

# Primary care

## Primary care in the United States

### Organisation of primary care in the United States

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The replacement of health authorities by primary care trusts in 2002 marked the beginning of a new chapter in the evolution of primary care in Britain's national health service. The explanations for these reforms include trying to improve the quality and accessibility of health services in the United Kingdom.<sup>1</sup> How these objectives will be achieved has been intensely debated and, aside from the issue of resources, the question of how to foster the evolution of primary care in Britain remains unresolved.

Despite differences in how the United Kingdom and the United States finance health care and in the equity in the distribution of resources, the challenges in delivery of primary care are similar in the two countries. This first article in the series focuses on the current organisation of primary care in the United States. Future articles will describe the US experience with performance measurement in primary care, referrals to specialists, and innovations in delivering ambulatory care services.

#### US primary care physicians

The United States has more specialists per capita than the United Kingdom, but the proportion of primary care physicians is similar (table 1). The US workforce of primary care physicians includes the specialties of family practice, general practice, general internal medicine, and general paediatrics (figure) and, for women patients, obstetricians and gynaecologists provide primary care. The specialty training and work role of family practitioners most closely resembles that of British general practitioners. The term general practitioner in the United States refers to doctors who did not complete a residency in a specialty. Unlike the situation in Britain, American general internists and paediatricians mostly work in offices sited in the community. Primary care physicians in the United States have historically also provided some inpatient care, while few provide home visits; most are in private practice; and about a third practise singlehandedly. It was believed that managed care contracting would create financial pressure for physicians to merge into larger groups, but even in California, where the managed care market has grown more than in other parts of the United States, the percentage of primary care physicians in singlehanded practice has remained at about 35% between 1996 and 2001.<sup>2</sup> Regardless of the

#### Summary points

Although America and Britain differ in how they finance health care, many aspects of delivery of primary care are similar in the two countries

Primary care is undergoing dramatic changes in America, as in Britain

After increasing the use of gatekeepers in primary care during the 1990s, the US healthcare system is abandoning this model

Occasional activities of many primary care physicians, such as care of inpatients and management of chronic medical conditions, are being concentrated in the hands of a smaller number of more specialised providers

Strategies need to be evaluated to determine whether they in fact improve the quality and efficiency of the healthcare system.

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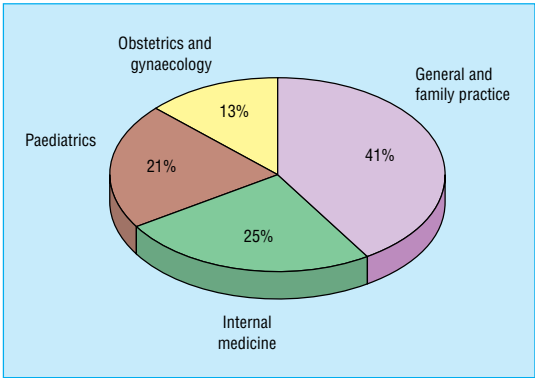
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setting, most primary care physicians will have both privately and publicly insured patients in their practices. A large number of public and non-profit (charity) primary care clinics are available in inner city and rural areas to care for uninsured people and others with restrictions on their access to care, but most ambulatory care for these patients is provided by private primary care physicians who often receive little or no payment for these services.<sup>3</sup>

During the 1990s, US managed care organisations rapidly adopted the NHS approach of using primary care physicians as gatekeepers, but unlike in the NHS, US patients were not accustomed to obtaining the permission of a primary care physician before seeing a specialist. US managed care organisations used primary care physicians as gatekeepers, hoping that they would both improve the quality of care and decrease the overall cost of services. The growth of gatekeeping in the 1990s in the United States was associated with an increase in the demand for primary care physicians,<sup>4</sup> but US primary care physicians never fully embraced the gatekeeper role. While some thought gatekeeping improved their role as care



Percentage of consultations by primary care specialty, United States, 2000

coordinators, for many the increase in paperwork outweighed the benefits.<sup>5</sup> Furthermore, specialist physicians, who largely continued to be paid on a fee for service basis, were unhappy with the barrier that gatekeeping created between them and their patients. Patients, although positive about primary care physicians, were dissatisfied when they perceived that their primary care physician was playing a role in keeping them from specialist care.<sup>6</sup> Primary care gatekeeping thus created a marketing problem for managed care organisations, and there was little evidence to show that it actually improved patterns of use.<sup>7</sup> More recently, managed care organisations have begun to retreat from using primary care physicians as gatekeepers and are reconsidering the role of primary care physicians in their systems.<sup>8</sup>

Primary care gatekeeping is less controversial in Britain than in America. None the less, changes in the NHS, particularly the growth of nurse practitioners, walk-in centres, and NHS Direct, have the potential to undermine the general practitioner's role as the coordinator of patient care. The US experience suggests this may lead to an increase in referral rates.

Beyond gatekeeping

In addition to experimenting with gatekeeping, health-care organisations are also changing the role of primary care physicians by carving some of their traditional roles into separate functions performed by specialised providers or teams. This approach represents, in part, an application of a "practice makes perfect" or volume-outcome strategy to primary care.<sup>9</sup> Studies of several hospital based services have found that the more often a service is performed, in general the better the health

outcome.<sup>10</sup> "Hospitalist" and disease management programmes are organised to create high volume niches out of areas of practice that comprise a small proportion of primary care physicians' workload that support and in some cases replace broadly based activities of primary care physicians.

Hospitalists

Hospitalists are doctors who work under contract with managed care organisations, hospitals, or large private practice groups and who take responsibility for the care of primary care physicians' patients when they are admitted to hospital (box 1).<sup>11</sup> This separation is familiar to British general practitioners, who are generally not responsible for the inpatient care of their patients, but the emergence of hospitalists in the United States represents a carving out of a traditional low volume function of many primary care physicians and the turning of this activity into a high volume function of only a few providers. US proponents of hospitalists believe that because these doctors spend more time in hospitals they offer a greater level of accountability, can practise more efficiently, and can be more accessible to patients than can traditional primary care physicians. Furthermore, they suggest that primary care physicians relieved of their hospital responsibilities can be more productive in their work in the community. Most studies of hospitalist interventions have used non-randomised designs and found that hospitalists care for their patients with shorter lengths of stay and with similar or better quality of care than traditional providers of inpatient care.<sup>12</sup>

US managed care organisations are rapidly increasing their use of hospitalists. In 2002 there were about 5000, with projected growth to 19 000 for the current US population.<sup>13</sup> About two thirds of primary care physicians in California reported that a hospitalist is available to care for the patients they send into hospital.<sup>14</sup> Although the use of hospitalists remains mostly voluntary in the United States,<sup>15</sup> the potential cost savings and quality improvement benefits of this approach may create pressure to make them mandatory.

Disease management

Disease management programmes have also helped to change the face of primary care in the United States. Disease management is a form of case management in which packages of healthcare services are designed to manage specific groups such as elderly patients or those with chronic diseases. The most common

Characteristics of primary care physicians, United States and United Kingdom, 1998. Values are medians unless indicated otherwise

	No per 10 000 people <sup>23</sup>	% of time for primary care	% practising singlehanded	Visits per week			Income (\$)	% of income from insurance	
				Office based	Hospital based	Home visits		Public insurance	Private insurance
United States†									
Family practice or general practice	3.1	100	46	100	5	0	132 000	27	40
General internal medicine	3.6	80	34	70	10	0	147 000	45	30
Paediatrics	1.8	95	29	95	6	0	120 000	20	60
United Kingdom									
General practice	5.4 <sup>25</sup>	100	9.8 <sup>26</sup>	132 <sup>27</sup>	0 <sup>27</sup>	9 <sup>27</sup>	74 938 <sup>28</sup>	100	0

\*Medicaid or Medicare.

†All data about the United States are from the American Medical Association's *Physician Socioeconomic Statistics*, 1999-2000 edition,<sup>24</sup> except number of physicians per 10 000 people.

‡British pounds converted to US dollars at a rate of \$1.56 per pound.

chronic disease management programmes have been for asthma, diabetes, and congestive heart failure. Typically, these programmes use doctors or paramedical providers to maintain contact with patients outside traditional clinical settings, to prevent exacerbations of disease. Patients suitable for these programmes can be identified through disease registers or more often through pharmacy, inpatient, and outpatient claims.

Many of these programmes claim to reduce hospital admissions and costs while improving patients' satisfaction and functional status. However, most reports are internal evaluations performed by private disease management firms themselves, rather than peer reviewed publications. The trials which have shown a benefit for disease management programmes generally rely on nurse or other paramedical case managers, enhanced patient education and communication, and provider feedback to achieve their goals (box 2).<sup>16</sup> For example, Rich et al reported a significant reduction of hospital readmissions in a randomised trial of a disease management intervention which included intensive patient education about congestive heart failure, treatment by an experienced cardiovascular research nurse, dietary assessment and instruction by a dietician, social service consultation, analysis of drug treatment by a geriatric cardiologist, and intensive follow up through home care services after discharge.<sup>17</sup> These programmes are increasingly making use of such methods as automated telephone surveys and instructions to perform surveillance and inform patients about their ongoing care.<sup>18</sup>

Disease management programmes can either be included in or removed from primary care. When they are included in primary care (the "chronic care model") the primary care physician remains the ultimate decision maker in caring for patients.<sup>19</sup> The disease management team, including a nurse case manager, standardises and supports the implementation of the primary care physician's management plan. On the other hand, some managed care organisations are taking these services and patients out of primary care. In this case, the standardised services for a particular group of patients are provided in parallel with ongoing routine care. These services may be obtained from a separate company, and the disease management team may be organised around a specialist rather than a primary care physician.

Whether the effectiveness of disease management strategies is associated with whether or not they are applied within or outside primary care is unclear. Since many patients with the chronic conditions that are being "disease managed" could have multiple chronic

### Box 2: Components of disease management programmes

- Leadership at clinic or provider level
- Information systems that can support complex clinical management
- Expanded roles for nursing
- Decision support for providers
- Patient education and activation in self management of disease
- Intensive patient education about their drugs

conditions, another concern is whether these disease management programmes will enhance or detract from overall coordination of the patient's care. Even in successful disease management trials, about 80% of patients were ineligible for randomisation, often because of comorbidities,<sup>20</sup> suggesting that the acceptability and widespread application of the programmes could be limited.

### Reactions of US primary care physicians to change

Despite the decline of gatekeeping arrangements and the emergence of hospitalists and disease management programmes, US primary care physicians do not seem to be unduly concerned about their changing work roles. Although gatekeeping might have elevated the role of primary care physicians in the US healthcare system, the more they became involved in this role, the more likely they were to report that the load was too great.<sup>21</sup> By contrast, they have reported that hospitalists and disease management programmes have decreased their workload, increased their practice satisfaction, and improved quality of care without lowering their income.<sup>14 22</sup>

### Conclusions

Primary care in the United States is evolving, but through marketplace pressures rather than as a result of government led reforms. Managed care organisations are fostering the development of new team arrangements and specialists to perform tasks that had been the province of the primary care physician. In some US settings primary care physicians are maintaining a central role, while in others they are being pushed aside.

The globalisation of healthcare ideas suggests that it may not be long before British general practitioners are confronted with the same pressures for change that US primary care physicians are experiencing. The formation and development of primary care trusts seems to be catalysing this process in the United Kingdom. Many such trusts are exploring not only the boundaries and options between primary and secondary care but also the roles of medical and paramedical providers. Despite the different financial frameworks, in both countries a fundamental question remains regarding the role of primary care physicians in improving access to and the quality and efficiency of the healthcare system. The growing concern with the costs and accountability of health care in both countries is raising expectations for improved performance. To maintain a role in the

### Box 1: Hospitalists

- Accept responsibility for primary care physicians' patients while in hospital, returning them to the care of their primary care physician on discharge
- Spend at least 25% of their professional time as the physician of record for inpatients
- Are available to facilitate and coordinate communication with patient, family, and healthcare team
- Are accountable for hospital quality and cost and are charged with leading improvement in services

healthcare system, primary care physicians will need to provide evidence of their unique contributions to patient care in an increasingly specialised profession.

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## *A patient who made me think*

### We should not play God

It was shortly before Christmas. Richard was 38 years old and had inoperable non-small cell lung cancer. Chemoradiotherapy had held the disease at bay for a while, but at the expense of his renal function. Two weeks earlier, he had been told that no further treatment was possible and to prepare for the worst. Dialysis was not an option, so there was no point in seeking a renal opinion. He had been discharged from the tertiary unit for palliative care.

The call came at 10 pm from the local chest physician. Richard was breathless, oligoanuric, and in extremis. A week earlier he had been at work holding down a high powered job. Abdominal pain meant that he was taking a high dose of morphine, but his quality of life remained good. His three young children and his wife were distraught. Things had happened too quickly. They were not prepared. He didn't want to die. Could anything be done?

It is rare to consider a patient with such advanced disease for dialysis, but something struck a chord. Perhaps it was because we were the same age. Perhaps it was the family. What would I want in his position? Who was I to deny treatment when he might just benefit? He was transferred to the dialysis centre, and we spent a long night stabilising him. Several times he nearly died, and I wondered if we were doing the right thing. Colleagues were sceptical, his oncologists incredulous. And yet, three days later, Richard left hospital, off all opiates and feeling better than at any time in the previous six months.

Over the next four months, I came to know Richard well. He knew that we had bought him only a little time, but he used that time. He never complained about dialysis, arguing that the months gained were beyond price, beyond inconvenience. He celebrated Christmas and the new millennium with his family, saw his youngest son's sixth birthday, and made his arrangements. He died in his sleep, at home, with his wife at his side.

Many months have passed, but I think of Richard often. Looking after him was an emotionally draining experience, but one of the most satisfying of my career. Above all, I believe that we did the right thing, and that we should not discriminate against people on the basis of their diagnosis or their expected prognosis. We do not have the right to judge quality of life. All we can do is offer information, advice, and, if asked, an opinion. We should not play God.

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