

Developing solutions to the provision of primary care services in rural and remote Queensland

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INTRODUCTION

In 2003 Health Workforce Queensland (formerly known as the Queensland Rural Medical Support Agency), undertook a research project to understand why rural and remote Australia, and Queensland in particular, is experiencing a medical workforce shortage, and how this shortage impacts on communities and health professionals, in order to develop solutions to support sustainable rural practice.

The methodology employed in the execution of this project included:

- An extensive literature review
- Industry scoping, compilation and analysis of current models of primary medical care, and workshopped with key stakeholders
- Synthesis of information to develop principles for sustainable primary care and new models of service delivery

This paper will draw on the key findings of the policy paper, *Solutions to the Provision of Primary Care Services to Rural and Remote Communities in Queensland*¹, and will briefly describe the historical and current factors contributing to the rural medical workforce shortage, its impact on community well-being and service provision, and identified strategies to improve sustainable service delivery based on a planning framework. Two case studies are presented where Health Workforce Queensland has worked with two Shires and local health service providers in the development of new models of service delivery.

Why is there a rural medical workforce shortage?

The trigger for the rural crisis was a result of the convergence of federal government policies in the early 1990s that sought to address the oversupply of general practitioners (GPs) in metropolitan areas through restricting medical student intake, reducing GP training places, applying provider number restrictions to overseas trained doctors, and limiting the issue of provider numbers to doctors participating in or completed a vocational training program.²

These measures limited the supply of medical practitioners in Australia, and had some impact on the distribution of the medical workforce in rural and remote areas with the number of doctors working in these areas increasing by 11%.³ However there continues to be a maldistribution of the medical workforce and workforce shortages, concurrent with a high turnover of doctors in rural and remote Queensland and other states.

There have been a number of studies and reviews identifying factors that contribute to the ongoing shortage of primary care doctors in rural and remote areas, as well as regional areas. The most notable supply side factors are the ageing of the workforce⁴, changes in participation (measured by hours worked per week) and the increase in female participation. Other factors

are emerging that have an “upstream” impact on choosing general practice as a career. These include poor image of general practice and rural practice, consideration for the needs of spouse and family, satisfaction with vocational training, and changing attitudes to owning a practice.⁵

The impact of the rural and remote medical workforce shortage is seen at many levels. It affects the viability of rural communities⁶, the health status of communities⁷, continuity of patient care, viability of the doctor, placement of doctors with little orientation to the environment they are working in, quality of care, training and supervision of junior doctors, reduction in access to procedural services, viability of a health service and access to other health professionals.

Evidence that undergraduate rural training, postgraduate training and medical school entry criteria favouring rural students is associated with an increased likelihood of being a rural GP underpins recent university policies for preferential selection of students with a rural background as part of a long-term strategy to address the rural medical workforce shortage.

However, this is obviously only part of the solution as there continues to be a need to re-think service delivery models that address the factors of why doctors leave rural practice⁸ ie. heavy workload and on-call commitments, professional isolation, lack of professional development opportunities, and lack of locum relief. Family factors including opportunities for spouse employment and children’s education, and community resource factors are significant contributors to poor retention indicating that in addition to revised service delivery models community development action is also required.

MODELS TO ENHANCE SUSTAINABLE RURAL AND REMOTE PRACTICE

Development of planning matrix to assist model development

The project team developed a planning matrix to identify the core components to be addressed in further modelling to support sustainable rural and remote medical practice. Two matrices were developed. The first identified the core components required to support the professional factors for rural doctors. The core components (identified on the x axis) included recruitment, employment conditions, practice viability and support, relief and peer support, continuing medical education and training, and specialist and other health professional support. The second matrix identified the core components to address family and community factors. Many of the components identified in the matrices have application to other health professions.

The y-axis of the matrices set out the ‘level’ at which components could/should be addressed i.e., national, state, regional and community. In developing the matrices, the project team notionally identified state responsibilities to Health Workforce Queensland (QRMSA) and Queensland Health, and regional responsibilities to networks such as the Divisions of General Practice. Responsibilities at a community level have been identified as local government, community members, and community organisations. The detailed planning matrices are described in Appendix 1 and 2.

In developing practical solutions to support rural and remote general practice in Queensland, it is obvious that one size does not fit all. Solutions at a local level need to consider the current availability of medical and ancillary health professionals and determine the adequacy of such in terms of numbers of health professionals to provide services, their skill mix, and model of service delivery eg. hospital based, community based, medical model, primary health care model. In addition, access to administrative and management personnel within a community, capacity and willingness of local government to partner in the development and operation of

solutions, the geographical location of the community and access to secondary and tertiary care, and geographical location with respect to other communities, are some of the factors to be considered in developing local solutions.

In looking for solutions to sustainable primary care models the project team sought to:

- 1 Identify adaptations to existing models to enhance sustainability of service delivery
- 2 Develop new models for the provision of primary care services and apply these to “real world” situations.

Adaptations of existing models

The project team undertook a compilation of models currently operating in Australia, and developed adaptations to enhance sustainable service delivery. These strategies focused around practice ownership and management, reducing the burden of after hours, and mechanisms to increase the critical mass of doctors to continue to provide a range of procedural and primary care services, addressing identified factors contributing to poor recruitment and retention, and sustainable practice (Table 1).

Application of models to the real world

Health Workforce Queensland is currently working with a number of communities across Queensland to develop new models of primary care. This section describes two case studies where new models of service delivery are being developed, with particular emphasis on the process used.

CASE STUDY 1. DIAMANTINA SHIRE

Health service provision in very small remote communities in Queensland is usually focused around a nurse-run clinic with visiting general practice type medical services provided by the Royal Flying Doctor Service or a GP residing some distance away. The health clinics can be auspiced and managed by a Queensland Health District Health Service, or another agency. In locations where Queensland Health does not directly provide the service, it does contribute some funds for service provision and pharmacy. Over the last 2–3 years, Queensland has seen the withdrawal of some of these agencies from the management of remote clinics resulting in communities seeking other organisations to provide this remote nursing service.

The Diamantina Shire is in outback Queensland. Within the Diamantina Shire there are two communities separated by 200km of dirt road. Birdsville has a population of 160 and Bedourie has a population of 120. Indigenous Australians represent 40% of the Shire’s population. These communities experience a large influx of tourists during the winter months, with over 50 000 visitors passing through Birdsville each year.

The current health service within the Diamantina Shire is based on two primary health care clinics staffed by a remote area nurse in each of Birdsville and Bedourie, operated by a non-government organisation. The Birdsville clinic is designated as a 2 nurse clinic but difficulty in recruitment and retention over recent years has resulted in it often being staffed by only one nurse. The factors contributing to poor retention include prolonged periods of service without relief, difficulty in providing backfill for annual leave and study leave. The high turnover of nursing staff has impeded the development of effective systems within the clinic and development and implementation of health prevention and promotion programs.

Table 1 Overview of strategies to enhance sustainable rural and remote practice

Issue	Option	Adaptation
Practice Ownership and Management	Division of General Practice operating a practice management service or operating as a corporate General Practice	Division of General Practice contracts practice management services to individual practices and provides financial and human resource management services. Division of General Practice owns the practice, employs practice staff, GP contracted to provide services on a percentage basis. Practice building rented by Division.
	Community Controlled Health Service	Adaptation of Aboriginal community controlled. Incorporated community organisation owns and operates the medical/health service, governed by a Board of Directors. Opportunity to contract practice management services
	Reduction of After-Hours and On-call Commitment	Telephone Triage operated by Qld Ambulance Service
Reduction of After-Hours and On-call Commitment	Regional Telephone Triage	Regional telephone triage operated by QAS as first point of contact to assess calls and direct to appropriate service provider. Rural doctors subscribe to triage service, with callers directed to QAS, hospital nurse or doctor dependent on protocol
	Nurse triage training	Regional telephone triage staffed by either doctors or nurses, and uses clinical algorithms.
	Integrated after-hours across public/private interface	Hospital nurses trained in assessment, communication and decision making for front line after hours service provision
	Private GPs and salaried hospital doctors share common on-call roster, with private GPs paid a retainer by Qld Health to provide services, and hospital doctors able to access Medicare to provide services to private patients	
Increased critical mass of doctors to provide procedural services	Health District "employing" local GPs to provide hospital and procedural services	Health District "employs" local private GPs to provide hospital and procedural services by cashing out one or more hospital positions, enabling development of internal relief structures and removal of reliance on inexperienced junior relieving doctors, increased opportunities for private GPs to continue procedural services, availability of public procedural services not dependent on recruitment of salaried doctors with necessary skills.
	Targeted recruitment of salaried doctors with procedural skills	
Increasing critical mass of doctors to provide primary care to small communities	Establishment of satellite practice	Group practice in larger town provides service to small community (no doctor) on regular outreach basis working from a small branch practice staffed by a practice nurse, with clinical governance from group practice. Alternatively, solo doctor in small community, incorporated into overall practice structure with relief provided from group practice
	Rotation of doctors to small remote community	Medical officer position shared between 2 or more doctors working from a regional location and providing services to community on a fortnightly basis

Within the Diamantina Shire, a number of visiting health services operate from the clinics including Aboriginal Health Worker employed by the Central West Health Service District, fortnightly GP clinics (provided by the Royal Flying Doctor Service), Rural and Remote Women's Health Service, allied health services provided by North West Queensland Primary Health Care and the Central West Health Service District.

The Diamantina Shire Council were concerned with the continued provision of primary care nursing services within the Shire and approached Health Workforce Queensland for assistance in developing alternative solutions. The Diamantina Shire Council has invested in health at a local level through the contribution of takings from the Birdsville races toward a second nursing position in Birdsville, and through provision of maintenance to the Bedourie clinic. In 2003 the Shire Council successfully obtained funding to build a new clinic in Birdsville and two houses for nursing staff through the Commonwealth Regional Health Strategy and Regional Solutions Program respectively.

Health Workforce Queensland has worked with the Diamantina Shire and the Central West Health Service District to develop a new model for the delivery of primary health care services to the communities of Birdsville and Bedourie. Representatives from the three organisations collaborated to formulate a discussion paper outlining a model of service for the provision of primary health care based on the input from the community. The key differences in the new model to the previous model are that the two sites will be treated as one entity with sufficient nursing personnel (3.5 FTE) to provide internal relief, resource allocation for backfill for annual leave and professional development, a designated team leader located within the Shire (rather than being managed from a distance), and process for community engagement in the operation of the service ie negotiation of hours of operation, after hours response, flexibility in where services are provided.

The discussion paper reviewed possible funding streams to support the model including opportunities for cost recovery. A budget for the operation of the model, and governance and management options for the service were also described. The planning matrices have been applied to assist in operationalising the model, and identification of the roles and responsibilities of the various agencies.

The discussion paper was distributed to officers of the commonwealth and state health departments and current providers of visiting services to the Shire to review the model, costings, and governance processes.

The Diamantina Shire, represented by the Mayor, Councilor and CEO, in conjunction with Health Workforce Queensland, presented the model and discussion paper to the commonwealth and state health departments and are awaiting an outcome regarding funding opportunities, at the time of writing (end November 2004).

Health Workforce Queensland has assisted the Diamantina Shire develop an Expression of Interest and tender schedule for potential providers, and was advertised in late November 2004.

CASE STUDY 2. CLONCURRY

Currently in Queensland there are a number of communities that have fragile health services. An example is the community of Cloncurry. This town is the service centre of the Cloncurry Shire, and has a population of 3827 of which approximately 25% are Indigenous people. Cloncurry is 1.5 hours drive from the city of Mt Isa, which has a base hospital with resident and visiting specialist services. Cloncurry has a hospital with two designated positions, a Medical Superintendent with Right to Private Practice and a Medical Officer with Right to Private Practice. The hospital is a 20 bed facility. Occupancy rates are about 25% with most patients being short stay as it is a predominantly young community, however the accident and emergency department is busy with one nurse usually stationed there.

The Medical Superintendent and Medical Officer with Right to Private Practice operate the only general practice in the town. The general practice has 2 consulting rooms and a treatment area. Community based services in Cloncurry include community health nurse and Indigenous health worker, HACC service managed and delivered by a local Aboriginal Corporation, a private pharmacist, visiting allied health services provided by North West Queensland Primary Health Care and Mt Isa Health Service District. The Queensland Ambulance Service has 1 officer stationed in Cloncurry.

A large mine is located about 35 km north of Cloncurry, with an increasing number of staff residing locally rather than working on a fly-in fly-out basis.

The provision of general practice services in Cloncurry has been problematic for a number of years. In 1998, Health Workforce Queensland (then QRMSA) together with the Mt Isa Centre for Rural and Remote Health, James Cook University, Mt Isa Health Service District, and North and West Qld Primary Health Care (formerly Northern Qld Rural Division of General Practice), worked with the Cloncurry community to identify options for the development of sustainable general practice in the area. Whilst a significant amount of time and effort was dedicated by the various agencies to the development of alternative models a new model was never formally put in place.

Medical services in Cloncurry have continued to be provided by overseas trained doctors, most of whom have been on the 5 year program, but have little capacity to invest in private practice, and often limited experience in managing private practices. There has continued to be a high turnover of doctors in Cloncurry, with the problem coming to a head in late 2003 with resignation of the MSRPP without a replacement in place, and the second doctor resigning soon after. At the time the Mt Isa Health Service District and the local Division (North West Qld Primary Health Care) entered into a collaboration to continue to operate the practice using medical staff from the Mt Isa Hospital on a rotational basis.

In 2004, North West Queensland Primary Health Care, Health Workforce Queensland, Mt Isa Health Service District and the Mt Isa Centre for Rural and Remote Health convened a planning meeting and undertook a SWOT analysis of health services in the Cloncurry Shire. The outcome of the meeting was a range of strategies to support the immediate provision of medical services, together with a commitment and plan to develop a longer term solution.

The SWOT analysis identified that the current 2 doctor model was unsustainable, with doctors seeing 35–40 patients per day in the practice as well as having 3–4 hours of hospital based work each day. However, the current practice building provided no scope for increasing the number of doctors. The after-hours commitment was also burdensome at 1 in 2.

The analysis identified that the Mine wanted to ensure the continued provision of a quality medical service for its workers and their families, and that contract work with the Mine was an additional source of income to the general practice.

Following the meeting Health Workforce Queensland developed and costed two models for provision of medical services to Cloncurry. These models included:

- assessment of the number of doctors required to service the community
- identification of funding streams
- strategies for the provision of after hours
- strategies to support the solo doctor in the nearby town.

Cloncurry model

Financial analysis indicated that a community the size of Cloncurry would support four doctors. The additional doctors could either form part of a larger group practice together with the Medical Superintendent and Medical Officer with Right to Private Practice, or establish a second smaller general practice.

The preferred model is the development of a group practice with the capacity to train a GP registrar. The key features of the model included:

- 4 doctor practice (3 GPs and 1 registrar)
- practice building with at least 4 consulting rooms and a treatment area
- Queensland Health maintains its financial commitment to Cloncurry hospital including funding allocation for 2 medical positions (salary, oncosts and entitlements)
- the Cloncurry practice is employed or contracted to provide services to the hospital including outpatient, inpatient, emergency and on-call
- the general practice is a mixed billing practice, with additional income derived through contract work with the mine
- internal relief is provided within the practice for weekends, and draws on locums from HWQ for extended leave
- the practice employs 1 FTE practice nurse and 3.8 FTE receptionists, and 1 FTE practice manager
- hospital nurses are trained in triage, with doctors and nurses developing protocols for calling in doctors after-hours.

Progress of the model

Health Workforce Queensland has negotiated with a corporate general practice organisation with focus on workplace health and safety services, to undertake the management of the group general practice, contracting an experienced GP as the Medical Director, and Practice Manager to run and operate this practice, and several others in the region. A building is being refurbished and will be leased by the corporate entity.

The current doctors working as MSRPP and MORPP will provide general practice services from the new facility. The group practice has applied to become a training practice and will have a registrar in mid 2005. After-hours and on-call will initially be a 1 in 3, moving to 1 in 4 when the Registrar is placed.

Strengths of the model

This model addresses a number of the barriers to sustainable rural practice. It is seeking to remove the ownership of the building and practice from the doctors to another entity, and provides practice management expertise that includes the recruitment and training of clerical staff, to support the continued operation of the practice even when doctors relocate. The model develops a critical mass of doctors to reduce on-call burden and allow internal relief within the practice for week-end and days off cover, and has capacity for local training and succession planning. The model maintains the commitment of the local Health Service District to the

provision of medical services which underpins or underwrites the capacity to expand services. It also formalises a commitment from local industry to the continued provision of health services.

Lessons learned

These case studies demonstrate that solutions to improve the sustainability of health services in rural and remote areas hinge on collaboration and partnerships between communities, state and commonwealth funded service providers, and support agencies.

It is recognised that each community, or cluster of communities, have unique circumstances that must be considered in the development of new models of service delivery, with funders able to accommodate flexibility in order to develop and implement solutions.

RECOMMENDATIONS

A number of recommendations were developed as a result of the research project undertaken by Health Workforce Queensland in 2003 to support sustainable health service delivery in rural and remote Queensland, and appear in full in the policy report. The following recommendations are a subset relating to the case studies described in this paper:

Recommendation 1: Communities are central to decision making regarding the type and mechanism of health service delivery to meet local need and priorities. Communities are supported to make these decisions by drawing on the expertise available from agencies including local Divisions of General Practice, Rural Workforce Agency and district health services.

Recommendation 2: The artificial boundaries created by state and federal health funding are removed to promote more efficient, effective and sustainable models of health service delivery in rural and remote areas.

Recommendation 3: As a follow on to Recommendation 2, Medicare is reviewed to remunerate hospital nurses to triage and support private general practitioners in the provision of after hours care in rural and remote areas.

Recommendation 4: Health professionals that support and extend the role of the general practitioner are appropriately remunerated through Medicare by specific item numbers or practice item numbers in rural and remote areas.

Recommendation 5: Restructuring of health services funded and delivered by either state or commonwealth governments are underpinned by the principles of community participation, equity, sustainability and quality.

Recommendation 6: As Australia will continue to rely on overseas trained doctors for primary care service delivery in rural and remote areas in the foreseeable future, sponsoring organisations will implement international best practice recruiting processes, undertake skills assessment and seek to match the doctor and family to a community. In addition, the length of bonded service in remote communities is inversely proportional to the isolation of the community.

Recommendation 7: Develop mechanisms or tools to assess the aptitude of Australian and overseas trained doctors for rural and remote practice, and cross-cultural adaptability of the doctor and family.

Recommendation 8: Implementation of initiatives to promote the recruitment and retention of a multi-disciplinary health team inclusive of nurses and allied health professionals, drawing on the literature and evaluation of the North and West Queensland Allied Health Service⁹, which included working in functional teams; line management by a health professional; access to professional development and cross-cultural training; remuneration package that includes financial reward relevant to complexity and responsibility of isolated practice, accommodation subsidy, relocation expenses, annual repatriation to designated “home”; professional mentoring

Recommendation 9: Development and implementation of alternative practitioner models such as physician assistant to extend the care provided by a general practitioner/primary care doctor. The development of this new profession in Australia requires resources to develop curriculum and pilot programs, and introduction of legislation to describe the role and responsibility of the profession.

APPENDIX 1: PLANNING MATRIX – PROFESSIONAL FACTORS

Level	Recruitment	Employment conditions	Practice Viability/support	Relief/Peer Support	CME/Training	Specialist and other health professional support
National	<p>Overseas trained doctors (OTDs):</p> <p>Adopt international recruitment best practice processes (see Wolfe 2001)</p> <p>Clarify/standardise methodology for placement (OTD) and residency status</p> <p>Australian doctors:</p> <p>Selection into training program – consideration of aptitude for rural practice</p> <p>Incentives for rural practice developed – OTDs eg residency/provider number; Aust HECs debt, specialist training place, professional exchange programs</p> <p>Strategic marketing of rural practice to medical students, PGY1–3</p> <p>Minimum level of GP and procedural services benchmarked (and maintained) against community with consideration of morbidity, catchment population and remoteness</p>	<p>Temporary Resident Doctors (TRDs) – removal of ambiguities eg immigration, credit arrangements, school fees, Medicare access, clarified and promoted</p> <p>Remuneration package includes:</p> <ul style="list-style-type: none"> • Relocation expenses • Leave isolation • Housing subsidy • Communications subsidy • 1 paid activity/yr • childcare/nanny subsidy • Mentoring • Maternity/paternity leave • Assistance with indemnity premium <p>OTDs and bonded scholarship holders duration of bonded stay isolation</p> <p>Procedural skills maintenance incentive</p> <p>After hours, reconfigure PIP to pay dr</p>	<p>Electronic health records/ HealthConnect supports:</p> <p>shared care</p> <p>shared on-call streamline retrieval processes</p> <p>Recognition of role of practice nurse, interpretation of EPC items</p> <p>Practice nurse item number or practice item number</p> <p>Rural item numbers</p> <p>Professional indemnity reforms</p> <p>Remuneration for red tape</p> <p>Capitalisation (practice establishment and GPs retiring)</p>	<p>Increased flexibility of Rural Locum Relief program eg regional locum backfill in provincial area</p> <p>Skills assessment of locums including TRDs and Junior House Officers (JHOs)</p> <p>Cultural awareness training – Indigenous and rural/remote</p>	<p>Learning plans/contracts in conjunction with ACCRM, RACGP eg procedural skills, fellowships</p> <p>Assessment of new docs/ TRDs/OTDs but need to train assessors and have them accredited</p> <p>CME/training modules include Australian medical system, HIC, Workcover etc</p> <p>Language assessment/ communication skills</p> <p>Flexibility of RACGP/ ACCRM program relevant to local/regional level</p> <p>Supporting attainment of FRACGP (OTD/TRD)</p> <p>Supporting Indigenous health professionals/workers</p>	<p>Training program exposure to rural and remote</p> <p>Specialist as training provider</p> <p>Alternative practitioners and clinical governance models to assist in meeting worldwide medical shortage</p> <p>Alternative practice models – curriculum development</p> <p>Course accreditation</p>

Level	Recruitment	Employment conditions	Practice Viability/support	Relief/Peer Support	CME/Training	Specialist and other health professional support
State	<p>Medical Board registration</p> <p>Mandatory cultural awareness training (Indigenous and rural)</p> <p>Skills assessment</p> <p>Skills match to community</p> <p>Skills development to meet community need</p> <p>Recruitment philosophy – flexibility</p> <p>Supervised training</p> <p>Assist with HIC registration</p>	<p>State/regional management of after hours/on-call eg. QAS triage to manage after hours</p>	<p>Infrastructure – access to pathology, radiology</p>	<p>Maintenance of adequate locum pool</p> <p>Affordability</p> <p>PGY2 and 3–6 months locum in general practice in supervised environment</p>	<p>Procedural skills training/ placements offered at regional level</p> <p>Train the trainer:</p> <ul style="list-style-type: none"> • Facilitators of training sessions • GP supervisors <p>Time allocation for CME/PD, for participants and presenters</p> <p>Individual learning personalised and localised</p> <p>Linkage to mentors</p> <p>Use Medical Education Officers to support and advocate for PGY1,2 and 3 to ensure balance between training and service delivery, and supervision during relieving terms (PGY 2 and 3)</p>	<p>Telehealth as a viable means of specialist support</p> <p>Centralised electronic bookings for specialists and visiting services</p> <p>MEOs/discipline training resource for JHOs in larger hospitals</p> <p>Joint training opportunities for medical students, nursing and allied health professions to build concept of multi-disciplinary teams</p> <p>Legislation to recognise and define roles of alternative practitioners eg physician assistants, nurse practitioners</p> <p>Development of awards and salary scales for alternative practitioners</p> <p>Development of Medical preceptor program to support alternative practitioner models</p>

Level	Recruitment	Employment conditions	Practice Viability/support	Relief/Peer Support	CME/Training	Specialist and other health professional support
Regional	<p>Orientation to regional health services including primary, specialist, retrieval</p> <p>Participation in selection of health professionals</p> <p>Development of community and regional profiles for new doctors and health professionals</p>	<p>Job sharing</p> <p>Flexible work eg. registrars working across practices</p> <p>Rostering on-call across geog sites</p> <p>Regional after-hours triage and response service</p> <p>Training nurses to triage</p>	<p>Training practice staff – nurses, Indigenous Health Workers (IHWs,) reception (AAPM training)</p> <p>ITIM support</p> <p>Support development of crisis plan for Dr/practices</p> <p>Virtual practice management canvassed</p> <p>Division as corporate employer of practice staff</p> <p>Division assists doctors in negotiation of contracts with state health services</p> <p>Models have capacity for:</p> <p>Walk in/walk out</p> <p>Clustering</p> <p>Branch practices</p>	<p>Peer Support eg. "Chats over the Back Fence" teleconference network</p> <p>Regional locum/regular locum consistency for pts</p>	<p>Implement train the trainer "packaged" mobile modules from procedural workshops/ courses with blocks conducted for doctors, nurses, allied health professionals, ambulance officers ie health teams</p> <p>Develop electronic resource kits, on-line learning resources, flexible learning</p>	<p>MSOAP, MAHS, RHS – co-ordinate health teams locally</p> <p>Include RFDS, QAS in primary health teams</p> <p>Role of AHPs promoted</p> <p>Team building/working in teams</p> <p>Work with communities to identify health priorities and local needs</p>
Community	<p>Participation in selection</p> <p>On-site interviews</p> <p>Orientation</p> <p>Cultural awareness – Indigenous and rural, contextualised to local community</p> <p>Housing/accommodation</p> <p>Community education/ managing expectations on Dr</p>	<p>Shared on-call between dr and ambos</p> <p>On-call co-operatives within community</p> <p>Local ownership</p> <p>Local shire as employer</p>	<p>Ownership of building/ equipment (partner with Division)</p> <p>Accommodation</p>	<p>Offset transport/housing costs for locums</p>	<p>Flexible learning options</p> <p>PRVTS</p> <p>Training aligned with individual training needs</p> <p>Education incorporated into working hours</p> <p>Use QAS as training resource for doctors, nurses, health teams</p>	<p>Identification of local health priorities and health professional mix to meet need</p> <p>Educate community on role of allied health professionals and alternative practitioners</p> <p>Formalise community support eg CWA</p> <p>Health teams establish linkages with schools, school nurses, aged care, child care build primary health care processes</p>

Planning Matrix Rural Medical Workforce: Family Factors

Level	Recruitment	Viability of community/community resources
National	<p>Family part of recruitment process</p> <p>Implement international best practice Human resource management (including Oz families as rural/remote different culture)</p> <p>Include in on-site interviews</p> <p>Link with National Family networks</p> <p>Promote equal power relationship (partner not the handbag) ie 2 professionals with skills/attributes for community</p> <p>Cultural awareness training (Indigenous and rural) for partner and children</p>	
State	<p>Identify employment opportunities for partners across communities</p> <p>Skill match partner to community</p> <p>Career counselling/guidance for partner</p> <p>Identify training opportunities for partner (by distance)</p> <p>Advocacy</p>	<p>Lobby state education to improve quality of schooling in rural and remote, lobby with ICPA re:</p> <ul style="list-style-type: none"> • Preparing teachers for rural and remote placements • Cultural awareness • Videoconference links to city schools to broaden curriculum choices • Accelerated learning opportunities for identified students <p>Doctor and spouse health</p> <p>Develop strategies to support youth of professional service providers in rural and remote communities</p>
Regional	<p>Identify local employment opportunities</p> <p>Strategies to support work from home opportunities including IT/internet support</p> <p>IT training</p> <p>Link with local and existing networks including Rural Women's Network, ICPA, QRMFN</p>	<p>Regional community capacity building – linkages with DPI, Outback revival etc</p>
Community	<p>Community buddy</p> <p>Community hosts regular meet and greet for new people coming to town</p> <p>Cross cultural settlement education – for communities with overseas trained doctor and for doctor and family</p>	<p>Local community development to improve resources within communities including:</p> <p>Developing family day care/child care facility, nanny opportunities, emergency childcare rosters</p> <p>Employment of tutors for secondary school education/to support distance education for local children</p>

PRESENTERS

Kristine Battye has worked in health service planning, health systems analysis, project development and evaluation since 1994. Kristine started in this career with the advent of the Divisions of General Practice, and worked with the NSW Central West Division, the Townsville Division, and was Executive Officer of the North Qld Rural Division of General Practice from 1997 to 2000. Kristine started her own consultancy in early 2001. Her main areas of work have been in regional health service planning, project evaluations and rural workforce development. Kristine's qualifications include a Bachelor of Applied Science, PhD and MBA.

Sheilagh Cronin is a rural GP based in Longreach, Queensland. Dr Cronin has been involved in rural medical workforce development for the last 10 years through her board membership of a number of organisations, including the Qld Rural Divisions Co-ordinating Unit, the Qld Rural Medical Support Agency, the Australian Divisions of General Practice and the Central West Qld Rural Division of General Practice, and more recently in her role as the Medical Advisor to the Qld Rural Medical Support Agency. Dr Cronin continues to work in rural and remote practice, and provides clinics through the Rural and Remote Women's Health Service managed by the Royal Flying Doctor Service.

REFERENCES

- 1 Queensland Rural Medical Support Agency (2004). Solutions to the provision of primary care to rural and remote communities in Queensland. Brisbane:QRMSA.
- 2 Australia Medical Council (2001). Annual Report. Canberra: AMC.
- 3 Lennon B (2003) The overlapping roles of primary care physicians, general specialists and sub-specialists: An Australian Perspective. 7th International Medical Workforce Conference, Sept 11-14, Oxford UK.
- 4 Hirsh et al 2001, cited in Commonwealth Department of Health and Aged Care (2001). The Australian Medical Workforce. Occasional Papers: New Series No. 12, August 2001. Canberra: DHAC.
- 5 Australian Medical Workforce Advisory Committee (2003), Career decision making by doctors in vocational training, AMWAC Report 2003.2, Sydney.
- 6 Rural Doctors Association Australia (2003) Viable models of rural and remote practice. Stage 1 and Stage 2 report. RDAA, Canberra 2003.
- 7 Commonwealth Department of Health and Aged Care (2001). The Australian Medical Workforce. Occasional Papers: New Series No. 12, August 2001. Canberra: DHAC.
- 8 McDonald J, Bibby L, Carroll S (2002), Recruiting and retaining general practitioners in rural areas: Evidence based review: Final Report. University of Ballarat.
- 9 Stanley-Davies P, Battye K (2004) The Division with the Vision: Development of the North West Qld Allied Health Service by North and West Queensland Primary Health Care. Evaluation Stage 1. Townsville: NWQPHC.