expensive. Furthermore, the economic analysis only assessed costs over 12 months. If dyspepsia is cured further savings will accrue in later years. Several economic decision models have shown that there is an economic advantage to the eradication of H pylori.<sup>8-10</sup>

The meta-analysis by Moayyedi shows that there is a small but definite benefit to treating patients who have non-ulcer dyspepsia for H pylori infection. In practice the benefits of treating patients who are infected with H pylori are likely to be greater. Family physicians commonly manage patients with uninvestigated dyspepsia, some of whom will have peptic ulcer disease that can be cured by eradicating H pylori. The lifetime risk of developing ulcers for people who are infected with H pylori is 5-15%.11 There is an expectation that treating patients who have H pylori will prevent them from developing gastric cancer, although there are no data from randomised trials to support this. A recent randomised clinical trial of 294 patients with uninvestigated dyspepsia in Canada found that treatment resulted in a sustained improvement in symptoms at 12 months in 50% of the patients treated to eradicate H pylori compared with 36% in the placebo group.<sup>12</sup> This result was significant, and seven patients needed to be treated to cure one patient. The trial also showed that treatment was cost effective.12

How should a family physician manage patients who have uninvestigated dyspepsia and are considered to be at a low risk for gastric cancer?13 The 20-40% of patients presenting with the dominant symptoms of heartburn and acid regurgitation can be confidently diagnosed as having gastro-oesophageal reflux disease and treated for it. Although the definition of dyspepsia used in clinical trials dictates that patients with gastrooesophageal reflux disease are excluded, most general practitioners consider reflux symptoms to be part of dyspepsia.<sup>13</sup> Assuming there is no reflux or symptoms that would make a doctor suspicious that more serious disease was present and if the patient is younger than 50-55 years old (above this range the risk of gastric cancer starts to increase) the patient should be tested for *H* pylori with a non-invasive test such as the urea breath test or a serological test.<sup>13</sup> If the test is positive the patient should be treated. However, 50-70% of these patients will continue to have symptoms of dyspepsia after the infection has been cured and they will need additional treatment.

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# Clinical ethics committees

They can change clinical practice but need evaluation

Research ethics committees, both local and for multicentre research, are now well established in the United Kingdom. Clinical ethics committees, which deal with issues that arise in clinical practice, are a more recent phenomenon. Earlier this year people from 14 clinical ethics committees within the United Kingdom met to compare their experiences—at a time when the pressure for such committees, or other mechanisms for dealing with the ethics of everyday practice, is growing.

The first clinical ethics committees in the United Kingdom developed for a variety of local reasons. Some were an institutional response to one or two problem cases. Others developed because a few clinicians were particularly concerned with, and interested in, the ethical aspects of clinical practice. Now that medical ethics is part of the core of medical education,<sup>1</sup> and with the high profile of medical ethics in the media, clinicians are increasingly aware of the ethical dimensions of practice. The medical profession is also under mounting pressure to ensure high standards of ethical practice. Inevitably, this will mean developing clear processes for determining and assessing those ethical standards. Clinical ethics committees at the level of NHS trusts, health authorities,<sup>2</sup> and primary care groups are likely to play an important part. Professional bodies will want such processes to be in place; the courts may consider them a part of due process; and clinical governance will need to include ethics within its remit.

Most published data on clinical ethics committees (often called healthcare ethics committees) come from the United States, where such committees have existed since the early 1980s. The Joint Commission on Accreditation of Healthcare Organisations requires hospitals to have a mechanism for addressing ethical issues in providing patient care, and it recommends a multidisciplinary ethics committee.<sup>3</sup> Nursing homes and long term care institutions also have developed committees in the United States.<sup>4</sup>

Clinical ethics committees in the United States typically perform one or more of three functions<sup>5</sup>: (*a*) individual case consultations in response to requests from clinicians or occasionally from patients or their families; (*b*) providing ethical input into hospital policies and developing guidelines; and (*c*) education of health professionals within the institution. In practice, case consultation is more likely to be carried out by individual ethicists or increasingly by small multidisciplinary teams which may include ethics committee members as part of the team.<sup>6</sup>

Clinical ethics committees, and other ethics support services, are developing in Europe and Australia. In the Netherlands clinical ethics committees are usually combined with research ethics committees, and in Australia many research ethics committees report that they also provide ethics advice on clinical issues.<sup>7</sup> In Germany the Christian association of hospitals (representing about a third of all German hospitals) has recommended that all hospitals in the association should have a clinical ethics committee.<sup>8</sup>

There are few published data on United Kingdom clinical ethics committees, though hospital committees have been described in London, Oxford,<sup>9</sup> and Nottingham<sup>10</sup> and more recently in a small NHS trust including a general practitioner hospital and community services.<sup>11</sup> We are currently studying the position of clinical ethics support services in the United Kingdom. Preliminary results suggest there are at least 20 committees throughout the United Kingdom and several NHS trusts are considering establishing a committee in the near future. United Kingdom committees usually report directly to the trust board, or are a subcommittee of another hospital committee. Most are in

acute trusts, although there are a few in community trusts and at least one in an ambulance trust.

Established committees tend to follow the North American model. Case consultation is less developed than in the United States, and most committees in the United Kingdom see ethical input into policy and guidelines as their main function. Indeed, American experience suggests that a model other than a committee is required for case consultation, and some committees in the United Kingdom are looking at this.

Clinical ethics committees can change clinical practice through policy development and case consultation, and indirectly through education and raising awareness of ethical issues throughout the trust. But evaluation is needed to determine whether these committees are influencing clinical practice. There have been no rigorous studies in the United States evaluating healthcare ethics committees and ethics consultation,<sup>12</sup> possibly because of the disparate nature of these services. If these committees are to develop effectively, they will need to communicate closely with each other to share experience and to establish the basis for systematic evaluation and research.

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# Saving lives during extreme weather in summer

Interventions from local health agencies and doctors can reduce mortality

Interest in the impact of weather on human health has grown enormously, largely due to predictions that over the next century temperatures will rise. A report in this week's journal (p 670) indicates that among Europeans any increases in mortality related to heat will be only temporary.<sup>1</sup> Other studies, however, in the United States and China have found that there will be a sharp increase in mortality related to heat if the globe warms as expected.<sup>2 3</sup>

In some ways the argument is moot because it is clear that heat is already an important killer in

many parts of the world. Weather variability, rather than heat intensity, is the most important factor defining human sensitivity to heat.<sup>4</sup> People living in areas where summer climates are highly variable are ill adapted to extreme heat, mainly because it occurs irregularly. Thus, there are large increases in mortality when an intense heatwave occurs in temperate cities, such as Chicago, New York, Rome, Shanghai, and Athens. One of the difficulties in assessing the impact of potential global warming on health is the lack of understanding regarding the future variability of the climate. If

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