Executive Summary

The ASA’s Submission focuses on health workforce issues that directly impact the delivery of safe, quality health outcomes for Australia. The major area of concern is the future planning of the health workforce. While the ASA considers there is no systemic shortage of anaesthetists, the Society acknowledges there is a significant maldistribution of the anaesthetic workforce. This maldistribution is due to complex socioeconomic factors. The maldistribution will prevail while these conditions continue to exist. Initiating positive changes to the anaesthesia workforce requires appropriately targeted funding. It may take more than a decade for changes implemented now to become fully effective.

Education facilities in Australia are in danger of failing to meet the forecast demand. This is a result of chronic under-funding of the public hospital system and the fractured and disparate funding process. The quality of training is however good, by international standards, and provides Australia with one of the safest anaesthesia environments in the world. Training of registrars in private hospitals is an innovation that will help prevent a logjam of trainees, however this must be done with due consideration to registrar remuneration, medical indemnity and required educational resources.

Anaesthesia workforce shortages cannot be resolved through short-term solutions that circumvent market forces for remuneration and employment conditions. Solutions to the maldistribution of anaesthetists must focus on the prevailing conditions rather than searching for services from less trained and less experienced health workers.

Australia should plan to satisfy future workforce demand through self-sufficiency, quality in medical education and centralised effective, efficient health management processes. It will be necessary to consolidate anaesthesia and surgery into large
centres of excellence. This will maintain the highest possible standards and a sustainable anaesthesia workforce.

**Background to the ASA’s Submission**

Anaesthesia is the fourth largest medical grouping in Australia (after General Practice, Internal Medicine and Surgery), is clinically involved with about 70% of all hospital admissions, and is pivotal in the delivery of healthcare to surgical, obstetric, intensive care and pain management patients.

The ASA was founded in 1934 with the objective of supporting anaesthetists. It is the only “grass roots” member based organisation representing specialist, non-specialist and trainee anaesthetists in Australia. It has a 70-year history of advocacy on behalf of the specialty of anaesthesia, was instrumental in the formation of the (now) Australian and New Zealand College of Anaesthetists (ANZCA), and has a close working relationship with both the AMA and ANZCA though is independent of them. The ASA is a national body and represents members’ interests to the Federal Government (Departments of Health and Ageing and Veterans Affairs) as well as to individual State and Territory Health Departments.

It is in this latter role that the ASA is making this Submission to the Productivity Commission’s Health Workforce Study.

**Objective of the ASA’s Submission**

The Objective of this Submission is to provide the Productivity Commission with advice to assist in shaping the efficiency and effectiveness of the Health Workforce to achieve safe, quality outcomes.

This Submission addresses those issues germane to the ASA’s focus and expertise. While there are a large number of issues identified in the Productivity Commission’s Terms of Reference, the ASA’s Submission addresses:

1. Workforce planning.
2. Education and training of specialists.
3. Workforce participation.
4. The impact of migration on the specialist workforce.
5. Likely workforce demand.

**The ASA’s Position on the Provision of Healthcare**

The ASA believes in equitable, accessible, quality healthcare for all Australians, and sees the “health” of public hospitals as fundamental in underwriting the quality training of our future anaesthetists and in benchmarking our national healthcare standards.

The ASA believes that there are particular difficulties affecting the provision of anaesthesia in Australia in both the public and private sectors. This Submission expands on the background, contributing factors, systemic problems and opportunities for improvement.
Key Issues

1 - Workforce Planning

The underlying rationale for workforce planning in Australia is to produce medical practitioners in adequate numbers, appropriately trained, and appropriately located. This is essential if community, medical, and political expectations are to be satisfied.

(i) Current Planning Arrangements for Australia's Health Workforce

Planning for the anaesthesia workforce is a balancing act between over and undersupply. Previous studies by the Australian Medical Workforce Advisory Commission (AMWAC) have established that the effective number of full time anaesthetists should be one per 10,000 people. Although this ratio has not been validated, it has been attained and even exceeded.

There are a number of important issues that need to be addressed when looking at the future requirement for the number of anaesthetists.

What is effective full time work? Studies by the Australian Bureau of Statistics (ABS) have shown that professionals in medicine work significantly longer hours than the general population, yet recent trends have shown the number of hours worked by doctors is falling. Junior doctors now expect that they will work either 40 hours per week, or part-time, and are likely to retire at or before the age of 65. It is important that the relationship between current trends in the number of hours worked and the total number of hours required to maintain an appropriate workforce is fully evaluated and this knowledge is utilised in workforce projections.

What effect does the ratio of males to females have on the workforce? An increase in the number of women involved in anaesthesia has reduced the average hours worked due to the many other commitments with which women may be involved.

How does the changing scope of medical practice impact? As medical and surgical procedures are modified, and new ones develop, the need for anaesthesia services changes. In the majority of cases both the number of anaesthetists required and the work time demanded is increased rather than decreased.

1 References for this section are:
   a. AMWAC Reports
      2. 2003.4 Annual Report 2002-03
      3. 2003.1 Specialist Medical Workforce Planning in Australia
      4. 2001.5 The Specialist Anaesthesia Workforce in Australia. Supply and Requirements 2000 - 2011

2 From ASA Annual Surveys of Members.
Overseas Trained Specialists (OTS) are often employed to regions with a shortage of medical practitioners (regions often already identified as Areas of Need (AON)). Why are Australian practitioners not attracted to these areas, and what can be done to rectify this imbalance? The overseas trained practitioners employed under these circumstances are being used as ‘bandaid’ treatments for more extensive problems including inadequate packages on offer (poor remuneration and conditions). OTS brought into to fill vacancies declared through AON rarely remain in the geographic location beyond their initial contract, preferring to relocate to areas where conditions and remuneration are superior. The ‘situation’ is exacerbated by this approach in the longer term.

Many countries have shortages of medical practitioners. A recent study within the USA shows they will have a deficit of 100,000 medical practitioners by 2020. If anaesthesia is 5% of medical practitioners then the US will be looking to import or train 5000 specialists to supplement their domestic market. Australian anaesthetists are highly regarded overseas and will be targeted to fill this gap, with offers of economic and workplace conditions beyond those currently available in Australia.

(ii) Problems Associated with the Current Planning Arrangements.

The current planning arrangements have failed to take into account many of the issues involved in the planning for the anaesthesia workforce. Current planning is uncoordinated and chaotic, with multiple departments involved. Each department, organisation, stakeholder, and participant is funded separately with no central plan and there is limited ongoing monitoring of the workforce capability and sustainability.

There are numerous important issues that are both multifactorial and interdependent, and require a coordinated approach if they are to be satisfactorily addressed.

Workforce participation changes as society changes, and any planning must incorporate such influences as attitudes to work and lifestyle, attitudes to after hours work, retirement ages, impact of safe hours requirements, feminisation of the workforce and medical indemnity issues.

Decreased birth rate, ageing of the ‘baby boomer group’, improved healthcare, and new technology have seen a right shift in the median age of the population and a skewing of the population distribution curve. There are and will be more elderly people. There will be an increasing demand for medical services (the vast majority of medical services occur in the latter part of a person’s life). Many of the procedures on older patients take longer (for example surgery related to joint replacements, cancer, and cardiac) reducing the number of procedures that can be performed per day. Elderly patients require more rehabilitation to get back to an active life, and many require ongoing care and support after major procedures. In addition, many medical specialists in current practice are a product of the “baby boom” era, and are heading towards retirement in the next 10 years.

Council of Graduate Medical Education (USA)
(iii) Workforce Numbers

Training of anaesthetists involves at least 13 years tertiary study. Consequently some decisions taken today will not impact on workforce reforms for over a decade. Forward planning for the health workforce requires consideration not only of the long lead-time but the availability of appropriate resources for infrastructure, training and organisational support. This is a highly complex mix that requires all participants to contribute to the process.

The funding of the health system is vital to workforce planning and no single area can be looked at in isolation. The current funding arrangements see multiple stakeholders involved, often with one group having to pick up a funding deficit from another without a coordinated plan. The majority of funding and planning for health services is in the hands of the federal and state government departments. In recent years we have seen an increasing contribution from private enterprise and this is not unreasonable as they rely on a well-trained workforce whom they recruit from a government backed teaching hospital system.

The number of specialist anaesthetists is limited by a number of factors. For many years the Federal Government reduced the number of Australian medical graduates due to an influx of high quality medical practitioners from countries such as South Africa. The Government mistakenly believed that general health service costs would increase by increasing the numbers of doctors. Reduction of supply was an inappropriate attempt to keep control of costs. Recent increases in the number of medical school places are only bringing them up to the level of the mid 1990’s. This increase does not match the increase in demand for medical services in the last decade caused by an increase in the age and size of Australia’s population.

The availability of training positions is determined by the state governments’ ability to fund them. Accreditation of hospitals for training in anaesthesia is determined by ANZCA, however the number of anaesthetists that each hospital trains is determined by the number of registrars and teachers they can employ as well as the availability of clinical workload. ANZCA has no restrictions on the number of anaesthesia training positions.

In the 1980s many well-trained, overseas anaesthetists came to Australia. This limited the number of positions available for locally trained anaesthetists. From the 1990s on, this number has fallen dramatically and many overseas countries are now in a much more desperate need for medical practitioners than is Australia.

Funding by the major stakeholder(s) will impact on workforce planning. There is an Australia wide shortage of doctors, mostly General Practitioner’s (GP’s), due to a lack of funding for university and hospital positions to train them. The reduction in GPs in rural areas has also further diluted the ability of those practitioners to practice anaesthesia on a part-time basis. GP anaesthetists are a vital part of the maintenance of anaesthesia services in many rural communities. A lack of funding in public hospitals makes the provision of training for GP

---

4 For example in 1978 there were 450 medical graduates from NSW & ACT. The number dropped to 286 in 1990 and is not forecast to rise to 476 until 2007.
anaesthetists very difficult. Anaesthetists do not work in isolation and require the availability of hospitals to work in, and surgeons and nurses with whom to work.

At the moment we have an Australia wide shortage of nursing staff due to a lack of funding by both the State and Federal bodies. At times, this shortage severely restricts the availability of operating theatre and ward services.

The reduction in public hospital funding and procedures with the subsequent increase in private hospital treatment has reduced the training exposure for registrars and the ability of the public hospitals to increase the number of consultants they train. This means that new models of training and funding of training need to be investigated including, private hospital training schemes, overseas experience, and simulation training.

(iv) Distribution of the Workforce

The relationship between proceduralists and anaesthetists is symbiotic and hence any increase in the numbers of one, needs to be matched by a proportional increase in the other.

Lack of anaesthetists in many areas is due to a maldistribution, as well as industrial and financial issues rather than an overall shortage of anaesthetists. This is very evident in Queensland at the moment where poor remuneration and conditions have seen many areas desperate for medical practitioners and having to import OTS. The use of OTS to fill AON is a short-term measure to overcome a fundamental lack of sustainable employment conditions. Poor remuneration for after hours private work makes it difficult to encourage anaesthetists to participate in these rosters without adequate compensation.

Low Commonwealth Medicare Benefits Schedule (CMBS) rebates place increased pressure on the public hospital system and discourage anaesthetists from participating in emergency work. They also impose increased financial responsibility on patients to pay larger gaps for privately billed services.

(v) Coordination of the Health Workforce

Coordination of the workforce is constrained by the multiple participants, especially between the Federal Government and the States, and the diversion of resources to meet short-term political imperatives at the expense of longer term balanced health services’ outcomes.

Coordination and integration may be improved by: bringing all public funding for health under the one umbrella (preferably Federal), developing a non-political body to oversee the development of Hospitals and Medical Services according to infrastructure requirements using data from AMWAC and ABS and also by the centralisation and consolidation of medical services into ‘centres of excellence’.

In the USA patients are willing to travel large distances to attend centres of excellence, contrary to the Australian concept of provision of facilities ‘at their back door’. Australia is not able to provide the highest quality healthcare within each local community. It is simply too expensive and impractical to provide immediate local access to tertiary and high level secondary healthcare.
to every member of the community in their local environment. In addition it leads to a far higher standard of health care if surgery and anaesthesia is consolidated into large centres. This permits all members of the health delivery team to maintain and improve their skills due to the combination of collegiate support, enhanced medical infrastructure and the high volume of services provided.

Large centres for surgery and anaesthesia also enable far better continuing education of the staff. If there are six anaesthetists or more then adequate recreation leave, conference leave, sick leave and a reasonable after hours anaesthesia roster is possible. This leads to a greatly increased ability to attract and retain anaesthetists.

(vi) Anaesthesia Workforce Planning

Planning in the anaesthesia workforce on the whole has worked well to date. Australian anaesthetists are highly trained and are well regarded around the world. Australia has one of the safest anaesthetic workforces in the world, with very low morbidity and mortality figures.

There are currently disincentives for people to enter medicine including litigation and medical indemnity issues, poor professional treatment by hospital administrations, after hours commitment and lifestyle, and a perceived poor remuneration compared with similar skilled jobs.

If the workforce is mismanaged, doctors will either not enter or will leave. In the USA in the 1990s the introduction of managed care slashed the number of anaesthetists in departments and made the practice of anaesthesia unpopular. This led to a downturn in the number of trainees and hence a decrease in the long term provision of anaesthetic services. Incentives are needed to encourage redistribution of anaesthetists to areas of workforce shortage and for the retention of anaesthetists currently providing services in these areas. This should include the examination of suitable incentives to discourage anaesthetists from choosing early retirement.

Summary - Workforce Planning

The changing work preferences and life style choices of medical practitioners are impacting their availability to meet future demands. The development of a specialist anaesthetist involves extensive resources and a lead-time of at least 13 years. Planning to satisfy future needs requires addressing the trends of ageing and longevity, the maldistribution of the anaesthesia workforce, plus more integrated and coordinated planning and early supply decisions.

2 - Education and Training of Specialists

(i) Education and Training of Anaesthetists

The training and examination of anaesthetists is conducted by ANZCA. This entails a minimum of two years general residency after completing a medical degree and then five years of specialty anaesthesia training. The training is as long, comprehensive, and thorough as any anaesthesia training system in the world. Examinations are as detailed, searching, and of a standard equal to any anaesthesia examinations in the world.
At present, all of this training is conducted in the Australian public hospital systems. Education is provided on a pro-bono basis by specialist anaesthetists and the administration of the training program, and the examinations are conducted on an honorary basis by specialist anaesthetists throughout Australia. The training involves all areas of anaesthesia, and includes intensive care and pain medicine.

The reduction in activity of the public hospitals throughout Australia is having an effect on the delivery of education to anaesthesia trainees such that, less clinical material is available for anaesthesia trainees. Coupled with this, is the increase in activity of the private hospital sector with not only an increase in the volume of services, but also an increase in the complexity of anaesthesia services they are undertaking.

The solution to this is to either reinvigorate the public hospital system and once again provide a high volume and wide cross section of anaesthesia, or if that is not possible, start to introduce anaesthesia registrar training in the private sector where there is clinical material available for teaching that is currently under-utilised.

The training of anaesthesia registrars in private hospitals will only occur if certain safe guards are set in place. The anaesthesia registrars will need to have appropriate medical indemnity coverage, and be appropriately remunerated, and there will need to be appropriate infrastructure for their education, such as, offices, libraries, computers and work areas. The specialist anaesthetists working in these private hospitals will need to agree to the teaching of anaesthesia registrars in an environment where they have never before had teaching, and finally the patients must agree to the teaching of anaesthesia registrars during their anaesthesia in a private hospital. If and when these hurdles are overcome, then the teaching of trainees in private hospitals will be possible and will open up to the trainees a far greater volume of clinical material for them to experience.

(ii) Continuing Anaesthesia Education

In Australia both the ASA and ANZCA provide a large quantity of material for the continuing education of anaesthetists. Each organisation conducts a major scientific meeting annually, the College in the autumn and the Society in spring, and they combine in each State to provide regular continuing education meetings throughout the year. The ASA also publishes the journal, 'Anaesthesia and Intensive Care’, which is regarded as one of the best anaesthesia journals in the world.

In hospitals throughout Australia, there are regular educational programs that review anaesthesia morbidity and mortality, as well as other education material.

ANZCA offers to anaesthetists a data collection program, whereby anaesthetists can record annually their participation in continuing medical education and have it assessed. If deemed acceptable they are issued with a certificate indicating they have maintained their professional standards for that year.

For over 45 years there has been a system in place, first in NSW, and now nationwide whereby every death that occurs within 24 hours of anaesthesia is assessed, and the anaesthetist(s)
involved are given feedback on the anaesthesia and its contribution, if any, to the patient’s death. This has provided data to Australian anaesthetists unlike any available elsewhere in the world and has been a significant contributing factor in both the education of Australian anaesthetists, and the continuing increase in anaesthesia safety in Australia.

General Practitioners, who wish to work in rural areas and provide anaesthesia, can participate in the joint program run by the Royal Australian College of General Practitioners (RACGP) and ANZCA. This one-year program provides these non-specialists with a good basic training in anaesthesia, which allows them to practice anaesthesia in rural areas safely, within a well-defined and limited scope of practice.

The ASA believes the education and training available to anaesthesia trainees, non-specialists, and specialist anaesthetists, is at least equal to anything available elsewhere in the world. Combined with the fact that every patient in Australia undergoing anaesthesia has a medical practitioner anaesthetist dedicated to their exclusive care, means that the anaesthesia provided to Australians is at least as safe as that provided anywhere else in the world.

Summary – Education and Training of Specialists

*The state of the public hospitals as the traditional source of specialist training experience is steadily being eroded to the point that they need to be either massively reinvigorated or an alternative for training is developed. Private healthcare facilities are a viable option for training of registrars but considerable review, consultation, planning and financial resourcing is required. Anaesthesia is managed in a systems approach in Australia, which has led to the safe outcomes and recognition of the quality of training. This standard of safe practice requires to be maintained against lesser alternative options.*

3 – Workforce Participation

(i) Workforce Participation and Anaesthetists

The ASA has been intimately involved at Federal and State level in discussions on the workforce issues including conditions, remuneration and services. Outcomes of the discussions are affected by the disparate ownership of liabilities for health funding. Similarly, the distribution of the workforces is affected by limited/inadequate budgets (with a small population spread over a large area) that are distorted by variable local and philosophical political aspirations.

Major factors affecting anaesthetic workforce participation include the level of remuneration, local department and hospital practices, and the frequency of on-call commitments. Medical facility managers’ require anaesthetists to be immediately available each day and night for urgent procedures, emergencies, obstetrics, resuscitation, and intensive care units. This is the standard Australians expect, yet this aspect of practice is barely recognised, is grossly inadequately remunerated, and has psychosocial impacts on individuals and families. The recent trend of feminisation of the anaesthesia workforce impacts the availability of practitioners.
The outcome is that anaesthetists are tending to avoid the onerous on call expectations and impositions. For example, commuting to a rural or outer metropolitan community to be on call every third night and weekend with recurring night disruptions for the next thirty years is not an appealing career model. Forcing new practitioners through some form of "bonding" is not a sensible or mature way forward.

Anaesthetists generally should be remunerated on a case basis, appreciating the inefficiencies that invade any process when participants are salaried. Preferences currently exist to maximise working relationships with surgical colleagues, enabling planned and unplanned procedures to be performed expeditiously, safely and efficiently.

Effective initiatives to improve "job design and conditions", and subsequent satisfaction, stability and increase productivity require a thorough understanding of the liability for ongoing educational, scientific and peer review commitments. Health workforce managers need to acknowledge a quality system approach that recognises all participants (nurses, allied health, technical support and doctors) as competent and valued contributors.

(ii) Productivity and Anaesthetists

The output of the anaesthetic workforce has been recurrently assessed by the AMWAC reviews, and consistently, individual caseloads are high and on par with comparable countries. Concurrently, while demand for medical procedures continues the costs associated with these procedures declining though shortening in average length of stay in medical facilities. The economic benefits to the Australian community though productivity gains in anaesthesia and surgery compared with two decades ago is estimated at $4 billion.\(^5\)

Unfortunately the measure of performance in public health facilities acknowledges budget management skills above clinical quality. Facilities that manage activities within the available resources are recognised as superior. Throughput is not a quality measure of health outcomes.

Less restrictive delineation of work responsibilities are not generally seen as ensuring a safer, more secure clinical ambience in an environment where improving quality care is the clinical mission. Recent experience in Queensland with Dr Ayand Patel (Bundaberg) and foreign orthopaedic practitioners (Nambour) confirm the problems that arise when alternative providers are prepared to work for lower remuneration and conditions than their Australian trained colleagues.

(iii) Alternative Anaesthesia Providers

Recently one State has publicly mooted an option to compensate for ‘anaesthesia workforce shortages’ is to provide alternate anaesthesia providers such as ‘nurse anaesthetists.

In those countries with a “British medical heritage” such as the United Kingdom, Australia, New Zealand, Canada, South Africa and the Republic of Ireland, the medical specialty of anaesthesia has developed as a specialty practised by medical practitioners who have undergone conventional

---

\(^5\) Kilham, R. Savings Dues to Advances in Anaesthesia and surgery, Access Economics Pty Ltd, June 200
university-based medical teaching and training and early postgraduate experience in general medicine. By contrast, and in marked contradistinction, a very different arrangement has evolved in the United States over the last 90 years, where alternative providers administer anaesthesia under the supervision of medical doctors because there were not, until recently, adequate numbers of anaesthesia providers.

In Australia, anaesthesia is administered to 3.2 million patients (or 16% of the entire population) annually with a safety record not exceeded elsewhere in the world. Most of these anaesthetics are provided by the approximately 2,000 specialist qualified anaesthetists. Some 5% are provided by general practitioners, many of whom have undertaken the joint training programme of the ANZCA and the Royal Australian College of General Practitioners (RACGP), who practise with appropriate credentialling. Thus all patients who are anaesthetised in Australia have the exclusive and dedicated care of medically qualified anaesthetists. Anaesthesia in Australia is a medical act.

Australia has been analysing the safety of its anaesthesia rigorously for 45 years. No other country has data analysis that is comparable. Since 1960 the numbers of deaths that are associated with anaesthesia errors have halved every 10 years. Today the mortality wholly attributable to anaesthesia is one death per 220,000 anaesthetics\(^6\). It is similar to the risk of flying. This is in an area of medicine where crises can develop suddenly, at any time, which if not resolved in minutes can result in permanent brain damage or death.

Unlike the United States, where there has been a tradition of alternative anaesthesia providers, surgeons and other proceduralists in Australia do not have the necessary skills in resuscitation and anaesthesia required to assist in an anaesthetic emergency. As such, if an anaesthesia related complication occurred in Australia without a medically qualified anaesthetist present there may be nobody capable of rectifying it – leading to significant increased risk of morbidity and mortality.

Over recent years, there have been changes in medical practice that have provided opportunities for politicians, bureaucrats and some nursing groups to re-open debate on the feasibility of using alternate providers of anaesthesia care in Australia and New Zealand. The motivation and the suggested models for such care have varied depending on the particular proponent.

The ASA considers that ANZCA is the appropriate provider of training in anaesthesia in Australia, and that the standard of anaesthesia facilitated by its structured training program is at least as good as anywhere else in the world.

The ASA believes that anaesthesia should continue to be a “medical act” that is practised most competently by medical practitioners, with a fundamental part of anaesthesia training being the basic knowledge of medicine attained at medical school and in the first two postgraduate years of general hospital experience. The ASA acknowledges and encourages the current perioperative roles of nurses and technicians in providing much-valued support in anaesthesia, intensive care medicine and pain medicine, and notes the significant national shortage of clinical nurses. The ASA believes that the introduction of “alternate providers” with shorter and likely poorer training programs must compromise the recognised high standard that has been achieved over a significant period of time by a large number of committed anaesthetists.

Summary – Workforce Participation

The availability of health workers is not simply a relationship between supply and demand. Health is a major component of all government budgets and is constantly being shaped by financial considerations – sometimes at the expense of good health outcomes. Alternative less expensive workforce options are poor short-term solutions. Doctors, nurses and other professional staff each bring unique skills to the patient's bedside. There are not significant shortages of anaesthetists. However, there are interested groups that propose “alternate service providers”, fuelled by promises of cost-saving and the elimination of areas of workforce shortage. It would seem to the ASA that such outcomes are unlikely and that the possibility of decreased standards of care would be very real.

4 – The impact of Migration on the Specialist Workforce

National self-sufficiency in the supply and retention of the anaesthetist workforce should be one of Australia’s long-term goals. While migration of anaesthetists globally will always occur as part of personal choice, training, and experience, active overseas recruitment of anaesthetists is not a long-term solution to acute workforce shortages and carries associated costs, ethical issues, and problems with supervision, retraining and certification. This investment in overseas recruitment would be of greater benefit to the Australian community if the resources were diverted towards achieving national solutions for the anaesthesia workforce.

(i) Determinants of Vacancies and the Maldistribution of Anaesthetists

In determining the reasons behind vacancies and the maldistribution of anaesthetists, there are issues that first need to be quantified, including, how many anaesthetists are needed, where are they required, and how are they retained?

National data for anaesthetists (based on optimal work distribution) is required to estimate the optimal workforce numbers by region/area health service/hospital, incorporating both public and private sectors. In addition, there is a need to identify factors that will facilitate the recruitment, and retention, of Australian-qualified anaesthetists. For example: terms and conditions of employment and how they vary between public and private practice, and urban and regional areas; the work environment: including training systems and capacity, and career development; and additional incentives: be they non-monetary compensation, health infrastructure, childcare, child education, housing, transportation, or continuing professional development.

(ii) Balance of Immigration Versus Emigration of Anaesthetists

To quantify this balance it would be beneficial to obtain annual national data on the relocation (immigration and emigration) of anaesthetists internationally. This would provide a “balance

---

7 AMWAC 2001.5 The Specialist Anaesthesia Workforce in Australia. Supply and Requirements 2000 - 2011
sheet” of workforce numbers, allowing the monitoring of the Australian position within the global market, as well as indicate the need for change to maintain a competitive position.

(iii) Area of Need and Overseas Trained Specialists

To date, AON and OTS have been used to overcome a maldistribution problem that exists within the anaesthesia workforce.

The AON qualification process for health services seeking anaesthetists lacks a rigorous checking procedure that proves the positions declared as vacant, have been advertised with terms and conditions that are adequate to attract and retain Australian qualified anaesthetists. In addition, AON appointees are being placed in supervised work roles, and given responsibilities that Australian trainees are not permitted to take up before full qualifications are obtained. This is often demoralising for the existing nursing and anaesthetic workforce.

Supervision and training of OTS imposes a greater workload and financial liability on an already stressed workplace while positions filled by OTS anaesthetists become unavailable for Australian qualified anaesthetists. This reduces the possibility of maintaining or increasing the numbers of Australian trained anaesthetists working in these areas.

(iv) Ethical Considerations

Commonwealth Code of Practice for the international recruitment of Health Workers should be accepted as the standard. Expansion of this to become an International Code of Ethical Guidelines is a desirable goal.

Summary - The Impact of Migration on the Specialist Workforce

*There is no reason given Australia’s economy, population and education resources for the Nation to not be self-sufficient in supply and retention of its anaesthesia workforce. Migration should be used to satisfy mutual benefits not to lower the quality of the Australian medical workforce and simultaneously denude third world countries of their scarce anaesthesia resources.*

5 - Likely Workforce Demand

The most recent assessments of demand for anaesthesia services are contained in the 2001 AMWAC report[^9]. The report suggests a demand growth rate of 2.2% per annum in the ten years period 2001-2011. An acknowledged limitation of this assessment is the reliance on Medicare billed anaesthesia services as the basis for monitoring trends. Anaesthetists employed in salaried hospital positions are largely excluded from the data as are anaesthetists working in public or private practice as intensive care specialists in critical care and high dependency units.

The specific impact of factors such as population ageing, patient expectations and advances in medical technology have been considered in the AMWAC report. The estimate of increased demand for anaesthetist services as a consequence of these factors requires closer consideration.

It is known that utilisation of medical services tends to be highest in the last few years of a person’s life. It is also known that the complexity of care and time involved in care per patient increases with age and co-morbidity. The time demands for anaesthetic services and critical care and high dependency services per patient increase significantly with patient age and complexity of procedure. Therefore using ageing as a factor, the population numbers alone will significantly underestimate the anaesthesia service requirement. The same effect is evident with less invasive approaches to treatment facilitated by technological advances. Laparoscopic surgical techniques and minimally invasive approaches to cardiac and vascular conditions have generally increased anaesthetist time per patient for treatment of many of these conditions.

The introduction into the Medicare Benefits Schedule of the Relative Value Guide for rebate of anaesthesia services makes it feasible to track and monitor trends in anaesthesia times based on patient age and procedure to assist in estimating future workforce requirements. The inclusion of anaesthetically qualified intensive care specialists and their work patterns in the AMWAC data would provide a more comprehensive analysis of the workforce.

The expanding role of the anaesthetist outside the operating theatre has also been recognised as a factor increasing demand for anaesthesia services. Preoperative assessment clinics, acute and chronic pain management services, patient retrieval services, imaging requiring anaesthesia services, critical care, and endoscopy anaesthesia are all areas that are increasing anaesthetist involvement.

Other important factors that may impact on demand for anaesthetic services in the future include:

- Public hospital funding arrangements and the effect on service delivery capacity
- Implementation and regulation of safe work hours policies
- Lifestyle balance choices by anaesthetists that are at variance to those predicted currently
- Early retirement/reduced work choice approaching retirement, that is at variance with current predictions/indications
- Emigration of anaesthetists to countries with workforce shortages offering better conditions

**Summary - Likely Workforce Demand**

*The Australian demand for anaesthetists will continue to grow to match: the services required by the ageing Australian population, the dramatic improvements in clinical procedures delivering higher quality of life, the expansions of medical research and sub specialties, and the international attraction for Australian trained anaesthetists.*

**Conclusion**

The ASA’s Submission has focused on health workforce issues that directly impact the delivery of safe, quality health outcomes for Australia. The major area of concern is the future planning of
the health workforce. While the ASA considers there is no systemic shortage of anaesthetists, the Society acknowledges there is a significant maldistribution of the anaesthetic workforce. This maldistribution is due to complex socioeconomic factors. The maldistribution will prevail while these conditions continue to exist. Initiating positive changes to the anaesthesia workforce requires appropriately targeted funding. It may take more than a decade for changes implemented now to become fully effective.

Education facilities in Australia are in danger of failing to meet the forecast demand. This is a result of chronic under-funding of the public hospital system and the fractured and disparate funding process. The quality of training is however good, by international standards, and provides Australia with one of the safest anaesthesia environments in the world. Training of registrars in private hospitals is an innovation that will help prevent a logjam of trainees, however this must be done with due consideration to registrar remuneration, medical indemnity and required educational resources.

Anaesthesia workforce shortages cannot be resolved through short-term solutions that circumvent market forces for remuneration and employment conditions. Solutions to the maldistribution of anaesthetists must focus on the prevailing conditions rather than searching for services from less trained and less experienced health workers.

Australia should plan to satisfy future workforce demand through self-sufficiency, quality in medical education and centralised effective, efficient health management processes. It will be necessary to consolidate anaesthesia and surgery into large centres of excellence. This will maintain the highest possible standards and a sustainable anaesthesia workforce.