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Day surgery—the future

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Abstract

Day surgery in Australia continues to expand but has not reached its potential of 60% of procedures. The concept of extended recovery for appropriate day surgery patients, involving overnight stay, was recently unanimously supported by the Australian Day Surgery Council. This should provide a significant stimulus for the further expansion of day surgery. There has been no formal undergraduate or postgraduate teaching of day surgery and this needs to be addressed. © 1998 Elsevier Science B.V. All rights reserved.

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The concept of day surgery as a high quality, safe procedural service is now well established in Australia and there has been rapid expansion in the past 5 years.

Day surgery services are provided in hospital based units, private and public, as well as in free-standing centres. Some hospitals have constructed separate free-functioning day surgery units. However in many hospitals this ideal situation does not exist and day surgery patients are mixed with overnight stay patients.

The cost advantage of day surgery is best achieved in free-standing centres or totally free-functioning units within acute bed hospitals. The number of free-standing day surgery/procedure centres has almost doubled since 1993. As indicated in Table 1, there were 83 free-standing day surgery/procedure centres registered with the Commonweath Government in January 1993 and this increased to 139 by January 1996. The greatest number of these centres are of multi-disciplinary type, but there has been a notable increase in the number of day eye surgery centres.

In Australia at the present time approximately 40% of operations are carried out as day surgery, although it is generally accepted that 60%, and possibly more, of surgical operations can be treated this way.

In 1992, the Australian Day Surgery Council identified 18 commonly performed operations which, at that time, were mostly carried out as overnight(s) stay surgery in acute bed hospitals. There has been an increase in the proportion of day surgery for these procedures from 1993 to 1996, as indicated in Table 2

Table 1
Free-standing day procedures centres in Australia

Population 18 million	January 1993	January 1996
Day surgery centres	36	67
Endoscopy centres	23	29
Day plastic surgery	10	7
Day eye surgery	3	18
Day ENT Surgery	—	1
Day medical centres	11	17
In vitro fertilization	2	3
Oncology	1	1
Cardiac clinic	1	1
Sleep disorders	1	2
Sports medicine	1	1
Rehabilitation	1	—
Dental	—	1
Medical/diagnostic	4	8
Total	83	139

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Table 2
Selected procedures for transfer to day surgery

Description	% Day only	
	1993	1996
Breast excision of cyst or fibroadenoma or other local lesion	37.2	66.3
Breast excision of cyst, fibroadenoma or other lesion where frozen section is performed	38.6	68.4
Femoral or inguinal hernia or infantile hydrocoele repair of…	13.2	13.0
Umbilical epigastric or linea alba hernia repair < 10 years of age	44.9	86.9
Pilonidal sinus or cyst or sacral sinus or cyst excision <10 years of age	10.7	11.5
Varicose veins, multiple ligation; one leg	30.7	30.8
Varicose veins high ligation and complete stripping; one leg	5.6	10.9
Cystoscopy with urethroscopy; not associated with any other urological endoscopic procedure	47.2	83.8
Cystoscopy with ureteric catheterisation	43.8	70.0
Cystoscopy with one or more ureteric dilation, insertion or ureteric stent, biopsy	29.0	38.5
Cystoscopy, with ureteric catheterisation, unilateral or bilateral	38.2	69.3
Cystoscopy, with biopsy of bladder	44.6	77.5
Hysteroscopy with dilation of cervix under GA	48.9	91.0
Hysteroscopy with endometrial biopsy or suction curettage or both	61.4	91.1
Hysteroscopy with uterine adhesiolysis or polypectomy or tubal catheterisation or R/O IUD	66.3	88.9
Lens extraction and artificial insertion	30.5	50.0
Squint operation for one or both eyes involving one or two muscles	37.8	63.8
Lop ear, bat ear or similar deformity correction of	27.3	40.8

Data provided by Medibank Private.

(this data applies to private insured patents and was provided by Medibank Private). Nevertheless, the levels of day surgery for some of these procedures is unacceptably low.

It is frequently stated by surgeons that many patients having intermediate type operations have not sufficiently recovered or are not comfortable enough to be discharged on the same day as the operation. These patients require an extended period of recovery involving overnight stay, e.g. many laparascopic abdominal operations, anorectal operations, cataract/lens replacement operations and tonsils.

The Australian Day Surgery Council, at a meeting on the 12th October 1996, unanimously supported the concept of extended recovery for day surgery and this will include overnight stay. Very importantly, it will be necessary to provide specifically constructed/modified recovery units for such patients and these can be attached to free-standing centres or hospital based units. These extended recovery units would be of 'hotel type' and not the typical highly sophisticated and serviced acute hospital bed accommodation.

In view of this important decision, Council considered it was essential to define all facets of day surgery, and at a subsequent meeting on 28 February 1997, the following definitions applying to day surgery were identified.

Office or outpatient surgery/procedure: An operation/procedure carried out in a medical practitioner's office or outpatient department other than a service normally included in an attendance (consultation), which does not require treatment or observation in a day surgery/procedure centre (facility) or unit, or as a hospital patient.

Day surgery/procedure: An operation/procedure, excluding an office or outpatient operation/procedure, where the patient would normally be discharged on the same day.

Day surgery/procedure patient: A patient having an operation/procedure excluding an office or outpatient operation/procedure who is admitted and discharged on the same day.

Day surgery centre (facility): A registered[1] centre (facility) designed for the optimum management of day surgery/procedure patient.

Day surgery/procedure—extended recovery patient: A patient treated in a registered day surgery/procedure centre (facility) or unit, free-standing or hospital based, who requires extended recovery including overnight stay before discharge.

Extended day surgery/procedure recovery centre/unit: Purpose constructed/modified patient accommodation, free-standing or within a registered day surgery centre (facility) or hospital, specifically designed for the extended recovery of day surgery/procedure patients, and registered with Commonwealth/State Governments for this purpose.

Limited care accommodation: Hotel/hostel accommodation for day surgery/procedure patients where professional health care is available on a call basis.

Hotel/hostel accommodation: Accommodation for day surgery/procedure patients without proffesional health care, when required for domestic, social or travel reasons.

1. Office-based procedures

A number of minor operations/procedures carried out under local anaesthetic, minor oral sedation or without anaesthetic, are suitable to be carried out as office-based procedures.

Until the present time, there has been a major disincentive for medical practitioners to carry out office-based surgery as there is no health insurance facility

[1] Registered with Commonwealth/State Governments.

rebate for these procedures with the costs of providing this service carried by either the patient or the medical practitioner. The recent more acute awareness of anti-infection standards necessitating the use of autoclaves, together with the steady increase in overall costs, has increased this disincentive.

Legislation in the Australian Capital Territory (The Skin Penetration Procedures Act 1994) came into force in mid 1995. This Act provides for minimal anti-infection standards and applies to any procedure or operation where the skin is penetrated. In summary, under the Act it will be compulsory to have a certificate of accreditation where these office-based procedures/operations are carried out and the Act applies to medical practitioners (general and specialist), dentists and other practitioners, such as acupuncturists and tattooists.

It is understood that other States are considering the introduction of legislation and accreditation processes for office-based surgery similar to that which has been introduced into the ACT.

As a result of these influences, it is now imperative that an office-based facility rebate be introduced into the Medicare Schedule of Rebates. It would be inappropriate for such a rebate to be paid by private health insurance funds, as they now only cover about one third of the population. Furthermore, private health insurance funds may only pay facility rebates for services provided at hospitals or registered free-standing day surgery centres.

2. Extended recovery units for day surgery

Many patients having intermediate type operations are not being treated in day surgery at the present time because they are considered to be insufficiently recovered to be discharged on the day of operation. Some elderly patients, with inadequate social back-up, may also be unsuitable for discharge on the day of surgery. Such patients require an extended period of recovery and this would involve overnight stay.

The standard recovery rooms of operating complexes, be they free-standing centres or hospital-based day surgery units, do not provide appropriate accommodation for an extended period of recovery.

Specifically designed and constructed/modified extended recovery units with hotel type facilities are required for these patients. At existing free-standing day surgery centres these would mostly be additions to the existing structures as most centres do not have enough space to construct them within the centre. New free-standing centres could design and construct the extended recovery unit as an integral part of the day surgery centre. It would be much easier in hospitals to reallocate and modify existing sections of the hospital as day surgery extended recovery units.

It is emphasised that these extended recovery units should be of hotel type and do not require the sophisticated and expensive acute hospital wards/rooms, with inbuilt resuscitation and related equipment. The capital and running costs of these units would therefore be considerably less than acute bed hospital accommodation.

Patients in these units would be supervised by appropriately trained nurses.

A further option is the development of unsupervised hotel/hostel aocommodation for day surgery/procedure patients, with or without on call professional health care.

In respect of these day surgery options, the paramount principle is reiterated, that the choice of procedure and the operation venue must remain the responsibility of the surgeon and/or anaesthetist.

3. Education

There has been very little formal education of medical practitioners up to the present time on the subject of day surgery, neither undergraduate nor postgraduate, and this needs to be addressed. Specific anaesthetic and surgical techniques are necessary if patients are to make a rapid recovery from operations so that they are fit for discharge either on the same day, or the following day for extended recovery patients.

It is suggested that a segment on day surgery practice be introduced into the final year undergraduate medical course. Free-standing day surgery centres, with their high daily number of patients, have a wealth of clinical material which, at the present time, is not utilised in either undergraduate or postgraduate teaching. Secondment of undergraduate medical students and resident medical officers in their early postgraduate years to selected day surgery centres deserves serious consideration.

The inclusion of day surgery in postgraduate specialist courses for surgeons and anaesthetists should also be considered.

4. Recommendations

On the basis of the above comments, the following recommendations are made:

- The introduction of a Medicare facility rebate for office-based operations/procedures.
- Commonwealth and State Government support for the development of extended recovery day surgery units.

- The inclusion of day surgery in undergraduate and postgraduate medical education.

5. Conclusion

Introduction of the abovementioned recommendations would provide a major stimulus for the expansion of day surgery to achieve its potential of 60%, if not more, of all surgical operations/procedures, and eliminate the serious disincentive that currently exists for office-based operations/procedures.

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