

Providing a service for anaesthesia, critical care and pain management in a remote and rural hospital; spinning plates, herding cats and juggling balloons

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The role of anaesthetists in every hospital has been expanding dramatically over the last few years. Intensive Care, High Dependency, Critical Care outreach, Accident and Emergency, "Emergency medicine", Acute and Chronic Pain Management; all come under the umbrella of the anaesthetist. The concept that I had when starting my anaesthetic training included the realisation that, by the time I had completed my training, I would be a member of a highly-qualified group of multi-skilled general practitioners, not of the world out there in traditional GP-land, but within the slightly more rarefied atmosphere of hospital. At the last count, anaesthetists were involved with over 65% of hospital "patient-centred" activity, with a significant number in senior clinical management positions.

Remote and rural anaesthetists, multi-skilling and training

I have always felt that anaesthetists, of any consultant group, have an insight into the workings of virtually every department in a hospital as well as an intimate knowledge of their own. It provides us with a (usually) balanced view. This worldly cognizance never goes unnoticed in remote and rural hospitals. In the absence of anyone else, anaesthetists here are called upon to exercise their skills in every possible channel. In my hospital this frequently includes paediatrics, sometimes ear, nose and throat (ENT) surgery, occasionally obstetrics and even psychiatry. We even make passable chest physicians, cardiologists and on occasions (with our new toys for central line placement) ultrasonographers. I won't mention all the anaesthetic subspecialties in which we are supposed to exercise our skills, from neonatology to neuroanaesthesia.

It has recently been realised that many of the clinical skills required by medical students and those in the newly-established "Foundation Years", are those performed routinely by anaesthetists. So, who better to deliver much of the generic undergraduate and early postgraduate teaching?, who better to give a running teaching commentary on trauma resuscitation?, who better to give an impromptu tutorial on electrocardiograms when the novelty of watching surgery from an unscrubbed distance wears off?, and who better to impart the rudiments of "recognition of the sick patient"?

In a remote and rural acute hospital, it is impossible to work simply as a "jobbing" anaesthetist, providing anaesthesia for routine lists or running an Intensive Care Unit or Pain Clinics. Despite the demands of maintaining "core training" for appraisal or revalidation, it is not possible to be "just" an anaesthetist. The demands of teaching trainee anaesthetists already takes a heavy toll on those with a commitment to it within the anaesthesia schools in teaching hospitals. We do not have that specialist burden, but, in a remote and rural hospital, the alternative is even more demanding. We must provide interest and deliver many anaesthesia-related skills to everyone *except* anaesthetic trainees!

Service Delivery and Standards

Service provision within a small hospital is, paradoxically, fraught with contradictions. What is provided is a consultant-delivered service. Not consultant-led, or consultant-organised, but-consultant delivered, at every single step. Introduction of new guidelines, say for acute pain management, running epidurals, pre-operative fasting, post-operative nausea and vomiting is relatively easy. Write a protocol referenced from recognised publications and guidelines, discuss it with your few colleagues, meet with ward and theatre charge nurses, and implement it. Just like that! My record is under six hours! Clinical excellence, clinical governance, evidence-based medicine; any term you care to use, practically speaking, can be updated in a rural general hospital (RGH) in the blink of an eye. No need for long meetings, no need to make sure that every junior trainee anaesthetist understands. Read a journal; see something that could improve the service to patients; start doing it.

A major problem arises from the fact that, with the possible exception of chronic pain management, anaesthetists are not primary hospital service providers. The quantity and type of work to which we are exposed is dependant largely on what the surgical service provides. We have little choice in the kind of patients we are expected to anaesthetize. This means we also, unwittingly, and extremely reluctantly, take on the role of gate guardians for the patients. In my experience, because of our inherent "big picture" view of the

quality of service we have seen delivered in other hospitals during the course of our training, the following question has to be asked of every clinical situation: "Is this the best place for this patient to receive the surgery that is about to be performed, and will the patient's peri-operative care be as good as it possibly can be, and at least as good as the patient expects?" The seeds of doubt are easy to sow. Because the tangible workload and patient throughput may be considered relatively low in an RGH compared to a production line, waiting list-busting big hospital, the consequences of a wrong decision, and the possibility of what may be considered unfair scrutiny by the "big centre", oblivious of the added difficulties of providing a comprehensive anaesthetic service in a remote place, could be catastrophic. A five-year audit showing zero dural puncture rate in obstetric epidurals delivered to 200 labouring women looks like the best in the country. Everyone applauds the fantastically high standard of consultant service delivery in an acute rural unit. Until, that is, the 201st, performed on a black December night, for prolonged labour, in a moving anatomical landscape about as featureless as the darkness outside, over a hundred completely inaccessible miles from obstetric life as we know it, goes horribly astray, with an accidental dural puncture resulting in the mother of all headaches. It is then that the clamour rises from the ivory towers of the major centre hospitals to close the service, to pretend it was bad all the time, and to suggest that the consultants delivering the service obviously had not maintained their skills to current standards.

Maintaining standards, Audit and Critical Incident reporting

We may be stupid to be working in remote and rural areas, but maintaining standards can have problems. Let's audit the anaesthetic record, check we're recording the recommended minimum dataset for intra-operative monitoring, and maybe produce an improved anaesthetic chart design. This would be something good and positive. However, it is difficult to collect data anonymously. We have no "audit person" employed to "pull notes" and study the anaesthetic forms. We have to do it ourselves and this leads to immediate conflict. Imagine the following statements in a large department of 30 anaesthetists: "A third of all anaesthetists fail to record regularly whether the anaesthetic machine has been checked before use" or "66% of anaesthetists don't record the capnography readings on the anaesthetic chart". Whoever you are in such a big department, you can be secure in the knowledge that you are anonymous and not alone. Now imagine the same statements from an audit within a department of only three. As any Scottish child would say, "Well, if it wasnae me and it wasnae him, it must be yours." Critical appraisal indeed!

Anaesthesia: keeping it all together

Predictable elective operating lists are not the daily lot of the RGH anaesthetist, but rather the challenge of limitless on-call and dealing with things which, in theory, should never come an anaesthetist's way. Rather, the RGH anaesthetist tends to be the port of call whenever something goes seriously wrong in an area not clearly the responsibility of someone else. The anaesthetist, who is usually "around" in the hospital is likely to be called when it is not clear what should be done, when the patient is clearly seriously ill, when the ECG looks "funny" or when the patient has no obvious site for venous access. Thus, I have found myself suturing lacerations in Accident and Emergency and telling the difference between meningococcal bacteria and chickenpox in a four year old (we have no consultant paediatrician in our hospital).

Conclusion

By sheer determination, the case for the quality of service delivered by anaesthetists in RGHs is being won by a process little more gratifying than trench warfare. Constant pressure questioning the sustainability of services from many sources (frequently the uninitiated and ignorant with no experience of remote hospital practice) bears down in a very personal way like a Damoclean sword, leaving one unable to do more than fire-fight to stand up for oneself, and ultimately feeling more demeaned than ever. Nevertheless, and I would like to think partly as a result of the massive recent publicity surrounding the redesign concepts for acute service provision in the West Highlands, the need for specialist training for anaesthetists in remote areas is, at last, being addressed nationally. With the vast range of skills we are currently called upon to provide it will be hard to deliver a training package under the terms of 'Modernising Medical Careers' to produce such pluripotent anaesthetists in the future. However, as the realisation dawns that over 20% of the Scottish population resides in remote and rural locations, the need to overcome the difficulties of providing an appropriate sustainable anaesthesia service in remote areas must be met.