Key messages

- Acute hospitals which operate at bed occupancy levels of 90% or more face regular bed crises, with the associated risks to patients
- Management interventions should focus on measures with long term benefits to counteract the growth trend in demand for admission
- Many initiatives have only a short term effect; they briefly delay the worst effects but do not address the growing mismatch between supply and demand
- Evaluating management interventions year on year at a single hospital is futile—any effects are swamped by random variation

such evaluations is an important justification for a modelling approach.

Emergency admissions are, by their nature, stochastic and difficult to predict. Our model shows that spare capacity is essential if an emergency admissions service is to operate efficiently and at a level of risk acceptable to patients. Emergency admission crises are not generally created by poor management. With insufficient spare bed capacity even the best run hospital is at risk. It must be recognised by the NHS that maintaining some unoccupied staffed beds is not wasteful, but is a cost which must be incurred if a quality service is to be sustained.

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and Clinical Evaluation at the University of York, Coventry Business School, and Plymouth University. The invaluable assistance and support of Andrea Roalfe, senior analyst at the NHS Executive (West Midlands), is gratefully acknowledged.

Contributors: AB directed the design of the model, carried out the experiments, synthesised the results, and drafted and edited the paper; MP developed and tested the model structure, carried out data analysis and model calibration, and participated in writing and editing the paper; JWP initiated the project, contributed to conceptual discussions, analysed the policy implications, and participated in writing and editing the paper. All authors are guarantors for the paper.

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The rise in emergency admissions—crisis or artefact? Temporal analysis of health services data

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It is a common view that emergency admissions are increasing at up to 5% per year in the United Kingdom,¹ and that this unsustainable rise "threatens the future of the NHS."2 The perceived rise in emergency admissions is invoked to explain those recurrent and well publicised crises that in turn support the view that there is a fundamental mismatch between demand and supply in health care,3 as the reported trend is held to represent a real and substantial increase in demand for hospital care.

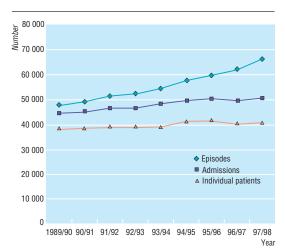
Subjects, methods, and results

The data presented here reflect all emergency admissions in all medical and surgical specialties from 1989-90 to 1997-8 in an urban and rural population of 850 000 served by Avon Health Authority. Three trends are described: numbers of people receiving hospital treatment each year; numbers of admissions each year, where readmissions are additional events (admissions

are here provider spell admissions, where transfer between hospitals within a trust remains a single admission); and episodes, or more correctly, finished consultant episodes, which constitute a continuous period under an individual consultant's care.

Episodes of emergency treatment have risen 4.4% a year over the period, but the number of admissions has increased by only 2.0% a year (figure). The number of people receiving emergency treatment has increased only slightly, at an annual rate of 1.4%, of which an increase of some 0.6% could be expected from the increase in the numbers of older people in the population during this period. A rise of some 0.8% in emergency admission therefore remains unexplained.

Though the ratio of episodes to admissions increased from 1.06 to 1.32 over the period, the overall readmission rate, as summarised by the ratio of admissions to individuals, has remained relatively constant, rising from 1.17 to 1.22. During the period the average length of stay per emergency admission fell from 10.2



Numbers of episodes, admissions, and individual patients, 1989-90 to 1977-8, all specialties and all ages, Avon Health Authority (population 850 000)

days to 8.7 days (the median fell from 3.6 to 3.1 days). The number of emergency bed days at the beginning of the period (456 382) is similar to that at the end (453 290).

Comment

This study shows that, whatever else is causing a real or perceived crisis in the NHS, an increase in the number of people requiring or demanding emergency treatment is not the explanation. The supposed rise in emergency admissions is almost entirely attributable to the increased reporting of internal transfers of patients after admission. For example, if someone with a stroke

is transferred from an assessment ward to the care of a neurologist, then referred for computed tomography, and subsequently moved to a geriatric rehabilitation ward, this single admission may be recorded as three or even four episodes. Costs are attributed according to episodes, not admissions. The cost of emergency care has thus risen dramatically during a period when capacity and demand have changed little.

The main evidence to support the view that the current rise in emergency admissions may be a genuine reflection of population changes comes from the analysis of linked Scottish data for the period 1981-94.⁴ Our study shows how extrapolation from that period may be seriously misleading for the interpretation of more recent trends in other geographical areas. There is no doubt that many individual patients and their carers have deeply unsatisfactory experiences when seeking access to emergency care. It will be important to replicate this study in other localities to decide whether the problem in emergency care is really one of changing demand, or more a matter of the quality and accessibility of the capacity that is currently available.⁵

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Use of chaperones in clinics for genitourinary medicine: survey of consultants

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In 1996 the United Kingdom's General Medical Council recommended offering chaperones during intimate examinations whenever possible. This advice was incorporated into a report from the Royal College of Obstetricians and Gynaecologists. Surveys on chaperones have been undertaken in general practice and paediatrics. Information on the availability of chaperones and their use in hospital based adult practice is sparse. We therefore surveyed policy on the use of chaperones in British genitourinary medicine clinics, where most consultations are followed by intimate examinations.

Participants, methods, and results

In November 1996, 255 lead consultants in genitourinary medicine clinics were invited to participate in a confidential postal survey. They were asked about their departmental and hospital policies on chaperoning

during genitourinary examinations in several clinical scenarios. Replies were received from 175 consultants (69% response).

When female patients are being examined by male doctors, clinic policy is that chaperones are almost always present (table). By contrast, male nurses sometimes perform unchaperoned genital tests and treatment on female patients. Female doctors are more likely than nurses to be chaperoned while performing genital tests on female patients. Most units do not routinely use chaperones during examinations and genital tests on male patients.

Although most chaperoning is done by female nurses, one quarter of departments sometimes delegated this role to health advisers. Chaperones were sometimes relatives of patients (in 21 departments), medical students (14 departments), or secretarial or clerical staff (8 departments). Most chaperones were female, but male chaperones were used in six

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