Our recipe for world-class rural medical teaching sites

Christopher Patey, MD[1,2,5], Emma Dalley, BKin. (Hons), MScPT[1], Andrew Hunt, MD[1,3], Philip Holloway, MD[1,4], Christina Young, PhD[5]

1. Faculty of Medicine, Memorial University, St. John's, NL, Canada
2. Family Medicine, Newfoundland and Labrador Health Services, Carbonear, NL, Canada
3. Family Medicine, Newfoundland and Labrador Health Services, Twillingate, NL, Canada
4. Family Medicine, Newfoundland and Labrador Health Services, Old Perlican, NL, Canada
5. Carbonear Institute for Rural Reach and Innovation by the Sea (CIRRIS), Carbonear, NL, Canada

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If fortunate, we all have a favourite family recipe that when crafted, just tastes better. Maybe it is Nan's homemade bread or a soulful pot of soup. While we can all follow a recipe and have similar ingredients, the outcomes can vary. For some unknown reason, despite all variables being equal, some people are just better cooks.

Memorial University of Newfoundland's (MUN) Doctor of Medicine program has consistently been recognized as a better "rural cook." Currently, our program has twenty-seven rural teaching sites with approximately three hundred preceptors. MUN is a ten-time recipient of the Keith Award, presented by the Society of Rural Family Physicians to the medical school with the highest number of graduates in rural practice ten years after graduation. It has also received the Rural Medical Education Award presented annually to the residency program that matches most graduates to a rural family medicine residency.[1]

As physicians working in rural sites, we bake our own bread, but can we share our recipes and collaborate to create a superior bakery? As we continue to increase medical school and residency enrolments in Newfoundland and Labrador, where our focus is often the creation of rural practitioners, it is essential to have the best recipe for success. This opinion piece draws on our experience as rural practitioners, learners, and researchers, to identify ten key ingredients we believe are required to "bake" a world-class rural medical educational site:

INDEPENDENCE

It is no good to have Nan watching over your shoulder in the kitchen while you try to make bread; you have to bake it yourself to know if you can do it.

Medical training aims to develop independent practitioners. Rural sites foster independence since we often function without full specialist backup and there is a lesson in that discomfort. As a result, learners observe the independence of rural preceptors and develop confidence in assessment, formation of differential diagnoses, and patient management. Rural sites tend to demonstrate the value of learning independence.

COMMITMENT

We need to teach others to bake bread to continue to feed our rural communities.

Despite a perceived element of academic inferiority and a lack of guaranteed tenure, there is a high level of commitment to medical training in rural areas. We seek and accept medical students from undergraduate medical education, often in pairs, and layer learners at different levels to enhance everyone's experience. We dedicate time to teaching and invite students to present.

COMMUNITY

Ingredients are always plentiful when there's a neighbour's door to knock on.

There is no welcome like that at a rural site. Where else are you embraced by the community with baked goods, personal meetings, or even supper with the mayor? In rural areas, whether due to cultural factors or an appreciation for medical care, patients are generally more accepting of learner involvement, often welcoming interactions with all members of the care team. The ideal rural site focuses on the learning experience and an outstanding life experience. For learners, this approach helps foster the desire to enter a profession of rural medicine that extends beyond the clinical atmosphere. Ensure that you provide learners with comfortable and safe housing, and access to amenities such as grocery stores, fitness equipment, coffee shops, sports facilities, and hiking trails, as these are integral to success.[2]

EXPANSIVENESS

Be sure to cook over an open fire in the woods.

Rural physicians, in our experience, are accustomed to fulfilling an expansive role. The triage, management, and constant tasks expand the scope of a physician to include stabilization and follow-through, often without in-house consultation support. This is attractive to learners who are eager for hands-on experience. In our rural hospitals, a physician's finger is always on the pulse of what is happening throughout the whole medical community, and it is an open medical wilderness that must be sold.

FREEDOM

A recipe isn't meant to confine ambition but provide a foundation for creativity.

Providing an education that goes beyond the classroom or the clinic creates lifetime memories. Provide opportunities for medical transfer - by road, snow, mud, water or air. Be sure to highlight some of the valuable, non-traditional educational experiences often not available to trainees at urban sites. Additionally, continuing to provide opportunities for unique learning experiences outside of regular business hours is essential for the development of a well-rounded medical professional. Spontaneity is important and learners appreciate impromptu rural teaching. Thankfully, the broad scope of practice and exposure in rural medicine means new things happen every day.

UNIQUENESS

Our cookbooks are not mass-produced.

Medicine in rural environments is very unique. From rare pathology to unconventional treatments, rural medicine allows for the development of knowledge and skills not available elsewhere. From administering Factor VIII to a patient in the "Hemophilia capital of the world" in Twillingate to performing phlebotomy at "Hemochromatosis Central" in Brookfield, novel experiences help develop clinical knowledge. You must be aware of your local strengths and sell them. The further creation of opportunities for longitudinal learning, such as Longitudinal Integrated Clerkship (LIC), permits valuable continuity of care from both the patient and learner perspectives and allows learners to capture the full unique flavour of rurality.[3]

GENERALISM

When there is no bakery within one hundred kilometres you just learn to bake better bread.

There is an assumption that medical education in rural areas is of a lesser quality and the highest level and quality of learning often occurs at the highest level of subspecialty. Rural generalists and specialists often mirror the broad scope of practice of rural primary care providers: the general internist who does endoscopy, central lines, pacing wires, stress tests, dialysis and more; or the general surgeon performing vasectomies, trigger finger releases, fracture clinic follow up, and hiatal hernia repairs. These are diverse and highly specialized exposures for a student, available all in one place.

COLLABORATION

You are not afraid to knock next door and borrow a cup of sugar.

Rural settings provide opportunities for optimal team cooperation. Learners and physicians are part of an interprofessional team that includes allied health workers, paramedics, nurses, managers, and more. What better way to learn to collaborate than with a rural "work family" that strives to accomplish a common healthcare goal during the day and at a local coffee shop or pub during the night? Collaboration and exposure to other fields of medicine and rural health care lead to improved overall medical graduate preparedness. Understanding the roles of others, engaging in different methods and techniques (e.g., nursing IV access tricks) and sharing stories with the team over a coffee can only optimize confidence and competence.

DIRECTORSHIP

Julia Child does not live in Newfoundland but many there have baked her cakes.

MUN's Faculty of Medicine boasts an extensive network of staff dedicated to the onboarding and orientation of learners and faculty throughout the province. The Office of Distributed Medical Education works with the disciplines, learners, faculty, health authority and community players to best ensure travel, lodging and community connectivity are delivered flawlessly. Collaborative efforts with our provincial and community partners are necessary to ensure infrastructure and faculty needs are supported and maintained. We must continuously assess our environment, the faculty and learner climate and the needs of our people and communities through social accountability assessments. To achieve high-quality rural medical education, the instructional components must be free of deficiencies and led by insightful rural faculty.

INCENTIVIZE

You're more likely to cook if you know someone else will wash the dishes.

Since rural physicians often see themselves as clinicians first and teachers second,[5] it is important to highlight the importance of rural faculty. We must provide stipendiary and full-time appointments equally to rural and urban faculty, as well as preceptor remuneration models comparable to those across Canada. Further provision of productive faculty development with opportunities such as faculty-wide preceptor meetings and retreats, access to library privileges, and inclusion in academic committee work are essential. Communication must also be strong with enhancements through rural-led newsletters, faculty development sessions, provincial tours, and virtual town halls. Financial support through infrastructure funding and travel are integral to optimal rural faculty engagement.[4]

CONCLUSION

MUN has had sustained success in rural medical education, and we hope that others can learn from our success. While we've identified the ingredients for a successful rural teaching site based on our practical experiences, more formal research should be conducted to support our beliefs and identify additional factors associated with successful medical teaching sites in other rural areas. We believe that rural medical education creates a lifelong educational memory for all

medical learners. Let's be sure to join in the potluck and make it taste rich.

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