RURAL AND REGIONAL SURGERY POLICY

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Position statement

ASSA wholly supports the improvement of surgical outcomes in rural and regional areas.

Currently, ASSA believes there are numerous barriers to accessing healthcare services in rural and regional areas due to geographic isolation from tertiary centres, and current funding and training structures. ASSA believes that medical schools and medical students are able to assist in reducing negative bias in rural and regional surgical outcomes.

Background

Role of Medical Schools and Medical Students in Improving Rural Surgery

Despite the robust health systems of Australia and New Zealand, an estimate of up to one million individuals across both countries do not have access to appropriate and timely surgical care, with people living in rural and regional areas being over-represented in this population. (1,2)

Medical schools influence a country's medical workforce distribution by directly controlling student recruitment (particularly rural student recruitment), admission criteria, and by integrating exposure to rural medical training and rural-orientated medical curriculums (3). Medical schools serve a key role in exposing medical students to rural/regional medical training early in their career, and thus influencing whether one is likely to work rurally or not. Accordingly, it has been suggested that the exposure to rural clinical placements early in student's training is regarded as a major influencing factor for the decision to perform rural work upon graduation (4,5). An Australian study found that students' experience seems to be the key factor for later rural practice, since graduates who have undertaken rural placements are three times more likely to undertake rural internships compared to medical students with a rural background (6,7). Nevertheless, many medical schools are tempted to adjust medical student numbers in an attempt to address shortages of rural medical workforce.

With substantial evidence showing that the impact of quality rural training placement does increase the likelihood of medical graduates working rurally, medical schools in Australia and New Zealand should embed this as an integral component of its curricula (8). To date, 18 rural clinical schools have been established across rural areas of Australia. Through this, some medical students are given the opportunity to undertake short-term or long-term rural clinical placements. However, most opportunities for rural clinical placements provided to medical students are one-off, that is, the exposure to rural medicine is not longitudinal. Furthermore, the exposure to surgical placements and shadowing in rural settings is often limited.

Ultimately, medical schools have the responsibility to ensure that the appropriate proportion of students are able to experience clinical placements in rural regions, one that is continuous throughout their medical studies. This can help in improving rural surgical workforce in Australia and New Zealand.

Rural Surgery Partnership/Advocacy

It is a well-established fact that rural and regional centres within Australia are commonly regions of workforce shortage in many surgical specialties. It is therefore in the best interests of current and future patients within such communities to increase the role medical students, and future doctors can play to support and sustain these networks. Currently, many medical schools around Australia have programs engaging students with rural communities for a short period of time during their studies. These placements are often either in the form of short-term pre-clinical development, or long-term clinical placements. Other extra-curricular programs such as the John Flynn Placement Program and the NSW Rural Doctors Network, offer monetary compensation for time spent in rural areas shadowing and assisting local healthcare workers and doctors.

External to medical school curriculum and the aforementioned rural placements, there are not many opportunities for medical students to participate in clinical experience in rural and regional areas, even if the rural and regional areas are enthusiastic to host students. Partnerships to grow and sustain connections between medical schools and medical students will act to secure increased visibility and awareness of rural and regional surgery training pathways and career options in early careers, through to rural and regional employment in mid and late stages of medical careers.

Upskilling

Doctors utilizing surgical techniques in regional/rural areas include both surgeons belonging to the Royal Australasian College of Surgeons (RACS), and general practitioners (GPs). 14.6% of Australian RACS surgeons live, and presumably practice, in regional and rural areas (9). Many GPs have a special interest in surgery and upskill accordingly to become a GP proceduralist or surgeon (Australia), or a GP with a Special Interest (New Zealand) in either Minor Surgery or Dermatology.

GP surgeons in Australia have been found to perform a diverse range of surgical procedures:

- Operations commonly performed by GP surgeons in South Australia include caesarian sections, vasectomies, appendicectomies (appendectomies), carpal tunnel releases, and skin grafting (10).
- GP surgeons are often expected to be skilled in managing lacerations, abscesses and skin lesions independently, with procedures including suprapubic catheter insertion, appendicectomy, burr-holes and fasciotomy performed under the ‘supervision’ of a RACS surgeon (11).
- Surgical procedures performed by RACS surgeons in regional and rural areas include any and all procedures which may be performed safely without an on-site intensive care unit (5).Common operations include cholecystectomy, Nissen fundoplication, hernia repair and grommet insertion. Rural and regional general surgeons usually have a broader scope of practice than their metropolitan-based colleagues.

Regional and Rural Hospitals

Due to the geographic differences between Australia and New Zealand, there are certain discrepancies in regional and remote hospital management, however underlying principles remain constant. As a result of geographic isolation between larger base hospitals and satellite rural, the communication and distribution of surgical services – both human and capital resources – are often poorly utilised to serve the communities.

While Australia is highly urbanised in comparison with many other OECD countries, given that the country has 18 cities of more than 50,000 the average 1.38 cities within the OECD (12), however the majority of

these lie on the eastern seaboard or along the coastline. This suggests that rural and regional health outcomes will have large discrepancies due their isolated position in inland Australia (13).

Furthermore, as Australia's geographical and environmental conditions differ drastically from one another, the system to be set in place to assist regional and rural hospitals must be tailored for their specific geolocation. For instance, hospitals in Alice Springs will have a higher incidence in heatstroke related admissions compared to Burnie in Tasmania where the climate is much cooler (14).

It has been stated those receiving elective surgeries in inner regional hospitals have increased waiting times compared to their counterparts in city hospitals but also – more surprisingly – those in outer regional and remote hospitals. However, it should be noted that these elective surgeries were still all completed within the clinical suggested time frame (15).

This lack of established relationship between regional and rural hospitals has also led to mutual misunderstanding of respective hospital capabilities in the severity of cases that can be met (16).

Access and Equity

New Zealand is geographically divided into Urban and Rural areas; rural areas are further divided based on urban influence. Rural communities generally have poorer access to health resources (17). The Government's rural health policy proposes that people living at a distance from a hospital must retain access to a full range of services and such services are determined based on reasonable need and ability to benefit and not by where a person lives (18). Hence, those with a lower income face financial difficulties of the initial cost of transport and a long waiting time to receive reimbursements for transport (minimum 4 weeks). Furthermore, the subsidy level often does not meet the true cost of travel.

Rural regions of Australia face a pressing issue of distance and geographic isolation preventing opportunities to access healthcare services. Since January 2020, the Department of Health programmes have transitioned into utilising the Modified Monash Model (MMM) classification for health service planning. The MMM measures the remoteness and population size on a Modified Monash (MM) category MM 1 (major city) to MM 7 (very remote) -- aiming for an equitable distribution of the health workforce. Currently, there are subsidy schemes assisting transport costs across the nation (19). However, due to the complexity of funding programs each with different objectives and administration from different government agencies, there is an inefficient system put into place that fails to appropriately address the urgent issue of geographic barriers to accessing healthcare.

Policy Statements

Role of Medical Schools and Medical Students in Improving Rural Surgery

ASSA recommends:

1. Medical schools in Australia and New Zealand:
    a. Promote greater access and treatment of surgery in rural and remote communities
    b. Acknowledge that medical schools are students' first exposure to any form of medical training and medical schools have a critical role in influencing student exposure and interest to rural surgery
    c. Significantly prioritise rural health in its medical curricula.
        i. Sustainable structure with rural health being embedded across all years of medical education, both pre-clinical and clinical years
        ii. Include Aboriginal and Torres Strait islander health curriculum that is consistent with the Indigenous Health Curriculum Framework

iii. Student exposure to a good balance of both clinical work and the lifestyle of the rural town

d. Deter from adjusting medical student numbers. To instead provide medical students with appropriate, adequate, and longitudinal exposures to rural medicine
e. Regularly review the effectiveness of its integration of rural health in medical curricula, including the operation of its rural clinical schools.
f. Ensure funding is used appropriately and effectively to promote adequate exposure of rural medicine to medical students
g. Ensure appropriate surgical rotations and exposure during short-term and long-term rural clinical placements
    i. (See 'Rural surgery partnership/advocacy' section for more details)

2. Medical students:
    a. Take initiative to learn rural health as part of their medical education
    b. To understand that the roles of being doctors include addressing the inequities faced by individuals living in rural and remote areas
3. Royal Australasian College of Surgery (RACS):
    a. To partner with medical schools around the country
        i. To provide mentorship opportunity for students who have expressed interest in rural practice when undertaking their rural clinical placements
        ii. To consider creating incentives or reserved positions in surgical training programs for students with rural origin, students involved in bonded medical placement (BMP) schemes with the Department of Health, students who undertook long-term rural clinical placements during their medical education
4. Government:
    a. To continue funding rural health in medical curricula.
    b. Specifically fund rural hospitals and clinics so as to maximise opportunities for medical students to undertake rural surgical placements in these areas

Rural Surgery Partnership/Advocacy

ASSA supports the inclusion of medical students in rural and regional theatres and surgical specialty placements in order to increase the likelihood of future interest in working rurally in surgery. There are a number of initiatives that we support, in order to magnify the effect of this position.

1. Medical school rural weeks should include surgical placements, in theatre and ward rounds.

The inclusion of medical students in the practice of rural surgery is central to ASSA's wider policies on rural surgery. There are a number of factors that must be considered in order to maintain patient safety and the support of all stakeholders, such as the rural nodes, medical schools and regulatory bodies. These factors are outlined in guidelines below.

a) Students must not be allowed to demonstrate or practice skills beyond that of which they have been taught
b) Students must comply with the rural network and medical school's codes of conduct
c) Students must comply with all relevant aseptic techniques and practice during theatre visits and ward rounds
d) Patients must consent to the inclusion of medical students in surgeries or ward visits
e) Hospitals must support in the supervision and training (where appropriate) of medical students during placements
f) Hospitals must advise supervising doctors on their responsibilities to, and limitations of, medical students
g) Medical schools must advise students on their responsibilities and limitations while on placement
h) Medical schools must communicate skill level to rural hospitals

There are also a number of practical concerns that ASSA believes can be addressed using the strategies below.

a) Where the number of students, size of hospital, workload or supervising doctors is a limiting factor, students with an interest in rural surgery could be identified prior to placement and made known to those scheduling placements. This may be done competitively, by application stating interest,
b) In order to 'give back' to the hospital, students on surgical placements may be required to write a reflection on their time in rural surgery to be distributed through the hospital, medical school and ASSA's marketing platforms,
c) Students in their final and penultimate year may register interest to receive intern application packs on conclusion of interaction with hospital
d) Students who have been deemed competent by the medical school at basic surgical skills may be allowed to demonstrate these skills rurally

2. ASSA supports 'erasmus'-style placements between ANZ medical schools and rural nodes

During holidays and/or elective blocks, students should be given the opportunity to spend an amount of time experiencing rural life, and rural surgery. Many structures are already in place to support students in rural nodes associated with medical schools, such as accommodation, rural medical school staff and supervisors. Medical students currently only have the option to experience rural surgery in the nodes assigned to them by their medical school, or those nodes associated with their medical school. We suggest that medical schools offer ANZ-wide placement within their rural nodes in a centralised period of time during university holidays or electives so medical students may experience a diversity of rural surgery culture and practice. Medical students will be incentivised to complete this placement for career development, while the government will be incentivised to fund this placement to increase interest in rural placements AUZ-wide.

A number of factors must be considered in order to realise this policy practically. They are listed below.

a) Medical schools agreeing to facilitate this initiative must receive capabilities of medical student ability at the stage of placement
b) Medical schools accepting students must accept responsibility for the welfare, teaching and supervision of the student while on placement
c) Medical students must complete all compulsory state health and safety requirements prior to placement in another state
d) Medical schools must allocate a home university contact for travelling students to contact for welfare concerns or otherwise
e) Patients must consent to the presence of any medical student in surgery or ward visits
f) Travelling students must uphold the home and visiting universities code of conducts, as well as those of any separate rural stakeholders
g) In the interest of organisation, universities may elect to make these placements reciprocal, whereby one student at a medical school 'swaps' with another student of another school

3. ASSA supports the development of a website or application to easily 'match' students with other universities and rural nodes willing to accept students for ANZ-wide rural swaps

The development of a digital tool to 'match' students with rural surgery placements, would allow transparency between students to available placements. It would also allow nodes to explain the culture, opportunities and features of doing a surgical placement within their system.

4. ASSA supports the governmental aid of programs such as JFPP and NSWRHN Bush Bursary that compensate medical students during attendance of rural placements

5. ASSA supports the initiation of a program to compensate medical students while performing rural surgery placements, outside of medical school obligations

Upskilling

Considering their frequent use in rural and regional surgery, and considering the requirement for medical students to learn their surgical craft ethically and safely, ASSA has created the following list of ASSA Regional/Rural Surgical Competencies. ASSA regards the ASSA Regional/Rural Surgical Competencies as important skills for student members to attain by graduation from undergraduate medical school training.

ASSA Regional/Rural Surgical Competencies

Suture techniques	Incision (+/- drainage)	Haemorrhage control	Associated skills
Simple interrupted Horizontal mattress Vertical mattress Subcuticular Corner	Incision technique Lancing technique Wound irrigation	Hand suturing Electrocauterisation	Intravenous cannulation Catheterisation

Table 1.1: ASSA Regional/Rural Surgical Competencies

ASSA will support its members to achieve competency across these four domains by engaging in:

Advocacy

- Highlight regional/rural surgical needs at a keynote session at each annual ASSA Conference.
- Dedicate a permanent column in *Headlights*, the ASSA newsletter, to the three key areas of surgical inequity identified by ASSA – rural/regional surgery, global surgery, and women in surgery.

Information Provision

- Feature the ASSA Regional/Rural Surgical Competencies on the ASSA website.
- Create an online database of surgical skills demonstrations, with a special focus on the ASSA Regional/Rural Surgical Competencies.
- Host workshops and seminars at ASSA Conferences and training days which aim to make ASSA members independently proficient in the ASSA Regional/Rural Surgical Competencies

Partnership

- Encourage local surgical societies to partner with their local general practice and dermatology interest groups to provide surgical training workshops at individual universities.
- Encourage medical schools to create and strengthen regional/rural surgical placements for clinical students.
- Liaise with the Royal Australasian College of Surgeons, the Australian College of Rural and Remote Medicine, the Royal Australian College of General Practitioners, and the Royal New Zealand College of General Practitioners on a bi-annual basis regarding changes in the scope of practice required of a regional/rural surgical practitioner.

Regional and Rural Hospitals

ASSA recommends that:

1. Medical students
    a. To take a proactive approach on all their rural placements and understand their role as a key member in the healthcare team.
    b. To be aware of the limitations of advantages of each site and to transfer that knowledge to other sites they may visit in the future.
2. Medical schools in Australia and New Zealand
    a. To advocate and allow students to participate in more surgical rotations in a rural, clinical setting.
    b. Provide support for those medical student
3. Regional and rural hospitals

    a. To remain in contact with surrounding hospitals to decrease the waiting times for patients and their family.
    b. To support and foster the role of medical students and surgical trainees in increasing the retention rates to improve specialist care within rural and regional settings.
4. State governments
    a. To assist in the creation of hospital networks and infrastructure that is more uniform and allows for a cogent system in place, allowing better patient outcomes.

Access and Equity

New Zealand:

1. National government to identify:
    a. Rural towns with a distance greater than 100 km away from primary healthcare have promising local initiatives to alleviate inequity of transport.
2. Ministry of Health to improve:
    a. National Travel Assistance Policy to inaugurate an efficient system of undelayed travel expenses for the first specialist visit;
    b. The policy of travel subsidies to ensure health appointments are funded;
    c. Both travel expenses and subsidies to ensure a realistic relationship with the actual cost of transport.

Australia:

3. Local transport services to:
    a. Consistently provide information throughout patients' journey of health care about transport services available for health appointments by health services and other relevant services including community organisations.
4. State Government to:
    a. Improve transport subsidies for permanent residents living more than 200km away from the nearest treating specialist;
    b. Simplify the complex series of funding programmes with a compromising list of main objectives agreed by the majority of organisations.

Recommendations

Role of Medical Schools and Medical Students in Improving Rural Surgery

1. ASSA believes that medical schools in Australia and New Zealand should significantly prioritise rural medicine in their medical curricula.
2. ASSA supports medical schools in Australia and New Zealand to create a sustainable structure with rural medicine being embedded across all years of students' medical education, both during pre-clinical and clinical years.
3. ASSA believes that medical schools should provide adequate rural clinical placements that contain surgical rotations in rural and remote communities, and these exposures should be longitudinal across the students' medical education.

Rural Surgery Partnership/Advocacy

1. ASSA supports that medical school rural weeks should include surgical placements, in theatre and ward rounds.
2. ASSA supports 'erasmus'-style placements between ANZ medical schools and rural nodes
3. ASSA supports the development of a website or application to easily 'match' students with other universities and rural nodes willing to accept students for ANZ-wide rural swaps

4. ASSA supports the governmental aid of programs such as JFPP and NSWRHN Bush Bursary that compensate medical students during attendance of rural placements
5. ASSA supports the initiation of a program to compensate medical students while performing rural surgery placements, outside of medical school obligations

Upskilling

1. ASSA supports training all medical students to be independently competent at performing the ASSA Regional/Rural Surgical Competencies by the time of graduation.
2. ASSA supports highlighting regional/rural surgical inequities in a meaningful way at its annual conference.
3. ASSA commits to highlighting the ASSA Regional/Rural Surgical Competencies to its members through consistent information provision.
4. ASSA commits to partnering with identified key stakeholders to improve medical students' access to high-quality surgical training.

Regional and Rural Hospitals

1. ASSA supports the NSW Futures plan to create sustainable networks through careful discussion to create integrated surgical service specific to their region and demographic.
2. ASSA supports having a connected "level system" between remote, regional and metropolitan hospitals, allowing for streamlined support.
3. ASSA asserts the suggestion therefore is that if there are better distribution of resources and sharing of expertise between inner regional and outer regional hospitals, it could lead to an overall decrease in elective surgery waiting times.
4. ASSA suggests that students can be rotated around different surgery providers around the region and thereby becoming the most up to date individual on the healthcare team as to what services are nearby that can be provided, decreasing the need for repeated, unproductive phone calls.

Access and Equity

1. ASSA believes that the New Zealand government and Ministry of Health should prioritise improving local initiatives in remote rural areas.
2. ASSA believes that Australian state governments and local transport services should enhance patient communication about transport services and subsidies available and more importantly, improve these systems already put into place through simplification of objectives and administration.

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