A tale of two cities: academic service, research, teaching and community practice partnerships delivering for disadvantaged Australian communities

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ABSTRACT

- An innovative team approach and integration of care across sectors, including general practices, community health services, allied health professionals and hospitals, can deliver high-quality comprehensive care in disadvantaged areas while providing teaching and research opportunities and community service.
- Academic general practice departments are committed to supporting and evaluating such models.
- A governance infrastructure that encourages strong partnerships across health care sectors is essential.
- With broad health partnership support, bulk-billing is viable in an Australian general practice team model providing health care to the disadvantaged.

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Universities are about three things — teaching, research and community service. Community service is the least measured of these and, for many universities, the most troublesome to deliver. We describe two examples in very different cities, where establishing a university general practice has shown excellence in community service, met the goal of research through the evaluation of new models of care and delivered multiprofessional teaching for students and vocational trainees.

General practice internationally is reshaping itself to take a more central coordinating role in increasingly complex health care sectors. A systematic review of primary health care models observed:

> In response to the growing evidence-base supporting primary health care . . . a number of countries have embarked on significant primary health care reforms . . . challenges being experienced are:
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> • an increased proportion of gross domestic product (GDP) spending on health and inappropriate use of hospital services for ambulatory care sensitive conditions;
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> • the ageing of populations and an increasing burden of chronic disease . . . ;
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> • problems with inequitable access to primary care services . . . ; and
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> • a lack of integration of primary care services with other parts of the health system . . .[1]

Taking up the challenge

We describe the approaches piloted by academic practices of the University of Newcastle (Box 1) and University of Queensland (Box 2) in taking up the challenges identified in that review. These approaches meet the review's challenges to the "new" primary care[1] in the ways described below.

Lack of integration within the health system and inappropriate use of tertiary services

Cessnock Uni-Clinic provides the clinical environment to develop extended roles for women's health nurses, practice/triage nurses, dietitians, mental health and drug and alcohol nurses, and other non-medical primary health care providers. The New South Wales Health Integrated Primary Health Care and Community Services Program (IPHCCSP; <http://www.health.nsw.gov.au/pubs/2005/integrated_phcc_eoi.pdf>) sees Cessnock as a lead site and integration is now proceeding well.

The Inala Chronic Disease Management Service identifies the opportunities available when local health services adopt integrated models of clinical care, information exchange, professional development and governance. Its clinicians will take a greater role in coordination of care, insulin management, onsite screening for diabetic retinopathy, and management of early chronic renal failure.

Need to manage an ageing population with increased prevalence of chronic disease

The Cessnock clinic offers diabetes care plans, asthma care plans, vaccination clinics, aged health assessments, case conferencing, chronic disease management plans, mental health assessments and counselling, and men's health and women's health clinics. Because of its success, the building has recently been tripled in size, allowing a much-needed increase in staff numbers and ability to deliver services.

Inala Primary Care has a strong focus on a broader health care team, care planning across biopsychosocial aspects of care, and patient self-efficacy. Staff are involved in advanced training by means of flexible modules from the University of Queensland Master of Medicine (General Practice) and nursing programs.

Increased need for health promotion, disease prevention and early intervention

Inala Primary Care uses the Australian Government Department of Health and Ageing's "Lifescripts" lifestyle intervention[11] and a motivational counselling approach with its GPs and practice nurses. It also actively identifies those at risk of lifestyle-related illness for group, individual or family sessions with the Inala Chronic Disease Management Service team or the community health service.

Historical inability of general practice to address comprehensive community need

Cessnock Uni-Clinic used a general practice model to tackle the problems of inequitable access to health care within a disadvantaged community. It approached the problem of small practice size by creating a multidisciplinary team of health professionals who apply their unique skills where they are truly appropriate. Integra-

1 University of Newcastle approach: Cessnock Uni-Clinic

Cessnock has some of the worst health and socioeconomic indicators in Australia.[2] The rate of diabetes in Cessnock is among the highest in New South Wales.[3] It has the highest premature rate of death from heart disease in NSW and nationally, as well as very high rates of mental health, drug and alcohol problems, teenage pregnancies and single parenthood.[3] Unemployment rates are higher than the state average, with a rate for 15–19-year-old males of 29.8%.[4] In 2004, Cessnock had around one general practitioner per 2850 population, and an ongoing reduction over 30 years in the number of GPs had created major local problems with access to care.

In 2003, NSW Health made available a grant of $700 000 to build a new GP facility in Cessnock, with funds to be expended by June 2004. In August 2003, a call for expressions of interest to run the primary care service in the building that had been proposed was placed by Hunter Area Health Service. As none were received, the University of Newcastle became involved.

While teaching and research at the Cessnock Uni-Clinic are very important, they were not in themselves reasons for becoming involved in running a general practice. However, when the Faculty of Health's strategic goal of new models of care was included, there was an opportunity to see if problems of access, sustainability and quality of care in this extremely disadvantaged community could be overcome, while delivering the University's goal of excellence in community service.

Partnerships with other organisations were considered. The University's solicitor provided an opinion on the *Health Insurance Act 1973* (Cwlth) and advised on the most appropriate legal structure. The governance structure of the clinic is a not-for-profit trust (Cessnock Uni-Clinic Trust), with a controlled entity of the University (Hunter Uni-Clinics) as trustee. The trust deed proscribes that income generated by the Trust must be directed toward health promotion activities, including teaching and research.

The Uni-Clinic model is a novel "one clinic, one team" approach to primary health care, with services delivered by multiprofessional teams under the leadership of GPs. The clinic was welcomed by the community, and its hours of 9 am to 5 pm on weekdays saw its full capacity readily absorbed by patient demand.

Cessnock Uni-Clinic celebrated its second anniversary in October 2006. At this time, it had over 7000 patients registered and had:

- provided over 66 460 medical services in 43 222 patient visits;
- commenced comprehensive care for over 200 patients with diabetes;
- identified and managed 290 patients with asthma;
- conducted comprehensive health care plans for more than 521 citizens aged over 75 years;
- provided 139 dietitian services;
- completed more than 1357 cervical cancer Pap smears;
- provided 111 clinical placements for University of Newcastle medical, nursing and dietetics students;
- a full-time equivalent staff of two GPs (who also provide weekend and night cover through the hospital), two general practice registrars, 2.1 advanced practice nurses, one triage nurse, one women's health nurse, 0.6 midwives, one dietitian, one operations director, one administration manager and 3.8 receptionists.

All staff are salaried. The clinic receives no subsidies.

We see Cessnock as a health care delivery laboratory and have made every detail of its operation widely available. It has drawn widespread approbation from the community, health care professionals, federal and state governments, and at conferences.[5,6] The question we set out to answer has been answered successfully. By using GPs as team leaders, reserving their high-order skills for where they are truly needed, we have demonstrated a viable and sustainable model of care for areas that find it difficult to recruit health care professionals and deliver health care. ◆

tion of primary care services with other parts of the health system has been stimulated by the IPHCCSP, and relationships and joint programs are being developed with the community services of Hunter New England Area Health Service. Integration of some services, such as palliative and diabetes care, is already working well, and integration of others is being explored through a combination of virtual integration and collocation.

Programs such as the Inala Chronic Disease Management Service have established formal care delivery linkage for local general practices with both community health and public hospital services.

Workforce shortage and maldistribution

Cessnock Uni-Clinic has created a thriving general practice presence in a health service void. The Inala approach has allowed a chronically understaffed outer urban general practice to reach full staffing potential in 2007. The reorientation of triage and chronic disease management services around a model of partnered clinical management between doctors and nurses has encouraged and invigorated all clinicians to focus on an accessible, evidence-based care model. These successes reinforce the experience of programs such as More Allied Health Services (MAHS), which have demonstrated an ability to attract health care workers to difficult areas by offering role flexibility and innovative models of practice.[12]

Exemplars of innovative practice are possible only where local vision, leadership, and clinician and community commitment allow them to gestate and grow.[13] The historical "disconnect" between general practice, acute care and community health services results in a fragmented, inefficient system that serves patients poorly. Redressing this arrangement requires political will and leadership, clear organisational roles and responsibilities, a commitment to services orientated around community need, and local integrated governance arrangements.[13]

System barriers

The difficulties stemming from Australia's system of health care funding and delivery being divided among federal and state governments are much reported.[14,15] A number of settings have now been able to overcome these challenges[16] and many more could follow suit with the cultural changes described above.

The *Health Insurance Act 1973* (Cwlth) was groundbreaking in its day. However, it was written for a model of practice that is no longer appropriate 30 years later. Over the years, there have been many amendments, but its continuing literal interpretation remains a substantial impediment to the delivery of multiprofessional health care in 2007.

Effective evaluation of change in practice across community and hospital sectors, and the impact of such change on both consumers

2 University of Queensland approach: Inala Primary Care

In 2003, the University of Queensland (UQ) became involved in an integrated service delivery initiative — the Brisbane South Centre for Health Service Integration (BSCHSI) — involving Queensland Health (QH), the Brisbane Inner South Division of General Practice and Mater Health Services, Brisbane. This involved a collocation of key personnel from each organisation, supported by a validated set of integration strategies designed to develop a unified health care culture.[7-9] This approach highlighted important challenges for general practice in building on the success of the initiative, and in 2005, the BSCHSI partners supported an expanded framework for general practice to further develop its capacity to support local communities. The Brisbane South Comprehensive Primary Care Network Model[10] identified the characteristics of an integrated general practice/primary care network able to respond to the challenges and opportunities ahead in the Australian health care system (Figure). The model was deliverable through private general practice or through a standalone community health/general practice setting.

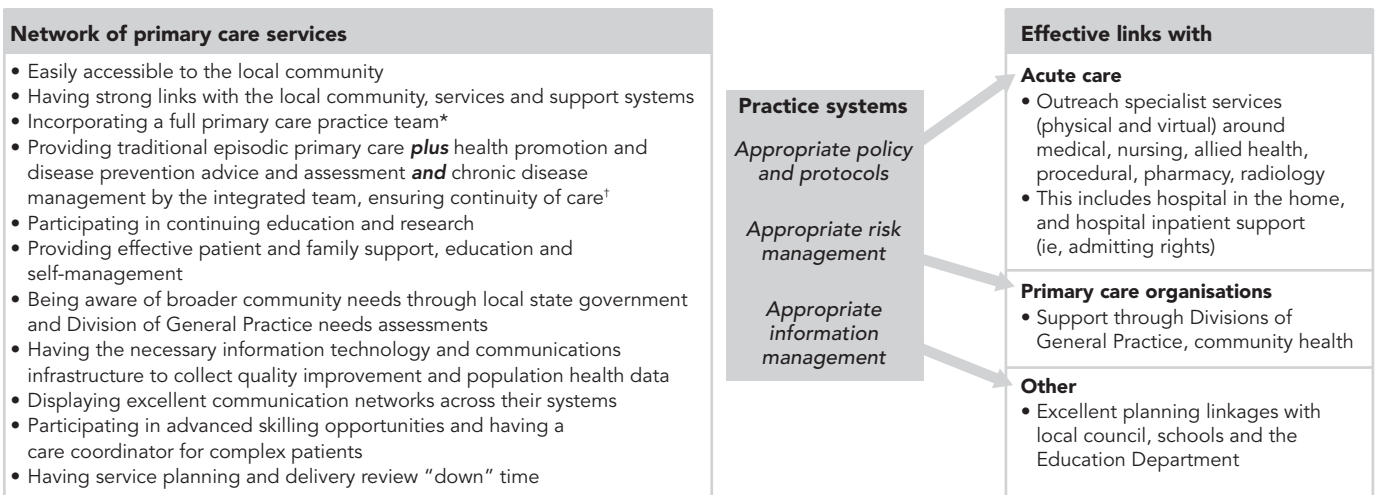
In 2006, the UQ and QH resolved to convert an existing QH-funded, UQ-staffed general practice in Inala to such a model. Data from the 2001 Census for Inala recorded about a third of the population as having been born overseas, with only 64% speaking English at home. The vast majority of the population (85.7%) did not have a qualification and 20% were unemployed. A third of households (33.1%) comprised single-parent families, and the median income for people aged 15 years and over was $200–$299 per week.

Inala Primary Care is now a private not-for-profit company limited by guarantee, with a Board of seven directors comprising two QH and two UQ nominees, a community representative and two independent directors. Its mission is to deliver and evaluate the new model of primary care for the optimal health benefit of its underprivileged community in Brisbane South. Currently, Inala Primary Care employs 2.3 full-time equivalent (FTE) general practitioners, one full-time and two part-time general practice registrars, 2.6 FTE nurses, three FTE administration staff, and a chief executive officer/practice manager, as well as 2–3 medical students per 2-month rotation. The clinic is open from 8am to 5pm every weekday except public holidays; weekends are covered by an after-hours service that includes home visits. Medical staff are salaried, with all revenue derived from Medicare bulk-billing, Practice Incentives Program payments and Service Incentive Payments, and teaching subsidies. Inala Primary Care is not subsidised by the University.

Inala Primary Care
Excellence in General Practice

This year, in partnership with the Endocrinology Department outpatient clinic at Princess Alexandra Hospital, Inala Primary Care is developing a $1.8 million pilot of a community-based tertiary care service for local patients with diabetes, based around enhanced primary care capacity building, integrated care protocols and "virtual" tertiary support. The Inala Chronic Disease Management Service will work with local general practices, Indigenous health services, community health and the hospital outpatient department to improve the quality of life for local patients with diabetes.

Brisbane South Comprehensive Primary Care Network Model



* Medical, nursing, allied health and practice management; may be private, salaried, corporate, public or a mix.
† This approach is preferably delivered through patient linkage to the practice (ie, patients consenting to receive this element of their care from Inala Primary Care rather than numerous practices) for chronic disease management, health promotion and disease prevention activities (predicated by patient consent). ◆

and the health care system, is sadly lacking in Australia. Queensland Health has recently moved to redress this, with one of the criteria for the multimillion-dollar state innovation grants being the requirement to have methods robust enough for publication.[17] Academic departments should be strong partners in such projects.

System enablers

Clinicians and communities are thirsty for better coordinated and more easily accessible care.[14] Creating incentives — clinical, organisational, and business-related — that encourage efficient integrated approaches to patients and communities would be an excellent start. General practice sees nearly 90% of the Australian community each year;[18] no other setting or service group can achieve this level of contact. Better use of general practice as the "hub" for other community and acute care "spokes" would allow more efficient use of scarce resources in both the public and private health sectors. The broadening team of health care workers in many practices now allows a much broader scope of preventive

and comprehensive care in general practice than has been previously possible.

Principles of engagement

To make such changes happen in general practice, we need to examine the commonalities at both University practice sites. These were:

- a focus on important community health needs;
- matching service style to the available workforce, the broader health environment and an evidence basis for effective care;
- carefully managing the change process with practice personnel and local stakeholders;
- taking time to choose the right clinical model of care, communication infrastructure, professional training, and governance arrangements to make the innovation a sustained reality;
- measuring and reviewing progress and deliverables regularly; and
- being bold, well researched and relevant to the local communities.

While changing approaches to general practice are unfolding across Australia, the innovative models of practice described in this article demonstrate both the commitment of academic general practice departments to support such initiatives, and their special abilities to incubate the changes and measure their impact. Academic general practices are ideal vehicles for piloting and formally evaluating new models of primary care. They must be brave enough to push the barricades over, ever vigilant to work in partnership with local practices, and willing to share the benefits of good research in the crucial area of service delivery with the Australian and international communities.

Competing interests

John Marley is a Director of Hunter Uni-Clinics, the trustee for the Cessnock Uni-Clinic. Claire Jackson is a board member of Inala Primary Care.

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