

2014

**PROVIDING QUALITY, SAFE AND  
COMPREHENSIVE ANAESTHESIA  
SERVICES IN IRELAND  
- A REVIEW OF MANPOWER CHALLENGES**



Joint Faculty of  
Intensive Care Medicine of Ireland

College of Anaesthetists of Ireland | Intensive Care Society of Ireland  
Royal College of Physicians of Ireland | Royal College of Surgeons in Ireland



FACULTY OF  
PAIN MEDICINE

NATIONAL  
CLINICAL  
PROGRAMME IN  
ANAESTHESIA



**CAI**  
SALUS DUM VIGILAMUS

College of Anaesthetists of Ireland

ENDORSED BY NCPA, JFICMI & THE FACULTY OF PAIN MEDICINE



**T**he College of Anaesthetists of Ireland (CAI) and the National Clinical Programme in Anaesthesia (NCPA) has been asked by the Health Service Executive to review manpower planning for our profession. This report represents the collective view of the College of Anaesthetists of Ireland, the National Clinical Programme for Anaesthesia, the Joint Faculty of Intensive Care Medicine of Ireland and the Pain Faculty of CAI.

The report has identified immediate challenges in provision of anaesthesia services. These include an overdependence on international medical graduates and non-training NCHDs, insufficient numbers of consultants and an inability to retain newly trained consultants due to changes in working conditions and contracts. The workforce in anaesthesia appears to have evolved rather than been centrally planned. The Hanly Report 2003 did identify solutions, principally reconfiguration of acute hospitals coupled with increased consultant numbers and decreased NCHDs, but this has not been implemented.

In this report we have reiterated previously published standards for provision of intensive care medicine and obstetric anaesthesia and we have published new standards for service provision of anaesthesia. All of these standards are designed to provide patients with the safest possible service. The temptation to maintain workload despite a reduction in workforce will result in an erosion of these standards and is not in the interests of patient safety. If the current situation is not rectified, in a planned manner, we will see a reduction in service provision, which will impact on other services and specialties.

This report provides the tools to identify the correct workforce for services and hospitals. Its implementation is beyond the powers of its authors but we are prepared to work with the HSE/DOHC to do so. The ultimate aim of all parties is to provide safe effective care to patients whether it is anaesthesia, intensive care medicine or pain medicine.

**Dr David Mannion,  
Chairman of Working Group**



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## EXECUTIVE SUMMARY

- Anaesthesia manpower in Ireland comprises Anaesthetists, Intensive Care Medicine specialists (intensivists) and Pain Medicine specialists. There is frequent overlap between anaesthetists and the other two specialties i.e. anaesthetists may work on a part time basis in one or other of the other two specialties.
- 70% of the workforce is made up of consultants (45%) and College of Anaesthetists trainees (25%). The other 30% of the workforce is made up of non-training NCHDs. This latter group is a declining workforce, who are usually employed on six-monthly contracts. The Irish health service is overly dependent on this group to maintain existing anaesthesia services.
- International medical graduates (IMG) constitute 49.2% of the anaesthesia workforce. This indicates that to date, the policies for recruitment, training and most of all retention of Irish graduates have been inadequate to meet the needs of the Irish health service.
- A number of studies have provided indicative numbers of how many anaesthetists and intensivists are required to deliver anaesthesia services in Ireland. At the time of the first of these, Hanly 2003, the ratio of consultant anaesthetists per 100,000 population was 8/100,000. This report recommended increasing to 11/100,000. The current ratio of anaesthesia specialists is 8.8/100,000 and the number of consultants is 74% of what was recommended 10 years ago. In intensive care medicine, the ratio of consultants appointed is much lower than the recommended level e.g. in paediatric intensive care medicine it is 20%.
- The CAI/NCPA recommend that only anaesthetists who are on or eligible for, the Anaesthesia Specialist Register of the Irish Medical Council (IMC) should be independently providing anaesthesia to Irish patients.
- Anaesthetic services should adhere to the standards laid down by professional bodies including the CAI, the Association of Anaesthetists of Great Britain & Ireland (AAGBI), Joint Faculty of Intensive Care Medicine in Ireland (JFICMI) and the Intensive Care Society of Ireland (ICSI). These will include availability of anaesthetic personnel and appropriate skilled assistance to anaesthetic personnel.
- The CAI/NCPA recommend certain new minimum standards in terms of anaesthesia provision and running of theatre schedules. This is being done to prevent the erosion in standards, which may occur due to insufficient manpower, at present. In addition, it will allow planners estimate what personnel are required for delivery of services in anaesthesia, ICM and pain medicine.
- The number of hospitals and services requiring 24/7 anaesthesia services should be reduced through centralisation of services particularly intensive care medicine and obstetric services. In doing so this may have the dual effect of reducing



anaesthesia manpower demand and also ensuring, where services are centralised, that current professional standards are adhered to. The report '**The Establishment of Hospital Groups as a Transition to Independent Hospital Trusts**' will establish a framework within which such reorganisation may occur.

- The Irish health service needs to recruit many more consultant anaesthetists, intensivists and pain medicine specialists in the near future, if there is not to be an inevitable reduction in hospital activity caused by a lack of anaesthesia services.
- Consultant recruitment has become problematic following the 2008 contract restrictions and the introduction of reduced pay structures for new entrants. Anaesthetic and ICU consultant positions are currently unable to be filled in a number of hospitals because of this. A recommendation document on consultant recruitment and retention has been produced by a joint HSE/Forum of Postgraduate Training Bodies (FPTB) group and this may provide the solution to the issue. Whatever solution is agreed needs to recognise the considerable onerous duty which anaesthetists and intensivists are required to provide to maintain the smooth running of the health service.
- We are currently training sufficient numbers (30 per annum) to staff our health service with anaesthetists at a level of 11/100,000 population. However this is assuming we have reached steady state in consultant numbers and that most College of Anaesthetists of Ireland (CAI) trainees

would opt to stay in Ireland, when trained. Neither is the case at present. There is scope to facilitate increased training numbers up to 40 per year. This would facilitate achieving 11/100,000 much more quickly. However without a commitment to increase consultants, there should be no increase in training numbers.

The Anaesthesia community in Ireland was asked by the National Programme Director for Medical Training, HSE, Prof Eilis McGovern, to “consider and crystallise their views on workforce planning within their specialty”. This request was channelled through the College of Anaesthetists of Ireland (CAI) and the National Clinical Programme in Anaesthesia (NCPA). Over the past twelve months we have held a number of meetings on this topic including a session at the CAI Strategy Day 2012, a dedicated Manpower Planning Workshop in the CAI and the Winter Anaesthetic Meeting 2013. In addition we have circulated two consultation documents to the entire anaesthesia community and solicited responses to it. This document reflects the views of anaesthesia practitioners in Ireland.

#### **THE ISSUES WE WERE ASKED TO FOCUS ON INCLUDED:**

1. To estimate an appropriate ratio of anaesthetists per head of population?
2. To consider how many additional consultant anaesthetists we estimate will be needed in the next 5 and 10 years?
3. To directly link future training numbers to workforce projections.
4. To consider the service implications of positions held by non-training NCHDs.
5. To inform the HSE MET what policy drivers will influence the future of anaesthesia in Ireland.

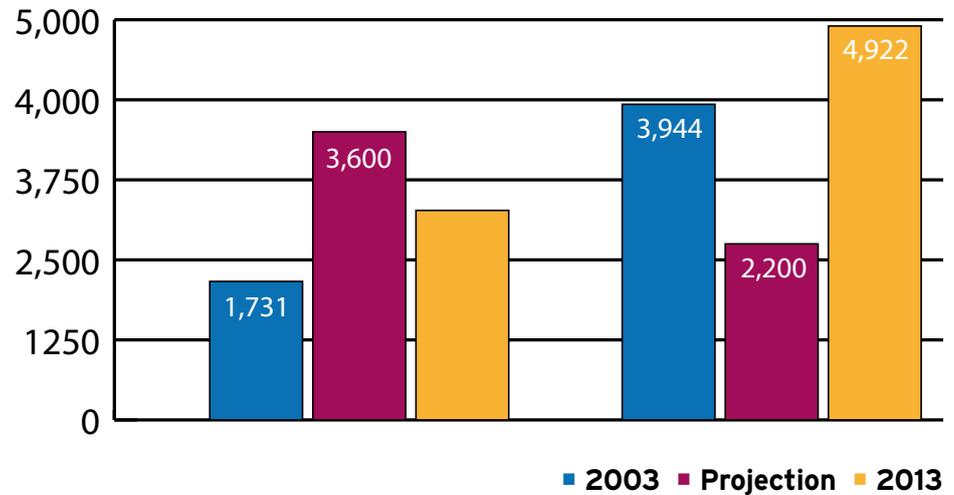
6. To consider how Anaesthesia, Intensive Care Medicine (ICM) and Pain Medicine may be developed to fit changes in Irish health service delivery.

Workforce planning is a difficult process within the medical field because the variables are many. They include the model of delivery of care, resources available for manpower recruitment, developments in technology, etc. Two previous reports exist into Medical Manpower Planning in Ireland, Report of the National Taskforce on Medical Staffing 2003 and A Quantitative Tool for Workforce Planning in Healthcare: Example Simulations 2009.

The first of these reports, Hanly 2003, focused on reducing NCHD hours, in line with the European Working Time Directive. In doing so it also made recommendations on increases in consultant manpower to provide a consultant provided service, development of a centralised medical education and training office and reorganisation of acute hospitals. In respect to the current task, it found that Ireland currently had a career grade position in NCHD employment, in practice if not in name. It recommended that this should be phased out in a structured manner. It sought to reduce NCHD numbers by 44% and increase consultant numbers by 108% so that the ratio of consultants to NCHDs went from 1:2.2 to 1:0.61.

Some aspects of the Hanly report were implemented including establishment of a central medical education and training office.

## HANLY REPORT - NUMBER OF DOCTORS



The key proposals in relation to changes in consultant and NCHD numbers were not implemented as seen above.

The ratio of consultant anaesthetists to NCHDs at the time of Hanly was 1:1.2 and it remains at that level today. The essential recommendations of the Hanly report with regard to increasing the number of consultants and reconfiguring the delivery of acute hospital services remain pertinent today.

The 2003 Hanly report also devised a formula to relate trainee numbers to future consultant numbers and in this document we use this to predict our training requirements. The variables that went into this formula included the target number of consultants, the average working years of a consultant, the number of years training, the likely number of future consultants who would opt for flexible working hours and finally the attrition rate between numbers of trainees who achieve Completion of Specialist Training (CST) and those who eventually go on to practice as a consultant in Ireland.

The second report, which addressed anaesthesia workforce, was by FAS and looked at consultant and trainee numbers in anaesthesia under the conditions that pertained in 2009 and under a projected scenario. The baseline scenario used the ratio of consultant anaesthetists per 100,000 of population at that time, which was 8 and estimated consultant and trainee requirement up to 2020. The number of trainees required to graduate to CST requirement per year was 14. The projected scenario used the consultant manpower numbers that were predicted necessary by the 2003 Hanly report. In this scenario anaesthesia consultant numbers increased to 11 per 100,000 of the population and the annual trainee output required was 29. The FAS report did caution that its numbers were developed on a macro scale (11/100,000) and it did not look at the micro level as to what may be required in different specialty areas or geographic regions e.g. intensive care.

# 04

## CURRENT STATUS

To begin the process of workforce planning we first determined what the current numbers of consultants, trainees and non-trainees were.

### 4.1 CONSULTANTS

The CAI train doctors to consultant level to deliver anaesthesia in all specialties, to deliver intensive care and to deliver pain services. As such workforce planning by the CAI must look at these three different specialties. Anaesthesia is recognised as a specialty by the Irish Medical Council and the CAI is the only Post Graduate Training Body (PGTB) that may train trainees to practice anaesthesia in Ireland.

The Joint Faculty of Intensive Care Medicine of Ireland (JFICMI), which is a faculty of the CAI, Royal College of Physicians of Ireland (RCPI) and the Royal College of Surgeons in Ireland (RCSI), is the advisory body for intensive care training, accreditation and standards. Although in theory graduates of any of its parent colleges may pursue a career in intensive care medicine, in practice the vast majority of practitioners come from anaesthesia at present. Intensive Care Medicine is currently seeking specialty status recognition by the IMC.

The Pain Faculty of the CAI regulates the training and assessment of pain specialists in Ireland. It also runs the Diploma and Fellowship in Pain Medicine for pain practitioners. A graduate of one of the other postgraduate training bodies may seek a career in pain medicine but

in practice, almost all practitioners are consultant anaesthetists who allocate a proportion of their sessions to delivering acute and chronic pain programmes.

To look at workforce numbers we therefore need to look at the numbers in each of these specialties. Many intensivists and pain practitioners also practice anaesthesia and so will be included in anaesthetist numbers.

The HSE provided the College with their estimate of consultant numbers as of September 30th 2012 which were broken down as follows:

ANAESTHESIA	
Anaesthesia	282
Intensive Care	23
Paediatric Anaesthesia	23
Pain Medicine	8
<b>Anaesthesia Total</b>	<b>336</b>
INTENSIVE CARE	
Intensive Care	4
Paediatric Intensive Care	5
<b>Intensive Care Total</b>	<b>9</b>

The HSE estimate is sourced from approved consultant positions. It is therefore not an accurate estimate of actual consultants delivering service, as it does not take cognisance of whether the post is filled or not, nor of locum posts.

All practicing anaesthetists must be

registered with the IMC and therefore must register with the CAI for PCS. Our PCS statistics show that there are 382 permanent consultants and 84 locum consultants giving a total of 466 consultants. Of these 14 are overseas, 64 are in private practice and 9 are retired which would suggest that there are 379 practicing in the HSE.

To ascertain the numbers in intensive care we looked at the Intensive Care Consultant Manpower Report 2012 prepared for the HSE DQCC Critical Care Programme for adults and at the Right Care, Right Place, Right Time report 2008, into paediatric critical care. Both of these reports were also used to predict future requirements in the Intensive Care specialty.

As most practitioners of intensive care also practice anaesthesia, the adult report focused on the sessions delivered nationally and calculated the whole-time equivalents (WTE) from there. In adult practice this confirmed that there were the equivalent of 35 WTE of consultant clinical hours committed to ICM. In paediatric intensive care there are 3 full time consultants delivering care.

The Pain Faculty estimate that currently there are approximately 4 consultants in full time pain medicine practice and another 10 or so with Pain Medicine as their major subspecialty interest (7:4 sessional split). As with intensive care, in many instances these practitioners also practice anaesthesia though the trend towards full time pain medicine will continue as part of the quality patient care agenda.

## **4.2 TRAINEES**

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There are currently 206 trainees on the CAI national anaesthesia training scheme. In addition there are 10 trainees who are engaged in full time research.

The CAI anaesthesia training scheme is currently in transition from a 7 year scheme (2 Basic Training (BST) & 5 Senior Specialist Training (SpR) to a single 6 year Specialist Anaesthesia Training (SAT) scheme. When this process is complete, we will have 190 trainees and an output of 30 trainees achieving CST, per annum.

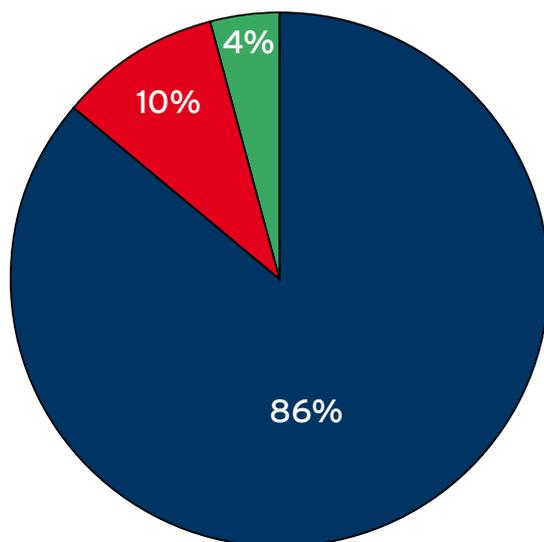
## **4.3 NON-TRAINEE NCHDS**

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Non-trainee NCHDs have become affiliated to the CAI for the purposes of recording of Professional Competence (PCS) and for the purposes of delivering the Professional Development Programme (PDP). The HSE provided us with an estimate of 169 non-trainee NCHDs in anaesthesia nationally. As with consultants, we sought to verify this figure from our own PCS database. Our database reveals that we have 285 NCHDs registered for PCS. Of these 13 are in private hospitals and 17 are overseas, suggesting that we have 255 non-trainees providing anaesthesia in HSE hospitals. A handful of these 255 are trainees who have graduated from our programme and are in fellowship positions.

This group of anaesthesia practitioners is a particularly unstable component of the workforce. Whereas CAI trainee and consultant numbers may fluctuate slightly, they are generally stable from year to year. The non-training NCHD workforce is more prone to fluctuate

and has none of the stabilising factors associated with the consultant and trainee posts. In particular the general economic conditions, changes in training status of posts resulting from the 2007 Medical Practitioners Act, and changes in working conditions resulting from changed HSE employment contracts seem to be having a negative impact on those doctors prepared to take these posts. This has particularly impacted since July 2013. The CAI has been contacted by four hospitals in crisis over NCHD manpower since then. A snapshot manpower survey conducted by the CAI in October 2013, responded to by 21 of the 44 acute hospitals revealed that 10% of NCHD posts are completely unfilled and a further 4% are filled on a temporary basis by locum agency doctors. Given that almost all trainee posts are currently filled, it is clear that a large percentage of non-training NCHD posts are vacant.



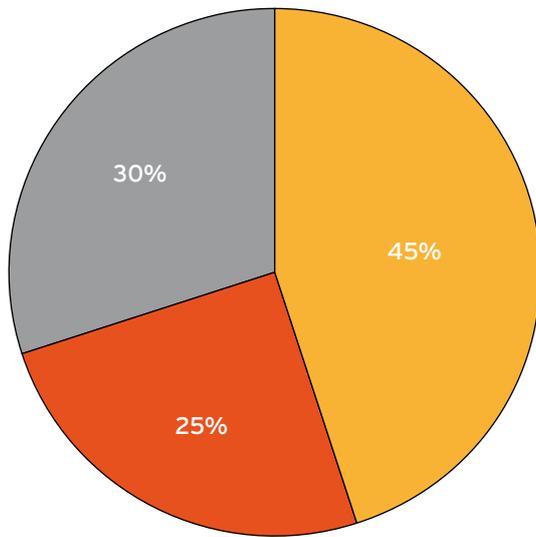
- Occupied NCHD post
- Vacant NCHD post
- Locum/agency

#### 4.4 TOTAL ANAESTHESIA PRACTITIONERS IN THE IRISH HEALTH SERVICE EXECUTIVE

Our calculations therefore give a total figure of 850 anaesthesia practitioners registered for the Professional Competence Scheme and working in the HSE in Ireland.

■ HSE Consultants	379
■ HSE Non-training NCHDs	255
■ Training NCHDs	206 (+10)
<hr/>	
Total	850

This figure correlates with two other sources of anaesthesia practitioners. The Fifth National Audit Project of the Royal College of Anaesthetists in collaboration with the Association of Anaesthetists of Great Britain and Ireland and the College of Anaesthetists of Ireland (NAP 5 study) into Awareness under Anaesthesia undertook a snapshot picture of anaesthesia manpower and calculated there were 342 consultants and 430 NCHDs in anaesthesia, a total of 772 practitioners. The Medical Workforce Intelligence Report published this year reports a total of 1075 anaesthesia practitioners registered with the IMC in 2012. Of these 10% worked wholly outside Ireland in that year and a further 15% worked in Ireland for only part of the year. We believe our figure of 850 practitioners is a reasonable estimate of anaesthesia workforce in Ireland.



- **Consultants**
- **Trainees**
- **Non-Training NCHDs**

This workforce is divided into consultants, trainees and non-training NCHDs.

As can be seen from the diagram, 30% of anaesthesia practitioners are neither consultants nor anaesthesia trainees.

The Medical Workforce Intelligence Report also highlighted two important facts in relation to the anaesthesia workforce. Ireland ranks second only to New Zealand in having the highest proportion of International medical graduates (IMG) in its workforce at 35%. Within anaesthesia however the proportion of IMGs in Ireland is 49.2%. It is clear therefore that the current system of recruitment, training and most importantly retention of anaesthetists in Ireland, is wholly inadequate to meet the needs of the Irish Health Service.

The proportion of doctors who work part time in anaesthesia in Ireland is also low (males 4.9% & females 8.8%) compared to the general medical population where 9.4% of males and 20.4% of females work part time. At the same time the proportion of females in the anaesthesia workforce is increasing with their being 5% more in the under 45 year age bracket compared to the over 45 year age bracket. It is likely therefore that the proportion of anaesthetists working part time in the future will rise, necessitating additional trained personnel to meet the work demands.

## 05

## FUTURE PLANNING IN ANAESTHESIA CHALLENGES

The above figures illustrate the magnitude of the challenge facing the HSE and the anaesthesia specialty in maintaining services that require anaesthesia practitioners in the future. These services include provision of anaesthesia, provision of intensive care medicine, provision of pain medicine, pre-operative assessment clinics, transport of the critically ill and the numerous managerial and administrative roles taken on by anaesthetists in hospitals particularly, but also in the wider medical community. The key challenges will be

- Replacing the 30% of anaesthesia posts currently occupied by non-training NCHDs with a more stable and permanent solution.
- Reducing the dependency on International Medical Graduates (IMGs) for the provision of anaesthesia services in Ireland. How much this should be reduced by is a guess but the Medical Council statistics indicate that with the exception of the UK, all EU countries have a dependency of less than 10% on IMGs. Interestingly though, all of the other English speaking countries have a dependency ranging from 23% to 39% with the exception of Canada at 18%. This means that there is a ready market for our trained anaesthetists abroad and the issue of retention of trained specialists will have to be a key component of whatever solutions are reached.
- Increasing the number of consultant anaesthetists from the current low figure of 8.8 per 100,000 population. Hanly recognised that figure was insufficient to allow introduction of the European Working Time Directive (EWTD) and recommended a figure of 11 per 100,000. The UK figures would suggest a higher ratio than 11 per 100,000 would be a more realistic solution to cope with the 24/7 demands of the profession.
- The proportion of part time practitioners is likely to rise and this must be accommodated for in any consultant expansion.

# NUMBERS OF CONSULTANTS AND TRAINEES REQUIRED, IN THE NEXT 10 YEARS

06

## **CONSULTANT NUMBERS**

The numbers of consultants needed in Intensive Care Medicine have been defined by two separate reports into both adult and paediatric critical care. The Faculty of Pain Medicine has estimated the national requirements into the future. Within anaesthesia there are many factors at play, but it is clear that in 2013 we have an overstretched anaesthesia service, with too many sites requiring 24/7 anaesthesia and a critical dependence on IMGs to maintain the current status quo. That status quo has started to crumble in 2013, as IMGs are no longer available in the numbers required to maintain the current service.

### **6.1 ADULT CRITICAL CARE**

There are currently 37 adult intensive care units in the country. Of these, only 20 have dedicated consultant intensive care sessions. Many practitioners combine ICM delivery with anaesthesia delivery. It is thus useful to see how many WTE are dedicated to ICU currently and how many are required to staff ICUs to a minimally acceptable level nationwide.

Currently there are the equivalent of 35 WTE consultant clinical hours committed to ICM, but with the majority of the consultants delivering this service having a significant clinical commitment to anaesthesia also. Because of the combined anaesthesia and ICM structure of consultant posts, the actual number of consultants providing ICM is much larger than 35 as most are not full time intensivists. The official HSE figures are 4 full time adult intensivists and 23 with

a part time commitment. Traditionally in this country, many anaesthetists though appointed full time to anaesthesia, also provide ICM cover and see this as an integral component of their post.

The 2010 Critical Care Program report into Critical Care manpower used as its basis the 2009 Prospectus Report and included recent appointments since then. It proposed two options for critical care staffing and the more conservative of these estimated that, based on current intensive care unit configurations, a minimum of 84 WTEs are needed. The current adult ICM staffing is therefore less than 50% of what is considered acceptable.

### **6.2 ADULT CRITICAL CARE RETRIEVAL SERVICE**

A Joint Anaesthesia / Critical Care group considered adult critical care retrieval in 2012. They recommended 8 Centres around the country to provide 24 hour cover, based on the estimate of likely workload for a Retrieval Service for Critically Ill Adult patients. They recommended staffing of 3.5 WTE Consultants + 1.0 WTE NCHD for each Retrieval Centre to provide in-house cover 08.00 to 20.00 with on-call cover from home 20.00 to 08.00. This would indicate a requirement of 28 WTEs to provide this service nationally.

The Adult Critical Care Retrieval Manpower planning was based on a number of assumptions relating to the future configuration of hospital services and on our estimate of the likely volume of transfers from Model 2 hospitals.

The exact resource requirements for this Service will become clearer as the Retrieval Service begins to be rolled out in 2014.

### **6.3 PAEDIATRIC CRITICAL CARE**

The DNV report into Paediatric Critical Care recommended that there should be between 12 and 18 full time paediatric intensivists by 2012. Currently there are 3 full time intensivists appointed. A further 2 posts have been approved by the HSE but were not filled when advertised because of a lack of trained consultant paediatric intensivists.

This raises another area in manpower planning, that of ensuring that trainees are directed into more specialised and possibly more demanding clinical areas. While individual anaesthetic departments and training bodies have a role in this, the negative impact of changes in consultant working conditions are likely to manifest first in these areas.

### **6.4 PAIN MEDICINE**

Patients with chronic pain will need full time specialists and specialist who combine pain medicine with anaesthesia delivery. The Pain Faculty foresees that most practitioners will continue this model of service delivery in the future. With this model, international experience suggests they will require a ratio of 1 per 100,000 population, giving a requirement of 44 practitioners nationally.

### **6.5 ANAESTHESIA**

Anaesthesia services have evolved to a very high standard in Ireland. This has occurred mainly through the efforts of individual consultants in individual

departments to raise standards, adopt new technologies and provide novel patient services as they are developed. The CAI has played its part through central planning of anaesthesia training and setting standards for training hospitals. It is constantly evolving its practices and has introduced the first run through training programme for postgraduates and the first specialist training programme for post CST doctors in anaesthesia and ICM subspecialties.

What is missing from Irish anaesthesia development however is central co-ordination of workforce planning so that the anaesthesia (including ICM and Pain Medicine) resources may be deployed most efficiently and effectively for the Irish health service. Because the anaesthetist plays such a critical role in the workings of hospitals and particularly in the services hospitals may deliver, workforce planning of anaesthesia will of necessity impact on how and where healthcare is delivered. This has largely been ignored in the past because the ready supply of IMGs allowed anaesthesia services to propagate without central planning, resulting in duplication of some services, under use of services in some areas and overuse in others. As this supply of IMGs, who account for 49.2% of the anaesthesia workforce, declines, the model of health service delivery, which has developed, may be compromised. This will either evolve in a haphazard manner or preferably will be managed to provide most effective use of resources. As the latest HIQA report (October 2013) illustrates, the safe delivery of some medical services in this country



is dependent on immediate access to anaesthesia practitioners.

Within anaesthesia the numbers required may be influenced by reconfiguration, by CAI standards, by adoption of the Hanly report, by introduction of EWTD, by the Department of Health policy of achieving national self-sufficiency of medical specialists, by increased use of flexible working within the specialty and by the reduction in non-trainee NCHD numbers. Service delivery of non-training posts will also be impacted by both the model of health care delivery and numbers of consultants planned.

## STANDARDS

The CAI has always set the standards required for anaesthesia provision in training hospitals (Appendix 1). These have included standards relating to delivery of care and patient safety as they related to trainees but the CAI has not published standards of care required for non-trainees. With the decline in anaesthesia manpower, consultants are endeavouring to fill the gaps resulting in an, at times, overstretched service. The CAI/NCPA have agreed on certain minimum standards with a view to guiding service delivery of anaesthesia departments and manpower planning for hospital networks. These include

### 7.1 ROSTERS

The 2003 Hanly report recommended a 1:7 to staff a 24-hour on-site service with an average of 52 hours per week. The CAI agree that in planning the service the aim for trainees should be for a 1:7 roster but that at present, trainee and consultant rosters should not be more onerous than a 1:6 at a minimum. This means that when there are insufficient NCHDs to fully staff rosters then services must be cut or additional staff found. It is not acceptable to ask trainees to work more than a 1:6 and thus ask them to shoulder the burden of a system that is no longer functioning correctly. It should be noted however, that if we are to become fully EWTD compliant, this number per roster will likely change.

### 7.2 MULTIPLE SITES

Consultants are routinely asked to cover multiple sites delivering anaesthesia and/

or intensive care. This is because there are insufficient consultants in many hospitals to cover all elective work. The CAI/NCPA considers that this is not best practice from a patient safety, training or service delivery perspective. In future, hospitals should staff their anaesthesia departments such that they have one consultant anaesthetist available for each elective list. It is recognised that in reality, consultants may frequently have to cover for colleagues who are on leave or at meetings, etc. In these circumstances, consultants may cover two lists where the case complexity of both lists allows and where there are NCHDs of sufficient ability to manage the cases listed.

### 7.3 WORK SCHEDULING

All elective lists should have defined start and finish times and these should be adhered to. The precise start and finish times can be decided locally by theatre management and it is recognised that for some specialties the duration of the list may need to be 12 hours rather than the traditional 9 hours. Where a user of anaesthesia services schedules more cases than they are capable of completing in the allotted time, the excess cases should be deferred to the next available list.

### 7.4 EMERGENCY THEATRE

Every Level 3 and 4 hospital should have designated emergency theatre hours in their weekly elective schedule. For Level 4 hospitals this will probably mean an all-day emergency theatre every day; in Level 3 hospitals the

time dedicated to emergencies may be somewhat less and can be decided locally based on anticipated demand. The aim is to complete as much emergency work as possible within routine hours. Studies from the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) in the UK have clearly demonstrated improved patient outcomes in this scenario over operations performed out of hours by less experienced personnel.

### **7.5 INSUFFICIENT MANPOWER**

Where there is insufficient anaesthesia manpower to fully staff out of hour rosters, services should shut to all but life threatening emergencies. Each hospital/network should develop policies outlining the priority of services to be covered when there is insufficient anaesthesia manpower. Serious consideration should be given to the level of cover provided as attempting to maintain previously existing levels of cover may result in substandard care.

A clear example is provision of anaesthesia to obstetric services. The standard expected has been defined by the Obstetric Anaesthesia Association as including immediate availability of a duty anaesthetist, a backup consultant and provision of an epidural within 30 minutes of it being requested. If there is no duty anaesthetist available or if their level of obstetric anaesthesia competency is such that they do not qualify as a duty anaesthetist, should that obstetric unit continue to accept women in labour? If so, who takes responsibility for the inadequate obstetric anaesthesia service? In this context it is worth noting the comments of the Minister for Health

that “in the past, there may have been an attitude among management that patient safety was an issue for clinicians alone. It is not. It cannot be the case.” Irish Times October 10th 2013.

### **7.6 SERVICES REQUIRING 24/7 COVER**

What constitutes sufficient anaesthesia cover will depend on the services delivered by the hospital. It can generally be assumed that a Level 4 hospital will have a regional ICU, theatre and an obstetric unit. To cover these services 24/7 will require:

- Six consultants and six NCHDs to cover theatre activity out of hours i.e. 1 roster of NCHDs and 1 roster of consultants at a minimum. For routine work, the number of consultants and NCHDs required will depend on the number of anaesthesia sites operational including, theatres and radiology.
- Where there is an obstetric unit an additional six consultants and six NCHDs will be required. The Obstetric Anaesthesia Association (OAA)/AAGBI guidelines for Obstetric Services state that there must be a dedicated duty anaesthetist immediately available 24/7 (i.e. within 5 minutes); that they must have clear lines of communication to their supervising consultant and that there needs to be separate anaesthesia staff to cover whatever elective theatre activities are scheduled. Where the duty anaesthetist is a consultant, there should be another consultant available as immediate backup, when necessary.
- With ICU, the recommended staffing level during routine hours is 1



consultant per 12 ICU beds and 1 NCHD per 6 ICU beds. Out of hours, the ratio is less, 1 consultant per 30 beds and 1 NCHD per 12 patients. A regional ICU will therefore require 2 resident NCHDs and one consultant on call.

- At a minimum, a Level 4 hospital, with obstetrics will therefore require 4 rosters of NCHDs and 3 rosters of consultants out of hours. Level 3 hospitals may have less activity and thus one may assume that the manpower requirements are less. However if we are to meet the accepted standard for ICU and obstetric anaesthesia cover, anaesthetists need to be immediately available to them. Therefore any Level 3 hospital with ICU and obstetrics will need 3 rosters of NCHDs and 2 of consultants to support out of hours cover.

**T**he key question that will determine consultant and non-trainee numbers is what model of anaesthesia delivery and hospital configuration will exist for the future. The recent report on “The Establishment of Hospital Groups as a Transition to Independent Hospital Trusts” 2013 represents new challenges for the medical profession but also opens the door to potential manpower solutions in anaesthesia.

## 8.1 HUB AND SPOKE

The reorganisation proposed could result in a Hub and Spoke model of anaesthesia service delivery, which could work very well in Ireland. In this model a larger central hospital would be at the center of a network and would support differing types of hospitals in the region. This could impact positively on 24/7 cover, on training and on service provision, particularly those services that are anaesthesia intensive i.e. critical care medicine and obstetric anaesthesia.

Some of the hospitals within the proposed regions may provide no 24/7 cover as currently is the case in a small number of hospitals. Others may have 24/7 cover provided by one, two or three rosters of consultants and NCHDs depending on service need.

Many trainees could be centralised in the hub hospital. As it is not desirable that trainees would only experience larger hospitals in their training, they would rotate to peripheral hospitals for some of their elective lists. Ideally they would rotate to cover the module that they are currently training in, though this will not always be possible. Most of their on

call commitment would be to the larger hospital. This would avoid the situation whereby it is necessary to employ additional non-trainees to staff an NCHD on call roster. Other trainees may be posted to a peripheral hospital that has obstetric and ICU facilities and thus require 24/7 in house cover and may or may not rotate to other hospitals during their 6 months.

The Prospectus report “Towards Excellence in Critical Care” which reviewed adult intensive care recommended a hub and spoke model for delivery of intensive care. They recommended that instead of having 37 hospitals delivering ICU care, there should be 8-10 regional hub hospitals with between 15-30 beds and 14-16 spoke hospitals with 8-16 beds. The critical care service would be underpinned by a critical care retrieval service, which would facilitate patients accessing the level of intensive care they require in a timely fashion. These are the goals that the National Clinical Programme in Critical Care is working towards and which will hopefully be implemented as part of the proposed acute hospital reorganisation.

The situation with regard to obstetric services is less clear-cut in terms of solutions. As mentioned above, the standards in terms of immediate availability of an anaesthetist to the labour ward are very clear. The Health Information and Quality Authority report of October 7th 2013 into safety, quality and standards of services delivered to obstetric patients has illustrated shortcomings in the service currently available.

The number of hospitals delivering obstetric care compounds the situation. There are currently 19 units countrywide delivering approximately 72,000 births annually. Four of the units deliver 50% of the births and the other 50% are shared across 15 units. Some of these have less than 1,500 births per annum. Given the standard that exist for anaesthesia availability to these units, there should be a dedicated duty anaesthetist and backup consultant for each unit. It is doubtful that the smaller units currently have this availability. The duty anaesthetist is likely to be shared between the labour ward, ICU and general theatre, as is the consultant anaesthetist on call.

For the larger units there may need to be 2 duty anaesthetists available. At a minimum however these 19 units should be staffed by 19 rosters of NCHDs on a 1:6 on call and 19 rosters of consultant anaesthetists on a 1:6 on call, if we are to meet the standard of the OAA/AAGBI, which has been endorsed by HIQA. That means we need 114 NCHDs and 114 consultants if we are to staff the current configuration of obstetric units to meet international best practice standards. The obvious solution is to reconfigure the obstetric units into larger regional units, which, if 5 were removed, would remove the requirement for 30 NCHDs and 30 consultants. There would be societal and political concerns, which would impact on any such decision, but at least the cost in terms of anaesthesia workforce provision can now be factored in to such decisions.

## **8.2 24/7 ANAESTHESIA SERVICES IN EVERY HOSPITAL?**

The two main determinants of anaesthesia requirements are firstly the need to

staff elective theatre lists, ICU, pain services and secondly to provide 24/7 anaesthesia cover to most of the 44 hospitals in the country. The latter impacts on both consultant manpower and NCHD manpower requirements. As an example, if a smaller hospital is assigned one or two training SATs, it frequently means that a further 4 or 5 non-training registrars are required to maintain an on call roster at NCHD level. The CAI/NCPA believe we should question whether every hospital needs 24/7 anaesthesia cover. Certainly larger hospitals, hospitals with obstetric services and those with an ICU that caters for ventilated patients need 24/7 resident cover. Every other hospital should have the need for 24/7 cover questioned. Would an extended working day to 8 pm or 10 pm cater for whatever emergencies may attend that hospital?

In deciding what level of cover is needed, decisions need to be made on how best to cover acute medical emergencies. Anaesthetists and critical care physicians are often called to these patients because of their skills in resuscitation, vascular access and airway skills. Where anaesthesia is not needed for postoperative patients or acute surgical emergencies should there be an anaesthesia roster to provide backup to physicians running acute medical units? The view of the specialty is that this should not be the case and those physicians who run acute medical assessment units in peripheral hospitals should be trained and skilled in acute resuscitation and backed up by a critical care retrieval team. Therefore hospitals that do not provide out of hour emergency surgical cover, do not have an ICU and do not have obstetrics should not need 24/7 resident anaesthesia cover.

**T**he current consultant anaesthetist numbers represent just over 8/100,000 population similar to the 2009 numbers. The manpower modelling used in the 2003 report recommended moving to a consultant delivered service and so increasing to 11 per 100,000. The FAS report on Workforce Planning in Healthcare 2009 estimated that we should now have 512 consultant anaesthetists, increasing to 533 by 2020. Based on the FAS report we therefore have a deficit of 133 consultant anaesthetists in Ireland.

In Northern Ireland, where service delivery is less dependent on NCHDs and is EWTD compliant there are 11.66 consultant anaesthetists per 100,000 population and an additional

1.5 permanent staff grades per 100,000 population (Royal College of Anaesthetists Census 2010). If we were to replicate NI anaesthesia numbers of permanent practitioners we would have 605 consultants now increasing to 629 in 2020.

If we were to attempt to increase consultant numbers can this be done? The numbers being trained to consultant standard, by the CAI have been increased and the training scheme has been shortened. In addition we are hopeful of starting advanced training to consultant standard in sub-specialties, in the near future. What we do not know however is what will be the loss of our trainees to other countries.

## ATTRITION RATE

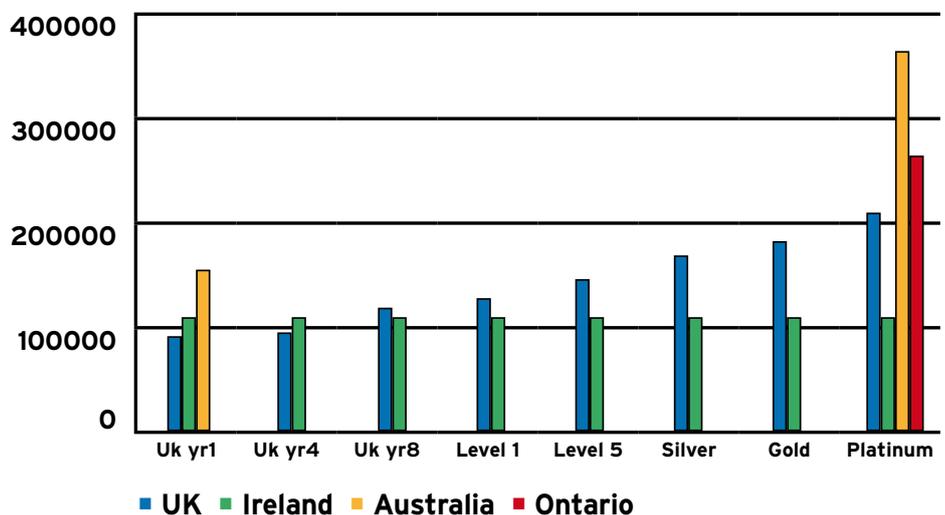
The attrition rate between achievement of a CST and eventual appointment to a consultant position in Ireland is unknown. A recent survey by the Committee of Anaesthesia trainees (CAT) on future plans identified that 90% of trainees intend to leave Ireland on completion of their training. The 2009 FAS report quoted from the Career Tracking Study that only 60% of doctors working abroad are interested in returning to Ireland. If both of these items are correct the implication is that only 64% of anaesthesia trainees will go on to occupy consultant positions in Ireland. This represents an attrition rate of 36%.

Irish trained anaesthetists are highly regarded abroad and at present have little difficulty in finding permanent employment abroad. The recent changes in consultant contract conditions, particularly for new entrants, are unlikely to improve the chances of Irish trainees returning to Ireland and may significantly worsen the attrition rate.

The media spin generated about consultant salaries repeatedly states that consultants in Ireland are highly remunerated compared to their peers in other countries. The reality however is that the Irish health service is in competition with the health services of other English speaking countries around the world. While the starting salary compares well with the UK and Ontario, the lack of progression means that aspiring Irish consultants will fare very poorly over the duration of their career compared to their peers in other countries.

The HSE have conducted discussions with the Forum of Postgraduate Training Bodies including trainee representatives about this issue. The concept of an incremental consultant salary scale and additional payments for specialties with more onerous out of hours duty work would, if followed to fruition considerably improve the potential attrition rate of Irish trainees.

**CONSULTANT SALARIES IRL, UK, AUSTRALIA, ONTARIO**



## FLEXIBLE WORKING

**A**t the time the FAS report 2009 was compiled they estimated that 10% of consultants, across all specialties, would choose to work part time. The Medical Workforce Intelligence Report of the IMC provides very useful information on flexible working in anaesthesia. The proportion of consultant anaesthetists who work part time is considerably less than the general medical population. Within anaesthesia 4.9% of males and 8.8% of females work part time. This compares with 9.5% of males and 20.4% of females in the general medical population i.e. 13.8% overall. The specialty is becoming more feminised with time, the proportion of females in anaesthesia is 42.5% in

the under 45 age group compared to 37.8% in the older than 45 age group. In addition, with the retirement pension no longer being dependent on the final 3 years salary and the retirement age being increased, more anaesthetists are likely to opt for flexible working in the later years of their career.

It is likely therefore that the proportion of anaesthetists working part time will increase in the future and this will have to be factored into manpower planning. As an example, if we accept the FAS figures of 512 WTE required in 2013, we would require an additional 70 doctors if we had the same flexible working proportion as the general medical population.

# 12

## SERVICE DELIVERY OF NON-TRAINING NCHD POSTS

### **12.1 WHO SHOULD PROVIDE ANAESTHESIA?**

The CAI/NCPA believes that Anaesthesia should be a consultant delivered service. The Committee of Anaesthetists in Training (CAT) supports this view. Furthermore, the CAI/NCPA also believe that only anaesthetists whose names are included in the Register of Medical Practitioners, Specialists Division (anaesthesia) of the Irish Medical Council, or who are eligible for inclusion, should practise independently, that is, as consultants. Although non-physician anaesthetists play a role in the delivery of anaesthesia services in many countries in Europe, and in North America, we do not consider they have a role to play in Ireland.

### **12.2 CAREER GRADE NCHD?**

As with Hanly 2003, we acknowledge that career service grade doctors at NCHD level do exist in anaesthesia in Ireland in practice if not in name. In this respect it would be very useful to determine the number of non-trainees who have or are entitled to have contracts of indefinite duration. We agree with Hanly that this career grade should not be viewed as a long term solution but we also recognise that, at present, it is a reality on the ground.

Ensuring quality of care is an issue in this group of doctors and will be determined to some extent by their qualifications and experience coming into their post and by their engagement with continuing medical education. The qualifications and experience is something that is outside the CAI/NCPA control and is an issue for employers. The on-going medical

education of these doctors is now being addressed through the PCS process and the PDP programme. All of these doctors must engage in PCS to meet IMC requirements and HSE MET have funded the CAI to deliver PDP to 80 of these doctors. The CAI/NCPA is of the view that we should begin the process of reducing non-trainee NCHD posts while also recognising that many of these will remain in place for the present time.

The concept of a long-term registrar grade was explored as a solution to the non-training NCHD problem. A new applicant for such a position would need to meet defined minimum training standards and would need to engage with the Professional Development Programme and the Professional Competence Scheme. Current long term registrars could have their competence assessed by their consultants but would also need to engage with PDP and PCS schemes. The overwhelming response of the profession, to this proposal was that this would perpetuate a grade which has not achieved CST and was not aspiring to do so, in delivery of anaesthesia care services. As with the Tierney report 1993 and the Hanly report 2003, it was felt that this was not in the best interests of patients or the health service.

### **12.3 LEVEL 5 ASSESSMENT**

The other group of doctors who make up a significant proportion of non-trainees are those, primarily IMGs who come to Ireland for training and experience and ultimately hope to be entered on the Irish Medical Councils (IMC) Specialist

Register through a Level 5 Assessment. They rotate every six months and hope to achieve all competencies in doing so. In terms of providing NCHD anaesthesia service this is an important group of doctors and they occupy many of the non-training positions in training hospitals. Changes in conditions of service impact on the attractiveness or otherwise of these non-training positions and the new change to English language requirements for non-native speakers may render some of these positions unappointable. The ability of these doctors to get on the Specialist Register is a significant attraction when it comes to filling non-training posts.

It does however undermine the whole concept of training bodies training programmes when the training scheme can simply be bypassed. CAI trainees undergo multiple assessments in the process of their training; are required to maintain accurate logbooks and are required to record all of their academic activities. In the final year of their training they are required to demonstrate through the Professionalism in Practice Module of the College's Master's Degree Programme (MSc in Professionalism) that they possess the necessary non-technical skills to become a consultant. Without these milestones being achieved, they cannot progress in training. The Level 5 Assessment allows doctors who have achieved the anaesthesia Fellowship to work in a number of different posts to achieve Specialist Registration, according to current IMC regulations. This is somewhat incongruous and has been a source of disquiet to our trainees.

The Hanly 2003 manpower report recommended that we should allow this process but only for a limited time period and The Medical Practitioners Act 2007 (Section 47, subsection 2) allows it only until the fifth anniversary of the commencement of this subsection of the act (16 March 2009). If the IMC remove this avenue to specialist registration it will be interesting to see the effect on manpower planning for these non-training NCHD posts.

#### **12.4 TRAINEE NUMBERS**

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Trainee numbers will plateau at 190 from 2016 on. There is scope to increase trainee numbers if we were to take our share of the increased medical school output and if we were to successfully introduce advanced training in subspecialties (see below - Trainee Number required). If both were to occur we could increase trainee numbers each year to plateau at 264 in 2019. This would reduce non-training NCHDs numbers by 74, which would make a significant impact on replacing this declining workforce.

Before increasing trainee numbers however we would need to ensure that there are potential consultant posts for them. Thus there would be no point in increasing trainee numbers in isolation. It would need to be combined with an increase, or a commitment to increase consultant numbers also. As increasing consultant numbers will be a component of the solution of replacing non-training NCHDs, there is a synergy to combining this with an increase in trainee numbers.

## **12.5 ICU NCHD COVER**

Traditionally anaesthesia NCHDs have formed the backbone of the NCHD workforce in ICU. As the majority of consultant practitioners of ICM are from an anaesthesia background, they naturally used their own trainee pool to staff ICU. All of the patients either come from medical or surgical teams and the College is of the view that they should participate in delivery of ICU care. The JFICMI is currently in discussions with the RCPI with regard to establishing ICU training post rotations for RCPI trainees. If successful, this welcome development would have the dual benefit of providing surgical and medical SpRs with valuable ICM training and removing some of the workload from anaesthesia trainees. Every hub ICU should endeavour to establish a roster of medical and or surgical NCHDs who rotate to ICU for 6 months and work under the supervision of the intensivists. These can then participate in service delivery 24/7. As the hub ICUs will require more than 1 NCHD to care for up to 30 patients, each non-anaesthetist can be on call with an anaesthetist thus ensuring that critical airway and vascular access skills are always available. This solution is unlikely to work in smaller “spoke” ICUs where only one NCHD is required on call at night.

## **12.6 REDUCE THE NUMBER OF SITES REQUIRING 24/7 ANAESTHESIA COVER**

If the proposed changes in the delivery of Healthcare Services are introduced, the need for resident NCHD 24/7 cover in level 2 hospitals will disappear.

Hospitals with intensive care and

maternity units will require in-house NCHD cover for the foreseeable future. Many of these will be training hospitals and so will have a cohort of CAI trainees. However all training hospitals will also require a cohort of non-training NCHDs.

## **12.7 CONSULTANTS ON CALL**

As the numbers of non-training NCHDs reduce, additional consultants will need to be employed to cover elective work in hospitals. How to replace the on call rosters currently performed by non-training NCHDs is more contentious. If career grade NCHDs is not an option in the Irish healthcare system, the question of whether consultants should be used to replace non-training NCHDs resident on call rosters arises.

The Hanly report 2003 recommended that a number of specialties become resident on call. Consultants in Emergency Medicine, General Medicine, Paediatrics/Neonatology, Obstetrics and General Surgery were recommended to become resident on call. In terms of anaesthesia it recommended that consultants in “Major Hospitals” covering major maternity units and regional intensive care units should be resident on call. The HIQA October 7th 2013 report reiterated this recommendation in respect of obstetrics.

There is no facility within the current consultant contract for remuneration for resident on call. At present the out of hours allowances for consultants are capped, resulting in current consultants providing on call cover to HSE hospitals, at no cost to the HSE, once the caps are

exceeded. This method of remuneration for 24/7 call would clearly not be acceptable, if consultants were expected to become resident on call. Since Hanly 2003 the consultant contract has been rewritten by the HSE/DOH and there has been no provision in either the contract prior to 2008 or subsequently for consultants to be resident on call. Clearly therefore provision for resident on call consultants is not envisaged at present. If such a position were to be explored it would require renegotiation of the consultant contract with the consultant representative bodies.

In addition to contractual issues the cost effectiveness of having consultants resident on call would have to be questioned. The current method of on call cover by consultants is highly cost effective for the HSE as most consultants are rostered for elective work after a night on call. If consultants were to become resident, they would then be subject to EWTd and would not be available for elective lists after a night on call. The number of consultants required to cover both elective and out of hours duty would increase significantly. A sample NCHD roster from the Hanly report is indicative of how inefficient this would be. Seven consultants would be available for just 7 elective lists between them, over the entire week, if they were also providing resident 24/7 cover.

The discussions on manpower within the specialty have indicated there is no appetite at present, for consultants to become resident on call. In addition, if this option was proposed, there are insufficient consultants employed in the HSE for this to be a viable solution.

The Academy of Medical Royal Colleges in the UK is currently looking at considerations in terms of implementing seven-day consultant cover, in the UK. Similar to the situation in this country, they have highlighted that the direct and indirect costs are likely to be substantial, that it cannot be done within existing NHS funding and tariff levels and that service configuration onto fewer sites would be needed for its implementation. In addition, they have pointed out that it would be only be effective if teams of consultants from different disciplines were present in the hospital. The Royal College of Anaesthetists commenting on the anaesthesia aspects of this proposal stated that there are clear resource implications, that without an increase in personnel there may be a negative impact on elective work and that the effects on trainees may be both positive in terms of training and negative if it impacts on trainees acquisition of the skills of decision making, resource management and team leadership.

## **12.7 SUMMARY OF REPLACING SERVICE DELIVERY OF NON-TRAINING POSTS**

Managing the service delivery of anaesthetic posts that are currently filled by non-training NCHDs will require a multifaceted approach. This will include:

For elective work

- Additional consultants will need to be employed to provide a consultant delivered service in accordance with CAI/NCPA recommendation.

For out of hours working, consideration should be given to

- Reducing the number of sites and services requiring 24/7 call.
- Increasing CAI trainee numbers, but this will need to be accompanied by increased consultant recruitment.
- Rotating medical and surgical SpRs to ICU rotations, which will free up anaesthesia trainees.
- Finally, the current cohort of non-training NCHDs is not going to

disappear completely. It is anticipated that their numbers will reduce significantly but not completely. Doctors in these posts are providing a considerable service to the Irish health service. How these occupied posts and doctors should be managed in the future needs to be defined.

## 13

### NATIONAL SELF SUFFICIENCY

**T**here will always be movement of doctors into and out of the Irish health service, from abroad. This is by and large positive as it enables other doctors to train and practice in Ireland and it allows our trainees to travel abroad to gain experience and learn new skills.

That we should be dependent on IMGs for 50% of our anaesthesia workforce however is an indictment of the lack of workforce planning in anaesthesia. With the increase in medical student output combined with increased training numbers, we should be able to reverse this trend.

Many factors outside the control of the profession will impact this effort and chief among these will be how the government and the HSE treat the profession. For the last number of years they have chosen to significantly reduce

remuneration and working conditions while simultaneously engaging in negative media spinning about medical consultants. This has had the effect of persuading HSE consultants to leave the public health care system and dissuaded a significant number from taking up new consultant appointments. If we are to become self sufficient in anaesthesia, ICM and Pain medicine healthcare delivery there will need to be an awareness among healthcare management that what they are seeking to recruit is front line hospital providers who deal 24/7 with the sickest and most critically ill patients and do so on onerous duty rosters. The working conditions, remuneration and respect, shown to those new consultants, need to reflect that. Currently they do not appear to and the recruitment process is failing. The goal of national self-sufficiency will remain elusive unless and until this changes.

## WORKING LIFESPAN

**T**he 2003 report took the average lifespan of a consultant surgeon as 25 years. Anaesthesia consultants tend to be appointed somewhat earlier than their surgical colleagues. In addition the retirement age is likely to be increased given the current economic circumstances. We therefore think the average working lifespan will be greater than 25 years. Two factors may mitigate this though. Increasingly graduate entry medical students are being attracted to anaesthesia and this will increase the average age

of consultant appointment. In the UK the average age at which consultant anaesthetists discontinue their clinical duties is 57. This takes into account early retirement, premature death, sickness and career change to administrative or managerial duties. There is no comparable data for Ireland but given the effects of the current economic circumstances and the impact of graduate medical entrants, the CAI estimates that the working lifespan of a consultant anaesthetist in Ireland is closer to 30 years than 25.

## HOW MANY CONSULTANTS WORK WHOLLY IN THE PRIVATE SECTOR?

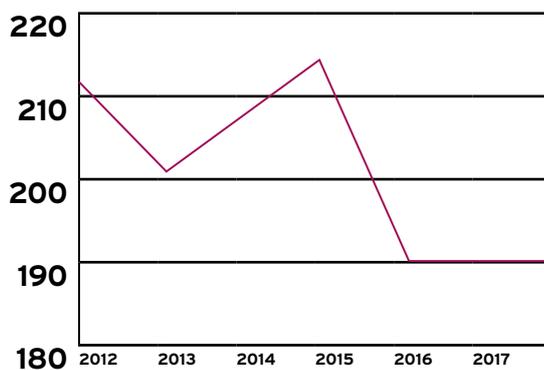
**W**hile tasked by HSE MET to look at workforce planning in the public health service the CAI is responsible for maintaining anaesthesia standards in all institutions nationally. All anaesthetists, irrespective of their place of work must partake in the CAI & IMC PCS process. In addition, Irish trained anaesthetists may compete for jobs in either the private or public health service. As there is no private anaesthesia training programme, the CAI training scheme must take the private health sector into consideration when determining numbers needed to be trained. The FAS report 2009 stated that there were 26 anaesthetists working in the private health sector. We estimate that there are 65 consultants working wholly in private hospitals in Ireland.

This number is likely to rise in the future as the impact of the 2008 consultant contract becomes manifest. Publicly employed doctors will be precluded from practicing in private hospitals and these hospitals will therefore have to employ their own consultant anaesthetists. It is also conceivable that a reporting relationship to the HSE may be necessary if the government policy of introducing Universal Health Insurance is introduced.

The current figures for consultants employed in the private sector represent 14% of total consultants. Some of these numbers are retired public consultants who are unlikely to be working full time in the private sector. The CAI considers that a figure of 15% - 20% of total workforce in the private sector is a reasonable estimate.

## WHAT NUMBERS OF ANAESTHESIA TRAINEES ARE REQUIRED?

Given the numbers of consultants estimated to be required above in anaesthesia, pain medicine and ICM, can we estimate the number of trainees required in anaesthesia overall and in subspecialties? The CAI training programme is currently in transition from a seven year programme to a six year programme. When completed we will have 190 trainees over six years. Currently we have a mixture of trainees on six and seven year programmes.



The 2003 Hanly report looked in detail at estimating trainee requirements based on target numbers either at consultant level or at a more senior trainee level. It devised a formula using many of the above factors with which to estimate how many trainees are required overall. The formula may also be used to look at individual specialties and estimate how many one year fellowships are required to meet specialty requirements.

### THE FORMULA FOR THE NUMBER OF TRAINEES REQUIRED IS

$T \times M + \text{Private}$

where

- T is the target number of consultants

- M is the Multiplier
- Private - no of private consultants factored in.

The Multiplier  $M = (A/B) \times C \times D$   
where

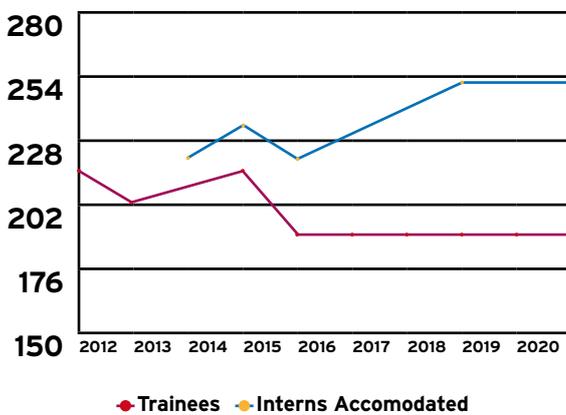
- A - Number of years in training
- B - Average no of years a consultant
- C - Attrition Factor
- D - Flexible working

At a macro level therefore we can work out the number of trainees needed overall depending on which consultant manpower model we require.

Currently we have 379 public consultants and 65 private consultants. Using these as targets and estimating the average number of years a consultant as 28, the attrition rate as 36% and the flexible working as 13% we get  $379 \times (6/28) \times 36\% \times 1.13$ , which would indicate a requirement for 167 anaesthesia trainees currently. Without knowing the precise figures for the average number of years a consultant and the attrition rate, it is not possible to completely accurately estimate the correct numbers of trainees required e.g. if the attrition rate were to increase to 40% we would need 179 trainees at present.

If we were to go to the FAS predicted scenario figure of 513 consultants for 2013 we would require 220 anaesthesia trainees on a six year programme now, rising to 240 by 2020. This could be achieved by incorporating the increased medical school output as illustrated by FAS. This would necessitate an increase to 40 of anaesthesia trainees per year.

### POTENTIAL TRAINEE NUMBERS



### IN THIS SCENARIO TO PROVIDE: INTENSIVE CARE

82 consultant intensivists would require 4.2 fellows trained per year. As most of the consultant workforce works in both anaesthesia and ICM, the number of fellows would need to be increased in inverse proportion to the amount of time spent in ICM. If 100%, then only 4.2 fellows are needed, if 50% then 8.4 fellows are needed etc.

### SUBSPECIALTIES

There are a number of specialist areas within anaesthesia that it would not be possible to enter straight from CST. These include intensive care specialist, pain specialist, paediatric anaesthetist, specialised obstetric and cardiothoracic anaesthetist. The college recognises these areas and has developed a subspecialty training pathway which includes 1 year pre-CST to develop an interest in that specialty followed by a post CST year to become a specialist in that area. The CAI have the resources to train specialists in Ireland and have submitted a proposal to HSE MET to allow them to do so. In retaining post CST specialty training in Ireland we hope to improve consultant uptake in these specialty areas.

The formula may also be used to estimate how many trainees we would need in this post CST specialty training. In estimating this we are assuming that most fellowship graduates would choose to work in Ireland and therefore reducing the attrition rate to 20% while keeping flexible working and working lifespan at the previous figures. Finally we will just estimate for the public sector, assuming that no one goes into private practice.

### PAIN

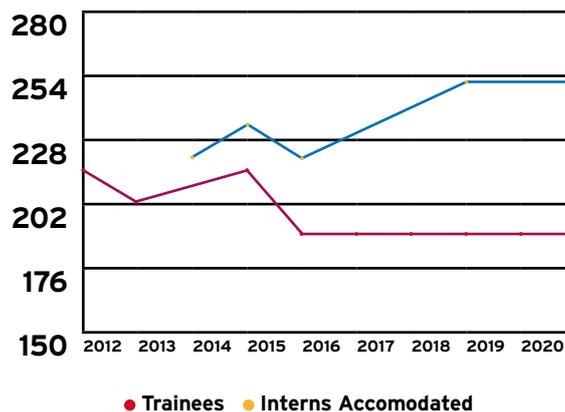
44 pain specialists would require 2.2 fellows per year if they went into full time pain posts. If part time, then the number increases similarly to Intensive care. So if they spent 50% of time in pain then 4.4 fellows are needed per year.

### PAEDIATRICS

Paediatric anaesthesia currently has 23 specialists according to HSE figures. Using the same formula would indicate that 1.15 fellows are required per annum just to maintain that number.

If this programme is successfully implemented the number of trainees in Irish hospitals will rise further to a potential 264 trainees.

### POTENTIAL TRAINEE NUMBERS



## CONCLUSION

The specialty of anaesthesia including Intensive Care Medicine and Pain Medicine faces particular workforce challenges in 2013. These include an over reliance on IMGs for the delivery of services, an unstable pool of non-training NCHD doctors and a “Perfect Storm” in recruitment, with changes in conditions of employment resulting in an inability to attract applicants to either consultant or non training NCHD posts.

The specialty does have strengths to meet these challenges. Chief among these is a cohesive united consultant workforce centered on a strong independent College. In addition we continue to lead the way in training structures in anaesthesia, intensive care medicine and pain medicine. The attractiveness of our training programmes is reflected in the strong interest among junior doctors and medical students in entering our specialty. The success of our training programmes is reflected in the ability of our graduates to seamlessly enter the workforce in many countries.

The solutions to the current situation lies within the specialty itself and within the HSE/DOHC.

- Within the specialty we need to maintain the high standards of training and clinical practice that we currently practice. Where workforce gaps appear, we can no longer do the same volume of work and we should reduce the amount of work to maintain standards.
- We need to work with our colleagues in other specialties to agree safe reconfiguration of acute services including obstetric services and intensive care medicine.
- The solutions to many of the current workforce problems have already been identified in many reports including the 2003 Hanly report, the FAS report 2009, the Prospectus report into critical care services 2009, the DNV report into paediatric critical care 2008. None of these reports have been implemented in full to date; at best there has been partial and piecemeal implementation. The HIQA report of October 7th 2013 states in relation to the HSE “This again emphasises the urgent need for ‘ownership’, accountability and responsibility within the health service’s national and local structures for implementation of critically important recommendations made by various review bodies and organisations”. This document attempts to tie these reports together as they relate to anaesthesia and it is hoped that this may act as a stimulus to implement them.
- The economic situation means that everybody’s conditions of employment have significantly diminished in recent years and there is little that can be done to remedy this. The decision to implement a 30% pay cut for new consultants however is a self inflicted wound, in terms of manpower recruitment. Rightly or wrongly trainees see it as relegating them to



a sub-consultant grade permanently. Fruitful discussions have taken place, which have identified solutions to this issue. It may well be that if these discussions result in recognition for the onerous duty involved in our specialty, new appointees may end up in a significantly better consultant contract.

# APPENDIX 1

## CRITERIA FOR APPROVAL OF HOSPITALS FOR SPECIALIST ANAESTHESIA TRAINEES TRAINING POSTS

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- The hospital should provide an appropriate number and range of elective and emergency surgical procedures suitable for Basic trainees.  
  
As a general guide the College currently requires more than 1500\* cases under general anaesthesia per annum (with some variety in the types of surgical procedures performed rather than a single specialty) before granting training recognition. Smaller single specialty hospitals may also be included, where the caseload is deemed beneficial to training.
- There should be adequate consultant supervision to ensure patient safety and to provide clinical teaching in theatre and other clinical areas.
- An Anaesthetist should see patients pre-operatively and post-operatively. Whenever possible, this should be the Anaesthetist responsible for care of the patient.
- Monitoring equipment and equipment checking procedures should comply broadly with the recommendations of the Association of Anaesthetists of Great Britain & Ireland.
- There should be dedicated skilled assistance available for anaesthetists at all times.
- Appropriate Anaesthesia records should be maintained.
- A properly staffed and equipped recovery room should be available.
- The immediate post-operative recovery period should be supervised by specifically designated nursing staff. Appropriate HDU and ICU facilities should be available.
- There should be a teaching area identified within the hospital. Audio visual aids, digital projector, photocopying services, access to library facilities and to the Internet for access to the CAI electronic portfolio should be available.
- There should be a continuing programme of appropriate theoretical teaching integrated with clinical activity. This should include Physiology, Pharmacology and Clinical Measurement to prepare the trainee for the Membership Examination. Records of attendance at teaching sessions should be maintained by the hospital.
- Audit, including Mortality and Morbidity conferences, and Journal Clubs should be included in the teaching programme.
- The hospital must allow appropriate study and educational leave for trainees as their contract permits.
- Maintenance of the CAI logbook and Professional Competence Credit System (PCS) (the CAI electronic portfolio) by

trainees is mandatory and should be reviewed by Tutors/Trainers in each hospital to verify authenticity. Hospitals within the SAT year 1-2 will be subject to regular review of their Teaching/Training Programmes with visits to individual hospitals at intervals determined by the College Training Committee.

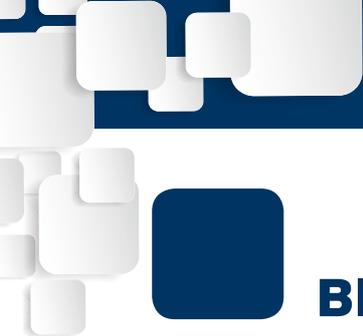
### **CONSULTANT STAFFING AND DEPARTMENT ORGANISATION**

- For approval for training the Department of Anaesthesia must be adequately staffed to meet clinical needs, based on the clinical services provided.
- Each hospital or group of hospitals must have sufficient consultant staff to provide instruction and supervision. There should be at least 1 consultant for every 2 trainees, with a minimum consultant whole time equivalent establishment of 3.
- The number and grade of NCHDs should be sufficient to allow trainee working hours in line with agreed national guidelines and to ensure that education and training are not impeded by unduly onerous on-call duties.

NCHD rosters should be balanced in such a way that trainees' workload in anaesthesia, ICM or pain reflect the modules that they are targeted to achieve in that six months.

- The Department of Anaesthesia will have a designated Chairman who takes overall responsibility for administration of the Department.

- The Department must nominate a College Tutor(s) who takes responsibility for coordinating training in the institution (Section 2.6). The Tutor should ensure that an institutional teaching programme is organised i.e. tutorials, conferences, etc.
- The Training Committee must be satisfied that there are sufficient trainers in the department (see "Definition of a Trainer")
- To be an approved trainer, a Consultant must be in good standing with the College, must have fulfilled the Medical Council's PCS requirements and must be included on the Register of Medical Specialists.
- The Anaesthesia Department shall formally discuss each trainee's goals at the start of each six month rotation and record these. Each trainee must then be assessed after three and six months and this assessment must be discussed with them (Section 1.6.1). Towards the end of each six month period the Tutor must complete the online ITA on the CAI website which forms part of the electronic portfolio.
- Hospitals are recognised for a specific duration of training.



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