

# 9 The health and social care response

An influenza pandemic will result in intense and sustained pressure on all parts of the health and social care system, limiting the scope for mutual aid and threatening to overwhelm services at its peak. Protecting human health is the primary objective of the UK's response strategy. An effective response has the potential to reduce the proportion of the population that may develop influenza or become critically ill, thereby saving lives, alleviating suffering and reducing the social and economic impact. To limit the spread of infection, national and local messages will emphasise that anyone with influenza-like symptoms should stay at home and seek help by telephone via the National Flu Line service rather than attending surgeries, hospitals or other healthcare facilities, unless by prior arrangement. Organisations therefore need to adapt and reorganise to provide treatment and support in a home setting whilst maintaining other essential care and critical services.

More detailed operational guidance for health and social care organisations is available at [www.dh.gov.uk/pandemicflu](http://www.dh.gov.uk/pandemicflu)

## 9.1 Aims

The health and social care response to an influenza pandemic should reduce mortality and morbidity by:

- maintaining surveillance to detect the emergence of a novel virus strain or any illness attributable to it, monitor its spread and health impact, describe the illness and inform the response
- providing prompt access to rapid and reliable diagnostic tests
- reducing the severity of illness and incidence of complications in infected individuals
- reducing disease transmission and rates of illness by applying individual and community infection control measures
- adjusting responses to reflect emerging epidemiological data
- developing surge capacity to meet expected demand, recognising that this will require a redefinition of boundaries between primary and secondary care
- making targeted and effective use of potentially scarce healthcare skills, facilities and resources
- reducing or ceasing non-essential activity as demand increases but maintaining essential care for emergencies or patients with chronic or other illnesses
- assessing all symptomatic patients rapidly and treating promptly with antiviral and other medicines if indicated

- providing effective treatment for those suffering complications
- educating the community and providing public advice and information
- providing vaccination, if and when suitable vaccines are available
- providing data to monitor the impact, effectiveness and adverse effects of interventions.

## 9.2 Principles underlying planning and response

Health and social care organisations should apply the following principles to their planning and response.

- Response arrangements should be based on strengthening and supplementing normal delivery mechanisms as far as is practicable.
- Interventions will be applied where they achieve maximum health benefit, but may also be required to help maintain essential services – political decisions will be necessary if there is a conflict of interest.
- Plans should be developed on an integrated multi-agency basis with risk sharing and cross-cover between all organisations.
- Plans should encourage pan-organisational working, seeking to mobilise the capacity and skills of all public and private sector healthcare staff (including students and those who are retired), contractors and volunteers.
- Although visiting all cases will not be possible, primary care plans should be based on influenza patients avoiding leaving home as far as possible.
- Initial telephone-based assessment is likely to be necessary to meet demand.
- Primary care response strategies should focus the available capacity and clinical skills primarily on treating those suffering with the complications of influenza or requiring other essential clinical care and assessing young children or patients in groups identified as being at particular risk.
- Antiviral medicines should initially be available to all patients who have been symptomatic for less than 48 hours within 12–24 hours of reporting symptoms.
- Response measures should maintain public confidence and 'feel fair'.
- Treatment and admission criteria should remain clinically based and hospital admission criteria should be applied in a transparent, consistent and equitable way that uses the capacity available for those who are most seriously ill and most likely to benefit.

- Plans should recognise the need to respond to psychosocial issues and concerns such as anxiety, grief and distress and for sympathetic arrangements to manage additional fatalities.

### 9.3 Assumptions for health and social care planning

In order to allow sufficient lead time to finalise and implement operational response arrangements, respective health departments will need to make decisions to reduce or change NHS services and, where appropriate, to modify or suspend some normal performance targets at UK alert level 2. A graded approach based on decisions proportionate to local impact made by SHAs in England and their equivalents may be appropriate.

Health and social care organisations need to ensure that their response plans include provision for enhancing, scaling down, or ceasing some services as the pandemic threat increases. They should use the following planning assumptions to ensure that response arrangements are resilient and robust, but must be prepared to modify plans should emerging information change.

#### 9.3.1 Severity of illness

- Up to 50% of the population may show clinical symptoms of influenza over the course of a pandemic, and up to 25% of those may develop complications.
- Up to 2.5% of those who become symptomatic may die.
- Up to 22% of influenza cases can be expected during the 'peak week' of a pandemic wave.
- Up to 28.5% of symptomatic patients (including all children under three) will require assessment and treatment by a general medical practitioner or suitably experienced nurse.
- Up to 4% of those who are symptomatic may require hospital admission if sufficient capacity is available. Average length of stay for those with complications may be six days (ten if in intensive care).

#### 9.3.2 Health and social care demand

- A short epidemic would put greater strain on services than a lower-level but more sustained one.
- Hospitalisations and deaths are likely to be greatest if the highest attack rates are in older people. The lowest burden on healthcare might be associated with higher attack rates in adults aged 15–64.

- Total healthcare contacts for influenza-like illness could increase from around 1 million during a 'normal' season up to 30 million, given a 50% clinical attack rate during a pandemic, but it will not be possible to refine estimates until person-to-person transmission begins.
- New healthcare contacts for influenza-like illness can be expected to reach 11,000 per 100,000 population per week (50% clinical attack rate) during the peak pandemic period. Peak consultations during seasonal influenza periods in recent years have been between 200 and 250 per 100,000 population per week.
- Peak demand could last for one to two weeks and local epidemic waves for six to eight weeks.
- Most patients will be treated at home with antiviral medicines initially.
- Children within the normal weight range for their age who have high fever and cough or influenza-like symptoms should:

<b>Under 1 year</b> or at high risk of complications (due to severe co-morbid disease)	Be seen and assessed by a GP or hospital emergency department
<b>1–2 years</b>	Be seen and assessed by a GP or other health professional suitably qualified and experienced in the care of children
<b>3 years +</b>	Be assessed by the National Flu Line service using a clinically based paediatric triage protocol and referred for antivirals or to a medical practitioner if indicated.

- Assuming a complication rate of 25%, a 50% clinical attack rate and those under three needing to see a health professional, general practice can expect to see 3,135 influenza patients per 100,000 population per week at the peak.
- Some 2,000 per 100,000 population may require hospital admission for acute respiratory and related conditions at a 50% clinical attack rate – an increase of at least 50% on normal demand.
- Demand for hospital admission can be expected to increase up to 440 new cases per 100,000 population per week at the peak, given a 50% clinical attack rate, and will exceed available acute hospital capacity.
- Demand for critical care beds could rise up to 110 per 100,000 population per week at the peak, given a 50% clinical attack rate, and would exceed available capacity.

- An increase in the number suffering from influenza and its direct complications may be accompanied by other demands caused by anxiety and bereavement and by service provision challenges exacerbated by the depletion of the workforce and logistical difficulties.

Tables 4 and 5 estimate anticipated cases, healthcare contacts, GP consultations, hospital admissions and deaths based on a range of clinical attack rates and a uniform attack rate across all age groups.

**Table 4: Expected healthcare demand over the course of a pandemic**

	25% attack rate		35% attack rate		50% attack rate	
	Per 100,000 people	Per GP practice	Per 100,000 people	Per GP practice	Per 100,000 people	Per GP practice
Clinical cases	25,000	1,500	35,000	2,100	50,000	2,900
GP consultations	7,130	430	9,980	600	14,250	830
Hospital admissions (rate 4%)	1,000	60	1,400	90	2,000	120
Deaths (fatality rate 2.5%)	625	40	875	60	1,250	80

**Table 5: Expected healthcare demand during the peak of a pandemic**

	25% attack rate		35% attack rate		50% attack rate	
	Per 100,000 people	Per GP practice	Per 100,000 people	Per GP practice	Per 100,000 people	Per GP practice
Clinical cases	5,500	330	7,700	470	11,000	640
GP consultations	1,570	95	2,200	135	3,135	185
Hospital admissions (rate 4%)	220	15	310	20	440	30
Deaths (fatality rate 2.5%)	140	10	200	15	280	20

(Indicative demand per general practice is based on practice numbers from the Office for National Statistics.)

### 9.3.3 Finance and performance targets

As 'core' business is traditionally focused on those activities that relate to performance and financial targets, the UK health departments (directorates in Scotland) should recognise that decisions to modify or suspend some performance targets at UK alert levels 2/3 will be necessary. Further guidance will be issued in due course.

## 9.4 Healthcare delivery modes

Normal patient pathways and service delivery arrangements will need to be adapted in a pandemic scenario as additional demand saturates or threatens to overwhelm available capacity, staffing or other resources. Alternative arrangements and strategies need to be developed to cope with likely numbers and implemented as demand increases. These are likely to include:

- the introduction of a telephone-based initial assessment sift of all symptomatic patients and authorisation for antiviral collection or referral to general practice assessment by trained lay operators following clinically approved algorithms
- provision of a wider range of treatments by health professionals other than GPs (eg nurses, paramedics, pharmacists, dentists) following agreed guidelines and using prescription-only medicines under agreed authorisations
- care of patients, who under normal circumstances would be admitted to hospital, in their own home, residential setting or temporary intermediate facilities by GPs and community-based healthcare teams
- treatment of severely ill patients in areas of a hospital not normally used for providing acute medical care by medical and nursing teams who do not normally manage such patients
- treatment of patients in private healthcare facilities not normally used for acute medical care by healthcare teams that do not normally manage such patients.

The Department of Health will consult on any necessary changes to medicines or other legislation that may be required to implement these alternative operational arrangements.

## 9.5 Clinical guidance

The British Thoracic Society, British Infection Society and Health Protection Agency (HPA) have produced joint provisional guidelines for the clinical management of patients with an influenza-like illness during a pandemic. They describe the clinical features and cover assessment and treatment of adults and

children in hospital or community settings once cases are identified in the UK (alert level 2). The guidelines are regularly reviewed and updated, are based on optimal or most desirable care standards and may need to be varied to reflect capacity, shortages or constraints as the pandemic develops.

Guidance on the clinical management of patients with influenza-like symptoms during a pandemic is available at [www.brit-thoracic.org.uk/PandemicFlu.html](http://www.brit-thoracic.org.uk/PandemicFlu.html), [www.dh.gov.uk/pandemicflu](http://www.dh.gov.uk/pandemicflu), [www.britishinfectionsociety.org](http://www.britishinfectionsociety.org) and [www.hpa.org.uk/infections/topics\\_az/influenza/pandemic/default.htm](http://www.hpa.org.uk/infections/topics_az/influenza/pandemic/default.htm)

## 9.6 Dealing with initial cases

If a pandemic emerges in another country, the UK would be at a heightened state of alert and an increased demand for advice and consultations can be anticipated for all kinds of respiratory tract infections, including many that would normally be managed using over-the-counter remedies. During any heightened alert period, it will be important to ensure that this demand is effectively managed to maintain service continuity.

The consultant responsible for communicable disease control in the relevant area will provide initial advice on patient management, containment strategies and follow-up actions. At UK alert levels 1 and 2 – and initially during level 3 – all patients fulfilling the case definition criteria and presenting with influenza-like symptoms should have samples taken and sent for virological and, if relevant, microbiological investigation.

Epidemiological information should be collected and forwarded to the HPA's central database for collation and analysis. Once activity is widespread (UK alert levels 3 and 4) treatment will be largely empirical. Virological tests are not routinely recommended or likely to be readily available and bacteriological testing should be informed by the current clinical guidelines. The HPA will maintain a detailed database for the first few hundred cases, switching to aggregate surveillance data thereafter.

## 9.7 Providing care in a community setting

Most sufferers are likely to experience typical influenza symptoms of varying severity that can usually be appropriately managed using an approach based on care in the home. Developing effective arrangements that ensure a sustainable community-based response providing for initial patient assessment, access to antiviral medicines, treatment of complications, home care and access to hospital care, should that become necessary, is therefore pivotal in all local plans.

GPs and community health teams will continue to provide the initial health response, and normal primary and social care delivery mechanisms may remain adequate and maintainable in the early and latter phases of a pandemic, although they will need to adapt significantly. Ceasing non-clinical activities and similar measures may make some additional capacity available but pressure on individual practices will be heavy, additional demand for care in the home will be high, and single-handed or smaller practices are likely to experience disproportionate difficulties caused by the absence of key staff.

In addition to maintaining essential provision for non-influenza patients, the resources and skills available in general medical practices should focus primarily on patients who:

- are suffering influenza complications
- are less than three years of age
- are pregnant
- have relevant pre-existing medical conditions
- are in identified 'at-risk' groups
- are not responding to treatment
- need higher levels of care but cannot be admitted to hospital
- need terminal care
- need bereavement support.

Differences in operational arrangements and organisational responsibilities may apply in Northern Ireland, Scotland and Wales. Each administration's country-specific plan will outline arrangements for the provision of care in community settings.

## 9.8 Supplementing primary care – arrangements in England

Reinforcing individual practice and inter-practice service continuity arrangements, developing mutual aid, enhancing out-of-hours arrangements, providing for those who are unregistered or away from home and exploring the potential contribution of pharmacists and other healthcare professionals should form an integral part of planning by primary care organisations. Response plans should be developed in consultation with local professional representative committees. Normal primary care arrangements are likely to require significant supplementation as the pandemic wave or waves develop, and an effective support system during the peak week(s) of a pandemic should incorporate:

- 24/7 telephone-based access via the National Flu Line service for the majority of those patients who believe they are symptomatic, with an appropriate and timely response across the PCT area
- the use of non-clinical staff to provide initial telephone assessment for most patients and either to authorise the collection of antivirals or refer patients to their GP as appropriate (see section 9.8.1 and Figure 4)
- secure systems allowing for the collection of an antiviral treatment course and self-care leaflet by the patient's friend or relative from a designated centre or, exceptionally, home delivery (see section 9.9)
- advice to parents/guardians of symptomatic children weighing 15kg or less (under three years of age) to contact their general practice for assessment and antiviral solution
- prompt reference to a GP if history/signs/symptoms indicate influenza complications or failure to respond to treatment
- agreed and consistently applied clinical criteria and thresholds for hospital admission
- continuing provision for emergency treatment and for maintaining other essential primary care
- social support to help maintain patients in their home or residential setting
- protocols recognising that some symptomatic patients will present at accident and emergency departments, general practice, pharmacies or other health facilities irrespective of advice or plans
- arrangements for targeted vaccination as/when/if a suitable pre-pandemic or specific vaccine becomes available.

### 9.8.1 Telephone-based access arrangements (National Flu Line service)

Face-to-face clinical assessment for every patient will not be feasible at the peak of a pandemic, even assuming that most would be well enough to attend surgeries or other healthcare facilities. Department of Health analysis suggests that general medical practices will not be able to expand their collective telephone call-taking capacity sufficiently to meet the level of demand anticipated. Whilst patients may still choose to make contact via their GP surgery, call centres using trained call takers operating to a clinically based algorithm offer a viable and acceptable alternative.

To provide public information and advice before and during a pandemic, the Government – in conjunction with the Central Office of Information, and NHS

Direct and its equivalents in the devolved administrations – will establish a National Flu Line service at WHO Phase 5 (see also section 10.7).

From UK alert level 2 (WHO Phase 6), the service will expand to provide initial patient assessment and antiviral authorisation and both functions will then remain operational until the impact of the pandemic and the threat of further waves subside.

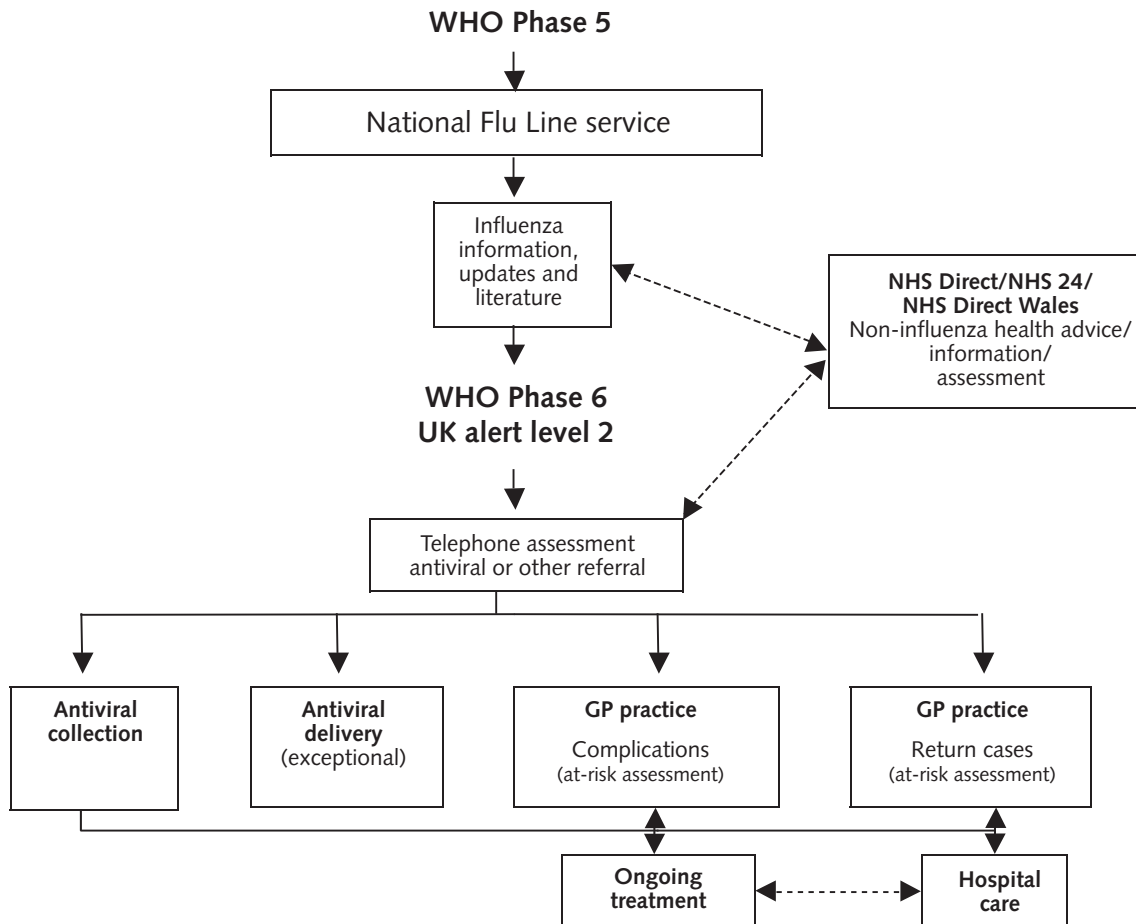
The key objectives of the National Flu Line service are to:

- provide pandemic influenza-related advice and information
- provide access to pandemic-related literature
- provide situation reports and daily updates
- provide access to mechanisms for rapidly assessing those suffering influenza-like symptoms
- authorise access to antiviral treatment (if that is indicated)
- give information on the nearest antiviral medicines collection point
- refer to some other part of the health and social care system if that is a more appropriate disposition
- facilitate the capture of critical surveillance information (number of people calling who are symptomatic, demographics of those accessing treatment, take-up of treatment etc) to inform the local and national pandemic response.

Initial assessment will focus on confirming that the caller has signs and symptoms of influenza, no indicators of complications, is aged three or over, has been symptomatic for less than 48 hours and antiviral treatment is not otherwise contraindicated. Suitably trained staff using a clinically based decision tree algorithm could perform these tasks and authorise the collection of antiviral medicines for the patient. Analysis suggests that, at a 50% clinical attack rate, such a service might need the capacity to handle a minimum of 11,000 influenza-related telephone calls per 100,000 population and 28 staff per 100,000 population per day to provide 24-hour cover during the peak week.

The Department of Health is developing a suitable algorithm and producing model protocols/guidelines to allow the supply of oseltamivir (Tamiflu) following a telephone assessment. It also proposes to make the necessary amendments to medicines legislation to enable alternative prescription and supply arrangements in a pandemic and will be consulting on the proposals (in conjunction with the Department for Health, Social Services and Public Safety, which is responsible for medicines in Northern Ireland).

Figure 4: Proposed model of care from a patient's perspective



### 9.8.2 Local influenza health coordination arrangements in England

Each PCT will need to establish and resource an effective mechanism for directing and coordinating the local health response.

In terms of functionality that should:

- act as a focal point, providing a link to and oversight of the local health response
- monitor and coordinate the overall health response on a pan-organisational, whole-systems basis
- maintain the continuing provision of general practice and primary care services both in and out of hours
- collect, collate and report information on the local health situation
- link with social care and other agencies to support the delivery of care and to maintain patients at home

- provide a local link and health input and advice to the wider local coordination arrangements
- ensure that national messages are cascaded and reinforced and that the public are well informed and advised of local response arrangements.

Further guidance on the provision of care in a community setting in England is available at [www.dh.gov.uk/pandemicflu](http://www.dh.gov.uk/pandemicflu)

## 9.9 Providing rapid access to antiviral medicines

In order to limit the spread of infection and maximise individual health benefits, patients should take an antiviral medicine as soon as possible after the onset of symptoms – ideally within 12 but in any case within 48 hours. Therefore, rapid antiviral provision is an important planning aim. At the initial stages of a pandemic, any patient who has been symptomatic for less than two days should be offered treatment with antiviral medicines unless contraindicated, although this policy will be reviewed as information on the actual attack rate, clinical impact, optimum dosage regime, stock consumption, any resistance and timeframe within which treatment remains useful emerges.

During WHO Phase 6 (UK alert level 2), initial allocations based on a 25% clinical attack rate and their resident population will be pre-distributed to PCTs (and their equivalents in Northern Ireland and Wales). In Scotland a proportion of its national stockpile has already been pre-distributed to the NHS health boards (5% to mainland boards and 10% to the island boards). Subsequent supplies will be adjusted to reflect the actual attack rate, transient populations and supply position. Response plans should provide for local distribution to hospitals, health establishments, closed institutions and GPs, and should ensure that supplies are conveniently accessible to those local communities from pre-designated collection points (which are likely to include some community pharmacies) across the area. Storage and distribution arrangements should address the need to protect stock and staff security in consultation with the police and local pharmacy adviser. Self-management advice leaflets, information and contacts for support should also be available at these antiviral collection points.

In England, plans should assume that a friend or relative will be available to collect the patient's antiviral treatment course from the designated collection points on production of authorisation from the National Flu Line service or nominated health practitioner. Pre-pandemic messages will ask everyone to try to arrange such helpers ('flu friends'), but for the small proportion unable to do so, alternative arrangements such as a home delivery service by courier/taxi should be developed.

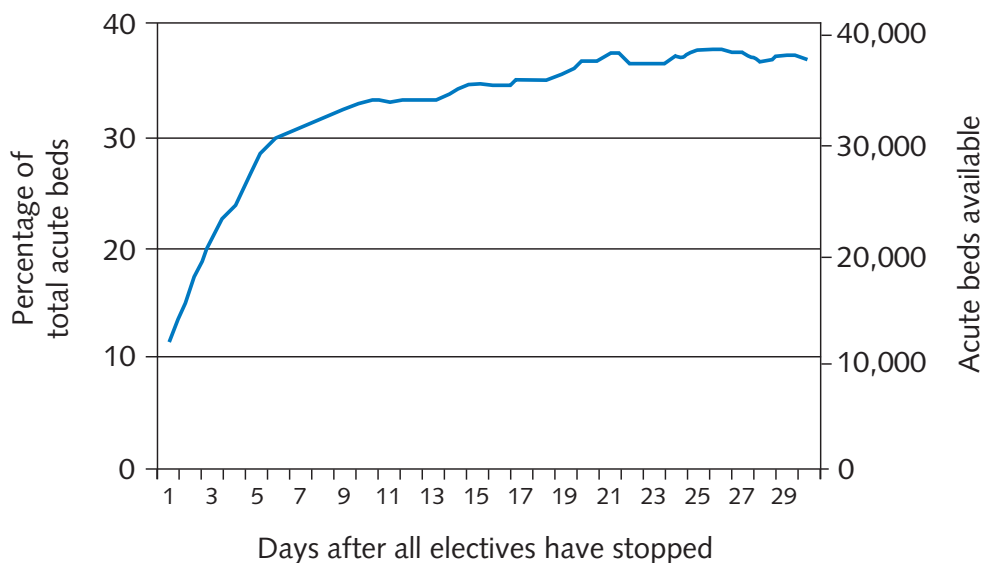
## 9.10 Essential medicines

Demand for essential medicines and over-the-counter remedies is likely to be high in a pandemic and resupply may be uncertain. The Department of Health and the devolved administrations are reviewing available stock levels and working with the pharmaceutical sector and others to consider enhancing stocks, improving supply chain resilience and considering other options for meeting demand and maintaining supply. There will be a consultation on proposed changes to medicines legislation and related regulations, designed to ensure adequate patient access, with a view to implementing those changes in the event of a pandemic.

## 9.11 Hospital admission

Although adults with uncomplicated influenza infection do not usually require hospital treatment, patients with worsening pre-existing medical conditions or suffering influenza-related complications such as bronchitis and pneumonia may need referral. Children with severe illness may also need referral for assessment for admission. Normally, there are some 159,600 beds (including day beds) in use across the UK, of which 3,900 are for patients requiring critical care. Generally, bed utilisation tends to be high (85%) and analysis suggests that it would be possible to release almost 33% of the total acute bed capacity – almost 40,000 in England – within five to ten days of any decision to cease elective work (see Figure 5).

**Figure 5: Acute care bed availability for pandemic influenza in England**



Even with this additional capacity – and the implementation of other measures to improve utilisation and supplement availability – the expected level of additional demand, combined with increased staff absences and possible increases in length of stay, will make hospital overcrowding inevitable and capacity a major limiting factor. Other limiting factors, such as shortages of medical supplies (including blood and blood components) and limited availability of diagnostic support services, are also likely to have an impact. In particular, hospitals may need to be prepared to respond to the probable activation of the NHS integrated national blood shortage plans in the event of any collection or processing difficulties.

Estimates suggest that existing hospital capacity may only meet 20% to 25% of the expected demand at the peak. Further guidance on developing ‘surge’ capacity will be available in due course. It is highly probable that proportionate admission thresholds based on the clinical management guidelines will need to be agreed and progressively applied. Consistency and equity in the application of such thresholds will be an important factor in gaining public understanding and maintaining confidence. Common understanding and interpretation of those guidelines by health professionals at the primary, secondary and social care interfaces are particularly important.

Therefore, local response plans should focus primarily on ways of supplementing and making the most effective use of staffing and beds, with particular attention to factors that facilitate rapid discharge arrangements. Plans should also address establishing alternative care sites, utilising private hospital/clinic facilities, staffing, other options for increasing capacity and whether to designate some hospitals for influenza cases.

Internal hospital plans should consider pharmaceutical and other supplies, practical changes in configuration to segregate influenza patients, flexible staffing and other changes to normal practices that may free up or improve the utilisation of beds, improve throughput and maintain infection control. Hospitals should also consider such factors as limiting the spread of infection, security of staff/supplies and the control of exit/entry.

## **9.12 Emergency departments**

In a pandemic, all symptomatic patients will be advised to stay at home, seek help by calling the National Flu Line service and not attend surgeries or health facilities unless by prior arrangement, but contingency arrangements should recognise that some self-referral is inevitable. The level of self-referral is likely to be significantly higher if there are breakdowns in primary care provision, loss of confidence or access difficulties in provision for assessment, treatment or antivirals both in and out of hours. The interface between hospital and primary

care arrangements, therefore, needs joint review and appropriate protocols agreed with primary care and PCT representatives at the planning phase. Hospital pandemic plans should also ensure that measures are in place to:

- control entry
- immediately identify, assess and separate symptomatic patients prior to and during assessment and treatment
- protect staff and control contamination of emergency facilities
- provide appropriate treatment and/or self-management advice
- manage patients according to agreed protocols
- monitor and review the effectiveness of these arrangements.

### 9.13 Critical care

Estimates suggest that up to 25% of the symptomatic patients who would warrant admission to hospital if sufficient capacity were available may require critical care. The indications for transfer to a high dependency or intensive therapy unit (HDU/ITU) in those infected by influenza are no different when compared with other patients and most will have influenza-related pneumonia or a severe exacerbation of underlying co-morbid illness.

Demand, particularly for ventilation, is likely to exceed available resources rapidly as the pandemic develops, even where all possible local measures to supplement and expand capacity have been implemented. Prioritisation of all patients on an individual basis matched against available resources will become necessary, and additional guidelines for clinical management are being developed jointly with the Intensive Care Society.

Further guidance on hospital planning and critical care aspects is available at [www.dh.gov.uk/pandemicflu](http://www.dh.gov.uk/pandemicflu)

### 9.14 Blood, tissue and organ donation

Continuation of blood, tissue and organ supply will be vital to the provision of emergency healthcare. Health messages should encourage the public to continue to give blood and healthcare providers should promote and encourage tissue and organ donation. NHS trusts will often be contacted in emergencies by members of the public wishing to donate blood. Such callers should be referred to the National Blood Service on 0845 7 711 711 or visit [www.blood.co.uk](http://www.blood.co.uk)

## 9.15 Ambulance services

Demand on ambulance services is likely to increase significantly in a pandemic scenario, particularly if the capacity available in primary care proves insufficient to ensure a timely response. The primary focus of service continuity plans is the maintenance of capacity to answer all emergency and urgent calls, although some prioritisation and reduction in normal response time standards may become unavoidable. Plans should also recognise the need to facilitate rapid discharge or transfer arrangements and explore opportunities to utilise any organisational and communication capacity that services may have available from the curtailment of non-essential activities to support the delivery of home care to influenza sufferers.

Pandemic-specific pre-hospital patient assessment and treatment protocols should recognise that hospital capacity will be extremely limited, emphasising treatment at home and ensuring that only patients with life-threatening conditions are actually conveyed to emergency departments. Local response plans should also consider the extent to which the field assessment and treatment skills of ambulance staff could be utilised to support the wider delivery of home care.

Further guidance on ambulance planning is available at [www.dh.gov.uk/pandemicflu](http://www.dh.gov.uk/pandemicflu)

## 9.16 Mental health

Mental health establishments will face specific challenges. Many, particularly those providing secure care, are relatively closed environments with the attendant risk of rapid spread of influenza amongst patients and staff. The welfare of patients being cared for in the community is largely dependent on staff availability for domiciliary visits and the supply of psychopharmacological agents necessary to maintain health.

Contingency plans should include infection control measures to minimise the spread of influenza in residential establishments, based on the assumption that it will not be possible to move those with significantly disturbed behaviour to other settings, and should contain explicit agreements for utilising available staff according to greatest need. Community services should also consider how to prioritise resources to identify vulnerable individuals, help them to take appropriate precautions against infection and provide support should they develop influenza.

Mental health trusts may also experience increasing demands on services due to the impact of the pandemic on individuals and families, and the skills and experience of their staff may be particularly helpful in the development of

mechanisms for counselling and support. The Department of Health is currently developing further guidance for mental health trusts in England.

### 9.17 Pharmacy

The contribution that pharmacies can make in a pandemic scenario will depend on the setting in which they routinely provide services and the qualifications, expertise and area of practice of their pharmacists. Community pharmacies are often located in the heart of communities. They can make an important contribution in support of self-care, dispensing/repeat dispensing of routine medicines, signposting other NHS services, supplying regular medicines to vulnerable people such as residents of care homes or those with long-term conditions and maintaining medicine supplies under contracts with other bodies such as mental health trusts, hospices and prisons as far as possible.

To ease pressure on GP surgeries and community services, new powers may be given to community pharmacists (subject to consultation and parliamentary approval) to supply medicines and provide pharmaceutical services in a more flexible manner. Formal consultation will precede any proposed changes to legislation.

Hospital pharmacists and their staff will play an important part in making the best use of available medicines including the appropriate use of patients' own medicines and facilitating the discharge of patients with adequate supplies of medicines. Where there are shortages of some medicines, pharmacists are well placed to advise on the use of alternative medicines that have a similar effect. Pharmacies will play an important part in educating the community, providing positive health messages and advising patients and members of the public on medicine supply issues.

As the pandemic escalates, some of the routine functions and services provided by pharmacies may have to be reduced, or stopped for short or longer periods, as demands increase elsewhere. Specialist clinical pharmacists may be able to support doctors and other healthcare professionals in all settings, including primary care, hospitals and the community. Pharmacists working in primary care could also be deployed to support GPs in their practices or in community pharmacies.

### 9.18 Dentistry

Current infection control advice suggests that health professionals should avoid aerosol-generating procedures on symptomatic patients as far as possible during a pandemic and wear respirators and suitable protective equipment where that is not possible. Many dental procedures have the potential to generate aerosols

and risk assessments will therefore be necessary. Local plans should ensure that emergency care remains available throughout a pandemic, but dental practitioners may find normal demand reduced because of limits on the procedures they are able to carry out on those with respiratory symptoms and patients themselves deferring treatment or facing travel difficulties. Local planning should explore opportunities to use the assessment and treatment skills of dental practitioners or other health professionals to support the wider delivery of healthcare in a pandemic.

### 9.19 Prison health

HM Prison Service has an established Influenza Pandemic Working Group, which reports directly to the Cabinet Office to inform planning for managing the impact upon the prison system. This group has wide-ranging representation from partners, including the Department of Health, Prison Escort and Custody Services, Civil Contingencies Planning Office, UK Immigration Service and the National Probation Service.

The Prison Service instruction for prison governors, *Contingency Planning for Pandemic Influenza*, was issued to all governors in October 2006. This sets out the requirements and parameters for the preparation of governors' plans to meet the contingencies of pandemic influenza. Plans are to be signed off as fit for purpose by area managers, with prison senior medical staff involved at all stages of planning. The governor must establish links with the local health protection unit and the PCT to finalise arrangements for antiviral access and infection control management, and to adapt local community policies to a prison setting. This is necessary to establish the appropriate lines of command and control between the governor, the consultant in communicable disease control and the Director of Public Health. This agreed division of authority and responsibility must be specified in the contingency plan.

In addition, *Planning for Pandemic Flu in Prisons and Places of Detention* will provide guidance for governors and healthcare staff on the management of specific issues identified. This guidance is informed by evidence-based practice where that exists for specific interventions or actions.

### 9.20 General principles of containment and infection control

Specific infection control guidance is available for hospitals, primary care and some other settings but, generally, limiting the transmission of pandemic influenza requires the application of tried, tested and proportionate basic infection control measures such as:

- staff and public education

- local risk assessments to inform decisions on control and protective measures as required by the Control of Substances Hazardous to Health Regulations 2002
- documenting proportionate procedures, operational protocols and checklists
- the consistent application of good hygiene and infection control measures
- timely recognition of symptomatic patients
- segregating (isolating) symptomatic patients in their homes and limiting external contact
- using voluntary quarantining measures if necessary
- clustering symptomatic patients who are in hospital, residential homes or other closed establishments in specific wards or designated areas
- ensuring that staff are well informed about and adhere to procedures for the prevention of influenza transmission
- providing personal protective equipment if occupational risk assessments have indicated that to be necessary, and ensuring that staff are trained in its correct wear, limitations and use
- implementing enhanced cleaning routines to minimise the risk from contact with hard surfaces.

Further guidance on infection control measures is available at [www.dh.gov.uk/pandemicflu](http://www.dh.gov.uk/pandemicflu) and [www.hpa.org.uk/infections/topics\\_az/influenza/pandemic/fluplan.htm](http://www.hpa.org.uk/infections/topics_az/influenza/pandemic/fluplan.htm)

### 9.21 Face masks/respirators in care settings

Various types of surgical face masks and respirators are available, offering differing levels of protection and meeting agreed European and/or international normative standards. WHO recommends the use of surgical masks and particulate respirators at 95% efficiency by healthcare workers during a pandemic and that symptomatic patients could themselves wear surgical masks to protect others if circumstances make it absolutely necessary for them to leave home and logistical arrangements allow. However, standard Health and Safety Executive guidance calls for higher specification FFP3 respirators for healthcare workers whenever respiratory protection is indicated in the UK, although it recognises that this may not be sustainable in the special circumstances of an influenza pandemic. Based on available evidence and current UK pandemic influenza infection control guidance:

- fluid-repellent surgical masks should be worn by healthcare workers who may be in close and/or frequent contact (within one metre) with symptomatic patients
- FFP3 standard disposable respirators should be worn when carrying out clinical procedures likely to generate aerosols of respiratory secretions from infected patients (eg dental drilling, intubations, aspiration), although such procedures should be avoided as far as possible. It should particularly be noted that fit testing and specific training are essential.

## 9.22 Other protective equipment

If close contact with an influenza-infected patient is considered inevitable or highly likely, health workers should adopt sensible barrier precautions in addition to face masks. Disposable protective equipment, such as aprons and gloves, provide a physical barrier and help avoid spreading contamination. Although the ocular route is not regarded as a major route of transmission for normal human influenza viruses, it is nevertheless biologically plausible and eye protection (preferably disposable) may be necessary when carrying out aerosol-generating procedures or if risk assessment indicates that this is necessary.

Further guidance for employers is available at [www.hse.gov.uk/biosafety/diseases/pandemic.pdf](http://www.hse.gov.uk/biosafety/diseases/pandemic.pdf)

## 9.23 Coping with stress and bereavement

In the lead-up to a pandemic, many are likely to be anxious, apprehensive and to have their own subjective perception of the degree of risk. As the pandemic develops, they may also feel fears for their own health, grief for loss of relatives or friends, concerns for family members, a sense of social isolation or other potential causes of psychological distress. Whilst most are likely to be resilient enough to cope with little or no professional or specialist intervention, local plans should consider how self-help and other explanatory material might be made available, how those experiencing particular problems can access assistance and how mental health services, voluntary organisations and social care agencies might best be organised to offer support.

## 9.24 Social care support

Effective contingency arrangements developed jointly by health and social care agencies will be critical to the relief of suffering and to achieving the wider public health aims of keeping symptomatic patients at home, caring for them in a community setting and reducing the burden on healthcare facilities. Estimates suggest that up to 1.7 million adults rely to varying extents on social care

support provided by or through local authorities. Those services cover a wide range of needs such as care in residential/nursing homes, day centre provision, meals on wheels, home care and personal assistant schemes. The 2001 census also indicated that over half a million people care for a relative or friend for between 20 and 49 hours per week – and over 1 million people for over 50 hours a week – in England and Wales. Many of these informal carers will be affected over the pandemic period and alternative care arrangements may be required.

Social care providers are aware of, and are in regular contact with, many vulnerable individuals in the community, and those clients might be either more vulnerable to, or more affected by, pandemic influenza. In addition to maintaining services for those who will continue to rely upon them, social care providers must also anticipate additional short-term and short-notice demand from influenza sufferers no longer able to cope independently and others whose normal care arrangements have been disrupted. Voluntary, private or independent sector organisations provide many of the services on contract and all forms of social care provision will need factoring into local contingency plans. Key challenges in maintaining social care services include:

- sustaining indirect care services that form an essential lifeline for some people, eg meals on wheels, provision of community equipment, community alarm services, with reduced staff
- meeting the additional burden on already overstretched local social care services and intermediate care services due to the additional pressures on acute hospital beds
- ensuring that the necessary lines of communication exist to relay essential national, regional and local messages to the diverse range of social care services across all sectors (statutory, voluntary, independent and private)
- relieving additional pressures on caring time to support care home residents and people cared for in their own homes when they have influenza
- sustaining people with complex disabilities who are currently supported with intensive care packages in the community
- providing emergency respite care for vulnerable people looked after at home by informal carers for the period their carer is ill
- maintaining a balance between appropriate safety and infection control measures and ensuring that the quality of life of vulnerable adults is maintained as far as possible.

## 9.25 Staffing

The availability of sufficient human resources is critical to the maintenance of all health and social care. Therefore, planning for optimum staffing levels should be a key focus for influenza pandemic preparedness.

In England, the Department of Health is working with NHS Employers to produce guidance for human resource management during a pandemic, which will be available in due course.

An influenza pandemic will put staff under considerable pressure and there are likely to be conflicts between staff members' professional and/or contractual obligations, personal or family responsibilities and concerns about risks.

The forthcoming guidance on human resource issues will have relevance to the ethical and professional obligations of staff. When this guidance is available, trusts will need to work with staff to explain what will be considered appropriate professional practice mechanisms to support them in resolving any ethical dilemmas that may arise out of their work.