This report describes a program initiated in 1992 to provide appropriate training for rural physicians and to address the shortage of physicians in rural Australia. Rural medical practice differs dramatically from urban practice in that there is limited access to specialist services in rural areas, thus requiring rural practitioners to be competent in delivery of secondary and tertiary medical care. It has been found that a physician that has not received adequate training to meet the needs of rural practice is likely to discontinue rural practice. Consequently, the shortage of rural medical personnel is most directly related to inadequate preparation for rural practice. To address this problem, advanced training curricula for rural medical practice were developed in anesthesiology, obstetrics, and surgery. The program established training posts at hospitals throughout rural Australia for trainees and for established rural doctors who wished further training. Currently, 33 posts are filled, 23 of them by Rural Training Stream trainees. The training consists of practical experience, a real-work situation, one-on-one teaching and consultation, and continuous trainee assessment and feedback. Program evaluation indicates that trainees and supervisors view the content of training as appropriate and realistic for the requirements of rural general practice. Other approaches to problems of appropriate rural medical training include the Rural Training Stream, which provides 4 years of medical education focused on developing skills and competencies for rural practice; the Directorate of Rural Education and Training, which facilitates rural medical training at all levels; and Rural Health Training Units, created to increase training opportunities for rural health professionals. Contains 23 references. (LP)
TRAINING FOR RURAL PRACTICE: THE WAY AHEAD

Thomas Doolan and Mrs Anna Nichols - Australia
The design and implementation of advanced training curricula for rural medical practice was initiated by RACGP (through its Faculty of Rural Medicine) in 1992 in three procedural disciplines - surgery, anaesthetics and obstetrics. Parallel with further curricula design, the first three curricula were implemented in 1993 and subjected to a national evaluation. This study, in conjunction with the establishment of the Directorate of Rural Education and Training (RACGP), has provided a unique opportunity to assess the implications of providing this type of program and the practical requirements of the training settings with respect to personnel, resources and support. This paper outlines the issues emerging from the first year of advanced training in accredited posts and what this will mean in terms of planning, organisation and support for the teaching setting.

INTRODUCTION

Over the past few years there has been a concentrated focus throughout Australia on rural communities and their health needs. The literature regarding these needs indicates major deficiencies in a number of areas, one of these being education and training opportunities for rural health professionals. Inadequate education and training have been clearly identified as key issues in recruitment and retention of rural doctors.

It has been observed that "if the doctor's training has not made him basically competent to meet the needs, it is unlikely that he will continue in rural practice", and further that "shortage of manpower in country areas is most directly related to inadequate preparation for rural practice". The Doherty Report has brought this shortage of rural doctors and problems with rural health services to the attention of the public and government.

In accordance with this, a review has recently been conducted to ensure that the National Rural Health Strategy is directed towards achieving optimal health for all people in rural and remote Australia. The Strategy looks at the identification of existing health services, and the extent to which they effectively meet rural health needs. Further, there is reference to ensuring that the particular skills and educational needs of rural health workers are met through adequate training and support programs. In terms of rural objectives, it is intended that there will be a fair distribution of health resources and equitable access to essential medical services for all rural Australians.

Rural practice is medical practice outside urban areas where the location of the practice means the doctor needs to have, or to acquire, procedural and other skills not usually required in urban practice. A good rural doctor must be a general practitioner sharing the clinical and consultation skills of an urban doctor. However, because of the limited access to specialist services in rural areas, rural practitioners must also be competent in the delivery of any secondary and tertiary care also required. There is now a clear recognition that rural practice is in fact different from urban practice, and requires a discrete set of knowledge and skills.

With the recognition of this major distinction between urban and rural practice came attention to appropriate solutions. One example is the observation made by Craig and Mudge that there is a need to develop a coordinated approach to:

- Recruit (identify and select) suitable candidates
- Identify and teach the skills required for competence (in rural practice)
- Teach those skills in context (in a setting which will foster confidence in their performance and promote interest in rural practice)
- Support existing (and future) rural practitioners to retain their services

Clearly there is also a need to nurture rural students in order to improve potential recruitment, considering that these students should be the best source of rural general practitioners. Previous studies have found that students from the country have a high likelihood of returning to practice in the country, but historically not many have applied or have been accepted into medical courses. Positive recruitment strategies by Rural Health Training Units in some states are beginning to reverse this situation, for example South Australia and Western Australia. Predominantly, rural general practitioners enjoy their work, but there is often dissatisfaction over protracted working hours and difficulties in finding locums. Procedural work is an important part of rural general practice and increased access to training opportunities in this area is necessary for undergraduates and graduates who wish to become rural general practitioners. Country life can provide good community support and status for a doctor as well as a challenging sense of professional independence. City general practitioners have developed from the country practitioner mould and shed their procedural skills. They have less accessibility to hospitals and may have less income but enjoy better facilities such as choice of education for their children and the availability of locums.

General practitioner to population ratios according to the RaRA Classification and based on 1992-93 Medicare data indicate progressive shortages in rural areas. The capital city and other urban ratios are around 1:1100, rural major 1:1300, rural other 1:1800, remote major and remote other 1:2000. When other factors such as the complex nature of medical services provided, dispersed pattern of rural populations and levels of morbidity in remote communities, the true extent and significance of the shortage becomes evident.

The identifiable rural doctor shortage in Australia is currently around five hundred, on the basis of advertised positions and other recognised situations of need. If the shortage is considered from the perspective of rural general practitioner to population ratios, it assumes even greater proportions. Better undergraduate and vocational training of the rural medical work force may eventually provide rural Australians with adequately staffed medical services.

However, this begs the question: Is there any point in training rural doctors to safe competent skills levels when operating theatres in rural hospitals are being systematically shut down across the country? The number of rural doctors practising obstetrics and anaesthetics has fallen by almost 40% over the past five years due to the stripping of acute care facilities from country hospitals, clinical privileging and indemnity issues and the lack of opportunities for skills upgrading and retention. This then raises a further question: Why are our rural communities not entitled to equitable access to operating theatres and other acute care facilities compared to our urban population particularly considering the enormous rural contribution to the Australian economy and our demonstrated proven high standards with respect to rural medical procedural outcomes?

The literature suggests three recurrent themes:

- There is a need for specific vocational training for rural practice, especially in procedural skills, and a need to reward those who complete such training
- There are continuing difficulties in providing this training, especially in providing suitable hospital posts
- Rural doctors and their families have needs other than education, which must be satisfied if rural areas are to be properly serviced. These needs include professional, social, family and financial support, and in particular, locum relief.

In response to these and other needs, state Rural Doctors' Associations developed in the late 1980's culminating in the formation of the Rural Doctors' Association of Australia (RDAA) in February 1991 at the First National Rural Health Conference in Townsville. Dialogue also began at this conference between
CORE CURRICULUM FOR RURAL TRAINING

Core curriculum was considered in detail at a conference held at the DRET in December 1993. The principal considerations were felt to be:

- Comprehensive nature of Rural General practice
- Capacity for safe and competent practice in isolation
- Unreasonable expectations of trainees if clear guidelines not provided
- Constitutes need for well-defined, rural training program with common content requirements
- This equates to a core curriculum, i.e. that which rural doctors require in terms of knowledge, skills and attitudes
- Development requires consultation with an input from all stakeholders

The essential design elements which require incorporation were perceived as:

- Problem-based learning approach, i.e. focus on patients' presentation
- Integration of discipline-specific content and themes, i.e. "strands and slices" concept
- Encouragement of self-directed learning and familiarity with distance education systems
- Focus on graduated responsibility
- Understanding of the functional rural GP network
- Role of RHTU as primary locus of organisation and delivery of rural components of learning
- Clinical skills logbook documenting requisite experience and certified competency by supervisors
- Concept map to ensure essential areas covered
- Alternative means of addressing areas where problem-based teaching is inappropriate
- Consideration of current training program content to avoid duplication
- Emphasis on rural multi-disciplinary health team approach

Core curriculum for rural training is currently being advanced by the Faculty of Rural Medicine Training Working Party in consultation with the relevant stakeholders.

ADVANCED RURAL SKILLS CURRICULUM DEVELOPMENT AND EVALUATION

One of the most significant issues impacting on the rural community is the provision of quality health service. This is, at its most effective, a team effort, with medical, health, social and community services operating within a cohesive framework. The position of the rural general practitioner in this team is pivotal, as has been evident from studies conducted over the last ten years. The undersupply of rural doctors continues to limit some rural communities' equity of access to many medical services. While the doctor is not the sole provider of health care in the rural team, a medical presence affects the pattern of health practice across the board. It determines in many respects, the use of hospital facilities in the area and forms a key link for rural people with specialist and support services beyond the local area.

These issues are well documented, as is the shortfall in the rural medical workforce. In addressing the task of attracting and retaining a greater number of doctors in rural Australia, studies have identified social factors, financial considerations and family background among a range of attitudinal issues affecting a doctor's individual decision to undertake or to remain in rural practice. However the consistent thread running through the majority of work in this field, is the doctor's clear identification of adequate training and preparation as the key factor in affecting the decision to practice in a rural or remote location and the most significant reason why the ensuing practice can be undertaken with confidence.

In investigating the medical disciplines which most immediately impacted on a doctor's ability to serve the needs of the rural community, research in Queensland in 1992, led by Professor Richard Hays, clearly identified surgery, anaesthetics and obstetrics as the three areas in which rural doctors requested further training. These findings were supported by earlier work in WA by Professor Richard Hays, in Victoria by Professor Roger Strasser and in SA by the Committee chaired by Dr David Gill.

In response to this need, The Royal Australian College of General Practitioners (RACGP), initiated in 1992, the development of Advanced Training Curriculum in Surgery, Anaesthetics and Obstetrics, with principal input through its newly formed Faculty of Rural Medicine. These training curricula were developed in consultation with the relevant Specialist Colleges and endorsed by these bodies, in addition to RACGP College Council. Their development was funded through a grants from the Department of Human Services and Health, Rural Health Support, Education and Training Program. The curricula formed a world first both in the form of this training initiative and in the way it was developed, through close consultation with partners in a number of Specialist Colleges.

In 1993, the task remained to implement these curricula in accredited training posts throughout Australia. While the curricula have been developed by a process that included wide consultation, it is only on implementation that their adequacy and practical use can be determined. The rationale for the development of the Rural Medical Curriculum Evaluation Project included the provision of a means by which a comprehensive process of information-gathering could be instituted to guide potential changes required to the curriculum documents. Furthermore, as partners in a new venture, the Rural Training Posts required national support personnel to assist in the establishment of the training which was in this case, provided by the Evaluator together with the Director of Rural Education and Training, when this post came on line in September 1993. Basically, information was required to indicate how well the curricula and their means of implementation meet the needs of rural trainees. These requirements, both of new entries and of returning rural doctors must be met if the program is to contribute the provision of appropriately trained GPs in rural areas.

Integrated activity by a College Working Group established Interim Accreditation in parallel to the design phase, in order to produce over the first year, a number of posts in which the standard of teaching, the quality of facilities and resources and the training/service mix, supported the provision of effective training for rural trainees. The posts were available at registrar level, for
both trainees within the existing rural training stream and for established rural doctors who wished to undertake further training in one of the three disciplines offered.

Training is currently being undertaken in posts associated with Rural Health Training Units, the number of posts currently accredited, nationally is as follows:

<table>
<thead>
<tr>
<th>Rural Training Unit</th>
<th>Discipline</th>
<th>Number of posts</th>
<th>Commencement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bendigo</td>
<td>Obstetrics</td>
<td>1</td>
<td>1993</td>
</tr>
<tr>
<td>Gairs</td>
<td>Anaesthetics</td>
<td>3</td>
<td>1993/1994</td>
</tr>
<tr>
<td></td>
<td>Obstetrics</td>
<td>5</td>
<td>1993/1994</td>
</tr>
<tr>
<td>Horsham</td>
<td>Obstetrics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td>Modbury</td>
<td>Anaesthetics</td>
<td>1</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>2</td>
<td>1993/1994</td>
</tr>
<tr>
<td>Mor</td>
<td>Anaesthetics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Obstetrics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td>Rockhampton</td>
<td>Anaesthetics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Obstetrics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>2</td>
<td>1994</td>
</tr>
<tr>
<td>Shepparton</td>
<td>Obstetrics</td>
<td>1</td>
<td>1994</td>
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<tr>
<td>Tamworth</td>
<td>Anaesthetics</td>
<td>4</td>
<td>1993/1994</td>
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<td></td>
<td>Obstetrics</td>
<td>2</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>2</td>
<td>1993/1994</td>
</tr>
<tr>
<td>Toowoomba</td>
<td>Anaesthetics</td>
<td>2</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>Obstetrics</td>
<td>1</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>1</td>
<td>1993</td>
</tr>
<tr>
<td>Townsville</td>
<td>Anaesthetics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Obstetrics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td>WACRRM</td>
<td>Anaesthetics</td>
<td>2</td>
<td>1993</td>
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<td></td>
<td>Obstetrics</td>
<td>2</td>
<td>1993</td>
</tr>
<tr>
<td>Wagga Wagga</td>
<td>Obstetrics</td>
<td>1</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>1</td>
<td>1994</td>
</tr>
</tbody>
</table>

Of these posts, 33 are currently filled – 7 in surgery, 14 in anaesthetics and 12 in obstetrics. Twenty three of these are Rural Training Stream trainees.

The means of evaluating the implementation of advanced training has been developed through a series of extensive field visits to all training sites and consultation with trainees, hospital and general practice supervisors, hospital and RTU administration and education staff. The work has been monitored through an Advisory Committee which includes among others the Secretary General RACGP, the DRET and the Chairman and Censor of the Faculty of Rural Medicine. Through these means, it is intended to provide a balance of input from both training personnel and the administrative and medico-political framework which supports them.

The advanced curricula have translated well into practice. Information collected during the implementation review endorses the process of design with the documents receiving approval from both supervisors and trainees. The content is viewed as appropriate to and realistic for the requirements of rural general practice and there is general approval of the suitability of training relationships between trainee and supervisor recommended by the curricula, which impinge on the degree of experience, developing autonomy and levels of responsibility. The training is developed on practical experience, a real-work situation, one-on-one teaching and consultation and continuous assessment and feedback.

The mostly provincial hospital settings associated with the sites of the Rural Health Training Units provide a broad and relevant caseload and casemix, enabling supervisors to offer appropriate experience both to the specialist trainees and the advanced rural trainees.

Equally important to the continuous success of this training venture, is the work undertaken during 1993/4 by RACGP Committees to clarify and document the procedures for selection, assessment and certification, and by the office of the DRET to open lines of funding and support for the training posts.

The first year of a major training innovation will naturally have its challenges, but the progress has been remarkable in implementing a national training initiative in the 10 Rural Health Training Units. The challenge now is to consolidate the flow of trainees and the availability of posts. A longitudinal study is in place to chart the progress and destinations of the graduating doctors and their contribution to procedural services in rural practice. Much of this work would not be possible without the outstanding contribution of both hospital and GP trainers and without the enthusiasm and commitment of the rural trainees. Our thanks go to them, and to RHSET for the provision of funding.

RURAL TRAINING STREAM

Negotiations between the FRM and the RACGP Training Program have led to the establishment of the Rural Training Stream (RTS) of the Training Program this year which, in addition to the education and training opportunities provided for all general practice vocational trainees, will provide rural trainees with:

- Four years training for rural practice, including a minimum of twelve months in rural general practice, six months of which will be in basic and/or advanced general practice terms
- Twelve months in Advance Rural Skills Posts (currently available in Anaesthetics, Obstetrics and Surgery)
- Specific educational activities/events focused on rural general practice
- Assistance with securing the necessary training and clinical experience to prepare the trainee for rural practice. This might include preference for hospital and special skills posts in disciplines important for rural practice as well as preference for relevant courses.

RTS trainees are required to be enrolled with the relevant state Training Program office, and enrolled or affiliated with the RHTU in their current region.

RTS trainees for 1994 number 140 nationally from the January intake and potentially 170 after the July intake. It is anticipated that over 200 are likely in the Rural Training Stream by 1995.

DIRECTORATE OF RURAL EDUCATION AND TRAINING

The Directorate of Rural Education and Training (DRET) was established in September last year to facilitate rural medical training at all levels. It is part of the national office of the RACGP Training Program and is located in Brisbane. The Directorate is half-funded by the Rural Health Support, Education and Training Program (RHSET) of the Federal Government and half by the Training Program of the RACGP.

The Directorate is staffed by a full-time Director, personal assistant and a temporary evaluation officer. Additional medical educators, research/project officers and administrative staff are essential if the Directorate is to fulfil its objectives and address the needs of a growing Rural Training Stream. If the rural medical workforce needs are to be met in the medium to long term, then around 500 RTS trainees will be required at any one point in time, with a graduating cohort of 125 per year. This equates to one quarter of the total RACGP Training Program numbers of around 2000 at present.

Key objectives of the Directorate are:

- Development of the RTS including integration of the activities of RHTUs and the Training Program
- Promotion of rural undergraduate initiatives particularly emphasising contact between rural trainees and rural doctors.
- Advancement of rural continuing medical education, relocation training for urban general practitioners and restocking opportunities for rural doctors.

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RURAL HEALTH TRAINING UNITS

Rural Health Training Units (RHTUs) have been established across the country over the past three years as a logical and spontaneous response to a vacuum in training opportunities for rural health professionals. As rural health care has come to be recognised as a discrete discipline, so has the need for specific rural health educational programs. RHTUs are rapidly assuming a central role as the developers and coordinators of such programs and the obvious loci of their delivery.

RHTUs have now been established at Toowoomba, Townsville, Cairns, Rockhampton, Tamworth, Wagga Wagga, Moe, Launceston, Modbury (Adelaide) and WACCRM (Perth). Other potential sites include Tweed/Murwillumbah, Orange, Dubbo, Bendigo, Warrnambool, Whyalla, North-West Western Australia and the Northern Territory.

The focus of RHTUs vary considerably depending on a range of factors including:

- Regional influences and priorities
- Discipline-specific emphasis
- Infrastructure arrangements
- Funding sources
- Relationships with local health services
- Associated educational institutions
- Professional support networks

Most RHTUs, however, share some common characteristics, roles and objectives:

- A multi-disciplinary approach to educational activities, reflecting the rural health team model of service provision
- Regional location, facilitating contact between rural trainees, educators, patients and service providers
- Coordination and supervision of appropriate rural training posts in hospitals, practices and other locations
- Educational programs focusing on health care in the rural context
- An educational philosophy oriented towards interdisciplinary participation and vertical streaming (i.e., involvement of trainees at all levels -- undergraduate vocational training and postgraduate)
- Contribution to rural health curriculum development
- Production of distance education packages and involvement in delivery of distance education
- Collaboration with other educational institutions such as universities and professional colleges
- Promotion of rural health careers amongst high school students and university undergraduates.
- Implementation of other rural undergraduate initiatives including rural term placements, mentorship schemes, rural student clubs and education programs
- Facilitation of continuing rural health education activities e.g., workshops, satellite broadcasts, distance access to library resources
- Coordination of relocation training for urban health professionals and re-skilling posts for rural service providers
- Organisation of locum services
- Research in the areas of rural health problems, rural practitioner skill requirements and rural health education methodologies

Sources of funding for RHTUs have been various and usually multiple. These include the Federal Government through RHSET, state public health sector contributions, universities, local government and private sources. The Federal Government's Rural Incentive Program is likely to have a future role in relation to funding for rural undergraduate initiatives, urban GP relocation programs, rural GP re-skilling and rural locum programs. Rural GPs of General Practice are looking to RHTUs as potential providers of rural continuing medical education (CME) programs, and thereby represent a likely additional funding source.

Measures of success are difficult to estimate because of the brevity of programs to date, but those available indicate:

- High quality, highly relevant educational programs
- Greater coordination and supervision of appropriate hospital and practice rotations
- Significant increase in junior staff levels at provincial hospitals and thereby represent a likely additional funding source
- High level of acceptability of the overall process by trainees and providers
- High level of knowledge and skills demonstrated by the small number of medical graduates to date, all of whom have located to rural or remote practice
- 140 RTS trainees enrolled in the first intake for the first year of this program, including 150 trainees in advanced rural skills posts
- Considerable success achieved by those RHTUs which have focused on measures to increase rural high school student intakes into medical courses
- High degree of response amongst medical undergraduates to the efforts of those RHTUs which have promoted rural undergraduate courses, rural practice placements and rural student clubs

SUMMARY

In summary, this paper describes the current situation of training for rural medical practice in Australia, how this was achieved and raises a number of issues in relation to the way ahead. It is worthy of comment that no equivalent process appears to be in place in any other country at a vocational training level, and therefore comparisons are difficult. Issues which require consideration include:

- A permanent facility to monitor rural health professional resource needs and allocation.
- A strategy to ensure retention of acute care facilities, particularly operating theatres in rural hospitals so that trainees who are skilled up to meet rural community needs and the rural community themselves can mutually benefit according to social justice principles.
- Support for completion of curriculum development for rural medical training. The fact of advanced rural skills curriculum development in the areas of anaesthetics, obstetrics and surgery, together with the imminent curriculum for Aboriginal and Torres Strait Islander Health in 1995 in no way diminishes the importance of completion of the task. Definition of core curriculum for rural medical training, as well as the development of advanced curricula in emergency medicine, psychiatry, paediatrics and adult internal medicine have already been determined as critical areas requiring immediate address.

- Continuing support for evaluation of curriculum implementation. This is a key issue without which objective evidence of the effectiveness of rural training cannot be measured

- Further development of the Directorate of Rural Education and Training. With the necessary growth of the Rural Training Stream comes a commensurate need for additional resource allocation for the DRET if the process is to remain coherent and achieve desired objectives.

- Ongoing assistance for Rural Health Training Units. These are the obvious loci of rural health training programs and are proving to be central to the success of the process thus far.


16 South Australian Health Commission, Australian Medical Association (SA), Royal Australian College of General Practitioners (SA Faculty), Review of General Medical Practice. Second report Education and Training for General Practice, Dr D Gill (Chairman), 1989.


18 Nichols A, on behalf of the Project Advisory Committee, Advanced Curriculum for Rural General Practice: Implementation Review 1994, Sydney, Royal Australian College of General Practitioners.


22 Sheedy, V. Personal communication to the Director of Rural Education and Training, May 1994.