Like the country itself, the profession of surgery in Panama is young, and still largely unregulated. Many changes are taking place that will affect the way surgery is practiced in the near future. Some of them are good and necessary, while others are not quite so.

For most of the 20th century, the private sector was the driving force behind innovations, but the current economic situation has made it almost disappear, with no foreseeable change in the near future.

GENERALITIES
Panama is a country of 2,839,177 inhabitants distributed throughout an area of 75,517 km², with 1,383,357 living in the capital city and its outskirts. Its gross domestic product is 10 billion Balboas, and the per capita income is US $3,000. Spanish is the official language, though in the medical and business communities, English is in common use. The literacy percentage is 92.3%. The maternal death rate is 0.6%, and the infant death rate is 17.2%. The principal causes of death are (1) diseases of the cardiovascular system, (2) malignant tumors, and (3) trauma.

HISTORY
Panama is a young country that will reach only 100 years of existence as an independent nation in 2003. The first Spaniard to reach land was Rodrigo de Bastidas in 1501; Cristóbal Colón reached the Isthmus in his fourth travel to the Americas in 1502. From the start, the tropical climate caused devastation of the European colonization. The expedition of Vasco Núñez de Balboa, who in 1513 crossed the Isthmus and was the first European to see the Pacific Ocean, began with 190 men and ended with only 66. The losses were mostly due to the climate and diseases.

The first hospital was founded in 1515 in Santa María La Antigua. The site was within the Darien area on the coasts of the Caribbean Sea. The climate turned out to be so barren that the settlers were compelled to look for a less insalubrious area, abandoning the Darien colonies and founding the first City of Panama at the Pacific side of the Isthmus. Destroyed by the pirate Henry Morgan in 1671, the ruins of the city now rest at the suburbs of modern Panama City.

During the 19th century, the history of Panama began to interweave with that of the United States, and it may also be said that it intermingled with the history of medicine of the United States.

Between 1850 to 1855, the first trans-isthmian railroad was built to transport the adventurers and explorers, who, looking for a shorter and safer way to California during the Gold Rush, traveled to Panama to be transported from the Atlantic to the Pacific. Malaria, yellow fever, cholera, and dysentery killed many of the construction workers and passengers.

Notwithstanding, the idea of crossing from one ocean to the other over a distance of only 55 miles was so attractive, that in 1880, Count Ferdinand de Lesseps, constructor of the Suez Canal, arrived to build an Interoceanic Canal. Nine years later, due to fiscal irregularities, but most of all, to diseases, the project ended. It is estimated that 22,000 workers of the French Canal Company succumbed to disease.

The construction of the canal was only possible when William Gorgas, applying knowledge acquired and put in practice previously in Cuba, eradicated yellow fever in the isthmus.

The history of modern medicine in Panama begins in 1924 with the construction of the Hospital Santo Tomás, the first
major hospital in the country. From this date onward, the evolution of surgery resembles that of the rest of the Latin American countries, with periods during which the profession has remained on equal footing with the great advances of the world, and other more numerous times during which it has marched several steps behind.

**SURGICAL WORKFORCE**

There are presently 277 qualified general surgeons in the Republic of Panama. There are 3 thoracic surgeons, 15 cardiac surgeons, and 8 vascular surgeons.

Two of the thoracic, all of the cardiac, and 5 of the vascular surgeons, in addition to nearly 75 of the general surgeons, practice in the capital city.

Female representation in the profession is quite small; presently, there are only 15 female surgeons. This situation is rapidly changing, however, as more and more women are entering medicine. To date, 23% of all general surgery residents are women.

**ORGANIZATION OF HEALTH SERVICES**

There are 4 providers of health services, composed of the Social Security Institution (CSS), the Ministry of Health (MINSA), private health services, and the Coordinadora Nacional de Salud (CONSALUD).

**The Social Security Institution**

The CSS is an autonomous entity that offers health care services to the quoting population and its dependents.

The payment of the quotations to the CSS is compulsory for all salaried workers of the public and private sectors, and only independent workers are not under the obligation to contribute to the system.

Presently, the system covers 60% of the population. Although there are multiple problems, this is a rich sector, and its services are well financed.

**The Ministry of Health**

The MINSA offers services to those not quoting to the CSS. Its budget depends on the contributions assigned by the central government.

In practice, MINSA covers the lowest economic strata of society and presently provides services to 40% of the population. This is a poor sector, and its services are not well financed.

Salaries in the public sector (CSS and MINSA) run more or less from US $1300 (pretax) monthly for a newly appointed surgeon, up to $3000 (pretax) for one who has reached retirement age. Except for seniority, there are no criteria to justify the salary increases.

Most Panamanian surgeons hold a position with one of the state’s health care systems and take private cases in their free time.

**Private Medicine**

Private medicine in Panama is in crisis. The percentage of the population seeking attention in private hospitals has diminished in the last 3 years, and presently, it does not reach more than 10% to 15% of the population. This situation has arisen due to a severe economic recession and, to a lesser extent, to the efforts made by the present government to improve the quality of the services rendered in the public sector.

Compensation in the private sector is based on a fee for service system through insurance companies, and very few patients pay out of their own pockets. Tariffs are around 10% more than that paid by Medicare in the United States. A private cholecystectomy per month can almost double the real income of a young surgeon.

Unfortunately, as mentioned earlier, very few Panamanians use private services, and their numbers are decreasing. The income of private surgeons, incidentally, has decreased 25% to 40% in the last years.

**Coordinadora Nacional de Salud**

The latest provider of health services, CONSALUD, has arisen as a result of society’s dissatisfaction regarding the services rendered by the public sector.

Jointly, MINSA and the CSS have created an entity that buys health services from a state-built hospital, which is administered as a trust by the community. Physicians working in this hospital have organized themselves as private concerns and provide their care on a fee-for-service basis to the hospital. Another innovation of the model, and maybe the most controversial, is the implementation of a stratification of services according to degree of complexity. The given hospital offers services up to the secondary level of care, transferring the most serious cases to tertiary care hospitals. These concepts have not been well received in a profession that is traditionally accustomed to hospitals where all services are offered, even though some of them maybe be too sophisticated and/or so frequently performed that they are not cost-effective. This project of modifications to the health care system, which has been supported and sponsored by the Panamerican Health Organization and the World Bank, seems to be rendering good results, but still it does not enjoy the confidence of the medical guilds, which perceive it as the spearhead of the privatization of the medical services.

**SURGICAL EDUCATION**

The majority of the general surgeons in Panama have been locally trained. To ascend to a residency post in Surgery, the candidate must have graduated from a university recognized by the Government of Panama, and must have completed 2 postgraduate years, one of which must be done in the provinces. This second postgraduate year, which originally was considered a rural year, has been losing its former characteristic, because the hospitals of the provinces have undergone sophistication. Consequently, the second year is presently not much different than the first year, which is spent in some of the major hospitals in the cities of Panama, Colón, and David.

During these 2 years, the candidate must pass an examination of general medical knowledge, which is administered by the University of Panama, in order (upon termination of said 2 years) to be a candidate for a resi-
der the management of Drs Félix Bonilla and Javier Díaz.

The Panamanian Association of Surgery (APC), and its approval is required for a physicians to implement the obligation of physicians to comply with some CME annual hours, but these have faced fierce resistance from the medical guilds.

Approximately 10 new positions are opened each year, and approximately 50% of the new general surgeons opt to carry on 1 or 2 more years of subspecialty training in one of the programs available in Panama (intensive care, pediatric surgery, and cardiovascular surgery) or abroad, usually in other Latin American country.

**CONTINUING MEDICAL EDUCATION**

There is no equivalent to the American Board of Surgery in Panama. Neither is there obligation to submit evidence of continuing medical education (CME) credits.

Though not very enthusiastic, there have been some attempts on the part of the government health authorities to implement the obligation of physicians to comply with some CME annual hours, but these have faced fierce resistance from the medical guilds.

Still, the Panamanian Association of Surgery has among its midterm projects, the establishment of some type of CME requirement which its members must comply with. As everywhere else in the world, Panamanian society demands more accountability from its physicians; thus, changes in this area are unavoidable, and in our opinion, they are long overdue.

**SURGICAL SOCIETIES**

There are several surgical societies. Due to the sparse population and limited territory of the Republic of Panama, these societies are organized pursuant to the basic surgical disciplines and some of the subspecialties, and not based on geographical areas. The most important of these organizations is the Panamanian Association of Surgery (APC), which nominally represents all the general surgeons of the country. Notwithstanding, active participation is variable, and membership is optional.

The association has a representative before the National Health Council, and its approval is required for a physician to be granted qualification as general surgeon.

The APC holds monthly meetings that culminate in a National Clinical Congress every 2 years. In the last 2 years, the APC has acquired a remarkable dynamism under the management of Drs Félix Bonilla and Javier Díaz.

Young surgeons have been actively recruited, and the CME programs have increased in number and improved in quality. To date, the Congress of the Latin American Federation of Surgery is being organized to take place on July 2003. The presidency of the association is in good hands, and its future is promising.

**MODERN TECHNOLOGIES**

Laparoscopy, thoracoscopy, endovascular and lithotripsy procedures, imaging, endoscopy, and intensive care techniques are cutting-edge at the private hospitals, and to a lesser extent, in the public hospitals of the principal cities of the country.

In the rest of the country, the situation is not so advanced, and the surgery that is being practiced mostly resembles that which was practiced in the 1980s. Except for renal and corneal transplants, transplant surgery is nonexistent. Cardiac surgery is only practiced in the capital city.

**WHAT A GENERAL SURGEON DOES IN PANAMA**

As we have seen, there are several modalities in the rendering of surgical services in this country, and the workload of an individual surgeon depends on what sector he or she practices in.

In the private sector, surgery is highly subspecialized and the general surgeon usually will take care of problems related to the acute abdomen, gallbladder and biliary ducts, hernia, and trauma.

Surgical oncology and noncardiac thoracic cases are mostly handled by the respective subspecialists. The situation is similar, though to a lesser extent, in colorectal surgery. On the contrary, in the public sector, the general surgeon remains a generalist to a large degree.

**CONCLUSIONS**

Surgery in Panama is undergoing a time of change. Some of them are negative, principally the decrease of income. Other changes, such as the CME requirements and the greater participation of the Panamanian Association of Surgery in the issues of the profession, are positive and welcomed.

As surgeons, we expect to emerge strengthened from this period. In Panamanian surgery, much has been accomplished within a short period of time, but there is much more that remains to be done.

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