One in four New Zealanders live in rural areas or small towns, and there is a greater percentage of children, older people and Māori living in these areas. One in five New Zealanders are served by one of the 33 rural hospitals in New Zealand. Almost 1 in 10 New Zealanders live in highly rural or remote areas, or rural areas with low urban influence. Therefore a substantial part of our population is served by hospitals that are non-urban and non-tertiary.

Despite this substantial presence, a rural-urban disparity exists in many aspects of healthcare today. And despite this disparity, the sector of medical practice represented by small base hospitals and provincial or rural centres tends to be under-represented in medical literature, professional networking, and educational and clinical resourcing. Rural hospitals have been under threat due to a focus on urban-based policy, funding and service planning, and desire for centralisation of services. Perhaps on the assumption that tertiary or urban practice represents a ‘gold-standard’, there can also be an assumption that improving practice is a one-way street with new learnings trickling down from large academic centres to smaller centres.

We would suggest that this is not the case. Non-urban medical practice, and indeed non-teaching-hospital education, are not scaled down versions of their urban counterparts, but rather speciality domains in their own right. When the health system is under pressure and there is a focus on minimising wastefulness and curating best practice across the whole healthcare system, there is much to be learned from provincial and rural practice. Wisdom is a two-way street and the constraints of distance, equipment, facilities and staff that affect these centres also lend themselves to creative and resourceful solutions to healthcare that can inform best practice for everyone involved.

Two papers in this issue of the New Zealand Medical Journal demonstrate these issues well. Fagan et al demonstrate that the management of acute sigmoid volvulus in a provincial centre is safe, timely and clinically appropriate. Although hampered by a lack of flexible endoscopy resources, overall surgical outcomes in the patient cohort treated largely using rigid sigmoidoscopic decompression followed by early sigmoid colectomy were associated with low complications and mortality.

Miller et al describe the use of troponin testing and accelerated diagnostic protocols (ADPs) for chest pain in rural New Zealand. ADPs have been universally adopted by urban emergency departments in New Zealand, however their validity in rural centres with point-of-care troponin tests is actually unknown. Expecting that the trickle-down of urban emergency medicine can be a solution for rural practice is highly problematic and may be risky for patients when clinical resources differ. The solution here will lie in rurally focused research into an ADP designed specifically for rural use with point-of-care troponin testing.

Rural and provincial research faces many of the same obstacles that clinical teams face, with fragmented and dispersed rural hospitals lacking a formal research network. Research networking is essential.
for disseminating and sharing knowledge, meeting local population health needs and promoting appropriate non-urban health policies.\(^5\) This has been slowly recognised and an informal ‘Rural Hospital Research Network’ has been organised through the Rural Health Academic Centre Ashburton.\(^6\) However, practical challenges remain, as identified by Miller, such as maintaining and supporting a database of stable research contacts from within the rural hospital workforce. Solutions here may mirror rural education in using online virtual campuses and videoconferencing to link networks together. The University of Otago Rural Postgraduate Programme has been using these methods to deliver postgraduate training in rural hospital medicine across New Zealand and into the Pacific.\(^7\)

For one in four New Zealanders their healthcare journeys will begin in smaller centres. Although each hospital may be relatively small compared to larger urban counterparts, collectively they comprise a significant part of the daily healthcare provided to New Zealanders. Greater involvement of rural and provincial providers in health research will increase visibility of these journeys, build collaborative academic, educational and clinical networks, and allow research data to be translated back into clinical practice for all.

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Nil.

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**REFERENCES:**


policies in 8 high-income countries. Health Policy. 2016; 120(7):758–69.


