the health care system and health outcomes (World Health Organization, 2010). Promoting IPC in rural and remote communities could relieve some of the challenges associated with work environments (Bowman, Crabtree, Petzel, & Hadley, 1997; Miedema, Hamilton, Fortin, Easley, & Tatmichi, 2009; Penz, Steward, D'Arcy, & Morgan, 2008; Smith, 2005) and poorer health related outcomes (Public Health Agency of Canada, 2006; Pong, Desmeules, & Lagacé, 2009) in rural and remote communities.

In order to effectively facilitate IPE and community engagement there needs to be a clear understanding of the contextual and design issues required to achieve meaningful collaborative practice within a rural context. The Centre for the Advancement of Interprofessional Education (2002) defines IPE as "Interprofessional Education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care". Hays (2008) suggests rural healthcare settings may be ideal for healthcare learners to engage in IPE learning activities since smaller communities work together out of necessity and have few permutations to team composition. Literature supports this view that exposure to rural health settings increases understanding of professional collaboration (Sen Gupta, Murray, McDonell, Murphy & Underhill, 2008; VanLeit & Cubra, 2005; Whelan, Spencer, & Rooney, 2008).

However, the majority of research exploring development and support of IPE and IPC focuses on urban centres making it difficult to generalize to rural areas. This represents a considerable gap in the literature for organizations, such as the Northern Ontario School of Medicine (NOSM), committed to preparing clinicians to work collaborative in rural settings.

#### 3.0 Phase 1: Needs Assessment and Environmental Scan

The ERIC project started with a needs assessment and environmental scan to address two of the five project purposes:

Purpose 1: To articulate the core IP competencies that health professional learners are currently acquiring while learning in IP environments in NOSM's distributed teaching sites in rural communities

Purpose 2: To identify core competencies either absent or limited from these experiences to add to the current IPE literature

Two methods were used to address the project purposes: investigate the current IP education opportunities in rural communities and determine the learning and support needs of communities to implement IPE opportunities. The first process involved a secondary analysis of consultancy data from the Integrated Clinical Learning project to investigate the ERIC community needs for rural collaborative practice. The second process was a survey of preceptors in rural communities that explored preceptor perspectives on competencies necessary for rural IP activities and gaps in implementing collaborative practice opportunities for health care and social care students in rural communities.

# 3.1 Secondary Analysis of ICL data

A total of 38 of NOSM's distributed teaching sites across northern Ontario were canvassed for informants to be involved in the consultancy process for the Integrated Clinical Learning (ICL) project. Integrated clinical learning involves teachers and learners at different stages of their professional development and, often from the different health professions, in a multi-directional process which builds the knowledge, skills, and attitudes leading to improved professional and team competencies and improved patient care. The purpose of the ICL project was to develop a model of integration in clinical education as a unique feature of health education at NOSM. The discussion focused on exploring opportunities for peer learning, developing teaching skills, defining integrated clinical learning, and supporting IP education in the clinical environment. Data collected from the communities targeted to be involved in the ERIC project on supporting inteprofessional education was extracted for analysis. The purpose of this secondary analysis of data was to establish background on the communities involved in the ERIC project as well as determining the needs of the communities. The responses from 23 participants from the twelve interested communities were included in the analysis.

#### 3.1.1 Data Collection

For the secondary analysis of the ICL consultancy data, the selected responses from the ERIC communities that related to IP learning were extracted from the original qualitative data set. Data included in the secondary analysis included the responses to:

- a) "In your view, what supports does NOSM need to implement to ensure our future graduates are adequately and appropriately prepared for interprofessional practice?"
- b) "How could your practice contribute to inteprofessional learning?"
- c) "What would enhance collaborative practice opportunities for learners?"

The extracted text was further analyzed using ATLAS ti version 6.0 software. A mixed-approach was utilized in the secondary analysis with the five validated themes from the initial analysis providing a framework for coding as well as the occasion to develop emergent codes.

#### 3.1.2 Data Analysis

Data collected from the NOSM ICL project (2010) was initially transcribed for analysis. Frequent themes and recurrent words or phrases expressed by the participants were noted by the two project interviewers. The transcribed data was subject to a secondary review through individual analysis by each member of the project steering team. The individual analysis exercise was further validated through a two-step group consensus model approach involving first the entire ICL project Steering Group and a subsequent meeting consisting of 60 clinical teachers, learners and medical education leaders from across northern Ontario. The five themes emerging from the validity exercise included:

- (1) Learners seek shared clinical experiences enthusiastically engaging in informal and formal teaching (inclusive of peers, Residents, clinical teachers, and patients) in and outside clinical settings (authentic real interactions driven by an educational and clinical agenda
- (2) Influence of the culture of practice that drives the culture of teaching and learning (teach how one practices)
- (3) Learning spans the continuum of care in the context of the community ranging from the bedside to the clinic to community-based care, inclusive of experiential learning of the community
- (4) Value-added to clinical learning is the team-based contribution of community interprofessional teaching and learning (multi-directional learning)
- (5) Investment of community and professional relationships fostering professionalism and promoting recruitment and retention.

#### 3.1.3 Results

During analysis it was discovered that the five themes emerging from the complete consultancy data were richer in detail than the selected responses from the ERIC communities. The major components of the themes were maintained: (1) varied learning experiences; (2) health care professionals involved in teaching; (3) demonstrating interprofessional collaborative practice; and (4) opportunity for personal relationship building.

#### (1) Varied learning experiences

The participants from the ERIC communities placed a high value on providing varied learning experiences for learners on placement in their communities. This theme included both diversity in the learners present and diversity in learner situation. The participants from the ERIC communities indicated the importance of incorporating other health and social service learners with medical learners to enrich their learning experiences, as illustrated in the following quotes:

"Incorporating other learners in shared learning experiences - RPNs in the community along with RN students, x-ray tech, med lab and rehab learners"

"Students learn interprofessionalism through their experiences with a hospitalist ... students work with team members"

Bringing together learners from different disciplines not only provides an opportunity for learners to interact and communicate with other disciplines but also the opportunity to gain a greater understanding of the roles and scopes of practice of different health professionals.

"Access to learning about other professions through Residents and students undertaking a 4-week hospitalist experience"

Learners in the health professions can gain skills and knowledge in learning with, from and about students in other professional programs. Peer learning was one factor that NOSM should consider implementing to prepare learners for collaborative practice.

"Encourage more peer to peer learning"

"Learning from each other"

The participants also recognized one of the major challenges of scheduling learners concurrently. Rural communities often can have multiple requests for student placements from educational institutions and can negotiate a variety of learners. Difficulties arise for communities to ensure they have the capacity to handle multiple learners, including available preceptors and space.

"Scheduling issues are an issue when getting different health professional learners together for IP learning opportunities"

Although the diversity of learners was an important factor in contributing to interprofessional learning, the variety in the learning situation was also important for enhancing collaborative opportunities for training. The participants also reported that involving the patient would be beneficial for learners experiencing interprofessionalism. Involving the patient in their treatment is a cornerstone of an interprofessional approach.

"In-patients - learn the concepts of a team"

"Four students team up and pick a case - they follow through with that one patient and see how IP works with that patient."

There seemed to also be a need to allow learners to have some control over their learning situation. Participants encouraged opportunities for learners to follow their clinical interests or address their individual learning needs, as illustrated in the following quotations:

"Interprofessional patient care rounds [when] following a specific patient or something of interest to learner"

"Other students sometimes onsite at same time, e.g. RN, NP, interactions with these students, e.g. med student may follow other students to see good clinical cases."

By varying the learning experiences in terms of professions represented, the presence of patients, and type of activities, the learners have the opportunity to gain knowledge and skills in communication and role clarification. Health care professionals also felt that giving learners the ability to vary their learning schedule to observe how interprofessionalism might apply to their clinical interests was important to address IP learning needs and clinical training overall.

#### (2) Health care professionals involved in teaching

Participants from the ERIC communities also emphasized the importance of all heath professional involved in teaching. Teams of professionals working and teaching together were considered an important element that NOSM should implement to prepare learners for inteprofessional practice. The following quotes illustrate the importance of including all health care professionals in teaching or preceptorship:

"Learners are exposed to [other professions], encouraged to interact around patient care issues, and learn from others."

"Pharmacist, rehab, dentist, chiropractor - all a resource for the students"

"NP, RN and RPN - students learn to work with them in providing "simple medicine"

Using other health care professionals in the teaching process also allowed learners to have a better understanding of roles and teamwork within the communities.

"Learning from other people other than one's own profession"

"Team teaching sessions with health professionals to Residents and students and have them recognized formally for their teaching within medical programs - teamwork is the common denominator"

Allowing all health care professionals to be a resource for learners not only presents a differing perspective on patient care but also allows learners to gain experience in communicating with other professions.

#### (3) Demonstrating interprofessional collaborative practice

Modeling collaborative practice creates a positive learning environment by allowing learners to observe IPC. Role modeling interprofessional practice also facilitates acquisition of knowledge, skills and behaviours by presenting an environment that encourages learners to seek out other professionals to meet their learning needs.

"Learners identify what they need to learn - are encouraged to be self-directed - approach nursing staff to assist in meeting their learning needs (eg. Breast exams, alternative therapies)"

The practice culture creates an environment that supports team-based approach to learning and was established as a key feature for practices in the ERIC communities to contribute to interprofessional learning. The following quotes exhibit how the environment can influence the teaching and patient care:

"Changing the culture of learning within the hospital and clinic - hospital working towards this changed culture to eliminate the competition between health professions"

"Good space and great team and that helps develop good teaching and learning experiences for learners and ourselves"

#### (4) Opportunities for personal relationship building

Developing relationships has multiple benefits for learners in rural and remote communities. Participants in the ERIC communities cited relationship building to enhance collaborative practice opportunities and increase teaching resources. The following quotes illustrate how enhanced relationships allow learners and professionals to communicate more freely:

"Developing personal relationship [to be] comfortable in approaching any health professional"

"Good relationship with community partners"

"Preceptors and learners consciously building relationship"

Participants also emphasized opportunities for learners to interact with other health professional learners and often informally. It is unclear whether the meeting of students provides the exchange of information relevant to their training or whether making connections with other professionals to encourage communication between disciplines.

"Students involved in monthly "team building" discussions"

"Informal lunch discussions between NP students and Residents"

"Informal connecting with nursing and medical students"

Relationship building emerges as an important element of IPE and IPC in rural communities. Future research should explore the extent to which building relationships, both personal and professional, differ between rural and urban contexts.

#### 3.1.4 Conclusions

A secondary analysis of the ICL data found that ERIC communities had IP learning needs and gaps that were consistent with other communities within the region. The communities highlighted the importance of providing varied teaching experiences, as well as including a variety of health care professionals in the training of health care students for collaborative practice. The opportunity to build relationships, both between professionals in the community and between learners in other disciplines, and demonstrating IP practice were seen as enablers to training for IPE.

#### 3.2 Rural Preceptor Survey

A survey for health care professionals was developed for the ERIC project using a combination of the preliminary draft of the National Interprofessional Competency Framework and pilot study on rural palliative care teams (Appendix B). The qualitative study followed the process and progress of developing palliative care teams in thirteen rural northwestern Ontario communities. The main objective was to understand how collaboration is experienced in the context of rural collaborative teams. The model of interprofessional collaborative practice proposed by Way, Jones and Busing (2000) was used as a framework for deductive analysis however emergent themes were discovered. The elements of rural collaborative practice from the study on rural palliative care teams were used to complement and enhance the items created from the draft version of the CIHC competency framework.

Table 1
Rural Palliative Care Team: Elements of Rural Interprofessional Collaboration

Global Theme	Themes				
The Experience of Rural Collaboration	oration • Having a Sense of Responsibility and Accountability				
	Elements that Impact Co-operation				
	Varying Degrees of Coordination Exist				
	Communication is a work in progress				
	Assertiveness Helps to Move the Process of Change				
	Autonomy is a Process				
	Mutual Respect and Trust is Earned				
Rural Practitioners; "the Automatic Teams"	Process of Collaboration				
	Supports to Collaboration				
	Indirect Benefits from Collaboration				

#### 3.2.1 Data Collection

The survey was targeted to health care professionals, over the age of 18 and acting as clinical preceptors, in the communities selected for inclusion in the ERIC project. The survey explored what IPC competencies are necessary for work in rural communities, what IPC competencies learners acquire and how they acquire them, and what gaps exist in IPC learning. A total of 97 health professionals from the rural communities were sent invitations via email to respond to an electronic survey developed using a web-based platform (Survey Monkey, <a href="https://www.surveymonkey.com">www.surveymonkey.com</a>). The email invitation provided a brief introduction to the study as well as an attachment with detailed information on the study and provided Lakehead University Research Ethics Board requirements for informed consent. The online survey took approximately 45 minutes to complete. The online surveys were coded to allow follow up with non-respondents. Two weeks after the initial invitation non-respondents were resent the email and survey link one additional time. Preceptors that participated in the project had their name entered into a draw for a \$100 gift card for Future Shop. The coding list was kept separate from the data and destroyed at the end of data collection to protect anonymity of respondents.

#### 3.2.2 Data analysis

The survey collected both quantitative and qualitative data. Completed surveys were downloaded by the researchers for analysis. Quantitative data were summarized as descriptive statistics. Qualitative data were analyzed using standard practices of coding. Quotes were used to illustrate themes and concepts. Responses were then cross referenced with other identified elements in previous literature (Gaudet, 2009; National Interprofessional Competency Framework, 2010; Way et al., 2000).

#### 3.2.3 Results

Of the 97 health care professionals invited to participate, a total of 37 clinical preceptors responded to the survey in varying levels of completion resulting in an overall response rate of 38%. Of the non-respondents, email addresses for two of the participants were not valid while two participants declined the invitation to be involved in the survey. The 60 remaining preceptors invited to participate did not respond to the email invitation. Table 2 illustrates the distribution of health disciplines represented in the data. Female staff represented 86.5% of respondents and 13.4% were male.

Table 2

Professional field of participants

Targeted Professionals	# Participated
Administration	3
Dietetics	5
Medicine	4
Nursing	8
Occupational therapy	5
Physiotherapy	7
Social work	1
Speech language pathology	4
TOTAL	37

The number of years that each health professional practiced in rural settings varied from less than one year through to 37 years. The distribution of years of rural practice is illustrated in Figure 1. Data reveals that the number of students each health professional supervised in their discipline within the past 12 months varied from 0 up to 75 students. Figure 2 illustrates the distribution of self rated experiences as a preceptor.

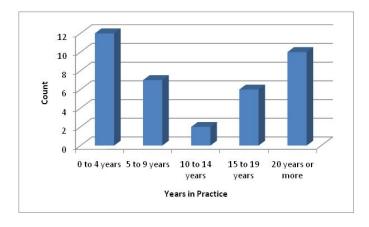


Figure 1. Distribution of Years of rural practice

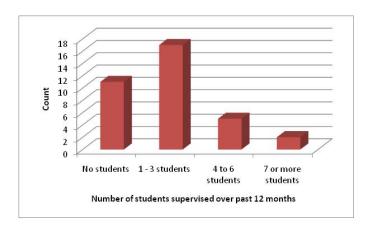


Figure 2. Distribution of students supervised over past 12 months

#### Unique features of rural team practice

Participants identified features of rural practice based on their experience. Autonomy and cooperation are cited by participants as significant features necessary for collaboration and consistent with the literature. Features identified by participants but not distinguished in literature were role fluidity, negotiating personal and professional relationships, personal connectedness, and interpreting ethics in context.

#### <u>Autonomy</u>

Health professionals in rural practice are often the sole representative of their discipline. Having autonomy is an effective tool to allow health professionals to navigate their way through a busy work day.

"There are few if any others in the same profession working in the same community, so one must be self directed"

#### Cooperation

Participants are cognizant of the resource challenges which create a need for healthcare professionals to become creative and cooperative in their daily activities.

"By nature the practice is collaborative and needs to be supportive"

"Because of lack of HR, it is imperative that people work together to cooperate for the betterment of the patient"

#### **Role Fluidity**

Participants made comments suggesting that due to the nature of rural practice health professionals should be open to all opportunities and be adaptable to unique challenges often presented in rural practice and may be alien to urban settings. The feature of role fluidity goes

beyond role clarification by not only understanding professional scopes of practice but also a willingness to move into service gaps inherent to rural practice.

"Team member's roles overlap more"

"People are flexible, taking on multiple roles, while maintaining a generalist approach"

"The fact that many rural professionals wear 'Many hats'"

"You must be a jack of all trades as there is not access to specialists in my field locally"

# Negotiating personal and professional relationships

Respondents indicated management of the personal and professional relationships was necessary for practice in a rural community. The interactions of these relationships were determined by the context in which they occur. It is important for health care professionals to recognize the boundaries between relationships, both personal and professional.

"Rapport/interaction made easier by everyone knowing everyone on multiple levels, professionally as well as out of the facility"

# Personal Connectedness

Survey participants commented on the benefits of having open lines of communication to facilitate a more relaxed learning environment. Opportunities to connect with other medical professionals helps students to create support from team members while also creating an atmosphere open to building personal relationships. In essence, open lines of communication helps to get the job done.

"Personal connectedness with other team members facilitates easier communication and sharing of resources"

#### Interpreting ethics in context

The relational boundaries can interfere with patient/client care in rural practice and requires ethical integrity.

"Everyone knows everyone - creates challenges in terms of confidentiality, professional separation, repeatedly seeing same client, who is most appropriate to treat someone that everyone on staff has some connection with"

#### Perception of rural teams

Participants were mixed in their responses on whether membership on rural health teams was voluntary, however the majority of participants agreed that they continually advocate for the needs of their patients/clients. Participant responses suggest the following:

- Rural teams are generally initiated by practitioners rather than organizations
- Rural teams are initiated in an effort to better meet patient/client needs
- Continuing professional education is perceived to be important to support rural teams
- The dedication of team members is a significant factor holding rural teams together
- Relationships outside the rural team influence how team members interact
- Rural healthcare workers often work in isolation from similar teams in other communities
- Membership of rural teams is determined by the team itself and that many members serve on several teams within the community
- Team members typically had relationships outside the workplace with other team members
- Team members have autonomy which allows them freedom to participate in teams when they choose
- Interactions are often in a "grab on the go" teamwork approach.

While a few participants indicated relationships within rural teams are hierarchical, many indicated that relationships are equal. Most respondents indicated that relationships among rural team members are determined by professional roles, whereas leaders on rural teams are often chosen based on capability. Many respondents indicated that rural teams have more informal power and influence than formal power and are able to work autonomously within the community.

The majority of participants agree that it is necessary for rural teams to meet face-to-face in order to improve the effective use of services and professionals. It is also suggested that expert face-to-face clinical consultations are supportive to rural teams and can improve continuity of care for rural patients/clients.

#### Perceptions on rural IPC elements learners should be taught

The majority of participants (84%) recognized the importance for learners to be taught rural IPC elements. Participants strongly agreed that students should be and are able to describe their own professional role and responsibilities clearly to other professions. There is also a need for students to be able to recognize the limits of individual professional competencies and know how to involve other professions in a patient's/client's care. In order to provide patient centre care, students need to recognize the competencies of other professions as different from their

own and also be tolerant of differences in professional perceptions. Students should be able to work with other professions to resolve differences or conflicts in the provision of care and treatment. An important element of IPC is that student training should emphasize the importance of including the patient/client as part of the team and be provided with the skills necessary for communication with the patient/client.

#### Existing opportunities to learn about IPC in the community

Twenty-four participants (65%) provided positive responses of opportunities for interprofessional learning in their community. Data suggests that whether interactions occur between students with other students or via shadowing professionals, all interactions provide opportunities for interprofessional learning. Participants also recognize the value of informal discussions as being a source of learning. Interprofessional placements provide opportunities to work in various settings and to engage in diverse knowledge translation via attending rounds, case conferences, clinical resource group meetings, and education sessions. Participants identified several competencies students are developing during learning opportunities:

- recognizing when a patient/clients' needs go beyond their current level of training
- describing their own professional role and responsibilities clearly to other professions
- recognizing the limits of their professional competence
- recognizing the competencies of other professions as different from their own

Only a few participants agreed that students have the opportunity to collaborate with other professionals on joint clinical related activities and to learn with students of other disciplines in an interprofessional team. There were no participants that strongly agreed students had the opportunity to lead interprofessional meetings or case conferences.

#### Additional competencies to prepare learners for rural team practice

Half of the respondents identified other necessary competencies for learners. Some of the competencies (assertiveness, autonomy, responsibility and accountability) were elements regarding collaborative practice found in the literature. Factors distinct from the literature were: accessing resources creatively, interpreting ethics in context, leveraging collective knowledge, navigating personal and professional relationships, and social accountability.

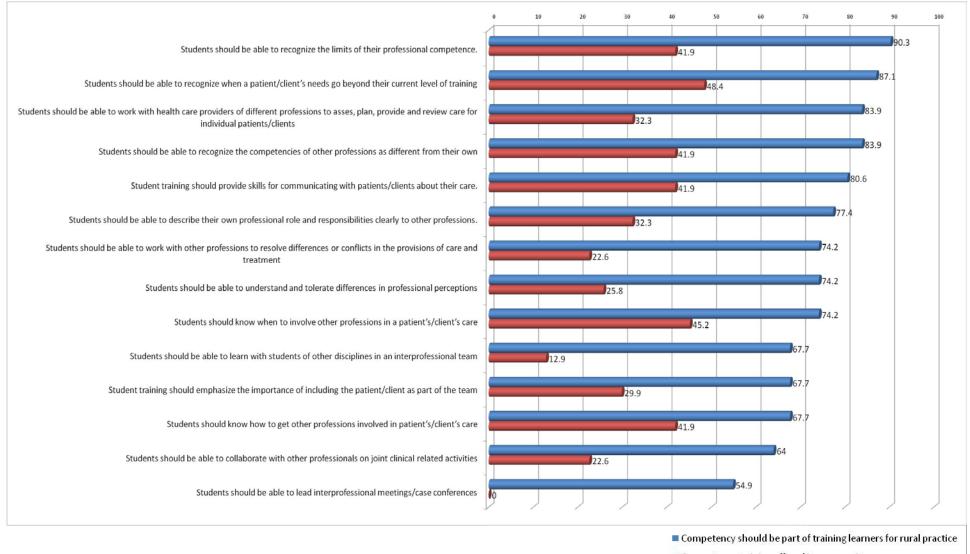


Figure 3. Comparison of importance of competency and training opportunity for learner

Competency training offered in community

# **Assertiveness**

"Self-direction, independence/interdependence, and resourcefulness - assertiveness skills in reaching out to community agencies to provide service to patients"

#### Accessing resources creatively

Health care professionals in rural communities are required to be creative in dealing with limited resources. It is necessary to have a good understanding of the community resources with the intention of adapting them to meet patient/client needs.

"Assertive skills in reaching out to community agencies to provide services to patients"

"Becoming creative in thinking of new linkages to make with community resources and how they can be best used to provide services for patients"

#### Interpreting ethics in context

"Good awareness of confidentiality and privacy legislation as sometimes border is grey with some members of the interdisciplinary team"

#### Leveraging collective knowledge

"They need to understand the "flow" of an existing team and its inherent necessary hierarchies"

"Focus on a limited role is sometimes necessary while learning"

#### Navigating regional resources

In addition to having a good understanding of the resources availability in the community and the outlying areas it is important to involve all areas of the communities and region into the health care system.

"Legislative requirements; organizational structures within training sites"

"Cultural diversity...language barriers, poverty, etc"

"To understand resources are limited and to communicate to client how it will affect their care"

#### **Community Commitment**

Health care professionals in the rural communities need to have a sense of commitment and obligation to the community and empower the community to utilize services in the community. One part of social accountability is to provide the knowledge, skills and expertise through knowledge translation to the public community.

"Make presentations; publish pamphlets"

#### Gaps or limitations in IP learning opportunities for communities

Twenty-four participants identified several gaps or limitations in IP learning opportunities in their communities. Four main categories of identifiable gaps or limitations identified by participants include: (1) lack of human and educational resources; (2) organizational challenges; (3) challenges of interprofessional collaboration; and (4) balancing experiences of learners (interprofessional vs. their own profession).

#### (1) Lack of human and educational resources

"Generally there is not an opportunity to work with other students as most providers in my field are only able to accommodate one student at a time."

"Limited resources of each professional and heavy caseloads limits professional availability"

"Students do take every opportunity to learn from the multidisciplinary team, but limited numbers and disciplines on the team make it harder to get a broader view"

"We do not often have learners of different professions and so we do not have structured sessions"

"Conferences are located in bigger cities"

# (2) Organizational challenges

"All of the medical professional students in this community are not organized with one person and as such, hard to arrange interprofessional education when you don't know who is in town. As well, there are few professional students in town and no residents due to changes in residency program. It is also difficult to provide students with the required client

contact hours because of the amount of travel involved and, to some extend depending on time of placement, being tied to the school year"

"No formal interdisciplinary teams/meetings in hospital and gaps in professionals - not always fully staffed"

"Taking time from the floor to be involved in interprofessional meetings is challenging"

# (3) Challenges of interprofessional collaboration

"Medical, rehab, dietetic, and nursing students don't mingle within work" "Insufficient knowledge of what other disciplines are doing and when"

# (4) Balancing experiences of learners (interprofessional vs. their own profession)

"Although we do provide opportunities for interprofessional learning, it is also important to allow the student to experience what is it about our own profession that makes us unique. It can be a challenge to find the right balance of that so it is not overwhelming for the student"

One participant did not perceive any gaps or limitations in IP learning, further commenting that health professionals help learners to fill voids as they occur.

#### Further faculty development sessions about IPE & C

Of the thirty responses, twenty-one participants indicated they would be interested in participating in faculty development sessions, and nine are not interested. Although any topic on IP was suggested, participants specified six topics of interest which included:

- Communication conflict resolution
- Interprofessional communication and collaborative
- Interprofessional collaborative care of patients with chronic disease
- Interdisciplinary roles and how to best utilize their health services
- Nutrition
- Team leadership, facilitation, problem solving

#### 3.2.4 Conclusions

In this survey of health care professionals functioning as preceptors in the ERIC communities it was discovered many elements are necessary for training for rural IPE and IPC. Some elements for rural IP were consistent with previous literature while other elements suggest unique features. The elements discovered in this exploratory survey require further study and discussion to determine if the elements are unique or an extension of the previous literature.

The discrepancy between elements necessary for training and opportunities for training emphasize the need for further IP training in these rural communities. The lack of human and educational resources and organizational challenges are major challenges to providing IP learning activities as well as some indication there is lack of collaboration within settings and difficulties with balancing specific professional learning and IP collaboration. The health care professionals also express interest in faculty development sessions on topics of IPE and IPC including communication and conflict resolution.

# 3.3 Summary of Phase 1

The ERIC project instigated two processes in order to fully address the gaps and assess the needs of communities for implementing IPE and IPC. The communities put an emphasis on varying the learning experiences and including a diverse group of health care professionals for learning activities. The communities also stressed the importance of modeling IPC to learners and suggested rural IPC may require an additional set of skills. There is a clear discrepancy between the skills and knowledge required for collaboration and the opportunity for development. The need for human and educational resources, solutions to organizational and IPC challenges, and professional development for IPE and IPC were also observed by health care professionals in the community.

# 4.0 ERIC project plan

The ERIC project was a collaborative approach by ten NOSM staff members. In addition to videoconference meetings to exchange information between staff members a web-based resource, an online WIKI, was utilized for guiding the process, sharing documents and resources, and reporting on progress in the communities.

The first step of the project was approaching and engaging communities in the ERIC project. Initial meetings were scheduled face-to-face in the communities to establish contact with members of chief health care organizations. The initial meetings also provided ERIC project staff with a better understanding of the community context. The ensuing videoconference meetings combined educational material with guidance in planning and evaluating the community IP activity. Following the IP learning activity, communities provided information on the activity on numbers of the individual profession, a summary of their activities, and for some communities, completed evaluation forms.

#### 5.0 Phase 2: Results and outcomes

Purpose 3: To implement IP experiential learning situations and case-based tutorial experiences for health professional learners in distributed community teaching sites that best illustrate teamwork practice

Purpose 4: To develop a toolbox to prepare learners for rural interprofessional practice and roles

Purpose 5: To use technology and web-based resources in support of project team and the communities in the development of IP learning

# 5.1 Interprofessional activities for communities

ERIC project staff presented 30 education sessions and 21 planning sessions to the eleven community groups involved. The planning session led to the 13 activities developed and implemented (Appendix C). The activities were mostly focused on the development of IP rounds with debriefing sessions, and community response to emergency situations. The emergency scenarios also included professionals from outside the health care sector. A total of 331 participants (144 learners, 187 professionals) representing 16 disciplines were involved in the organization and/or execution of the learning activities (Appendix D).

# 5.2 Health care professionals perceived impact of ERIC project

The primary contact in each of the communities involved in the ERIC project was approach to provide information on the impact of ERIC on the organization and community as well as the impact on learners and patients involved. The community approach to sustainability of IP activities was considered an area of importance.

#### 5.2.1 Data Collection

A survey was developed (Appendix E) and, once participants were identified, they were contacted via email to complete the electronic survey on the web platform Survey Monkey (<a href="https://www.surveymonkey.com">www.surveymonkey.com</a>). The community leaders were sent a follow up email two weeks following the initial email.

#### 5.2.2 Data analysis

The responses of eight community members were downloaded from the survey website and the text was analyzed using ATLAS ti version 6, software. A grounded theory analysis approach was used to code the responses. The responses were independently coded by two researchers while third research validated themes. Any discrepancies in coding were discussed and,

through an iterative process, the codes and themes were clarified and relationships were defined.

#### 5.2.3 Results of Data Collection

Investigation of the data revealed responses to questions on the impact of the ERIC project should be analyzed separately from the response to the question on sustainability of the activity. The themes originating from the impact question revealed three salient themes: (1) promoting communication; (2) increasing awareness of learner needs; and (3) enhancing patient care.

# (1) Promoting Communication

The ERIC project was described as a vector for organizations to improve their communication between team members. It was reported by ERIC participants that the opening the lines of communication also allow for health care professionals to get a better understanding of the roles and scopes of practice of others.

"[ERIC] has opened communication amongst the team and given them an opportunity to discuss possible changes.

"We have already improved communication between professionals in planning the project."

"The ERIC project has allowed us to identify barriers to communication and ways to assist with role definition and clarification."

ERIC participants also observed that the project allowed for collaboration between health care settings and the community at large. Several sites had interprofessional activities that involved multiple organizations, including community service agencies and industry as well as health care organizations.

"Expected impact to be positive and reinforce good working relationships with fellow agencies and workers. Reinforce appropriate response to disasters and encourage good communication and a positive and supportive learning environment for all involved."

"It also got the community working together ... we were successful with that and we will continue with the projects. It makes you think outside the box of your facility."

# (2) Increasing Awareness of Learner Needs

A major impact of the ERIC project was a greater awareness of the needs of students and designing activities around those needs.

"It has provided staff with the opportunity to see themselves and each other through a learner's eyes."

"The ERIC project has increased awareness on the needs of learners, to include and incorporate them into the multidisciplinary team and any activity that would serve to improve and enhance their understanding of the health care system"

"For the hospital community it has made us more aware of what learners are in the building and how we can give them a more positive and well rounded experience"

A better understanding of learner needs was also important for the ERIC participants to plan for a more organized approach to activities when learners are on placement.

"It has had a positive impact on the students and given an organized approach to facilitating learning among different disciplines."

"Minimal yet but hopefully a consistent approach and coordinated approach to learning"

# (3) Enhancing Patient Care

The ERIC project was perceived by community representatives to impact patient care through the teamwork approach. The participants communicated that a better understanding of an individuals' role and their interactions within a team would advance patient care.

"I believe this has heightened the learners' awareness of their individual role/contribution within a team/group environment and how they interact/shape the provision of patient care."

"As the project unfolds I believe that interprofessional collaboration will improve the overall experience of being cared for in a hospital as well as improve the involvement of the patients in their own care."

Not only did the ERIC participants describe the impact of the ERIC project on the how professionals and learners could enhance patient care with teamwork, they also acknowledged the inclusions of patients would further improve patient care. A major component of an interprofessional approach involves patients and families in care decisions.

"I believe that by involving the patients it will improve both patient satisfaction and patient safety."

"I believe the community impact is greater patient satisfaction and will contribute to involving the patient with their care in and out of hospital."

The ERIC project had an overall positive perceived impact for organizations, learners, communities and patients. Many respondents commented that the projects in their communities will be sustained and in some cases expanded. Examination of the sustainability response revealed two themes: (1) resources and (2) funding.

#### (1) Resources

The importance of resources was a major need for ERIC respondents to maintain their interprofessional activities. It was also noted that the tools provided could also be used for health care professionals within the organizations and not solely for students.

"Tool kits and specific guidelines or activities and ways to measure their success"

"Continue to provide articles, research - info for front line staff"

"I think the tools, any new tools or anything like that, are great if you come up with them. The tools I had are a big help because you can use them in not just ERIC collaboration. The whole facility can use them for learning, as professionals and not just students."

It was also suggested that NOSM support opportunities for information exchange between the ERIC communities to engage more health care professionals in the interprofessional approach.

"NOSM could continue to have update sessions to check in and see how it's going. Offer presentations, conferences and have guest speakers where improvements in interprofessional collaboration are discussed. Education sessions that get people excited and on board would be wonderful."

#### (2) Funding

The ERIC respondents also highlighted the importance of funding to maintain interprofessional activities in their communities. It was proposed that the funding confirms the importance of interprofessionalism in the community.

"Opportunities such as ERIC are a wonderful way to "get the ball rolling". Sustainability depends on appropriate funding and continuous communication"

"Both administratively and financially supporting the working together of allied agencies when responding to an emergency incident or similar situation"

"In our community, IPE happens all the time on an ad hoc and as needed basis. By having NOSM behind us, it does emphasize to folks that it is important. The financial

help from NOSM will again validate the importance of team work to the professionals in our small community."

#### 5.2.4 Conclusion

The community leaders perceived a number of positive impacts as a result of the ERIC project. The project was a catalyst for change by promoting communication within an organization and between community groups and enhancing patient care in the community. The leaders also noted a greater awareness of learner needs and developing learning opportunities to meet those needs. The needs for resources and funding were deemed necessary for ongoing IP activities and project in their respective communities.

# **5.3** Learner impact of ERIC project

Communities were provided with evaluation forms to assess learner satisfaction with the learning activity and differences in level of competency in (1) roles and responsibilities, or (2) communication and collaboration (Appendix F and G). Both evaluation tools were designed as a post-test only using retrospective self-report data. The tool used for roles and responsibilities included items adapted from the Collaborative Competencies Scale (CERAH, 2008) and qualitative questions to provide feedback on the IP activity. The tool used for evaluating the IP activity and change in communication and collaboration included items from the ICCAS tool (MacDonald, Archibald, Trumpower, Cragg, Casimiro, & Jelley, 2010; used with permission).

#### 5.3.1 Data collection

Each community involved in the ERIC project determined the evaluation form that would be most appropriate for evaluating the IP activity. Communities distributed evaluation forms to learners following the IP activity. Some communities choose to return evaluation forms to NOSM staff for analysis.

### 5.3.2 Data analysis

Quantitative data were summarized with descriptive statistics, and additional analysis of paired t-test was used to determine difference between the pre-post self reported skill levels.

Responses to qualitative questions were analyzed using ATLAS ti version 6 software, using constant comparative method of grounded theory analysis approach. Initially, a researcher read the responses and identified concepts. A second and third researcher then validated the concepts and corresponding categories. Any discrepancies in coding were discussed and, through an iterative process, the codes and themes were clarified and relationships were defined.

#### 5.3.3 Results

A total of 19 evaluation forms on roles and responsibilities were received from the communities of Espanola, Fort Frances, Marathon, Hearst and Sioux Lookout. No evaluations were received from communities using the communication and collaboration tool.

Items for this tool were scored on a 7-point Likert scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Learners perceived some level of competence on roles and responsibilities before the IP activity took place with the mean of items ranging from slightly agree, 5.06, to moderately agree, 6.00.

There was an overall increase in the means following the IP activity. The items were then analyzed using inferential statistics, a paired sample *t* test. Due to the low number of returned forms, caution should be taken when interpreting results (Table).

Table 3.

Comparison of means for the learner roles and responsibilities tool

Statement	Pre Mean	Post Mean	t ( <i>df</i> )	p value
Describe my professional roles and responsibilities clearly to other professions.	5.22	6.17	-3.796 <i>(17)</i>	.001*
Recognize and observe the constraints of my professional role and responsibilities.	5.61	6.39	-3.289 <i>(17)</i>	.004*
Recognize when patients/clients needs go beyond my scope of practice.	6.00	6.39	-1.686 <i>(17)</i>	.110
Recognize and respect the roles and responsibilities of other professions as compared to my own.	5.68	6.68	-3.627 <i>(18)</i>	.002*
Work with others to assess, plan, provide, and review care for individual patients.	5.56	6.67	-3.082 <i>(17)</i>	.007*
Work with other professions to resolve differences or conflict in the provision of care and treatment.	5.28	6.83	-4.279 <i>(17)</i>	.001*
Tolerate differences in professional perceptions and misunderstandings by other professionals.	5.79	6.58	-2.535 <i>(18)</i>	.021*
Facilitate interprofessional case conferences, team meetings, etc.	5.47	6.47	-3.011 <i>(16)</i>	.008*
Know when to involve other professions in patients' care.	5.26	6.42	-4.009 <i>(18)</i>	.001*

Know how to involve other professions in patients'	5.06	6.50	-4.914	<.001*
care.	3.00	6.50	(17)	<.001

<sup>\*</sup>Significant at the 0.05 alpha level

Following the IP activity, learners had significantly increases in the majority of items related to roles and responsibilities, including: (a) knowing how to involve other professions in patients' care, t(17)= -4.914, p<0.001; (b) working with others to assess, plan, provide and review care for individual patients, t(17)= -4.279, p=0.001; and (c) knowing when to involve other professions in patients' care, t(18)= -4.009, p=0.001. Only one item did not have any significant changes post activity, recognizing when patients/clients needs go beyond my scope of practice, t(17)= -1.686, n.s., however this item also had the highest mean pre activity.

The overall rating on the Interprofessional learning activity was scored on a 7-point Likert scale, ranging from 1 (Extremely Poor) to 7 (Excellent). The recommendation to other students was scored on a three point scale: 1 (Definitely Not), 2 (Maybe), or 3 (Definitely Yes). All the learners perceived the learning activity positively, with the majority providing high ratings to the learning experience. Additionally, all learners responded confidently they would recommend this activity to other students.

Table 4.

Descriptive statistics for overall activity satisfaction (N=19)

	Min	Max	Mean
Rating of overall learning experience <sup>1</sup>	4	7	5.89
Recommend this IP learning activity to other students <sup>2</sup>	3	3	3.00

<sup>1</sup> Likert response from 1 to 7

Qualitative data revealed two themes: (1) benefitting patients, and (2) benefitting clinical learners. Within the two themes, the emphasis was on action-oriented activities to both patient care and clinical learning.

#### (1) Benefitting patients

Learners centered on the importance of patient needs and the concept that interprofessional care addresses patients in a more holistic and comprehensive manner. This was apparent as learners reflected on their roles and the roles of others and related this knowledge to the needs of patients. The following quotes illustrate how learners related roles to both patient care and outcomes.

<sup>2</sup> Likert response from 1 to 3

"I learned that an interdisciplinary approach is always needed when treating a patient and every health care professional plays an equally important role in treating the patient"

"All of us can help each other and make a difference on the patient's road to recovery"

"Respect for other members of the team and the job they have to do - even if it is small it contributes to the final outcome of the patient"

Learners often commented on the action-oriented components of patient care (the doing) and did not comment on how interprofessional care contributes to the cognitive aspects of care (the decision-making/thinking). It is difficult to infer from the data whether this is due to learners operationalizing interprofessionalism as primarily an active part of care (i.e., interprofessionalism occurs through performing care with others), or whether they viewed the cognitive aspects of patient care as being primarily individual (i.e., decisions are made individually and then acted upon interprofessionally). The following quotes are examples of action-oriented responses in the context of patient care:

"The most valuable thing I learned was the role of the paramedic in terms of transferring patients. Being able to drive with the paramedic, I learned a lot about the information that the paramedic obtained and charted on"

"It's good to know what others can do so that we can ask them for help"

"The most value I see being part of rounds is seeing how they work, the procedures and how they work with other HC professionals"

The primary conceptualization of interprofessional care placed the clinical team members as contributors to patient care but did not mention how the patient fit into the team. However, one respondent commented on how the patient is at the center of care:

"Patients needs are critical and they dictate who needs to be involved in that patients care at a specific time"

This response comments directly to the role of the patient and supports that notion that patients are active contributors to their care. Overall, learners were able to relate principles of interprofessionalism to patient care and outcomes and in doing so focused primarily on action-oriented aspects of care. Further research is needed to investigate whether learners conceptualize interprofessionalism to include a patient at the centre of care and whether learners operationalize interprofessionalism within the cognitive aspects of patient care. Both questions have potential to inform future IPE activities.

# (2) Benefitting clinical learners

Learners also expressed that working as a team to coordinate care and services would not only provide better patient care but also benefit learners. This is aligned with the goals of interprofessional care; to improve patient care and clinical work environments. The following quotes illustrate how learners viewed ERIC activities as benefiting learners:

"I will feel more confident in my work knowing we are a team with the same vision"

"It's the way of the future where both professionals and patients will benefit"

"It helped me understand the importance of working as a team and communication"

These statements reveal that learners are considering how IPE can assist in preparing them for interprofessional collaborations and their future career as clinicians.

Similar to how learners viewed the action-oriented components of IP activities as benefiting patients, they also reported action-oriented facets of learning as being the most beneficial. The activities that were the most beneficial for learners to gain experience in IPC involved teamwork and communication, especially active discussions of cases:

"I learned the most with the group discussion involving the case studies"

"I gained the most experience in interprofessional collaboration in the mock code orange at the hospital. I was able to observe first-hand the collaboration of all the staff in the hospital as they did such activities as set up the decontamination tent and triage"

An active approach to learning interprofessional care was also expanded to include opportunities to share and learn from perspectives and experiences related to patient care as the following quotes highlight:

"Understanding the patient seems to come about more as more professionals shared their experience or conversation with the patient"

"I gained the most experience in the group project because we all got to come up with a way to treat a patient from different perspectives"

Overall, learners viewed IPE within the ERIC project as having benefit to learners and valued an active approach to IPE.

#### 5.3.4 Conclusions

The learners involved in the ERIC activities reported increases in their knowledge and skills for roles and responsibilities in addition to positive ratings on the various IP activities. The positive experience for the learners would be recommended to other learners. The IP activities and

impact on patient care and to themselves as learners were seen as benefits by creating a focus on patient care and outcomes and on their understanding of working in a collaborative team.

# 5.4 ERIC project staff impact of ERIC project

The processes to achieve a collaborative approach to the ERIC project became a focus. The important aspects were to determine the best practices for a collaborative approach to ensure delivery of the project was consistent across communities and the use of technology to support the process, particularly the use of an online WIKI.

#### 5.4.1 Data Collection

Midway through the ERIC initiative project dyads were interviewed individually using a semi-structured open-ended question format. All project staff members were interviewed face-to-face or via telephone. Interviews lasted approximately fifteen minutes and were audio recorded for analysis. The midpoint in the project was defined as meeting the following criteria: 1) dyads had made at least one verbal and email contact with the community, 2) dyads had attended an initial meeting in the community and 3) dyads had presented at least one of the educational sessions. The areas of focus for the interview were their perceived impact on knowledge of Interprofessional Learning and Practice, perceived understandings of the project roles and objectives, perceived elements that contributed to the dyad relationship, their perceived impression of interactions with ERIC communities, and their perceived satisfaction in utilizing supports and resources (Appendix H).

## 5.4.2 Data Analysis

Eight individual interviews were transcribed and the text was analyzed using ATLAS ti version 6 software using constant comparative method of grounded theory analysis approach. Initially, a researcher read the interview transcripts and identified concepts. A second and third researcher read the interview transcripts to validate the concepts and corresponding categories. Any discrepancies in coding were discussed and, through an iterative process, the codes and themes were clarified and relationships were defined.

## 5.4.3 Results of Data Collection

Four themes were developed from the analysis of the data as described above: (1) mirroring within the ERIC initiative; (2) time; (3) preparation; and (4) reality of the community.

## (1) Mirroring within the ERIC Initiative

This theme was identified when it became apparent that the elements by which the NOSM staff collaborated on the ERIC project paralleled interprofessional interactions the ERIC project was promoting. The National Interprofessional Competency Framework (CIHC, 2010) was utilized for subthemes.

Role clarification. Each member of the dyad, a faculty member of the IPE unit to be paired with a staff member of the Health Sciences or UME unit, brought a differing set of skills and knowledge to the project. The dyads recognized the need to establish the role each member would play and that background and expertise was an important factor in the division of labour.

"I think what basically is key to doing this kind of work with a team member is that you come to an understanding about what role each person in the dyad will play, what tasks will be accomplished by each member of the dyad, and showing some flexibility ... I think its openness and communication about the expectations and what we need to accomplish that makes it work."

"I think one factor that has made [the dyad relationship] work well is that we both come from completely different backgrounds ... the contrast in backgrounds has been really positive."

Patient/Client/Family/Community-Centred Care. The focus of IPC is on the needs of the patient/client and inputs from patient and family in the decision making process. This is similar to the dyads establishing contact with the ERIC communities to share information and to listen to their needs. The NOSM staff stressed the importance of input from the communities in developing resources and supports as a recommendation for future projects.

"I think that may have been helpful for us in developing the education sessions. What I'm noticing now is that sort of like a pre-survey of the communities about their expectations and what they would see as being their state of readiness could have been helpful to us as a project team."

*Team Functioning.* This competency is directed at the relationship between members of the team. The NOSM staff reported trust and respect in developing the relationship was important for collaboration on the project. Getting to know each other also provided an opportunity to have open communication between staff.

"Elements, certainly it's similar to collaboration. It is trust and familiarity. Once you have those kinds of things established it's easier to send a brief email and you're not concerned about people reading it in a different way. It frees up the avenues for communication"

Collaborative Leadership. This competency involved a shared approach to decision making. The dyads were able to work together to make decisions on roles and the function that each member would when interacting with the ERIC communities as well as making decisions about needs of the community when planning education sessions.

"We've shared the responsibility around presenting materials but [my partner] has been the lead in both of the communities that we're involved with."

"The powerpoint presentations have been very helpful and I have appreciated the process whereby the group is allowed to review and have input and also to modify so that it's not a canned presentation that can't be changed."

Interprofessional Communication. The communication between members of the dyad, as well as communication with the NOSM staff as a whole was important to the progress of the ERIC initiative. The sharing of information was also important to the dyads.

"I think it's really just the ongoing communication and sharing of ideas and blending of experience and expertise which I think has made it successful."

"I think being able to come together as a larger group sometimes and hearing what the others have done and what worked well for them, and what didn't."

Interprofessional Conflict Resolution. The importance of creating an environment in which the dyads were able to express opinions and discuss the approach to communities was also identified by the NOSM staff.

"I think both of us in the dyad are very open to suggestions for improvement and how we can make, for example, the presentations better and more effective."

# (2) Time

The ERIC project faced several barriers in initiating the original project. In addition to the already the tight timeline of project deliverables, the recruitment and hiring of one Lead project staff member, potential interested recruits unable or unwilling to travel to ten different communities during the course of the project, and the high number of communities geographically dispersed and variation in teaching sites were also challenges. In order to ensure the ERIC project was completed by the deadline date, ten staff and faculty accepted the call and welcomed the opportunity to undertake this project as an internal collaborative initiative.

"I think one of the challenges that arose was that the time frames that were delayed in being able to move forward with engaging communities led to probably not as a detailed work plan as could have been done in light of the project being delayed for challenges in recruiting human resources to support this project in particular."

Time was also an impediment to the ERIC project through delays in response times and the limitation of the project timelines. The delays in response time could be a result of the

community placing a lower priority on the ERIC project or competition of the ERIC initiative with other projects already underway in the community. It is the latter that led to the withdrawal of a pair of the communities originally proposed for inclusion into the ERIC project.

"The timeline has expanded I think we at NOSM has a commitment to the timeframe. One of the challenges is response time - this project is lower on the community's priority list."

Although the theme of time was a barrier to the initial start of the ERIC project, time also had a facilitating effect on the ERIC initiative. The facilitating effect of time was most evident in the dyad relationship. The amount of travel time provided the opportunity for NOSM staff members to develop relationships.

"The fact that we travel gives us a lot of time to dialogue and brainstorm and make plans. While we're on the highway, of course that's what we're doing. That same amount of time has made it better because we get to know each other as individuals and get a better feel for how we each work."

"Certainly the long drives to various communities add to the opportunity to discuss the project, common concerns of the project, and even our own personal attitudes so that kind of opportunity has made the relationship positive."

## (3) Preparation

The theme of time was connected with the theme of preparation. As introduced in the previous section, the short timelines and challenges in initiating the ERIC project required a more aggressive approach to the work plan. There were varying degrees of understanding of the goals and objectives of the project and recognition that adaptation was necessary in order to achieve the project deliverables.

"I am fairly clear ... I think we're making it up in response to challenges."

"I have become more clear as time has gone on and as we've engaged with community partners ... I feel more clear about the objectives of the project and that was a little bit of a mystery to me in the beginning."

"I didn't feel like there was a lot of preparation beforehand. It's not anybody's fault, it just happened too quickly."

As well, NOSM staff indicated that preparation was important for organizing and developing the resources for the project. It was also important for NOSM staff to be prepared and have the knowledge and skills to be able to present to the ERIC communities.

"I think the timing of all of the support documents was difficult. If we had had all of those lists and suggested introductions and flyers and presentations and everything right from day one I think it would have been easier. It could have laid out a step by step strategy more easily. That being said, I don't think it's going all that badly."

"I think everybody else has done a really good job of getting it going but I think if we had started earlier it would have run a bit more smoothly. There's nothing worse than going to do something when you're not prepared and you're representing somebody and you don't want to feel like you're doing a bad job and that's a little bit how I felt. I wasn't prepared."

".. the whole outline ... so when we first approach them we can tell them "this is going to be what's going to happen over the next few months" rather than going month by month. This is what's coming up next and this is what's going to happen next so that they're prepared for what's coming too. I'm looking at this from the person in the community's perspective. And if I felt that's what I wanted to know and I didn't know it they probably felt the same."

The use of the technology, particularly the WIKI, supported knowledge transfer between the dyads however initial issues with initial organization and training on using the WIKI were noted.

"WIKI has been a very valuable resource because everything is centralized ... it becomes very onerous and challenging if you have to do everything by either email or stored on shared drive when not all members of the project team would necessarily have ready access to the files"

"I know the WIKI was a new tool for us and I think we relied on it too much for stuff sometimes ... which was hard if you didn't really understand how to use it."

"It has been helpful as a one stop shop to find the materials that I need. At times it has been a little bit disorganized and I frequently get these emails whenever something has changed. Those emails are not always clear because I can't always see what has changed"

It was also reported by NOSM staff that identifying the key contacts in the communities was an important component for connecting with the communities. In some cases tracking down the correct participant was a barrier in the ERIC progress for their community. Additionally, there were some opportunities to connect organizations in the community but the logistics of contacting and scheduling meetings between sites was a barrier.

"Initially I made phone contact in my community and then followed up with email. I found the phone difficult in the beginning because as it turned out the contact listed in the WIKI wasn't the right person so it got all muddled up. And I was embarrassed by that."

"Just knowing who all the players are. Making those contacts and trying to maximize what we're doing in the time we're doing it. Getting as many players as we need at the table."

# (4) Reality of the community

The NOSM staff involved in the ERIC project underscored the importance of understanding the context and remaining grounded in that context. Approaching communities required an understanding of the nature of practice in rural and remote communities as well as an understanding of the challenges communities face, including limited resources and lack of health human resources. These are general challenges for small communities however there is a need to recognize the unique characteristics within that.

"...[The ERIC project] wasn't to construct something that was completely out of the ordinary, or something that was very onerous, but they could reflect on what they were currently doing and how that could be slightly modified to be inclusive of interprofessional competencies and expectations."

"We have our own ideas of how [IP activities] will be up taken and how it can benefit the different learners and professionals in those communities ... I think we have to stop and recognize that, particularly in the North and particularly in rural communities ... there is a lot of dynamics and issues which make it quite challenging."

Overall the ERIC communities appeared to have a high level of motivation to participate in the ERIC project, in part related to the opportunity to access resources and funding in order to move projects forward:

"The highlights I would say is some of the enthusiasm in some of the communities and the clear willingness to work with us on doing this"

A key feature of the ERIC project was to empower the communities to coordinate IP activities and support them during the process. In some of the ERIC communities, the staff reported a level of hesitation or unwillingness to participating in the ERIC project.

"The fact that we're in Thunder Bay and Sudbury, we're talking about the rural reality but again there may be a perception that we don't REALLY get it, we talk about it, but we don't really get it. It's the "us" and "them"."

The ERIC staff also suggested that in order to better meet the needs of the community, input from the community would assist in designing education sessions and resources:

"We had a pretty standard approach to delivering our presentations and initial meetings with the communities however having quite a varied state of readiness and understanding about what interprofessional education and collaborative practice is and understanding the challenges that some communities are facing then we may have been able to make appropriate adjustments"

"In other communities a combination of resourcing issues which make it difficult for people to effectively partner so that we've had to take on more than the load or lead in moving forward."

In order to empower the communities, NOSM staff recognized the value of a flexible approach to the ERIC initiative as well as a respect for the communities and their needs. The developing of a deeper relationship with the communities facilitated a flexible approach in order to meet their needs.

"I think one has to be flexible and really listen to what they [the community] are saying and not try to force or impose what we think will work but to really listen and respond."

"Know about them first of all. Know who they are. Know what makes them unique. Know what makes the proud. And I think to know the people involved. Know what their roles are and what they bring to the team you're working with ... building on that uniqueness."

### 5.4.4 Conclusions

Elements of the National Interprofessional Competency Framework were expressed by the ERIC project staff suggesting the collaborative approach on the ERIC project reflects the collaboration in health care settings. Time was perceived as an enabler and a barrier to the ERIC project. Project staff spent considerable time together which provided an opportunity for developing deeper personal connections however time was observed as a barrier for challenges in communicating with communities and maintaining deadlines. The theme of time was associated with preparation in the project. The adaptation of the original project plan to a collaborative and community-centred approach to the project required the development of resources to assist project staff as well as the communities. The community-centred approach was reported by ERIC staff to be important for engaging the community as well as promoting sustainability of IP activities.

# 5.5 Summary of Phase 2

ERIC empowered health care professionals in the communities to organize IP activities by providing educational, human and organization resources to communities resulting in 13 learning activities with 331 participants involved. The community liaisons involved in planning and executing the learning activities responded with positive impacts on the community, organization and on learners. The need for continued resources for sustainable IP learning activities was observed. Learners self-reported increases in competencies related to roles and responsibilities and overall satisfaction with the learning activity. ERIC project staff experienced a collaborative project supported incorporated web-based tool and technologies that mirrored collaboration in the health care setting.

## 6.0 Discussion

The ERIC project was able to discern the competencies necessary for rural IP practice as perceived by preceptors and the extent to which opportunities to develop those competencies are available in the communities. Results show the competencies are regarded as important learners are not likely to have many opportunities to develop their skills. Importantly, the opportunity for learners to engage with learners in different professional fields was lacking in the ERIC communities.

Unique competencies emerged for rural IPE and IPC were also noted. Due to the sample size further investigation and debate is required to determine if the competencies found in this study are in fact unique or extension of existing IP frameworks. The comparison of the IP competencies by framework can be found in table 5.

Table 5.
Comparison of Frameworks for IPE and IPC.

Elements of successful IP & C practice	Way et al. (2000)	Gaudet (2009)	CIHC (2010)	ERIC
Responsibility and accountability	✓	✓		✓
Co-ordination	✓	✓		✓
Communication	✓	✓	✓	✓
Co-operation	✓	✓		✓
Assertiveness	✓	✓		✓
Autonomy	✓	✓		✓
Mutual trust and respect	✓	✓		
Patient/client/family/community-centered care		✓	✓	✓
Role clarification		✓	✓	✓
Team functioning		✓	✓	✓

Collaborative leadership	✓	✓	✓
Interprofessional conflict resolution	✓	✓	✓
Role Fluidity			✓
Personal Connectedness			✓
Interpreting ethics in context			✓
Accessing resources creatively			✓
Leveraging collective knowledge			✓
Navigating regional resources			✓
Community commitment			✓
Negotiating personal and professional relationships			✓

ERIC project was able to empower eleven communities to develop 13 learning activities. Learning activities were developed around scenarios of collaboration existing in the community organization, including IP rounds and emergency responses. Both community liaisons and learners observed the importance of the team exercises for benefitting patients and learners.

The provided resources on education and organization were perceived by community members and learners to enhance their knowledge of IP. The community members also saw the benefit of using the materials developed for ERIC for other IP learning activities, particularly for the use with health care professionals.

The collaborative approach to the ERIC project utilized a variety of technology and a web-based resource which had mixed responses from project staff. Although there was value, the initial organization and lack of experience with using the WIKI was a challenge for some staff.

### Limitations

Although there was substantial participation in the ERIC project only key health care professionals involved in the organization of the IP activities provided their perspectives on the project. It is unknown whether they provided individual opinions or their reflections represented feedback from the community. Additionally, only a small portion of learners involved in the ERIC project provided feedback using the assessment and evaluation tools provided by NOSM. Due to the low number of participants providing feedback, it is also difficult to determine if the IP activities had a change on behavior of the learners or practice in the community. The low number of responses also reduces the ability to generalize the findings to other rural communities.

Furthermore, participants in the ERIC project were volunteers and it is likely individuals interested in the ERIC project were supporters of interprofessionalism in health and social care setting. If the individuals were already persons of influence in their community, their attitudes

could indicate a response bias, influencing responses to impacts on the ERIC project in their community.

While the ERIC project added to the scant literature on IP in rural and remote communities, the need for rigorous and larger scale research is necessary to determine if the results found in the ERIC project can be generalized to other rural communities and if IP activities have long-term impacts.

# 7.0 Knowledge Dissemination

ERIC was a large project that produced results useful to a variety of end-users. Our dissemination plan is based on a modified Canadian Health Services Research Foundation (CHSRF) dissemination framework. We will customize our key messages to three targeted user groups: rural community health care professionals (administrators, nurses, physicians, social workers, physiotherapists), educators and educational decisions makers involved with IPE/IPC and/or distributed learning models, and the broader academic community (researchers exploring IPE/IPC). When our audience is:

Rural Community Health Care Professionals, we will disseminate our results using processes that were developed through the collaborative nature of ERIC. Specifically, we create targeted one-page summaries of results pertinent to community members engaged with IPE and distribute these through a) the WIKI b) the key contacts in each community and c) the clinics where health learners participate in clinical rotations. Additionally, we will supplement written information with video-conference information sessions, roundtable discussions, and provide face-to-face information sessions whenever possible within time and budget constraints.

Educators and Decision Makers interested in promoting IPE/IPC in rural contexts, we will present our findings at key meetings of educators and educational planners at NOSM and within the region (i.e., Laurentian University, Lakehead University). Additionally, we will prepare fact-sheets of key findings from our research that could be used by educators and decision makers (LHIN 13 & 14) interested in partnering with communities to facilitate IPE activities and/or facilitating IPE in rural communities. We will highlight practical strategies that could maximize partnerships between educational and health institutions in Northern Ontario to facilitate IPE throughout the region. Finally, we will convene all partners in the next year to discuss continuity as well as move towards the development of Integrated Clinical Teaching (ICL) and Learning and how the project activities can be incorporated into ICL.

**Broader Academic Community,** we will use both traditional and innovative mechanisms for disseminating results – presentations at conferences (i.e., IPE Ontario Conference), publications in relevant peer reviewed journals (i.e., Journal of Interprofessional Care), and fact sheets on

websites specifically aimed at IPC/IPE (i.e., Canadian Interprofessional Health Collaborative Blog).

To date, presentations based on aspects of the ERIC project have been presented at two conferences:

Gaudet, A., Kelley, M.L. & Williams, A. (2009). Understanding interprofessional collaboration in rural palliative care teams. Poster Presentation. Canadian Rural Health Society Conference, Kingston, ON. October 15-17.

Gaudet, A., Kelley, M.L. & Williams, A. (2009). Understanding interprofessional collaboration in rural palliative care teams. Facilitated Poster Presentation. Collaboration Across Borders II: an International Dialogue on Interprofessional Health Education, Research, Policy and Practice, Halifax, NS. May 20-22.

Additionally, abstracts have been submitted and accepted for presentation at two upcoming conferences:

Berry, S. Ranger, N., Global Community-Engaged Medical Education Muster Conference, Australia. October 18-21, 2010

Berry, S., Kelley, M.L., Ranger, N., Gaudet, A., Parkkari, M., Farrell, S., Arseneau, L., Sihvonen, L., & Rupert, H. Experiencing Rural Interprofessional Collaboration (ERIC): Exploring the Diversity of Learning Situations in Small Communities. January 2011, IPE Ontario 2011, Toronto, Ontario.

Farrell, S., Ranger, N., Parkkari, M., Rupert, H., Berry, S., Kelley, M.L., & Gaudet, A. Exploring IP competencies in the Rural Context. January 2011, IPE Ontario 2011, Toronto, Ontario.

Parkkari, M., Reinikka, K., Berry, S., Ranger, N., Rupert, H., & Farrell, S. Using Dyad Teams and Technology in Organizing Multi-site IPE Activities: A Multiple Team-Based Teaching Model. January 2011, IPE Ontario 2011, Toronto, Ontario.

Ranger, N., Rupert, H., Farrell, S., Berry, S., & Parkkari, M. The Use of Education Sessions and Toolkits in Supporting IPE and Collaborative Teams in Rural Communities. January 2011, IPE Ontario 2011, Toronto, Ontario.

Finally, for all target end-users, this report will be emailed to all ERIC participants from all ERIC communities and organizations and recipients will be encouraged to contact members of the research teams with questions.

## 8.0 Conclusions and Recommendations

The design and purpose of the ERIC project was to integrate IP learning activities into current clinical placements for learners in rural communities. The goals of ERIC were to increase the

number of IPE and IPC champions, implement various IP activities and investigate the skills required for rural collaborative practice. The evaluation was conducted to establish if the ERIC project objectives were achieved.

#### **Recommendations:**

## **Integrated Clinical Learning - Communicating and Coordinating with Communities**

1. It is recommended that student placements be synchronized in a placement mapping process by teaching site or individual small community to provide greater opportunities for learners to interact.

## Strategies:

- establish connections in communities with the placement coordinator and other organizations/institutions to collaborate on learner placements
- contact FWFHT on their use of online calendars for student placements and determine if this method would be helpful for other organizations
- 2. It is recommended that NOSM create a calendar of upcoming faculty development sessions to provide communities with appropriate notice for attending interprofessional education and teaching sessions.

## Strategies:

- create IP learning plan with IP PPC with at least 6-8 week's notice
- circulate list of events to ERIC participants community liaisons to distribute in their communities
- contributing to the CEPD faculty development syllabus

## **Knowledge Transfer**

3. It is recommended that NOSM continue with ERIC both with participating communities and expanding to other communities to increase IP opportunities.

#### Strategies:

- invite other potential communities to ERIC roundtable for more information on ERIC
- saved ERIC roundtable webcast to distribute to other potential communities
- market ERIC activities/resources to other communities for their use and focus on providing services (establishing cost-recovery based on needs)
- ensure that ERIC initiatives in the community interface with the developments and implementation of integrated clinical learning
- identify and highlight role models of IP practice in communities
- 4. It is recommended that methods to determine learner needs and ideal learning situations be developed and shared amongst distributed teaching communities.

#### Strategies:

• literature review on ideal learning situations for IP events

- consistent question on feedback forms of all NOSM IP events to determine most appropriate learning situation as well as provide a variety of learning situations
- learner placement form to identify learning needs to clinical placement organization
- utilization of a consistent learner feedback form

# Social Networking and Sharing Expertise to Enhance Sustainability

- 5. It is recommended that NOSM maintain connections with communities to provide consultation and guidance for further IP education and organization materials.

  Strategies:
  - maintain contact list for ERIC contacts and distribute with all ERIC community participants
  - connect ERIC participants with IP leads on both campuses, IP PPC as a contact for NOSM
- 6. It is recommended the problems encountered by NOSM staff should be addressed and use of the WIKI should be suggested to communities as a vehicle to share information. <a href="Strategy: 1.5">Strategy: 1.5</a>
  - determine the appropriateness of using the WIKI at the ERIC roundtable for information sharing between community members and NOSM providing resources to communities
  - determine with communications for guidance to preserve NOSM branding

# 9.0 References

Bowman, R.C., Crabtree, B.F., Petzel, J.B., & Hadley, T.S. (1997). Meeting the challenges of workload and building a practice: the perspectives of 10 rural physicians. *Journal of Rural Health*, 13(1), 71-77

Canadian Health Services and Research Foundation. (2006). Developing a dissemination plan. Retrieved from http://www.chsrf.ca/knowledge\_transfer/pdf/dissemination\_plan\_e.pdf

Canadian Interprofessional Health Collaborative. (2010). A National Interprofessional Competency Framework. Retrieved from <a href="http://www.cihc.ca/files/CIHC IPCompetencies Feb1210.pdf">http://www.cihc.ca/files/CIHC IPCompetencies Feb1210.pdf</a>

Centre for the Advancement of Interprofessional Education. (2002). *Defining IPE*. Retrieved from <a href="http://www.caipe.org.uk/about-us/defining-ipe/">http://www.caipe.org.uk/about-us/defining-ipe/</a>

Gaudet, A. (2009) Understanding the Experience of Interprofessional Collaboration on Rural Palliative Care Teams. Masters Project, Faculty of Social Work, Lakehead University, Thunder Bay, ON., 1-49.

Hays, R. B. (2008). Interprofessional education in rural practice: how, when and where? *Rural and Remote Health*, 8(2), pp. 1-5.

HealthForce Ontario . (2007). Interprofessional Care: A Blueprint for Action in Ontario. Retrieved from http://www.healthforceontario.ca/upload/en/whatishfo/ipc%20blueprint%20final.pdf

MacDonald, C.J., Archibald, D., Trumpower, D., Cragg, E., Casimiro, L., & Jelley, W. (2010) Quality standards for interprofessional healthcare education: Designing a toolkit of bilingual assessment instruments. *Journal of Research in Interprofessional Practice and Education*, 1(3), 1-13.

Miedema, B., Hamilton, R., Fortin, P., Easley, J., & Tatmichi, S. (2009). The challenges and rewards of rural family practice in New Brunswick, Canada: lessons for retention. *Rural and Remote Health [Online]*, 9(2), 1141.

Northern Ontario School of Medicine. (2009). Realizing the Potential of Integrated Clinical Learning. Retrieved from

http://www.nosm.ca/uploadedFiles/About Us/Media Room/Publications and Reports/ICL%20Report no%20Appendix for%20web.pdf

Penz, K., Steward, N., D'Arcy, C., Morgan, D. (2008). Predictors of job satisfaction for rural acute care registered nurses in Canada. *Western Journal of Nursing Research*, 30(7), 758-800.

Pong, R.W., Desmeules, M., & Lagacé, C. (2009). Rural-urban disparities in health: how does Canada fare and how does Canada compare with Australia? *Australian Journal of Rural Health*, 17(1), 58-64.

Public Health Agency of Canada. (2006). How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants. Retrieved from http://www.phac-aspc.gc.ca/publicat/rural06/

Sen Gupta, T.K., Murray, R.B., McDonell, A., Murphy, B., & Underhill, A.D. (2008). Rural internships for final year students: clinical experience, education and workforce. *Rural and Remote Health [Online]*, 8(1), 827.

Smith, D.M. (2005). Barriers facing junior doctors in rural practice. *Rural Remote Health [Online]*, 5(4), 348.

VanLeit, B., & Cubra, J. (2005). Student-developed problem-based learning cases: preparing for rural healthcare practice. *Rural and Remote Health [Online]*, 5:399.

Way, D., Jones, L., & Busing, N. (2000). Implementation Strategies: "Collaboration in Primary Care – Family Doctors & Nurse Practitioners Delivering Shared Care" The Ontario College of Family Physicians. Retrieved from <a href="https://www.ocfp.on.ca">www.ocfp.on.ca</a>

Whelan, JJ., Spencer, J.F., & Rooney, K. (2008). A 'Ripper" Project: advancing rural interprofessional health education at the University of Tasmania. *Rural and Remote Health*, 8(3), 1017.

World Health Organization (1978). Alma-Ata 1978: Primary Health Care. Report of the International Conference on Primary Health Care. 6 – 12 September 1978. Alma-Ata, USSR. Geneva: World Health Organization.

World Health Organization. (2010). Framework for Action on Interprofessional Education & Collaborative Practice. Retrieved from http://www.who.int/hrh/nursing\_midwifery/en/

# 10.0 List of Appendices

Appendix A: ERIC Project Logic Model

Appendix B: Preceptor survey

Appendix C: ERIC community summary

Appendix D: ERIC participant by discipline

Appendix E: Community liaison impact questions

Appendix F: Learner evaluation form – Roles and Responsibilities

Appendix G: Learner evaluation form – Communication and Collaboration

Appendix H: Staff impact questions

## INTERPROFESSIONAL CARE & EDUCATION FUND 08-09 PROJECT LOGIC MODEL

Project Goal: To achieve a greater understanding of the activities and processes that lead to the acquisition of interprofessional competencies of health care learners in relation to their experiences in Northern rural communities, in order to develop a model & tools to support IP learning & care in rural and remote communities

#### PROJECT COMPONENTS

- Empower the communities to implement IP clinical experiential learning and small group learning reflective learning experiences for HPLs that best illustrate teamwork practice for each of the identified rural distributed teaching communities
- To develop a toolkit to assist IP facilitators and prepare HPLs for rural interprofessional (IP) collaborative practice and role differentiation and collaboration
- To identify and articulate the core IP competencies that HPLs are currently acquiring while learning in IP environments in NOSM's DTSs in rural communities
- To identify core competencies either absent or limited from these experiences to add to the current IPE literature.
- To use technology and web-based resources in support of project team and the communities in the development of IP learning.

#### **CONSTRAINTS**

- Project timelines
- Recruiting project staff
- 3. Number of communities targeted for implementation
- 4. Student placement time-lines
- Interest and buy-in from DTSs and Health Care Practitioners/organizations in each site and time and resources available
- 6. Traditional mind-set of care (discipline specific)
- Scope of Preceptors/clinical faculty's formal knowledge of IPE & IPC
- 8. Availability of educational meeting rooms
- Availability of time for experiences within HPL's academic / clinical programming
- 10. Response rate
- Health care provider staff shortages and competing other project commitments
- Existing silos of care- marginal community collaboration amongst healthcare organizations
- Risk management issues of staff travel to distributed teaching sites and time away for extensive travel
- 14. Community readiness to participate
- Ethics policies
- 6. Communities Workers Compensation
- 17. Privacy laws and patient confidentiality
- 18. Lack of nursing (RN) students
- 9. Challenges of coordinating students

#### TARGET AUDIENCE

- Health Professional Learners (HPL)
- Health Care
   Providers in DTSs
- NOSM faculty/clinical teachers/preceptors
- NOSM Phase 1 & 2 coordinators
- NOSM health professional placement coordinators
- Patients/clients & families

#### **INPUTS**

- Commitment of NOSM partners and learners for IP learning / community engagement
- Expertise of partners
- Financial Resources
- Technology
- Diverse training level of learners
- Existing NOSM infrastructure in IPE and clinical experiences in DTSs
- IPE as a NOSM academic principle / NOSM 2010-2015 strategic priority
- IP Champions
- (existing and new)
   Emerging model of clinical education at NOSM
- Integrated Clinical Learning incorpotating IP team learning
- Literature review on rural health collaboration

#### **ACTIVITIES**

- Selection of 6 distributed sites in NE & 6 in the NW
- Identify IP faculty development needs in IPE & C
- Develop and deliver faculty development sessions
- Recruitment & selection of diverse student groups and new graduates on placement
- Identify current IP experiential learning occurring in each community & the IP competencies they enhance
- Identify the gaps in IP experiential learning occurring in each community and the IP competencies that require strengthening
- Promote the development and delivery of a variety of IP clinical experiences
- Develop/adapt reflective discussion questions to IP activities created
- Identify new IP competencies unique to rural and remote practice
- Highlight role of patients/families in collaborative practice and patientcentred care
- Identify opportunities for informal interprofessional learning
- Develop toolkit for HPLs/Health Care Providers
- Develop a template for a learning directory/menu with IP learning outcomes for each experience
- Engage regional Family Health Teams (FHTs)
- Develop a web-based collaborative project site – WIKI
- Identify barriers and gaps in, and how to respond effectively
- Empower the communities

#### **OUTPUTS**

- A draft model of IP experiential learning in rural & remote communities
- 100% recruitment of up to 12 IPE & C rural health provider champions
- 100% commitment of up to 12 rural communities I
- Written documentation of IP competencies currently acquired
- Minimum of one IP activity developed per participating community
- Evidence of unique IP rural competencies
- Evidence of special features, gaps & limitations in IPE & C in rural and remote sites
- 75% learners survey response rate to capture perceptions of IPC in their rural/remote placement communities
- 75% acceptance of incorporation of specific IP experiences in clinical setting
- 75% learner survey response rate of existing IPE experiences
- 80% participation of learners highlighting relevant IP experiential learning unique to their placement community
- 90% participation of learners in IP experiences/community
- # of new experiences for learners
- # of health care providers involved
- · # of varied IP experiences
- 80% learner satisfaction with IP exp.
- 1-3 unique features of rural team practice
- 2-3 features of new learning situations in collaborative patientcentered care
- Comprehensive list of IP learning environments/perceived IP competencies in DTSs
- Rural IP literature review
- Implementing a patient-centered philosophy
- NOSM student placement map
- Develop step-up model where communities can effectively build IPE

#### **IMMEDIATE OUTCOMES**

- 12 communities engaged & IPE & C champions supported in each site
- Project participants are educated and supported in initiative
- Validation of IP competency themes and identified new IP competencies
- Greater understanding of NOSM's own goals and values related to IPE & C
- Increased capacity of IP champions in

   DTSc
- Completion of a community engagement strategy
- Improved central coordination for student placements and identification in organizations
- Improved cross-portfolio collaboration in supporting the project
- Awareness of gaps in student placement diversity within certain communities

#### INTERMEDIATE OUTCOMES

- Increased participation of learners in IPE & C experience
- Increased opportunities for Aboriginal & Francophone IP experiential learning
- Increase patient satisfaction with care received from IPC team (?? How will we measure)
- Increase number of resources and IP competency documentation for rural and remote practice
- Embed IPE in CIL and SES and other areas of UME

#### LONG-TERM OUTCOMES

- Penultimate visual model of IPE & C to be shared with all DTSs and acceptance in principle of its implementation across all NOSM programs
- Identified mechanism to investigate teaching of core IP competencies that need to be embedded in DTS experiences
- Improved quality of learner communitybased education, patient care and IP rural practice
- Improved recruitment & retention in rural communities
- Increased research opportunities to determine effectiveness of IPE & C
- Improved regional collaboration in offering student IP learning experiences

# Appendix B: Preceptor Survey

# Instructions:

A.	Please enter your ar (day) (month)	-	d the la		digits o	f your p			f birth
	For example, if yo			nuary 1	2 and yo	our pho		iber is 7	66-1437 then
В.	Demographics:								
	Age:	Gen	ider:			Prof	fession:		
		Name o	of Comn	nunity (	of Pract	ice:		·	
	Number of st	udents	at your	organiz	ation (p	ast 12 r	months	):	
C.	Open-ended questic Based on your expended box)		what ar	e the ui	nique fe	eatures	of rura	l team p	oractice? (text
D.	There are no right of Please answer each	_			-		ntained	in this	questionnaire.
BE	GIN HERE:								
	Please indicate the e statements regardin health care profession	g your		=	=	=	_		_
	The term <i>rural team</i> together either form	-		-				_	and working
1.	Rural teams are gene	erally in	itiated b	oy pract	itioners	rather	than o	ganizat	ions.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
2.	Rural teams are initia	ated in a	an effor	t to bet	ter mee	et client	and co	mmunit	y needs.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

3.	It is the dedication o	f its me	mbers t	hat hol	ds a tea	m toge	ther.		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
4.	Membership on rura	l health	teams	is volun	ntary, no	ot requi	red by o	organiza	tions.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
5.	Rural teams continua	ally adv	ocate fo	r the n	eeds of	their cli	ients.		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
6.	Relationships outside	e the te	am influ	ience h	ow the	team in	teracts		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
7.	As a team member, I the team.	can sep	oarate r	ny tean	n relatio	onships	with rel	ationsh	ips outside of
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
8.	It is very difficult for	rural he	alth ca	e team	s to hav	ve face-	to-face	meetin	gs.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
9.	The autonomy of rur	al pract	itioners	allows	them f	reedom	to part	icipate	in teams.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
10.	Typically, several rur	al team	s will ha	ive the	same m	nembers	S.		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
11.	The membership of I	rural tea	ams is d	etermir	ned by t	he tean	n itself,	not ext	ernally.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
12.	Teams in one commi	unity wo	ork in is	olation	from si	milar te	ams els	ewhere	
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
13.	Rural teamwork can	be desc	ribed a	s "grab	on the ${}_{i}$	go".			
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

14.	Teams have more inf	ormal p	ower a	nd influ	ence, th	nan forr	mal pov	ver.	
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
15.	Relationships within	teams a	re equa	al, not h	ierarch	ical.			
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
16.	Teams work autonon	nously v	vithin tl	ne comi	munity.				
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
17.	Relationships within	teams a	re not l	pased o	n profe	ssional	roles.		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
18.	Leadership on teams role.	is base	d on pe	rceived	individ	ual capa	ability r	ather th	an professional
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
19.	Members of teams ty	pically	have m	ultiple r	elation	ships in	the co	mmunit	y.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
20.	Education and expert	consul	tation a	ire impo	ortant to	o suppc	rt team	ıs.	
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
21.	It is necessary for tea	ms to n	neet fac	ce-to-fa	ce.				
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
22.	Team meetings impro	ove con	tinuity	of care	for rura	l clients	<b>5.</b>		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

23	. Team meetings imp	rove e	effective	use of	service	s and pr	ofessio	nals.	
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
E.	Please indicate the statements pertain (circle the most app	ing to t	the traii	ning of	-	-	_		_
1.	a) Student training sthe team.	should	emphas	size the	import	ance of	includii	ng the p	patient as part of
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are dev	eloping	g this co	mpetei	ncy in m	ny comm	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
2.	a) Student training scare.	should	provide	skills f	or comr	municat	ing with	n patien	ts about their
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are dev	eloping	g this co	mpetei	ncy in m	ny comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
3.	a) Students should be other professions.	oe able	to desc	cribe pr	ofessio	nal roles	and re	sponsib	oilities clearly to
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are dev	eloping	g this co	mpetei	ncy in m	ny comm	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
4.	a) Students should be role, responsibilities			_	nd obse	erve the	constra	aints of	their professional
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are dev	eloping	g this co	mpete	ncy in m	ny comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

5.	a) Students should be scope of practice.	e able to	o recog	nize wh	en patie	ents/clie	ents ne	eds go b	eyond their
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	loping t	his com	petenc	y in my	commu	nity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
6.	a) Students should be competence of other		_		-			ponsibi	lities, and
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	loping t	his com	petenc	y in my	commu	nity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
7.	a) Students should be assess, plan, provide					•		differen	t professions to
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	loping t	his com	petenc	y in my	commu	nity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
8.	a) Students should be conflicts in the provis				-	essions	to reso	olve diffe	erences or
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	loping t	his com	petenc	y in my	commu	nity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

9.	a) Students should be perceptions.	e able	to und	erstand	and tol	erate d	ifferenc	es in pr	rofessional
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	eloping	this co	mpeter	ncy in m	y comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
10.	a) Students should b	e able	to chai	r interp	rofessio	onal me	etings c	or case o	conferences.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	eloping	this co	mpeter	ncy in m	y comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
11.	) Students should be activities (e.g., joint				vith oth	er prof	essional	ls on pr	ofessional
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	eloping	this co	mpeter	ncy in m	y comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
12.	a) Students should k	know w	hen to	involve	other p	orofessio	ons in a	patient	c's care.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	eloping	this co	mpeter	ncy in m	y comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
13.	a) Students should k	know h	ow to g	et othe	r profes	ssions in	volved	in patie	ent's care.
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) Students are deve	eloping	this co	mpeter	ncy in m	y comn	nunity		
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

14.	14. a) Students should be able to learn effectively in interprofessional situations with learners of other professions.									
		ongly Disagree	1	2	3	4	5	6	7	Strongly Agree
	b) :	Students are deve	loping t	his com	petenc	y in my	commu	ınity.		
	Str	ongly Disagree	1	2	3	4	5	6	7	Strongly Agree
F.	2.	Other than those interprofessional practice? YES/NO What interprofes (students) have in learners in your of Would you partice.	compe compe compe compe sional le son your computer	etencies etencies s, pleas earning commur nitations nity? (De	listed a a stude e state experiently? (Describe	bove, dents in bove, dent show what the ences do escribe . The exproses with expression of the express	o you the learn sese are so health with examples.	ommulhink then to be:  a profestample	nity.  ere are prepare  sional le )  opporte	ed for rural earners unities for

# Appendix C: ERIC community summary

Community Distributed Teaching Site	Facilities/Organizations	Primary Contact Information	Summary of IP activities
Cochrane	1. Lady Minto Hospital	Karen Hill Chief Nursing Officer Lady MInto Hospital 705-272-7200, ext. 2222 Karen.hill@micsgroup.com	<ul> <li>Hospital investigated Incorporating bullet rounds, SBAR, and "Plan-Do-Study-Act" projects into their setting creating working groups with a charter to improve patient transition through continuum of care, improve understanding of roles and responsibilities and improve efficiency in communication</li> <li>Rounds were scheduled for Tuesdays, Wednesday and Fridays</li> <li>The participation from a number of departments and their willingness to alter schedules was important for success of the implementation of the program</li> <li>Education sessions on interprofessional communication were provided to all health care professionals and students</li> <li>Education and activities are expected to be organized for buy-in from both nursing and physicians, including a proposed presentation from a Flo Collaborative champion</li> </ul>
Dryden	Dryden General Hospital     Dryden Area Family Health     Team	Chuck Schmitt  Recruitment and Fundraising  Coordinator  Dryden General Hospital  807-223-8808  chuckschmitt@usa.net	<ul> <li>Health care students will shadow in experience-based learning situations visiting in various departments (shadowing nursing supervisor on the ward and observing coordination of care/discharge planning for knee replacements) once a week</li> <li>Reflection and debriefing immediately following experiences with three facilitators</li> <li>Goal to provide students with a greater understanding of their role and role of other team members in contributing to shared care</li> <li>Future sessions will also include Discharge planning, Emergency room, rehabilitation, oncology and the DI department</li> </ul>

Appendix C: ERIC community summary (contd.)

Espanola	1. Espanola General Hospital	Jane Saal Clinical Manager Emergency & Acute Care Espanola General Hospital 705-869-1420 ext 3123 jsaal@esphosp.on.ca	<ul> <li>Trauma rounds presented by Emergency Department physician to nursing and diagnostic imaging students</li> <li>Identify roles and responsibilities of health care providers in emergency situation and how different disciplines complement on one another for best possible patient outcomes</li> <li>Reflection on roles and responsibilities and debriefing session</li> <li>Improved relationships between nursing and diagnostic imaging were reported</li> </ul>
Fort Frances	1. Riverside Health Care Facilities	Anne Marie Vanderaa Manager, Inpatient Services Director, Nursing Education Riverside Health Care Facilities 807-274-3261 X 4692 a.vanderaa@rhcf.on.ca	<ul> <li>Learner activity developed video as a sustainable resource to be sure for future learners to convey information needed on the roles members of the interprofessional team and all their role entails</li> <li>Students will identify interprofessional team members who provide care and support to patients, identify their roles, clarify misconceptions about their profession, experience interprofessional practice for optimal health outcomes, and expose learners to and interprofessional team meeting to identify necessary skills to be an active participant on the team of health care professionals and administrators</li> <li>Students were involved in exposure to literature on interprofessional care including conferences with learning consultants, were participants in role and scope of practice activity</li> <li>Learners reflected and debriefed on preconceived understanding of roles of other team members</li> <li>Learners debriefing included in video for potential use for future learner orientation</li> </ul>

Hearst	1. Hôpital Notre-Dame Hospital	Nancy Girard Physiotherapist Hôpital Notre-Dame Hospital 705-372-2914 girardn@ndh.on.ca	<ul> <li>Organizers of the ERIC activities met several times over lunch to partake in interprofessional activities (ice breakers) and brainstorm the learning situation</li> <li>First activity was situation scenario for students to create a budget for the family health team. This activity focused on interprofessional communication</li> <li>Second activity was a case scenario for students involving a burn victim and focusing roles and scopes of practice along the continuum of care</li> <li>Subcommittee created to implement bullet rounds on the acute care floor moving forward</li> </ul>
Huntsville	Huntsville District Memorial     Hospital     Muskoka Algonquin Healthcare	Bev Leslie-Suddaby Food & Nutrition Services Manager Huntsville District Memorial Hospital 705-789-0022 ext 2360 Bev.leslie@mahc.ca  Michael O'Driscoll Occupational Therapist Muskoka Algonquin Healthcare 705- 645-4400 ext 235 michael.odriscoll@mahc.ca	<ul> <li>Elements of interprofessional care include roles and scopes of practice as well as identifying potential areas of collaboration with the team members to better understand course of care for stroke patient</li> <li>1<sup>st</sup> meeting focused on establishing group norms, IPC education, required learning around stroke and reflection time</li> <li>2<sup>nd</sup> meeting included activities for sharing knowledge on stroke, discussion of roles and scopes of practice, examination of overlapping scopes</li> <li>3<sup>rd</sup> meeting required students to present their roles and scopes as well as inclusion of patient needs and systems level for planning</li> <li>4<sup>th</sup> students developed comprehensive care plan based on patient's needs and reflecting on the process of IP learning</li> </ul>

Marathon	<ol> <li>Wilson Memorial General Hospital</li> <li>Barrick Gold Mine</li> <li>Ontario Provincial Police</li> <li>Emergency Medicine Service</li> <li>Community Care Access Centre</li> </ol>	Janet Gobeil Director of Nursing Wilson Memorial General Hospital 807-229-1740 ext 251 jgobeil@wmgh.net	<ul> <li>Multi-organizational interprofessional activity focusing on cyanide poisoning including student learners and current staff education</li> <li>Students will recognize roles and responsibilities clearly within the exercise also with one student acting as a patient to provide patient feedback to group</li> <li>Hospital to recognize additional training for interprofessional activities</li> <li>Further exercises to be developed between community organizations and mines for 2011</li> </ul>
Parry Sound	<ol> <li>West Parry Sound Health Centre</li> <li>Parry Sound EMS</li> <li>Canadore College</li> </ol>		<ul> <li>The retreat was designed with a strong instructional component focusing on disaster response and management was selected to create a united context for working with clinical, social, organizational and interprofessional dimensions of practice</li> <li>The simulated disaster scenario was a multiple vehicle accident resulting in multiple injuries, limited resources, and other problems such as personnel problems and media intrusion</li> <li>Sessions and presentations allowing for discussion of strategic planning and ethical concerns was followed by a mass simulation exercise around eight stations dealing with practical issues associated with emergency response medicine (EMS/communications, shock, airway management, triage, fracture, mental health, C-spine and obstetrics)</li> <li>The retreat ended with a debriefing session to provide feedback to learners regarding performance</li> <li>Evaluation responses were highly positive with participants valuing the practical and clinical learning aspects of the activities as well as the opportunity for IP learning</li> </ul>

Red Lake	<ol> <li>Red Lake Margaret Cochenour Memorial Hospital</li> <li>Goldcorp Mine</li> <li>Ontario Provincial Police</li> <li>Northwest EMS – Red Lake</li> </ol>	Lisa Habermehl Physician Red Lake Margaret Cochenour Memorial Hospital 807-727-2617 Ihabermehl@redlakehospital.ca  Ted Turgeon Ambulance Coordinator Northwest EMS – Red Lake 807-727-3286 tturgeon@kdsb.on.ca	<ul> <li>Cyanide exposure at local mine with 3 victims and a family member (4 patient actors)</li> <li>Chain of events mapped out and areas of importance for collaboration and communication identified</li> <li>Chain of events also used to establish debriefing plan</li> <li>ERIC activity highlighted the need for large scale exercises resulting in the planning of another activity in the new year with the inclusion of other community agencies</li> <li>Cross-training between agencies has become a focus with expectations to continue into the new year</li> <li>Gaps in communication between agencies has highlighted a need for additional communication through communication technologies</li> </ul>
Sioux Lookout	1. Meno Ya Win Health Centre	Samantha Brooks Utilization Coordinator Clinical Care Coordinator Men Ya Win Health Centre 807-737-0891 sbrooks@slmhc.on.ca	<ul> <li>Learning activity involved patient care rounds including interpreter students. Role of interpreter students to allow communication between health care professionals and patients</li> <li>Team members discussed each patient case, established plan of care and confer on barriers to discharge</li> <li>Debriefing included several team members, interpreter students and facilitator</li> <li>Learners indicated hesitation in participating in patient care rounds and expressed need for additional training in interview skills</li> <li>Activity highlighted need for orientation to facility with predefined roles, especially since role blurring is prevalent throughout the facility</li> <li>Patient care rounds to continue with additional health care students to explore impact of role defining for orientation to facility</li> </ul>

Timmins	<ol> <li>Timmins Family Health Team</li> <li>East End Family Health Team</li> </ol>	Joy Galloway Executive Director	Create community linkages for open invitation to Seniors     Case review and other appropriate case reviews, including
	3. Northern College	Timmins Family Health Team	presentation from Ontario Provincial Police on elder abuse
	4. Alzheimer's Society	705-267-1993	Shared calendar to increase number of disciplines
	5. Canadian Mental Health	jgalloway@timminsfht.ca	represented at educational session and overall interaction
	Association		between disciplines through lunch and learn activities
	6. Community Care Access Centre		offered throughout the year
	7. Bayshore Health Services		Northern College to provide training for preceptorship for
			hospital and staff has received positive feedback from both
			staff and students. Another round of training is scheduled
			for the new year
			Raising awareness of students on placement to increase
			communication and collaboration
			Tiimmins Family Health Team institute a orientation for all
			health care students to allow for interaction and sharing,
			also including other learning experiences (i.e. geriatric
			clinics)
			Meetings to continue through to December followed by
			evaluation and debrief of project initiating rounds with
			student involvement and accessed through combination of in
			person and videoconference formats

# Appendix D: ERIC participant by discipline

Discipline/Department Blue indicates Learners/New Grads Green indicates Professionals	Total	_	Cocnrane	-	Dryden		Espanola	Fort	Frances	1	nearst	1	Huntsville	10000	Maratmon	Parry	Sound	-	Ked Lake	Sioux	Lookout	: :	I II I
CCAC Coordinator	1								1														
Coordinator/Promoter	8				4				1		1										1	1	
Culinary Arts	1									1													
Dental Hygiene	1							1															
Diagnostic Imaging	5					1	2					2											
Dietetics	8	1	1						1	1	1		1								1		1
Fire & Rescue	4														4								
High School Co-op Student	1													1									
Information Technology	2											2											
Interpreter	5																			5			
Maintenance	1									1													
Manager/Directors	7						3		2		1										1		
Medical Laboratory Technology	4				2				1	1													
Medicine	96	2	2	4	4		3			1					3	56	9	4	3		5		
Mental Health Workers	5				2		2		1														
Mining - Engineering	25													2	3				20				
Nursing	106		2	14	18	2	4	1		2	1	2		5	4	22	6	2	12		3		6
Occupational Therapy	7				4				1				1								1		
Ontario Provincial Police	5														2				3				
Paramedics/EMS	16														2	3	5	2	4				
Pharmacy	3		1						1														1
Physiotherapy	13		1		4				2	1	1												2
Respiratory Therapy	3		1							1	1												
Social Work	4																				1		3
Learner 144 Professional	187	3	8	18	38	3	14	2	11	9	6	6	2	8	18	81	20	8	42	5	15	1	13
Total 331		1	1	5	6	1	7	1	3	1	5	8	3	2	6	10	01	5	0	2	0	1	4

# Appendix E: Community liaison impact questions

- 1. What impact has the ERIC project had on your organization?
- 2. What impact has the ERIC project had on the learners/students involved?
- 3. What impact has the ERIC project had on your community?
- 4. If patients/clients were involved, what impact did the project have on their health care?
- 5. How would you like NOSM to support your community in sustaining IPE into the future?



# Experiencing Rural Interprofessional Collaboration (ERIC)



# **IP Learning Activity Evaluation**

# Part A

Please answer the following questions by placing an x in the box that most accurately reflects your opinion about the following Interprofessional (IP) collaboration statements:

1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral,

5 = slightly agree, 6 = moderately agree, 7 = strongly agree, na = not applicable

**Before participating** in the learning activity I was able to:

	Roles and Responsibilities	1	2	3	4	5	6	7	n a
1.	Describe my professional roles and responsibilities clearly to other professions.								
2.	Recognize and observe the constraints of my professional role and responsibilities.								
3.	Recognize when patients/clients needs go beyond my scope of practice.								
4.	Recognize and respect the roles and responsibilities of other professions as compared to my own.								
5.	Work with others to assess, plan, provide, and review care for individual patients.								
6.	Work with other professions to resolve differences or conflict in the provision of care and treatment.								
7.	Tolerate differences in professional perceptions and misunderstandings by other professionals.								
8.	Facilitate interprofessional case conferences, team meetings, etc.								
9.	Know when to involve other professions in patients' care.								
10.	Know how to involve other professions in patients' care.								

Appendix F: Learner evaluation form - Roles and Responsibilities (contd.)

# Part C

Please answer the following questions by placing an x in the box that most accurately reflects your opinion about the following Interprofessional (IP) collaboration statements:

1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral,

5 = slightly agree, 6 = moderately agree, **7 = strongly agree**, na = not applicable

After participating in the learning activity I am able to:

After participating in the learning activity ram able to:											
	Roles and Responsibilities	1	2	3	4	5	6	7	n a		
1.	Describe my professional roles and responsibilities clearly to other professions.										
2.	Recognize and observe the constraints of my professional role and responsibilities.										
3.	Recognize when patients/clients needs go beyond my scope of practice.										
4.	Recognize and respect the roles and responsibilities of other professions as compared to my own.										
5.	Work with others to assess, plan, provide, and review care for individual patients.										
6.	Work with other professions to resolve differences or conflict in the provision of care and treatment.										
7.	Tolerate differences in professional perceptions and misunderstandings by other professionals.										
8.	Facilitate interprofessional case conferences, team meetings, etc.										
9.	Know when to involve other professions in patients' care.										
10.	Know how to involve other professions in patients' care.										

10.	know now to	involve otne	er protess									
How	would you rate	your overall	learning e	xperience in the	Interprofe	ssion	al Ac	tivity	<b>/</b> ?			
	1	2	3	4	5			6			7	
Exti	remely			Satisfactory						Ex	celle	nt
F	oor											
Wou	ld you recomme	end this Inter	profession	al Activity to oth	er student	s?						
	1			2					3			
	Definitely N	Not		Maybe			C	efin	itely	Yes		

Appendix G: Learner evaluation form – Communication and Collaboration



# Experiencing Rural Interprofessional Collaboration (ERIC)



# **IP Learning Activity Evaluation**

# Part A

Please answer the following questions by placing an x in the box that most accurately reflects your opinion about the following Interprofessional (IP) collaboration statements:

- 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral,
- 5 = slightly agree, 6 = moderately agree, **7 = strongly agree**, na = not applicable

# **Before** the learning activity I was able to:

Com	Communication				4	5	6	7	n a
1.	Promote effective communication among members of an IP team								
2.	Actively listen to IP team members' ideas and concerns								
3.	Express my ideas and concerns with constructive criticism								
4.	4. Provide constructive feedback to IP team members								
5.	Express my ideas and concerns in a clear, concise manner								
Colla	boration	1	2	3	4	5	6	7	n a
6.	Seek out IP team members to address issues								
7.	Learn with, from and about IP team members to enhance service for individuals								
8.	Work effectively with IP team members to enhance service for individuals								
Coll	aborative Person-Centred Approach	1	2	3	4	5	6	7	n a
9.	Use an IP team approach to assess the patient/clients' situation								
10.	Use an IP team approach for holistic patient care								
11.	Include the individual and/or family in the decision making process								

Appendix G: Learner evaluation form – Communication and Collaboration (contd.)

# Part C

Please answer the following questions by placing an x in the box that most accurately reflects your opinion about the following Interprofessional (IP) collaboration statements:

- 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral,
- 5 = slightly agree, 6 = moderately agree, **7 = strongly agree**, na = not applicable

**After** the learning activity I am able to:

	,								
Com	munication	1	2	3	4	5	6	7	n a
1.	Promote effective communication among members of an IP team								
2.	Actively listen to IP team members' ideas and concerns								
3.	Express my ideas and concerns with constructive criticism								
4.	Provide constructive feedback to IP team members								
5.	Express my ideas and concerns in a clear, concise manner								
Colla	aboration	1	2	3	4	5	6	7	n a
6.	Seek out IP team members to address issues								
7.	Learn with, from and about IP team members to enhance service for individuals								
8.	Work effectively with IP team members to enhance service for individuals								
Coll	aborative Person-Centred Approach	1	2	3	4	5	6	7	n a
9.	Use an IP team approach to assess the individuals' situation								
10.	Use an IP team approach for holistic patient care								
11.	Include the individual and/or family in the decision making promise								

12. How would you rate your overall learning experience in the Interprofessional Activity?													
1	2	3	4	5	6	7							
Extremely			Satisfactory			Excellent							
Poor													
13. Would you recommend this Interprofessional Activity to other students?													
	1		2			3							
Defi	nitely Not		Maybe			Definitely Yes							

# Appendix H: Staff impact questions

# **Questions for Dyads**

- 1. How has your involvement in the ERIC project impacted your knowledge of Interprofessional Learning and Practice?
- 2. Reflecting on your involvement in the ERIC projects how clear are you on your role and understanding of the objectives in the project?
- 3. When thinking about how your dyad is functioning, what do you feel has made the dyad relationship work? How have you been dividing the work between you and your partner?
  - a. Can you identify elements that have made your communication effective?
- 4. How have you been communicating with the communities involved in the ERIC project? What highlights and challenges have you experienced?
- 5. What have you learned about interacting and communicating with the communities that you are involved in?
  - a. What are important aspects to consider when approaching communities?
- 6. What supports or resources have been the most helpful to your role in the ERIC project? Can you identify what additional resources would have been necessary at the beginning of the ERIC project that weren't made readily available?
- 7. If there is one aspect of the WIKI that needs to be addressed what would you suggest (e.g. training, assistance, clarity, organization, etc)?
- 8. Is there anything else you want to add about the ERIC project at this time?