

# Lung cancer · 10: Delivering a lung cancer service in the 21st century

F C Wells

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Properly organised regional centres would involve teams of interested cardiothoracic surgeons working with, and possibly led by, specialist pure thoracic surgeons to common protocols. A great deal of time would be saved by specialist staff reducing travelling times to outlying units. Data collection and administration would be greatly enhanced and the potential for collaborative work significantly increased. Unfortunately, there has been little if any coherent planning for a national strategy for the delivery of such care in the United Kingdom.

It remains as true today as when first stated by Lord Brock nearly half a century ago, that the only reliable chance of potential cure for lung cancer is a complete and timely resection in a patient with an appropriately staged tumour (stage 1a to stage 2b).

With this fact in mind, resection rates for lung cancer may be used as an assessment of the quality of service provision. To maximise the number of patients with this disease who are offered resection, all patients must be appropriately staged at the earliest opportunity in the progress of the disease. This requires a highly efficient and properly resourced service, staffed by appropriately trained people who are abreast of all the up to date evidence-based knowledge relevant to the subject. It is a sad indictment on the provision of cancer services for patients with lung cancer in this country that the United Kingdom has one of the lowest resection rates in the Western world. Moreover, the distribution of quality services is very patchy. Undoubtedly there are some centres that are working to a very high standard, but sadly many regions have woefully inadequate services. Why is this?

Until the current reforms there has been little if any coherent planning for a national strategy for the delivery of care for these patients. Services have grown up around interested physicians and surgeons wherever they happen to be. There has been a real air of nihilism surrounding the perceptions of the outcome for patients with lung cancer that has not kept pace with the development of therapeutic options. The point sources of referral of patients including primary care and general physicians, as well as those who care for the elderly, have been so distanced from those specialists in the field that advanced treatment options are all too frequently not sought.

The country is short of oncologists, pathologists, specialist radiologists, specialist nurses, and thoracic surgeons. Those that exist are frequently not deployed in any sensible relation to population densities, or indeed to one another. Thoracic surgeons are based in regional thoracic centres and oncologists are based in teaching hospitals and linked to district general hospitals. Interested chest physicians are usually located in district general hospitals.

Although the Calman proposals for the management of cancer have led to the setting up of cancer centres and cancer units working through multidisciplinary teams (MDTs), because of geography and fixed working practices thoracic surgeons in particular are having to travel to several MDT meetings, and in some areas ad hoc MDTs occur without the full range of necessary specialists available. Decisions are made about the operability or otherwise of patients in general without the full range of competencies available. With such scarce human resources in this country, the most efficient form of deployment and utilisation is an absolute imperative. However, old working practices continue, often thinly disguised in a partial reorganisation of the delivery of services. A radical revision is necessary. Many more trained staff are required but much more effective use of those who currently exist could have a big impact. For that to happen significant changes in working practices and timetable rescheduling is necessary, not to mention the significant change in mind set of many active clinicians.

From a management perspective there is a presumption that patients are vehemently against the prospect of travelling far to be treated. Much of this misinformation is derived from the fact that the wrong questions have been asked of patients in the first place. If a patient is asked the misleadingly simple question, “would he/she prefer to have access to high quality services on their doorstep rather than having to travel significant distances for the same care?”, then the answer would inevitably be as close as possible. However, if the same patients were truthfully informed that the country cannot afford world class facilities at every street corner and more importantly there are not enough properly qualified staff available to staff all of these units, and asked the more appropriate question, “would they be prepared to travel further for the highest chance of cure in a world class centre of excellence?”, then the answer would I am sure inevitably be yes! Indeed, many who can afford to avail themselves or their loved ones of treatment that they perceive as the best

Correspondence to:  
Mr F C Wells,  
Cardiothoracic Surgery,  
Papworth Hospital,  
Papworth Everard,  
Cambridge CB3 8RE, UK;  
julie.mazzone@  
papworth-tr.anglox.nhs.uk

on a global scale will travel to a different continent in pursuit of those perceptions.

Of course the responses will be skewed if the possibility of cure does not exist, because the patient has advanced lung cancer on presentation. In this situation management either in their home or as close to home as possible is the ideal. However, even this situation it not as simple as the purchasers of care might wish to believe. A powerful argument can be made to support the suggestion that all patients ought to be entered into properly constructed clinical trials to answer a host of as yet unanswered questions, and to that end should have the chance of passing through the hands of the experts in the earliest stages after presentation. Those who are not suitable for aggressive treatment could then be passed back to their local care team with an action plan which may be entirely palliative in nature, but which, because plans are prospectively structured, can give rise to meaningful datasets surrounding all aspects of care for all stages of the disease. Best supportive care can be orchestrated by the local palliative care team with the general practitioners feeling supported themselves and generating important information. The centres would have an important role in consolidating the information.

The geographic situation of the centres should be decided upon based on the population densities that they supply. At the moment many thoracic surgical centres are carrying out relatively few surgical resections. This is not just because the patients are not being considered for surgery, but also because of the grouping of centres. Some are widely scattered, but in some areas of the country there are also more than one quite close together. This does not make good sense.

The number of patients presenting with lung cancer each year in this country is known, as is the relative preponderance of the disease in different regions of the country. Units can be designed so as to serve the ideal number of patients who are required to optimise the use of valuable skills and expertise—for example, the Royal College of Surgeons has defined the minimum number of procedures per surgeon per year. It would be sensible to go one stage further and ask how many cases per year should pass through a unit for all the staff to stay well versed in all aspects of management, and more than that, to ask how many patients may be needed to sustain sensible clinical research programmes. Similar questions should be asked of radiotherapy equipment and for the dispensation of chemotherapy regimens. Armed with this information it is then simple to define the appropriate population density to deliver this number of patients. This would then decide where the units should be placed.

MDTs would then be centred at units where all necessary expertise is present and all patients would be discussed and managed through these groups. Much more consistent decisions on treatment plans would occur, and all patients

who are potentially suitable for surgery would be dealt with appropriately. It is most likely that resection rates in this country would rise rapidly to international standards and recruitment to clinical trials would rise exponentially.

Another byproduct of this kind of organisation is the optimisation of all aspects of patient care—not least, consistent, reproducible, and patient focused dispensation of information for patients and relatives. A breakdown in communication leading to a bad experience by the patient, and even litigation, would be minimised if not practically eliminated. It also allows for the most efficient use of non-medical grades of staff.

An important factor controlling the implementation of such a plan is the dire shortage of thoracic surgeons in this country. Inadequate remuneration in the absence of access to sufficient private practice leads to disenfranchisement when compared with their cardiac surgical colleagues who have progressed through the same rigorous training and selection process. This problem is unlikely to be solved in the short term. If one adds to this the move to ostracise cardiothoracic surgeons from significant thoracic surgical practice, then the scale of the problem becomes very apparent. The critical question here is not the name of the type of surgeon carrying out the care of the patient with lung cancer, but the expertise and desire to perform to a high standard, and the level of interest of the surgeon. This point seems to have been missed in much of the discussions around this subject in the blind pursuit of the dogma of thoracic surgery for thoracic surgeons.

Working in such properly organised regional centres as discussed above, one can envisage teams of interested cardiothoracic surgeons working with, and possibly led by, specialist pure thoracic surgeons to common protocols. There would be a great deal of time saved by specialist staff reducing travelling times to outlying units. Those referring patients inward may only need to visit on a fortnightly basis, as the number of patients seen in each of the outlying clinics may be serviced satisfactorily by this means. Data collection and administration would be greatly enhanced and the potential for collaborative work significantly increased.

Such institutions exist in many other developed countries and work extremely well for both patients and staff alike. Change such as this is very difficult to manage and will only come about through the combined efforts of all those involved, and in particular from the deep commitment of management at the highest level. Sadly this kind of commitment seems to be woefully lacking when one observes even the simplest of boundary redefinitions at a local level. There is much lip service and window dressing but so far only limited sign of real change that could result in delivery of care for those with lung cancer at a level to compete with the best in the world in the 21st century.