Surgical Training in a Statutory Health Insurance System: Belgian Experience

A. Hubens, M.D., Ph.D.,¹ R. Van Hee, M.D., Ph.D.²

¹University Department of Surgery, Stuivenberg General Hospital, B-2060 Antwerp, Belgium
²University Department of Surgery, University Hospital Antwerp, B-2610 Antwerp, Belgium

Abstract. Health care delivery in Belgium is based on a compulsory insurance system, installed and controlled by the government since 1945 for employees; in 1963 the system was expanded to include self-employed citizens. Mutual benefit organizations act as insurance carriers for all patients, whether cared for in the office or hospital. The cost of state-financed medical care has grown to such an extent during the last few decades that cost-sharing in ambulatory practice is being extended to in-clinic services. The free choice of practitioners as well as free access to medical and specialist education have always been keystones of the Belgian medical care system. A well regulated scheme of surgical training combined with strict rules imposed on instructors, hospitals, and trainees guarantee high quality and state-controlled surgical education. Developments in the Belgian political landscape may considerably affect health care delivery and surgical education. A constant rise in the number of medical practitioners and the sociopolitical discrepancies between the Flemish and French speaking parts of the federalized kingdom have paralleled burgeoning medical health care costs and have induced rationalization and possibly federalization of health care delivery as well as ongoing debates concerning the limitation of medical and surgical practitioners.

Both the health care system and surgical training programs in Belgium have witnessed interesting developments during the second part of this century, resulting in a compulsory statutory health insurance system and a government-controlled training and accreditation program for surgeons. A short review of the growth process of the Belgian health care system and of the surgical training modalities is indispensable if one wishes to have some insight into the effects of the health care delivery system on surgical education.

Most modern health care systems emanate from either Anglo-Saxon models based on private insurance models or from continental statutory models based mainly on social contributions by employers and employees, as witnessed in Belgium [1-3]. Compulsory health insurance for employees was introduced in Belgium by law in 1945 as part of a statutory sickness and invalidity scheme, operated through a reorganized structure of mutual benefit societies. These organizations had existed for many decades, providing health insurance on a voluntary basis to people of various political and occupational affinities. In 1945, when health insurance was made compulsory for all employees, it was decided to preserve these societies and use them to run state health insurance. At the national level, they were grouped together into five confederations with specific affinities: Christian, Socialist, Liberal, Professional, and Neutral. A sixth independent state carrier, the National Sickness and Invalidity Insurance Fund, was created to care for insured persons who wanted to join a society without political or philosophical connotation. Unlike this National Fund, the mutual benefit societies are private organizations selected by the patient, but they all operate under identical rules for benefits, contributions, and disbursements. The management, at national level, belongs to a National Institute for Sickness and Invalidity Insurance. This Institute collects the money from the taxpayer and passes it on to the mutual benefit societies and to the National Fund.

Progressive extensions of medical care coverage were made through the years, the most important being the addition of a scheme for the self-employed in 1963. Today almost the whole population is protected by an insurance system managed by the National Institute for Sickness and Invalidity Insurance. One of the main features of this health system is the important place it occupied by the private sector.

The general scheme of the compulsory health insurance system provides a comprehensive range of medical care, subject to cost-sharing by the patient of about 25% of services, such as ambulatory care by general practitioners, specialists, and dentists. The patient pays for the service and claims reimbursement from the mutual benefit society. Pensioners, widows, orphans, and the disabled are exempt from this cost-sharing.

For hospitalization, there is minimal cost sharing, provided the charge is that fixed by agreement with the government at the national level. Additional costs of a private hospital room must be met by the patient. As regards drugs, those for which the insurance pays part of the cost are listed by a technical council based on the criteria of cost and effectiveness, determined by this council.

Since 1963 there has also been a compulsory system of health insurance for the self-employed but only against major illnesses, such as surgical operations, hospitalization, and treatment costs for cancer, tuberculosis, poliomyelitis, mental disease, and congenital malformations. For minor health problems, the self-employed can insure themselves on a voluntary basis.

In both schemes (the general and the scheme for the self-employed) there is a free choice of practitioner. Everyone is free to consult as many general practitioners as they wish. Likewise, everyone may consult as many specialists as they wish, without a letter of referral. Cost-sharing is considered to be a method offering a restraining element on consumption and makes the beneficiary aware of the value of social security. Cost-sharing is increasingly regarded as an indirect method of financing the scheme.

Financing the health insurance system is done primarily through payroll contributions by the employers and the employees (almost 70% of the financing of the system). Most of the remaining cost is paid by means of state contributions.

A fee-for-service scale is used for reimbursing medical care expenses. Rates are negotiated at the national level by permanent committees of the insurance carriers and professional associations, the resulting agreement needing the approval of the Minister of Social Welfare. The agreement is then referred to each member of the medical profession concerned. If 60% agree to it, it applies nationwide. Providers not accepting the scale in the agreement are free to fix their own charges, but the societies' liability for payment is calculated at the rate laid down in the agreement. In this respect, a considerable number (up to 85%) of medical practitioners in private practice ensure coverage with
primary health care. When a general practitioner or a specialist has accepted the fees agreement, he is obliged to arrange a minimum of consulting hours, during which he will charge such fees. Visits to the homes of patients are always at the agreed rate.

Patients admitted to the hospital are assigned to either a public ward (generally a four-bed room) or, if requested by the patient, to a private room. A rate per patient and per day is fixed by the National Institute for Sickness and Invalidity Insurance for nursing in a public ward. Hospitals charge the mutual benefit societies directly.

Most of the hospital doctors are paid on a fee-for-service principle. Hospital administrations charge the mutual benefit societies and pay the doctors at fixed periods (third-payer principle). However, the administrations skim off a substantial part of those fees for the various costs they charge the medical staff.

Hospitals charge supplements for accommodation in a two-bed ward or private room. Doctors also may charge supplements for patients in private rooms (generally twice the agreement rate in public hospitals) that are also handled by the third payer system. A substantial number of patients contract a private insurance, covering the costs of treatment in a private room.

The dispensing of medical care is controlled by a Central Medical Control Service of the National Institute for Sickness and Invalidity Insurance, which oversees the control functions exercised by the advisory medical officers of the societies. In this way medical practitioners are supervised by their peers.

In summary, the Belgian health care system is a compulsory, statutory system that protects almost the whole population. Private medicine occupies an important place in the system. Free choice of medical practitioner and a fee-for-service scale for reimbursing medical care expenses are important features of health care in this country.

Belgian Surgical Training Modalities

In Belgium, undergraduate medical training occupies 7 years, including a rotating internship of 12 months’ duration [4]. After passing the final university examination, students graduate as doctors of medicine, which confers on them a legal license to practice medicine in any or all of its branches. However, according to the Belgian medical insurance scheme, further training is required to qualify as a specialist. Specialist training in surgery occupies 6 years, and this training alone ensures up to the present time a specialist license without a higher examination.

Since 1957, specialist certification in Belgium has been under the control of the Ministry of Health. The present regulations were laid down by Royal Decree in 1983 and amended in 1985. A National Supervisory Board and Specialty Boards act as consultative committees, advising the Minister in this matter.

The National Supervisory Board (Hoge Raad-Conseil Supérieur) defines the criteria for specialist training programs and the criteria for the instructors and hospital services approved for training. This board also decides on requests for approval. To be approved as an instructor in a surgical training program one must have been a qualified surgeon for a minimum of 8 years, head of a surgical service or department, and practice surgery on a full-time basis in a single hospital.

A hospital service or department may be approved for surgical training for a full or partial program. For a full program the surgical service should be responsible for at least 100 beds including 20 beds for fractures, perform a minimum of 1500 operations, and treat 2000 new patients in the various clinics each year. For every 50 beds, an additional qualified surgeon with a minimum of 5 years’ experience should be in service full time. In this way, an instructor can supervise one to three candidates for every 25 to 30 beds. For a partial program the service should be responsible for at least 50 beds, perform at least 700 operations, and care for 1000 patients annually.

Training in general surgery takes 6 years, four of which are spent in basic training and two in higher training. During the basic training period, the candidate becomes acquainted with the various fields of general surgery and serves, on a rotating scheme, in departments or sections of gastrointestinal surgery, traumatology including emergency neurosurgery, orthopedics, thoracic surgery, and vascular, pediatric, gynecologic, and reconstructive surgery. The final 2 years of higher training are spent either in a general surgical department or in a specialized section such as gastrointestinal, cardiac, pediatric, head and neck, or oncologic surgery.

During the whole 6-year training period, the trainee is gradually given increased responsibility and performs operations of increasing difficulty under the close supervision of the full-time staff members. Trainees must keep logs in which they note all the operations they performed themselves or at which they assisted. They must also note all the meetings, courses, and seminars they attended.

Trainees must present at least one paper to a scientific meeting or publish an article in a peer-reviewed medical journal during the training period. The training must be pursued on a full-time basis in a Belgian surgical department. On special request, the specialty board may allow a training period of a maximum of 1 year in a foreign department. However, the country must be a member of the European Common Market. The specialty board supervises the training period by annual inspection of the trainee’s diary and by perusal of the instructor’s report, controlling the progress in education and the distribution of the training among surgical subspecialties.

Eventually, the Board may make corrections to the training scheme and even propose to prolong the training period. The trainee may appeal against this resolution to the supervisory council. At the end of the training period, the specialty board reviews all the data and proposes the candidate for certification if the instructor certifies that the trainee is “apt to practice surgery, independently, under his own responsibility.” The Ministry of Health confers on the trainee a Certificate of Specialist in general surgery after this 6-year training program has been successfully completed.

To summarize, after graduating as a doctor of medicine, a candidate for training in general surgery submits a training program to the specialty board for general surgery. This program must be pursued in approved surgical services under the direction of approved instructors. The candidate contacts the instructors, and the application is accepted or rejected by an individual instructor or by a local committee of instructors after an interview of all candidates for the post.

The candidate must submit a full 6-year program to the specialty board. If the program is accepted, its execution is supervised by the board. After successful completion of this program, the candidate is certified as a specialist in general surgery by the Ministry of Health. This certificate confers the right to practice general surgery exclusively, in private practice or in a general hospital, or to pursue an academic career.