



**Final Report:
MicroResearch Nova Scotia Workshop
Brunswick Street Mission, North End Halifax, Nova Scotia
June 5- June 16, 2017**

***Building Local Capacity for Community Focused Research to Improve
Local Health Outcomes***

Introduction and Background

MicroResearch is an innovative research training program for community members that began in 2008 in Africa under the leadership of Noni MacDonald and Bob Bortolussi of the IWK Health Centre in Halifax, NS. Since 2016 the African MicroResearch program has been used in communities in Nova Scotia. The experience gained from work in other countries is thus being applied in Nova Scotia (MicroResearch-NS). Wherever it is used, the MicroResearch program provides community focused research training, mentorship and small grants for health research projects conceived and done locally.

“The goal of MicroResearch is to improve health care outcomes with innovative community based research that assures quality and integration of research into the fabric of the local health system and the community”.

Between June 5 to June 16, 2017 the first MicroResearch-NS Workshop in the Central Region of the Nova Scotia Health Authority was held at the Brunswick Street Mission in the North End of Halifax, NS.

MicroResearch-NS in the North End of Halifax was led by Noni MacDonald and Margaret Casey in partnership with:

- Brunswick Street Mission
- Dalhousie University Faculties of Medicine and Health Professions
- IWK Health Centre, Pediatrics, Research Services
- Nova Scotia Health Authority, Research Development Office, Public Health Services , Provincial Library Services

- Halifax Regional Police
- Nova Scotia Emergency Health Services

Rationale for MicroResearch-NS

Nova Scotia rates poorly on many health indicators compared to other provinces, and health care funding is becoming increasingly limited. The gaps in knowledge translation/ adaptation/ implementation at the community level are widening and there is a need to better align local resources to improve outcomes at the community level. Continuing to deliver health care – preventive, acute and chronic – as is currently done, will not bring the changes needed to improve local health outcomes and meet the Nova Scotia Health Priorities. While the business plans at NSHA, IWK and Nova Scotia Dept. of Health and Wellness all encourage strategies and collaboration to address complex health problems. Local health problems need community-focused, locally driven, sustainable, culturally and local resource appropriate solutions. Building on this need, MicroResearch-NS aims to develop local community focused research capacity to find solutions to local health problems deemed important by local participants.

MicroResearch-NS Program Model

The fundamentals of the MicroResearch-NS program include:

Workshops:

- Training – participants are taught practical and applied community focused research skills

Proposal Preparation:

- Interdisciplinary collaboration - teams work together to move a research idea to a fundable proposal
- Seed funding - of up to \$3000 to support quality projects

Implementation:

- Project management – teams work together to carry out the community project
- Knowledge sharing – of research outcomes with stakeholders



See MacDonald et al MicroResearch: Finding sustainable local health solutions in East Africa through small local research studies. *Journal of Epidemiology and Global Health* 2014;4:185–93

MicroResearch-NS Program Accreditation

The MicroResearch-NS workshop received accreditation from Dalhousie University Continuing Professional Development, Faculty of Medicine for 40 Category 1 RCPS / CCFM credits. The full program was also reviewed by the Royal College of Physicians and Surgeons of Canada and Category 2 and 3 credits can be garnered for those physicians who complete the entire program. Continuing Professional Development credits can also be garnered by other health professional participants for their continuing education.

MicroResearch-NS Workshop in North End at Brunswick Street Mission

After discussion and thought the North End of Halifax was selected at the first Central Zone site for a MicroResearch-NS Workshop with Margaret Casey, given her long history of working with different communities in the North End, as the site leader. She arranged for the program to be held at the Brunswick Street Mission – a

site very suitable for MicroResearch-NS as it serves many vulnerable populations in the North End.

Participants: Workshop participants were recruited through personal meetings, referrals and online invitations by Margaret Casey. The breadth and depth of experiences of the participants were remarkable. Alix Carter from Emergency Health Services recruited two paramedics to attend and Chris Giacomantonio, Research Coordinator for the Halifax Regional Police, recruited two policepersons. Initially 13 participants enrolled in the Workshop on Day 1 with one more joining on Day 2 and another on Day 3, for a total of 15 participants. However, due to a change in job, one of the police officers had to withdraw on Day 3 for a final class of 14. A complete list of participants is available in **Appendix 1**. Also of note Heather Rushton, the MicroResearch-NS Co-ordinator participated in the workshop up until Day 9 but was not eligible to continue due to potential conflicts of interest given her MicroResearch-NS responsibilities e.g. involvement in reviewer selection, project approval etc.

Pre Workshop Assessment

A summary of the findings of nine pre-workshop assessment are shown in **Appendix 2**.

The most common reason participants gave for attending the workshop was a variation on:
to learn about MicroResearch and how it can be used to improve community health. The community focus was appealing to many participants. Although 6 of the 9 participants who enrolled had previous experience in research- predominately as research assistants, none had been a principal investigator i.e. designed a research project from the beginning and only one had been a site investigator.

Workshop Facilitators, Coaches and Guest Lecturers: All faculty who facilitated this workshop had research experience and the majority had MicroResearch teaching experience. The list of faculty can be found in **Appendix 3**. **Coaches** with skills in research design were recruited to support each team with the development of their ideas and proposal. A list of coaches can be found in **Appendix 4**.

Workshop Logistics: All the workshop sessions were held at the Brunswick Street Mission on weekdays from 1-4:30 PM. The workshops began on Monday, June 5th and ended on Friday, June 16th 2017. Mr Liam Donnelly, who works at the Mission, participated in the workshop as well as providing local support for workshop set up, coffee and tea etc along with Heather Rushton on MicroResearch-NS. MicroResearch-NS arranged access to 10 local parking spots to ease parking for participants/coaches.

Workshop Format: The MicroResearch-NS workshops combined interactive seminars, exercises and daily small group interdisciplinary, project development sessions supported by local site coaches. Course participants were divided into two

“groups” by the MicroResearch-NS faculty on Day 2 of the workshop series such that each group included a variety of professional disciplines and gender equity across the groups. Each groups had 7 to 8 members. By Day 5, the two groups had evolved into “Teams” who focused their time, energy and effort on addressing a research question they had agreed to investigate.

The daily attendance was excellent – with the only few days when attendance was not 100% occurred when a participant had a presentation at meetings booked before the MicroResearch workshop was announced and arranged.

Workshop Program Overview:

The daily program of lectures, discussions and exercises is summarized in **Appendix 5**.

Day 1: Noni MacDonald welcomed participants and coaches who then introduced themselves. The breadth of expertise, diversity of background and experiences was immediately evident setting the stage for rich discussion. This was followed by an introduction to the MicroResearch concept noting that the program was built on experiences in Africa and in Truro with the goal of helping community health providers and community members find solutions for local community health problems. Bob Bortolussi then lead a lecture on good clinical practices and an over view of web and library resources. This was followed by a third lecture on how to develop a research question with each participant being challenged to prepare a research question for discussion on Day 2, based on their experience and passion (i.e. community based AND community directed).”

Day 2: The second day began with two lectures, one on “Principles of Clinical Research-Toolkit 1 – Qualitative Research- that was co-taught by Chris Giacomantonio and Noni MacDonald followed by one on “Pitfalls in Research”. This lead into a good discussion of the difference between “groups” and “teams”. The class then looked at two options- having three small research groups with four to five participants each or two larger groups with six to eight each. Given that several participants knew they would miss a few sessions because of health needs and /or work requirements, the class chose to be formed into two groups.

Each group then vigorously discussed the merits of each of their individual research questions (See **Appendix 6**). One question was then selected as their team workshop project. For one group this proved difficult as several questions had much appeal.

Day 3: A spokesperson for each group presented the list of questions to the entire class, noted the one selected by the team and then the rationale for its selection. Following a lecture on quantitative research methods, the two groups then worked on these questions, further refining them. In one group- the initial question was changed as discussion had revealed concerns that finding the answer might or might not be able to change any outcome.

Research Questions:

The final two topics selected by the teams (i.e. unrefined questions) for development into an overview research proposal during the workshop

Team 1: What is the average cost per year of someone who is chronically homeless and suffers with alcoholism – the cost to justice, department of health, and community services?

Team 2: Given the Youth Suicide Epidemic, What Out of Hospital Processes Exist to Support a Pre-adolescent Following Hospital Discharge for Suicidal Ideation?

Day 4-5 Week 1. Throughout the remainder of the first week, there were discussions by the participants, faculty and coaches to strengthen and revise the research questions, find background information on the topics, select appropriate research methods to use to address the question, optimize community engagement, to ensure the project would meet ethical requirements, and to draft a project budget. The session on research ethics on Day 5 was well received and generated much discussion and was lead by Bob Bortolussi and Bev White from the IWK Research Services office. The subsequent session on community engagement also lead to vigorous discussion.

In Week 2_ Day 6-9 of the workshop, attention shifted to the development of the 10 minute presentation of the Teams' emerging research proposal overview. Background, Methods, Budget and Knowledge Translation (KT) sections were developed. Teams were supported by the lectures and coaches to fine-tune their proposed overview. The teams selected their orator to present on the final day, practiced the presentation as well as developing answers to questions that the judges might pose. Teamwork was emphasized.

Team Research Proposal Overview Presentations and Judging

The two refined research aims/ questions presented by the teams on Day 10 for adjudication were:

Team 1: To describe the costs associated with the resources utilized by chronically homeless, alcohol addicted men in HRM and to explore the perspectives of the affected men on the existing and potential services

Team 2: What supports are offered for youth (ages 12-19) within HRM following discharge from hospital after suicide ideation, attempt, or threat?

The highlight on the final day of the workshop (**Appendix 7**) was the oral presentations describing how each team would attempt to answer their research question. Each presentation included a 10-minute overview of the team's research proposal followed by comments and questions from the judges and audience and

then constructive suggestions from the other participants on how the proposal might be strengthened.

Judges:

Five distinguished judges were invited to adjudicate the presentations.

- Tracy Kitch, CEO of IWK Health Centre
- Shawna O'Hearn, Director Global Health Office, Faculty of Medicine, Dalhousie University, who is an Occupational Therapist
- David Anderson, Dean Faculty of Medicine, Dalhousie University
- Ronald Stewart, Professor of Anaesthesia and Emergency Medicine, Dalhousie University and a Former Minister of Health for Nova Scotia
- Jill Hayden, Associate Professor and CCRF/Dalhousie Research Professor in Epidemiology

The judges listened to the presentations, asked questions and then deliberated on whether each of the projects could go forward to be developed into a full MicroResearch-NS grant proposal. Their Evaluation and scoring system was based on MicroResearch principles (**Appendix 8**).

Best Presentation:

The judges commented on the high caliber of both teams' presentation, the importance of the questions selected for the community and their thoughtful responses to the questions asked following their presentations. The selection of the "winning team" (i.e. best presentation) was difficult, but they chose:

Team 2: What supports are offered for youth (ages 12-19) within HRM following discharge from hospital after suicide ideation, attempt, or threat?

Judges Comments:

The judges were very impressed by the diversity of the teams and how well they had shown that they were indeed a team. They enthusiastically and unanimously recommended that both teams be encouraged to develop a full MiroResearch project proposal. The passion and energy these two teams brought to the projects was palpable. These very committed teams want to make a difference in our community. Both teams presented a clear rationale for their plans and demonstrated a passion to undertake them. They identified the communities they would be working with and had a knowledge translation strategy to shorten the time between discovery and implementation. The judges had a number of specific suggestions for strengthening each proposal (**Appendix 9**). Each team were supported by volunteer coaches who stated that they were keen to continue working with the teams to ensure ultimate success.

Workshop Assessment

An assessment of the workshop by participants was obtained using structured evaluation forms submitted anonymously. All 13 eligible participants completed the final participant evaluation form. The scores and summary of comments are presented in **Appendix 10**. Of note, the majority of the participants rated the

workshop highly and would recommend to a colleague. Many highlighted how helpful and practical the workshop had been. There were calls to expand the program to all honors students, students at NSCC, EHS, Police as well as the Mi'gma'we community.

Audience and Participant Feedback

QEII Foundation/ Bill Bean

Mr. Bill Bean, President and CEO of the QEII Foundation attended Day 10 of the workshop to hear the presentations. He was very impressed by the diversity on the teams, the importance of the questions raised for the community and the passion and work the teams had put into their presentations and answers to the judges questions. He noted that he would like to support these small projects as they go forward.

Participants

One participant noted that she had taken part in many community workshops and retreats over the years, but this was by far the best experience and indeed she could see how change can happen with MicroResearch-NS. Another suggested strategies on how to encourage more community participants in MicroResearch. Several participants commented on how much they valued working with others that they might never have met and how this diversity of experience and expertise strengthened their proposal. The helpful support of the coaches was also much commented upon.

Team Evaluations

From the viewpoint of the coaches and facilitator the teams worked exceptionally well together. They themselves noted the commitment of the team members and valued the diversity (**Appendix 11**).

Comments and Recommendations

Gerry Johnston, when delivering summary comments for the judges, noted that the two MicroResearch-NS questions developed are of great importance at the community level and that none could be answered appropriately using a top-down approach. All five judges emphasized the diversity of the teams, their links to community and the importance of their voices.

Noni MacDonald thanked Margaret Casey for the great work in recruiting such a diverse but very community oriented group of participants. She also thanked the judges for taking the time to come to these presentations and the participants for their very hard and enthusiastic work on their questions through out the workshop.

Outcomes and Recommendations from the Brunswick Street Mission MicroResearch-NS Workshop

Administrative Considerations:

Margaret Casey did a remarkable job of recruiting a diverse workshop participants leading to an extraordinary class. She noted that other community members were interested but the time commitment was hard yet the time is needed to get a proposal overview together. More thought and creativity is needed to see what potential solutions might be possible. Patti Melanson, a participant, suggested having an evening session for groups who work with communities in the North End to discuss the program using examples and participants from this workshop to showcase its value.

Each site needs solid, dedicated local leadership (e.g. a community “champion”) and local organization for MicroResearch-NS to be successful. Margaret Casey’s success recruiting the diversity of participants exemplified the value and importance of this role in the North End. A knowledgeable and capable local community leader is key to recruiting a wide range of diverse participants (e.g. beyond the health sector), securing appropriate schedules and meeting spaces. Linda Carvery and others have volunteered to help with bringing MicroResearch to North Preston. Kristy Barnaby spoke up about building the bridges to the Mi’gmawē’l Tplu’taqnn.

More discussions are needed to see how to speed up MicroResearch training for police in HRM and for paramedics across the province. How can the model be adapted?

Support for the teams after the workshop concludes is much needed to ensure each team completes and submits a full proposal for funding consideration. The Coaches are critically important for supporting and encourage teams to complete their proposals. Christy Woolcott and Gerry Johnston have pledged to support and to check in with their teams on a regular basis. Chris Giacomantonio, because of his expertise in qualitative research has graciously accepted to support both teams.

Educational Considerations:

Having a variety of topic experts and coaches participate in the workshop sessions and provides insights to support teams was very helpful (e.g. Chris Giacomantonio, Gerry Johnston, Christy Woolcott, Audrey Steenbeek and Bev White) and kept the workshop sessions and group discussions flowing. Consideration needs to be given to determining how this can be done in the more outlying areas in the province.

The revised workshop lectures that took into account the evaluation comments from the Truro workshop were well received including the lecture on preparing a research budget.

Future Implications:

The success and enthusiasm of this MicroResearch-NS Workshop supports further expansion of the workshop program in the central zone and across Nova Scotia.

Three more MicroResearch-NS workshops are currently being considered: one for Cape Breton in the Eastern Zone, one in North Preston in Central Zone and one for Kentville in the Western Zone.

Acknowledgements:

The MicroResearch-NS Facilitators would like to express our gratitude to the following people who were instrumental in helping to making this Central Zone MicroResearch-NS workshop a success:

The participants for their time and the energy and passion they put into their proposal overviews

The teachers and coaches who supported the participants

The Brunswick St Mission for providing the site and to Liam Donnelly for set up and arrangements for refreshments

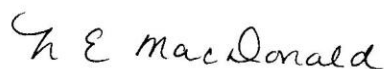
Margaret Casey for the recruitment of participants and her efforts to support participants

Research Services at IWK and NSHA for supporting MicroResearch

Heather Rushton for her superb support for the infrastructure for this workshop

The judges for giving generously of their time and talents

Respectfully submitted by



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