



Building a Scholarly Research Program for Rural and Remote Family Medicine Faculty

Cheri Bethune, MD, CCFP, MSc
Shabnam Asghari, MD, MPH, PhD
Wendy Graham, MD, CCFP
Patti McCarthy, MSc, PhD (c)
Tom Heeley, BSc, MASP (RA)

Disclosure

We DO NOT have an affiliation (financial or otherwise) with a pharmaceutical, medical device, or communications organization.

Session Objectives

After this presentation, participants will be able to:

- **Identify barriers, enablers, and ascribed needs of rural and remote faculty that impact engagement in research**
- **Describe the 6 for 6 Program**
- **Share research findings that led to the development of the 6 for 6 Program, progress to date, and next steps**

Warm Up

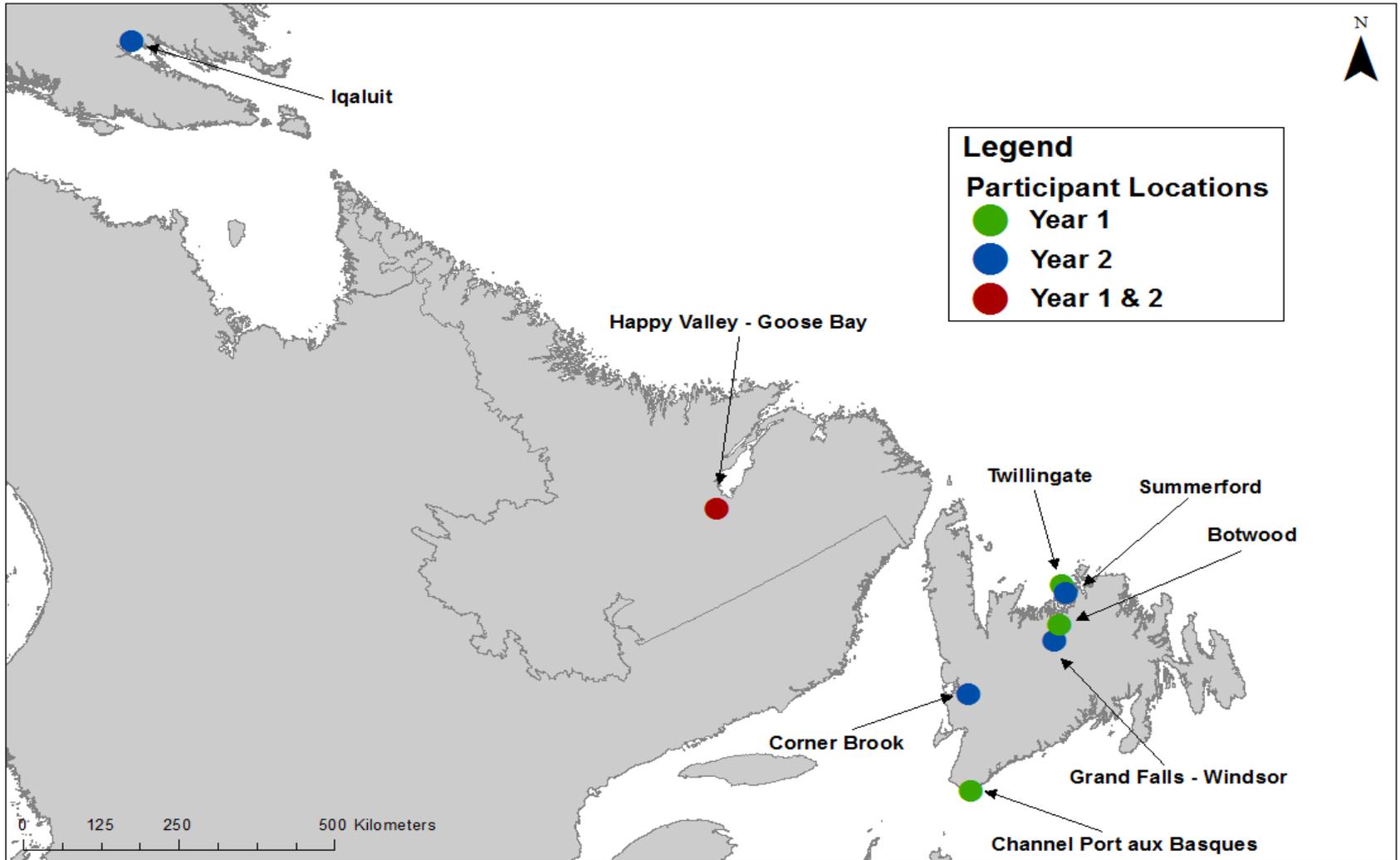
(Photo Credit: Barrett & MacKay Photo; NL Dept. Tourism)

- **What is your research idea?**
- **Write it on the paper provided**
- **When instructed, tape your idea to the wall**

6 for 6: History

- Faculty development program identified key areas for skill building – led to a focus on writing for publication
- Began a focus on rural and remote faculty
- Launched a 15 month research skills program for physicians from various rural and remote regions
 - NL; NB; NU
- Year 2 now halfway
 - Year 3 recruitment starting; Open to royal college specialists

Regions Represented to Date



Program Goal

- **Develop, implement and evaluate a longitudinal faculty development program that promotes research skills and knowledge translation for rural and remote family medicine faculty**

6 *for* 6

- **Mixed-methods, multiphase project**
- **Purposeful and snowball sampling**
- **Iterative design**

Phases of the Program

Phase I (Needs assessment)

- (i) Identifying priority research skills
- (ii) Identifying knowledge translation process

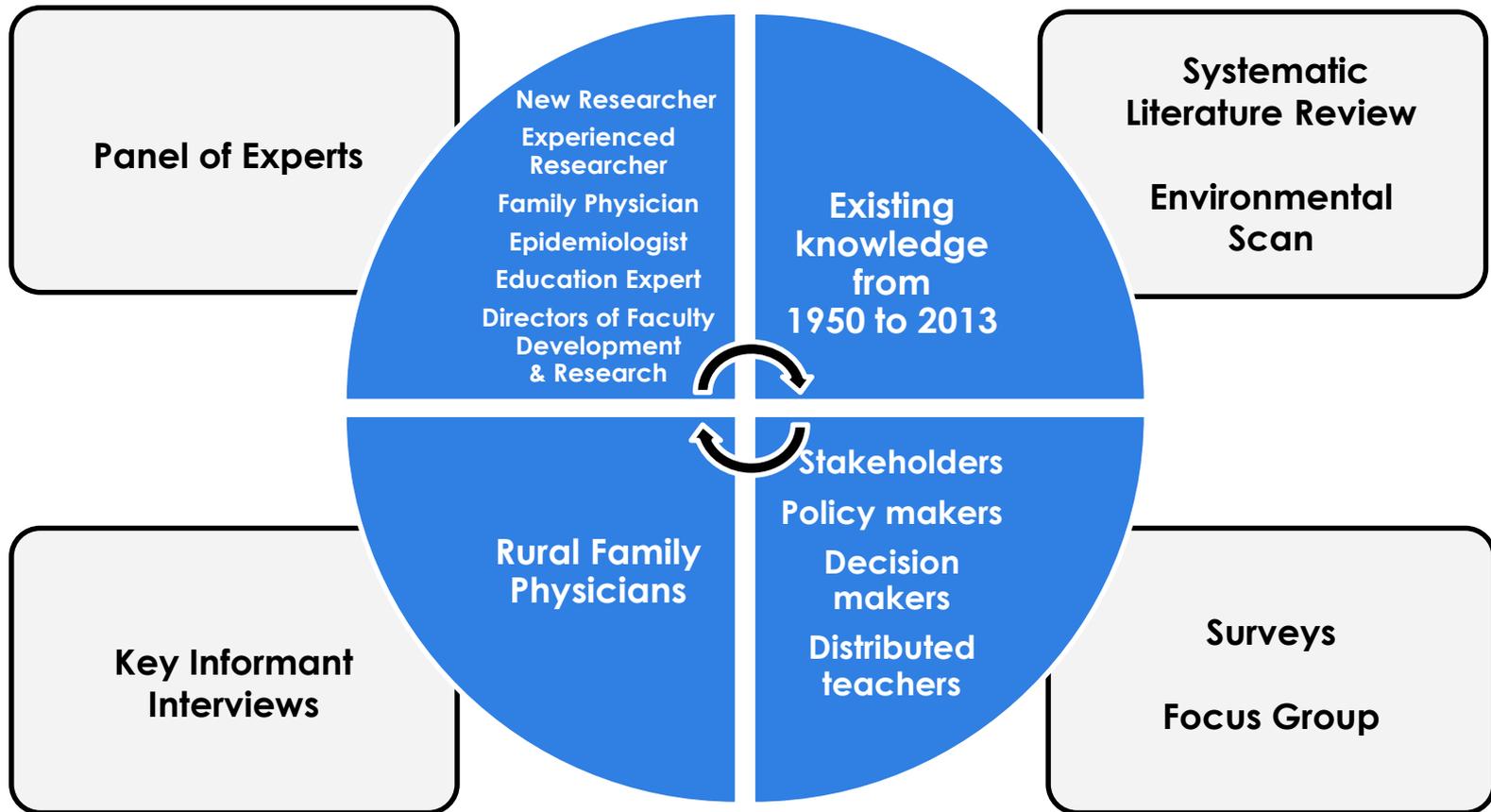
Phase II (Curriculum)

- (i) Curriculum design
- (ii) Curriculum development
- (iii) Curriculum implementation

Phase III (Evaluation)

- (i) Program evaluation

Identifying Priority Research Skills



Curriculum Development Plan



Step 1
Identify problem & general needs assessment
(General NA = Ideal Approach – Current Approach)
 • Executive advisory committee

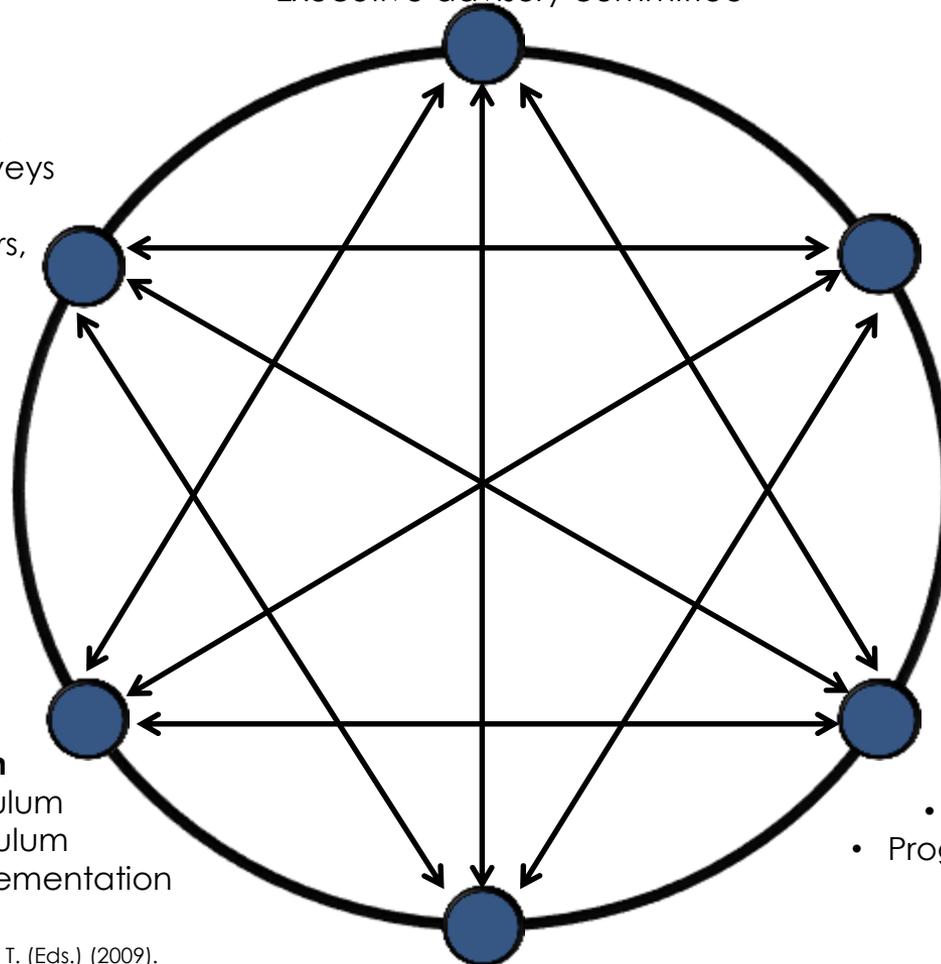
Step 2
Targeted needs assessment
 • Literature review
 • Environmental scan
 • Focus group
 • Key informants (pan Canada)
 • Needs assessment surveys
 • Strategic planning session

Step 3
Goals & objectives
 • Feedback gathered
 • Program planning committee

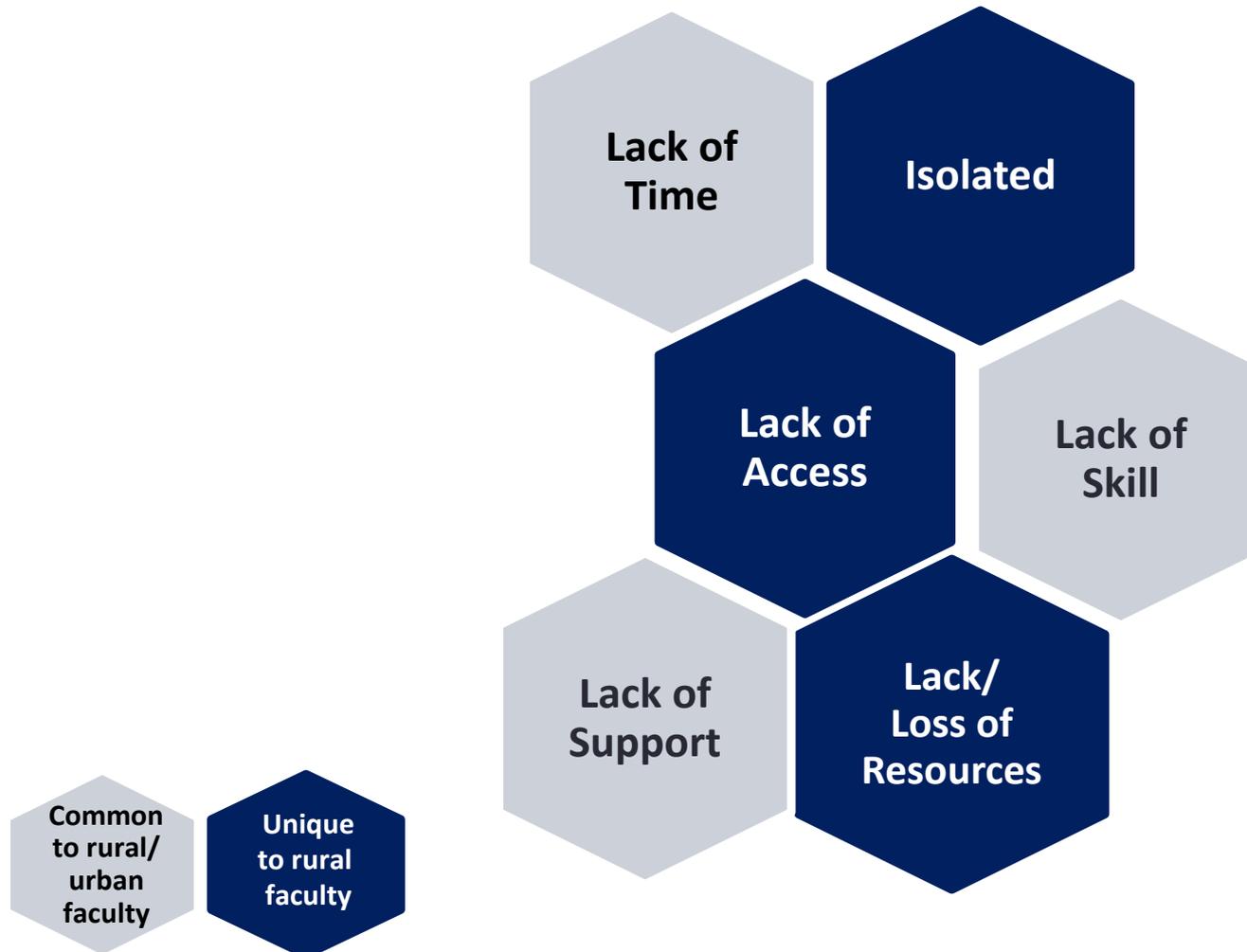
Step 4
Educational strategies

Step 5
Implementation
 • Introduce curriculum
 • Administer curriculum
 • Address barriers to implementation

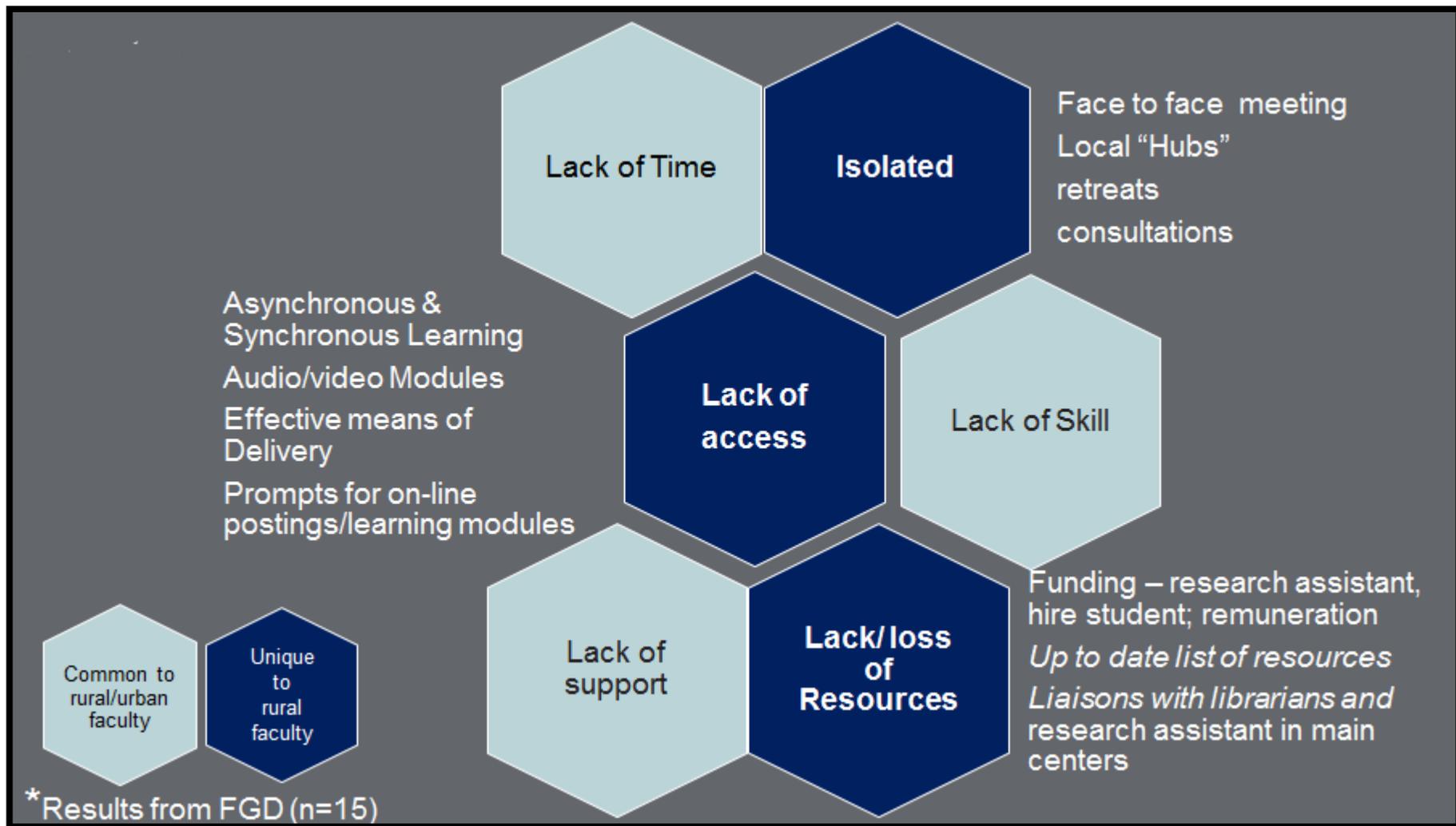
Step 6
Evaluation & feedback
 • Program evaluation surveys
 • Session surveys
 • Feedback from mentors, RA, facilitators, etc.



Comparison of Barriers Reported by Urban & Rural/Remote Faculty



Strategies to Address Barriers



Needs Assessment Findings

Importance of Curriculum Topics in Developing a Research Program as Rated by Program Participants (n=6)

| Topics | Mean Importance Score (out of 8) (SD) |
|-----------------------------|---------------------------------------|
| Research Planning & Design | 6.00 (3.16) |
| Data Analysis | 5.50 (1.64) |
| Research Dissemination | 5.33 (1.37) |
| Ethics Approval | 5.00 (3.10) |
| Data Collection | 4.60 (2.07) |
| Finding Relevant Literature | 4.33 (2.34) |
| Scholarly Writing | 4.33 (1.63) |
| Sources of Funding | 3.50 (3.27) |



Additional Needs Assessment Findings from Program Participants

Scheduling

- Weekends preferred for face-to-face meetings

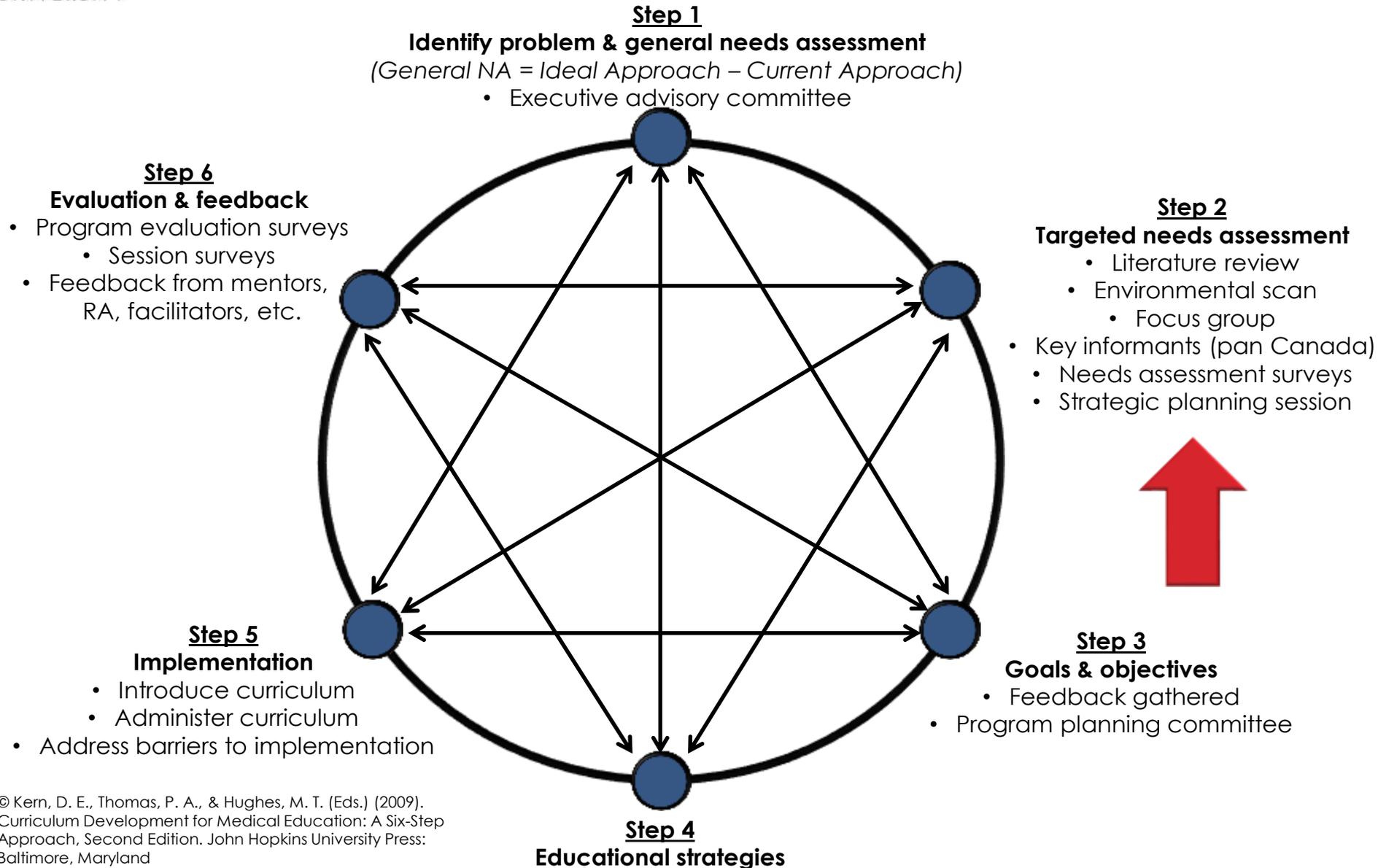
Time

- Lack of time identified as potential challenge to participating in program

Resources/Support

- Resources required for coordination of research networks

Curriculum Development Plan



Program Framework & Curriculum

- **Blended learning model**
 - Didactic learning
 - Web-based and mobile learning
 - Case-based learning
 - Audio and video podcasts

- **Synchronous and asynchronous learning methods**
 - 6 structured, face-to-face sessions
 - Self-paced eLearning activities

- **Curriculum**
 - Knowledge- and skill-building
 - E.g., scholarly writing, research planning, data collection, analysis
 - Development of research networks

- **Built-in dedicated time to work on research project**

- **Research assistant**
- **Mentor**
- **Costs**
- **Venue**
- **Collaboration with support services**

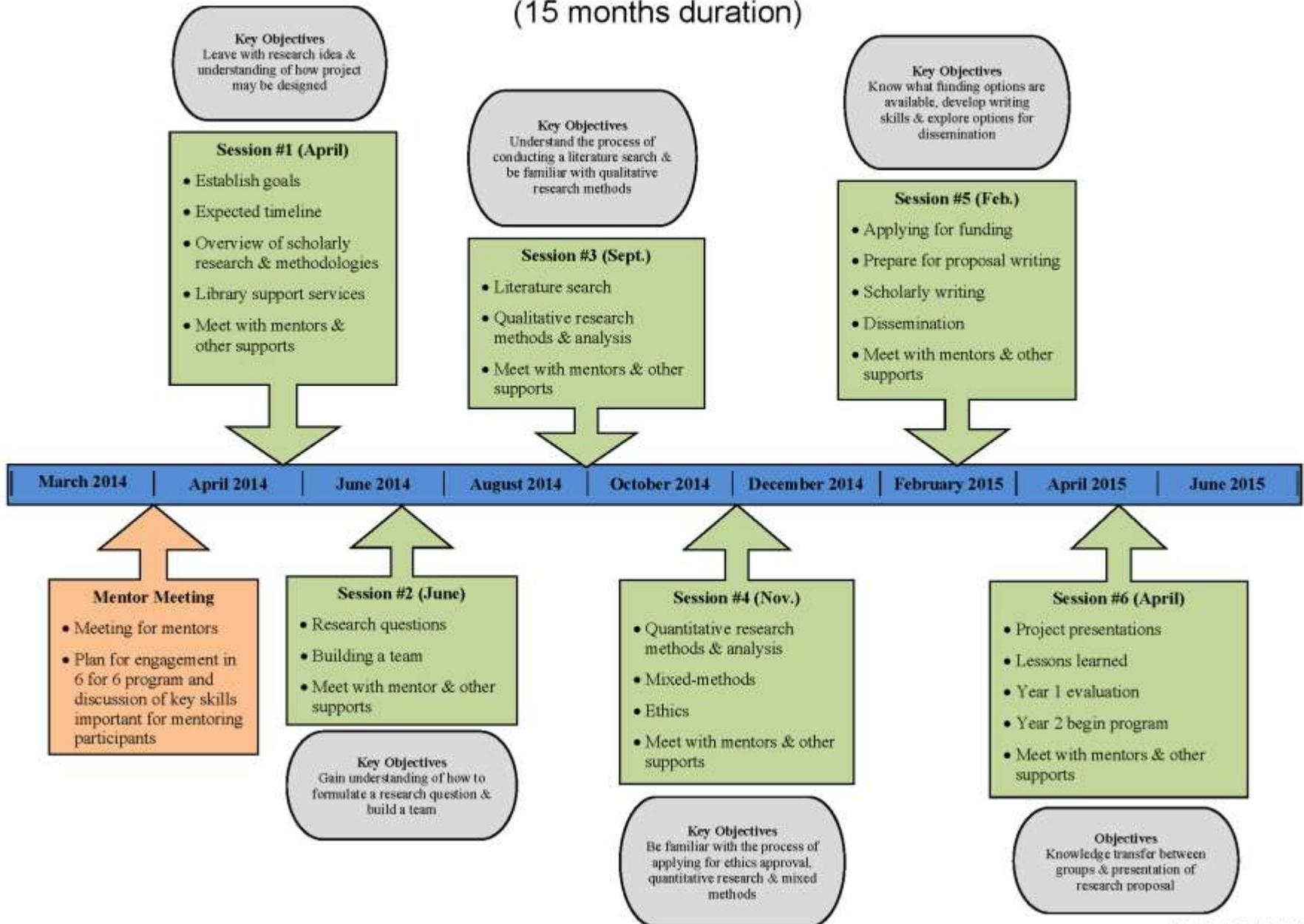


Program Outline

| Session | Curriculum Topics |
|-----------|--|
| Session 1 | Overview of Research Methods; Overview of Library Services |
| Session 2 | Formulating Research Questions; Building a Team |
| Session 3 | Literature Search; Qualitative Methods & Analysis |
| Session 4 | Process of Seeking Ethics Approval; Quantitative Methods & Analysis; Mixed Methods |
| Session 5 | Applying for Research Funding; Scholarly Writing; Dissemination |
| Session 6 | Project Presentations; Lessons Learned |

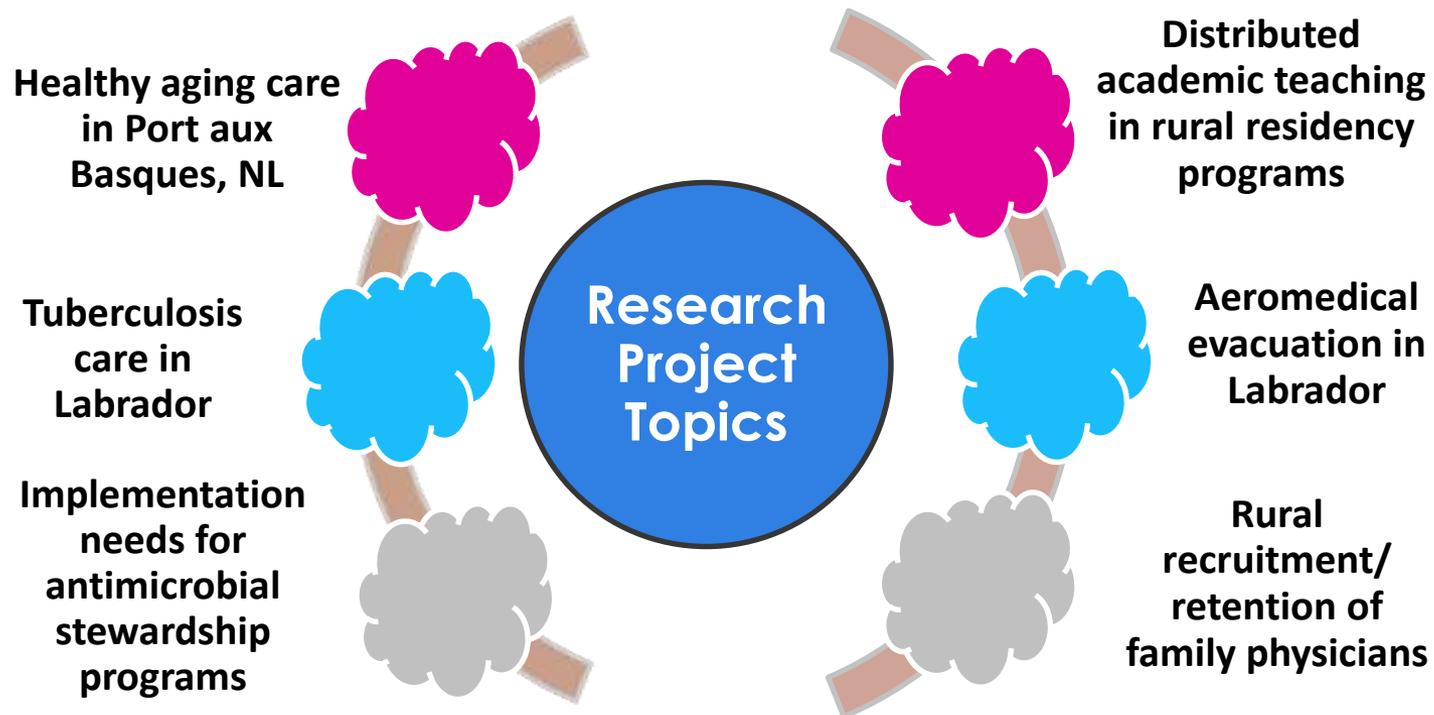
6 for 6 Program Timeline

(15 months duration)

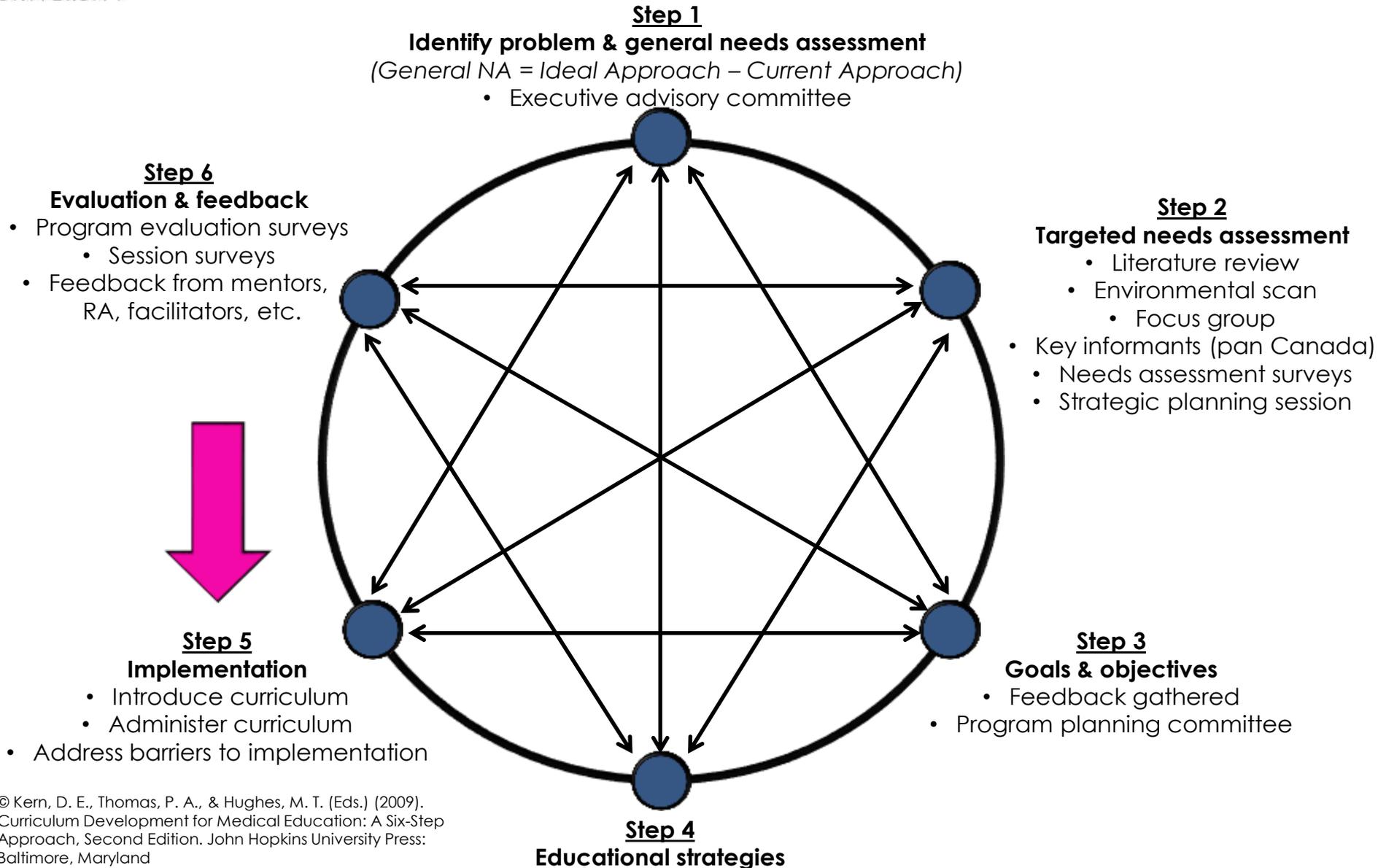


Projects Underway

Individual Research Project Topics as Developed by Program Participants (n=6)



Curriculum Development Plan



Case Study Activity

(Photo credit: NL Dept. Tourism)

Case Studies: Research in Action

- **There are always speedbumps in research**
- **Rural and remote research can present unique challenges to which there are no perfect solutions**
- **Form small breakout groups**
- **Discuss the cases provided amongst your group**

Case Studies

- **Dean does not share your vision, revokes funding**
- **Ineffective marketing, no applicants**
- **Participant to graduate with unfinished project**
- **Maintaining participants' momentum after program**

Next Steps

- **Recruit for year 3**
 - Royal College specialists
 - New Brunswick participant

- **Complete year 2**
 - 3 more sessions remain

- **Alumni mentorship and institute**

- **Publish articles on:**
 - Impetus for 6for6 (FaMPub)
 - Evaluation phase

Cool Down Activity

(Photo Credit: Barrett & MacKay Photo; NL Dept. Tourism)

Cool Down Activity

- Reclaim your post-it from the warm-up activity
- What could you do *tomorrow* to move your research idea forward?

Thank You!

(Photo Credit: Barrett & MacKay Photo; NL Dept. Tourism)

➤ **Questions or comments?**

Research Networking

(Photo Credit: Barrett & MacKay Photo; NL Dept. Tourism)

Research Networking

- **Form break-out groups by province**
- **What barriers to research engagement are most prominent in your province?**
- **How could your group members collaborate to mitigate one of these barriers?**

References

1. Brand, D.A., Patrick P., Grayson M.S. (2008) Mid Career Research Training for the Generalist Physician: Case Study of a Balancing Act. *Teaching and Learning in Medicine*, 20(2), 180-185.
2. College of Family Physicians of Canada. (2009). Working Group on Curriculum Review. *CanMeds Family Medicine*.
3. Herbert, C. P. (2004). Future of research in family medicine: Where to from here? *Annals of Family Medicine*, 2 Suppl 2, S60-4. doi:10.1370/afm.151.
4. Kern, D. E., Thomas, P. A., & Hughes, M. T. (Eds.) (2009). *Curriculum Development for Medical Education: A Six-Step Approach, Second Edition*. John Hopkins University Press: Baltimore, Maryland
5. Kirkpatrick, D. L. & James D. Kirkpatrick. (2006). *Evaluating training programs: The four levels*, 3rd ed. San Francisco: Berrett-Koehler Publishers.
6. Steinert, Y., McLeod, P. J., Liben, S., & Snell, L. (2008). Writing for publication in medical education: The benefits of a faculty development workshop and peer writing group. *Medical Teacher*, 30(8), e280-5. doi:10.1080/01421590802337120
7. Brocato, J. J., & Mavis, B. (2005). The research productivity of faculty in family medicine departments at U.S. medical schools: A national study. *Academic Medicine: Journal of the Association of American Medical Colleges*, 80(3), 244-252.