

The AMS revolution – primary care, quality assurance, capabilities and competence

The Army Primary Health Care study (1) may well mark a turning point in healthcare delivery to the Army, coming on the crest of a wave of profound change in medical concepts, organisation and management. The cost of personnel, litigation and logistic support lead us, like all businesses, to focus on quality and on tailor-made solutions. Are we experiencing a revolution, and what are the key drivers behind it?

Clinical Governance has proved a major force behind change. This medical version of quality assurance has combined with other concepts becoming commonplace in business and management to radically change the way we will do medical business in future.

Quality assurance has emerged explicitly and forcefully in business and management over the past few decades, through Total Quality Management, Corporate Governance and now the European Foundation for Quality Management process. Standards are no longer woolly aspirations rarely met but are clearly specified and have to be achieved. Military health care must now be delivered to 'mandated NHS Standards'. The 'amateur' approach where medics could just be soldiers with a couple of weeks of training and any doctor could do anything has long gone. We are now a force of professionals with professional expectations and responsibilities.

The military, and military activities, used to be relatively cheap. Communications were poor and planning had to be kept simple. The most economical approach in both financial and staff effort was standardisation. Standard procedures, standard unit sizes, standard equipments. As the cost of personnel, equipment and logistics has increased hugely against a diminishing budget, the focus has shifted to the most economical model. Business is moving to 'just in time' logistics and production lines that tailor each item to the customer. The military is expected to adopt the same approach of just-in-time training, minimal non-deployable posts and 'mission-tailored' solutions. This leads us in the opposite direction from standardisation. As 'mission tailoring' is developed, so are a number of underlying concepts. We are no longer satisfied with 'being there' but are more concerned with 'what can we do'; the focus has shifted from process to outcomes and outputs. We are looking for capability

and competence.

Capability used to be measured very simplistically; the number of regimental medical assistants would be counted even if they included the QM and RSM. The title 'general duties medical officer' covered a host of individuals who may last have seen a patient twenty years ago. We used to audit capability by ticking boxes with little reference to reality.

As we have developed quality assurance, our approach to capability has evolved. Now, with clinical governance, we have to define not just capability but current competence; can a GP who has been in staff posts for five years still practice without refresher training? Can an ENT surgeon perform a laparotomy? Who should be allowed to dispense? We have to define and demonstrate the concepts of continuing medical education, professional development and re-accreditation for all clinical staff.

The move towards 'competence' opens up a whole new area. Who can be competent? We have been brought up in a world of professional training, professional groups and clear demarcation between them. The introduction of 'competence', with clear definitions and guidelines, can eliminate professional barriers; nurse practitioners and nurse consultants, pharmacists, and paramedics are all expanding their range of competencies. This offers a revolution for planning, where we no longer require 'a doctor' but 'a capability' delivered by any individual or group of personnel who together have the competence to meet the requirement.

This must apply to command and staff functions too. What competencies do we require for command and staff, and do we really measure them objectively? Should we select those who do what we want or those that do what we need? Is a medical reconnaissance a reward for a busy staff officer who will count beds and surgeons or a challenging task for an expert who will assess competence? Which experts should go?

Why then is this a revolution not just evolution? The development and implications of economics and clinical governance may be pushing us towards greater competency and sound audit. The real challenge comes to applying this to military planning and military structures.

We have traditionally viewed military

support in structural terms, using simple, standard concepts. We still talk of Roles 1, 2 and 3, of first, second and third line, and primary and secondary care. We talk of regimental aid posts, collecting sections, dressing stations and field hospitals. All of these terms are over a century old, developed when the overriding need was for standardisation and simplicity. Is this how we now deploy and function? No - we deploy half sections, role 2+ or 3-, and all sorts of combinations that have no military name. This is guaranteed to confuse those in a multi-layered chain of command, many of whom still espouse the standard structures. Until very recently we were deploying a 'field ambulance at best effort' to Bosnia. We nearly deployed a 'surgical group without surgery' to Kosovo and recently had a 'surgical group without surgeons but with an anaesthetist' in Macedonia. Was there a risk assessment and an evidence base for these decisions?

Doctrinally we have always espoused standardisation, but in practice over many years radically different approaches have always been a feature. Besides 'standard' structures in the Gulf, we deployed Mobile Surgical Teams, a cross between the 'Flying Columns' used in North Africa in 1941 and the Parachute Clearing Troop. In WW2 we deployed surgery at Role 1 during the Sicily landings.

So what is the revolution we now face? To meet clinical governance we must shift from medical support based on structures to one based on capabilities and competence. This must be reflected in the way we assemble medical elements for deployment and the roles they must fulfil. If we have to question the whole basis of our structures each time we deploy, should we now question the structure of the AMS?

What does a casualty on the battlefield need? Medical support should initially consist of basic then advanced trauma life support. But what then? They need definitive treatment. This, in most cases, means an operating theatre. In the old parlance this means a move from First to Third line, Role 1 to Role 3. What about Second Line, and what is Role 2? If we look at ten years in the Balkans, where was the dressing station? It was several trucks full of equipment that at best got left in the barracks or at worse got left unused in the rain and snow. Because, very simply, a dressing station is a logistic, not a medical capability.

Developed initially as part of a 'field ambulance' in South Africa during the Boer war (by Keogh among others) it was intended to be part of the system needed to get casualties from the RAP to the field hospital, a logistic capability. Part of the logistic requirement was the ability to hold casualties until transport was available; rather than an empty field or tent, we provided

medical personnel to maintain medical care while the casualties waited. This is a logistic requirement only in high intensity warfare.

Where we have sufficient timely evacuation assets, we have no need for a dressing station at all. But we clearly have a role for the personnel back at Role 1, delivering primary health care. Our structural approach does not recognise primary care as a separate entity, but it is a fundamental component of military medicine. Proportionally it is of far greater importance as the spectrum of conflict shifts towards peace enforcement and peacekeeping.

The process of reconfiguration of Role 2, revolutionary for many, required a simple, standard grouping with one equipment table to be split many ways to meet specific capability requirements. New competencies and requirements must now be added; GPs replace GDMOs, pharmacists and dispensers are needed. The structural role of unit staff was correspondingly turned inside out; what was the new command requirement, and who did what? It took some seven years to move from 'a field ambulance at best effort' to the capability based, tailor-made establishment in Bosnia today; seven years of planners torn between those espousing indivisible structures enshrined in equipment tables and those advocating ultimate flexibility represented by personnel and their competencies.

Is our current Role 2 structure suitably flexible to allow this mission-tailoring? The ability to subdivide and re-organise requires the ability to split command structures too; can we still do this with the current medical regiment structure? Are we providing the necessary capabilities on the battlefield? We may have the resources on the ground to treat and evacuate, but who advises, liaises and manages? We now have to choose between commanders either commanding or advising, between clinicians either caring for patients or on the staff, but we do not have sufficient for both.

The belief that we have developed a new concept in 'Role 2+' ignores sixty years of experience, with the old Casualty Clearing Station and airborne forces who have always had a surgical capability at second line. The airborne facility is not a dressing station with surgery, but a tailor-made 'light' surgical capability. Evidence has also shown (2) that simply inserting a surgical team into a dressing station does not work; a much more comprehensive staff and equipment structure is required, with a significant amount of additional training.

Damage control surgery (DCS) is now core doctrine, but can we realistically deliver this in a dressing station? Those specialist individuals needed for DCS would otherwise work at Role 3 and will inevitably be double-hatted while we have a shortfall in surgeons and anaesthetists. The management

structure for DCS must thoroughly understand the clinical and logistic needs of surgery. Should we restrict this capability at second line to 16 CS Med Regt, and provide all other DCS facilities as elements of Role 3 Units, building the flexibility into field hospitals instead of medical regiments?

Why not just regard Role 2 personnel as additional, flexible, modular Role 1 elements that can deliver primary care or a holding capability, amalgamating as many modules as we wish, forming a dressing station if we have to and supporting DCS facilities. If Role 2 is a logistic asset, call it that; casualty management and evacuation remains a challenging, specialist task.

Now that we have to think in terms of quality and competence, we need capability-based planning that can tailor the requirement to the task. We cannot go back, but have yet to accept or adopt the implications of multidisciplinary teams and competence-based capabilities. Planners cannot deliver the medical support of the future without a clear understanding of the process of risk assessment and of medical competence and capability. Without introducing this expertise and competence to planning, we can never achieve mission command.

As we become ever more specialised, with deployments more tightly tailored, do we risk

losing flexibility? We can be flexible, through variation and choice of specialist modules, and through a robust approach to training with a forgiving approach to training audit. We can be flexible if we develop the ability to listen to bright, innovative young minds, of which there are plenty still in the AMS. We must learn from past experience, continue to question and most importantly stop unnecessary blame and criticism.

The Primary Care Study is already having a profound effect on the structure and role of the Army Medical Directorate. The principles it espouses may mark the birth of a new era in Army Medical Care, a revolution in the making. We cannot go back, so should seize the opportunity to make the leap forward.

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¹The Army Primary Health Care Study. Army Medical Directorate Mar 01 (the Creamer Report).

²On Op MUSKETEER (Suez), non-para FSTs were integrated into a parachute field ambulance; this process took over four weeks before they were competently collectively trained. On Op GRANBY para FSTs were integrated into non-para dressing stations; this again took over four weeks to achieve competence. Attempts to create an ad-hoc surgical team in an armoured field ambulance on Op Agricola were only solved after several weeks of planning when most of the requirement came from 23 Parachute Field Ambulance, yet we teach the theory of this process regularly.