urgent need in the community, many possible options are available to deal with the problem—not just telephoning 999. Patients can go to their general practitioner, telephone NHSDirect, treat themselves, call social services, or get help from a pharmacist. Often patients will not know that alternatives to telephoning 999 or seeing the general practitioner exist, and a single point of contact is needed where the patient could be put in touch with the most appropriate service.

Several major players are involved, but all tend to function independently. These include general practitioners, ambulance services, social services, primary care trusts, acute trusts, mental health services, pharmacists, children's trusts, the voluntary sector, and so on. These, together with other local initiatives, have all added to the complexity of choices. What we need urgently is coordination of all these options with planning and prioritisation of services on the basis of local needs. One possible solution lies in the formation of geographically based emergency care networks. At present the evidence base in support of emergency care networks is non-existent, but networks have certainly helped in services for cancer and coronary heart diseases.

Networks can operate at two levels. The higher level would cover a strategic health authority and deal with broader aspects of policy and cooperation between partners, as well as covering clinical areas not represented in every acute trust, such as major trauma. The local networks would cover an acute trust, the appropriate primary care trust or trusts, the mental health trust, social services, the voluntary sector, and all other partners. The network would meet on a regular basis and would have senior representation from the parent bodies. A first task might be to review existing services and identify problems and solutions. One area, for example, is the development of urgent care centres outside acute hospitals convenient for patients, staffed by emergency nurse practitioners and perhaps paramedics, and acting as a base for services out of hours in primary care. This requires cooperation between several of the partners. Staff could rotate between acute trusts, primary care, and the community.

Organising all this within the current organisational silos is difficult. Similarly, the current confrontational commissioning of services on a one to one basis between primary care trusts and individual providers does not help and interferes with a whole-system approach. The network could work out an appropriate service plan for the local community, set priorities, and then negotiate with the commissioner—ultimately itself becoming the budget holder. The final question is who should lead the network. Different models are already in operation. In some cases the primary care trusts lead. This is convenient but can also lead to competing interests as they are both commissioner and provider. In other places the chief executive of the ambulance trust has picked up the reins, which seems to be working well. Perhaps the chief executive of social services could fulfil this role—giving social services a greater role. Who leads the network probably does not matter so long as each partner organisation is committed to following the priorities chosen by the network as well as the overall model of care.

Much progress has been made in the past few years in developing and improving emergency care in England—but much more needs to be done. The next step is to establish empowered local emergency care networks.

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Long term outcome of treating schizophrenia

Antipsychotics probably help—but we badly need more long term studies

Schizophrenia is one of the most disabling of mental illnesses, affecting one in 100 people in their lifetime, some 80% of whom will experience chronic or relapsing symptoms.[1] What do we really know about its long term treatment?

The guidelines on schizophrenia issued by the National Institute for Clinical Excellence (NICE) describe antipsychotic drugs as "an indispensable treatment option for most people in the recovery phase of schizophrenia,"[2] and a recent meta-review of depot antipsychotic injections considered them to be an effective maintenance treatment.[3] Conventional antipsychotics (those acting via dopamine blockade, such as chlorpromazine or haloperidol), introduced in the 1950s, increased the proportion of patients who improved clinically noticeably from 35.4% to 48.5%.[4] Because of their mode of action these drugs generated serious side effects, such as parkinsonism or hyperprolactinaemia; hence new generation, atypical antipsychotic agents (such as clozapine, olanzapine, risperidone, quetiapine) have been used (and sold) increasingly since the mid-1990s.

Acting more via 5HT blockade, but with interestingly variable biochemical profiles, these newer drugs have been shown to be as effective as the conventional drugs in treatment and relapse prevention.[5] But they have yet to establish their longer term credentials in an illness that is usually lifelong.

The nature of schizophrenia as an illness (delusions, hallucinations, limited insight) leads to some 80% of patients relapsing within two years of a treated first episode (usually because of non-adherence to continuing

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medication), and only one in six patients remaining relapse free (and not needing medication) 10-15 years later.[6] However, recent critiques have shown that recovery and readmission rates in schizophrenia before 1950 were no different[7] and that antipsychotic agents might even do more harm than good.[8] Thus the marked decline in the numbers of patients in asylums, from the mid-1950s (in the United Kingdom from some 150 000 in 1956 to under 40 000 in 1990) is usually attributed, at least in part, to effects of the medication. But this decline could equally be seen as socially generated via fiscal policies and community care programmes.[8] Enhanced biological vulnerability to psychotic relapse might even be a result of the brain being made supersensitive to dopamine,[9] medication thus acting as a double edged sword, relieving the symptoms of illness but creating an increased potential for relapse once drugs are discontinued.

The World Health Organization's studies of relapse in the 1960s and 1970s showed better outcomes of schizophrenia, surprisingly, in developing countries than in industrialised ones, with over 60% of patients in poor countries asymptomatic after five years compared with only 18% in rich countries.[10] This finding was generally attributed to better social acceptance and support in agrarian communities, but it may have been related to less use of mainstream antipsychotic agents, and continued use of medication correlating with poorer outcome.[8]

Such criticisms rely on a somewhat selective viewing of the literature; more severe illnesses usually require higher doses of medication, thus creating the illusion that the medication creates the severity. More recent appraisals have identified other factors. These include the fact that we now have better definitions of what is and is not schizophrenia. Studies have identified the importance of the family in psychoeducational approaches,[1] especially the need to counter the relapse inducing effects of high expressed emotion (the term used to describe families having persistently critical or hostile attitudes towards their schizophrenic kin). We also know that long term studies show that patients with schizophrenia tend to stabilise anyway after about five years through the natural alleviations of the disease and increasing age and maturity.[11] Also we no longer have the large, backward, "demented," long stay asylum population,[4] and there is agreement that the duration of untreated illness with active symptoms tends to predict the patient's ability to recover—the shorter the better—and that relapse rates can be reduced by continuing with antipsychotics for at least two years after recovery.[1]

But there are no grounds for complacency, even with the new atypical agents. These may have their own longer term problems, weight gain and diabetes being the most obvious so far.[12] Treatment with any therapies, should include careful review of physical health, medication dosages, and consideration of graduated withdrawal. Such careful assessments are, of course, made difficult by the patients one cannot research: those who are non-compliant, who use alcohol or illegal drugs damagingly, and who constantly evade even the most diligent community teams.

The history of schizophrenia has shown that it can be a devastating illness and that medication has created at least a cohort of patients more coherent and articulate in describing their experience. But an outstanding need remains for continuity of care, adequately resourced, and for long term studies of outcome and treatments over decades rather than a few months. Such research fits poorly with the short term pressures of the research assessment exercise, drug company marketing policies, or career advancement.

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Hepatitis B infections

Universal immunisation should be preferred in Britain

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The hepatitis B virus causes up to a million deaths worldwide and 16 million healthcare related infections in the tropics every year.[1 2] In the United Kingdom, 4500 acute hepatitis B virus infections, more than 7500 new cases of chronic infection with hepatitis B virus (mainly in immigrants), and up to 430 cases of hepatitis B virus related hepatocellular carcinoma are estimated to occur each year, with estimated NHS costs alone of £26m-£375m ($48m-686m;€37m-538m) per year.[3] Approaches to prevention and treatment of hepatitis B have been reviewed in this issue and elsewhere (p 1080).[1–5] Vaccination and the implications of new screening and treatment strategies for carriers of hepatitis B virus in the Britain are discussed here. Immunisation strategies targeting multiple risk groups have failed to provide adequate coverage in Britain and should be replaced by universal immunisation.

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