

Pandemic Flu: the UK Response

The current swine flu pandemic is a new influenza type 'A' (H1N1) infection that, as the name implies, is believed to have originated in pigs. The virus acquired the ability to jump species from pigs to humans and, crucially, to sustain transmission from human to human. These are characteristics associated with a pandemic influenza strain; on 11 June 2009 the World Health Organization formally declared the outbreak a pandemic.

As little was known about the new flu virus when the outbreak started, it was sensible to take all necessary precautions to try and slow its spread while we learned more about it. In this the UK was successful. During this containment phase the Department of Health and the NHS gained precious time to understand the characteristics of the new virus, to build up medical supplies and to make significant progress towards developing a vaccine.

The scientists were always clear that it would not be possible to contain the virus indefinitely. By early July there were signs that its spread was accelerating, with the number of new cases in the UK doubling every seven days and the development of hotspot areas where swine flu was particularly prevalent. In view of the need to treat the increasing numbers of people contracting swine flu in the community, the operational emphasis thus shifted from a 'containment' to a 'treatment' phase. Among other measures, this meant that cases of swine flu could be confirmed by clinicians on the basis of patients' symptoms rather than waiting for laboratory testing. On 16 July, the chief

medical officer announced the launch of the National Pandemic Flu Service. This will support GPs in the diagnosis of swine flu and the distribution of antivirals, and will allow people with suspected swine flu to be diagnosed and given vouchers for antivirals via a dedicated call centre or online.

The World Health Organization considers the UK NHS plans for dealing with a flu pandemic to be among the best in the world. Every local NHS organisation has a pandemic plan, and in the first stages of the swine flu outbreak, local responders worked to previously agreed planning assumptions, as set out in the November 2007 National Framework for Responding to an Influenza Pandemic. These were based on the analysis and modelling of data both from the UK and abroad, with a number of parameters each being taken at their 'reasonable worst case' value, intended to ensure that plans were sufficiently robust and flexible to deal with the range of possible outcomes.

Preparing for Impact

While not an exact science, we can also gain a sense of the potential scope of the virus by looking at impact and patterns of behaviour in previous pandemics. Twentieth century pandemics moved around the world in two or three waves, with increased severity in the subsequent waves in the outbreaks of 1958-59 and 1968-69.

Based purely on how these previous pandemics behaved, it is possible that as many as 25-50 per cent of the UK population could be infected by H1N1, and dealing with an influenza pandemic

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Assessing the successes and failures in the global and UK response to swine flu, RUSI opens the debate about the UK's emergency planning capabilities.

on this scale will be a major challenge to the operation of all business sectors. Depending on the type of business, some services will need to be suspended or scaled down. The pandemic is likely to be more sustained, widespread, and in many respects less predictable than other types of emergency such as flooding or terrorist incidents. Levels of staff absence and the pressures placed upon resilience and communications systems may be unprecedented.

Staff absence during the pandemic may also result in other societal disruptions. These may include national or localised fuel shortages, transport interruptions and possibly temporary shortages of food and other consumables in supermarkets. In short, all those sectors of the economy that rely on 'just-in-time' delivery may be affected.

Human Resources

Although pandemic influenza planning needs to be aligned with strategies to cope with other major incidents, it is one that presents its own challenges in terms of duration, breadth of impact and geographical spread. To these must be added the further complications of asymmetric impact, with individual localities being affected differently at any given stage. Furthermore – and again in contrast to a localised major incident



New planning assumptions announced on 16 July should go some way towards preventing further infection, as swine flu continues to spread across the UK.

Photo courtesy of Roger Elaws.

– healthcare providers will be directly affected, possibly disproportionately so. Workforce management of the pandemic may therefore need to focus on the possibility of long-term occupational stress; a scenario more akin to the type of circumstances that induce post-traumatic stress disorders as opposed to the adrenaline rush of the ‘short, sharp’ emergency where the natural biological fight-or-flight mechanisms provide a partial insulation from event trauma.

Equally, no other plans – short perhaps of full-scale conflict planning – are required to assume the possibility of such widespread nationwide staff unavailability over a protracted period, with the resultant stresses on all parts of the economy. Again, this is particularly so for the healthcare sector, which could face an unprecedentedly high level of demand at exactly the phase when it has the fewest staff available. Plans also need to take account of the possibility of subsequent waves and the need not just for ongoing business continuity but also for post-pandemic recovery. While there will be clear lessons to be learned for planners charged with responding to, say, bioterrorist incidents, the most likely longer term benefit will be in our better understanding of how to address future major disease outbreaks, whether caused by other variants of influenza, like

the H5N1 Avian Flu virus, or previously unreported infections such as SARS.

In responding to these challenges, the NHS has identified a number of priorities, several of which will also be relevant to other organisations. These include the appointment of a full-time director-level lead dedicated to flu preparedness and resilience; stress testing of pandemic preparedness plans to ensure that the provision of high-quality care can be sustained both now and during a second sustained pandemic wave; and understanding and testing capacity restraints that may be caused through increased demand and workforce absences.

Getting the Message Right

Communications planning also forms an essential core element of pandemic influenza planning. Within the health service, specific priorities at present include wider communications and support for staff, and discussions around future staff vaccination programmes. NHS organisations are also working with local partner organisations to ensure that their role, channels of communication and ways of working during any second sustained wave are clear.

Effective communications are essential to allay concerns and mitigate the

business risks posed by the pandemic, and clear communications from trusted sources are recognised as the most effective single mechanism for sustaining morale, whether among staff or the public. General Practitioners are patients’ primary sources of contact and accordingly NHS organisations will need to ensure that communications to GPs are clear and help maintain public confidence in the UK’s approach to managing the pandemic.

Despite the many challenges, planning for flu outbreaks has been underway in the NHS for years. All parts of the NHS will be working to ensure that the organisational focus and resources devoted to managing the pandemic are ready. Everything needs to be in place, from the establishment of anti-viral collection points in the community as part of the National Pandemic Flu Service, to planning for larger numbers of hospitalised adults and children. Hospitals, Primary Care Trusts and ambulance services will all be using the next few weeks to ensure that they are prepared for a potential major flu outbreak in the autumn.

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Comment

Rather than the short sharp shock of 7/7, or the more predictable but nonetheless fast and furious arrival of the summer 2007 floods, swine flu has crept up on us slowly.

The current pandemic is primarily a health issue. Security experts in particular may well be wondering why they should be taking notice. They may dismiss the idea that there are any lessons to be learned that might inform our ability to respond to more ‘serious’ threats. Yet we have an enormous amount to learn, both from what we have seen so far and from what is to come.

As we assess the situation, we must guard against levelling criticism too freely, or expecting the impossible where the possible has been delivered efficiently. Despite the strain they have been under, GPs have coped: those who have needed Tamiflu or hospitalisation have received it.

This is not to pretend, however, that everything has been perfect, and that the response has been completely faultless. It has, inevitably, been a learning process that will identify issues as it progresses, unearthing more unknown unknowns as it goes along. Emergency planners are already realising that in planning for the worst case scenario (in this instance, 750,000 dead from H5N1), we perhaps spent too little time considering the effects of the ‘not-so-bad’ scenario, particularly in terms of how the outbreak was communicated, both to the public and through the media. Perhaps more awareness of this would have enabled potentially conflicting messages – about predicted numbers of deaths, about dealing with large numbers of mild symptoms against large numbers of severe symptoms, about when and when not to call GPs and other helplines – to be headed off. Moreover, we need to pay more attention to the terminology we use. For instance, was it well-enough understood that the ‘containment’ phase was not a time during which pandemic flu could be

made to go away, or be cured, but was a holding phase, a slowing down of the spread of the infection?

Overall, however, these have been minor issues to overcome and the government has made the right moves in seeking to contain and treat current infections. There is now an opportunity to take stock and be reminded of the value of emergency planning, and the importance of testing those plans in the most realistic scenarios possible.

As with so many emergencies, the issues we need to consider relate far more to the consequence than the cause. Gaps will emerge in the planning that has been carried out to deal with pandemic flu, but they are unlikely to be specific to only this scenario. Let us ensure that they are plugged properly, while we have the time and space to do so. Next time, we may not be so lucky.

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