

employing them. It is also important to invest sufficient resources to ensure that active interventions can be used to engage clinicians and to ensure that they find the time that is needed to change their routines.

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Comparison of specialty referral rates in the United Kingdom and the United States: retrospective cohort analysis

Christopher B Forrest, Azeem Majeed, Jonathan P Weiner, Kevin Carroll, Andrew B Bindman

Health Services Research and Development Center, Department of Health Policy and Management, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD 21205, USA

Christopher B Forrest
associate professor of health policy and management and paediatrics

Jonathan P Weiner
professor of health policy and management

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Although several studies have shown that US physicians make greater use of medical technologies than UK physicians, no study has examined variation in specialty referral rates, the step before specialised procedures. We compared rates of referral to specialists in the United Kingdom and the United States. To hold the effects of gatekeeping systems constant, we studied US managed care settings that used a structured referral process similar to that in the United Kingdom.

Participants, methods, and results

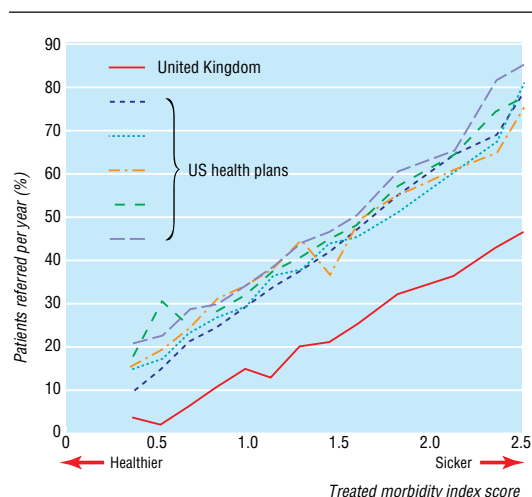
We included non-pregnant patients aged 0 to 64 years, with at least six months of enrolment on a health plan or general practice registration and at least one consultation with their primary care physician during 1996 (US) or 1997 (UK). The US sample comprised 384 693 patients from five health maintenance organisations. All US patients had been assigned physician gatekeepers, who authorised specialty referrals. We used the general practice research database for the UK sample (n=757,680).¹

We measured referral rates as the annual percentage of patients with a new referral to a specialist physician. In the United Kingdom, general

practitioners recorded whether each visit led to a referral. In the United States, patients with at least one visit to a specialist were considered to have had a specialty referral. To limit misclassification of follow up visits to a specialist as new referrals we did not count visits during 1996 (the study period) if the patient had also had a visit to the same type of specialist in 1995.

We used the Johns Hopkins adjusted clinical group system² to develop a "treated morbidity index." Patients in the same clinical group have a similar need for healthcare resources. For each adjusted clinical group category, we determined a referral rate for the largest US health maintenance organisation and then divided by the overall average referral rate for the plan to yield an index score. Higher scores indicate sicker patients, greater morbidity burden, and greater need for referral.

Across the five US health plans, 30.0% to 36.8% of patients per year were referred compared with 13.9% per year for the UK patients. The figure shows that the US health plans clustered closely around the same trend line and that US patients were referred more commonly than UK patients, regardless of the morbidity burden.



Referral rate as a function of morbidity burden of patients. A treated morbidity index score was assigned to patients according to their adjusted clinical group category (groups are based on information on diagnosis, age, and sex). Higher scores indicate greater morbidity burden and greater need for specialty referrals

Comment

Among patients who visit their primary care physician, about one in three patients in the United States are referred to a specialist annually compared with one in seven in the United Kingdom. Our data do not provide information on whether the US rates are too high or the UK rates are too low. Nevertheless, the twofold difference in referral rates held true for the healthiest as well as the sickest patients.

The low availability of specialists, and resultant long waiting lists, in the United Kingdom is an important explanation for these differences. The supply of specialists in the United States exceeds that in the United Kingdom by twofold.³ Just 1% of US patients wait four months or longer for elective surgery compared with 33% of UK patients.⁴ General practitioners believe that waits for appointments with

specialists threaten their capacity to deliver high quality care.⁵ Absence of waits is likely to have lowered the US physicians' referral thresholds.

Other possible explanations include a less intensive practice style among UK physicians, the common practice of self-referral among US patients (even those in health maintenance organisations), and a broader scope of practice among UK physicians. Given the low rates of referral in the United Kingdom relative to the United States, it seems unlikely that referral guidelines, which have been proposed as a method to reduce pressure on UK outpatient services, will dramatically enhance specialty capacity by decreasing demand.

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Observation of a believer

The annual meeting of the American College of Sports Medicine is like no other in my experience. Huge crowds, mostly young adults but many middle aged and elderly too, dedicated to exercise and sport, to fitness and health, to their scientific study and promotion in the community—and to cooperation, friendship, and conviviality. This year, the president, an orthopaedic surgeon brimming with ideas and enthusiasm, told me there were 5000 people attending, mostly members and fellows of the college.

I expected a lot of obesity in the United States, from the literature and the statistics showing that their epidemic is worse than ours. The plane had a generous complement of obese passengers. On my first night in America, the eve of the meeting, the hotel was almost empty: only 11 were dining, but three of these were obese (not just overweight, but with overhanging bellies, hips, etc) and two of them were in their 30s. Each subsequent meal included its share, and servings of food were in accordance.

At the meeting, however, it suddenly struck me that there didn't seem to be any obese people attending. Soon I was on the lookout, and in five days of innumerable sessions and of

observing the migrations over the vast spaces and lecture halls of the St Louis Convention Center I spotted three—three obese in the 5000.

What a peg for a seminar. Is this the healthiest group in America? In the world? Whom to compare? Australia? Too small. Sweden? Far more so. Japan? How study? The selections, the diagnostic traps. . . . And yet, and yet, it's right isn't it?

Jerry Morris *emeritus professor of public health, London School of Hygiene and Tropical Medicine* (jerry.morris@lshtm.ac.uk)

We welcome articles up to 600 words on topics such as *A memorable patient, A paper that changed my practice, My most unfortunate mistake*, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for "Endpieces," consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.

School of Public Policy, University College London, London WC1H 9QU
Azeem Majeed
senior lecturer in primary care

Office for National Statistics, London SW1V 2QU
Kevin Carroll
specialist registrar in public health medicine

Division of General Internal Medicine, Department of Medicine, University of California San Francisco, San Francisco, CA 94143, USA

Andrew B Bindman
professor of medicine, epidemiology and biostatistics

Correspondence to: C B Forrest, Johns Hopkins Medical Institutions, 624 N Broadway, Room 689, Baltimore, MD 21205, USA
cforrest@jhsph.edu