

the profession. Operating in the public domain, and with direct accountability to parliament as well as intermittent formal review of its procedures (also recommended in the report), it can only damage itself and the profession if it allows any actions to be interpreted as acting leniently to underperforming doctors. This is the fundamental paradox that we shall all have to embrace: that the trust between ourselves and our patients on which we all depend can only be protected by strict enforcement of tough and demanding standards. Any of us, including me, may fall foul of them at some stage. We must hope that the distinction between human error and recurrent underperformance is one that the GMC can operate consistently and fairly in a way that will not open it, and by

extension the rest of us, to the charge of excessive leniency. Paying for and supporting a body in the hope that it will be tough with us in its imposition of sanctions is difficult, and is perhaps why the GMC is not the only body in the UK contributing to the very low opinion in which professional self-regulation is generally held.

There is one other reason for welcoming the GMC's stay of execution. If this report is going to usher in a new age of a tougher stance towards underperformance, it is likely to be much more acceptable to the profession if it comes from its peers, rather than from some quasi-independent body of lay people. But it had better be tough.

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Human metapneumovirus

Children with respiratory infections frequently present to primary care. For doctors the diagnosis and management of these children is often straightforward — most infections are self-limiting and symptomatic treatment with antipyretics is the standard advice. 'Viral infection' is medical shorthand for saying the child has a minor illness and will recover without an antibiotic prescription. But parents may be dissatisfied with a diagnosis of 'it's just a virus' and their satisfaction with consultation enhanced by a more precise diagnosis and prognostic information about the likely course of the illness.^{1,2}

Using classical microbiological techniques, such as culture and immunofluorescence, a viral aetiology (for example rhinovirus, adenovirus, parainfluenza, influenza, respiratory syncytial virus [RSV]) has been identified in about 60% of children with respiratory infection. Advances in genetic diagnostic techniques, and in particular the use of polymerase chain reaction, have improved our ability to increase the percentage of children for which we can identify a viral cause for their respiratory infection. A significant recent advance in our understanding of the aetiology of viral respiratory infections in children has been the identification of a

commonly acquired, but newly discovered, virus — human metapneumovirus.

Human metapneumovirus was first reported in *Nature* in 2001 by a virology group from Holland.³ They discovered a paromyxovirus, closely related to avian pneumovirus, in 28 children with respiratory infection. Until their discovery avian pneumovirus, which causes rhinotracheitis in turkeys, was the sole member of the metapneumovirus genus to be identified. The larger subfamily of pneumoviruses include, among other viruses, a major player in respiratory infection in children — RSV. What was especially fascinating about their discovery was the demonstration by serological work on stored blood specimens taken in 1958 (from subjects aged 8–99 years) that human metapneumovirus has been circulating for more than 50 years, and that by the age of 5 years virtually all children have been exposed to the virus.

Since publication of the human metapneumovirus genus various groups from around the world have begun to document the incidence of infection and associated clinical features. Researchers from Tennessee retrospectively examined 248 specimens collected between 1976 and 2001 from children with respiratory

infection which had previously tested negative for virus.⁴ Forty-nine (20%) tested positive for human metapneumovirus RNA. They concluded that 12% of respiratory infections in their cohort were attributable to human metapneumovirus.

For most children the virus causes a mild upper respiratory infection. In others an influenza-like illness may result, with fever, myalgia and vomiting. Reports have described bronchiolitis, croup, pneumonia, conjunctivitis, otitis media, febrile seizures, diarrhoea, rash and altered liver function tests following infection. Preterm infants may be more susceptible. Serological evidence of universal exposure suggests that some infections are sub-clinical.

Asthma exacerbations secondary to viral respiratory tract infections and viral associated wheeze in young children commonly present in primary care. A recent Finnish study reported human metapneumovirus in 8% of consecutive children admitted to hospital with acute respiratory wheezing.⁵ In 70% of these children human metapneumovirus was the sole viral agent. Larger studies are required to determine the morbidity resulting from infection in children with asthma, but it is clear that this newly discovered virus has an important role in causing wheeze.

In addition to its close phylogenetic relationship, human metapneumovirus resembles RSV in that first infection does not seem to induce persistent immunity. Repeated infections with RSV are common throughout life. Indeed, 5–25% of all upper and lower respiratory infections in the elderly are due to RSV. Despite evidence of universal exposure by the age of 5 years, human metapneumovirus has also been documented to cause respiratory illness in young adults and in the elderly.⁶

The temporal pattern of human metapneumovirus infection is poorly defined. It certainly circulates during the winter, probably without the usual narrow monthly confines of RSV (November to January) and influenza (January to March). But we await descriptions of any seasonal peaks. Co-infection with other viruses may occur and there have been reports of significant worsening of RSV bronchiolitis if human metapneumovirus is present as well. Before the novel coronavirus causing severe acute respiratory syndrome (SARS) was discovered, human metapneumovirus

was mooted as a potential causative agent.

Human metapneumovirus is an important cause of respiratory infections in children. Despite the very recent identification of the virus, live attenuated vaccine development is already under way.⁷ Prevention of acquisition and transmission would significantly reduce the burden of childhood respiratory illness in the UK. Meanwhile, the development of near-patient tests will improve diagnostic accuracy of common viral infections in UK primary care and a full description of the clinical course of the infection will aid clinical management. Parents rightly want to know what is causing their child's symptoms and how long they are likely to last. Moreover, making a precise diagnosis of human metapneumovirus infection is sure to increase professional satisfaction among doctors working in primary care.

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The National Programme for Information Technology

The GP as gatekeeper — a bastion worth fighting for?

When Vannevar Bush described a process for making and following links between documents on microfiche in 1945,¹ did he have any idea that his suggestion would revolutionise the promulgation of information through society via what has become the internet? Chances are that he did not.

The invention of the internet has shown us how important a single change in the medium of information can be. The National Programme for Information Technology (NPfIT) has the potential to produce an equally significant impact in reforming the way that patient records are transcribed, transmitted and stored. More importantly, it has the potential to change forever the way in which health care is provided. We seem to be impervious to the implications of this change.

The rationale behind the development of NPfIT is a compelling one. The demands of the 21st century are often more than current healthcare systems can handle. Governments are beginning to realise that the utilisation of modern technologies is necessary in order to cope with these growing demands². As a result, NPfIT has captured the attention of international political, medical and public communities alike. It is human nature to be drawn towards what is new. In doing so, we often overlook the potential detractors of whatever it is that draws our attention.

Inevitably, the major concerns GPs have about the impact of NPfIT focus on choice of systems and potential disruption to current service. However, what doesn't seem to be recognised is that the vision of

the health service that underpins NPfIT is different to that which we know today. NPfIT is driven by a political agenda to change health care. One of the main thrusts of this for primary care is a 'supermarket' approach. A patient can select which service they want to use from a variety of general practices, walk-in centres, and privately provided and specialist services. Information systems are seen as the catalyst to this, as anyone can provide care given that they have access to the records. A logical conclusion from this is that the GP will no longer act as 'gatekeeper' (Anonymous, personal communication, 2004).

This vision is supported by a growing consensus that the traditional paternalistic culture of health care is gradually giving