

Abstracts of session 2a

## Organizational and management issues: a multidisciplinary approach

### 2a1

#### Co-operation between Belgian Association of Ambulatory Surgery and Royal Belgian Society for Surgery: better development of ambulatory surgery in Belgium in the future

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In Belgium the organization of ambulatory surgery was developed independently from existing surgical societies.

So called 'small' surgical specialistic fields like ophthalmology, oral surgery, ENT, urology seemed to have a higher interest for ambulatory surgery. The anaesthesiologic field also showed a big interest.

Ambulatory surgery turns out to be mainly an organisatory concept which also involved the nursing staff, the hospital administration, the home-care workers etc.

All surgical disciplines in Belgium are united in the R.B.S.S. Many surgeons are members of the R.B.S.S.

The structure of the R.B.S.S. was recently changed. Specific sections were established with the possibility of cooperation with existing surgical societies of which the B.A.A.S. is one. This will enable us to organize a better service to patients. A better and more cost-saving cooperation with the government will also be possible.

### 2a2

#### The development of ambulatory surgery in Poland — organizational models and issues

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Paediatric surgery was practically the first specialty in Poland that paid as early as in 1972 special attention to the provision of a day-based service for elective operations on children. Until the mid-1990s public hospitals controlled nearly all ambulatory surgery in Poland. Exceptions to the rule were dental and plastic surgeons, gynecologists, some ophthalmologists, ENT surgeons, and urologists who performed many procedures on an outpatient basis. Day-case surgery (DCS) has been undertaken mainly in private practice and medical cooperatives. The purpose of this paper is to review the development of ambulatory surgery in Poland during the last decade. The data have been gathered from very scarce official sources, the

press, medical publications as well as from the Internet. There are still no statistical data on ambulatory surgery in Poland available. Although the concept of DCS is not new, its practice in Poland has only recently become more widespread. Within the last 3–4 years 43 new day wards for quick diagnostic procedures and 48 new day surgery units were established, making a total of 226 day care wards with 2638 beds in the country. The majority of them are hospital based units (usually containing day beds in standard surgical wards). There are also at least 20 private free-standing day surgery centres (clinics). Since the purpose of day surgery is to provide surgical care that is as good, and preferably better, than inpatient care, in order to prepare for achieving this goal a list of procedures suitable for DCS, national guidelines and standards for day-case general surgery, pediatric surgery and urology, and the practice of anesthesia have already been developed.

### 2a3

#### Day surgery reform in Australia

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The incidence of day surgery has increased dramatically over the years and statistics in Australia show the complexity of procedures capable of being performed as day surgery in the public and private sectors is increasing. This paper is primarily concerned with reforms to day surgery health insurance provisions, in the private sector, in Australia.

In Australia prior to 1989, only limited private health insurance benefits could be paid for acute procedures that did not involve an overnight stay in hospital. Subsequent legislative changes enabling health insurance benefits payable for a range of day surgery procedures have eventually led to a definitive distinction between services provided on a day only basis.

Most surgical based hospitals undertake day surgery on a regular basis. Within the last 10 years there has also been a rapid development of a new type private acute facility, the free-standing day (surgery) hospital.

The time has come for further changes to be made to the controls over same day procedures and facilities providing such services. Little change has occurred in recent times and any change proposed needs to encourage substitution for overnight stays, cost-efficiencies and also the quality and safety of patient care.

There are currently a number of reforms in the Australian private health industry, which directly impact upon day procedures. The Commonwealth of Australia Government is keen to broaden the scope of private health insurance to cover out of hospital care

including extending the application of hospital-in-the-home services for patients and examining the feasibility of using limited care accommodation and extended (overnight) recovery services for step-down recovery for more advanced day only surgery.

The Government is developing the option of categorizing facilities to encourage a 'step-down' of procedures to more cost effective settings and further support the use of day facilities as efficient and safe alternatives to overnight hospital care. The Government is also trialing the feasibility of a professional employed by the hospital involved in the treatment of the patient, in the absence of the treating medical practitioner, to provide overnight hospital certification for those patients who, for medical or social reasons are unable to return to their normal domicile following a day surgery procedure.

The apparent increase in day surgery has the hallmarks for providing an effective and safe alternative instead of an overnight stay at a higher cost to funders/payers.

#### 2a4

##### **Ambulatory surgery as activity. Experience and results of Fundación Hospital Alcorcón**

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**INTRODUCTION:** Ambulatory surgery (AS) has developed in Spain in the last few years, in most cases as independent units, inside or outside of hospitals. In our center, AS has designed like an integrated activity inside of each surgical specialty. We present our experience after 2 years.

**METHODS:** Before the opening of the hospital, we designed guidelines for AS. This included selection criteria of patients, list of surgical pathologies amenable for AS, types of surgical and anesthetic procedures, pre-anesthetic visit, asistencial pathways and post-operative follow-up. Surgery Department enclosed General Surgery, ENT, Ophthalmology, Urology and Vascular Surgery. We have registered all the activity between March 1998 and October 2000, with special emphasis in General Surgery, where we registered too cancellation index and unexpected admissions.

**RESULTS:** We have performed 9331 elective surgical procedures in this period and 4694 were in ambulatory basis (50.3%). Ophthalmology was the unit with the highest activity in AS (75% of all elective ophthalmologic surgery), followed by Vascular Surgery (52%), General Surgery (48%), ENT (41%) and Urology (16%). Substitution index for some pathologies like pterigium and pylonidal cyst was of 100 and 95% for septoplasty and varicose veins.

In General Surgery we have operated on 1695 elective procedures in ambulatory basis, 464 inguinal hernias; 400 vascular access for hemodialysis; 376 pylonidal cyst; 95 anal pathology; 90 umbilical hernias; etc. Local anesthesia was used in 53% of cases, regional anesthesia in 30% and general anesthesia in 17%. Unexpected admissions were 132 (7.8%), and almost 50% of them were due to anesthetic causes (urinary retention, hipotension, vomiting). There were 167 cancellations (8.9%) and 61% of them due to the patient did not come to hospital on the scheduled date.

**CONCLUSIONS:** We think that the design of AS like an integrated activity inside of each specialty allows the participation of all the staff members, with better use of resources and excellent substitution index and high percentage of AS. In General Surgery, we must improve cancellation index and unexpected admissions.

#### 2a5

##### **Surgical short-stay scenarios: Case studies from the U.S.**

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The presenters will discuss up to 4 scenarios during this session to include: (1) the integrated, single-specialty, short-stay campus (with a focus on either orthopedics or gynecology); (2) the Emerging Surgical Facility remote from the hospital campus, including (a) the short-stay addition to an existing ambulatory surgery center ("ASC") and (b) the new, multi-specialty ASC/postsurgical recovery center; and (3) the short-stay, community hospital. Selected scenarios will be examined in accordance with key indicators, including: a) population, demography and demand characteristics; b) key characteristics of each scenario's proponents; c) prevailing marketplace conditions; d) regulatory and payor incentives and obstacles; e) key performance statistics (e.g., patient mix, procedure mix, patient satisfaction, payor mix, financial variables, outcomes); and f) risk assessment of each scenario to date.

#### 2a6

##### **The role played by ambulatory surgery in the reorganization of the surgical activity in a public regional hospital**

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The increased possibilities to cure, in addition to a more effective technology, have permitted to perform some interventions and procedures without the necessity of a prolonged post-operative observation. This has allowed the introduction of new and performing organizing models, as ambulatory surgery in surgical departments, and as Day Hospital in medical departments. For an example in the United States more than 65% of interventions and procedures follow such surgical care.

Also in Italy, the general ageing of the population has increased chronic illness, resulting in a prolongation of waiting lists and hospital stays.

Day care models can represent a solution to these problems since they are able to reduce waiting lists and can cope with the requirements of patients who possibly prefer short hospital stays.

At world level, there are three models of application of ambulatory surgery, free standing units, dedicated units and bed place part of the ordinary recovery stay. In Italy, especially in public hospitals the most practiced modality is the last one, although not being the gold standard for a good organization of the in and out-flow patients.

The employment of the ambulatory surgery has allowed the thinning of time dedicated to certain pathologies through a larger use of resources, both of money and time devoted by medical and nursery staff to the cure of primary and serious illnesses.

An other important goal of the ambulatory surgery is to satisfy the patient's request of humanizing the medical activity.

One of the fundamental goals of the ambulatory surgery is the achievement rationalization and sparing of surgical care costs.

On the other hand, the Diagnosis Related Group system (DRG), which is actually employed in our country for the reimbursement of the hospital medical assistance, is not always satisfactory, penalizing the development of the ambulatory surgery.

ASO S. Giovanni Battista of Turin, has more than 20 000 daily incomings, and almost 21 501 surgical interventions (since the 1st of January 1996 to the 31st of December 1996), the 46% of which have been performed with a recovery duration shorter than 1 day; for these reasons it can stand among those structures that could develop a free standing unit for ambulatory surgery.

The aim of this study is to understand through a detailed analyses of surgical activities, of our Hospital, the structural role and the organizing potentials for the creation of a free standing unit.

The first step has focused on the analyses of the surgical activity carried out by the ambulatory surgery unit of Oncological Surgery Department (ASO S. Giovanni Battista, Molinette Hospital, Turin). Our unit since 1994 has created an ambulatory surgery staff, based on the utilization of bed places in the context of the ordinary recovery. Up to now, over 1200 interventions have been here performed once per week. A diligent management of accepting and dismissing procedures, added to careful selection of surgical pathologies have decreased the complication up to 4.6%, while increasing the satisfaction rate up to 98%. We have to remark that 35% of patients needs overnight care, since surgical interventions take place only in the afternoon.

The economical analyses, used for both establishing the total per day cost of the stay and the cost of an ambulatory surgery intervention, in relation to the number of hours involved in such activities, has been carried out through the detailed reconstruction of the cost matrix for each centre of productivity and the determination of the global cost of our ambulatory surgery service.

The comparison between the total cost of hernioplasty carried out in ambulatory surgery (948.298 Euro, reimbursed by a DRG 162, of 1263.67 Euro) and the cost of the same intervention performed in ordinary recovery (1399.029 Euro, reimbursed by a DRG of 1805.0168 Euro), has shown that the profit is similar for the two operative modalities.

In conclusion, the bed place model inside an ordinary recovery unit is not always a source of profit since a major efficiency can be found in an increased turnover of patients and as consequence of reduction of acute illness bed places.

Afterwards an analyses of organizing potentials of the surgical activity at ASO S. Giovanni Battista, has been carried out. The study is based in the description of the current organizing situation of the surgical units and of day hospital, in order to define the evolutive possibilities of the construction of a free standing unit within such a structure.

On the basis of the examination of the activity of the surgical units, in 1996, turn out 44 500 ordinary admissions with 597 395 days of recovery, of which 24 712 in surgical units and 29 749 in day hospital units, 2423 of which with a surgical DRG.

The analyses of the surgical activity carried out in 1996 on SDO (Schedule of Hospital Dismission), according to defined methodological choices which reduced the number of selected interventions from 24 712 to 15 978, refers to inpatients both in ordinary recovery and in day hospital recovery, in order to value the surgical activity potentially transferable in ambulatory surgery regimen.

It has been therefore valued the surgical activity in ordinary recovery stay by analyzing the percentage of cases with 24 and 48 h (41.7%) post-operative stay in surgical units.

In 1996, in our Hospital have been performed 13 906 interventions mainly focusing on the operative units of general surgery, otolaryngology and urological surgery with 5805 cases with 24 and 48 h (41.7%) post-operative stay, of which 3112 dismissed after 24 h (22.3%). Moreover, 22.3% of the analyzed interventions is performed with a 24 h post-operative stay.

The further analyses of the procedure has outlined that also in 24–48 h post-operative stay the most frequently performed interventions are those transferable in ambulatory surgery.

Among the intervention with a post-operative stay < 48 h, 2726 intervention have been carried out with a < 48 h post-operative stay.

Out of the 15 978 selected interventions, 6942 (43.4%) can be potentially performed in ambulatory surgery. Moreover, to this amount, it is necessary to add 2218 Day Hospital interventions.

Ambulatory surgery sector can, therefore, be still largely developed in our Hospital in order to allow the diversification of in and outflow surgical patients, achieving an improvement of quality, number of bed places, human resources and technologies, dedicated to seriously sick patients.

The final result of this study can be described as an increasing productivity and rationalization of costs.

## 2a7

### Day-surgery organization in public settings

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**INTRODUCTION:** Day-surgery is not a new surgical technique, but a particular organizing modality for the handling of the surgical patient. It does not foresee pre-operative stay, while post-operative stay is limited to a few hours (Day-Hospital setting) or 24 h at most, including the night spent at the Hospital.

**PURPOSE:** Drastic reduction in hospital-stay costs; increased turnover of patients with reduction of booking lists for surgical interventions.

**METHODS:** A day-surgery organization in a public setting requires the formation of a dedicated specific surgical team. This kind of team, in which an anesthetist is a fundamental element, has the purpose of selecting patients (anxiety, loneliness, distance from the hospital structure are contraindications to this organizing model), of preparing them to surgery with the necessary pre-operative examinations, of operating them, and of handling them on an out-patient basis in the post-operative course.

**RESULTS:** More than 90% of phlebologic surgical interventions can be performed in a day-surgery regime. This requires an accurate selection of patients, a correct pre-operative diagnosis, allowing us to plan with great precision the kind of operation to perform. On the other hand, the combination of advanced anesthesiological techniques, mini-invasive surgery, and a reduction of surgical trauma, allow for an easy-to-handle, outpatient based post-operative course.

**CONCLUSIONS:** Due to its modest need of post-operative assistance and therapy, phlebologic surgery is well adequate for a rapid dismissal of surgical patients, which can thus be handled in a day-surgery setting.

## 2a8

### Developing the emerging surgical facility: freestanding ambulatory and short-stay centers

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A methodology for establishing new surgical programs in a variety of hospital and non-hospital settings will be depicted. Issues to be addressed include: feasibility determination; financial considerations; operational matters including clinical protocols and 'policies and procedures'; regulatory conditions; medical staff development; facility planning and design; and organizational/business configurations. In addition, a timeline will be proposed for typical Emerging Surgical Facility development. Global private healthcare investment will nearly triple in the next 10 years. As more countries' health care financing policies shift their emphasis toward private sector alternatives for health care delivery, those in the ambulatory surgery community must be prepared to lead the development of those surgical settings most likely to be both responsive to and predicative of these trends. ASC/short-stay surgical settings offer an alternative to a public healthcare system quandary by providing access, high quality and customer service in a resource-efficient manner.

**2a9****New surgery for a new millennium**

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In many centres in the UK day case numbers are in decline and day surgery beds remain empty.

AIM: To identify factors contributing to a decrease in day surgery procedures.

METHOD: A 10 year retrospective audit of day surgery in a District General Hospital.

RESULTS: From 1 July 1989 to 30 June 1999 a total of 38 466 patients underwent a day case procedure. Peak numbers occurred in 1995/1996 and there has been a steady decline since. Many procedures considered suitable as day cases a decade ago are no longer performed in the day unit. Some have decreased in number due to the introduction of new techniques (diagnostic arthroscopy replaced by MRI scanning and D & C replaced by outpatient hysteroscopy) while others have decreased due to overt government rationing (varicose vein surgery). Many minor 'lumps & bumps' surgery is now performed by primary care practitioners due to the introduction of financial incentives.

Procedure	Peak number/year	Number in 1998/1999	Decrease (%)
Diagnostic arthroscopy	203	38	81.3
D & C	455	186	59.1
Varicose veins	143	63	55.9

CONCLUSIONS: While newer and more major procedures (e.g. laparoscopic cholecystectomy and partial thyroidectomy) are being introduced to the day surgery environment the pace of change of surgical practice may not be sufficient in the UK to fill the void in day surgery numbers. Without the rapid introduction of such procedures the future of day surgery will remain uncertain.

**2a10****A French survey of ambulatory surgery (as): a view from general practitioners (GPs)**

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INTRODUCTION: Poor implication of GPs to the development of AS in France may be explained by a bad opinion, a lack of interest and, subsequently, by a poor motivation. The aim of the study was to report GP's opinion on AS, their satisfaction, their fear and their expectations on this specific activity.

PATIENTS AND METHODS: A questionnaire including more than 100 items was sent in 1998 to 1709 OPs in the south of France (Gard and Hérault states).

RESULTS: Replies were obtained from 388 GPs (22.7%).

Satisfaction regarding AS according to self-experience.

	Good (%)	Mean (%)	Bad (%)	No opinion (%)
From GPs	80.1	12.1	0.7	7.1
From patients	78.8	14.5	0.3	6.4

On a 100-mm visual analogue scale (median value [5th; 95th percentile] in mm), from 'nothing' to 'very significantly', GPs have reported their pre-operative (60 c[25–94]) and post-operative implication (71 [41–95]), patient's benefit from the ambulatory modality (70 c[41–97]), and economic benefit (74 c[45–98]). The motivation for a larger development of AS, between 'any' and 'very strong' was 68 c[36–97]. The greater the experience of AS, the greater were those values (Kruskal–Wallis test,  $P < 0.05$ ). The risks of AS was perceived as, greater (14.9%), identical (60.4%), lower (16.5%).

Cost of AS for

	More expensive (%)	Identical (%)	Cheaper (%)	No opinion (%)
The patient	6.0	20.3	60.4	13.3
Medical insurance	0.6	1.3	90.8	7.3
The ambulatory centre	5.7	13.0	60.4	20.9
Society	0.9	1.6	88.6	8.9

GPs (51.3%) thought that surgery must be performed on an ambulatory basis as often as possible, 68.7% wished to send more patients for AS (vs. 7.9% who did not). Percentages increased with the experience of AS ( $\chi^2$ -test,  $P < 0.05$ ).

CONCLUSION: GPs reported a positive medical, social and economic experience of AS and thought they can offer a positive contribution to a greater development of this activity.

**2a11****Ambulatory surgery in specialized doctor's offices — day clinics and praxis clinics**

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In 1993 the law SGB V regulated ambulatory surgery in Germany: ambulatory surgery can be performed in all hospitals and in specialized doctor's offices, so-called day clinics. In ordinary doctor's offices only minor surgery like wound stitching etc. is allowed. The law specifies in § 115 b SGB V the structural, technical, hygienical and staff requirements as well as the extent of quality assessment for ambulatory surgery in day clinics and hospitals.

In 1999 a third category of doctor's offices was introduced, the so-called 'praxis clinics' with overnight facilities for patients.

Practically all three types of doctor's offices are privately owned in contrast to hospitals, 94% of which are under public law (57% public, 37% non-profit-making organizations).

In the years 1996–1998, 97% of all ambulatory surgery in Germany was performed in free-standing day clinics and only 3% in hospitals. The quality of day clinics is high.

The presentation will focus on the legal requirements for day clinics and praxis clinics and on aspects of quality outcome in these specialized offices.

## **2a12**

### **Model day surgery complex with expanded recovery and medi-motel**

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Day Surgery in Australia continues to expand in both the private and public health care sectors.

There has been a remarkable development of free standing day

surgery centres over the past 7 years, the great majority of them being in the private sector. As of January 2000 there were 191 such centres and this compares with 326 private hospitals and 774 public hospitals.

These free-standing centres are both multi-disciplinary and uni-disciplinary, however, they are all of the 'same day' type, i.e. patients attend for their operation/procedures and are discharged on the same 'working' day with the further expansion of day surgery to include more major operations, day surgery centres with extended (overnight) recovery services are now being developed. A further initiative is post-discharge convalescent accommodation (Medi-Motel) which can be connected to day surgery centres.

A model plan of a day surgery/procedure centre, which includes extended recovery and a Medi-Motel will be presented. The model also includes important design features such as a community nurses centre, a pre-operative assessment clinic and education/conference room. The various features of the design will be discussed with comment on capital cost.