



Has the University of British Columbia's  
Northern Medical Program made any  
difference?

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**I have no conflicts of interest**

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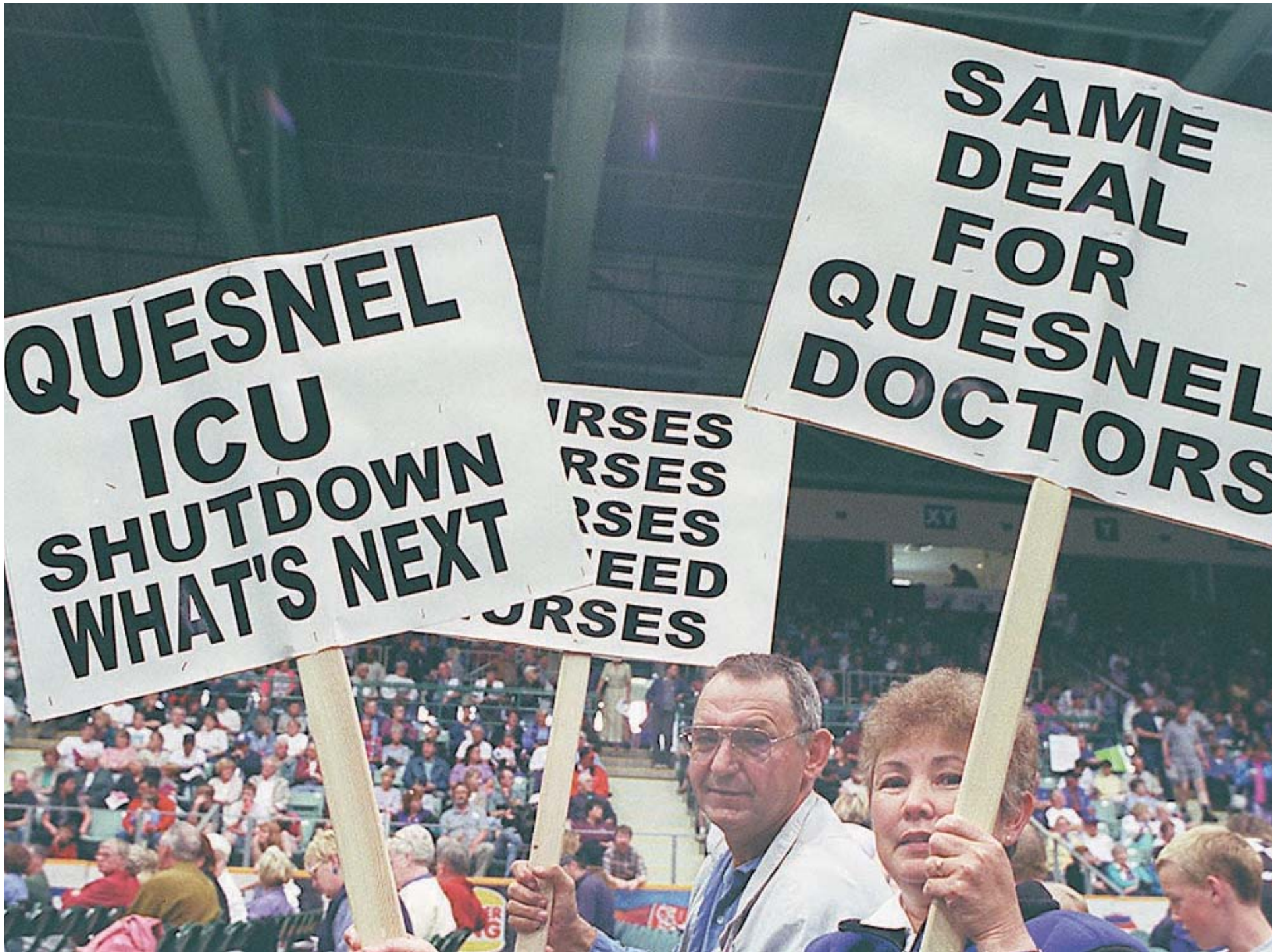
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**QUESNEL  
ICU  
SHUTDOWN  
WHAT'S NEXT**

**NURSES  
NURSES  
NURSES  
NEED  
NURSES**

**SAME  
DEAL  
FOR  
QUESNEL  
DOCTORS**



In response to these challenges, the B.C. Government and UBC partnered with the University of Victoria, the University of Northern British Columbia, and B.C.'s Health Authorities to create province-wide medical education programs.

UBC's MD program was distributed across B.C. to four geographically distinct sites:



2003

- Northern Medical Program  UNIVERSITY OF NORTHERN BRITISH COLUMBIA
- Southern Medical Program
- Island Medical Program  University of Victoria
- Vancouver Fraser Medical Program

New community-based postgraduate training programs were launched on Vancouver Island, in northern B.C., the Interior and the Lower Mainland.



2013

- MD Undergraduate Program entry positions
- Postgraduate medical training entry positions



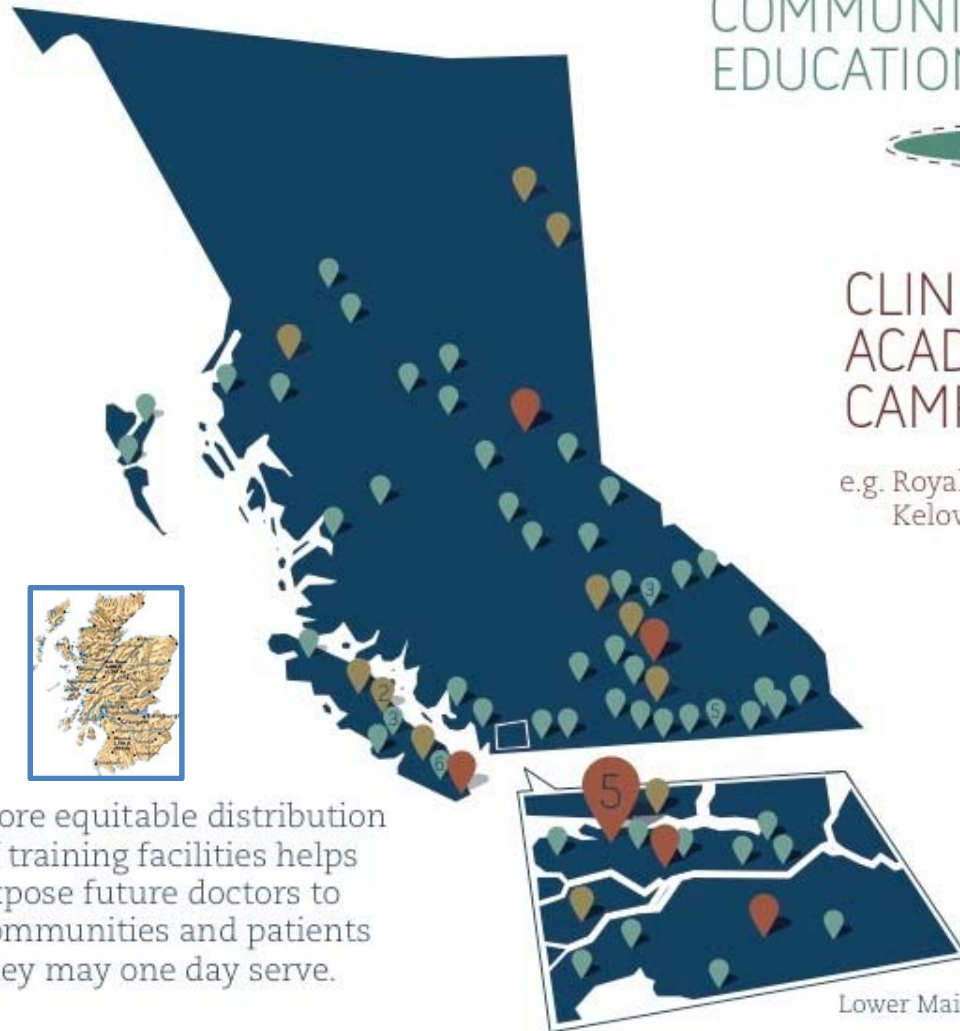
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# COVERAGE

There are over 80 training facilities throughout British Columbia. These include:



More equitable distribution of training facilities helps expose future doctors to communities and patients they may one day serve.

COMMUNITY  
EDUCATION



e.g. 100 Mile House,  
Masset, Cranbrook

CLINICAL  
ACADEMIC  
CAMPUSES

e.g. Royal Columbian Hospital,  
Kelowna General Hospital



AFFILIATED  
REGIONAL  
CENTRES

e.g. Vernon Jubilee,  
Abbotsford Regional

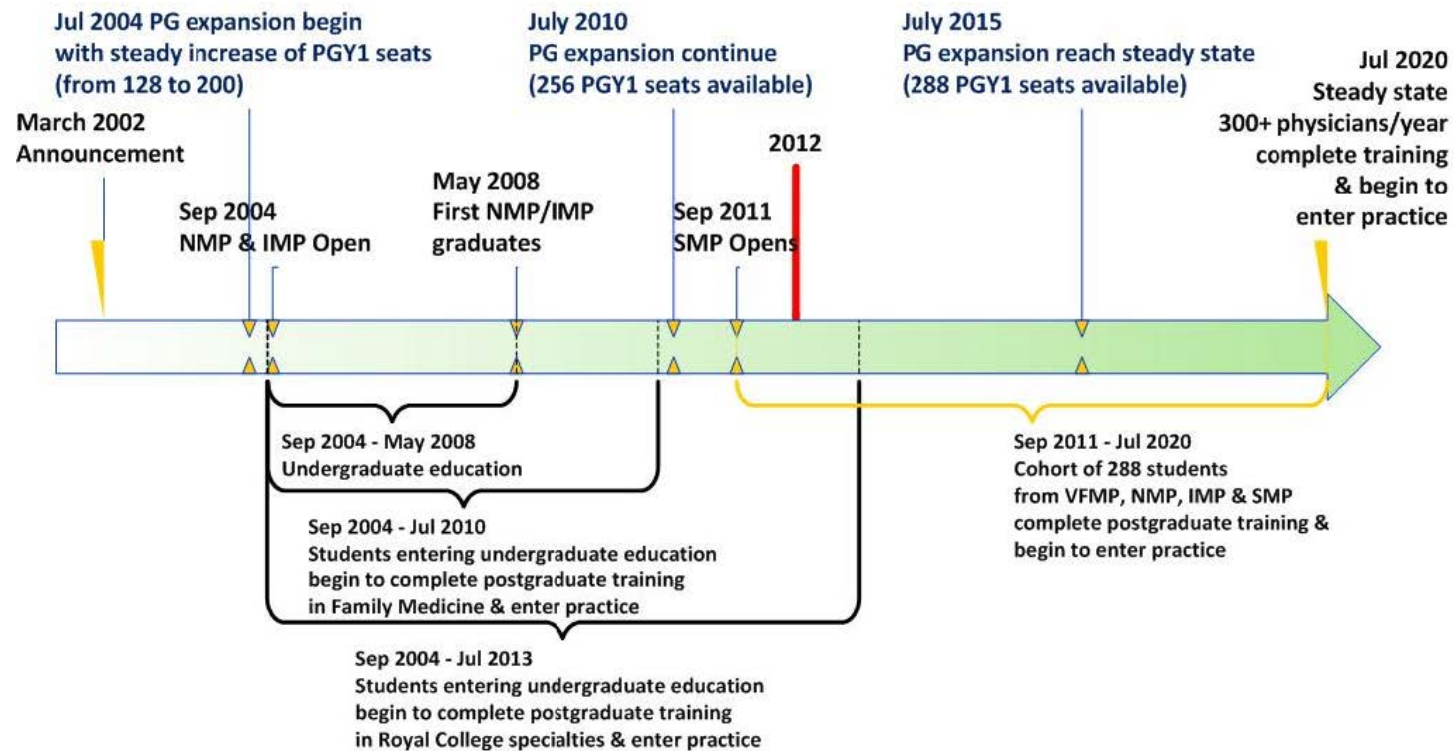


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# •Distribution timeline...



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LOCAL NEWS

## City enjoys specialist surplus

Peter JAMES

Citizen staff

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A decade ago, Prince George was desperate for physicians of all stripes, but now conditions have improved so much that Northern Health has turned some specialists away due to lack of available spaces.

Northern Health chief operating officer for the interior Michael McMillan told the health authority board on Wednesday that some orthopedics specialists willing to relocate to Prince George were turned down because that department is fully staffed.

"It's a dramatic change from what it was 10 years ago, I got involved in 2000 and 2001 and it's night and day," board chairman Charles Jago said. "This has become a far more attractive place for people to look to establish a practice."

According to figures provided to the board, the resource plan in the northern interior health service delivery area calls for 102 specialists and currently there are 95.85 full-time equivalent positions in the region. In the first eight months of this year, 10 new specialists arrived and only five departed.

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## UBC at a Glance

**56,382** students on two campuses, Vancouver and Okanagan

**8,437** international students

**11,257** degrees granted in 2010/2011

**\$10 billion** in economic impact

**\$549 million** per year in research funding

**275,000** alumni in 120 countries

**13,893** faculty and staff

**22nd** in world university rankings, 1 of 3 Canadian universities in the top 40



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A photograph of the University of Northern British Columbia (UNBC) campus at night. The foreground is covered in a layer of snow. On the left, there is a prominent glass pyramid structure with a stone base. In the background, several multi-story brick buildings are illuminated from within, with some satellite dishes visible on the roof. The sky is a deep blue.

UNBC was founded in 1991  
4,276 students  
178 faculty

# Faculty of Medicine

## Facts & Figures

Full time faculty	633
Clinical faculty	4,860
MD students	1,069
Postgraduate medical residents	1,142
Graduate students	1,287
Post-doctoral fellows	225
Clinical fellows	253







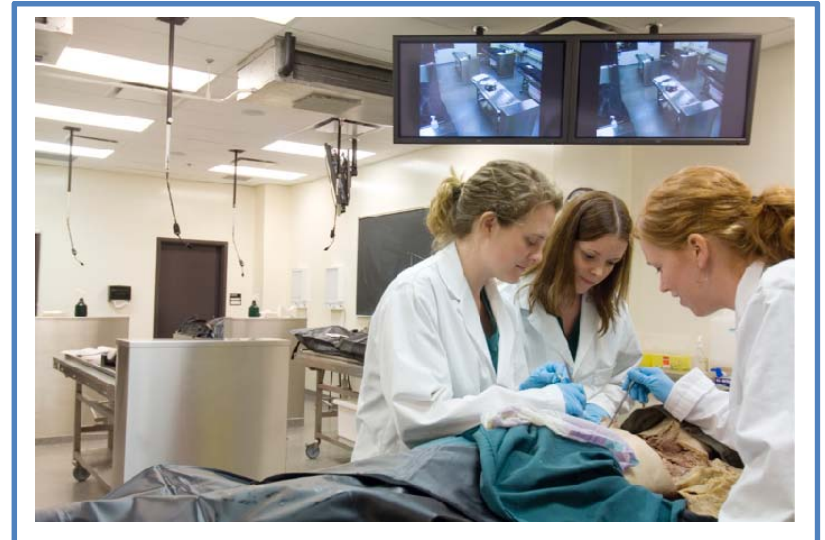




MILLS MEMORIAL HOSPITAL

 northern health

MILLS MEMORIAL  
HOSPITAL



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# What did we do to support the rural need?



- We tried to find students with a good fit
- We recruited faculty who would be role models
- We provided Faculty Development
- We provided experiences in rural communities with full service family physicians and with generalist specialists
- We provided experiences in underserved areas
- We looked for incentives to encourage rural experiences



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# Remote and Rural Suitability Score

Developed over 10 years:

- Rural Upbringing (50% of weight)
- Rural Links
- Rural Activities
- Self-reliance

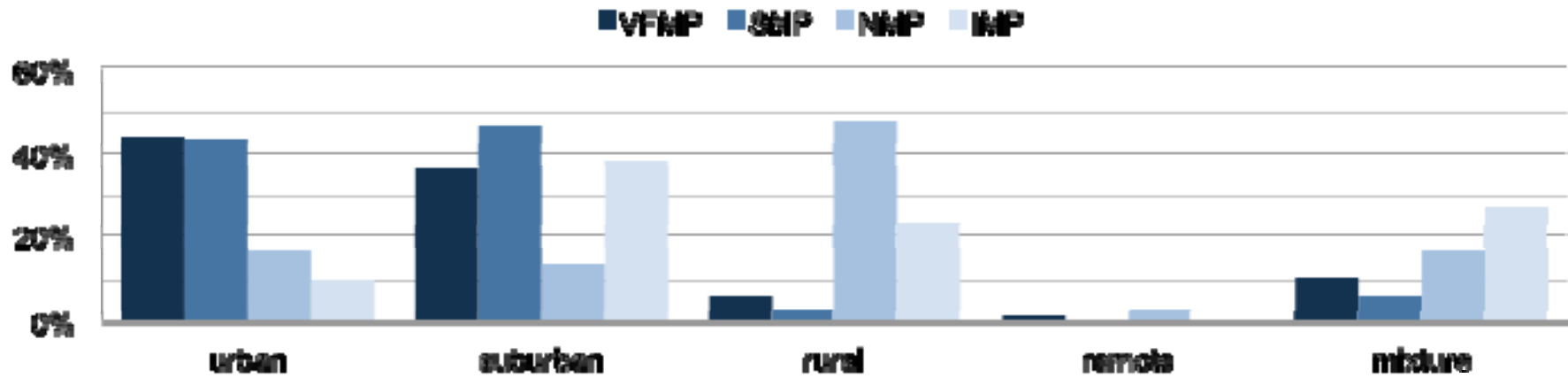


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# Geographical Background

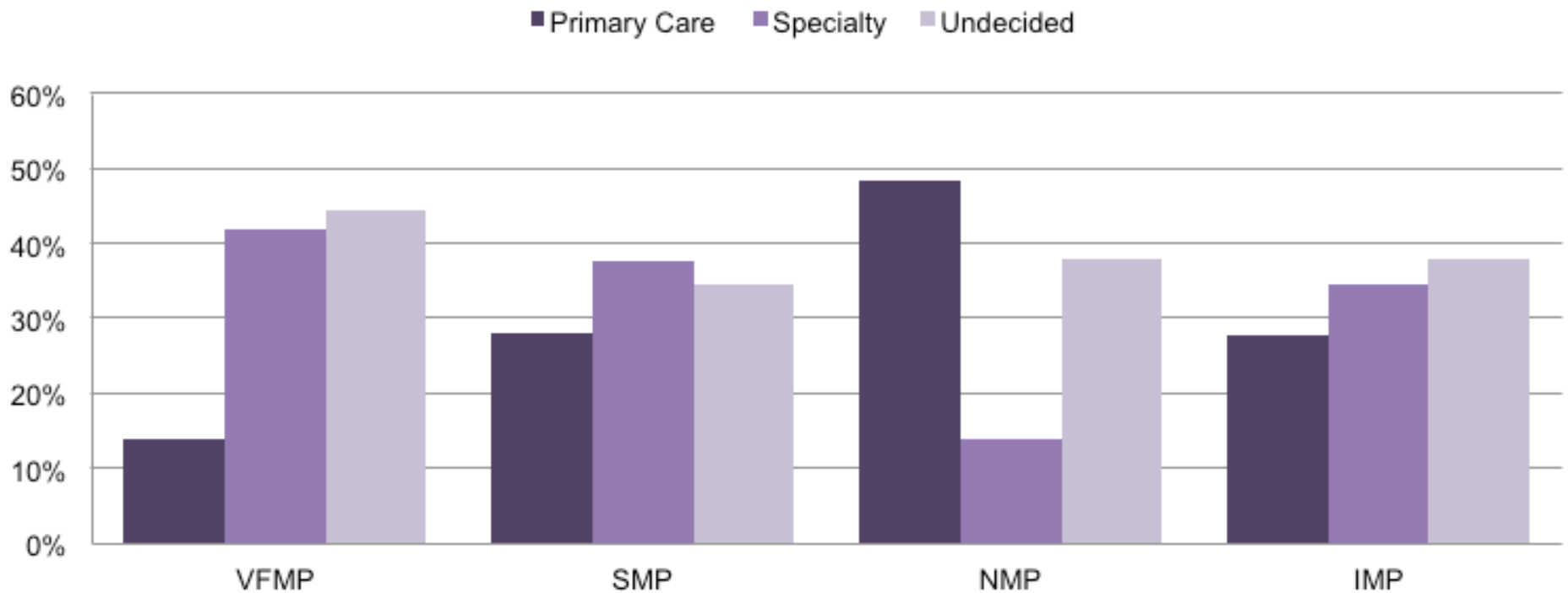


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# Intended career path at admission



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What is the impact of distributed education on communities?



# What research evidence is there?

Two qualitative studies exploring the impact of a distributed campus on its local community



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## Study 1: What were the impacts on the community?

Lovato C, Bates J, Hanlon N,  
Snadden D.

Evaluating distributed  
medical education: what  
were the community's  
expectations?

Medical Education, 2009,  
43;5: 457-461



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# Five Spheres of Community Impact

- Health
- Local politics
- Education
- Economy/Business
- Media



#### 4 Themes:

- Increase in Pride and Status
- Partnership Development
- Community Self-Efficacy
- Community Development



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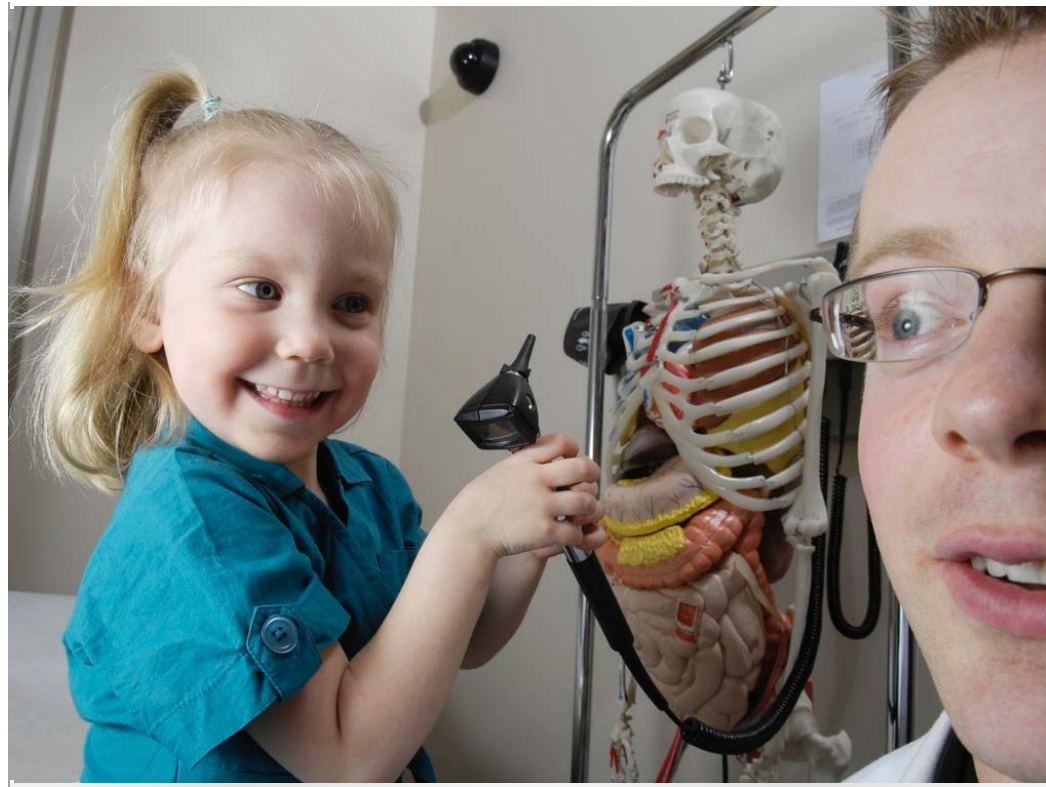


# Study 2 - making sense of disruptions to a physician community

Hanlon N, Ryser L,  
Crain J, Halseth G,  
Snadden D.

Establishing a  
distributed campus:  
making sense of  
disruptions to a  
physician community

Medical Education,  
2010; 44:256-262



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# Social Capital

- Forms of social participation (networks, norms and trust) that facilitate co-operation between individuals and groups to achieve common objectives. (Bourdieu P, the Forms of Capital; Handbook of Theory and Research for the Sociology of Education Greenwood, NY, 1985)
- The possibility that distributed medical education may lead to increased social capital links medical education to the sustainability and resilience of rural and northern communities.



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# Structural changes in the medical community

- Attracting specialists
- Widening relations with the medical profession
- Improved relations with regional and provincial health officials

*“With students around, you tend to interact with many disciplines, so the students act as a second-hand bridge between the disciplines that might not be there”*



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## Impact on individual physicians

- Impact on workloads
- Increased morale

*“Everybody feels good that we’re not only a first class hospital, but also teaching the next generation of physicians”.*



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# Impact on local community of physicians

- Enhanced ethos of professional development
- Effect on work-based networking
- Sense of community cohesion

*“If you’re doing things a certain way, and then you see it through the eyes of a young student, you may be more flexible and open to improvement”.*



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# Social capital as a theoretical framework

- Helps us understand how physicians were effected by the development of the NMP - existing networks were disrupted
- Helps us think about what needs to be put in place as a new site is developed
- NMP created mechanisms (professional, social and educational networks) that helped replenish social capital
- Helps us think about sustainability - as you deplete social capital you need to finds ways to replenish it. Is this the route to dealing with burnout?

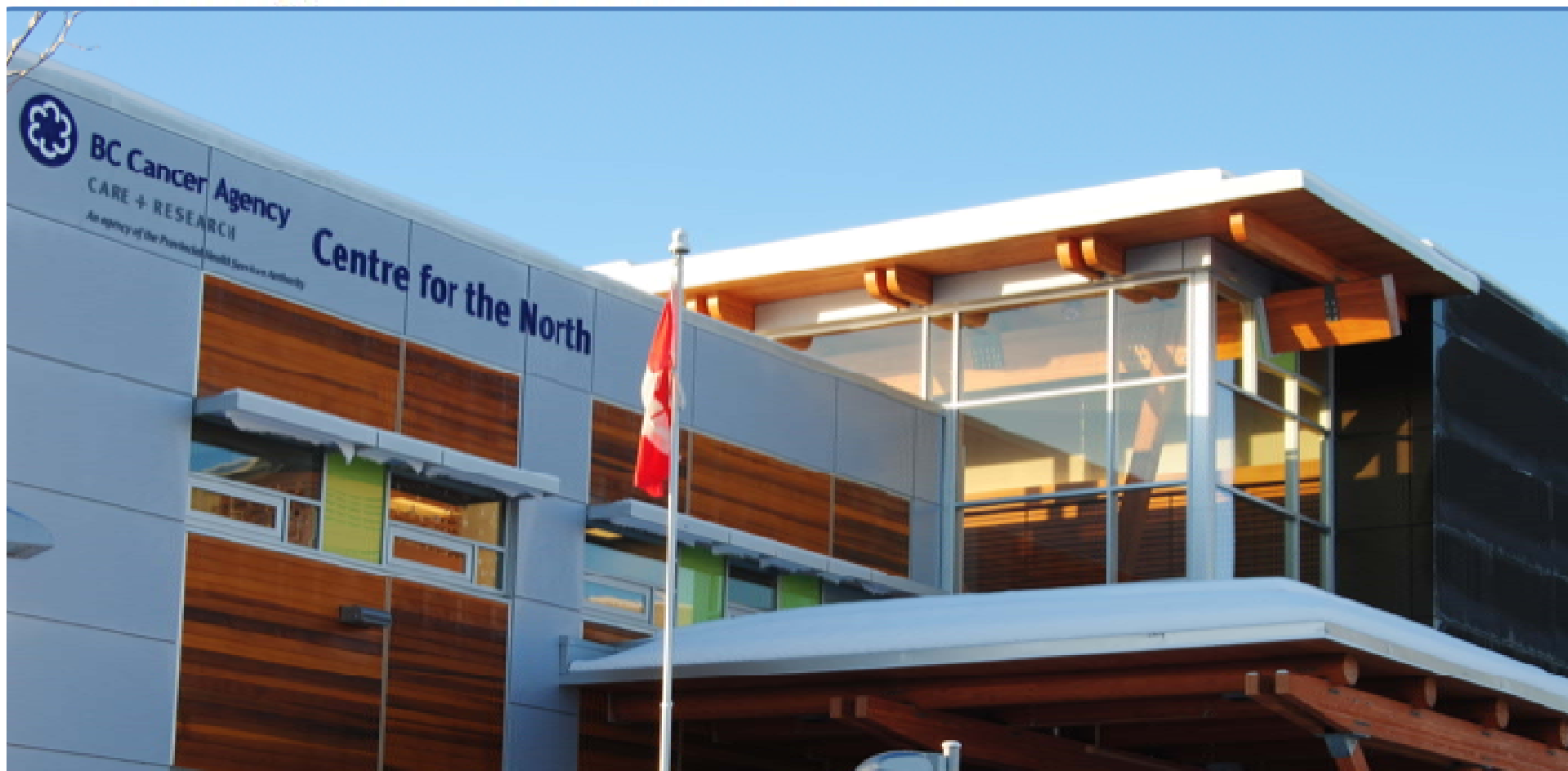


# THE PRINCE GEORGE CITIZEN

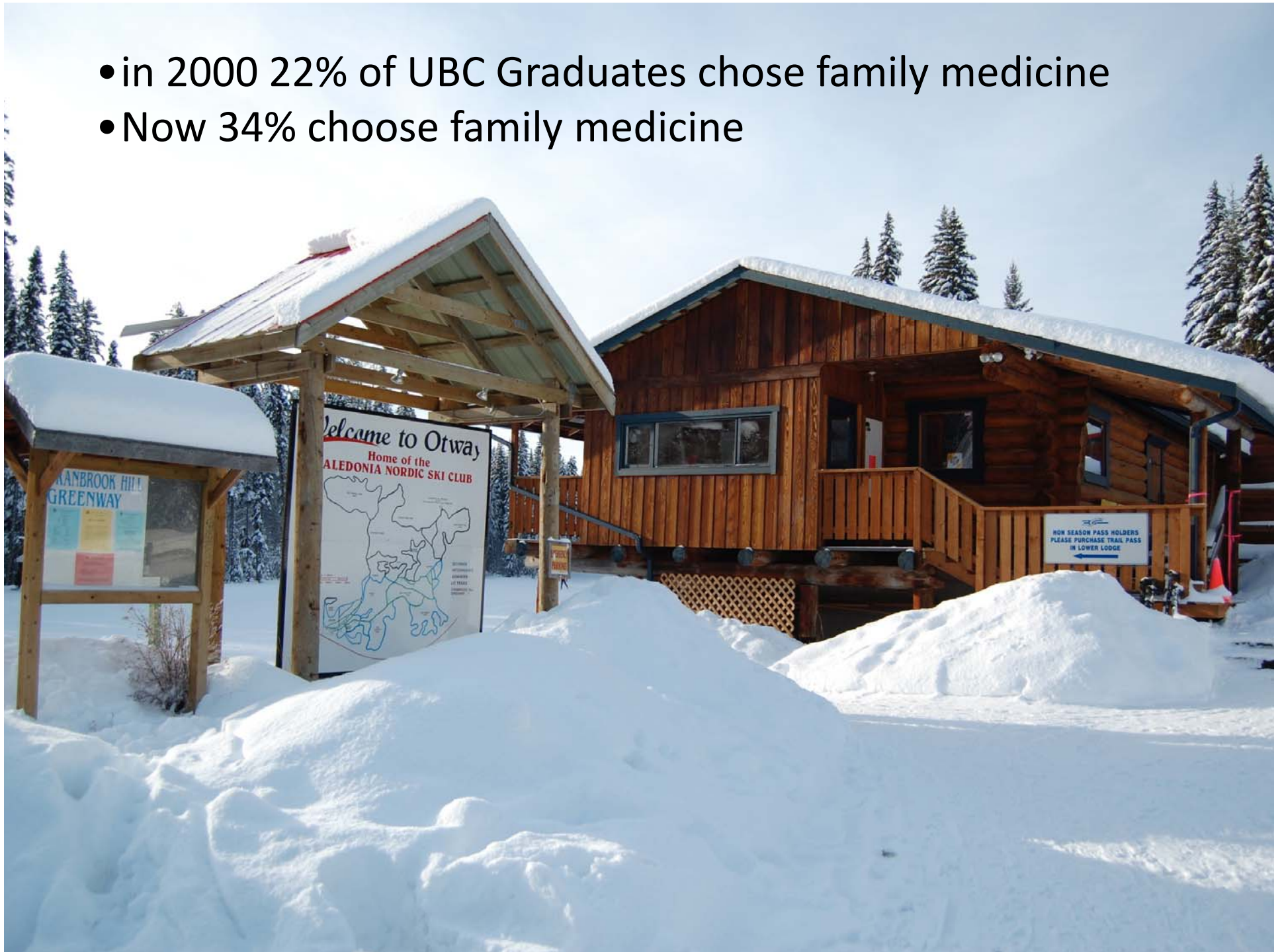
Published December 7, 2012  
LOCAL NEWS

Would this have happened  
without the NMP?

## Patients pour into cancer centre



- in 2000 22% of UBC Graduates chose family medicine
- Now 34% choose family medicine





# What choices have NMP Students made?

- 2008-2013 Graduates (n=160)
- 51% chose family medicine
- 19% chose generalist specialty

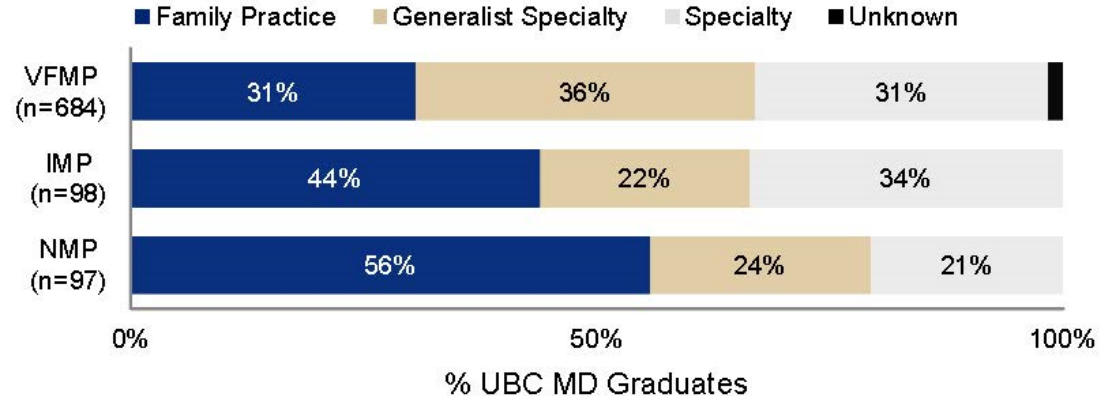
of first 4 cohorts 45% of those choosing family medicine are practicing or training in northern or rural communities

in 2013 16 of 29 (55%) graduates chose family practice, of those 11 in rural settings (70%)



# Impact on Northern B.C.

Early data indicate that more graduates from the Northern Medical Program have chosen to practice family medicine and almost 2/3 of fully licensed NMP graduates are practicing family medicine in the rural and northern region of British Columbia.



## Residency Programs are just as important for local recruitment

- **Distributed training correlates with successful recruitment and long term retention**
- **Prince George Family Medicine Training program**
  - **Grads to date** **107**
  - **Currently practicing in NHA** **39**
    - **Prince George** **32**
    - **Other Northern Health locations** **7**



# COMMUNITY BENEFITS



Doctors are more likely to stay in the area they train in.

Presence of learners helps increase the level of care.



Training facilities are not just limited to hospitals - a large amount of teaching takes place in physician's offices and clinics.



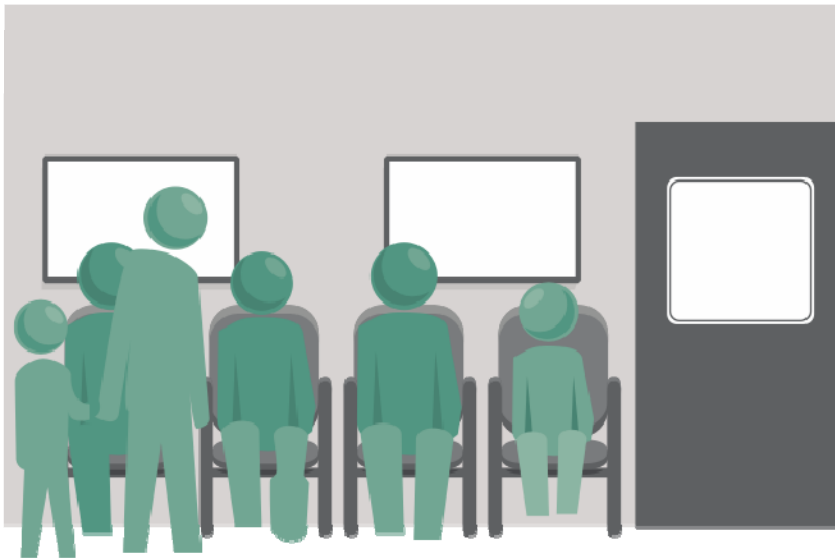
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# THEN

There were serious physician shortages in British Columbia



In B.C., the ratio of specialist trainees per capita was lower than any other province.

# NOW

B.C. is educating the right kind of physicians to ensure the province makes an equitable contribution to the Canadian medical workforce, and is self-sustaining as a province.



We have significantly increased the number of postgraduate trainees including those in family medicine and specialties most needed by British Columbians.



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# Distribution of Health Professional Programs



- The distributed model is now being applied to other Health Professional Programs at UBC such as Physical Therapy
- Our aim is to increase recruitment and retention of health professionals to northern and rural areas where there are significant shortages



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# What have we learned?

Distribution has:

- Brought benefits to communities
- Changed our recruitment and retention successes
- Increased opportunities for rural students to enter medicine
- Created an economic benefit locally
- Strengthened our partnerships with Northern Health and UNBC
- Started to contribute a northern/rural research environment in health care



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## **What else did we learn?**

**Partnerships are critical to success  
They need continual maintenance and re-negotiation**

**History has to be reinforced over the years, what is implicit to many - why we are doing what we are doing - is not known by new recruits**

**Recruitment is only part of the puzzle - there is much more we need to know about what influences retention of rural physicians**

**If you are a mouse and you get into bed with an elephant, even if it is friendly, watch out when it rolls over**





QUESTIONS?



Mt Ida, Kakwa Provincial Park, British Columbia