INTRODUCTION

Rural Australia & New Zealand

Rural and regional patients have the right to expect appropriate access to high quality medical services. When their condition requires surgical care, they rightly expect a surgical service appropriate to their needs and of a quality comparable to that available in metropolitan areas. Rural patients understand that they may have to travel for more specialised surgical care, but expect that the majority of elective procedures will be provided as close to home as possible. They also expect that, in critical or emergency situations, a system of surgical care will support them throughout their illness.

Background

Approximately 31% of the Australian population live in rural, regional or remote locations (Census data) but only 14.6% of practicing surgeons live in these areas (2012 Jan-Dec Activities Report). The percentage is even lower for most other medical specialists. Many of these rural areas, especially those along the eastern seaboard, are experiencing strong population growth, and this is likely to continue. These figures are problematic in the New Zealand context given that application of the methodology determining a rural/regional location leaves only Auckland as a metropolitan centre.

In the past many rural surgeons worked very long hours and their on call roster was often arduous. This is proving no longer sustainable. Surgeons should, in general, work no more than a 1 in 4 on call. They require adequate rest, holidays and study leave. This is essential to their wellbeing and that of their patients. The College’s safe working hours policy recognises this fact and supports adherence by Fellows of the College, irrespective of the location of their workplace.

RACS figures indicate that the surgical workforce in both Australia and New Zealand is ageing, the average age of an active surgeon being 52 years. Significantly, the proportion of surgeons aged 55 or older in 2012 was 37.3% in metropolitan areas but 45.2% in rural and remote areas (2012 Jan-Dec Activities Report).

Previous RACS Census data and workforce studies showed that many of these surgeons planned either to retire or restrict or cease performing on call surgery. These anticipated retirements, however, did not occur in the numbers predicted. The most likely explanation for this is that surgeons delayed their retirement; perhaps due to the effects of the Global Financial Crisis or to the inability to find a replacement. It is highly likely therefore that there will be a spate of retirements over the next five years.

Specialty Services

Effective rural services depend upon an adequate workforce. While surgeons represent the largest number of rural specialists, there is also a requirement for adequate numbers of anesthetists, physicians from a range of specialties, obstetrician/gynecologists, ophthalmologists and pediatricians. Support is also required from radiologists and pathologists. Larger centres require intensivists and emergency medicine specialists. It should also be noted that rural areas are desperately short of medical administrators.

The largest group of rural surgeons are General Surgeons, closely followed by Orthopaedic Surgeons, then Urologists and Otolaryngology Head & Neck Surgeons. There is a need for surgeons from the other surgical specialties and often this can only be provided as a visiting or outreach service.

At a time when it remains difficult to attract and retain surgeons in rural and remote locations, surgeons working in larger rural centres should be actively encouraged to add outreach services to their practice. Such services enable the provision of enhanced surgical services to these surrounding
communities, often allow local hospitals to remain open, and assist local medical and nursing staff to maintain skills which might otherwise be lost.

Generalism

There has been a steady trend towards specialisation in medical care for many years. While RACS recognizes and awards fellowships in nine specialties within surgery, (general surgery, orthopaedic surgery, urology, otolaryngology head & neck surgery, vascular surgery, plastic surgery, paediatric surgery, cardiothoracic surgery, neurosurgery), many surgeons, especially in metropolitan areas, practice in increasingly limited sub-specialties. This has brought great benefits to elective care, but has the potential to negatively affect delivery of care in rural locations.

There is increasing recognition that many rural centres require specialists who practice broadly across their specialty (generalist specialists). This is also true of many disciplines within medicine as a whole, not just surgery. The majority of rural surgeons wish to and do practice largely within one of the nine surgical specialties, often practicing one or more sub-specialties in considerable depth. They may also perform a limited range of procedures normally in the domain of another surgical specialty, especially in an emergency.

The current nine RACS training programs do, in fact, produce generalists. However, unless Trainees are exposed to rural practice, many assume that a narrow, metropolitan sub-specialist practice is the norm, or the only viable future practice model. The graduates of these programs are competent, but often not confident to commence independent practice and they usually seek extra training and experience in a specific area. There is a shortage of appropriate post fellowship training opportunities in generalist practice as would be appropriate for rural and regional surgeons. The majority of such positions produce sub specialists and this also has negative implications for the provision of emergency surgery in metropolitan areas.

Support for the concept of generalist specialists is sometimes confused with attempts to produce a generalist doctor, sometimes called a hospitalist. While there may well be a role for such individuals, they will never meet the need for appropriately trained specialist surgeons to perform elective and emergency surgery to a consistently high standard.

There is also recognition that some specialist services in rural areas can and must be provided by specifically trained General Practitioners. There are reasonably well established pathways for GPs wishing to train in anaesthesitics and obstetrics. In Australia there have been attempts to formalise training in GP surgery by collaboration between RACGP, ACRRM & RACS through a Joint Consultative Committee (JCC). These attempts were frustrated by an inability to agree on an appropriate curriculum, training methods and scope of practice, and the JCC has effectively disbanded. There remain a small number of GP surgeons in practice. There are currently plans for the three colleges to meet to resolve these issues.

RACS continues to support the Minor Surgery for GPs program through its Skills and Education Centre in Melbourne. A number of rural and regionally based GPs have been through this program.

**RECOMMENDATION:**

RACS will form two working parties to address issues relating to generalist surgery and training GP surgical proceduralists. These working groups will report with recommendations as to an appropriate way forward.
SURGICAL EDUCATION

Rural Medical Schools

There is now a large network of medical schools across rural Australia and many medical students spend a large portion of their clinical training in rural areas. The available evidence suggests at least equal and probably superior educational outcomes for these students. Many of these students would like to pursue a rural career and some have accepted Medical Rural Bonded (MRB) scholarships. Others have accepted bonded undergraduate positions. Surgeons have played an integral part in the success of these rural medical schools.

Early Postgraduate Years

The situation is less satisfactory here. While some rural hospitals do select for their own intern and PGY2 positions, in some states there is a lack of formal teaching and career support. In NSW, Health Education and Training Institute has introduced a mandatory training programme for the first 2 postgraduate years. For doctors wishing to specialise in areas other than General Practice there is no College body that actively supports rural residents to train in their specialty, hence the tendency for young doctors wishing to pursue a specialist career to gravitate back to the metropolitan centres where a large percentage will remain. Some states have created rural pathways whereby rural jurisdictions formalise RMO positions which aim to produce generalists who may then become surgeons. The College supports this position.

Surgical Education & Training (SET)

Entry into the RACS SET program is by application and open competition. While a successful application is perfectly feasible from a rural hospital, in practice most SET aspirants seek to work in a metropolitan hospital, perceiving that they are more likely to be successful. Application is possible during PGY2 or later. Successful applicants are allocated to a particular state, and possibly to a network of hospitals. The vast majority of SET training networks are based in capital cities but rural rotations are common in the eastern states in General Surgery and Orthopaedics. Rural opportunities are less common in other states and in other specialties. There is a view that some of the requirements for a position to be included in the SET program are unduly restrictive. RACS should review these requirements with the aim of adding training positions in rural Australia.

Support for SET Trainees who indicate an interest in rural surgery has been intermittent. In Australia, for many years the Commonwealth has supported rural training by funding the Rural Surgical Training Program. Currently there is also the Rural Coach program, funded by RACS and General Surgeons Australia (GSA).

Should additional funding for a rural training model become available through an avenue such as the Specialist Training Program (STP), this should be pursued because at least anecdotally (based on surgeons trained in previous rural surgical training programs) those surgeons trained in a rural environment are likely to seek long term employment in a similar environment. There is also good evidence in a broader forum that those medical practitioners educated in a rural environment are more likely to seek employment in a rural or regional setting.

The process and transparency of STP funding, however, needs to be addressed. Reasonable deadlines also need to be in place. Funding needs to be indexed annually as shortfalls can make a post financially unworkable for a hospital and can lead to additional cost shifting.

Within General Surgery in Australia, the SET program is administered by a number of hospital networks in each state. All these hospital networks have been metropolitan based, even though there are many training positions in rural hospitals. It is likely that there is little scope to expand rural training positions in General Surgery, however it would be possible to set up rurally based training networks. Trainees interested in a rural career could be appointed to a rural network and the majority
of their training could occur in rural areas. They would also require rotations in metropolitan hospitals for exposure to a range of tertiary surgical services. Formation of such a rurally based network is currently under active consideration in Victoria. At the time of writing a rural training network has been established in the Geelong Hospital Victoria, with the first trainees rotating through this hub in 2013. This training hub has been established using preexisting surgical training positions in rural and regional hospitals.

RECOMMENDATIONS:

RACS to review the SET requirements to remove undue restrictions with the aim of increasing training positions in rural Australia.

RACS investigates the possibility of forming rurally based networks in several states.

The Rural Coach and STP programs continue, with secure funding from government.

Fellowship Positions

Graduates of the SET program often require additional experience to build their competence and confidence. It is essential to have a range of fellow positions in rural centres and to facilitate the process by which these fellows integrate into rural communities. Many will then choose to stay and work there long term. Fellows can assist resident surgeons with elective and emergency workload, potentially saving their hospital money by reducing the incidence of consultant call-backs. While fellow positions are rapidly increasing in General Surgery, especially in New South Wales, a pilot program which has commenced in orthopaedics in New South Wales following negotiation with the Ministry of Health should be built upon. Similar schemes in other surgical specialties should be considered.

RECOMMENDATION:

Health and Hospital Networks should be encouraged and funded to create rural Fellow positions across the country in General Surgery, Orthopaedics, and perhaps other surgical specialties.

INTERNATIONAL MEDICAL GRADUATES (IMGs)

Rural Australia and New Zealand are markedly dependent upon IMGs. The College’s 2010 Rural Workforce Survey found that approximately 50% of rural surgeons entering practice in the previous 5 years were IMGs. The extended conclusion drawn from the survey was that there will be a continued reliance on IMGs to maintain the rural surgical workforce for at least the next decade.

These IMGs experience significant difficulties in achieving their goal of RACS Fellowship and integration into the Australian medical system.

While General Surgeons Australia (GSA) and the Australian Orthopaedic Association (AOA) have successfully instituted changes regarding the way in which IMGs are managed, more needs to be done with respect to the other disciplines within the nine RACS specialties. For example, while orthopaedic IMGs attend bone school and general surgical IMGs are able to attend pre-Fellowship exam courses, in some specialties IMGs are specifically excluded from these educational opportunities.

The Urological Society of Australia and New Zealand (USANZ) reports that while it encourages all IMGs to attend educational programs, many choose not to. Significantly, those who do attend have a much better examination success rate. It is unclear whether non-attendance is due to the misperception that such courses are for registrar grade surgeons or to the logistics of travel.
The AOA and GSA are effectively facilitating IMG access to educational opportunities equivalent to those of SET trainees. This is simply not the case for all IMGs. These changes may necessarily need to be led by the College, if the specialty societies responsible for the delivery of these training programs do not see the need for such changes. This is quite possibly due to a metropolitan bias brought about by the metropolitan predominance of surgeons practicing in these specialties and therefore a lack of awareness of the issue.

**RECOMMENDATION**

The College engage with specialty societies (other than AOA and GSA) to facilitate the expansion of pre-Fellowship educational opportunities to IMGs in their craft group.

**IMG Supervision**

Currently the quality of IMG supervision, support, mentoring and assistance with examination preparation where required is variable. Sometimes it is poor. IMG surgeons practicing in remote locations should spend a minimum of three months in a major metropolitan or regional hospital prior to commencing in the remote hospital. This allows for confirmation that the assessment of ability was correct, acclimatisation to the Australian and local medical systems, and development of professional networks which are required for more isolated practice. Contact with surgical trainees, leading to involvement in a study group, is also essential.

Periodical on site supervision is required. The cost of this supervision must be borne by the health service.

Prior to attempting the fellowship examination, a remote IMG will need to devote up to three months to intense examination preparation. This will require paid leave and backfilling with locum services. There have been numerous cases where failure to ensure this has resulted in repeated exam failures and subsequent loss of surgical services. The financial burden must be borne by the health service, not the IMG.

Issues relating to the registration of, and support for, IMGs in Australia were recently the subject of an extensive parliamentary inquiry. RACS is in broad agreement with the recommendations arising from this inquiry.

Until recently Queensland has run a mentoring program for IMGs. Peter Woodruff has administered this program. While this has been very successful in facilitating the integration of IMGs into the Australian healthcare system and professional and collegiate networks, unfortunately the program has been abandoned due to a withdrawal of funding by government.

**RECOMMENDATIONS**

IMGs to undertake a minimum of three months in a major metropolitan or regional hospital prior to commencing in a remote location to allow for confirmation that the assessment of ability was correct, acclimatisation to the Australian and local medical systems, and development of professional networks which are required for more isolated practice.

Health services to be funded to supply:
- periodical IMG on site supervision;
- protected and paid time up to three months to prepare for the Fellowship examination;
  - locum backfilling to ensure no suspension of surgical services while the IMG is on study leave.

The Queensland Government to immediately reinstate funding for the IMG Mentoring and Upskilling Program.
Area of Need (AoN)

This system was designed to match areas of workforce need with a supply of skilled medical practitioners. It attempts to retain surgeons in a particular location for up to ten years, by means of restriction of access to Medicare provider numbers.

The system does not work as intended. Surgeons have been allowed to practice in remote locations with supervision provided from afar, and sometimes with inadequate supervision. In practice, the majority of surgeons accepted into area of need positions are judged as only partially comparable to an Australian or New Zealand trained surgeon. These surgeons must then prepare for and pass the RACS fellowship examination, as well as many other requirements of RACS. Their failure rate at this examination is significantly higher than that of Australasian Trainees.

Finally, AoN had been so loosely interpreted and broadly applied that it is usually possible for these surgeons to move from their intended site of practice to another rural, outer or even central metropolitan practice.

These IMGs experience significant difficulties in achieving their goal of RACS fellowship and integration into the Australian medical system

The College reasserts its long held belief that, in the interests of patient safety, clinicians be consulted as part of the decision making process by which Areas of Need are declared by governments.

RECOMMENDATION:

The Area of Need process should be reviewed by the Australian Government. Major improvement is required as currently the process does not achieve the solutions for which it was instituted.

Scope of Practice

Some IMG surgeons arrive in Australia with a scope of practice that does not easily align with one of the nine RACS specialties. However, this scope of practice sometimes aligns well with actual community need. For example, a European trained general and trauma orthopaedic surgeon is well placed to serve a rural community. Their assessment by RACS, however, can raise unnecessary difficulties. Some of these surgeons could be assessed as surgeons practicing within a defined scope of practice, a provision which could be attached to their RACS fellowship certificate.

It would also be perfectly reasonable for the scope of practice to be decided by a local credentialing committee (which included a surgeon) in accordance with the needs of the community and the expertise of the AoN surgeon concerned.

RECOMMENDATION:

RACS continues to issue fellowships in defined scope of practice, especially where there is significant community benefit.

ELECTIVE VS. EMERGENCY CARE

Traditionally surgeons provided a continuous on call service to the towns in which they lived. This led to towns being described as 1 in 3 towns, or 1 in 2 towns, or 1 in 1 towns. Transfers were infrequent due to poor roads and lack of a developed retrieval system. More recently it has become accepted that, to avoid fatigue and burnout, surgeons should not be expected to work more than 1 in
4 on call (Standards for Safe Working Hours and Conditions for Fellows, Surgical Trainees and International Medical Graduates).

This has led to a rationalisation and regionalisation of emergency services, and the recognition that patients may need to be transferred for emergency care. Nonetheless elective services can still be provided in quite small centres, either by resident surgeons or by outreach. It is also not necessary to provide a full 24/7 emergency service when providing elective services. This notional separation of elective and emergency streams reflects best practice in surgical service delivery.

**SURGICAL SERVICE PROVIDER**

The ideal arrangement for a rural community is for a surgeon to be resident. This surgeon can contribute to the local community in ways that go beyond the purely surgical. For example, a resident surgeon can contribute to an emergency service working within safe hours. The rewards of working within and contributing to a rural community are significant.

But this ideal is not always practical. There is a shortage of surgeons in rural Australia and New Zealand. Some centres are too small to support a resident surgeon and some of the surgical specialties require equipment which can only be located in large centres.

Another option is the regular rotation of surgeons from a larger centre. This allows elective and emergency services to continue, and provides some continuity of care. These models have been proven to work in several towns in South Australia. The cost of such models, however, probably exceeds that of a resident surgeon and this arrangement can discourage entry by a surgeon desiring to become resident in the area.

Itinerant or peripatetic surgery is also required. It is important that such services enhance, rather than compete with, existing local providers. They should ideally include an educational component that upskills local providers.

There is also a role for GP surgeons. They should be integrated into local surgical networks and should ideally have been locally trained to fill defined local needs. Once trained, they should continue to visit larger centres to maintain their surgical skills. There may also be a role for them contributing to an on call surgical roster in medium sized towns, together with specialist surgeons.

**RECOMMENDATION**

Requirements for an adequate and safe surgical service need to be determined by the health service in consultation with surgeons and the community. The most effective model (as outlined above) must be chosen.

**RECRUITMENT**

A range of recruitment strategies is required. Involvement of surgeons in undergraduate education is vital. Rural Clinical Schools must encourage careers in a range of specialties, not just General Practice. Whenever junior doctors rotate to rural areas every effort should be made to ensure a rewarding experience. Close attention needs to be paid to matters such as accommodation, telephone and internet access and orientation to the rural community. This should include introduction to a range of community and sporting groups. Hospital administrations need to ensure that rosters are clear and not overly onerous, and that the payroll system functions fairly and effectively.

*Planning a future consultant workforce*
While hospitals need to plan for the future, some recruitment is necessarily opportunistic. If a surgeon with the appropriate skills mix expresses an interest, a rural hospital must be able to respond quickly to secure that surgeon, even if there is no current vacancy. Too often succession planning is ignored until a surgeon retires. Hospitals must have a medical recruitment contingency and must also look to recruiting surgeons before their training is complete, offering them a definite appointment a year or two hence and allowing them to complete any plans they have for additional training.

**RECOMMENDATION:**

Rural hospitals should have access to contingency funding to enable both planned and opportunistic recruitment of specialist surgeons.

**RETENTION OF RURAL SURGEONS**

Once recruited, retention of surgeons is a key issue. This requires attention to the following issues.

**Operating lists**

Surgeons require access to regular elective operating lists. The number of lists should reflect community need. Emergency lists should also be allocated according to measured need, allowing the vast majority of emergency procedures to be performed during daylight hours.

**Budget**

Hospital budgets need to be realistic. The widespread practice of cancelling elective surgery to balance a hospital budget needs to cease. For Orthopaedic Surgeons, elective joint replacement is a major elective activity. Hospital budgets must allow for an adequate number of prostheses to allow this important work to continue, and not be artificially constrained.

Prosthetic budgets across other specialties also need to be addressed, including for continence and erectile restorative surgery, particularly when related to cancer treatment.

**Remuneration**

Overall, rural practice is not as lucrative as metropolitan practice. There are also additional costs such as travel, and possibly private boarding school fees. A strong case can be made for a rural loading to recognize the real and social costs of rural practice and to attract surgeons to work in these areas. This loading should be dependent on a regular, long-term commitment to rural surgery.

The emphasis should not, therefore, be on start-up funding but on scaled funding for those who stay in a rural location providing quality care for five years, and be indexed beyond that.

**Infrastructure**

Modern surgery is dependent upon a range of infrastructure and support services. Hospitals require well-equipped operating theatres with up to date equipment. Imaging facilities must be available. Hospital funding has tended to ignore the need for depreciation and replacement of aging infrastructure. This must be put on a sustainable footing.

**Peer Reviewed Audit**

RACS requires all surgeons engaged in operative practice to participate in peer reviewed audit. Some rural surgeons experience difficulties in this area. There is an onus on hospitals to support the
audit process by ensuring and funding collection of the appropriate data. RACS can assist any hospital or individual surgeon who has difficulty in this area.

**Locum Services**

Surgeons in isolated practice require regular holidays and study leave. The responsibility for finding appropriate locums rests with the health authority, not with the surgeon. Paradoxically, locum services tend to be paid at a much higher rate than resident services. This can consume the discretionary budget of a health service, even though the quality of the service provided is very often inferior to that provided by resident surgeons. Every effort should be made to employ and retain an adequate number of surgeons to minimise reliance on locums.

**Lifestyle and Family Issues**

New surgeons need to integrate into their local community. Initial support with accommodation, accessing appropriate schooling for children, and facilitating access to financial organisations and local retailers can be very helpful. Several rural centres including Albury/Wodonga, Wagga Wagga and Bendigo have demonstrated the usefulness of such services. Particular attention should be paid to the needs of the surgeon’s partner. Partners often have their own career or lifestyle requirements, and partner satisfaction is a major factor in a new surgeon’s decision to remain long term or to move on.

**Surgical Networks**

There has often been discussion of hub and spoke models, where a metropolitan hospital takes a special interest in a rural hospital. These models can work, provided they are viewed as a partnership, not a franchise.

In truth surgical services are more akin to a spider’s web, with interconnecting relationships between rural, regional and a number of tertiary hospitals to be expected. There is increasing interest in like-minded rural centres forming their own networks for training or patient treatment. Such a model is currently being enacted for general surgical training in rural Victoria.

**CONCLUSION**

It is abundantly clear that there are current workforce issues in rural and regional surgical services. These arise from a number of origins including:

1. an aging workforce;
2. difficulties with appropriate training and experience for non-metropolitan practice;
3. problems with recruitment and retention of suitable surgeons including the management of IMGs and Area of Need surgeons;
4. logistical difficulties around on call rostering and establishment and maintenance of a critical mass to enable a sustainable surgical service.

These issues may be addressed by a number of measures, which include but are not limited to:

1. The development of a sustainably funded Rural Surgical Training Program;
2. Further development of rural surgical networks within the existing SET training program;
3. Development of additional fellow positions in rural and regional settings such that post fellowship trainees may be prepared for non-metropolitan practice;
4. Additional support for IMGs with respect to:
   a. educational support by some of the nine RACS specialties where support is currently limited or non-existent;
   b. supervision, mentoring and assistance prior to fellowship exams;
5. A review of the Area of Need process by the Australian Government such that the
recruitment of suitably trained IMG surgeons is facilitated while abuses of the system are prevented;
6. Further exploration of the role and mechanisms for training and defining scope of practice for GP surgeons;
7. Steps need to be taken to ensure that rural and regional hospitals have:
   a. Access to contingency funds such that planned and opportunistic recruitment of specialist surgeons is facilitated;
   b. Appropriate resources to provide regular access to elective operating lists and sufficient budget to cease the current practice of cancellation of elective surgery to manage budget shortfalls;
   c. Sufficient resources to appropriately remunerate rural and regional surgeons and thus facilitate recruitment;
   d. Infrastructure sufficient to support the practice of modern surgery;
   e. Appropriate support of resident surgeons with locum relief to allow adequate holidays and study leave;
   f. Mechanisms to ensure peer reviewed audit is undertaken in a manner that is not onerous for the specialist surgeon;
   g. The ability to ensure integration of newly recruited surgeons and their partners and family into the local community.

It is envisaged that the above developments will require the College, state and national Governments, the specialty societies and individual hospitals and health networks to work together to varying degrees to address these issues with the aim of resolving the workforce issues currently facing rural and regional surgical services.

Approver: Director, Fellowship & Standards
Authoriser: Professional Development and Standards Board