

Train for Rural

Rural Health Equity Strategy April 2021



Executive summary

A Fellowship of RACS stands for quality in surgical care; but quality cannot be truly present unless equity is accepted as an integral component.¹

The Rural Surgery Section Committee builds on the Select for Rural initiative by training surgeons to work in rural areas. It equips them to do so through expanding opportunities for rural experience during SET training. To achieve health equity for rural people, we need to ensure *our Trainees develop the skills and knowledge to work where they are most needed.*

This is not about compelling our Trainees to spend time working in a rural area. This is about providing opportunities during training to gain more positive rural work exposure and develop rural capability and self-efficacy.

People in rural areas have worse health outcomes, partly due to maldistribution of the health workforce.

The Rural Surgery Section Committee is developing its strategy for the next triennium, with a focus on patient-centred surgical care and a sustainable surgical workforce in remote, rural and regional Australia and New Zealand. With persistent health inequity for underserved populations and the impacts of climate change, we anticipate the need for a culturally and emotionally intelligent generalist surgical workforce (across all surgical disciplines), with the skills and motivation to work collaboratively and effectively, in areas of need and limited resource environments, including globally.

RACS has a social responsibility and mission to address health inequity, through the levers of selecting, training, retaining and collaborating for rural surgical services and rural communities.

As a bi-national committee, we recognise that Australia and New Zealand, and their islands, states and territories, are unique in culture and context. Australia and New Zealand have overlapping and distinct needs for their rural populations, with different health systems and geography. The Train for Rural Strategy proposes actions that are focused on outcomes for rural health equity, while allowing for flexibility in local implementation.

The Strategy is evidence based and consistent with the *World Health Organisation WHO Increasing* access to health workers in remote and rural areas through improved retention: Global Policy *Recommendations*. The Strategy provides pragmatic actions to meet the rural surgical goals of the RACS Strategic Plan, Policies and Position Papers and the Surgical Competence and Performance Guide. The Strategy meets the Australian Federal Government's National Medical Workforce Strategy goals of equity and correction of health workforce maldistribution.

The Strategy address the Australian Medical Council (AMC) standards for RACS to train surgeons for both quality and community need. We need to train surgeons for the jobs the communities need them to do. Now, and in the future, these jobs will be in rural and remote areas.

The Strategy address risks and opportunities for RACS. There are multiple precedents for similar initiatives from other speciality colleges in Australia and New Zealand and internationally.

THE STRATEGY PROPOSES

- New dual fellowship in primary speciality plus Global, Remote/Rural/Regional and Deployable (GRiD) Surgery achieved concurrently with SET training and/or through post SET fellowship positions.
- 2. The SET program meets the AMC standards for training for excellence and community need through
 - a. Generalist curriculum and rural curriculum: all Trainees acquire the generalist skills required for rural practice.
 - b. All Trainees have the opportunity for rural work exposure
 - c. SET training posts are distributed according to community need for surgical care

- d. Separate accreditation criteria for rural training posts recognising the unique value of rural training, without compromising the quality and safety of training
- e. Rural representation on all committees and boards involved in SET
- f. RACS persists with advocacy for portability/preservation of entitlements across jurisdictions.
- g. Rural and remote career coordinator
- 3. Rural and Remote Central and Northern Australia Surgical Service Strategy (RCANS)

HOW COULD SURGICAL EDUCATION AND TRAINING CONTRIBUTE TO IMPROVING HEALTH OUTCOMES FOR RURAL PEOPLE?

The Rural Surgery Section Committee's objectives² include

a. to ensure the provision of quality surgical care to the populations of regional, rural and remote areas of Australia and New Zealand

c. to advise and assist RACS with workforce issues relating to the provision of surgical services including recruitment, retention, training and support for surgeons working in regional, rural and remote Australia and New Zealand

Everyone has the right to safe, quality, culturally appropriate healthcare^{3,4}, as close to home and country as possible. ^{5,6}

Wherever there are people there will be a need for surgical care. Rural people need all kinds of surgeons and all surgical disciplines need to train for rural. We need to work at multiple levels of training across multiple surgical specialties. We can learn from and build on the significant past efforts of RACS and rural surgeons.^{7,8}

The Rural Surgery Section Committee provides the following information and invites RACS, in partnership with the Specialty Training Boards, societies and associations, to consider how they can contribute to ensuring a future sustainable rural surgeon workforce. There are three phases of a surgical career that impact on long term rural service and where RACS can have an impact on increasing surgical care for rural patients: Select for rural, Train for Rural and Retain for Rural.

Building on the Select for Rural initiative, we now turn to training surgeons to equip them to work in rural areas, through expanding opportunities for rural experience during SET training. To achieve health equity for rural people, we need to ensure *our Trainees develop the skills and knowledge to work where they are most needed.*

There is no silver bullet or single program; we need multiple stakeholders working on multiple initiatives across all surgical specialities and in multiple locations simultaneously. We need to confront the most difficult problems and work to solve them, while simultaneously working to achieve quick wins.

This submission uses the term "rural" to cover rural, regional and remote or non-metropolitan. The values underlying the Train for Rural submission are:

- Equity
- Quality
- Patient centred care⁹,
- Context
- Flexible in process, focused on outcomes.

1 Background

WHAT'S THE PROBLEM? INEQUITY AND MALDISTRIBUTION

Rural people have worse health outcomes than urban people. Part of this is due to poorer access to healthcare workers, including surgeons. In rural areas of New Zealand, doctor to patient ratios is half that of urban areas.¹⁰ 29 per cent of Australians are Rural (defined as MMM2-7) ¹¹ and 25 per cent of the population of New Zealand are Rural (defined by Stats NZ¹² and MCNZ) but less than 12 per cent of surgeons live and work rurally. A further 18 per cent of urban specialists provide intermittent rural outreach services. The 2018 RACS census showed that for five of the nine surgical specialties, less than five per cent of surgeons were based outside cities.¹³

The Australian National Medical Workforce strategy 2019-2021 has identified that, in Australia, there are adequate numbers of doctors per head of population, but this workforce is maldistributed, with some areas, including rural areas, enjoying much less access to care. ¹⁴ Their data shows that only 5 per cent of Australian Specialists work in remote and rural areas, much less than the data from the RACS census shows.

WHAT'S THE EVIDENCE? HOW DOES RURAL TRAINING INCREASE RURAL HEALTH WORKFORCE?

The way we select and train surgeons has unintended consequences for rural people. Thirty per cent of medical students, on entry to medical school, intend to practice in a rural or underserved area in the long term. ¹⁵ Following surgical selection and training, only 12 per cent fulfil their intention to serve rural communities.

Three factors are known to strongly increase rural recruitment and long-term retention of rural doctors: rural origin, rural medical school experience and positive post graduate rural work exposure.^{16,17,18,19,20,21} These factors are independently significant and act as multipliers.

Urban-focused training programs convert rural intention students to urban specialists. Conversely, positive rural exposure for urban origin students and Trainees is strongly associated with urban to rural conversion, with increased rural recruitment and long-term retention.²²

The mechanisms by which rural work experience promotes long term rural retention are, broadly:

- rural facing curriculum,
- positive rural work exposure and
- the development of rural self-efficacy or rural capability.

RURAL FACING CURRICULUM

The WHO Global Review of rural training found the most successful programs combined rural work exposure with rural facing curriculum.²³

3.1.4 Match curricula with rural health needs

Recommendation A4 Revise undergraduate and postgraduate curricula to include rural health topics so as to enhance the competencies of health professionals working in rural areas, and thereby increase their job satisfaction and retention.

Quality of the evidence – low. Strength of the recommendation – strong.

It's not sufficient to provide rural exposure if the curriculum is urban-focused. A Global Rural/Remote/Regional and Deployable (GRiD) faculty at RACS would be required to devise a suitable curriculum, which would exist in addition to the generalist curriculum goals for each surgical speciality. Elements of a rural curriculum can include:

- Generalist curriculum as a base plus sufficient exposure to relevant specialist knowledge in order to prepare practitioners with a wider scope of practice that is often required in rural areas.
- Patient centred care: The rural patient's context, and its impact on their ability to access and comply with medical treatment and advice.
- Conducting clinical assessment and management in resource limited environments and knowing when to seek advice or transfer
- Collaborating with rural communities and managing the rural context.
- Multi-disciplinary or cross disciplinary teamwork
- Skills for "good outreach" including telehealth as outlined in the RACS Position Paper Outreach Surgery in Regional, Rural and Remote Australia and New Zealand
- Skills for good "in reach", including
 - Taking responsibility for developing and maintaining reciprocal peer relationships between urban and rural hospitals.
 - Understanding the rural practitioner's context and what they need in terms of support to care for their patients in place.
 - Secondary consultations (surgeon to surgeon) by telehealth and
 - Pathways for transfer when care exceeds local capability
- Health system
 - Collaboration: Wherever there are people there will be a need for surgical care; there's a need for surgeons to collaborate with primary care, hospitals and jurisdictions in systems of transfer, outreach and in reach
 - Service design, state and national networks or frameworks, exemplars include national networks for trauma, stroke and burn care and the Management of Acute Neurotrauma in Rural and Remote Locations guide and e-learning course, by the Neurosurgical Society of Australasia.

The RANZCOG rural training information further outlines elements of a rural procedural curriculum.²⁴

A generic Rural Curriculum for all SET training programs would include the non-speciality specific knowledge all surgeons need to work in a rural context and would be designed to be completed as a self-directed online learning activity, achievable within a six-month rural rotation.

The Rural Surgery Section and RACS have secured STP project funding to commence work on a rural curriculum.

POSITIVE RURAL WORK EXPOSURE

Only positive experiences increase a doctor's chance of choosing a rural career. Factors contributing to positive experiences include:

- 1. Professional: quality of training experience, safe hours, autonomy or degree of choice
- 2. Personal: social, family, safety
- 3. Community: liveability, transport, accommodation

Quality of Training Experience: Rural surgical training posts have

- Fewer barriers to skill development, like lack of suitable cases, time constraints, and failure to
 provide opportunities to learn, particularly for women²⁵, less competition for cases (fewer Post
 Fellowship Education and Training PFET fellows), more direct consultant supervision²⁶ and
 increased primary operator rate.
- Generalist caseload, both inpatient and outpatient, and private practice consulting, encountering some work not seen in tertiary or public settings with equivalent experiential and academic outcomes to urban training²⁷.
- Multi-age patient population, providing paediatric experience.
- More interaction with primary care colleagues and proximity of opportunities for mentoring from clinicians and academics.²⁸
- Access to research facilities and mentors through links with Rural Universities and Medical Schools, Regional Multidisciplinary Training Hubs, National Medical Training Network NMTN,

Clinical Trials Network Australia and New Zealand (CTANZ) and rural research collaboratives like Spinifex in Australia.

The impact of rural training experience may be greater for senior compared to junior Trainees, through skill development (better able to take advantage of increased primary operator rate) and possible increased impact on rural retention.²⁹

Trainees rate rural experience highly: Survey responses regarding the rural rotation were universally positive including more hands-on experience, increased satisfaction with patient care and continuity, and operative confidence and competence³⁰.

The Royal Australian & New Zealand College of Obstetrics and Gynaecology (RANZCOG) Training Handbook outlines the benefits of compulsory rural training³¹

The compulsory rural rotation provides all Trainees with an understanding of the special issues facing a rural patient and a rural specialist, such as:

- The strategies that are necessary when practising in the absence of proximity to subspecialists and tertiary facilities;
- The importance to rural patients of geographical proximity to health services;
- The challenges of patient transfer issues when the need arises.

The rotation also provides opportunities for gynaecological surgical training that can be more available in a provincial centre. Trainees based in a tertiary hospital may find that some gynaecological surgical procedures are performed by subspecialist Trainees and are not readily available to FRANZCOG Trainees, other than during the rural rotation. As such, the rural rotation provides:

- A greater volume and case-mix of gynaecological surgery (approximately 80 per cent more than the average tertiary rotation and 40 per cent more than the average metropolitan hospital rotation);
- An opportunity to enhance confidence and competence in core operative skills and gain increasing independence in those skills needed for Advanced Training and ultimately specialist practice;
- The opportunity to be involved in outpatient and outreach clinics that may not normally be available in metropolitan centres;
- Exposure to different models of patient care and follow-up care.

RURAL COMPETENCY, CAPABILITY AND RURAL SELF-EFFICACY

In several countries, surgeons completing fellowship, after predominantly urban training, report feeling unprepared for the broad scope of practice required of rural practice.³² This disincentive to rural practice can be managed by providing rural work experience and aligning curriculum goals to a generalist scope of practice, encountered in rural contexts with the opportunity to develop broad scope practice skills, particularly for rural general surgeons.³³ The standard of fellowship, then, would be that a surgeon is capable of working effectively as a rural generalist in their field of specialty. In Australia, post-graduate programs exist to provide emerging rural medical practitioners with the non-clinical skills required for rural practice.³⁴ Lucie Walters and others describe the concept of *rural self-efficacy* in Australia.³⁵ An emerging concept of *rural practice capability* is described in New South Wales based on the Capability Approach Theory of Nobel Laureate Amartya Sen.³⁶

DURATION

Evidence shows at least nine months and preferably 12 months of continuous positive rural work exposure is consistently associated with increased recruitment to, and long-term retention in, rural practice for all doctors, including surgeons.³⁷ Twelve-month rotations, following the school calendar year, can make rural rotations logistically easier for Trainees with school age children and reduce the cost of more frequent relocations.

THE CASE FOR AND AGAINST COMPULSION

This is not about compelling our Trainees to spend time working in a rural area. This is about providing opportunities during training to gain more positive rural work exposure and develop rural capability and self-efficacy.

Compulsion may increase short term recruitment of rural health workforce but is not associated with retention and doctors working under compulsory conditions have poorer quality of life/work satisfaction and may deliver worse outcomes for patients.³⁸

Although, some medical specialist training programs have compulsory rural training posts, the Rural Surgery Section committee does not seek a policy of compulsion for RACS. If RACS chooses compulsory rural training, adequate notice of change to training requirements must be provided to prospective applicants. Trainees need adequate notice of rural rotation; other specialty training programs given more than 12-months' notice of rural rotations, and up to four years in some cases.

AMC Standard 7.1 allows compulsory rural training, providing "the education provider publishes the mandatory requirements or the specialist medical program, such as periods of rural training, and/or rotation through a range of training sites so that Trainees are aware of these requirements prior to selection. The criteria and process for seeking exemption from such requirements are made clear."³⁹

AMC standard 7.3 communication with Trainees, states "Education providers should communicate in advance with Trainees about proposed program changes and be guided by the "no unfair disadvantage to Trainees" specified in standard 6 and propose special arrangements for those already enrolled when change are implemented, recognising that sometimes program changes are required due to evolving professional practice and community needs."⁴⁰

ALIGNMENT WITH RACS STRATEGIC PLAN

The Train for Rural Strategy is consistent with the RACS:

- Mission (Improving patient care),
- Values (Service) and
- Strategic Plan 2019-2021 41
 - Key focus areas (Indigenous Health, Collaboration with Speciality Societies and Supporting Communities)
- Business Plan 2020 ⁴²
 - o Goals and Key Performance Indicators for Rural Health
- Code of Conduct ⁴³
 - 4 The Surgeon's Responsibility to Society
 - Surgical Competence and Performance Guide ⁴⁴
 - o 5 Health Advocacy
 - 10 Cultural Competence and Safety
 - Diversity and Inclusion Plan 2016 45
 - Objective for Diverse representation on Boards and in leadership roles
- Innovate Reconciliation and Action Plan 2020-2022 ⁴⁶
- Policies
 - Education Board Terms of Reference EDA-DTS-001 (items 3.2.2. and 3.2.5.) ⁴⁷
 - Conflict of Interest REL-PCS-037 ⁴⁸
 - Board of Surgical Education and Training and Training Boards Terms of Reference⁴⁹
 - o Council's Guidelines for Requirements of Fellowships in New Specialties ETA-SET-017
 - RACSTA Committee Terms of Reference ETA-SET-045
 - o Training Post Accreditation and Administration ETA-SET-043
 - Training Requirements and Curriculum Structure ETA-SET-044⁵⁰
 - Standards for Supervision
- Position papers:
 - Access to Elective Assessment and Surgery
 - Equity of Access to Surgical Care
 - o Generalists, Generalism and Extended Scope of Practice

- o Indigenous Health
- o Outreach Surgery in Regional, Rural and Remote Australia and New Zealand
- Rural and Regional Surgical Services

AUSTRALIAN MEDICAL COUNCIL (AMC)

The Train for Rural Strategy is consistent with Australian Medical Council and Medical Council of New Zealand requirements.

Standards for Assessment and Accreditation of Specialist Medical Programs and Professional Development Programs by the Australian Medical Council⁵¹: Rural selection and training initiatives are required in the standards. The Train for Rural recommendations address standards 1.2, 1.7, 2.1 & 2.2, 3, 6, 7, 8. Appendix B features the full descriptors of these listed standards.

With regards to the AMC Response to RACS Progress Report 2019, the Train for Rural Strategy addresses recommendations AA, GG, QQ, SS, TT and Condition 5 (to be met by 2020).

- The Strategy meets recommendation SS (Consider how to expand the surgical training programs in rural and regional locations. Standard 8.2.2 and 8.2.3) while also ensuring rural training exposure does not adversely impact recommendation QQ (Develop a policy that is adhered to by all Specialty Training Boards which stipulates the minimum advanced notice required prior to requiring commencement of new rotations and which also minimises the number of interstate / international rotations. Standard 8.2.2).
- The Strategy contributes to addressing Condition 5 To be met by: 2020 (Define how the College's educational purpose connects to its community responsibilities. Standard 2.1).
- Rural Training contributes to recommendation GG (Consider options to mitigate the lack of training in some parts of Australia and New Zealand such as in outpatient settings, endoscopy and aesthetic surgery. Standard 4.2.1).

WORLD HEALTH ORGANISATION

The Train for Rural Strategy is consistent with the World Health Organization Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention: Global Policy Recommendations, especially recommendations A2, A4, B1, B3, D1-4.⁵²

AMA

The Train for Rural Strategy is consistent with the Australian Medical Association position papers:

- Rural Training Pathways for Specialists⁵³
- Better Healthcare for Regional, Rural and Remote Australia ⁵⁴
- Regional Training Networks 55

2 Analysis of key issues

WHAT ARE THE OPPORTUNITIES AND RISKS FOR RACS?

The Australian Government introduced the Rural Health Multidisciplinary Training Program to increase the rural health workforce. Since 2002, 25 per cent of all students admitted to medical school must be of rural origin, 25 per cent of medical students must complete at least one-year training in a rural location, a further 50 per cent must complete at least four weeks rural placement and all students must be offered the opportunity to undertake a rural placement.⁵⁶ The Medical Deans of Australia and New Zealand include rurality in their policies for selecting for diversity and report rural representation within their student population. ^{57,58}

The Australian Government, via the National Medical Workforce Strategy ⁵⁹, is looking to the medical colleges to further the promotion of rural recruitment and retention, through their selection and training practices. Professor Brendan Murphy, formerly Australian Federal Chief Medical Officer and now Secretary of the Federal Department of Health, drove the National Medical Workforce Strategy and is focused on health service reform to address maldistribution. Along with the former Australian Rural

Health Commissioner, Professor Paul Worley, he championed the Rural Generalist Pathway. The newly appointed Australian Rural Health Commissioner, Professor Ruth Stewart, is a rural general practitioner with extended scope of procedural practice and a former President of The Australian College of Remote and Rural Medicine (ACRRM). ACRRM provides rural general practitioners with training in extended scope of practice including surgery. RACS may be on the cusp of losing their desired leadership role and surgical training monopoly, if we don't step up to produce a quality rural surgical workforce and to collaborate with other rural stakeholders. If RACS doesn't act, others are ready to fill the void, including RACGP Rural and ACRRM in Australia, and universities, with their increasing offerings in surgical education and need to develop new business models post COVID. There is a reputational risk if RACS doesn't act on its social responsibility to work toward rural health equity.

The Grattan Institute Report, *Coming out of COVID-19 Lockdown: The Next Steps for Australian Health Care,* outlines how the COVID crisis can lead to sustained changes in service delivery models to improve health equity for rural people, including through telehealth, increased outreach and secondary consultations.⁶⁰

There is an appetite among medical students and prevocational doctors, to go where they are most needed, provided they are equipped with the right skills and knowledge and a supportive professional environment.⁶¹ The Government of Western Australia, WA Country Health Service Aspire Program provides 2-year contracts for prevocational rural surgical aspirants working in South West WA, to prepare them for application to the general surgical training program or the ACRRM training program with extended scope in surgery. The New South Wales State Committee have prepared a paper⁶² in response to a request from the State Health Minister, who is convening a Round Table with stakeholders addressing surgery, including rural surgery, in that state. The Remote and Rural Junior Medical Officer Forum Steering Committee was convened in 2018 to support prevocational JMOs and Junior specialist Trainees to explore their needs and possible solutions to enable and empower them and future Trainees to live and work in their location of choice. The RACS Rural Surgery Section Committee Chair is member of the steering committee, along with representatives from all speciality colleges, remote/regional training hub specialists and remote/rural junior medical officers. The goal is for every college to have a pathway for junior doctors, already living in and committed to remote areas, to train in the specialty of their choice and take those skills back to their communities. These doctors currently face huge barriers to entering specialist training, despite their commitment to serve their communities.

The COVID-19 crisis had proved the benefits of a skilled, decentralised health workforce and strengthened collaboration between RACS and government. RACS can seize the opportunity COVID provides to engage purposely in the rural surgical space.

Precedents

Some SET Training Boards have already implemented training policies to support rural workforce, especially The Australian Board in General Surgery successful rural and regional training networks (with high rates of fellowship exam pass rates and regional retention) and General Surgeons Australia who are offering a post SET Fellowship in Rural Surgery from 2021.

Other Australian and New Zealand speciality colleges have rural training programs:

- RACGP mandates 50 per cent of all training positions are rural⁶³
- RANZCOG mandates 23 weeks rural in basic training (equivalent to one third of basic training), provides at least 12 months' notice of the location the rural placement⁶⁴
- RANZCO has two forms of rural training: rural training rotation in predominantly urban training program and a flipped model of predominantly rural training within a rural training network. Remote supervision is allowed, to supplement on site supervision.
- ACEM have at least 8 rural training networks using Integrated Rural Training Pipeline IRTP⁶⁵ funding, based in Alice Springs and many rural training sites, to supplement urban training.
- Three Australian University Rural Dental Schools produce graduates significantly more likely to work in rural/remote and inland communities⁶⁶
- The College of Intensive Care Medicine Australia and New Zealand mandates a three-month rural training term.
- RACP mandates a six-month rural training term for Paediatric Trainees.

• ANZCA has rural/remote training networks, with eight IRTP rural training positions and although rural training is not mandated for all Trainees, it is "expected" and helps to provide paediatric experience, which is hard to get in urban settings.

International Colleges of surgery have rural training programs, including United States of America: ACGME accredited residencies provide opportunities for rural surgery training through a variety of models. Rural surgical training opportunities were categorised as follows: intrinsically rural surgery residency, elective rural surgery rotations, required rural surgery rotations, and designated rural residency.⁶⁷

3 Global, Remote/Rural/Regional and Deployable (GRiD) Alliance and Fellowship

We propose a new dual fellowship in a primary surgical speciality plus Global, Remote/Rural/Regional and Deployable (GRiD) surgery. This could be achieved concurrently with SET training and/or through post SET fellowship positions.

A dual fellowship would meet the need for a skilled, broad scope of practice surgical workforce⁶⁸ to provide care to rural and remote areas of Australia and New Zealand and capable of deployment for regional and global humanitarian or military work. This fellowship would be the practical expression of the RACS position paper: Generalists, Generalism and Extended Scope of Practice.

The Rural Surgery Section cautions against creating "a separate vocational branch of surgery" (ETA-SET-017, 3.1.4). We advocate for ALL SET Trainees to have training experiences involving care of rural patients *and* for a dual fellowship model, where a proportion of surgeons obtain their primary fellowship in the surgical speciality of their choice and undertake concurrent or additional training in broad scope surgery (Global, Rural, Deployable), achieving a second fellowship in GRiD surgery. This avoids the risk of rural surgeons being less than or different to other surgeons and the potential risk of geographic practice restriction. It positions rural surgeons as being surgeons first and GRiD broad scope of practice surgeons second, with equal status to urban surgeons and career mobility.

The GRiD fellowship could involve

- 1. Attainment of desired primary specialty
- 2. 2 or more years of rural work experience, one or more of which could be gained concurrent with SET training and the remainder as post fellowship training
- 3. A peer reviewed project relevant to Global, Rural/Remote or Deployable surgery
 - a. Research presented at a surgical or rural health academic meeting or published in a peer reviewed journal
 - b. Service planning for example an outreach service
 - c. Educational resource to benefit surgical Trainees and surgeons.
- 4. A generic rural surgical skills curriculum focusing on non-operative skills paired with a speciality specific broad scope of practice surgical curriculum
- 5. Peer reviewed surgical audit
- 6. Reflective practice
- 7. Attendance at conferences, courses and workshops relevant to Global, Rural or deployable surgery.

A GRiD Faculty within RACS would need to be established to support the process.

We emphasise that rural surgery is not urban-lite. Rural practice is more, not less, it is different to urban practice, requiring a broader scope of practice, extra skills and capabilities and different metrics, supported by effective peer collaboration within and between teams, hospitals and regions.

Blattner et al describe the "critical importance of a fit-for purpose scope and rural-specific postgraduate training programs in minimising inequity of care and opportunity for rural communities, while managing the real (as well as potential) increased regulatory requirements of two separate scopes of practice".⁶⁹

A GRiD dual fellowship also caters to the varying career motivations and intentions of rural-interested Trainees, while avoiding locking them into a rigid rural or urban training "track". For example, Trainees of both urban and rural origin can be:

- a. Rural career intention,
 - a. and interested in a rural training pathway, or
 - b. interested in an urban training pathway to ensure they encounter tertiary/ quaternary surgical care and develop urban peer networks
 - c. interested in both urban and rural training.
- b. Unsure of where they want to practice and so unlikely to choose a rural training pathway that would lock them into a rural career, but open to a combination of rural training experience.
- c. Urban career intention and interested in rural training experience for case load/skill acquisition and to effectively care for rural patients travelling to cities for treatment.

Appendix A describes the background to the GRiD concept.

4 Surgical Education and Training (SET)

A Fellowship of RACS stands for quality in surgical care; but quality cannot be truly present unless equity is accepted as an integral component.⁷⁰

Rural patients need all kinds of surgeons.⁷¹ All surgeons need to train to be capable of working in rural surgery. We need to incorporate Train for Rural into all specialist training programs (One College).

GENERALIST CURRICULUM AND RURAL CURRICULUM: ALL TRAINEES ACQUIRE THE GENERALIST SKILLS REQUIRED FOR RURAL PRACTICE.

All RACS surgical speciality programs aim to produce "generalist" surgeons in their field capable of working across the broad spectrum of problems encountered in their specialty. As all surgeons, in some capacity, will care for rural patients, all SET programs should include rural surgery in their SET curriculum.

The importance of place

Rural people need General and Orthopaedic Surgeons, with enough surgeons to staff a 1:4 emergency roster. They need Otolaryngology, Head and Neck Surgeons, Plastic and Reconstructive Surgeons, Urologists and Vascular Surgeons, living and working locally, or providing outreach services from regional and provincial centres. Rural communities understand there are not enough of the surgeons to staff 1:4 on call rosters and accept alternative methods of emergency care, through task substitution or transfer.

They need Cardiothoracic Surgeons, Neurosurgeons and Paediatric Surgeons. They accept that cardiothoracic, neuro and paediatric surgery happens predominantly in urban centres, but they expect that any care that could be provided locally, by outreach clinics, secondary consultations or telehealth, will be delivered locally (a secondary consultation is one involving a rural patient and clinician at one end and an urban clinician at the other end).

A General Surgeon has a different skill set to other types of surgeons. It's not possible for a General Surgeon to be trained in all aspects of surgery. It is possible for a General Surgeon to have extended scope of practice to manage emergency presentations outside their usual scope of elective practice, particularly in the context of remote, global and deployable surgery.

Remote people need Rural Generalist Surgeons with extended scopes of practice, supplemented by FACEM and ACCRM/RACGP doctors with extended scope of practice. They need regional and rural surgeons to provide outreach surgical services, telehealth and supportive professional networks for secondary consultations or transfer. For example, in Alice Springs, General Surgeons have extended scope of practice in trauma, vascular surgery (particularly managing complications of diabetes) and the increasing burden of cancer surgery. They are joined by local Orthopaedic Surgeons and supported by

visiting surgeons from other specialties. In turn, they support rural generalists with extended scope of practice and remote area nurses in more remote centres. All are connected by technology and transport and retrieval services.

Rural and Remote people need Rural Focused Urban Specialists (RUFUS), to support their rural, regional and provincial colleagues, provide outreach/telehealth and culturally safe patient care when transfer to urban centres is necessary.

ALL TRAINEES HAVE THE OPPORTUNITY FOR RURAL WORK EXPOSURE

Twelve-month rotations will suit some specialties but not all. We propose 3 levels of rural surgical SET training, related to the surgeon to population ratios in Australia and New Zealand:

- 1. Rural/Regional Training Networks,
- 2. 12-month rural training posts and
- 3. RUFUS (Rural Focused Urban Specialist) training.

A note about terminology: although "training hub" has been commonly used, it can infer a superior/subordinate relationship between training sites. The term "training network" is preferable, to reflect the equal status of training sites.

Ratio of surgeon type to population in New Zealand⁷² and Australia⁷³

The Australian Government reports surgeon to population ratios for Vascular, Cardiothoracic, Neurosurgery, Paediatric, and Oromaxillofacial Surgery combined, rather than separately, so that RACS 2018 Census data and RACS 2018 Activities Report were also analysed, along with a combined Australia/New Zealand Population of approximately 30 million, to estimate the surgeon to population ratio of these specialties.

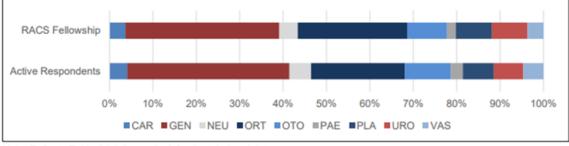
Based on the Surgeon to Population Ratios and the number of Surgeons in each speciality in Rural Only, City and Rural and Major City Only, we propose that

- General and Orthopaedic Surgery can support Rural/Regional Training Networks and 12-month Rural Training Posts
- OHNS, PRS, Urology and Vascular Surgery could
 - o investigate the feasibility of Rural/Regional Training Networks
 - o and provide most of their Trainees with 12-month Rural Training and
 - the remainder with shorter duration Rural Training or RUFUS.
- Paediatric, Cardiothoracic and Neurosurgery focus on RUFUS.

Surgeon	NZ	AUS
General	1:16,619	1:14,084
Orthopaedic	1:16,125	1:19,697
Otolaryngology Head and Neck	1:41,406	1:55,555
Plastic and Reconstructive	1:62,289	1:58,823
Urology	1:72,925	1:51,546
Vascular	1:143,795	1:114,000
Cardiothoracic	1:143,795	1:114,000
Paediatric	1:203,583	1:208,000
Neurosurgery	1:203,583	1:99,009

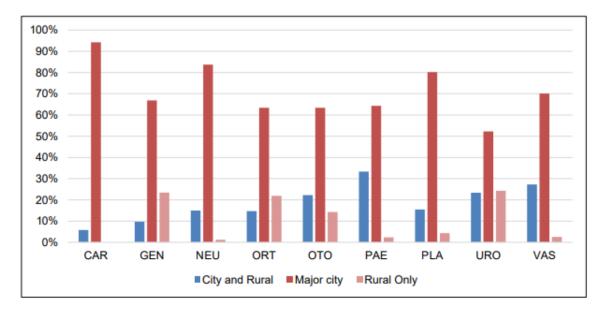
Table 1 Estimated ratios of surgeon type to population in New Zealand and Australia.

Figure 1. Specialty profile of active Census respondents and Active FRACS, 2018. Source: RACS Census 2018 report.



Note: Refer to Table A1.4 Appendix A for the tabulated data

Figure 2 Percentage of Fellows practicing in a rural or regional area by surgical specialty. Source: RACS Census 2018 report.



Rural/Regional training network

This is a "flipped" model of Rural Centred Training with secondment to an urban centre for one year of SET training. General Surgical Regional Training Hubs have been operating in Victoria and Queensland for some time and are being developed in New South Wales. Regional Training Programs have demonstrated high examination pass rates and surgeon retention.

Rural training networks benefit from

- Strong local champions to drive the success of the network
- Strong relationships with urban training sites, providing quarantined rotations for Rural Trainees and positive regard for rural surgeons and patients
- In Australia, partnership with the National Medical Training Network, Regional Training Hubs and Universities and research collaborative Spinifex
- In Australia, these networks may be funded under the Integrated Rural Training Pipeline (IRTP)
- Technology to allow participation in state and national educational events and research

What is needed is

- More Rural Surgical Training Networks, especially for Orthopaedics and consider for Otolaryngology and Urology
- A funding model providing transport and accommodation costs during urban rotations, similar to the entitlements provided to urban Trainees undertaking rural training posts

• Rural specific accreditation standards, including remote supervision and mentoring to supplement local supervision, and measures to ensure positive rural experience (like making family accommodation and childcare places standard).

Urban with twelve-month rural post

Urban centred training with rural secondment is currently the commonest form of rural surgical training for General and Orthopaedic surgery. An exemplar is the Austin Surgical Hub in Victoria. Pre-SET and SET registrars are seconded to rural hospitals, often more than once to the same region. Anecdotally, the program has been successful in recruiting general surgeons to rural and regional careers. In Australia, these posts may be funded under the Specialist Training Post (STP) program.

What is needed is:

- Where possible, that rural terms be extended to 6-12 months
- Rural training to be expanded to OHNS, PRS, Urology and Vascular Surgery programs.

Rural focused urban specialist (RUFUS)

For specialties who will always be urban or inner-regional based (Cardiothoracic, Paediatric and Neurosurgery), the benefit of rural exposure is to ensure Trainees learn the skills of a rural focused urban specialist (RUFUS). This could also apply to some Trainees in some specialties with an insufficient number of rural surgical units to provide all Trainees with 12-months' rural training.

What is needed is

- Cooperation between jurisdictions, and public and private health settings, to facilitate State/Territory or District Health Board employed Trainees to attend cross-border and fee for service outreach opportunities
- Funding for Trainees to be involved in outreach. The Rural Surgery Section is advocating for STP funding in Australia to be applied to outreach work
- Code of conduct for surgeons and other healthcare providers travelling with Trainees for outreach work

SET TRAINING POSTS ARE DISTRIBUTED ACCORDING TO COMMUNITY NEED FOR SURGICAL CARE

In Australia, two programs exist to provide Commonwealth funding to increase training positions in underserved areas, including the Integrated Rural Training Program IRTP and Specialist Training Program STP. For some specialities, where the Workforce 2025 report predicated an oversupply of appropriate future level of specialist to population ratio, STP funding was withdrawn. Special requests have been successful recently in gaining STP funding for rural training positions in these specialities. In other cases, the difficult decision may need to be made to transfer accreditation of training positions to rural hospitals at the expense of urban hospitals, to match community need and equity of access to surgical care.

Surgeons in urban hospitals will understandably resist the reduction in their accredited trainee numbers. Having training boards comprised predominantly of urban Directors of Surgery introduces a profound conflict of interest.⁷⁴ The AMC Response to RACS Progress Report 2019⁷⁵ recommendation AA addressed conflict of interest at RACS: *Broaden the definition of conflict of interest to include reflection on an individual's demography, committee roles, public positions or research interests that may bias decision making in areas such as selection or specialist international medical graduate assessment. (Standard 1.1.6).*

What is needed:

- RACS works with Government Health Departments in Australia and New Zealand to identify a system for distributing training posts based on community need
- Rural representation on all committees and boards involved in SET training
- Conflict of interests recognised and managed during decision making.

SEPARATE ACCREDITATION CRITERIA FOR RURAL TRAINING POSTS RECOGNISING THE UNIQUE VALUE OF RURAL TRAINING

Flexible in process, focused on outcomes.

The RACS policy Training Post Accreditation and Administration ETA-SET-043 sets standards for accreditation of SET posts. There is nothing in the policy to prevent training boards having accreditation *criteria* that differ between rural and urban training posts, provided all posts meet the standards.

3.1.1. Posts submitted by hospitals for accreditation are assessed in accordance with the standards established by the Specialty Training Board. These standards will assess:

- A Culture of Respect,
- Education facilities and systems required,
- Quality of education, training and learning,
- Surgical supervisors and staff,
- Support services and flexibility for Trainees,
- Clinical load and theatre sessions,
- Equipment and clinical support services; and
- Clinical governance, quality and safety

3.1.2. Posts must achieve each of the standards listed in 3.1.1, but do not need to meet every criterion within each standard.

The AMC standard for accreditation of training positions allow for remote, network (rather than local) and cross disciplinary supervision. The AMC recommends accreditation standards are outcome driven (the outcome being community need for surgical services) and specifically allow for training in rural locations and Indigenous communities. The AMC Response to RACS Progress 2019 Recommendation TT: Support collaboration amongst the Specialty Training Boards to develop common accreditation processes and share relevant information. (Standard 8.2.4)

Standard 8 Implementing the program – delivery of education and accreditation of training sites

8.1 supervisory and education roles: a supervisor can be at **network** rather than local level and **other members of the health care team may also contribute** to supervising, assessing and providing feedback to the trainee.

8.2 training sites and posts: the education provider's criteria for accreditation of training sites link to the outcomes of the specialist medical program and (including) support training and education opportunities in diverse settings aligned to the curriculum requirements including rural and regional locations and settings which provide experience of the provisions of health care to Aboriginal and Torres Strait Islander and Maori people; ensure Trainees have access to educational resources, including ICT applications, required to facilitate their learning in the clinical environment; the education provider works with jurisdictions as well as the private health system, to effectively use the capacity of the health care system for work based training and to give Trainees experience of the breadth and depth of the discipline.

Trainees are likely to gain experience in multiple locations each providing a varying range of experiences of the specialist discipline. For this reason, education providers are increasingly accrediting networks or training sites rather than expecting a single training site to provide all the required training experience and while all training sites should satisfy the education providers' accreditation criteria, the AMC encourage flexible rather than

restrictive approaches that enable the capacity of the health system to be used most effectively for training.

Rural training posts may not be able to meet all accreditation criteria that urban hospitals effortlessly meet, but this does not necessarily mean the training experience for registrars is inferior.

It is recognised that not every training post can provide Trainees with exposure to learn all aspects of the AOA Curriculum. Therefore, accreditation reviews assess that training posts can contribute effectively to each trainee achieving general orthopaedic surgery expertise and the ability to provide quality patient care on their first day of independent practice - (AOA, Accreditation Standards for Hospitals and Training Positions)

The criteria for supervision and for case numbers are the largest barriers for rural training post accreditation. Paradoxically, rural training posts may provide more opportunity for first operator experience and direct consultant supervision, broader scope of experience and exposure to conditions not seen in urban practice, despite not meeting current accreditation criteria for some specialties. Training boards would need to identify which accreditation criteria are absolutely core to the trainee's acquisition of competence, and which are negotiable or context dependent. Trainees work toward training outcomes over several years and in several contexts; it is not necessary or desirable for every training post to deliver exactly the same experience or all of the required experiences.

Requiring two, or in some programs three, FRACS supervisors at the training site is not workable for many rural training posts, does not take into consideration the full-time equivalent surgeon hours and is not based on evidence or AMC standards. For example, an urban unit may meet the criteria for 3 surgeons but each may work minimum hours in the unit, where a rural unit may have 1 or 2 surgeons working a much larger EFT fraction, resulting in greater hours per week of direct trainee supervision.

Requirement of FRACS supervision only is not workable in many rural and remote locations where vocationally registered (ANZ) or Specialist International Medical Graduate SIMG surgeons make up a large proportion of the workforce. Rural specific accreditation criteria need to allow for SET trainee supervision by IMGs (under level 3 or 4 supervision in Australia or vocationally registered non FRACS surgeons in New Zealand) provided there is one FRACS surgeon supervisor on site. Supervision can be supplemented by remote supervision from a second FRACS surgeon from within the training network. In other speciality colleges (FRACP), on-site supervision is supplemented by remote supervision with regular online meetings and tutorials with a distant supervisor.

Apart from setting professional standards and case load for training post accreditation, RACS and the Boards of Training could facilitate positive rural work experience by building personal and community supports into accreditation requirements.

- Adequate accommodation, and the expectation that families are accommodated without special request
- Adequate NBN or 5G access to allow for remote supervision and participation in online tutorials and study groups, state and national SET educational activities
- Adequate days off at the start and end of rotations for relocation, and relocation support (AOA, National Policy on Trainee Relocation Support),
- Access to research facilities and mentors through links with Rural Universities and Medical Schools, Regional training hubs), Clinical Trials Network Australia and New Zealand (CTANZ) and rural research collaboratives like Spinifex in Australia.

RURAL REPRESENTATION ON ALL COMMITTEES AND BOARDS INVOLVED IN SET

Rural health inequity cannot be addressed without rural health stakeholders at the table where decisions are made. An insoluble barrier to rural surgical training initiatives has been the conflict of interest of urban surgeons in wanting to keep control or ownership of SET Trainees and SET positions, limiting the ability to create rural training positions.

Some Training Board Terms of Reference⁷⁶ include the clause:

RACS recognises that there are positive benefits from diverse membership. The Board should co-opt members to improve board diversity, particularly in relation to gender, ethnicity, medical education qualifications and geography.

The Education Board Terms of Reference does not mention rural representation or co-option for Diversity. *Other co-opted members* are allowed (EDA-DTS-001 3.4.2 j)

The Board of Surgical Education and Training (BSET) Terms of Reference doesn't include a rural representative; most members must be chairs of boards, who are rarely rural surgeons. There is an allowance for *Co-opted members to align BSET with the diversity targets approved by Council* (ETA-SET-001 *3.1.1 v*).

Some national and binational training boards already include rural representation, and this should be extended to subsidiary (state and territory) committees. The Australian Board in General Surgery Terms of Reference (ETA-SET-058) stipulate membership must include a RACS rural representative (3.1.2 k) and this member does not need to have *an appointment at an institution accredited for Surgical Education and Training* (3.2.5).

The New Zealand Board in General Surgery Terms of Reference stipulate membership must include both a provincial and rural surgeon member (ETA-SET-059 3.2.1 i and j).

The Board of Urology Terms of Reference (ETA-SET-052) does not include a rural representative or clause for co-option for diversity but does allow the board to co-opt members as the board sees fit.

The RACSTA Committee Terms of Reference (ETA-SET-045) do not include a rural representative but does have multiple clauses for inclusion for diversity and co-options.

RACS PERSISTS WITH ADVOCACY FOR PORTABILITY AND PRESERVATION OF ENTITLEMENTS ACROSS JURISDICTIONS.

The Strategy supports the College's ongoing efforts with Federal, State and Territory Governments and the AMC Report on RACS Progress Report 2019 Recommendation RR: Work with the jurisdictions to assist in preventing the loss of employment benefits when Trainees transfer between jurisdictions. (Standard 8.2.3)

RURAL AND REMOTE CAREER COORDINATOR

AMC standard 7.3 communication with Trainees: To assist Trainees to make informed choices about a specialist medical program and location, information on career pathways, addressing workforce distribution issues and training opportunities in different regions/states should be available. Education providers are encouraged to collaborate with stakeholders in workforce planning activities for the specialty, including jurisdictions to support career guidance systems.

RACS and General Surgeons Australia GSA share the Rural Coach Program, which invites rural interested general surgical SET Trainees to connect with the rural coach (currently Mr Damian Fry FRACS) and attend the Provincial Surgeons Australia annual conference to network with other rural interested Trainees and rural and remote surgeons. Feedback was sought from current and past rural coach program participants in 2020. In response to the questions "how can the program serve you better?", the following emerged:

Ongoing communication on rural fellowship opportunities

- Support finding consultant position in about two to three years
- Ongoing communication about Rural Fellowship jobs
- Approaching the end of SET, having a list of which Fellowship jobs would provide good training (maintaining Generalism, but with a focus on a Special Interest) for those wishing to go rural would be great.
- I am very keen to hear more about options for rural training options, what pathways are available. Research in rural surgery areas.

We propose a new program to meet trainee and community need, drawing on the work of the Rural Coach Program and expanding to provide assistance to all SET Trainees interested in a rural career, across all disciplines. The Rural Surgery Section has applied for STP project funding to pilot this program.

In keeping "people and place" central to the Train for Rural strategy, we recognise that rural and remote surgical skills have a common basis and are also place-specific. We need to know where a trainee wants to end up, what skills are required for that location and how we can tailor their training to that outcome. It's not "one size fits all". Novice SET Trainees are in a low power position to negotiate for a training plan that meets their long-term career goals. The goals of the Rural and Remote Career Coordinator would be:

- Enrol all rural interested Trainees early in SET training with the opportunity for later entry into the program if a rural intention emerges
- Trainee interview to assess trainee's motivation and intention, determine career goals and map out individual training plan
- Training in place: to allow the trainee to train on country/as close to country or future desired practice location as possible, allowing development and maintenance of social and professional connections, increasing recruitment and retention. For Indigenous SET Trainees with rural/remote practice intention or wanting to train on Country, this service could complement existing mentoring programs and scholarships⁷⁷
- Facilitate the rotations the trainee identifies as necessary to gain the skill set required for the future desired practice location, through formal links with Training Boards
- Maintain a database of available rural PFET fellowships in each specialty and where jobs are likely to be, allowing 2-4 years lead time for placement in PFET position or long-term position
- Facilitate trainee connection with rural research opportunities through formal links with the Section of Academic Surgery, the Spinifex Network and the National Medical Training Network
- Link with one rural mentor in the same specialty and a second rural mentor in the desired future work location
- Access to networks and information:
 - a. Membership of the Rural Surgery Section
 - b. Rural interested surgical peer groups: Provincial Surgeons of Australia (PSA), Society of Country ENT surgeons (SCENTS), through formal links with specialty societies and other networking opportunities provide networking opportunities (social media, Registrar conferences, Provincial Surgeons Australia Conference, Rural Surgery Section at the RACS Annual Scientific Conference)
 - c. Multidisciplinary rural interest groups (AMA rural, Rural Doctors Association Australia and state sections, National Rural Health Alliance), through formal links with these organisations or via the RSS members serving in or being members of these organisations
 - d. Conferences: Provincial Surgeons Conference, RMA-rural medicine Australia conference, Australian Indigenous Doctors Conference (and NZ equivalent), Remote and Rural Health Forum
 - e. Journals and other library resources. RACS library staff have worked on a Rural Resources section on the library website and Table of Contents alerts, including The Australian Journal of Rural Health and the Journal of Remote and Rural Health.
 - f. Grants, scholarships and financial support opportunities for rural Trainees collated in an online resource with application links and dates, plus a twice-yearly e-newsletter.

Similar programs exist in Australia and internationally. The General Surgeons Association of Canada aims to connect junior Trainees with rural surgical mentors and with rural communities to aid with succession planning. ⁷⁸ The Australian Federal Government has announced funding for rural generalist coordination units (RGCUs) to enable registrars in the rural generalist pathway to access help in planning their training.⁷⁹

In designing the new program, what is needed is:

- 1. Funding: RSS will apply for STP funds to progress the development of the program
- 2. Further collaboration with Trainees to ensure the program is fit for purpose from their perspective, via consultation with RACSTA
- Methods of connecting with rural interested Trainees at SET entry, in all specialty training programs, via the JDocs website - <u>http://jdocs.surgeons.org/</u>, the RACS Prevocational Education and Training Committee
- 4. In the longer term a monitoring and evaluation framework:
 - a. Data gathering
 - b. Reporting framework
 - c. Review schedule

RURAL AND REMOTE CENTRAL AND NORTHERN AUSTRALIA SURGICAL SERVICE STRATEGY RCANS

In Australia, there are remote centres with essential but fragile surgical services. These include Alice Springs, Darwin, Kalgoorlie, Broome and Cairns, among others. Fragility comes from inability to recruit sufficient workforce to staff safe hours rosters and provide 24-hour emergency care, and inability to recruit for succession, so that dedicated surgeons after years of service to their community, feel trapped and unable to retire. The high proportion of Specialist International Medical Graduate Surgeons SIMG, who either require supervision for a period of time or are disqualified from supervising other SIMG or SET Trainees, means that loss of a single FRACS surgeon can mean loss of many other members of the surgical team and sometimes loss of the entire surgical service for huge geographical areas.

This is untenable. We need to work on urgent short-term measures to provide surgical care to these areas and longer-term measures to deliver a sustainable remote surgical workforce.

In the short term, the Rural Surgery Section has been encouraging new fellows to undertake remote and rural fellowships or three to 12-month periods of work in remote and rural areas of Australia and New Zealand. The international travel restrictions necessitated by the COVID pandemic have left many younger fellows unable to pursue overseas fellowships and with reduction in elective surgery in many states, we have a group of underemployed surgeons who could help in remote and rural areas. The Australian Society of Plastic and Reconstructive Surgeons have collaborated with surgeons in Darwin to deliver a two-year program of consultant services and a pathway for an SIMG surgeon to settle permanently in Darwin.

In the mid-term we propose RACS convenes a forum with remote surgical stakeholders including the directors of surgery from remote surgical services, RANZCA, RANZCOG and the Remote and Rural JMO Training Forum (hosted by Flinders University), to progress the implementation of the Northern Australian Training Network (RACS Business Plan 2020).

In the longer term, we propose a Central and Northern Australia Surgical selection initiative. A possible pathway to sustainable remote surgical services is a longitudinal or vertical training pathway, selecting junior doctors who are already living, working and committed to a remote area and providing the bulk of their training in the same area. The Remote and Rural JMO Training Forum was convened by remote specialists and JMOs to work with speciality colleges to overcome the huge barriers for remote and rural JMOs to access speciality training programs. This program would build on rural selection initiatives and require applicants to be "sponsored" or recognised by a nominated remote surgical centre as committed to that area. This approach is supported by the AMC standards, allowing for either jurisdictional appointment of Trainees to a training position (e.g., ANZCA) or of College appointment to a training program (ego RACS SET), then secondary allocation of a training position. This solution would combine the two models, with a RCANS selection pathway involving stakeholder hospitals and RACS training boards.

A draft RCANS selection initiative:

- Would sit alongside SET selection
- Applicants must meet minimum standard for selection (like the Aboriginal and Torres Strait Islander Selection Initiative)
- Plus meet additional criteria
 - Rural origin +/- rural medical school +/- rural work exposure (more points for more duration and more remoteness)
 - +/- Rural research
 - +/- Sponsorship/demonstrated relationship/commitment to Central and Northern Australia (via involvement with hospital or community)
- There will be quarantined positions reflecting community need for surgical care.
- Unlike SET, the applicants would be selected by a panel including representatives from RACS, specialty training board and the surgeons/hospital executives of the hospitals involved in the Northern Australian Training Network. This is allowed under the AMC standards and is a hybrid of college selection (like RACS does) and hospital training post selection (like ANZCA⁸⁰).

Appendices

Appendix A: Background to GRiD

In 2019-2020, The Rural Surgery Section Committee approached the Indigenous Health and Global Surgery Committees to propose a Rural-Indigenous-Global Alliance within RACS, in the spirit of collaboration of the One College policy. On the basis of our sections' shared values, particularly equity as a health care imperative, an alliance was proposed that could strengthen and amplify our advocacy work, for the benefit of the communities we serve and the surgeons we represent. The aim was to foster improved service delivery to our communities and a professional learning community of like-minded surgeons, through:

- The development of a RIG post-SET fellowship, with training posts, supervisors and curriculum, linked with research collaboratives in Indigenous, Global and Rural Health.
- A culture within RACS of service to underserved communities, including positive peer pressure to contribute effectively to outreach work and support rural, indigenous and global surgeons in their work.
- Championing the implementation of the new RACS tenth competency, Cultural Competency and Safety.
- A new RACS professional development course in Rural, Indigenous and Global surgery, including outreach work, that would equip surgeons to provide effective and culturally appropriate outreach.
- A RIG section at the RACS Annual Scientific Congress.

As with most ideas, it was improved over time with diverse perspectives.

Dr Maxine Ronald, Councillor and Chair of RACS Indigenous Committee IHC and members of the Indigenous Health Committee provided crucial insights. We acknowledge Indigenous surgeons and Trainees in Australia and New Zealand as First Nations People, focused on Indigenous Health Rights in their own countries, and with unique heritage and experiences of colonialism. Our goal is to collaborate and amplify their work, not absorb them into an alliance. They recommended an alliance in Australia with the newly formed Mina sub-committee (Aboriginal and Torres Strait Islander Peoples Advisory Group of the IHC), recognising there are many issues specific to Australia which are not experienced in New Zealand. Global Health initiatives should be focused on self-determination, cultural safety and capacity building. The IHC are essential in providing cultural safety and cultural competency understanding and knowledge for health care involving Indigenous populations. In New Zealand, many Maori surgeons have strong connections to the Pacific Islands, which provides invaluable support and advice to inform actions to support Pasifika people. Involving Pasifika surgeons is also intended.

Dr Annette Holian, Councillor and then Chair of Global Health, invented the acronym GRID, reflecting that each group has their own identity and expertise while also having shared ground, "what links us together, despite distance, land, water and cultural norms" envisioned as a 3D grid. The Global Surgery Committee is already actively networking with surgeons in Australia, New Zealand, and the Pacific.

Rural Surgery Section committee discussions recommended we encompass Wilderness and Disaster Medicine, ensuring the development of generalist skills in all surgical specialities to respond to disasters (AUSMAT, NZMAT), and consider post SET Fellowships in places like Fiji, allowing reciprocal exchange of experience in developing country and capacity building of the local healthcare workforce.

Although we do well to train surgeons as generalists by the end of SET, many then undertake a subspecialist fellowship, often in large international urban centres and lose their fitness for rural practice. Australian Rural Surgical post SET Fellowships were pitched to the Federal Department of Health and RACS was able to source STP funding for 2 rural fellowship positions in 2020 in Darwin and Cairns. The goal is for new surgeons to consider a paid fellowship position in a rural location (with good support from colleagues) rather than an unpaid overseas subspecialist fellowship.

Concurrently, General Surgeons Australian is implementing a PFET Fellowship in Rural and Regional Surgery, chaired by Sally Butchers, immediate past chair of the Rural Surgery Section Committee. Rural sections of 3 other specialty societies are in the planning phase of similar programs.

The Rural and Remote JMO Training Forum Steering Committee also recognise the value of global surgical skills for rural and remote practice and vice versa.

Appendix B: AMC standards applicable to the Train for Rural initiative

The Australian Medical Council. Standards for Assessment and Accreditation of Specialist Medical Programs and Professional Development Programs by the Australian Medical Council 2015 [Internet]. 2015. Available from: <u>https://www.amc.org.au/accreditation-and-recognition/assessment-accreditation-specialist-medical-programs-assessment-accreditation-specialist-medical-programs/</u>

AMC standard 1.2 Program management:

The structures responsible for the program and curriculum design should be informed by knowledge of local and national needs in health care and service delivery, national health priorities and regulatory requirements.

AMC Standard 1.7 Continuous renewal

The AMC expects each education provider to engage in a process of educational strategic planning with appropriate input, so that its training and education programs, curriculum, assessment of specialist international medical graduates and CPD programs reflect changing models of care, developments in health care delivery, medical education, medical and scientific progress, cultural safety and changing community needs.

AMC Standard 2.1 Educational purpose

The community responsibilities embedded in the purpose of the health education provider should address the health care needs of the communities it serves and reducing health disparities in the community, most particularly in addressing Aboriginal and Torres Strait Islander and Maori people and their health. Education providers are encouraged to engage health consumers when developing specialist medical programs to ensure the programs meet societal needs.

AMC Standard 2.2 Program outcomes

The provider relates its training and education functions to the health care needs of the communities it serves. In considering program outcomes, the education providers should consider whether graduates are "fit for purpose", both in order to attain the award and from the perspective of the patient, stakeholders and the community.

AMC Standard 3 The specialist medical training and education framewor:

3.1 curriculum framework for Generalism; 3.2 content of curriculum. 3.2.6 The curriculum prepares specialists to contribute to the effectiveness and efficiency of the health care system through knowledge and understanding of the issues associated with the delivery of safe, high quality and cost effective health care across a range of health settings within Australia and /or New Zealand health systems; 3.3 continuum of training, education and practice: Purposeful curriculum design which demonstrates horizontal and vertical integration and articulation with prior and subsequent phases of training and practice including CPD. The AMC supports activities to develop the linkage between primary medical education, prevocational training and vocational training It also considers that collaboration

AMC Standard 6 Monitoring and evaluation

Program and graduate outcomes incorporate the needs of both graduates and stakeholders and reflect community needs and medical and health practice. The education provider collects, maintains and analyses both qualitative and quantitative data on its program and graduate outcomes. This occurs form the level of individual graduate attributes through to the level of overall workforce demands. Education providers should consider methods of evaluation that ensure recently graduated specialists are of a standard commensurate with community expectation, such as specialist self-assessment of preparedness for practice, review of graduate destinations and community requirements. Education providers are expected to disseminate program and graduate outcomes and engage in a dialogue with

stakeholders. There should be evidence that stakeholder views are considered in continuous renewal of the education program.

Standard 7 Trainees 7.1 admission policy and selection

The policies and principles support merit-based selection can be consistently applied and prevent discrimination and bias; supports increased recruitment and selection of Aboriginal and Torres Strait Islander and Maori Trainees. The education provider publishes the mandatory requirements or the specialist medical program, such as periods of rural training, and/or rotation through a range of training sites so that Trainees are aware of these requirements prior to selection. The criteria and process for seeking exemption from such requirements are made clear. The education provider monitors the consistent application of selection policies across training sites and or regions. The AMC does not endorse any one selection process; it recognises that there is no one agreed method of selecting the most appropriate Trainees and supports diverse approaches that include both academic and vocational considerations. Selection into a specialist medical program can occur through several different mechanisms, often with the interlinking process for selection for employment and selection for training. In some situations, the education provider performs the primary selection with employment assured for those selected. In other situations, the reverse may occur, with employment into a training position as the primary selection mechanism (could we apply this to recruiting remote committed residents to surgical training egg Alice Springs). Strategies to increase recruitment and selection of Aboriginal and Torres Strait Islander and Maori Trainees should be complemented by retention polices. The education provider should facilitate opportunities to increase recruitment and selection of rural origin Trainees and Trainees from other underrepresented groups. Despite the wide variety of selection policies and processes, the AMC recognises a number of benefits to reginal coordination of selection processes for both Trainees and the employing health services, particularly in ensuring consistent application of selection policies.

7.3 communication with Trainees: Education providers should communicate in advance with Trainees about proposed program changes and be guided by the "no unfair disadvantage to Trainees" specified in standard 6 and propose special arrangements for those already enrolled when change is implemented, recognising that sometimes program changes are required due to evolving professional practice and community needs. To assist Trainees to make informed choices about a specialist medical program and location, information on career pathways, addressing workforce distribution issues and training opportunities in different regions/states should be available. Education providers are encouraged to collaborate with stakeholders in workforce planning activities for the speciality, including jurisdictions to support career guidance systems.

7.4 trainee wellbeing: the education provider should consider the needs of groups of Trainees that may require additional support to complete training, such as Aboriginal and Torres Strait Islander and Maori people.

AMC Standard 8 Implementing the program – delivery of education and accreditation of training sites

8.1 supervisory and education roles: a supervisor can be at network rather than local level and other members of the health care team may also contribute to supervising, assessing and providing feedback to the trainee.

8.2 training sites and posts: the education provider's criteria for accreditation of training sites link to the outcomes of the specialist medical program and (including) support training and education opportunities in diverse settings aligned to the curriculum requirements including rural and regional locations and settings which provide experience of the provisions of health care to Aboriginal and Torres Strait Islander and Maori people; ensure Trainees have access to educational resources, including ICT applications, required to facilitate their learning in the clinical environment; the education provider works with jurisdictions as well as the private health system, to effectively use the capacity of the health care system for work based training and to give Trainees experience of the breadth and depth of the discipline (they'll experience rural health, more access to common presentations not seen in urban OPD or ED due to protocols refusing referrals or other specialties managing them egg FACEM, and will have access to VMO model/private practice rather than always public outpatient clinics).

Trainees are likely to gain experience in multiple locations each providing a varying range of experiences of the specialist discipline. For this reason, education providers are increasingly accrediting networks or training sites rather than expecting a single training site to provide all the required training experience and while all training sites should satisfy the education providers' accreditation criteria, the AMC encourage flexible rather than restrictive approaches that enable the capacity of the health system to be used most effectively for training.

¹ Royal Australasian College of Surgeons. Equity of access to surgical care [Internet]. 2017. Available from: <u>https://www.surgeons.org/-</u> /media/Project/RACS/surgeons-org/files/position-

papers/2017-01-10 pos rel-com-

002_equity_of_access_to_surgical_care.pdf?rev =e2eb02fb242e4ce38a64c37ab2ed558d&hash= CE4C16358C5F809B8D3D75433BA76B59

² Royal Australasian College of Surgeons.Sections Terms of Reference [Internet]. 2018.Available from:

https://www.surgeons.org/resources/interestgroups-sections/rural-surgery/about-the-ruralsurgery-section

³ 1. NZ Human Rights Commission. Human Rights in New Zealand 2010 - 11. Right to Health [Internet]. 2010. Available from: https://www.hrc.co.nz/resources/

⁴ Australian Commission on Safety and Quality in Healthcare. Australian Charter of Healthcare Rights Second edition [Internet]. 2019. Available from:

https://www.safetyandquality.gov.au/australiancharter-healthcare-rights

⁵ Royal Australasian College of Surgeons. Access to elective assessment and surgery [Internet]. 2017. Available from: <u>https://www.surgeons.org/about-racs/position-papers/access-to-elective-assessment-and-surgery</u>

⁶ Royal Australasian College of Surgeons. Equity of access to surgical care [Internet]. 2017. Available from: <u>https://www.surgeons.org/aboutracs/position-papers</u>

 ⁷ Chong A, Kiroff G. Preparing surgeons for rural Australia: the RACS Rural Surgical Training Program. ANZ J Surg [Internet]. 2015;85(3):108– 12. Available from:

https://onlinelibrary.wiley.com/doi/abs/10.1111/an s.12880

⁸ Maddern GJ. Rural general surgical placement: a necessity not an option. ANZ J Surg [Internet].
2003 Dec 1;73(12):975. Available from: https://doi.org/10.1046/j.1445-2197.2003.t01-2-.x

⁹ Royal Australasian College of Surgeons. Surgical Competence and Performance Guide [Internet]. 2020. Available from: https://www.surgeons.org/Fellows/professionalstandards

¹⁰ Medical Council of New Zealand. The New Zealand Medical Workforce in 2018 [Internet]. 2019. Available from: <u>https://www.mcnz.org.nz/about-</u> us/publications/workforce-survey/

¹¹ Australian Bureau of Statistics. 3218.0 -Regional Population Growth, Australia, 2018-19 [Internet]. Available from:

https://www.abs.gov.au/ausstats/abs@.nsf/mf/32 18.0

¹² StatsNZ. New Zealand: An Urban/Rural Profile [Internet]. 2004. Available from:

http://archive.stats.govt.nz/browse_for_stats/Map s_and_geography/Geographic-areas/urban-ruralprofile.aspx#gsc.tab=0

¹³ Royal Australasian College of Surgeons. 2018 Surgical Workforce Census Summary Report [Internet]. 2019. Available from:

https://www.surgeons.org/resources/reportsguidelines-publications/workforce-activitiesreports

¹⁴ Australian Government Department of Health. National Medical Workforce Strategy [Internet]. Scoping Framework. 2019. Available from: <u>https://www1.health.gov.au/internet/main/publishi</u> ng.nsf/Content/Health Workforce-nat-med-<u>strategy</u>

¹⁵ Medical Deans Australia and New Zealand. Workforce - Career interests of 2019's medical graduates [Internet]. Available from: https://medicaldeans.org.au/priorities/workforce/

¹⁶ Kumar S, Clancy B. Retention of physicians and surgeons in rural areas—what works? J Public Health (Bangkok) [Internet]. 2020 Mar 5; Available from:

https://doi.org/10.1093/pubmed/fdaa031

¹⁷ World Health Organization. Increasing access to health workers in remote and rural areas through improved retention Global policy recommendations [Internet]. 2010. Available from:

https://www.who.int/hrh/retention/guidelines/en/

¹⁸ Grobler L MBJ, Mabunda S. Interventions for increasing the proportion of health professionals practising in rural and other underserved areas. Cochrane Database Syst Rev [Internet]. 2015;(6). Available from:

https://doi.org//10.1002/14651858.CD005314.pub 3

¹⁹ Chong A, Kiroff G. Preparing surgeons for rural Australia: the RACS Rural Surgical Training Program. *ANZ J. Surg.* 2015; 85: 108–12.

²⁰ Eley DS, Synnott R, Baker PG, Chater AB. A decade of Australian Rural Clinical School graduates--where are they and why? Rural Remote Health. 2012;12:1937.

²¹ Playford D, Ngo H, Gupta S, Puddey I. Opting for rural practice: the influence of medical student origin, intention and immersion experience. Med J Aust. 2017;207:154–8.

²² Hughes D, Williams JAR, Brooks JV. Movers and Stayers: What Birthplaces Can Teach Us About Rural Practice Choice Among Midwestern General Surgeons. J Rural Heal [Internet]. 2020; Available from:

https://onlinelibrary.wiley.com/doi/abs/10.1111/jrh .12428

²³ World Health Organization. Increasing access to health workers in remote and rural areas through improved retention Global policy recommendations [Internet]. 2010. Available from:

https://www.who.int/hrh/retention/guidelines/en/

²⁴ The Royal Australian and New Zealand
College of Obstetricians and Gynaecologists.
FRANZCOG Training Program Handbook - for
Trainees Commencing prior to 1 December 2013
[Internet]. 2019. Available from:

https://ranzcog.edu.au/training/specialisttraining/curriculum-handbook

²⁵ Luhoway JA, Ryan JF, Istl AC, Davidson J, Christakis N, Bütter A, et al. Perceived Barriers to the Development of Technical Skill Proficiency in Surgical Clerkship. J Surg Educ [Internet].
2019;76(5):1267–77. Available from: <u>http://www.sciencedirect.com/science/article/pii/S</u> <u>1931720418307670</u>

²⁶ Bonney A, Mullan J, Hammond A, Burns P, Yeo G, Thomson B, et al. A case-study of the experiences of junior medical officers in the emergency departments of a metropolitan hospital and rural hospital. Aust J Rural Health [Internet]. 2019 Dec 1;27(6):476–81. Available from: https://doi.org/10.1111/ajr.12526 ²⁷ Stupart D, Beattie J, Lawson M, Watters D, Fuller L. Medical Students Can Learn Surgery Effectively in a Rural Longitudinal Integrated Clerkship. J Surg Educ [Internet]. 2020; Available from:

http://www.sciencedirect.com/science/article/pii/S 1931720420301227

²⁸ Mercier PJ, Skube SJ, Leonard SL, McElroy AN, Goettl TG, Najarian MM, et al. Creating a Rural Surgery Track and a Review of Rural Surgery Training Programs. J Surg Educ [Internet]. 2019;76(2):459–68. Available from: <u>http://www.sciencedirect.com/science/article/pii/S</u> 1931720418304082

29 Ibid

³⁰ Hao S, Johnson HM, Celio A, Frye L, Bayouth L, Joseph J, et al. Rural General Surgery Experience as a Valuable Adjunct to an Academic Based General Surgery Residency. J Surg Educ [Internet]. 2020;77(3):598–605. Available from:

http://www.sciencedirect.com/science/article/pii/S 1931720419308566

³¹ The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. FRANZCOG Training Program Handbook - for Trainees Commencing prior to 1 December 2013 [Internet]. 2019. Available from: https://ranzcog.edu.au/training/specialisttraining/curriculum-handbook

³² Wilhelmi L, Ingendae F, Steinhaeuser J. What leads to the subjective perception of a 'rural area'? A qualitative study with undergraduate students and postgraduate Trainees in Germany to tailor strategies against physician's shortage. Rural Remote Heal [Internet]. 2018;18(4). Available from:

https://doi.org/10.22605/RRH4694

³³ Doescher MP, Jackson JE, Fordyce MA, Lynge DC. Variability in General Surgical Procedures in Rural and Urban U.S. Hospital Inpatient Settings Final report #142 [Internet]. Seattle, WA; 2015. Available from:

https://www.ruralhealthresearch.org/alerts/60

³⁴ Martin P, Sen Gupta T, Bond D, Douyere J, Mills K. Rural competencies in emerging medical practitioners: Beyond clinical skills. Aust J Rural Health [Internet]. 2019 Oct 1;27(5):427–32. Available from: <u>https://doi.org/10.1111/ajr.12531</u>

³⁵ Bentley M, Dummond N, Isaac V, Hodge H, Walters L. Doctors' rural practice self-efficacy is associated with current and intended small rural locations of practice. Aust J Rural Health [Internet]. 2019 Apr 1;27(2):146–52. Available from: <u>https://doi.org/10.1111/ajr.12486</u>

³⁶ Martiniuk AL, Colbran R, Ramsden R, Edwards M, Barrett E, O'Callaghan E, et al. Capability ... what's in a word? Rural Doctors Network of New South Wales Australia is shifting to focus on the capability of rural health professionals. Rural Remote Health [Internet]. 2020;20(3):5633. Available from:

https://doi.org/10.22605/RRH5633

³⁷ Deveney K, Deatherage M, Oehling D, Hunter J. Association Between Dedicated Rural Training Year and the Likelihood of Becoming a General Surgeon in a Small Town. JAMA Surg [Internet]. 2013 Sep 1;148(9):817–21. Available from: https://doi.org/10.1001/jamasurg.2013.2681

³⁸ Kumar S, Clancy B. Retention of physicians and surgeons in rural areas—what works? J Public Health (Bangkok) [Internet]. 2020 Mar 5; Available from:

https://doi.org/10.1093/pubmed/fdaa031

 ³⁹ Australian Medical Council. Standards for Assessment and Accreditation of Specialist Medical Programs and Professional Development Programs by the Australian Medical Council 2015 [Internet]. 2015. Available from:

https://www.amc.org.au/accreditation-andrecognition/assessment-accreditation-specialistmedical-programs-assessment-accreditationspecialist-medical-programs/

40 Ibid

⁴¹ Royal Australasian College of Surgeons. Strategic Plan 2019-2021 and Business Plan 2020 [Internet]. 2019. Available from: <u>https://www.surgeons.org/resources/reports-</u> <u>guidelines-publications/strategic-plans</u>

42 Ibid

⁴³ Royal Australasian College of Surgeons. Code of Conduct [Internet]. 2016. Available from: <u>https://www.surgeons.org/become-a-</u> <u>surgeon/about-specialist-surgeons/code-of-</u> <u>conduct</u>

⁴⁴ Royal Australasian College of Surgeons.Surgical Competence and Performance Guide [Internet]. 2020. Available from:

https://www.surgeons.org/Fellows/professionalstandards ⁴⁵ Royal Australasian College of Surgeons.RACS Diversity and Inclusion Plan [Internet].2016. Available from:

https://www.surgeons.org/resources/reportsguidelines-publications/action-plans

⁴⁶ Royal Australasian College of Surgeons.Innovate Reconciliation Action Plan 2020-2022[Internet]. 2020. Available from:

https://www.surgeons.org/about-racs/indigenoushealth/aboriginal-and-torres-strait-islanderhealth/innovate-reconciliation-action-plan-rap

⁴⁷ Royal Australasian College of Surgeons.Education Board Terms of Reference [Internet].2018. Available from:

https://www.surgeons.org/about-racs/policies

⁴⁸ Royal Australasian College of Surgeons. Conflict of interest [Internet]. 2019. Available from: <u>https://www.surgeons.org/aboutracs/policies</u>

⁴⁹ Royal Australasian College of Surgeons. Board of Surgical Education and Training (BSET) Terms of Reference [Internet]. 2019. Available from: <u>https://www.surgeons.org/about-racs/policies</u>

⁵⁰ Royal Australasian College of Surgeons. Training Requirements and Curriculum Structure [Internet]. 2015. Available from: <u>https://www.surgeons.org/about-racs/policies</u>

⁵¹ Australian Medical Council. Standards for Assessment and Accreditation of Specialist Medical Programs and Professional Development Programs by the Australian Medical Council 2015 [Internet]. 2015. Available from: https://www.amc.org.au/accreditation-andrecognition/assessment-accreditation-specialist-

recognition/assessment-accreditation-specialistmedical-programs-assessment-accreditationspecialist-medical-programs/

⁵² World Health Organization. Increasing access to health workers in remote and rural areas through improved retention Global policy recommendations [Internet]. 2010. Available from:

https://www.who.int/hrh/retention/guidelines/en/

⁵³ Australian Medical Association. Rural training pathways for specialists 2020 [Internet]. 2020. Available from: <u>https://ama.com.au/position-</u> <u>statement/rural-training-pathways-specialists-</u> <u>2020</u>

⁵⁴ Australian Medical Association. A plan for better health care for regional, rural, and remote Australia [Internet]. 2016. Available from: https://ama.com.au/position-statement/planbetter-health-care-regional-rural-and-remoteaustralia

⁵⁵ Australian Medical Association. Regional Training Networks - 2014 [Internet]. 2014. Available from: <u>https://ama.com.au/position-</u> <u>statement/regional-training-networks-2014</u>

⁵⁶ Australian Government Rural Health Multidisciplinary Training (RHMT) 2016-2018 – Program Framework

Definition of rural origin: see 2c in https://www1.health.gov.au/internet/main/publishi ng.nsf/content/rural-health-multidisciplinarytraining-program-framework

⁵⁷ Medical Deans Australia and New Zealand.Selection Policy Statement [Internet]. 2016.Available from:

https://medicaldeans.org.au/resources/policiesand-statements/

⁵⁸ Medical Deans Australia and New Zealand.
Policy Position on Rural/Regional Student
Representation in Medical School [Internet].
2013. Available from:

https://medicaldeans.org.au/resources/policiesand-statements/

⁵⁹ 1. Australian Government Department of Health. National Medical Workforce Strategy [Internet]. Scoping Framework. 2019. Available from:

https://www1.health.gov.au/internet/main/publishi ng.nsf/Content/Health%20Workforce-nat-medstrategy

⁶⁰ Duckett S, Mackey W, Stobart A, Swerissen H, Parsonage H. Coming out of COVID-19 lockdown: the next steps for Australian health care [Internet]. 2020. Available from: https://grattan.edu.au/report/coming-out-of-covid/

⁶¹ Paynter JA, O'Sullivan BG. Preferences and pathways of the next generation of rural doctors. Aust J Rural Health [Internet]. 2020 Jun 1;28(3):309–10. Available from: https://doi.org/10.1111/ajr.12629

⁶² RACS NSW State Committee. Surgical Services Consultation Paper. 2020.

⁶³ McGrail MR, Russell DJ, Campbell DG. Vocational training of general practitioners in rural locations is critical for the Australian rural medical workforce. Med J Aust [Internet]. 2016 Sep 1;205(5):216–21. Available from: https://doi.org/10.5694/mja16.00063 ⁶⁴ The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. FRANZCOG Training Program Handbook - for Trainees Commencing after to 1 December 2013 page 17 [Internet]. 2019. Available from: <u>https://ranzcog.edu.au/training/specialisttraining/curriculum-handbook</u>

⁶⁵ Australian Government Department of Health. Integrated Rural Training Pipeline for Medicine (IRTP) [Internet]. 2017. Available from: <u>https://www1.health.gov.au/internet/main/publishi</u> <u>ng.nsf/Content/integrated-rural-training-pipeline-</u> <u>medicine</u>

⁶⁶ Tchia K, Lim L, See N, Parikh S, Croker F, Woolley T. Do rurally focussed dental programs produce regional and rural dentists? An exploratory cross-sectional survey examining Australian dental graduates of 2015. Aust J Rural Health [Internet]. 2019 Dec 1;27(6):574–6. Available from: https://doi.org/10.1111/ajr.12572

⁶⁷ Mercier PJ, Skube SJ, Leonard SL, McElroy AN, Goettl TG, Najarian MM, et al. Creating a Rural Surgery Track and a Review of Rural Surgery Training Programs. J Surg Educ [Internet]. 2019;76(2):459–68. Available from: <u>http://www.sciencedirect.com/science/article/pii/S</u> 1931720418304082

⁶⁸ Bappayya S, Chen F, Alderuccio M, Schwalb H. Caseload distribution of general surgeons in regional Australia: is there a role for a rural surgery sub-specialization? ANZ J Surg [Internet]. 2019 Jun 1;89(6):672–6. Available from: <u>https://doi.org/10.1111/ans.14680</u>

⁶⁹ Blattner K, Stokes T, Nixon G. A scope of practice that works "out here": Exploring the effects of a changing medical regulatory environment on a rural New Zealand health service. Rural Remote Health. 2019;19(4).

⁷⁰ Royal Australasian College of Surgeons.
 Equity of access to surgical care [Internet]. 2017.
 Available from: <u>https://www.surgeons.org/about-racs/position-papers</u>

⁷¹ Cook MR, Hughes D, Deal SB, Sarap MD, Hughes TG, Deveney KE, et al. When rural is no longer rural: Demand for subspecialty trained surgeons increases with increasing population of a non-metropolitan area. Am J Surg [Internet]. 2019;218(5):1022–7. Available from: http://www.sciencedirect.com/science/article/pii/S 0002961019305045

⁷² StatsNZ. New Zealand Population [Internet]. Available from:

https://www.stats.govt.nz/topics/population Medical Council of New Zealand. The New Zealand Medical Workforce in 2018 [Internet]. 2019. Available from:

https://www.mcnz.org.nz/aboutus/publications/workforce-survey/

⁷³ Australian Government Department of Health.General surgery 2016 Factsheet [Internet]. 2016.Available from:

https://hwd.health.gov.au/publications.html

Australian Government Department of Health. Orthopaedic surgery 2016 Factsheet [Internet]. 2016. Available from:

https://hwd.health.gov.au/publications.html

Australian Government Department of Health. Otolaryngology 2016 Factsheet [Internet]. 2016. Available from:

https://hwd.health.gov.au/publications.html

Australian Government Department of Health. Plastic surgery 2016 Factsheet [Internet]. 2016. Available from:

https://hwd.health.gov.au/publications.html

Australian Government Department of Health. Surgery 2016 Factsheet [Internet]. 2016. Available from:

https://hwd.health.gov.au/publications.html

⁷⁴ Royal Australasian College of Surgeons. Conflict of interest [Internet]. 2019. Available from: <u>https://www.surgeons.org/aboutracs/policies</u>

⁷⁵ Australian Medical Council. AMC response to the Royal Australasian College of Surgeons 2019 Progress Report [Internet]. 2019. Available from: <u>https://www.surgeons.org/Resources/reports-</u> <u>guidelines-publications/australian-medical-</u> <u>council-and-medical-council-of-new-zealand-</u> <u>reports</u>

⁷⁶ Royal Australasian College of Surgeons. Australian Board in General Surgery Terms of Reference [Internet]. 2020. Available from: <u>https://www.surgeons.org/about-racs/policies</u>

Australian Board of Plastic and Reconstructive Surgery and Regional Subcommittees Terms of Reference [Internet]. 2017. Available from: https://www.surgeons.org/about-racs/policies

Board of Cardiothoracic Surgery Terms of Reference [Internet]. 2016. Available from: https://www.surgeons.org/about-racs/policies Board of Neurosurgery Terms of Reference [Internet]. 2020. Available from: https://www.surgeons.org/about-racs/policies

Board of Otolaryngology Head and Neck Surgery Terms of Reference [Internet]. 2020. Available from: <u>https://www.surgeons.org/aboutracs/policies</u>

Board of Paediatric Surgery Terms of Reference [Internet]. 2020. Available from: https://www.surgeons.org/about-racs/policies

Board of Urology Terms of Reference [Internet]. 2020. Available from: https://www.surgeons.org/about-racs/policies

Board of Vascular Surgery Terms of Reference [Internet]. 2017. Available from: https://www.surgeons.org/about-racs/policies

New Zealand Board in General Surgery Terms of Reference [Internet]. 2020. Available from: https://www.surgeons.org/about-racs/policies

New Zealand Board of Plastic and Reconstructive Surgery Terms of Reference [Internet]. 2019. Available from: https://www.surgeons.org/about-racs/policies

⁷⁷ Royal Australasian College of Surgeons.
 RACS Aboriginal and Torres Strait Islander SET
 Trainee One Year Scholarship [Internet]. 2016.
 Available from: <u>https://www.surgeons.org/about-racs/policies</u>

Royal Australasian College of Surgeons. RACS Māori SET Trainee One Year Scholarship [Internet]. 2016. Available from: https://www.surgeons.org/about-racs/policies

⁷⁸ Canadian Association of General Surgeons. Rural Surgery Mentorship Program [Internet]. Available from: <u>https://cags-accg.ca/rural-surgery-workforce-development-initiative/</u>

⁷⁹ Crimmins F. Rural units to enhance training in the bush. The Medical Republic [Internet]. 2020; Available from:

http://medicalrepublic.com.au/rural-units-toenhance-training-in-the-bush/32059

⁸⁰ Australian and New Zealand College of Anaesthetists. Anaesthesia training sites and rotations [Internet]. 2020. Available from: <u>https://www.anzca.edu.au/education-</u> <u>training/training-site-accreditation/anaesthesia-</u> <u>training-sites-and-rotations</u>