

**Final Report:
MicroResearch Nova Scotia Workshop
Dartmouth General Hospital,
Dartmouth, Nova Scotia
Sept 16 -27, 2019**

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 September 16 and September 27, 2019 the 5th Central Zone MicroResearch Workshop was held at the Dartmouth General Hospital in Halifax, NS.

The workshop was led by Noni MacDonald with Chris Giacomantonio also teaching a lecture and Bob Bortolussi helping on the final day; Amy Grant and Barbara Hamilton-Hinch coaching; and Kelly Hunter providing the workshop administrative support. The workshop was carried out in collaboration with the IWK and NSHA, the Dalhousie Faculty of Medicine, Dalhousie University and DMRF in addition to excellent support from the Dartmouth General Hospital.

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:

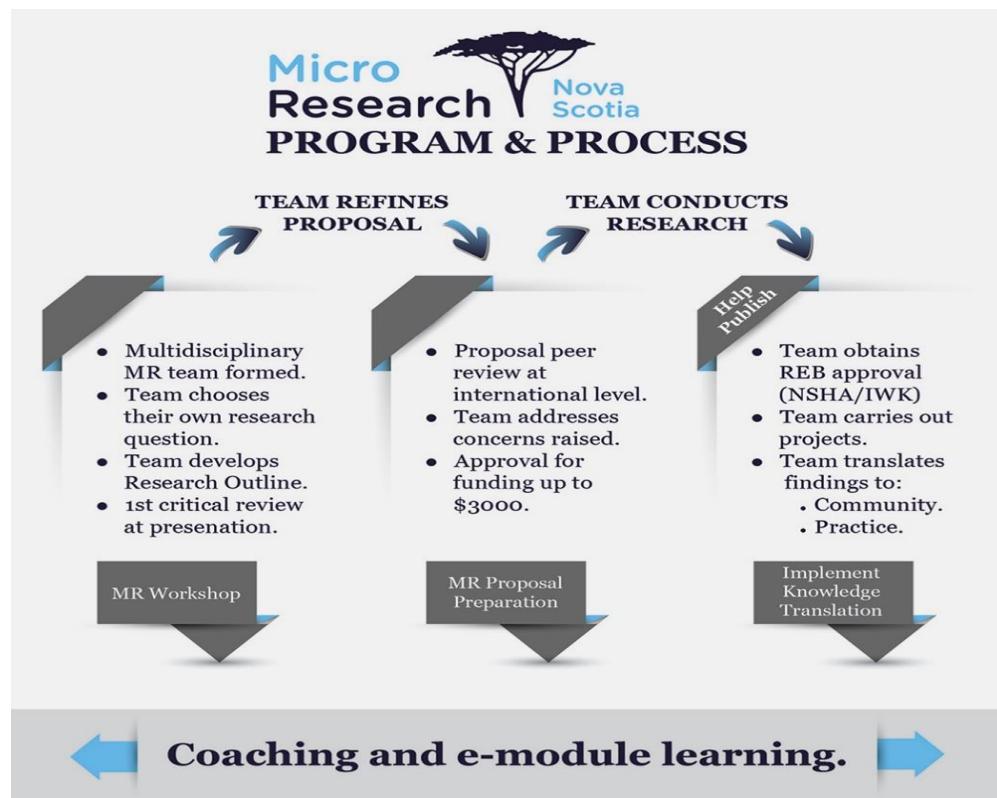
- Training – participants are taught practical and applied community focused research skills over 10 half days

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 – The Dartmouth General Hospital

Participants: Workshop participants were recruited through personal meetings, referrals and personalized invitations to the Dartmouth General Hospital, NSHA and IWK health workers, Dalhousie University, ISANS, Halifax Regional Police, and local community organizations. Originally, 16 participants registered for this workshop but due to many circumstances 3 were unable to attend. The group all agreed to strongly commit to the workshop. Daily attendance was >90%. One participant was only able to attend 7 sessions, however, she remained active within a team and will receive a MR-NS certificate if she attends the missing 3 sessions at a future workshop. The 13 participants came from quite diverse backgrounds as noted in Appendix 1. The two groups rapidly became teams - all pulling together to develop their project overviews. The commitment of these 13 participants to their chosen problems was remarkable.

Pre Workshop Assessment

All of the 13 participants filled in the evaluation form although not all questions were answered.

The most common reason participants gave for attending the workshop was a variation on: to learn about research/ MicroResearch, to meet new people/network and learn other skills

Workshop Facilitators and Coaches

All faculty who facilitated this workshop had research experience and MicroResearch teaching experience.

The two coaches were both familiar with MicroResearch.

Workshop Logistics

All the workshop sessions were held at the Dartmouth General Hospital in Classroom 1903 weekdays from noon to 4:30 pm. The room worked very well as was spacious with enough space to hold the two groups well. It also came equipped with a projector and screen. Tea, coffee and snacks (fruit, granola bars, cookies etc.) were arranged by MicroResearch. Each participant was encouraged to bring their own mug in order to decrease use of disposables. Parking passes were provided by Dartmouth General Hospital Foundation, which was much appreciated.

Workshop Format

The MicroResearch-NS workshops combined interactive seminars, exercises and daily small group interdisciplinary, project development sessions supported by local site coach. Participants were placed into two groups on Day 2 with good spread of background and expertise across the two groups.

The daily attendance was high as noted above. The two groups rapidly became teams with excellent daily discourse and regular sharing by email and catch up conversations for those who had to miss a class or had to come late because of pre-existing commitments.

Workshop Program Overview:

The 10 half-day program included daily program of lectures, discussions and exercises. Having the half-day sessions start at noon and run until 4:30pm worked very well- better than have seen when start at 12:30 or 1:00pm.

On Day 2, each participant vigorously discussed the merits of their individual research topic. One area was selected, shaped into a question, and then refined for proposal overview development during the workshop. All questions expressed deep commitment to helping to make a difference in the health of this community. Having team members from the community was crucial for understanding of the local culture and context of the topic area selected.

Day 3: A team spokesperson presented the list of topics to the coach and teacher and the team discussed why the final selection was made.

Research Questions:

(i.e. unrefined questions/ objectives) for development into an overview research proposal during the workshop:

Team 1: What mental health services, supports and processes are in place for first responders in the Halifax Regional Municipality and their efficacy?

Team 2: What are the main barriers faced by low income seniors in Dartmouth North from cooking healthy meals at home and what are the available resources/services if any in HRM to support seniors in this area?

The rest of the workshop was devoted to refining their research questions and developing the proposal overviews including background, methods, budget, knowledge translation, and next steps etc. all with the help of their MR coaches. Other presentations focused on report writing, manuscript development, creating posters and abstracts as well as how to create a research PPT for the final day.

Team Research Proposal Overview Presentation and Judging

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

Team 1:

Research question: “Are we helping the helpers? A review of mental health programs, processes, and supports currently in place for Halifax Regional Municipalities first responders.”

Team 2:

Research question: "What are the perceived barriers and facilitators to cooking at home for older adults living in Dartmouth North? What services are available to support those in need?"

The highlight on the final day of the workshop was the oral presentations describing each team's proposal overview to answer their research question. The presentations 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

Three distinguished judges were invited to adjudicate the presentations.

- Alice Aiken BScPT, MSc PhD, VP Research Dalhousie University
- Robert Bortolussi MD, FRCPC, FCAHS Professor Emeritus Dalhousie University
- Robert L Miedema TEP, Boyne Clarke Lawyers LLP

The judges listened to the presentation, asked questions and then deliberated on whether the project could go forward to be developed into a full MicroResearch-NS grant proposal. Their Evaluation and scoring system was based on MicroResearch principles.

Judges' Comments

The judges were very impressed by the importance of the two research questions to the community and to Nova Scotia. Both proposals were novel, compelling and delivered with great passion. Also evident was the personal involvement of all members of the team, each person had a role to play and answered questions about the project.

Both teams were given the greenlight to go ahead for full proposal development. The judges then offered specific constructive criticisms to both teams post adjudication for strengthening the proposals.

Workshop Assessment

An assessment of the workshop by participants was obtained using structured evaluation forms submitted anonymously. All 13 /13 eligible participants completed the final participant evaluation form. The workshop was well received and highly valued. Of particular note, there was only one loaner computer to use for in class work and not all participants had access to a laptop. Not surprisingly, several noted that this would help. The standard question – how will you use what you have learned – raised a wide range of responses from changing how do their work, to doing more research, to seeking postgraduate training, to helping community. Several noted the power of working in interdisciplinary teams. All would recommend MR to a colleague with 11/13 recommending this highly.

Team Evaluations

From the viewpoint of the coaches and facilitator the groups worked well and one was especially interactive. As noted above – the diversity of the teams was much valued. For one team, more efforts for team building was suggested.

Outcomes and Recommendations

Administrative Considerations:

1. This site and time worked very well. The timing of the workshop to start at noon did not seem to be a barrier, this lead to less pressure for finishing. No lunch was provided but this was not an issue. The noon start needs to be considered for future workshops
2. High level discussion is needed to consider the value and implications of having a reformed albeit multidisciplinary “team” come to the workshop as a team
3. The added value of internet access using MR router worked very well. Simple to use, no drop-offs. Not having day loaner computers was a gap that several participants raised. This needs to be filled. They do not need to be fancy computers – basic notebooks would be fine as loaners.
4. Supplying the coffee and tea with simple snacks was significantly less expensive than if MR purchased directly from NSHA and was well accepted by participants. MR needs to purchase a kettle and coffee maker to make this easier, rather than borrowing personal equipment from the MR team.
5. Having the parking paid by DGH Foundation was a huge advantage.

Educational Considerations:

1. Session 4 B- fix slide title Results to *what did we find*
2. Session 6A- add in slides on model with core results made large and prominent and that a slide of a paper is not a poster
3. Session 6B – remove time management objectives – as not cover that section
4. Build a new tool kit on how to create a google docs site (FM's model)- add to Day 2
5. Build a tool kit on how to set up task for completion (FM's model)- add to Day 2
6. There is even more need for a MR Forum as these teams' topics had potential connections to other projects. This will require specific funding and planning
7. Review the post workshop evaluation form to ensure includes all needed components for accreditation

Acknowledgements:

The MicroResearch-NS would like to express our gratitude:

The 13 participants for their time, energy and the passion they put into the development of the two proposal overviews.

To Chris Giacomantonio for his contribution to teaching and resource help for Team 1, as well as the excellent coaching by Amy Grant and Barb Hamilton-Hinch.

To the Dartmouth General Hospital MR Site team especially Todd Howlett and Heather Peddle-Bolivar.

Research Services at IWK and NSHA, Dalhousie Faculty of Medicine, DMRF and Dalhousie University for supporting MicroResearch.

The Dartmouth General Hospital Foundation for support for parking and especially for the promise to support the two teams if they are successful with full MR proposal applications.

To Kelly Hunter for her superb support for the infrastructure for this workshop as well as her keen participation in Team 2.

To the judges for giving so generously of their time and talents.

Respectfully submitted by

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MicroResearch NS Dartmouth Class – September 27, 2019