National Report: **What's New in Day Surgery in Portugal? The importance of the introduction of organisational principles**

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Introduction

The recent governmental nomination of the National Committee for the Development of Day Surgery in Portugal (CNADCA) [1] led to a new national survey aimed at evaluating the present rate of day surgery and day surgery organizational quality.

National Day Surgery Organisation

Sixty public Portuguese hospitals were included with data referred to 2006. Only 5 hospitals (8%) had no day surgery programme running in their hospitals. Forty-two hospitals (70%) had integrated facilities managing their patients totally or in part through inpatient facilities. Only thirteen programmes (22%) were using self contained units on the hospital site. The authors noticed that in 31 day surgery programmes (56.4%) there was no separation in the flow of day surgery patients and inpatients in the hospital organisation. The exclusive dedication of professionals to day surgery programmes happened most frequently with assistants (43.6%) and nursing staff (41.8%), and seldomly among anaesthetists (9.1%) and surgeons (5.5%). Clinical organization based on clinical protocols for patient selection and discharge criteria was used in 61.8% of the day surgery programmes. However, guidelines for pain control or post-operative nausea and vomiting prophylaxis were practised only in 43.6% and 36.4%, respectively. Written patient information was available in the majority of the day surgery programmes, but not all, giving the idea that there is still a long way to go to improve quality in Portuguese day surgery programmes. Few of them used clinical indicators to evaluate their clinical practice. The cancellation of booked procedures, unplanned return to the operating room on the same day of surgery and unplanned overnight admission were the most employed indicators. Nevertheless, post-operative supportive measures are being established in most of the day surgery programmes, namely personal phone contact with a staff member and a 3 follow-up phone call 24 hours after surgery to evaluate patients' clinical situations and to clarify any doubts that patients and/or their relatives might have.

National Day Surgery Performance

In Table 1, results from the two last national surveys on day surgery activity shows a positive evolution of this surgical regimen, with an increase of 7.7% in 2006 when compared with 2005, and a 5-fold increase when compared with 1999 [2]. The development of day surgery in Portugal has a homogeneous increase between regions of the country, giving the impression that this positive movement is occurring all over the country (Table 2).

However, the best way to evaluate the evolution of day surgery practice in our country is to compare the percentage of the most performed procedures on a day surgery basis. As can be seen in Table 3, almost all of the top 10 listed procedures had a positive growth in day surgery rates between 2005 and 2006.

Barriers for Future Development

From the national survey, we perceived that the great majority of hospitals (91.7%) have one or more constraints for the development of day surgery programmes (Table 4). The main problems are related to the logistics of hospitals due to their construction in the 70s and 80's when planning spaces and circuits dedicated to day surgery were not considered. Even though 5 some hospitals are trying to make small adaptations to begin their programmes by using this opportunity to change attitudes towards this new surgical concept, the lack of human resources, especially anaesthetists, increases the difficulties in initiating these programmes in our public hospitals.

Organizational Principles of Day Surgery Programmes

After analysing the data of the present national survey, there is a feeling that some day surgery programmes are not different from the management of conventional inpatient surgery programmes with

Table 1 National evolution of day surgery, between 2005 and 2006.

	2005		2006	
	N	%	N	%
Total non-emergency surgery	325,638		290,893	
Total ambulatory surgery	73,390	22.5	79,067	27.2

Table 2 National evolution of day surgery, by health regions (2005–2006).

Health Regions	Hospitals	2005		2006	
	N	N	%	N	%
North	17	26,877	22.9	29,962	29.2
Centre	17	15,826	20.8	18,954	26.5
Lisbon & Tejo Valley	21	27,133	24.0 2	7,741	26.3
Alentejo	3	2,114	20.0	2,035	22.0
Algarve	2	1,440	17.0	2,375	25.2
Total	60	73,390	22.5	79,067	27.2

Table 3 Results of the top 10 performed day surgery procedures (2001–2006).

Surgical Procedures	2001	2003	2005	2006
	%	%	%	%
Cataract surgery	29.6	31.3	53.9	63.4
Circumcision	29.9	41.1	45.1	59.4
Carpal tunnel decompression	30.6	39.3	50.0	58.1
Squint surgery	9.5	28.9	51.0	49.5
Myringotomy	8.5	14.9	28.6	35.8
Laparoscopic sterilisation	13.1	23.5	28.9	26.4
Hernia repair	9.3	14.9	18.0	21.6
Tonsillectomy	4.2	9.3	14.9	19.6
Varicose vein surgery	8.7	13.3	11.9	15.3
Knee arthroscopy	1.2	1.9	4.4	6.3

Table 4 Causes of constraints for the national development of day surgery (n=60).

Causes	North (n=17)	Centre (n=17)	Lisbon (n=21)	Alentejo (n=3)	Algarve (n=2)	Total (n=60)
Logistic problems	12	13	13	3	0	41 (68.3%)
Clinical equipment	2	6	3	0	0	11 (18.3%)
Human resources	8	9	9	0	1	27 (45.0%)
Hospitals w/ constraints	17	14	20	3	1	55 (91.7%)

deep organizational, clinical and patient information deficits. In fact, the innovative character of day surgery programmes is based on the patient centred organizational model. This includes a separate flow pattern for day patients from inpatients, structurally separate day surgery facilities and dedicated day surgery staff all aimed at achieving gains in efficiency, quality and patient satisfaction.

To accomplish these aims, it is recommended that certain principles should be adopted in the organization of day surgery programmes. Such principles can be divided into basic principles i.e. those that are compulsory for every day surgery programme, and into advanced principles with the intention of achieving excellence and improving the organizational quality.

Examples of basic principles of day surgery programmes are:

1 **Patient circuit** – with a separate flow of day surgery patients from inpatients, although it can be accepted to share the operating room and the post-operative anaesthetic care unit (PACU) in integrated models.

2 **Management structure** – with the establishment of an independent structure well defined in the organisational system of the hospital, appointing a Clinical Director for each Day Surgery Unit (DSU).

3 **Clinical protocols** – at least for patient selection and surgical procedures, and establish discharge criteria for patient safety.

4 **Written clinical information** – with clear post-operative instructions, with information of what to do and who to contact in the case of complications, when to re-take chronic medication, when and how to re-initiate physical activity, etc.

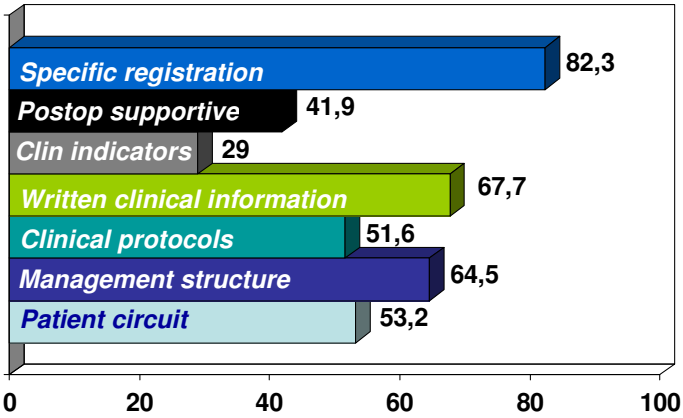
5 **Continuous analysis of clinical indicators** – at least those more important for quality improvement in a day surgery programme, such as cancellation of booked procedures, and unplanned overnight admission.

6 **Post-operative supportive measures** – such as the availability of a phone contact number of a clinical staff member and a

phone call 24 hours after surgery to evaluate the patient's clinical situation, clarify any doubts and to inform the patient and relatives in the case of the existence of surgical complications.

7 Specific registration of day surgery programmes data in a computerized system.

Interestingly, these basic principles of the organization of day surgery programmes are far from being present in Portuguese day surgery programmes (Graph 1).



Graph 1 Percentage of Day Surgery Programmes with the Basic Principles established.

Trying to move the quality of organization of day surgery programmes towards excellence, some Advanced Principles should be sought to be introduced:

a) the implementation of a separate flow of day surgery patients from inpatients in all situations;

b) proper day surgery facilities with waiting rooms for patients and relatives, and separate wards from inpatients for those included in ambulatory surgery with extended recovery programmes; c) dedicated assistants, nurses and administrative staff;

d) more extensive clinical protocols especially for pain management control and post-operative nausea and vomiting prophylaxis;

e) other written information including that for the pre-operative period and information especially orientated to relatives as well as patients;

f) additional clinical indicators, such as unplanned return to the operating room on the same day of surgery, unplanned return and readmission of the patient to the DSU, percentage of patients with severe pain or post-operative nausea and vomiting, etc;

g) gather information about patient satisfaction through anonymous surveys.

Conclusions

There is a long way to go to progress day surgery in Portugal .In spite of the positive indicators for its development that have been shown, there is a national perception that we could perform better not only in the quantitative but also in the qualitative aspects of this field. The Portugese Association of Ambulatory Surgery (APCA) has been pressing Government leaders to create incentive health policies to promote more and more day surgery in Portugal, and we hope that all the proposals made by the CNADCA will achieve the goal of performing more than 50% of non-emergency procedures on a day surgery basis by 2009.

References

1 Portuguese Law Decry nº 25 832 / 2007 (***Diário da República*** nº 218, **2ª Série**, 17 November).

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