

Ambulatory surgery in Spain¹

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Abstract

In Spain, ambulatory surgery (AS) is a form of surgical care provision covered by the services delivered by the National Health System (NHS). In order to achieve an approximation of the organisation of AS, an anonymous questionnaire was sent to all Spanish hospitals (public and private) in 1995. AS surgery was carried out in 57% of the respondent hospitals (out of these, 62% were hospitals of the NHS). Of hospitals, 54% not performing day surgery were planning to set it up in the immediate future. The most common way of providing the service is by integrating the day patients with elective cases from the surgical department. Most of the ambulatory units are hospital-based; only one free-standing unit was identified. Lack of infrastructure was claimed as the main obstacle for initiating day surgery programmes. A wide expansion of AS in Spain needs more structural modifications of the traditional hospital organisation to allow the establishment of well designed units for the provision of high quality care. © 1998 Elsevier Science B.V. All rights reserved.

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1. Introduction

The high cost of inpatient treatment and the pressure exerted by long waiting lists has resulted in the appearance of alternatives to traditional inpatient care for a large percentage of elective surgery. Ambulatory surgery (AS) is the best alternative. It is a safe and accepted form of treatment that introduces important changes in clinician practice and how the hospital is organised. When initiating AS programmes collaborative effort between doctors and managers is necessary as well as acceptance by patients. Cultural, economic and political factors are determinant for AS development in western countries, although the best solution for one country may not be the best for another [1].

This paper is divided into three main parts: a description of the hospital system in Spain, some facts and

figures about developments in AS and a final discussion.

2. Spanish Health Care System

Spain is a parliamentary monarchy. The political organisation of the Spanish State is made up of the Central State (government and parliament), 17 regions (autonomous communities) with their respective governments and parliaments and two cities with a statute of autonomy (Ceuta and Melilla). Each of the 17 autonomous communities has one basic law (Statute of Autonomy).

The 1978 Constitution laid down Spanish citizens' rights to health protection. The General Health Act of 1986 set up the National Health System (NHS) as the instrument to bring the constitutional right into effect.

The NHS comprises all facilities and public services devoted to health and is made up by all the health services run by both State Administration and the 17 autonomous communities. The Spanish health care system has been set up as an integrated national health

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service which is decentralised, with local organisation in each of the 17 autonomous communities which make up the Spanish State. The general principles of the NHS are: universal coverage with free access to health care for all citizens; public financing mainly through general taxation; integration of different health service networks under NHS structure; region-based organisation of health services into health areas and basic health zones; development of a new model of primary health care, emphasising promotion and prevention activities. These principles have resulted in far-reaching change. The process is not yet complete.

Publicly funded insurance scheme coverage currently amounts to 98.5% of the population, and 80% of the total 1995 budget came from taxation.

The Spanish population is nearly 40 million; the distribution by age is slightly younger than other European countries but there is a trend towards an ageing population, low demographic growth and a significant reduction in the birth rate.

Seven of the 17 autonomous communities currently have responsibility for overall health care services within their territories, while the remaining ten (39%) have yet to complete the transition process and most health care services are still managed by the central agency The National Institute of Health (INSALUD).

Each autonomous community has drawn up a health map stipulating a series of health areas and basic health zones. Health areas are the basic structures of the health system. Each area is responsible for the management of the facilities, the benefits and health service programmes within their geographical limits [2].

The health map has its basic structure in the health area within which all primary (general practitioners and community paediatricians) and specialised (including hospitalisation, day surgery and specialist centres) care services are provided. Access to specialised care is by referral from general practitioners. Within the public sector, hospitals are organised into three distinct divisions: medical, nursing and administration, co-ordinated by a general manager, who may or may not be a physician.

The total number of hospitals in Spain in 1996 was 800 (325 public hospitals and 475 private hospitals), with 167271 beds (114296 are in the public sector and 52975 in the private sector) with a rate of 4.4 beds per 1000 population [3]. The public hospitals are much larger than the private ones and generally treat more complex surgical cases. Due to a shortage of beds in the system's own institutions, the NHS establishes contracts with other public and private hospitals to assure health care. In 1992 Spain had the highest rate of registered physicians (including retired

and unemployed) in Europe, four per 1000, but a low rate of nurses, four per 1000 [4].

In the NHS, health reforms are now attempting to move directly into decentralised systems; the purchaser/provider split; freedom of choice for patients (Andalucia); internal-external competition and more involvement of clinicians in management.

According to the OECD (Organisation for Economic Co-operation and Development) estimated data [5], the level of expenditure on health services in 1994 was 7.3% of the gross national product (GNP), of which 5.7% was public-health expenditure and 1.6% private expenditure.

3. AS definition

AS is a form of provision of surgical care that is covered by the specialised services delivered by the NHS [6]. In Spain, Ambulatory Surgery is called Major Ambulatory Surgery to emphasise that the focus is on procedures that were previously or still conducted in an inpatient setting with overnight stay, and that endoscopies and minor surgical excisions are excluded (these procedures were traditionally performed as office procedures). According to the Guidelines on Major Ambulatory Surgery produced by the Spanish Health Ministry in 1993 [7], Major Ambulatory Surgery is surgery performed under general, regional or local anaesthesia or sedation requiring neither intensive postoperative care nor overnight stay; the patients being discharged from the facility a few hours after the procedure.

The Major Ambulatory Surgery Unit is the ideal venue for providing this type of surgery and it is defined as: a multidisciplinary health care organisation that meets specific structural, administrative, technical and functional criteria to guarantee the quality and efficiency of the procedures.

An Association of Major Ambulatory Surgery was established in Spain in 1994 and two National Congresses (Sevilla in 1995 and Zaragoza in 1997) and a Symposium (Játiva 1996) have been organised.

In order to obtain an approximation of how AS was delivered in Spain, a study was undertaken in 1995 by the Health Ministry in collaboration with INSALUD and the autonomous communities [8]. An anonymous questionnaire was sent to the general managers of all hospitals (public and private) included in the Spanish Hospitals Catalogue. Special categories of hospitals (psychiatric, maternal, oncology, geriatric and other monograph hospitals) were excluded. The questions were related to the type of hospital, organisation of AS, types of facilities, reference procedures, written protocols and current obstacles to the provision of day surgery programmes.

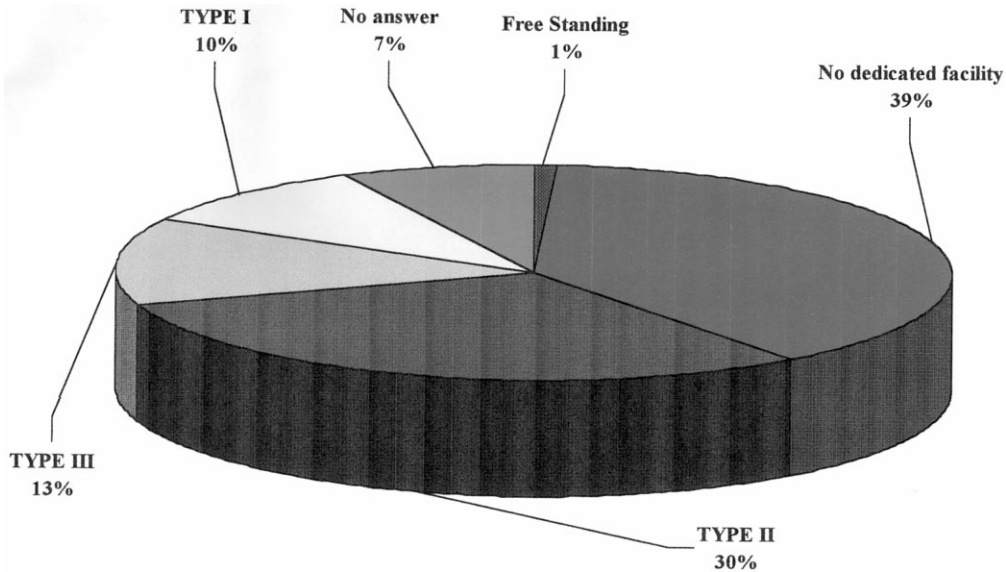


Fig. 1. Where the procedures take place.

4. Results

The questionnaire was sent to 577 hospitals and replies were received from 214 (37%). Some of the respondents did not reply to all the questions and some gave a multiple response.

4.1. Type of hospital

The answers have come from all autonomous communities: 46 hospitals in Cataluña, 26 in Andalucía, 23 in the Comunidad Valenciana, 20 in Castilla and Leon, 16 in Madrid, 12 in the País Vasco and 68 in the rest of the communities.

The majority of hospitals answering the questionnaire were from the NHS (112, 52%), followed by private hospitals (45, 21%), other public hospitals (30, 14%) and private non-profitmaking (21, 10%). Six hospitals did not answer. According to the number of beds, the most common respondent hospitals were those with 100–199 beds (64 hospitals). If only NHS hospitals are considered, the most common respondents were hospitals with 200–499 beds (39 hospitals).

4.2. Has the hospital an AS programme?

Of the responding 214 hospitals, AS was carried out in 122 (57%). Out of these 122, 76 (62%) were NHS hospitals. According to the number of beds, the most common were hospitals with 100–199 beds (38 hospitals) and 200–499 beds (36 hospitals). Out of the 92 (43%) not performing AS, 50 (54.3%) were planning to introduce AS programmes within the next year, 27 (29.3%) were not interested in day surgery and 15 (16.4%) did not respond.

4.3. AS organisation and facilities

4.3.1. How is AS organised in your hospital?

Of the 122 hospitals performing AS, AS was performed in 71 (52%) on a surgical departmental basis (urology, general surgery, orthopaedic and ophthalmology), in 31 (23%) it was a strategic plan of the hospital which provided specific resources and personnel, in 30 (22%) it was organised by doctors in some surgical specialities. In some hospitals AS was performed on a departmental basis and by groups of doctors (multiple response, $n = 136$).

4.3.2. Where do the procedures take place?

Of the 122 hospitals with AS programmes, 47 (39%) did not have a dedicated facility; 12 (10%) hospitals had a type I unit (sharing of all resources, equipment and personnel with the general resources of the hospital, although with different admission procedure); 37 (30%) hospitals had a type II unit (day unit sharing part of the resources with the general hospital) and 16 (13%) hospitals had a type III unit (dedicated ward and operating theatre with the various components of the unit autonomous from the inpatient facilities). Only one free-standing unit was identified (Fig. 1).

4.4. Reference procedures

According to the questionnaire 62890 procedures were performed as day cases in 1995. An overview of the results is given in Fig. 2. The proportion of AS for different procedures in relation to inpatient surgery for the same procedures could only be determined in those hospitals which sent complete data (ambulatory and inpatient activity, average length of stay LOS) (Table 1) [8].

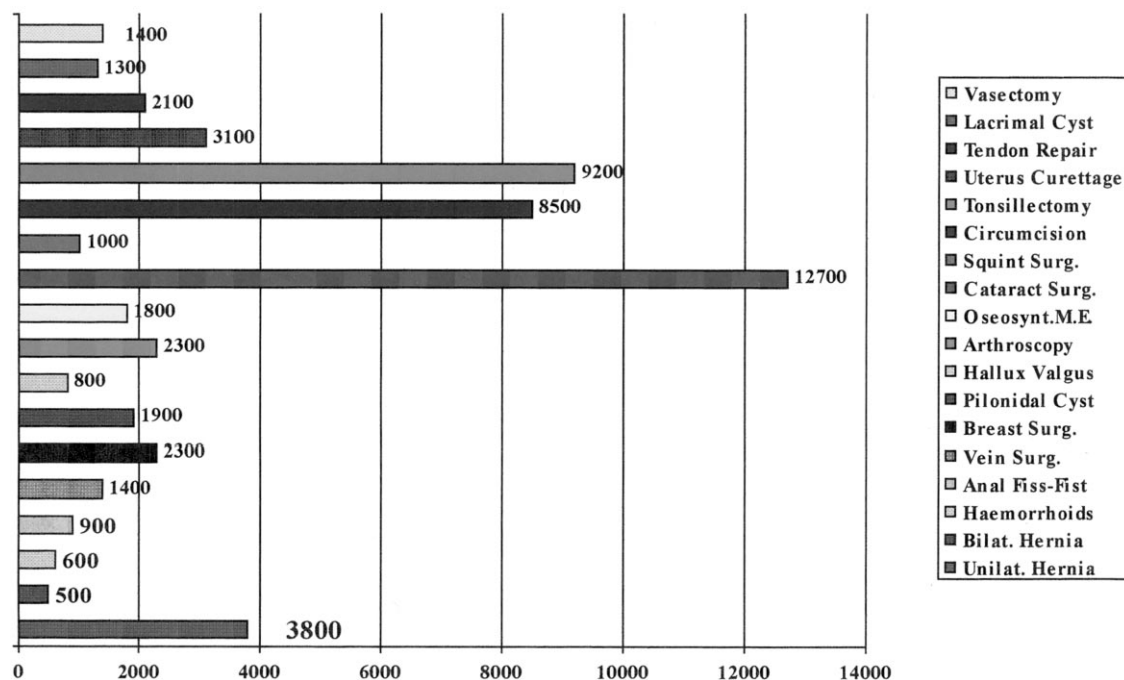


Fig. 2. Reference procedures.

4.5. Has the hospital written protocols for AS?

Out of 122 hospitals performing AS, there were 79 (65%) hospitals that had written protocols (45 for all activities and 34 in some of them) and 36 (30%) did not. Seven hospitals did not answer. The most common aspects considered were: anaesthetic assessment in hospitals (65), preoperative evaluation (61), patient selection (60), discharge instructions (59), informed consent (58), selection of procedures (54), surgical technique (43) and anaesthetic technique (40).

4.6. Obstacles to the provision of day surgery programmes

This question was answered with multiple responses ($n = 109$) that surpassed the number of hospitals not performing AS ($n = 92$). Problems with architectural layout and infrastructure were claimed by 46 (42%) hospitals. Inadequate contracts was alleged by 13 (12%) hospitals. Others mentioned conservative attitudes and practices among doctors (10, 9%), long distances from hospital (6, 5.5%), inappropriate method of delivering surgery (6, 5.5%) and other reasons (8, 7.3%). No answer was given by 20 (18%) of the hospitals.

5. AS evolution 1993–1995

To assess the evolution that took place over the period 1993–1995 we have compared the data of the 1995 survey with a similar questionnaire sent to the

hospitals during 1993 [9]. The response rate was similar (35% ($n = 212$) in 1993 and 37% ($n = 214$) in 1995) as well as those originating from the autonomous communities. The number of hospitals with AS programmes has increased from 78 (37% of 212) in 1993 to 122 (57% of 214) in 1995. The number of AS procedures has also increased considerably from 27,536 in 1993 to 62,890 in 1995.

Regarding facilities, there has been an increase in type II units (from 15 to 37) and type III units (from 12 to 16). In both surveys, the same obstacles were alleged by the hospitals for the setting up of an AS programme. It is interesting that only 9% of hospitals in 1995 considered the medical attitudes as a barrier as opposed to 19% in 1993. In 1995, 37% of the hospitals had written protocols for all the activities which compares favourably with the rate of 27% in 1993.

6. Discussion

As in most western countries the traditional hospital organisation is evolving into a more open model with AS being the best care option for 50% of all elective surgical procedures [10]. In Spain the health authorities have tried to encourage its practice and in 1993 the Spanish Health Ministry produced guidelines outlining the concepts, architectural requirements, organisation and benefits of AS [8].

The introduction of AS in our hospitals is a challenging task that has several perceived effects for the patients, managers and medical-nursing personnel: better

Table 1
Percentage of day surgery/inpatient (selected hospitals with complete data)

Year 1995	No. of hospitals	Day surgery	Inpatient	LOS (days)	% D.S.
Unilateral hernia	45	2214	8982	4.3	20
Fiss-Fist. anal	23	513	658	2.8	44
Vein surgery	32	482	2755	3.7	15
Breast surgery	60	1629	2491	3.9	40
Pilonidal cyst	43	1220	1903	3.3	39
Arthroscopy	32	1609	2404	3.8	40
Cataract surgery	54	9653	15 134	2.4	39
Circumcision	53	4733	1502	2.3	76
Tonsillectomy	53	6030	409	1.8	94
Uterus curettage	36	2507	4339	2.2	37

quality care (focused patient care, adequate information, less risk of cancellation and less psychological impact), increased productivity, reallocation of beds to acute or alternative care (in some cases by closing hospitals beds) and reducing waiting time for common surgical procedures. The establishment of well-organised AS programmes will enable both an optimal care environment for certain surgical patients and a significant impact on cutting waiting lists.

The data of the survey may be incomplete because it only comes from hospitals with AS, but it gives us baseline information on how AS is delivered and for future surveys. Perhaps, a non-anonymous and reminder questionnaire would improve the level of response. A drawback of the questionnaire is that there is no question about whether there is any clinician in charge of all day surgery.

The most common way of providing AS in Spanish hospitals is to integrate the ambulatory patients among the other surgical patients of the different specialities (the surgeon mixes some day patients with inpatient elective surgery cases). There is no clear multidisciplinary strategy for AS in Spanish hospitals which are highly dependent on the surgical department as to the extent they want AS carried out.

It was apparent that only 13% of hospitals with AS programmes had an autonomous day unit (type III) and the lack of available facilities was identified as an important obstacle to initiating AS programmes. It is advisable to provide AS in dedicated units (at least in large and medium-sized hospitals) where a variety of specialists share the facility to take advantage of the benefits of AS (proper preoperative selection, fewer cancellations and delays and low rate of unplanned admissions) and for accurate monitoring of performance. The establishment of AS requires capital expenditure to equip dedicated units (new or converted) and for education and quality assurance.

Only one free-standing unit answered the questionnaire. This independent type of unit is not frequent in

Spain, where most ambulatory units are hospital-based as in other European countries [11–13].

On dealing with the percentage of day procedures in relation to the same inpatient procedures, it appeared that tonsillectomy/adenoidectomy, circumcision, breast lump excision and cataract surgery have the highest indexes. In contrast only 20% of unilateral hernia repairs and 15% of varicose vein operations are performed as day cases. We need to increase the rate of substitution of these common procedures with the highest impact on length of stay.

Although there has been a positive evolution regarding the absolute number of hospitals and day procedures, a great deal of ambulatory procedures are still performed in a traditional hospital environment. It seems that expansion of AS has not reached the initial expectations of the Guide [7], which established a theoretical upper target of 230000 AS procedures per year. Considering that 50 (54.3%) of the surveyed hospitals were planning to introduce AS programmes immediately, there could be a significant potential for the expansion of AS in Spain.

The existence of written protocols covering all aspects of the health care process is essential to the success of day surgery. A written operational policy is needed to provide high quality surgery and to improve the overall organisation of day units.

It is also clear from this study that doctors' attitudes towards AS has improved in recent years. Voluntary adoption of AS by motivated and experienced clinicians (surgeons, anaesthesiologists and general practitioners) has been an important factor that has allowed the current development of AS in Spain. No-one considered day surgery as a method that does not match the needs of patients. This belief will contribute to an expansion and development of AS influenced by the health care demand.

Of hospitals 12% refer to the pattern of funding of hospitals as an impediment to the wide and successful

development of AS. Until the early 1990s the traditional method of financing hospitals was the retrospective budget. Since 1992 there is a trend towards adjusting funding to the real hospital costs of surgical treatment establishing prospective global budgets (Contrato-Programa). These contracts between hospitals and the Health Authorities allow the planning of activity according to predefined health objectives. The volume and percentage (the extent of substitution of day surgery for inpatients) of AS procedures is being introduced in these contracts as an incentive for encouraging AS and discouraging unnecessary hospital admissions. Nevertheless, more structural changes are necessary in the budget to enable the reallocation of resources and funds from inpatient to AS.

In conclusion, it seems that although AS activity in Spain is still limited, the potential for future growth looks promising. AS is feasible in our hospitals (mainly in NHS hospitals) and is well accepted by the patients; however, a wide expansion needs more structural modifications of the traditional hospital organisation that allow the establishment of well-designed units for the provision of high quality care. The future of AS in Spain must concentrate on quality, improved efficiency, research and education programmes.

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