pack and its side effects are among the lowest. Alternatively, olanzapine was the most effective agent, even though it was associated with the most weight gain and other metabolic side effects. Others might consider that perphenazine, which was in the middle range in effectiveness and side effects but cost much less than the others, is the best in terms of cost effectiveness.

Drug companies might be expected to selectively focus on the small marginal benefits of drugs they manufacture and sell. But pharmaceutical giants are not the only parties with financial conflicts of interest. Government agencies and insurance companies, with vested interests in paying as little as possible for care, might choose to focus on the lack of significant difference between older and newer agents, since the older ones have a clear cost advantage, and recommend the older agents as the best initial choice for patients.

Many questions remain.⁹ In the CATIE trial the dosing of all agents except olanzapine was set at or below that recommended by the Food and Drug Administration, while olanzapine could be given at 50% above the recommended dose. Could the (slight) advantage of olanzapine be a function of the higher dose? The study was not long enough to adequately assess the true health consequences of the metabolic changes, even though these adverse effects, as opposed to more immediate neurological problems, might be life shortening in the long run. Clozapine, which, yet again, turned out to be the best choice for those who did not respond to another agent,¹⁰ also produced troubling metabolic effects. Thus, choosing among the available antipsychotic agents involves difficult trade-offs. Truly novel agents are still needed.

What are clinicians to make of all this, in terms of selecting an antipsychotic drug for their patients? Patients themselves (and their care givers) need to be involved in the choice and informed about data that might help them with the decision. Such information should include the fact that efficacy differences between older and newer drugs (with the exception of clozapine) are small, if they exist at all. Patients and care givers should also be aware of the trade-offs between fewer neurological side effects (including akathisia, parkinsonism, or tardive dyskinesia) and more adverse metabolic effects (such as weight gain, hyperlipidaemia, and hyperglycaemia).

For patients who do not respond well to one antipsychotic drug the evidence is consistently in favour of

clozapine as the agent most likely to be effective. Yet the rates of clozapine prescribing appear to be far below what would be expected if this was being recommended for all patients who do not respond to treatment. Not only clinicians but patients and families may need to be better educated about clozapine, and treatment guidelines need to be revised to reinforce this.

Cost may be a critical barrier to accessing medication, particularly for long term treatment. Clinicians and patients for whom cost is a key concern should be relieved to know that the cheaper older antipsychotics have not become obsolete.

Rohan Ganguli *professor of psychiatry, pathology, and health and community systems*

(gangulir@upmc.edu)

Martin Strassnig *resident in psychiatry*

Western Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh, PA 15213, USA

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Should UK allergy services focus on primary care?

The time is ripe to rise to this challenge

The marked increase in the prevalence of allergic disease over the past few decades has left the NHS ill prepared. In response to the Health Select Committee's damning report in 2004 on allergy services,¹ the Department of Health and the Scottish Executive are currently reviewing all aspects of provision of allergy care. Their separate reports will be published shortly. A key question is whether it would be more effective for the NHS to emulate the model used in other parts of Europe and North America and invest in expanding specialist services for allergy

or—more controversially—to concentrate efforts on developing primary care services. This choice will have substantial and lasting implications for people with allergies in the United Kingdom and will probably affect the thinking of policy makers in other parts of the world who are grappling with similar rapid increases in the prevalence of allergic disease.

Around one in three of the UK population have allergic symptoms at some point in their lives.² Localised or organ specific allergic disorders such as atopic eczema, allergic rhinitis, and asthma are

common, and small but increasing numbers of patients are now also experiencing more acute systemic allergic disorders such as anaphylaxis.³ Multiple allergies are common, affecting an estimated 10% of children and young people (<45 years) and 5% of older people and are particularly problematic to manage, both for patients and healthcare providers.^{2 4 5}

Most patients with allergic problems manage their own conditions and seek help from their primary care teams when necessary. Some also need support from general paediatricians and specialists such as chest physicians and, in some regions, from clinical immunologists and allergists. However, this model of care has serious drawbacks.¹

Most doctors trained in the United Kingdom have had few opportunities for undergraduate or postgraduate training in the diagnosis, assessment, and management of patients with allergic problems. Also, accurate diagnosis is hampered by the difficulty in obtaining, financing, and interpreting simple diagnostic tests, such as skin prick and specific IgE testing. Furthermore, in more complex cases needing specialist advice the lack of allergy specialists means that primary care teams typically have little choice but to refer to local specialists with limited expertise in managing multisystem disease.

Patients often have to see more than one specialist—for example an ear, nose, and throat surgeon for allergic rhinitis; a gastroenterologist for food allergy; and a respiratory physician for asthma.⁴ Currently, only eight specialist allergy centres in the United Kingdom provide a comprehensive package of care led by a consultant allergist, and all of them are in England.⁶

The national campaign to improve the provision of allergy services has focused so far on lobbying for more specialist training posts, with little success.^{2 7} Given the very large numbers of patients with multiple allergies, the demonstrable failure of allergen avoidance measures in improving clinical outcomes for patients with eczema, allergic rhinitis, and asthma,^{2 8 9} and the costs of establishing consultant led specialist centres, we believe it would be more pragmatic to improve service provision in primary care. The report by the House of Commons Health Select Committee and the Department of Health's response to it¹⁰ agreed that primary care organisations should focus on developing and implementing local service models for managing allergy.²

Wider training and better access to allergy testing throughout general practice would be welcome, but an intermediate level of specialism could be provided by regional practitioners with specialist interests in allergy, who could also act as catalysts for a wider primary care based allergy service. A regional practitioner (a general practitioner or nurse consultant) with a specialist interest in allergy would organise an allergy clinic to serve a whole primary care trust, taking referrals from local practitioners.

Unpublished data from Education for Health—a training organisation for primary care staff—show that approximately 800 primary care staff have had diploma level training in allergy that would prepare them for this role.^{11 12} Furthermore, this model is already running in at least three parts of the United Kingdom, with support from and the ability to refer

patients to one or more specialist centres. No prospective evaluations from these units have been published yet, however.

Advocating primary care led allergy services in the current financial climate in the NHS carries the risk that nothing will happen. Improving standards of care will depend on having sufficient resources for better postgraduate training, better allergy testing, and better evidence on which outcome measures should be incorporated into future incarnations of the performance criteria which general practitioners have to meet—the UK general medical services quality and outcomes framework.¹³

This is not to say that there should be no investment in secondary and tertiary allergy services. On the contrary, these services do need more funding and more equal distribution throughout the United Kingdom.

Mark L Levy *senior clinical research fellow*

(Mark.Levy@ed.ac.uk)

Aziz Sheikh *professor of primary care research & development*

Division of Community Health Sciences: GP Section, University of Edinburgh, Edinburgh EH8 9DX

Samantha Walker *director of research*

Education for Health, Warwick CV34 4AB

Angie Woods *service improvement manager*

Harrow Primary Care Trust, Harrow HA1 3EX

Competing interests: MLL is a member of the UK National Allergy Advisory Group and a council member of the British Society for Allergy and Clinical Immunology. SW works for an organisation running postgraduate allergy training courses. AS serves on the Scottish Executive's Review of Allergy Services in Scotland Working Group. MLL, SW and AS are founding members of the Primary Care Allergy Network.

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