Hospital Topics

Combined short-stay/day surgery/investigation unit in a district general hospital

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Over the past few years there has been a growing interest in seeking alternatives to traditionally accepted patterns of inpatient care. The reasons for this development are probably complex but are partly attributable to the economics of providing health care. Examples of facilities evolved as a result of this trend are units for day surgery, programmed investigation, five-day wards, and short-stay wards.

There are many references to the operation of short-stay observation wards attached to accident and emergency departments,¹⁻⁴ five-day wards,⁵ programmed investigation,^{6,7} and day surgery units.^{8,9} These references mostly described units developed as discrete entities performing one function only. We describe a unit that from its inception was intended to fulfil three functions—namely, a short-stay observation ward for a major accident and emergency department and an investigation and day surgery unit for both medical and surgical specialties.

It is our contention, on the basis of the results for six months, that (a) such a unit can function efficiently and (b) it contributes to making the maximum use of expensive capital resources.

The unit

The unit is on the ground floor of the 400-bedded purpose-built district general hospital at Bodelwyddan, and serves the Clwyd North Health District (population 170 000) in North Wales. The unit is adjacent to the accident and emergency department and is linked by a corridor to a twin minor operating theatre suite, diagnostic radiography department, and fracture clinics. It has 12 beds and a recovery area for six trolleys (fig).

Operational policy

The accident and emergency department consultant is in administrative charge of the unit. Patients are admitted under named consultants as appropriate for investigation, day surgery, or short-stay observation. The nursing staff are under the overall control of the nursing officer-in-charge of the accident and emergency department, and a nursing sister is responsible for the running of the unit. Other nursing staff include two staff nurses, four State-enrolled nurses, and four nursing auxiliaries. A ward clerk undertakes the administrative work within the unit.

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Physical lay-out of the unit (not to scale).

FUNCTIONS

Patients are admitted to the unit for the following reasons:

- (1) A period of observation not exceeding 36 hours from the accident and emergency department.
- (2) Day surgery from the surgical waiting list.
- (3) Investigation as specified by the referring specialties.
- (4) Selected acute admissions between 2200 and 0800 each day and weekends. The duty registrars admit patients to the unit and are responsible for discharge or transfer to another ward the next morning.

As the unit was built for multidisciplinary functioning the beds are used flexibly and are not specifically designated for short-stay, investigation, or day surgery. Patients selected for day surgery or investigation are placed on the surgical or medical inpatient waiting lists and are sent for in an order of priority determined by clinical criteria. A list of patients, together with the case records, is sent to the sister-in-charge of the unit 24 hours before admission. On the

very few occasions when the excessive admissions of emergency cases to the observation ward from the accident and emergency department threatened to disrupt the smooth functioning of the unit in its day surgery/investigative capacity, the agreed operational policy permitted the consultant in administrative charge of the unit to admit short-stay observation patients direct to the appropriate ward within the hospital.

Analysis of admissions to the unit

Analysis of admissions to the unit during its first six months (July to December 1980) of operation showed that a total of 2525 patients were dealt with for short-stay observation, day surgery, or investigation procedures. Of these, 1326 (53%) were men and 1199 (47%) women. Table I gives the age/sex distribution.

Table II gives the number of patients admitted under each of the three functional categories. It can thus be seen that 2094 (82%) were planned admissions while 431 (18%) were unplanned emergency admissions. This latter figure represented 15% of all acute admissions (2848) to the hospital during the six-month period studied.

Table III illustrates the daily throughput of the unit during a typical week in the study period. The throughput of patients was in excess of the bed/trolley capacity of the unit because some patients, especially those attending for investigations, required neither facility and were accommodated in the patients' day room. In all, 114 (6%) of the 2094 planned admissions (day surgery and investigation) were retained overnight in the unit.

TABLE I—Age/sex distribution of admissions

Age group (years)	Men	Women	Total (%)
<10	23	25	48 (2%)
10-39	404	355	759 (30%)
40-69	552	527	1079 (43%)
≥70	313	268	581 (23%)
Not known	34	24	58 (2%)
Total (all ages)	1326	1199	2525

TABLE II—Reasons for admission

Reasons for admission	No of patients (%)
Observation	431 (18%)
Day surgery	1219 (48%)
Investigation	875 (34%)
All reasons	2525

TABLE III—Daily throughput during a typical week

Reason for admission	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Observation	3	4	2	2	2	4	5
Day surgery	3	20	22	16	10	0	0
Investigation	3	10	10	8	6	0	0
Total for each day	9	34	34	26	18	4	5

Discussion

The concept of the three individual functions described above is not new, but to the best of our knowledge there are no published reports of multifunction units as described in this paper.

The Platt report,¹⁰ while recognising the importance of short-stay beds, recommended that there should be 30 to 35 beds per 100 000 population for emergency cases in hospital wards. Both Lewin¹¹ and the Mills report,¹² in accepting the need for short-stay beds, resolved that the number of such beds should depend on local needs and policies. On the basis of the experience of the Bodelwyddan unit, it is our contention that a

figure of eight to 10 short-stay beds should be sufficient to serve a population of 170 000.

Even this provision may be under-used but, by combining various functions within a single unit, as we have described, better use of staff and facilities may be achieved. We have deliberately omitted detailed description of the clinical procedures and activities relating to each of the three functional categories listed as we believe that these have already been well documented.

This paper is also intended to highlight the clinical management of these various activities within a unit attached to a major accident and emergency department, under the co-ordinating influence of the accident and emergency consultant. We believe that this consultant, who has a close working relationship with most specialties, is uniquely fitted to co-ordinate multipurpose units.

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(Accepted 26 February 1982)

What research has been done into the effect of the Feingold diet on hyperactivity and can the diet be recommended?

There is a vigorous research controversy, not yet resolved.^{1,2} The Feingold diet excludes artificial food colourings and preservatives and naturally occurring salicylates. It forbids (among other things) most sweets, ice cream, jellies, soft drinks, breakfast cereal, fish fingers, and fruit. A great effort of compliance is needed, and this makes placebo effects particularly important. Several controlled trials have indicated that the diet can be effective—but nearly always because it is a powerful placebo. Even when the immediate clinical response seems to be excellent, doses of the additives are usually no more likely than a placebo to produce a relapse into hyperactive or difficult behaviour.³ A very few individuals, however, show a genuine improvement in behaviour as a result of the physical effects of eliminating specific additives. Unfortunately, we do not yet know how to identify this rare group. Accordingly, in my own practice I do not yet recommend the diet. The short-term benefits of a placebo are too dearly bought if they entail the neglect of other treatments, the wrongful labelling of a child as abnormal, or the sense of prolonged punishment. Nevertheless, many sincerely motivated families will decide to experiment with the treatment; and it is appropriate to support them with advice, concern, and monitoring. If the diet is strictly followed, then ascorbic acid supplements are a wise precaution.—ERIC TAYLOR, senior lecturer in child and adolescent psychiatry, University of London.

¹ Connors CK. *Food additives and hyperactive children*. New York: Plenum Press, 1980.

² Taylor EA. Food additives, allergy and hyperkinesis. *J Child Psychol Psychiatry* 1979;20:357-63.

³ Mattes J, Gittelman R. Effects of artificial food colorings in children with hyperactive symptoms. *Arch Gen Psychiatry* 1981;38:714-8.