Chapter 1.2.1

HEALTH SYSTEMS AND FUNDING OF RURAL-BASED MEDICAL EDUCATION

Michael Jong
Memorial University, Canada

Introduction

A strong medical workforce is an essential component for an effective health system. Training capable and motivated doctors for rural communities is necessary for achieving national and global health goals of achieving health equity for all. Well-trained doctors and equitable distribution of physicians[1] correlate with positive health outcomes.

The training of the medical workforce requires a functioning health system and adequate financial resources. These are the same elements for a successful rural programme.

Most health systems and medical schools operate with various forms of mixed private-public funded models. Funding may come directly from governments to the medical school/programme or indirectly from governments through universities, hospitals and health boards/authorities. Other sources of funding are research funds, endowments, foundations and philanthropists and payments from patients.

In many underdeveloped countries key challenges include low public/private investment in health; low economic growth rates; dearth of comprehensive health financing policies and strategic plans; extensive out-of-pocket payments.

Health systems

Health systems need not be simply a drag on resources, as is often believed, but rather can be part of improving health and achieving better economic growth (1). Evidence in this regard can be used as justification for securing funds from all levels of government and businesses for medical education in the local region.

---

[1] Here a 'physician' (and in North America more broadly) is another term for 'doctor' or general practitioner, while in countries like South Africa and Australia, a 'physician' is a specialist in internal medicine.

In the United States where medical schools are largely privately funded, government funding of departments of family medicine is significantly associated with the expansion of the primary care physician workforce and increased accessibility to physicians for the residents of rural and underserved areas. This is also associated with a change from sub-specialty training in favour of primary care (2).

Responding to the social accountability mandate can help medical schools secure funding. In the Canadian context, both the Northern Ontario School of Medicine and the Medical School of Memorial University received funding from governments because of their rural mandates.

From a health system perspective it is more cost-effective to provide all the training of rural core skills during undergraduate and postgraduate medical school training. This is especially true in resource-poor countries. The benefits of diverting limited funds from in-service after medical schooling to pre-service training programmes were found in health education institutions in Bolivia, Ecuador, Egypt, Ethiopia, Indonesia, Moldova, Morocco, Nepal, the Philippines, Tanzania, Uzbekistan and Viet Nam (3-7). In resource-poor countries, there are two main challenges of in-service compared with pre-service training:

- Funding for in-service training is difficult to secure from national and/or district health budgets, and presents substantial personnel time diverted from patient care, particularly for resource-constrained health facilities.
- The limited number of in-service trainers are more expensive, yet often have high rates of turnover and attrition. Pre-service training is associated with lower costs and increase returns to investment. Pre-service training is more effective than in-service because of the captive student audiences who are less likely to be absent. It also allows for leveraging of limited training resources within the medical school.

Funding models

Funding for medical schools can come from various sources:

- directly from government to the medical school
- from universities and hospitals
- private funding
- charitable donations / bequests
- research grants

Understanding government funding

Government funding generally comes from taxes. In resource-poor countries novel approaches to revenue generation is particularly important. New sources of funding for governments can come from improvement in efficiency of tax collection, re-prioritising budgets and innovative revenue generation e.g. taxes on tobacco, air tickets and foreign exchange transactions. Providing the evidence and lobbying for taxation of products that are deleterious to health and well-being of the population can assist government to make the right decision. Decisions about health care funding are inevitably political. Changes in funding involve redistribution of resources.

An example of how to generate new funds for rural medical education is provided by the McLennan County Medical Education and Research Foundation (McMERF), a non-profit, teaching and research institution and medical treatment facility. McMERF obtains funding from the Texas State Government, patient revenue, hospital and local funds. The institution received the state funds for implementing a mandatory one month rural rotation. The additional funds allowed them to create a 3rd year clerkship in family medicine. At the same time, McMERF also increased its funding base through grant appeals, fund raisers, and corporate and private giving programmes (3). Like most medical schools McMERF relies on a diversified sources of funds.

Improving one's success in securing funding includes being vigilant for opportunities. One of the opportunities is the 2010 Patient Protection and Affordable Care Act in the United States that is meant to provide universal health care for all Americans. The Act is associated with funding, such as the Rural Physician Training Grants to medical schools to develop programmes to recruit students most likely to practice in underserved rural areas. In 2012-2013 this amounted to US$4million a year. There are also other opportunities for rural medical education.

Orchestrating press releases and media interviews by national medical organisations, in conjunction with the publication of a new study highlighting the inequities between rural and urban parts of the country, can gain attention from governments. When the Canadian Medical Association and the Society of Rural Physicians of Canada sent out press releases the day before the publication of the study on recruitment and retention of physicians in rural Canada, the flurry of media attention caught the attention of the Ministry of Health. This occurred towards the end of the fiscal year and lead to one-time funding of C$33 million for family medicine residencies in underserved communities. One time funding is more likely towards the end of the fiscal year, as it is largely drawn from unspent or reserved contingency budgets. Long-term funding requires more persistent lobbying and funding and is usually announced when the government's budget is released.

Rural physicians usually have a close connection with their communities, businesses and politicians, following the care they may have provided for the person and/or family. Local business desires a healthy workforce. Large companies such as the mining industry often set aside charitable funds that can be directed to medical education. Large corporations have strong lobbies within the government and if they believe in the value of rural medical education, can deliver the message to the inner sanctum of government. Government is more likely to act if they heard the same message from multiple sources.

Key messages to deliver to funders

- Rural communities have poorer health status. Improving access to health care is one solution as it not only helps to improve health outcomes but is an important economic development strategy for many rural communities.
- Training of the medical workforce is best done in the setting that best approximates their future practice. Training rural doctors is best done in rural communities.
- Generalism and primary health care has greater impact on population health. Use evidence from research by Barbara Starfield available at www.globalfamilydoctor.com/InternationalIssues/BarbaraStarfield.aspx.

A project management model (Figure 1)

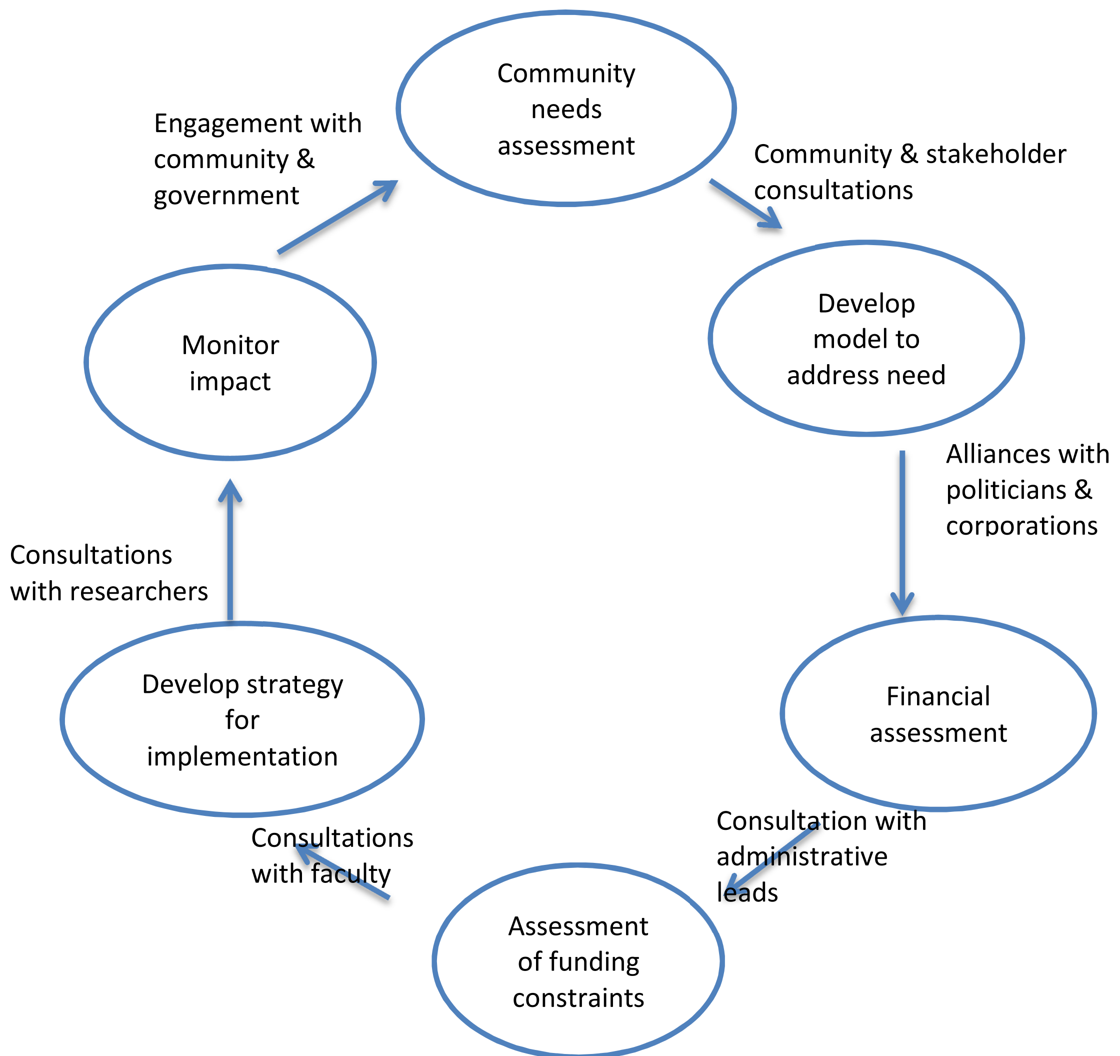
Health systems and medical education should be socially accountable and address the needs of the population. When starting a rural medical programme a needs assessment of the rural population should be the first step. The assessment is done in conjunction with consultations with key stakeholders including formal and informal leaders of the rural communities. The programme model should be designed to meet local health needs and value systems. Alliances with the business communities and community leaders will help with gaining commitments from politicians.

The development plan for a rural-based programme should include a business plan. A financial assessment of the cost of the programme should be developed with the assistance of the administrative leads in the medical school. It is usual to expect financial constraints from funders – and these should be discussed with the faculty[2] in the programme to work out how to best implement the programme within the financial limits. A governing board, which often include influential members of the community, can offer solutions. Local stakeholders including the health institutions may be able to help out with in-kind and monetary contributions since medical students and faculty contribute towards the provision of health care.

[2] 'Faculty' is another term for members of academic staff.

It is advisable to have a research team develop and implement an evaluation plan with input from the local stakeholders and funders. The results of the impact of the rural medical programme should be shared with the local community. Use the media and politicians to garner interest and support for continuing enhancement the programme. This should lead to another cycle of community needs assessment and engagement.

Figure 1:
Project Management Model



Practice pearls

Key issues

- Politics play a major role in the funding of many medical schools. The buy-in from the leadership of the government and the ministry of health is essential for successful implementation.
- One-time funding from unspent budgets in government departments at the end of the fiscal year is possible especially if there is evidence that this funding will offer a solution to a demonstrated need.
- Multi-year funding is more likely following repeated lobbying at all levels of government – municipal/town, provincial/state and national/federal. Medical organisations at each level are likely to be the most effective lobbyists – e.g. the local hospital lobbies the municipal government and the national government is more likely to pay attention to national medical organisations.
- Although senior bureaucrats/administrators report to the political minister of their departments, having them on side is important. Understand the working of bureaucracy – remember bureaucrats stay in the same department when ministers are reshuffled. Senior policy analysts and the secretary of state or privy councils are important people to convince of the value of rural-based medical education. Privy council are the brains of the cabinet and advises the ministers of the issues in the country.
- Be prepared to offer solutions to address problems. For example, training physicians to improve rural health care can maintain a healthy rural workforce leading to better productivity in the extraction of raw materials and in agriculture in rural areas; reducing urbanisation of population.
- Corporations with businesses in the local communities want a healthy workforce and are often willing to contribute financially to improve health care. They need to be persuaded with evidence that rural-based medical education will enhance the recruitment and retention of medical workforce and the betterment in the provision of health care.
- Large corporations have a large lobby in governments and can influence decision-making amongst politicians to support rural health infrastructure and financing.

What to do

- Engage local communities, health systems and governments.
- Do the research on rural health to show the health disparities in the country and how to address the disparities.
- Be opportunistic and arrange for the release of the publication of the research with press releases from the national medical organisation that can represent rural health. Politicians monitor the media.
- Use the office of local politicians, especially if they are in the governing party and have a cabinet position.
- Offer political gains for politicians; allow them the opportunity to announce funding and thank them in public.
- Provide the evidence for the need for a rural-based medical education and provide the potential solutions on how this can happen.
- Use personal stories to drive the point home – women (mothers) and children, especially in under-developed countries, tug at the heart.
- Solicit corporate partnership especially from corporations that have interests in the rural region and lever their contributions for other funds.
- Engage the CEOs of the major corporations to lobby governments for funding of rural medical education to meet the needs for medical workforce.
- Diversify funding sources – governments, research funds, private sectors and charities.
- Set up charitable status through a foundation to encourage corporate and private donations.

What not to do

- Do not ask for less than needed but at the same time be realistic.
- Do not bring up issues without potential solutions.
- Do not be afraid to ask.

Conclusion

A medical school has a mandate to be socially accountable to the funders and the population where it is located. Medical training can be successful if it is associated with an effective health care system - and an effective health system is dependant on successful medical training programme.

When seeking funding for a rural-based medical education, provide evidence of health disparities in the rural population, and of how enhancing the health of rural population can enhance the economy of the country. Offer rural-based medical education as a solution to address health disparities.

References

1. Figueras H, McKee M (eds.). *Health systems, health, wealth and societal well-being. Assessing the case for investing in health systems.* New York: Open University Press; 2012.
2. Ebert RH, Ginzberg E. The reform of medical education. *Health Affairs* 1988; 7(2): 5-38
3. Henderson T. *Implementation and financing: Growing the McLennan county medical education and Research Foundation (McMERF).* A Case Study for Panel Discussion at Third National Conference on Primary Care.1997. Washington,DC. 01f21cf.netsolhost.com/model/gradu/McLennan/implementation_and_financing.htm (accessed 16 February 2013).
4. World Health Organization. *Pre-service training for the Integrated Management of Childhood Illness (IMCI): report of an informal consultation*. Geneva, 1998. www.who.int/child-adolescent-health/New_Publications/IMCI/Reports/Report-Informal_Consultation_1998.htm (accessed 16 February 2013).
5. World Health Organization. *Report of an intercountry training workshop on IMCI pre-service training*. Geneva, 1999. www.who.int/child-adolescent-health/New_Publications/IMCI/Reports/Report-Intercountry_Workshop_1999.htm (accessed 16 February 2013).
6. Harare, World Health Organization Regional Office for Africa, Integrated Management of Childhood Illness (IMCI) Unit. *IMCI pre-service training review and planning meeting*. Harare, 2002. www.afro.who.int/imci/reports/pre-service_training_review_report.pdf (accessed 16 February 2013).
7. World Health Organization Regional Office for the Eastern Mediterranean. *IMCI pre-service training*. Cairo, World Health Organization Regional Office for the Eastern Mediterranean, Child and Adolescent Health and Development, 2004. www.emro.who.int/cah/PreServiceEducation-IMCI.htm (accessed 13 February 2013).

Further reading

1. Kutzin J. *Health financing policy: a guide for decision-makers.* Health Financing Policy Paper, Division of Country Health Systems. World Health Organization Europe. 1, 2001.
2. World Health Organisation. *The World Health Report: Health systems financing: The path to universal coverage*. Switzerland, 2010.

This article is a chapter from the ***WONCA Rural Medical Education Guidebook***.
It is available from www.globalfamilydoctor.com.

Published by:
WONCA Working Party on Rural Practice
World Organization of Family Doctors (WONCA)
12A-05 Chartered Square Building
152 North Sathon Road
Silom, Bangrak
Bangkok 10500
THAILAND

manager@wonca.net

© Jong M, 2014.

The author has granted the World Organization of Family Doctors (WONCA) and the WONCA Working Party on Rural Practice permission for the reproduction of this chapter.

The views expressed in this chapter are those of the author and do not necessarily reflect the views and policies of the World Organization of Family Doctors (WONCA) and the WONCA Working Party on Rural Practice. Every effort has been made to ensure that the information in this chapter is accurate. This does not diminish the requirement to exercise clinical judgement, and neither the publisher nor the authors can accept any responsibility for its use in practice.

Requests for permission to reproduce or translate WONCA publications for commercial use or distribution should be addressed to the WONCA Secretariat at the address above.

Suggested citation: Jong M. Health systems and funding of rural-based medical education. In Chater AB, Rourke J, Couper ID, Strasser RP, Reid S (eds.) *WONCA Rural Medical Education Guidebook.* World Organization of Family Doctors (WONCA): WONCA Working Party on Rural Practice, 2014. www.globalfamilyldoctor.com (accessed [date]).