Inaugural Lecture of the College of Surgeons, Singapore: Of Role and Role Model (A College Takes its First Steps Towards Collective and Individual Excellence in the 21st Century)

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Dr Colin Song, President of the College of Surgeons; Colleagues; Ladies and gentlemen:

It is indeed a great honour to be invited to deliver the Inaugural Lecture of the College of Surgeons. I am glad to see eminent members as well as younger members of our various surgical disciplines gathered here today. This is a testimony to the continuing involvement and vibrancy of our surgical Fellowship.

The medical fraternity in Singapore has a rich history. This year, we are celebrating the centenary of medical education in Singapore. It is 48 years since the Academy of Medicine was formed in 1957. Its founding members included Professor Sir Gordon Arthur Ransome, our first Master, Dr Benjamin Sheares, a past president of Singapore and Dr Yeoh Ghim Seng, a past speaker of the parliament. Since its inception, the Academy of Medicine has played an important role in advancing the art and science of medicine.

The Chapter of Surgeons was formed in 1966. It came under the umbrella of the Academy of Medicine. But over the nearly 40 years, we have realised that the Chapter, with its 9 specialties, very much like the Chapter of Physicians with its 15 specialties, should be given more space and latitude to grow and develop.

The idea of having distinct Colleges for each of the different major specialties was mooted some 10 years ago. When I was the Master of the Academy of Medicine, the Council and I were tasked to deliver the Colleges. We believed that the establishment of Colleges would not only allow more space and latitude for the growth of the individual disciplines, but also allow more colleagues to be involved in professional issues and take leadership positions. So we worked tirelessly for the establishment of the Colleges. I am glad that this vision of the many Masters and Councils has come to fruition with the establishment of the Colleges last year. Each one of us was involved in this decision. It is now time for us to reflect and ponder on our role.

If we can define the role of the College and the role of the profession, our roles as individuals will become clear. It is only through such reflection that we can steer our College and position it to serve the profession, our people and the nation.

I believe that one of the primary roles of the College is to develop and sustain professionalism. Our nation today enjoys high medical standards and a reputation for ethical practice and the College should ensure that neither is ever compromised. In this context, the College must set standards for the practice of surgery, put in place processes to ensure that these standards are safeguarded, set directions for growth, promote collegiality, train the next generation of surgeons, be an inspiration to its Fellows and be the pride of our nation.

Yes, there are many issues for us as Fellows of the College to examine and reach a consensus on how best they should be addressed. And for those of you who think that my call for the College to be the pride of the nation may be an exaggeration, I ask you to reflect on your standing among your peers just before you entered medical school. That talent should be a force that should extend beyond oneself and one's patients.

When SingaporeMedicine was launched 2 years ago, I recognised it as an opportunity for the profession to

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contribute to nation building. For those not familiar with the concept of SingaporeMedicine, it is an initiative of the Economic Development Board of the Ministry of Trade and Industry to identify Singapore's medical expertise as an economic force to bring in revenue for Singapore and create jobs for Singaporeans. This initiative came from outside the medical profession. They could see our potential and the greater good we could do for our people.

Let us first look at standards of practice and the role the profession and College could play. The growth of medical knowledge is exponential. New drugs are being developed with increasing frequency. Diagnostic and therapeutic modalities are evolving rapidly, all promising to be more efficacious than their predecessors. And more lay magazines and journals are reflecting these developments for the awareness of the public and, to an extent, marketing these products.

However, not all of these novel ideas will be beneficial to the patient. We need to examine each and every new procedure, implant, or drug carefully. We can and must refer to reputable institutions for their evaluation and cost consideration must be an important factor. The College can and should take a stand on which of these new interventions are effective, and which are not. We have a duty to sieve out the sham interventions from those that are truly of benefit to our patients.

Today, individual doctors, including surgeons, assist my Ministry in developing Clinical Practice Guidelines and clinical performance indicators for the profession. These set and measure the standards for the management of common conditions. With the setting up of the College, it may be most opportune for the College to take on this role.

Establishing standards of practice alone does not ensure that these standards will be adhered to. It is easy to slip into a state of complacency. A case in point is the Bristol Royal Infirmary Inquiry.[1] What started with the death of a child following an operation for complex congenital heart disease resulted in a public inquiry, which revealed some of the failings of the profession. The inquiry examined the management of all children receiving complex cardiac surgical services at the Bristol Royal Infirmary between 1984 and 1995. It revealed that an astounding one-third of all the children who had open-heart surgery at the Bristol Royal Infirmary received less than adequate care. More children died than might be expected in a typical paediatric cardiac surgery unit. Even the unusually high mortality following surgery went undetected.

Outrageous, we now say. But listen to the conclusions and recommendations of the Inquiry Panel. One of the conclusions was, and I quote, "*There was no systematic mechanism for monitoring the clinical performance of healthcare institutions or the professionals. For the future there must be effective systems within hospitals to ensure that clinical performance is monitored. There must also be a system of independent external surveillance to review patterns of performance over time and to identify good and failing performance.*"

Pertinent to our attention as a College are these conclusions. I quote again, "*What was lacking was any real system whereby any organization took responsibility for what a lay person would describe as 'keeping an eye on things'...while others may have looked to the Royal Colleges to assess and monitor the quality of care, the College did not see its role as such*". I can go on and discuss other examples, but I think the message is clear.

SingaporeMedicine today has a reputation for high standards and ethical practice. A decade ago, in the region, we were unchallenged. But the scenario has changed. The gap with our neighbours is closing. But we can ill afford to have a disaster strike like the Bristol Inquiry and then move in for damage control or containment. We are a nation unlike Britain or the USA, which have long histories of discoveries, dozens of Nobel Prize winners and developments like the discovery of penicillin, magnetic resonance imaging (MRI), and Dolly the sheep, that have enabled them to weather the occasional disruptions and damage to their reputation and to move forward as if nothing bad has happened.

We have to put in place systems that will continue to safeguard Singapore's high standards of practice. It is time that the College encourage the Fellows to review their own performances by giving them guidelines or appropriate global indicators that are most relevant to their respective practice, so that the Fellows can benefit from this exercise and go about upgrading or improving themselves and filling the gaps in their knowledge or skills.

This concept of evaluating and comparing the clinical performance of hospitals and surgeons is not new. In 1989, in an effort to reduce mortality after coronary artery bypass graft, the New York State Department of Health began collecting clinical data on all patients undergoing cardiac surgery.[2] They collected data on demographic factors, risk factors and complications. After adjusting for risk factors and co-morbid conditions, they compiled the mortality rates for hospitals and for individual surgeons. These data then became the foundation for a variety of surgical quality improvement activities.

From the beginning of 1989 to the end of 1992, the risk-adjusted coronary artery bypass graft (CABG) mortality rate in New York dropped from 4.17% to 2.45%, a relative decrease of more than 40%. Although improved surgical techniques may have contributed to the decline in mortality, there is evidence that collecting and reporting mortality rates also played an important part.

There has been heated debate about whether providing information on the treatment outcomes of individual surgeons will result in an overall improvement in the quality of care for patients. Some of us may be uncomfortable comparing results. Some are afraid that comparing results may result in unhealthy competition. These are valid concerns. But we should not be apprehensive about comparing our performance with standards. We should promote a culture that encourages sharing.

All of us are familiar with the Grand Ward Rounds that are conducted regularly in the hospitals. During Grand Rounds, the strengths and weaknesses in the management of the patients are discussed openly among the doctors in the department. It is this spirit of openness that we should promote. It is this spirit of openness that has taught us what we know today.

The present information technology system that we have in the restructured hospitals must be put to greater use. There is already sufficient information for the surgeon to monitor his performance. For instance, I am able to generate the number of total knees that I do annually, my patients' average length of stay and also if they have been re-admitted in the following months. I am able to compare this with institutional norms.

In a few years when a comprehensive National Electronic Medical Records Exchange platform is up and running, all healthcare institutions will be required to participate. I envision then, that each and every one of us, at the press of a button, can generate a list of patients operated on by each of us. We will be able to analyse the success rate, complication rate, mortality rate and other quality indicators of our patients.

Of late, the Ministry has reported publicly the caesarean section rates and the success rates for in-vitro fertilisation in the various healthcare institutions. Figures for CABG, LASIK operation, and cataract surgery are being compiled and will be released when ready. We have omitted individual surgeon's data and have so far presented data as an aggregate for the institution.

For the future, a proposal has been made to publicise the lowest, the mean, and the highest number of cases per surgeon in each institution so that the institutions' credentialing processes can be made transparent. Such information will drive the institutions to improve their quality of credentialing. This will promote a culture of accountability and improve the image of the profession and of healthcare providers in the eyes of the public.

Should collating such information and reporting them be the role of the College or the Ministry? When the College institutes it and does it, it is professional self-regulation, the highest form of professionalism. When the Ministry does it, the profession is being regulated. We have a choice.

The duty of care as professionals also requires us to have in place mechanisms that ensure that our skills and knowledge are regularly updated, and that we remain current. That is why compulsory continuing medical education or CME was introduced just over 2 years ago. CME programmes have now become an integral part of our medical practice but they have remained generic.

Beyond this, we must fine-tune the process so that it serves each specialty best. Many models exist, from a system of regular examinations in the US, to a process for the maintenance of certification in Canada, to hybrid systems. The Maintenance of Certification is a programme developed by the Royal College of Surgeons and Physicians of Canada that allows doctors to plan and document learning that contributes to continuing professional development. Through such self-assessment programmes, gaps in knowledge, skills and performance can be identified and rectified. It promotes learning as a personal and professional activity.

It is true that many developed countries are grappling with different models to address the issue. If the College assesses that the existing models are inappropriate for our context, then the College must innovate and implement professional development programmes that it deems fit but the standards must be secured.

Professionalism requires us to protect the interest of the public. At this hundredth year juncture, we are constantly reminded that our medical school began with a proposal raised by the public, from money collected from the public, by the public, for the public good. We must preserve this. The public must remain the beneficiaries of the service.

I have spoken of the Bristol inquiry and will shortly be alluding to a recent editorial in one of our medical journals lamenting our falling standards in surgery. Our profession cannot be in a state of denial and assume that everything is well.

In a profession where each individual is of high intellect and leading rather than following is the norm, opinions on many issues will differ, but let us take this in the spirit of a debate and not personally or as an affront. The spirit of collegiality should not be overlooked or taken for granted, but should be purposefully and actively nurtured, promoted and encouraged by the College among our Fellows. Collegiality refers to collaboration and constructive cooperation. We should strive to work together to achieve the College's objectives. We may have differences, but we can agree to disagree. We have to collaborate to improve our standards, with the ultimate aim of improving patient care.

As we reach higher, we must reach out and being inclusive

should be our philosophy. Turf issues can be set aside. Private issues can be set aside. We need to see issues beyond ourselves and focus on the patient. We have to see issues beyond ourselves and focus on nation building.

Other nations in the region are working tirelessly to improve their knowledge and skills and waiting eagerly to be the regional medical hub. If we fragment and let our standards fall, or even fail to show that we maintain high standards, not only will the profession lose its credibility with our own public, but the nation would also lose its opportunity to be the medical hub. And if the nation falters, be assured that you and I, as individual doctors in Singapore, will inevitably also suffer.

Let me now move to another aspect of role. The College has an important and critical role in the professional training of the next generation of surgeons. I would urge you to refer to the editorial in the most recent issue of the *Singapore Medical Journal*, July 2005.[3] The author, a senior surgeon, laments the deteriorating standards in the practice and training in surgery. This is a wake-up call for the profession. Here is a surgeon on the ground, one who was trained here and trained others here, expressing despair.

Human capital is our nation's only resource. Each year, some of the brightest people join our profession. It behoves us to teach and guide the new generation of doctors and inculcate in them the right ideals and values. We have the responsibility of mentoring and ensuring that they are not only proficient in their surgical skills, but are caring and compassionate doctors who act in the best interest of the patient.

For years now the responsibility for the training of the surgeon has been traded between the Academy, the Division of Graduate Medical Studies and the Ministry of Health. Every change that took place was an attempt to ensure a training programme of high standard and quality. In tandem with this, the Academy's role in training has waxed and waned over the years.

We have to ask ourselves, "What should the role of the Academy and College be in this scheme of things?". Should it have a role or should the role be out-sourced to an institution like the Division of Graduate Medical Studies, National University of Singapore? Or should each hospital be responsible for training of its own doctors? They already have postgraduate medical institutions in each cluster.

My take on this issue is that the profession is the competent authority. The College represents the profession and is therefore best placed to assume this role. But in recent years, in many countries, lapses in responsibility by the profession because of indifference or otherwise, have led to the regulators taking charge.

Fortunately in Singapore, the regulators still have trust in our profession and we have a window of opportunity to take on this responsibility and deliver it. The question is whether the leadership is ready to make the necessary sacrifices to take on the responsibility. After becoming a regulator, I, like my predecessors, see sustainability as an important issue. Unless we are able to incorporate sustainability in whatever training programme that is charted out, the Academy and the College will not play a major role.

If the framework for training and the quality of teaching keeps changing with the preferences and convictions of changing leadership, what will become the most obvious feature of our training will be its inconsistency, not its value or standards.

The Academy and the College must therefore incorporate in their structure a more permanent framework to support training. Each specialty has to identify teachers, who have the passion and capability to teach the next generation, and accord them permanence beyond the tenure of College leadership so that there is continuity. Our institutions of higher learning have managed their business on a similar structure.

I remember fondly the days when we were training as young surgeons in the Department of Orthopaedics, with teachers like Pesi Chacha, Ling Chaw Ming and Ong Leong Boon, to name a few, who had, by their individual efforts, laid the foundation for many of us to become surgeons. Although the Academy existed then, it played no role. Today, many surgical departments have similarly skilled staff, individuals who are capable of training the next generation of surgeons without even engaging the Academy or the College. Indeed, it will be wrong to engage the College just so that we could give the College a role.

The right perspective must be that when the College takes on the responsibility, it adds value to the whole training programme. In present times, this added value is essential. Standards are set and variations in the training programmes between different departments minimised and young surgeons are exposed to the leaders in their fraternity rather than to a few in the Department. It also brings a sense of dignity to the profession, that we are able to collaborate and manage our own affairs.

During my first 3 years of training in local hospitals, my exposure was limited to the few senior surgeons in the department. Contrast this to my one-year stint overseas. Every Friday afternoon, the who's who in Orthopaedic Surgery practice would take turns to teach trainees from the London area at the Royal National Orthopaedic Hospital. They had an established programme which added value to the trainees' learning. Our College can do likewise.

What of the role model – the doctor our younger colleagues can identify with, whose qualities they would like to have

and whose position they aspire to reach? There have been many great leaders in the history of the surgical fraternity here in Singapore. Many of the pioneers of surgery have influenced the way we practise surgery. But over the years I have often asked my students who their role model is and, more often than not, it is not an eminent person. Sometimes it is a name I have not even heard of. It used to surprise me. It does not surprise me anymore. All great role models started out as humble individuals who pursued their calling with zest that was not motivated by rewards or recognition but sparked by their passion to make a difference. To me, it means that each one of us can be a role model if we assume the responsibility to nurture the younger generation.

We have the responsibility to pass on this noble tradition to future generations. We need to disengage periodically and have a perspective beyond the rat race, beyond ourselves, and enjoy being part of our rich history of imparting our craft, our art, and our vocation.

Times can change. As we grow older and should we choose isolation as a feature of our practice, needs can change and life can have conflicting demands. But our commitment to the values and high standards of the profession should never change.

Then each of us will be an inspiration to someone. And our College can also be a role model and an inspiration to our other colleagues and other Singaporeans and take its place of pride as an icon of our nation. These are the times of our first steps as a College – and the first steps are always the most difficult. Perhaps we may fall – but let it not be a disastrous, a fatal fall.

If we secure ourselves by having the protection of high scientific and ethical standards, consistent and open monitoring, comprehensive training and nurturing, good ethos and fraternal support and think of ourselves as role models, then surely we would be able to live up to the expectations of the public and achieve excellence in the 21st century and equally importantly, Mr Tan Jiak Kim's efforts in establishing our medical school 100 years ago for public good would not have been in vain.

Thank you.

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