Pandemic influenza

Guidance for primary care trusts and primary care professionals on the provision of healthcare in a community setting in England
## Pandemic Influenza: Guidance for primary care trusts and primary care professionals on the provision of healthcare in a community setting in England

### Author
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### Target audience
- PCT CEs
- NHS Trust CEs
- SHA CEs
- Directors of PH
- Directors of Adult SSS
- PCT PEC Chairs
- NHS Trust Board Chairs - PCT Board
- Directors of HR – PCT
- Allied Health Professionals
- GPs
- Communications Leads
- Emergency Care Leads

### Description
This document is intended to inform and support the development of primary care response arrangements in England.

### Cross reference
- Pandemic flu: A national framework for responding to an influenza pandemic

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For recipient's use
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1 Introduction

1.1 Purpose

The purpose of this guidance is to assist primary care trusts (PCTs) in developing their plans for responding to an influenza pandemic. It is also intended to be a useful document for primary care professionals such as those working in general practice, community pharmacy and nursing, and for partner agencies providing services in the community setting.

The guidance is intended to provide general advice for planners, and to outline a model of care within which local plans should be developed.

Planners should be aware that the information available on pandemic influenza can change rapidly. Guidance is therefore continually being revised. It is important for planners to ensure that their plans reflect the principles underpinning the latest information.

1.2 Scope of the guidance

This guidance provides advice on preparing for and responding to an influenza pandemic in the community setting, which includes primary care provision in the context of the community or home. Advice on preparing residential settings for a pandemic influenza can be found in the guidance documents on adult social care (see below).

This guidance on healthcare in a community setting is supplementary to Pandemic flu: A national framework for responding to an influenza pandemic, and should be read in conjunction with it and other national guidance on pandemic influenza planning. These can be found at www.dh.gov.uk/pandemicflu and include the following:

- Responding to pandemic influenza: The ethical framework for policy and planning
- Pandemic influenza: Guidance on preparing acute hospitals in England
- An operational and strategic framework: Planning for pandemic influenza in adult social care
- Pandemic influenza: Guidance for ambulance services and their staff in England
- Guidance for pandemic influenza: Infection control in hospitals and primary care settings

Specific guidance on human resources and workforce issues, surge capacity and prioritisation in health services, mental health and death and cremation certification have also been commissioned and are available for comment. They can be found at
Pandemic influenza: Guidance for primary care trusts and primary care professionals

www.dh.gov.uk/pandemicflu. A draft guidance paper, Planning for a possible influenza pandemic: A framework for planners preparing to manage deaths, has also been prepared by the Home Office.

This guidance is for England only, and parallel guidance will be issued by the Scottish Government, the Welsh Assembly Government and the Department of Health, Social Services and Public Safety, Northern Ireland. Whilst there may be some differences in operational approach and organisational responsibilities, all four health departments are working closely to ensure a consistent approach wherever possible.

1.3 Objectives

The objectives of the community healthcare response to an influenza pandemic, as outlined in the National framework, are to:

- reduce the spread of influenza
- limit the morbidity and mortality from influenza
- adopt a multi-agency approach and mobilise the available capacity and skills of all healthcare staff (including recently retired staff) and volunteers
- slow or limit the spread of infection by supporting self care in the home, and by taking care to the patient (rather than patients to care) wherever possible
- ensure assessment of all symptomatic patients rapidly, and prompt treatment with antiviral and other medicines if indicated and appropriate
- ensure the continued delivery of essential services for people with influenza and its complications and for non-influenza patients
- provide vaccination if and when suitable vaccines become available
- ensure utilisation of other public health measures such as robust infection control
- make targeted and effective use of potentially scarce healthcare skills, facilities and resources
- apply transparent, consistent and equitable admission criteria that reserve available hospital capacity for the most seriously ill who are likely to benefit
- monitor the local epidemiology of influenza and maintain surveillance to inform local and national control measures and response arrangements
- provide accurate, timely and authoritative advice and information (that complements wider national messages) to professionals, the public and the media
- reduce the impact on health and social services as far as possible.
1.4 Audience

This guidance is primarily intended for those preparing PCTs and other primary care organisations for an influenza pandemic. However, it will have relevance to other stakeholders, including mental health trusts, acute trusts, ambulance trusts, local authorities and independent sector providers. Additionally, it will be of interest to those seeking general information or an overview of the general preparations for and planned response to a pandemic.

1.5 How the guidance is intended to be used

The guidance is intentionally broad to ensure coverage of all the key issues that have been raised by planners and key stakeholders. Some sections are also deliberately detailed to provide operational guidance on areas where planners have consistently requested further information.

To aid usability, the guidance has been split into chapters that describe discrete areas of planning. Chapters can therefore be read (and selected) on a stand-alone basis as well as as part of a comprehensive guidance document.

For a summary of the key points and actions of each chapter the reader should refer to the boxes at the beginning and end of that chapter.
2 The current context of influenza pandemic planning in the community setting

Key points

- Additional demand for healthcare will mean that most influenza patients will require an initial assessment, as well as the majority of their subsequent care and support, outside of hospital healthcare settings.

- Patients will need to access care (including self care) in their own home or residential settings as far as possible to help reduce and limit the spread of infection.

- Response plans should be flexible enough to deal with the range of possible attack rates.

- Up to 28.5% of symptomatic patients (including all children under 3 years of age) will require assessment and treatment by a GP or other appropriate health professional.

2.1 Potential impact of an influenza pandemic on primary care

An influenza pandemic will present unique international, national and local challenges to the delivery of health and social care, producing case numbers likely to be far in excess of the capacity and capability of both systems to cope in conventional ways.

Those organisations and professionals providing services in the community setting are likely to come under significant pressure. Even when there are small numbers of people infected or potentially infected, it is likely that public concern and demands on primary care services for information (and, potentially, treatment and/or medication) will be high. As a pandemic spreads, primary care services will need to deal with large numbers of individuals infected with influenza. They will also find that, because of the parallel pressures on hospital services, there are more people with acute care needs that need to be cared for within the community setting. This will occur at a time when PCTs and primary care contractors own resources in terms of staff, consumables and utilities are likely to be challenged.

The impact of an influenza pandemic on PCTs is likely to be intense, sustained and nationwide. Services may quickly become overwhelmed as a result of:

- the increased workload from patients with influenza and its direct complications
- the increased workload from patients who are not able to access hospital care
- additional pressure on health services caused by anxiety and bereavement
the particular needs for infection control facilities and equipment

depletion of the workforce and of numbers of informal carers, due to the
direct or indirect effects of influenza on themselves and their families

delays or difficulties in dealing with other medical conditions

logistical problems due to possible disruption of supplies, utilities and transport
as part of the general disruption caused by an influenza pandemic

the longer-term macro-economic effects of an influenza pandemic on the
national (and global) economy

pressure on mortuary facilities, possibly exacerbated by delays in death
registrations and funerals

pressure on social services, which will impact upon the health-social care
interface, and on integrated health and social care teams.

It is crucial that PCTs plan with other local and regional stakeholders so that they can
respond to an influenza pandemic in a coherent, effective, coordinated and ethically
appropriate way.

2.2 Key planning assumptions

The epidemiology of an emergent influenza pandemic virus and its clinical behaviour
cannot be predicted with certainty. In previous pandemics, the overall UK clinical attack
rate has been of the order of 25% to 35%, compared with the usual seasonal range of
5% to 15%. As the actual extent of illness will only become evident as person-to-
person transmission develops, response plans should be flexible enough to deal with the
range of possible attack rates, clinical impact and mortality assumptions as outlined in
the National framework. This recognises the possibility of a clinical attack rate of up to
50% in a single-wave pandemic, and so this should also be reflected in local response
plans. A graded response to an increasing threat, with specific ‘trigger points’, would
also be appropriate so that all partners understand at what stages of a pandemic certain
functions or processes will cease and/or start.

The following planning assumptions outline the potential impact (severity and extent) of
an influenza pandemic at a clinical attack rate of 50%.

2.2.1 Severity and extent

- Up to 50% of the population may show clinical symptoms of influenza
  over the entire period of a pandemic, and up to 25% of these 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 (which includes those with complications and all children under 3 years) will require assessment and treatment by a GP or appropriate healthcare professional. This assumes that those patients who require treatment with antiviral medicines will gain access to these via the National Flu Line service (see chapter 6 for further information).

Up to 4% of those who are symptomatic may require hospital admission if sufficient capacity is available (with up to 25% of people admitted to hospital expected to require critical care).

The average length of stay for those with complications may be up to six days (ten if in intensive care).

However, the epidemiology of an emergent influenza pandemic virus and its clinical behaviour cannot be predicted with certainty. Plans will have to be adjusted as new information becomes available.

See the National framework for further information on what a pandemic influenza may look like.

### 2.2.2 Health and social care demand

- Most health and social care will need to be delivered in the community setting, with hospital capacity protected and reserved for those in most clinical need.

- Most symptomatic patients will be treated at home with antiviral medicines initially, and most will access antivirals via the National Flu Line service (see chapter 6).

- Those symptomatic patients who have complications, those with more complex needs, and children under 3 years of age will need to be assessed by a GP or suitable health professional (see chapter 6 for further advice on children and access to care).

- Assuming a 50% clinical attack rate and a complication rate of 25% and that those under 3 years of age will need to see a GP or suitable healthcare professional, demand for pandemic-related GP consultations can be expected to increase to 14,250 per 100,000 population over the course of a pandemic. Assuming that 22% of the cases will occur in the peak week, this results in 3,100 additional GP consultations per 100,000 population during that
These are for pandemic-related consultations only and assume that symptomatic older children and adults without complications will access antiviral medicines treatment via the National Flu Line service.

- Demand for hospital admission can be expected to increase to 440 new cases per 100,000 population per week at the peak. This is unlikely to be met from available acute hospital capacity.

- Hospitalisations and deaths are likely to be greatest if the highest attack rates are in older people.

- An increase in the numbers of people suffering with influenza and its direct complications may be accompanied by other demand (eg caused by anxiety and bereavement), and service provision challenges such as increased absenteeism and logistical difficulties.

See Annex A for additional information on expected healthcare demand during the peak week of a pandemic.

### 2.2.3 Impact on the workforce

- Up to 50% of the workforce may require time off at some stage over the entire period of the pandemic, with individuals likely to be absent for a period of seven to ten working days. Absenteeism should follow the pandemic profile, with an expectation that it will build to a peak lasting for two to three weeks, when between 15% and 20% of staff from the workforce may be absent, and then decline.

- Additional staff absences are likely to result from other illnesses, taking time off to provide care for dependants (eg children), family bereavement, other psychosocial impacts, fear of infection or practical difficulties in getting to work.

- Modelling suggests that small organisational units (with 5 to 15 staff members) or small teams within larger organisational units should allow for higher percentages of absenteeism – up to 30–35% over a two- to three-week peak period. Even higher rates are possible in very small organisations.

- The Government may advise schools and early years/childcare settings to close in order to reduce the spread of infection amongst children. This advice will be provided only if closure is anticipated to produce significant health benefits. Closures will be area specific (whilst the virus is circulating in the locality) and are likely to be for two to three weeks, although they may be extended if the pandemic remains in the area. A further 5–6% of staff could be absent as a result of school closures, though this is based on an analysis of informal childcare being available for parents.
See chapter 11 and the Pandemic influenza: Human Resources guidance for the NHS for advice on how PCTs and primary care contractors can help to manage the impact of staff shortages.

### 2.3 Key planning principles

It is also important that PCTs and primary care contractors plan according to the same planning principles. These are as follows and are consistent with those outlined in the National framework:

- **Joint working and integrated planning between all key agencies**
  Effective response arrangements developed jointly by health and social care agencies will be critical to an effective response. Experience suggests that a consistent and coordinated response will not only help to reduce the impact of such an outbreak but will also aid recovery. The development of integrated local response plans that are resilient, proportionate, flexible and maintainable in responding to an influenza pandemic is therefore essential (see section 11.2).

- **Flexible planning**
  Given the difficulty of predicting the exact nature of an influenza pandemic, plans need to be flexible enough, within a clear overall structure, to deal with a range of possible scenarios. It is prudent that PCTs and primary care contractors prepare up to a ‘reasonable worst case’ scenario, with plans that describe the response to the less likely but more challenging clinical attack rates, as well as the more likely possibilities (see section 2.2).

- **Flexible thinking in bolstering local staff capacity**
  Plans need to be based on using local skills to the full, and working in novel ways, for instance by moving staff between different parts of organisations or by mobilising recently retired staff. Plans should seek to mobilise the capacity and skills of all public and private sector healthcare staff, contractors and volunteers (see section 11.7).

- **Building on normal delivery models (as far as possible)**
  Response arrangements based on building upon normal delivery models have the advantages of familiarity, maintainability, reliability and local flexibility. Such arrangements may continue to prove adequate and sustainable during the early and latter phases. Plans should, however, recognise that additional demand, compounded by higher levels of sickness absence and wider service continuity challenges, make it likely that normal services will require significant augmentation as the pandemic ‘wave(s)’ develops. Some reconfiguration of services will also be required to enable services to focus upon delivering care to those individuals in greatest need of them, and in order to respond to the specific needs of a pandemic (see chapter 9).
- Advising and enabling symptomatic influenza patients to remain at home
  Symptomatic patients risk infecting others if they present at healthcare
  facilities or ‘mix’ in public spaces where they are in close contact with other
  members of the public. Advising those who are ill with the influenza virus to
  self care (if they are able to), or access care from their own home, is therefore
  agreed to be the most practical and effective way of slowing or limiting the
  general spread of infection. It also facilitates the delivery of standard and
  simple public messages, allows for the fact that many patients may not be
  well enough to travel, and avoids creating infection ‘hot spots’.

- Rapid access to antiviral medicines
  Available evidence and experience in managing seasonal influenza and human
  cases of avian influenza (‘bird flu’) suggests that antivirals could have a
  significant beneficial impact in lessening the severity of illness in infected
  people and thereby reduce the risk of complications that may lead to mortality
  (see section 4.1.2). In order to maximise individual health benefits and limit
  the spread of infection, any patient who has been symptomatic for less
  than two days should be offered treatment with antiviral medicines unless
  contraindicated. This policy will be reviewed as information emerges on the
  attack rate, clinical impact, optimum dosing regime, stock consumption, and
  any resistance and timeframe within which treatment remains useful (see
  chapter 6).

- Reducing routine activity, but continuing to make essential care available
  Although the intention will be to maintain normal services as far as possible, the
  unique nature of the threat presented by a pandemic will require the curtailment
  of some routine services and activities so that others can be expanded and/or
  continued. Pre-planned measures to reduce or cease some routine services, and
  to deliver others via alternative means, are therefore important, as are plans that
  demonstrate how essential services will be maintained to cope with additional
  demand and potential disruption (see chapter 9).

- Adopting measures that maintain public confidence and ‘feel fair’, and
  balancing individual care with the priority to reduce illness and save most lives
  in a way that is fair, are principles that should also be applied in response
  plans and arrangements (see Responding to pandemic influenza: The ethical
  framework for policy and planning).

**Key actions**

- PCTs will need to ensure that their plans are based upon the planning
  assumptions and principles outlined within this guidance and the National
  framework.
An influenza pandemic will place considerable demands on the coordination of responses to the emergency. It is vital, therefore, that PCTs have clear arrangements for coordination in place. This requires roles and responsibilities to be clearly defined and a robust system of command and control to be in place to effectively manage the event.

PCTs are responsible for local health planning and the local health response. This chapter describes the role of PCTs in preparing for and then responding to a pandemic. It also highlights the coordination arrangements and alert procedures that should be in place, and the roles and responsibilities of other key agencies. This chapter should be read in conjunction with the NHS Emergency Planning Guidance (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4121072), which describes the role of PCTs (and the NHS more broadly) in preparing for and responding to all types of major incidents. New guidance on the provision of public health advice during a major incident can also be found on the Department of Health website at www.dh.gov.uk/en/Policyandguidance/Emergencyplanning

### 3.1 Planning for an influenza pandemic

#### 3.1.1 Roles and responsibilities of primary care trusts

PCTs are responsible for assessing local risk and for commissioning, supporting and monitoring the development of integrated health response plans. PCTs are also responsible for developing specific arrangements to maintain and support patients in a community setting. This requires ensuring that all key partners and service providers are fully involved in preparing for a pandemic and that health plans take account of military and other similar establishments in their area.
In preparing for a pandemic, key PCT responsibilities are to:

- assess local needs and risks, and define the health services that the local population will need during an influenza pandemic – this includes services provided by acute and community hospitals, mental health services, general practice, community pharmacy, and other primary care contractors and agencies (including subcontracted services)

- identify and take into account the needs of vulnerable and seldom heard groups (see section 5.5)

- profile the staff and resources that are likely to be available to respond to a pandemic and how they will be utilised – this includes identifying constraints on the workforce such as caring responsibilities for children and older people (see section 11.7)

- mobilise the resources within both secondary and primary care to ensure that essential services can be provided, and are as accessible as possible, in the context of locally available resources

- ensure that robust commissioning arrangements are in place to support the continued provision of key services

- ensure that all local health and social care organisations, including the NHS, NHS Direct, primary care contractors, local authorities, the independent sector and the voluntary sector, work together from an early stage to develop an integrated response that uses their combined resources to best effect

- engage with and support primary care contractors in developing robust and resilient response plans and arrangements including business continuity plans

- work with local authorities, including social services departments, to ensure that social support is available to maintain patients in their community setting

- make arrangements for the delivery of certain pandemic-specific services. This includes arrangements for the supply of antiviral medicines at local collection points, the coordination of clinical resources to support the operation of the National Flu Line service (see chapter 6), and planning for the delivery of the pre-pandemic and pandemic-specific vaccination programmes (see chapters 7 and 8)

- develop a command and control structure that allows appropriate linkages to, membership of, and communication with local resilience arrangements, including strategic, tactical and operational commands. It should also identify clearly who has the authority and autonomy to make decisions
ensure any command and control structure links with regional resilience mechanisms through the strategic health authority (SHA). The SHAs will be responsible for interfacing with the DH centrally especially the major incident coordination centre.

guarantee that there are clear protocols in place, with nominated post-holders identified to lead the coordination of the local health response

provide advice and information to members of the public to support them in preparing for a pandemic, and to increase confidence in the local healthcare response (see chapter 5)

ensure a robust process is in place for cascading routine and urgent information to local health professionals, including to GPs, practice nurses and community pharmacists

ensure that staff are appropriately trained and competent to plan for and respond to an influenza pandemic

maintain, test and review internal capacity and business continuity plans (see chapter 11), and train and exercise in conjunction with primary care contractors and local partners.

For PCTs that fulfil the role of lead PCT for emergency planning preparedness, there will be additional responsibilities. These are outlined in the Emergency Planning Guidance (see www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4121072).

Where PCTs are providers of community hospital care, they will need to plan for a pandemic in some of the ways that acute hospitals are doing, and will wish to refer to Pandemic influenza: Guidance on preparing acute hospitals in England. As part of this planning, it will be crucial for PCTs to determine the best use of their community hospital facilities in conjunction with local hospital, independent sector and intermediate care facilities in the locality. The role of community hospitals is considered in chapter 9 of this guidance.

3.1.2 Roles and responsibilities for specific PCT personnel

Chief executive and the board
The chief executive and the board of each PCT should take overall control of preparing for an influenza pandemic. Whilst it may be appropriate to delegate the task of preparedness planning to the PCT Pandemic Influenza Coordinator, the chief executive and the board should retain an active interest in progress and should be represented at director level on the local Influenza Planning Committee (see below) or equivalent planning group or forum.
The chief executive and the board should also engage with their professional executive committee (PEC), ensuring that PEC members are able to contribute to and inform preparations. The PEC is well placed to disseminate information and engage clinicians, other professionals and stakeholders in the local response. Regular updates should be given to the PEC as well as the board.

**Pandemic Influenza Coordinator**

PCTs should have a named Pandemic Influenza Coordinator who leads on the arrangements for providing an effective and sustainable community-based response during an influenza pandemic. This would usually be the Director of Public Health, who is well placed to lead on the arrangements for protecting the health of the local population and influencing all local agencies to ensure the widest possible participation in the response. The Director of Public Health is also well placed to communicate effectively and diplomatically with a wide audience, including the media and the public, in the build up to, during and in the recovery phases of a pandemic. The Pandemic Influenza Coordinator should be supported by the PCT’s emergency planning lead (and in some cases by a specific influenza coordinator).

The PCT Pandemic Influenza Coordinator should chair a health Influenza Planning Committee or equivalent planning group, which should involve local health and social care partners, including representation from NHS Direct, the local authority, the NHS hospital trust and primary care contractors. In some areas these committees have been established as district-wide (regional) bodies, rather than being specific to individual PCTs, to facilitate multi-agency planning. The Influenza Planning Committee is responsible for overseeing and coordinating the local health preparedness arrangements and for ensuring that robust response arrangements are in place. Any gaps, areas of concern and actions identified through the planning process should be taken forward, with regular updates to the board.

The Influenza Planning Committee should link with the Local Resilience Forum (LRF), the principle mechanism for the coordination of multi-agency (ie broader than health) planning at the local level (see section 3.2.3). In London, local pandemic influenza planning committees feed in at the level of the Regional Civil Contingencies Committee (RCCC).

**Communications lead**

Effective internal and external communications will be vital in responding to an influenza pandemic. In preparation, the PCT lead for pandemic influenza communications should work with their SHA to ensure that:

- plans are developed for the dissemination of information to staff, primary care contractors and the public before, during and after the pandemic, including the mechanism and frequency of delivery
plans are developed in conjunction with the strategies of national, regional and local stakeholders, including the Department of Health, RCCCs and LRFs/Strategic Coordination Groups (SCGs)

plans for communications are proactively developed in advance of a pandemic and that the communications answer the key questions that staff and the public are likely to ask

staff and primary care contractors know what their responsibilities are in the event of an influenza pandemic

there are trained staff capable of effectively communicating sometimes complex messages to the media (this would usually be the Pandemic Influenza Coordinator in the first instance).

The Department of Health is developing a revised communications strategy, which will need to underpin local communications plans and which will be available shortly. For further information on national communications-related campaigns and associated resources see www.dh.gov.uk/en/pandemicflu. National communications on self care are considered in section 5.2 of this guidance.

3.2 Responding to an influenza pandemic

3.2.1 Roles and responsibilities of primary care trusts

In the event of an influenza pandemic, PCTs are responsible for managing the local healthcare response. This includes providing a 24-hour emergency management and clinical response. In order to manage and coordinate the local healthcare response, all PCTs will need to ensure that they have a coordination centre or control room in place. In terms of functionality, the coordination centre should:

- act as a focal point, providing a link to and oversight of the local health and social care response
- monitor and coordinate the overall health response on an integrated, pan-organisational, whole-systems basis
- support the continuity of general practice, community pharmacy and other primary care services both in and out of hours
- collect, collate and disseminate information on the local health situation, to inform local and national control measures and response arrangements
- coordinate the supply of antiviral medicines in the locality, monitor antiviral use, and recommend follow up where local use is not in line with expected
take up and use (see chapter 6 on the distribution of national stockpiles of medicines)

- ensure that a pandemic-specific vaccine programme, if and when it becomes available, is coordinated, monitored and effectively delivered across the locality (see chapter 7)
- liaise with key partners such as local authorities to ensure a coordinated response
- liaise with commissioning partners to ensure they are able to deliver their commissioning obligations (as planned for a pandemic situation)
- ensure that local partners such as NHS Direct are fully informed of the arrangements for the management of pandemic influenza in the community, and that they are giving out messages that are consistent with those of other organisations
- link with social care and other agencies and sectors to support the delivery of care and maintain patients at home
- provide a health input to LRFs (and other multi-agency groups as appropriate), ensuring that their response arrangements maintain and support patients in the community
- ensure that national messages are cascaded and reinforced and that the public is well informed and advised of local response arrangements – this includes clear and simple information to patients and the public on any changes to access in primary and secondary care, disruptions to services, and what provision is being made for medicines such as antivirals and vaccines
- provide advice and information to staff, primary care contractors and other partners in conjunction with the strategies of national, regional and local stakeholders.

Further PCT roles and responsibilities in responding to a major incident are highlighted in the NHS Emergency Planning Guidance and should be adhered to.

### 3.2.2 Command and control arrangements

In the event of an influenza pandemic, PCTs will wish to convene an operational management group to oversee the day-to-day response. This should be under board-level leadership, and should include representation from senior management, including operational, medical, nursing, pharmacy, infection control and facilities representation.

PCTs should also have a command and control structure in place that allows appropriate linkages to and integration with external stakeholder command and control systems, in
particular RCCCs (via the SHA) and local SCGs. Lead PCTs may input to the SCG on behalf of other PCTs in the SHA area.

Generic response arrangements at regional and local levels are set out in detail in Emergency response and recovery and are available at www.ukresilience.info/ccact/errpdfs/emergresponse.pdf

Further guidance on command and control arrangements are also sited on the Department of Health Emergency Planning web page.

3.2.3 Coordination of multi-agency planning at the local level

The LRF is the principal mechanism for the coordination of multi-agency planning at the local level. Its membership includes all Category 1 responders (such as emergency services, local authorities and health bodies), which are subject to a range of civil protection duties under the Civil Contingencies Act 2004. In the event of an influenza pandemic, it is likely that SCGs will be convened. The purpose of the SCG is to take overall responsibility for the multi-agency command and control of an outbreak at the local level. Membership of the SCG is likely to mirror the Category 1 membership at the LRF.

See the National framework and the NHS Emergency Planning Guidance for further information on the coordination of multi-agency planning at the local level.

3.3 Roles and responsibilities of partner agencies in the planning and response

3.3.1 Strategic health authorities

The key responsibilities of each SHA in relation to an influenza pandemic are:

- to ensure that all NHS organisations are adequately prepared to coordinate and deliver their activities at the time of a pandemic – this includes the development, maintenance and regular testing of effective and integrated health response plans
- to ensure good two-way channels of communication with the Department of Health, PCTs, health organisations, respective regional government offices, the media, and organisations such as the Health Protection Agency (HPA) and NHS Direct – this includes reporting information to the Department of Health, and providing health advice and information to the RCCC and other appropriate bodies and forums
- to be responsible for the general oversight and coordination of the health response in a region during a pandemic.
In the event of an influenza pandemic, it is also anticipated that some central decision-making powers, including decisions on service priorities and suspension of targets, will be delegated to the SHA (see section 9.2 for further information).

Each SHA will have a named SHA pandemic influenza lead who is responsible for overseeing the planning arrangements for an influenza pandemic in their area, and ensuring that they are consistent with this guidance and other relevant legislation and guidance. In the event of a pandemic, the chief executive and the board of the SHA will assume leadership for the regional healthcare system.

Further SHA roles and responsibilities in preparing for and responding to a major incident are highlighted in the NHS Emergency Planning Guidance and should be adhered to.

### 3.3.2 Primary care contractors

All primary care contractors and their staff have a critical role in ensuring an effective response, minimising disruption and maintaining essential services. General practice and community pharmacy will, in particular, represent ‘pinch points’ in the delivery of services and in the management of demand.

All practices and pharmacies will need to develop robust response plans and should engage with their PCT from an early stage to ensure that plans are coordinated and consistent with the approach taken across the PCT area. Plans should be regularly tested for their resilience. Primary care contractors will also need to liaise with partner agencies such as local authorities to identify and coordinate support for vulnerable patients.

### 3.3.3 Subcontracted services

Subcontracted services such as cleaning, catering and security services will play an important role during an influenza pandemic. PCTs should ensure that subcontracted services are engaged in planning and should ensure that robust business continuity arrangements are in place. Plans should pay particular attention to the projected requirement for increased demand, redeployment of staff at short notice, staff protection and strict infection control. Subcontracted services will wish to refer to appropriate national and local guidance documents, including guidance on infection control measures (see section 10.1).

### 3.3.4 NHS Direct

During a pandemic, NHS Direct will have a dual role to play: it will provide advice and information to influenza patients, and it will continue to provide a core service to non-influenza patients. In terms of pandemic influenza services, NHS Direct will help to alleviate the burden of antiviral distribution on the NHS and general practice by setting up and managing the National Flu Line service, which will authorise access to antiviral medicines treatment to those symptomatic patients who require it (see chapter 6).
### 3.3.5 Health Protection Agency

The HPA in England (working in conjunction with equivalent public health organisations in the devolved administrations) is the lead agency responsible for providing public health advice to the Department of Health and the NHS, and for supporting all aspects of the public health response to an influenza pandemic. The HPA has a key role in:

- international and national surveillance and intelligence gathering
- informing public health policy development
- contributing to global efforts to prevent or detect the emergence of a new virus
- supporting NHS and inter-agency planning and response at all levels.

In any period of heightened alert, and as a pandemic develops, the HPA will provide the following specialist health protection services:

- reference virological and microbiological services
- coordination of, and advice on, the investigation and management of early cases and contacts
- detailed epidemiological data on the emerging virus (from WHO Phases 4 to 6 – UK alert level 2) and aggregation of data thereafter
- data for national decisions such as choice of vaccine or antiviral strategy
- expertise, advice and operational support to the NHS, local government and other partners at the local and regional level
- coordination of the collection and publication of UK-wide influenza surveillance data
- support to the Department of Health and NHS to develop and deliver clear and consistent health advice messages to the public
- a real-time modelling capability.

See [www.hpa.nhs.uk/infections/topics_az/influenza/pandemic/default.htm](http://www.hpa.nhs.uk/infections/topics_az/influenza/pandemic/default.htm)
3.4 Notification of a suspected human case of avian influenza

Any suspected case should be discussed with the HPA at the earliest opportunity. If a GP or other healthcare professional suspects that a patient has contracted avian influenza before a pandemic is declared, they should notify a consultant in communicable diseases control at their local health protection unit, using a case investigation form. Further information on the reporting process and a copy of the case investigation form can be found on the HPA website at www.hpa.org.uk.

The HPA website also has information on case definition and clinical features of avian influenza, case management advice and an algorithm for the management of visitors and travellers returning from countries affected by avian influenza (AH5N1) and presenting with febrile respiratory illness.

3.5 Declaration of an influenza pandemic

The Department of Health will inform health and social care organisations of any change to WHO phases or UK alert levels (see the National framework and Annex B for more information on WHO phases and UK alert levels) via the SHA and via the Chief Medical Officer’s public health link. PCTs must ensure that cascade systems are in place to alert staff and primary care contractors, and to assemble the appropriate coordination arrangements. Alert and cascade systems should utilise existing emergency planning mechanisms.
Key actions

- Conduct an assessment of local needs, risks and resources (including staffing) to inform decisions on the health services that will need to be maintained during an influenza pandemic.

- Identify and take into account the needs of vulnerable and seldom heard groups in all areas of planning and the response.

- Engage with all key partners, including primary care contractors, from an early stage to ensure an integrated approach to planning and the development of robust and resilient response plans.

- Liaise with commissioning partners to ensure robust commissioning arrangements are in place to support the continued delivery of key services.

- Ensure the organisation has senior-level leadership driving preparedness arrangements.

- Ensure named leads are in place, including a Pandemic Influenza Coordinator and communications lead.

- Establish an Influenza Planning Committee (or equivalent planning group) that oversees and coordinates local health preparedness.

- Ensure regular updates on progress and identified risks are given to the board and PEC.

- Develop a communications plan that ensures the dissemination of information and messages to staff, primary care contractors and the public before, during and after a pandemic.

- Ensure clear arrangements and protocols for command and control are in place (and communicated) that state how these link with external stakeholder command and control systems (ie LRFs and Regional Resilience Forums), and who has the authority and autonomy to make decisions.

- Establish arrangements for a coordination centre that is capable of delivering the required functionality (as stated in the guidance) throughout an influenza pandemic.
4 Interventions to support the delivery of healthcare in a community setting

Key points

- An integrated package of interventions will be critical in responding to an influenza pandemic in the community setting, including supporting the public to self care, access to medicines, measures to manage demand surge, and implementation of key public health measures such as robust infection control.

- Plans should ensure that there are robust arrangements in place to ensure the maintenance of both influenza and non-influenza essential services.

4.1 Model of care

In an influenza pandemic, there will be large numbers of people who require additional care and treatment within primary care. This is due to illness arising from the pandemic itself and also because if, as expected, acute care capacity is exceeded, many patients who might normally be admitted to hospital will require care and treatment in the community. In order to manage this additional demand, services will need to be reconfigured to focus upon delivering care to those individuals in greatest need, who cannot be managed by alternative means. GPs, for example, will need to focus on caring for those with more complex and urgent healthcare needs.

In addition, in order to limit the spread of the influenza virus, people with influenza will need either to access care, or to self care, from their own homes as far as possible. In order to support this (and primary care capacity more generally), a National Flu Line service will be activated to provide people with access to information and antiviral medicine where they require it. The public will also be encouraged to identify a ‘Flu Friend’ who can collect their antiviral (and other) medicines for them when they are symptomatic (see chapter 6).

An integrated package of interventions will therefore be critical in responding to an influenza pandemic. These include supporting people to self care in their own homes, and providing rapid access to medicines such as antivirals and other influenza and non-influenza medicines. It also includes augmenting and reconfiguring services to ensure essential services are maintained, and the implementation of other key public health measures such as the administration of a pandemic-specific vaccine (when it becomes available) and robust infection control.

This chapter provides an overview of this ‘model of care’, whilst chapters 5 to 10 provide detailed operational guidance, specifically for planners, on each of the intervention areas.
4.1.1 Supporting self care

Promotion of self care will be crucial in encouraging the community to look after its health and take steps to avoid contracting and/or spreading the influenza virus. Self care advice will also be critical in supporting those who are symptomatic with influenza to care for themselves at home where they are able to do so. This in turn will enable healthcare professionals to focus upon delivering care to those with more urgent and/or complex healthcare needs.

Key ways of supporting members of the public to self care will be through national and local information, educational materials and tools, and support networks. Specific self care support for those with long-term conditions, vulnerable groups, and for those people at the end of their lives (and who may die) and their families or informal carers is also important. These are discussed in more detail in chapter 5.

4.1.2 Access to critical medicines

Medicines have a key role to play in treating influenza and non-influenza patients. The Department of Health is reviewing available stock levels of both influenza-specific and non-influenza medicines, and is working with the pharmaceutical sector and others to ensure, as far as possible, that people have access to the medicines they need. Critical medicines for treating influenza and the complications of influenza are highlighted below.

**Antiviral medicines**

Each UK country has established a stockpile of oseltamivir (Tamiflu) antiviral medicine that allows for the *treatment* of all symptomatic patients at clinical attack rates of up to 25%. Arrangements to make it rapidly available, without symptomatic patients having to visit a healthcare facility (where they risk infecting others), are an important part of the health response and are described in detail in chapter 6.

Antiviral medicines act independently of vaccination and may help reduce the spread of influenza. When used to treat seasonal influenza, antiviral medicines reduce the length of symptoms (by around a day) and usually their severity, as long as medication is started within 48 hours of the onset of symptoms and ideally within 12 hours. Although their effectiveness in reducing morbidity and mortality during a pandemic cannot be known until the virus emerges, it is reasonable to anticipate a similar effect and associated substantial reductions in severe morbidity. Subject to clinical decision-making, specific vulnerabilities within some groups (i.e., there is a contraindication because of the interaction with other medicines that a patient may depend on) may necessitate them being excluded for consideration of administration of antiviral medicines.

Although a number of strategies for the supply and use of antiviral medicines are being evaluated, scientific advice confirms that prompt treatment of all symptomatic patients is currently the most effective use of the antiviral stocks available. Higher clinical attack
rates would require prioritisation of use but, initially, antiviral medicines will be made available to all patients who have been symptomatic for less than 48 hours. As well as benefiting individual patients, the prompt use of antiviral medicines may also produce public health benefits by decreasing the overall clinical attack rate, and by shortening the period that individuals are able to shed the virus and so pass on the infection to others.

See chapter 6 for guidance on access to antiviral medicines via the National Flu Line service and on the distribution of antiviral medicines from the national stockpile to point of use.

**Pre-pandemic vaccine**

Pre-first-wave immunisation with an influenza vaccine that is related but not specific to the pandemic strain – a pre-pandemic vaccine – might offer some limited, but nonetheless useful, protection. Currently, the UK has very limited stocks of an A/H5N1 vaccine purchased specifically for the protection of healthcare workers. Given sufficient stocks, the pre-pandemic vaccine could be used to provide partial protection for others likely to be frequently exposed to symptomatic patients and/or who are crucial to the maintenance of essential services.

More widespread immunisation with a pre-pandemic vaccine would require large stocks of such a vaccine and is not currently part of the UK health departments' plans. Anticipating a suitable vaccine strain has the inherent risk of it being ineffective against the ultimate pandemic strain. The Department of Health continues to monitor the evolution of viral strains and options for pre-pandemic vaccination. It will inform NHS planners of any policy changes.

**Pandemic-specific vaccine**

It is not possible to develop a matching vaccine – a pandemic-specific vaccine – until the emerging influenza strain has been identified. The Government has awarded contracts to Baxter and GlaxoSmithKline to secure production capacity for the manufacture of pandemic-specific vaccine for the UK population. However, it may take four to six months before an effective vaccine is available and evaluated for safety, and considerably longer before it can be manufactured in sufficient quantities for the entire population, given that international demand will be high. Realistically, it is therefore unlikely that a specific vaccine will contribute much to dealing with the initial wave of a pandemic, unless its evolution, or the effectiveness of early control measures, result in a significantly slower-developing pandemic than anticipated. It could, however, be an effective intervention during the latter stages of the first wave and/or for subsequent waves should they occur.

Various technical challenges relating to pandemic vaccines are still being addressed by a worldwide collaborative scientific effort. One in particular is the relatively novel use of adjuvant compounds, such as alum, with influenza vaccines. These might boost vaccine
efficacy and allow less viral antigen, the key ingredient of the vaccine, to be used in each dose – so called ‘antigen sparing’. Being able to use less antigen per dose could increase the number of vaccine doses available overall and reduce the time taken to provide sufficient vaccine doses for the population.

See chapter 7 for detailed guidance on delivering a pandemic-specific vaccine and chapter 8 for guidance on the delivery of the A/H5N1 pre-pandemic vaccine.

**Antibiotics**

Antibiotics are the most effective means of treating the secondary bacterial complications of influenza, but should be prescribed appropriately. It will be necessary to:

- determine the organisms most likely to cause complications (advice on this will come from the HPA
- determine and ensure available stocks of antibiotics.

The Department of Health is reviewing available stock levels and options for enhancing.

### 4.1.3 Managing demand surge

Primary care services will not have the resources to conduct all their usual activities during a pandemic and will need to focus upon delivering care to those individuals in greatest need. It is important to identify what essential work or activity must continue and to make local decisions on what could be reduced, stopped or delivered by alternative means.

As well as prioritising services, some reconfiguration will be required to enable primary care services to support influenza patients at home. This may include practices ‘buddying up’ to enhance their ability to provide a domiciliary-based service to influenza patients, for example. It may also involve establishing multidisciplinary visiting ‘teams’ so that the range of healthcare professionals and their skills are fully utilised (ie nurses, healthcare assistants, allied healthcare professionals such as physiotherapists and occupational therapists, and pharmacists).

Both influenza and non-influenza patients will need to be managed as part of the day-to-day response. Although influenza will represent a large part of the primary care services’ workload, people will continue to have non-influenza healthcare needs that require assessment, care and treatment. Plans must therefore ensure that there are robust arrangements in place for the maintenance of both influenza and non-influenza essential services. As far as possible, non-influenza ill people should access and receive care in the same way as in ‘normal’ circumstances. Practices should, for example, continue to provide essential practice-based care to those who are not symptomatic with the influenza virus.

See chapter 9 for further guidance on managing demand surge.
4.1.4 Other public health measures to promote and protect good health

Other public health measures, such as promoting and applying basic infection control measures and encouraging compliance with public health advice, will form a critical part of an effective response to an influenza pandemic at the local level. They also include measures such as the maintenance of vaccination programmes, personal and protective equipment, and liaison with partner organisations or agencies on the storage of dead bodies and the collection of clinical waste.

See the National framework for further advice on public health interventions.

**Key actions**

- Ensure arrangements are in place that utilise the range of interventions that will be required to respond to and minimise the impact of an influenza pandemic.

- Plans should demonstrate that there are robust arrangements in place to ensure the maintenance of **both** influenza and non-influenza essential services.
5 Supporting self care

Key points

- Effective self care support will be critical to helping people to take steps to protect themselves and others from the virus, and to remain at home when they are symptomatic.

- An integrated package of information, education, support networks and practical community care will be required to support self care.

- A National Flu Line service will help to respond to routine information requests by providing access to messages on pandemic-related issues, self care advice, and a literature (ie leaflet) request function.

- PCTs should seek to engage the voluntary sector, local authorities and community networks as well as independent contractors to promote opportunities for a joint approach to self care.

- PCTs and their partners will need to commence building social and community resilience at this stage, in order to ensure timely availability of support networks when an influenza pandemic arises.

5.1 Why self care is important

Self care will be critical in ensuring an effective response to an influenza pandemic. It will play an important role in enabling members of the public to take steps to protect their own health and reduce the risk of their contracting the influenza virus from others and/or passing it on. It will also play a crucial role in supporting those who are symptomatic with influenza to care for themselves at home where they are able to do so. This is particularly important given that symptomatic patients will be asked to remain at home and, as a first step, access antiviral medicines treatment via the National Flu Line service. By enabling those who are more able to self care to do so, this in turn will help to ensure that healthcare professionals are able to focus upon delivering care to those individuals in greatest need of their services.

Under non-pandemic circumstances, when people self care and are supported to do this, they are more likely to:

- experience better health and wellbeing
- improve medicines compliance
- reduce the need for emergency health and social services
- avoid unnecessary hospital admissions
- have better planned and coordinated care
remain in their own home
have greater confidence and a sense of control
have better mental health and less depression
improve timely diagnosis and treatment, plus rapid access to services when necessary.

During a pandemic, it will be important to aspire to these outcomes through an integrated package of information, education, support networks and practical community care. These are outlined in the sections below.

As part of their planning, PCTs will therefore need to develop and implement a project plan of how people in their locality will be supported to self care in the build up to, during and in the recovery phases of a pandemic. In doing this, PCTs will wish to work with their local healthcare team and their representatives to ensure effective utilisation of their roles and skills in supporting self care. As the principles and practice of self care are already integrated into service provision in many areas of the community setting, PCTs will wish to build upon this where appropriate. This will involve exploring what local and national initiatives link into self care support, eg community pharmacy medicines management and provision of healthy lifestyle advice, assistive technologies, integration with social services, Partnerships for Older People projects, Connecting for Health, and the National Primary Care Development Team (NPDT).

5.2 National communications on self care

Timely national communications that encourage the public to support and engage in self care prior to and during a pandemic are an important strand of the Department of Health’s communications strategy. Timely advice and information on how to protect themselves and others and what to do if they think they are symptomatic, for example, will help prepare the population for the potential impact of a pandemic and will be critical to its subsequent management.

In terms of written information and materials currently available, these are as follows:

- Explanatory leaflets, a guide explaining pandemic influenza and other informative material are available at www.dh.gov.uk/pandemicflu.
- An information pack has been distributed to GP surgeries, pharmacies, NHS Direct call centres and walk-in centres.
- A leaflet has been prepared that will be sent to all households at WHO Phase 5. This will give members of the public clear and simple messages on pandemic influenza and how to protect and care for themselves and others.
Plans for a print and broadcast advertising campaign and a public information film have also been developed and will be held on standby.

5.2.1 National Flu Line service

As public demand for information on pandemic influenza will be extremely high, at WHO Phase 5 the Government will activate a National Flu Line service that will provide rapid access to information, including self care advice, before and during a pandemic. The National Flu Line service is being developed in conjunction with NHS Direct and its equivalents in the devolved administrations and the Central Office of Information, and is likely to provide the following information services:

- pandemic-related advice and information
- situation reports and daily updates
- a pandemic literature request function.

At WHO Phase 6, UK alert level 2, the National Flu Line service will be expanded to provide assessment and access to antiviral medicines for symptomatic patients (see chapter 6). This part of the service will be managed by NHS Direct. Both functions will remain operational until the impact of the pandemic and the threat of further waves subside.

NHS Direct will also continue to play an important role in providing health advice and information through its normal telephone numbers, via the NHS Direct Online website (www.nhsdirect.nhs.uk), and by NHS Direct Interactive on digital satellite television.

Further information on health communications and public engagement preparations for a pandemic are available at www.dh.gov.uk/pandemicflu and in the National framework.

5.3 Supporting self care at the local level

5.3.1 Informing and educating

Public information and education materials will be important in preparing the public for the imminent arrival of a pandemic. Information prepared and/or communicated at the local level should seek to engage the community (including healthcare staff) and gain their cooperation in following advice. This should include taking personal responsibility for their health and accepting social responsibility for supporting each other, and (where they are not symptomatic) going about their normal activities as far as possible. PCTs and primary care contractors will also wish to ensure that they have mechanisms in place to update the community on the local situation, including any changes to access in primary and secondary care, disruptions to services, and what provision is being made for access to medicines such as antivirals and vaccines.
PCTs will need to ensure that communications and messages are issued in conjunction with the strategies of national, regional and local stakeholders, including the Department of Health, RCCCs and LRFs/SCGs.

**Informing and educating the public on how to protect themselves and others**

Providing information and encouraging the public to apply basic infection control measures and to comply with public health advice are likely to make an important contribution to the overall response to a pandemic. Simple measures will help individuals to protect themselves and include:

- covering the nose and mouth with a tissue when coughing or sneezing
- disposing of dirty tissues promptly and carefully – bagging and binning them
- washing hands frequently with soap and warm water, or using an alcohol handrub, to reduce the spread of the virus from the hands to the face or to other people, particularly after blowing the nose or disposing of tissues
- minimising contact between hands and mouth/nose unless hands have just been washed
- making sure children follow this advice
- regularly cleaning frequently touched hard surfaces (eg kitchen worktops, door handles) using normal cleaning products
- avoiding crowded gatherings where possible, especially in enclosed spaces.

PCTs should already be engaging with the public, primary care contractors and partner organisations in developing information and education campaigns on self-protection in an influenza pandemic situation. This should include the importance of establishing good basic hand hygiene and coughing and sneezing etiquette now, in advance of a pandemic. Primary care practitioners, including occupational health providers, are important role models in this regard, and should be applying and promoting good practice. Leaflets and other educational material about good hygiene practice should be made available to patients, their family and/or carers, and practice/hospital visitors. National resources to support this are located on the Department of Health website at www.dh.gov.uk/pandemicflu

**Informing and educating the public on what to do if they become symptomatic**

Providing clear and easily accessible information to symptomatic patients will be crucial in supporting and encouraging patients to remain at home and self care where they are able to do so.

Information and education materials should aim to support people to:

- assess their own condition
recognise and monitor their symptoms

- know what is ‘normal’ for their condition

- know when, where and how to get further help and advice (including knowing how to access information and antiviral medicines via the National Flu Line service)

- identify friends, relatives or ‘helpers’ who may be able to provide assistance and support during the pandemic - in particular, a friend or relative (‘flu friend’) who is able to collect their antiviral medicines (and other medicines) for them when they are symptomatic

- understand why it is important that they take their medicines and how to do so

- undertake strategies to aid their recovery.

PCTs will also wish to recognise the role of informal carers in caring for relatives and friends, and ensure that appropriate information and education materials are accessible to them. They will also wish to review how information and education materials are best provided so that people have access to the required information, as and when they need it, and are supported to use it. Where possible, all material should use nationally available resources and, where required, contextually apply them to local circumstances. All materials should be available in suitable languages for the local population.

PCTs will want to ensure that educating their local communities and staff about how to protect themselves and others, and what to do if they become symptomatic, are built into their self care project plans.

### 5.3.2 Support networks

Support networks have a critical role to play in supporting people to self care at home or in residential settings. Support networks can be particularly effective in helping to disseminate information, supplying advice and reassurance, identifying those who may be at particular risk, and providing support to the vulnerable. Support may be in the form of providing informal care for those who are symptomatic, collecting their medicines for them, ordering their repeat prescriptions, attending to basic household tasks such as cooking, cleaning and shopping, or contacting them on a regular basis to check they are ok, for example. All forms of support are important in enabling and supporting people to remain in their homes whilst they are symptomatic. Those people who provide informal care or tend to basic needs such as cleaning will need to be made aware of the measures they should take to protect themselves and others (see section 5.3.1). PCTs will need to build this requirement into their education programmes.
Types of support networks may include:

- informal networks, eg friends, family and informal carers
- voluntary organisation networks
- community networks, eg faith and religious groups, community groups and local schemes such as Neighbourhood Watch.

PCTs should therefore seek to involve local authorities, the voluntary sector, private sector, community groups and the public in preparing for and responding to an influenza pandemic, and should encourage all members of the public to be part of a local network. Local authorities, voluntary organisations and community groups have a wealth of information on potentially vulnerable groups that would particularly benefit from being part of a support network.

PCTs and their partners will need to commence building social and community resilience at this stage, in order to ensure timely availability of support networks when an influenza pandemic arises.

### 5.3.3 Practical community care

All healthcare professionals have an important role to play in encouraging and supporting self care. Community pharmacy, for example, is well placed to support self care through advice on the use of over-the-counter medicines for influenza and non-influenza symptoms and to support those with long-term conditions through integrated medicines management and provision of healthy lifestyle advice. Professionals such as physiotherapists may also be able to play an enhanced role in supporting people to self care in the community (eg providing breathing control advice and exercises to those with respiratory problems) as routine appointments in hospital settings are reduced or suspended. Nurses, healthcare assistants and other allied health professionals will also be critical in providing practical advice to patients and their carers on how to support their own care, and PCTs will wish to work with them to determine how best their skills can be utilised and coordinated.

See chapter 9 for further information on the key roles and work of health professionals.

### 5.4 Supporting people with long-term conditions to self care

As well as the national general public health messages, there will be additional, specific messages for people with long-term conditions. The Department of Health’s document Supporting people with long-term conditions to self care: A guide to developing local strategies and best practice (February 2006) is a guide to developing local strategies and good practice. There are four key areas where people with long-term conditions might benefit from additional support:
information – how influenza or antivirals might affect or exacerbate a specific condition, and what to do and who to contact if this happens

skills/confidence building – what support is available for enabling people to take decisions about their own care if they are symptomatic with influenza

equipment – additional considerations about using, or changes in, any self-monitoring devices and assistive technology

support networks – what organisations and groups (local and national) might be available to provide support in terms of a person’s health and other wider needs.

These elements could be provided by a mix of providers, including private and voluntary sector agencies. It is important to involve patients, lay experts and local professionals in identifying the best practice in approaches to needs, information and communication.

Within their project plans, PCTs will need to consider and plan for how they will continue to provide services to those with long-term conditions during an influenza pandemic. PCTs are advised to begin to develop the resilience of individuals with long-term conditions to cope when there are reduced levels of normal support available. PCTs will also need to plan for how, during a time of possible supply disruption, they will continue to supply essential medicines to those dependent on them for continued health.

5.5 Identification of, and provision for, vulnerable and seldom heard groups

Vulnerable people may be less able to help themselves in an emergency than self-reliant people. Whilst this will continue to be the case during a pandemic, the impact of a pandemic may also mean that there are more individuals and groups who become temporarily vulnerable.

PCTs should work with other agencies, including general practice, NHS Direct, providers of out-of-hours and unscheduled care, social care services and voluntary organisations, to identify those patients and groups who are potentially ‘at risk’, and ensure that services will be accessible to them. These may be groups that are at risk because of underlying health or social conditions or because of their seldom heard status, eg those who do not speak or understand English and those who are not registered with a GP.

These groups should be identified early on so that their needs can be taken into account when developing local arrangements for the provision of healthcare in the community setting.

The following list identifies a number of individuals and groups that could be classified as vulnerable or hard to reach (permanently or temporarily). This list is not exhaustive, and some individuals may fit into more than one category:
Voluntary organisations that support, for example, older people, children with special needs, mental health groups, people with long-term conditions or chronic illness, and ethnic minority or seldom heard groups will have an important role. These organisations are well placed to provide information and advice, but also to act as a support network to their members. PCTs should seek to engage the voluntary sector in pandemic influenza planning and promote opportunities for a joint approach to self care and supporting vulnerable individuals to remain in their own homes (or other community/residential setting) during a pandemic. This should be demonstrated in their self care project plans.

5.6 Supporting people at the end of their lives - bereavement and dying at home

Over the course of a pandemic, it is estimated that up to 2.5% of those who become symptomatic may die. This represents up to 625 deaths per 100,000 people at a 25% clinical attack rate and up to 1,250 deaths per 100,000 people at a 50% clinical attack rate. Although some of these deaths will occur in hospital, care home and hospice settings, larger numbers of people than usual will pass away in their own homes. Supporting people to die as comfortably and peacefully as possible in their own homes...
at the end of their lives will therefore be important. Appropriate management of deaths at home will also be key to maintaining public confidence and preventing panic, and will require particular training and support.

The types of support that may be required, which are akin to the normal aims of palliative care, are as follows:

- affirmation of life and regard of dying as a normal process
- relief from pain and other distressing symptoms
- psychological, spiritual and social support
- support networks and systems for the patient, and for the family to help them cope during the patient’s illness and in their own bereavement.

As demand for such services will be high, PCTs will need to engage with those providing palliative care and other services in their locality to decide how best the existing resources should be utilised and care coordinated. As services will be under extreme pressure, ‘normal’ levels of face-to-face contact by health and social care professionals may not always be possible, and family members, friends and carers may need to play an ‘enhanced’ role in caring for patients who are at home and nearing the end of their lives. To support them in this enhanced role, PCTs will wish to ensure that family members, friends and carers of the patient can obtain rapid access to both printed and telephone information and advice. Access to information will be supported by the National Flu Line service.

5.7 Everyone has a role

To increase awareness of the importance of self care, patients, parents, carers, professionals, employers and employees all need to get involved in providing and communicating useful self care information and advice. Important links can be made now between Patient and Public Involvement Forums (from April 2008 the Government plans to replace these forums with Local Involvement Networks), the Patient Advice and Liaison Service (PALS), local community groups and support networks, and voluntary organisations. Valuable information that has been created by patients’ groups and support groups, as well as strategies to encourage people to get more involved in their own care, can be provided by many community and voluntary organisations.
**Key actions**

- Develop and implement a project plan of how people in the locality will be supported to self care in the build up to, during, and in the recovery phases of a pandemic. This should ensure effective utilisation of existing programmes, and the skills of those professionals and volunteers, that support self care.

- Identify what information people may need and mechanisms for sharing information, so that they have access to the required information as and when they need it, and are supported to use it. This includes information and education campaigns for staff and the public on how to protect themselves in a pandemic, and what to do if they become symptomatic.

- Ensure that appropriate information and education materials are accessible to specific groups in the population – staff, carers, those whose first language is not English, vulnerable and seldom heard groups, families/carers of those who are very ill or dying at home, those with long-term conditions etc.

- Engage with primary care contractors, NHS Direct, the voluntary sector, local authorities, community groups and the public to maximise opportunities for a joint approach to supporting self care.

- Consider and plan for how specific groups such as those with long-term conditions and seldom heard groups can be supported to self care during a pandemic.

- Engage with those providing palliative care and other relevant services in the locality to decide how best existing resources should be utilised and care coordinated.

- Ensure that health and social care professionals have details about community contacts and support networks that people can access.

- Encourage all members of the public to be part of a local network and to identify a friend/relative/carer (‘flu friend’) that they can gain support from during a pandemic.

- Involve patients, lay experts and appropriate local professionals in identifying best practice in approaches to needs, information and communication.
6 Access to medicines

Key points

- The UK has established a stockpile of oseltamivir (Tamiflu) antiviral medicine that allows for the treatment of all symptomatic patients at clinical attack rates of up to 25%.

- The National Flu Line service will be expanded at WHO Phase 6, UK alert level 2, to provide rapid patient assessment and access to antiviral medicines from the home. NHS Direct will set up and manage this service.

- PCTs have a key role in coordinating and monitoring the distribution of antiviral medicines within their locality, and should determine the locations from which antiviral medicines can be collected (antiviral collection points).

- Pre-identified licensed hospital pharmacy manufacturing units will manufacture oral oseltamivir solution from the active ingredient powder once WHO Phase 6 is announced.

- It is proposed that once an influenza pandemic is declared by WHO, amendments to medicines and related legislation will be brought into force for the duration of the pandemic to enhance access to medicines arrangements.

6.1 Access to antiviral medicines

The UK currently has a stockpile of oseltamivir (Tamiflu) built on the basis of a 25% clinical attack rate. The stock levels are currently under review, but on the basis of the current stockpile, scientific advice confirms that it is best used for:

- treatment rather than prophylaxis, and

- treating all symptomatic patients who have an acute influenza-like illness and a fever (+38°C) and have been symptomatic for no more than 48 hours (unless contraindicated) at a clinical attack rate of 25% or less. If the attack rate was greater than 25% or there were high levels of wastage, prioritisation of treatment will be necessary.

For maximum treatment benefit, oseltamivir needs to be taken as soon as possible, preferably within 12 hours but at least within 48 hours of the onset of symptoms. Developing sufficient capacity in primary care to assess patients promptly is therefore critical to the effective provision of antiviral medicines.

Most people currently access treatment via their general practice or by going directly to their community pharmacist for advice and treatment. However, given the volume of appointments that will be required during an influenza pandemic, providing rapid face-to-face clinical assessment to all symptomatic patients by a GP or other health
professional is unlikely to be feasible. In addition, because a key planning principle is to encourage symptomatic patients to remain at home (to help slow and limit the general spread of infection), it will be important to enable patients to access care from their homes as far as possible. As this could not be achieved via home visits alone, creating capacity to assess patients over the telephone, and other non-face-to-face interfaces where these are appropriate, will therefore be key in managing demand and enabling rapid access to antiviral medicines.

As general practice will be under immense pressure during an influenza pandemic, it will also be important to have a system in place that enables practices to focus upon delivering care to those individuals in greatest need of their services and who cannot be managed by alternative means. Although some additional capacity may be available from ceasing non-essential activities, pressure on individual practices will be heavy, additional demand for home visiting significant and smaller practices disproportionately affected by the absence of key staff.

A model for accessing antiviral medicines that is based upon primary care augmented with a telephone service has the benefits of enabling prompt assessment and rapid access to antiviral medicines from the home. It also helps to ensure that primary care services are able to meet the needs of those patients who have higher or more complex healthcare needs. This model of care is described below.

### 6.1.1 The National Flu Line service

From WHO Phase 6, UK alert level 2, the National Flu Line service will be expanded to provide symptomatic influenza patients rapid access to antiviral medicines. The objectives of the service will be to:

- assess patients to determine their eligibility for antiviral treatment (ie if they are symptomatic and can take the first dose within 48 hours of onset of symptoms)
- authorise antiviral treatment if appropriate
- refer eligible patients (in practice a family member, friend or carer of the patient) to an antiviral collection point to collect their antiviral medicines, or another part of the health and social care system, as appropriate (ie to a GP or other healthcare professional) where the patients have further higher-level needs).

In terms of how the National Flu Line service will work, from a patient perspective this is as follows:

- Before and during WHO Phase 6, national messages will ask everyone to identify friends, relatives and/or informal carers (‘flu friend’) whom they could ask to collect antiviral medicines or other medicines for them should they become ill.
Anyone with symptoms suggesting influenza will be advised to stay at home and telephone a published National Flu Line hotline number for assessment and advice.

When a caller dials the hotline number they will be taken to a menu of options.

On requesting the assessment service option, callers will be taken through a clinical algorithm to determine their suitability for antiviral treatment.

If a caller is found to be suitable for treatment (ie is symptomatic and can access the medicines within 48 hours of onset of symptoms), the caller will be authorised with a unique reference number and given advice as follows:

- Stay at home and ask a family member, friend or carer to collect their antiviral medicines on their behalf.

- The family member, friend or carer should take the unique reference number (and possibly a form of identification) to the antiviral collection point – they will need to present it in return for the antiviral medicine.

- They will be advised where the medicines can be collected from locally (eg a local community pharmacy or a temporary location such as a leisure centre).

- If, exceptionally, they have no one available to collect their medicine for them, a locally organised courier will need to be provided to deliver the medicine to their home. This will need to be provided by PCTs (see section 6.2.3 on the transportation of antiviral medicines).

If the caller has higher-level needs (ie complications or more complex or urgent healthcare needs), they will be referred to another healthcare professional or service for further advice and care.

Should the patient’s condition subsequently deteriorate after taking antiviral medicines, they should contact NHS Direct (core service) or access their GP or out-of-hours service for advice.

It is also envisaged that at least some parts of the service will be replicated on the internet.

For information on the distribution and issuing of antiviral medicines at the antiviral collection point, see section 6.2.4.
**Provisional overview of patient pathway (as with 25% antiviral national stockpile) for the antiviral assessment functionality**

- The green pathway indicates the pathway for lower-need ‘routine’ influenza patients (i.e., those aged 3 years or over, with no complications or other healthcare needs that require professional input).

- The red pathway indicates the pathway for higher-need influenza patients once they have been assessed via the National Flu Line algorithm.

- The purple pathway indicates the pathway for those children under 3 years (see section 6.1.2).

In this way, the National Flu Line service will be a first port of call (only) for the assessment and triage of influenza patients. It is intended to triage routine cases to the antiviral collection points with minimum or no impact upon practices, whilst allowing those with higher-level needs to be referred on to a GP or other health or social care services.
professional for further care and treatment. Higher-level patients would include those influenza patients who:

- are suffering influenza complications
- are 15kg or under (under 3 years of age)
- have identified underlying medical conditions
- are in identified at-risk groups
- are not responding to treatment.

The patient pathway described above will evolve and may be subject to some adjustment as plans for the National Flu Line service develop, and as the Flu Line is tested. PCTs and primary care professionals will need to refer to the latest information available.

**The role of NHS Direct in setting up and managing the National Flu Line service**

Although the authorisation of medicines using non-face-to-face assessment does not take place under ‘normal’ circumstances, the telephone and web-based assessment, information and advice functions of the National Flu Line service are similar to those that NHS Direct already provides 24 hours a day. For example, NHS Direct already has the experience, expertise, systems, process and infrastructure arrangements in place to be able to assess patients, provide advice, and triage and signpost them to other services as appropriate. This includes the expertise and experience in managing contact centres and web-based (and interactive television) services, and in providing tailored services to specific groups such as those who have a hearing impairment or whose first language is not English, for example. With this, the public is already familiar with accessing NHS Direct for information and advice about all types of conditions and the treatments and services for them.

For these reasons, NHS Direct is well placed to support primary care services and help manage demand by setting up and managing the National Flu Line service. This would also ensure that antiviral medicines access arrangements are founded upon a system and delivery model that already exists and that members of the public are familiar with. As this will be an ‘extended’ role for NHS Direct – and because it too will be affected by higher levels of sickness absence and wider service continuity challenges during a pandemic – consolidation and augmentation of NHS Direct services will need to take place. NHS Direct will therefore need to focus on ensuring continued delivery of essential influenza and non-influenza services.

NHS Direct will therefore:

- set up the operational requirements of the National Flu Line service (including the contact centres, training of call takers, operational systems and process, for example)
support the testing and development of the technology application that will underpin the service

manage the service in the event of a pandemic.

Resource requirements
In terms of resource requirements to operate and administer the National Flu Line service, work is currently taking place to determine how far it could be automated (such as by using touch-tone or voice recognition systems and the internet). Although there will still be a need for people to staff the National Flu Line service (where a caller is unable to respond properly to the automated messaging or has further needs), having a proportion of the service automated could reduce the staffing requirements significantly. Alongside this, work is also taking place to determine how many non-clinical and clinical staff will be required, what level of skills and training they will require, and what existing contact centre resource could be used to deliver the service.

The role of PCTs
Although NHS Direct will be responsible for setting up and managing the National Flu Line service (rather than PCTs as implied in previous guidance documents), PCTs still have a role to play in supporting the Flu Line solution. For example, as there is only a finite pool of clinical resource in the system, it will be important for PCTs to work with NHS Direct to identify what clinical resource from the healthcare team could be used to support the National Flu Line service.

PCTs will also need to ensure that they have a contingency arrangement in place that could be activated if:

- an influenza pandemic was to take place before the National Flu Line service was set up, or
- in the event that additional local arrangements are required to support the National Flu Line service during a pandemic.

Arrangements could include bolstering critical access points such as general practice, out-of-hours services and NHS Direct with the resources and skills available within a locality. PCTs should liaise with NHS Direct and other key partners on any contingency arrangement.

Building and testing the National Flu Line service
The National Flu Line service will require rigorous testing to ensure that the operational model, IT applications and infrastructure supporting it are robust and fit for purpose. This will include testing of the planning assumptions that underpin the model so that they are refined. It will also include testing of the mechanisms that will be put in place to protect against people obtaining antiviral medicines where they are not symptomatic and against attempts to obtain medication under fraudulent circumstances. Work is currently under way with technology, fraud and security services to support this process.
Surveillance information
A key benefit of the National Flu Line service is that it will provide information that can be used to help manage the national antiviral stockpile and to inform the local and national response. By enabling allocation of the antiviral course and provision of a unique identifier, data are readily available on who has been given antiviral treatment and who has been referred for further care and/or treatment and to which services, for example. The service will also enable data to be produced on how many antivirals have been allocated and within which localities, and when re-supply of antivirals will be likely to be required.

6.1.2 Access for children

Adult treatment courses of antiviral medicines are stored as pre-packed capsules, but children aged 7 years and under (weighing about 23kg and under) will be given an age-related dose of oseltamivir. The Government has purchased the active ingredient powder for reconstitution into a solution for use during a pandemic. Unless the child is obviously over or under weight, the dose is determined by age as a proxy:

- Age under 1 year - oseltamivir is not licensed for use in this age group. Any decision to use it requires expert clinical judgment. The dose for this age group will be weight dependent. The Royal College of Paediatrics and Child Health has developed a consensus statement that will help clinicians to make a decision on whether to treat and the dose to be prescribed.

- Age 1 year or over but under 3 years (body weight up to and including 15kg) - 30mg 12-hourly for five days.

- Age 3 years or over but under 7 years (body weight over 15kg and up to 23kg) - 45mg 12-hourly for five days.

- Age 7 years or over (body weight 24kg and above) - adult dose (capsule - 75mg 12-hourly for five days).

Children within the normal weight range for their age who have high fever and cough or influenza-like symptoms should, if:

- aged under 1 year or at high risk of complications (due to severe co-morbid disease) - be seen and assessed by a GP or hospital emergency department

- aged 1 or 2 years (ie up to 3 years) - be seen and assessed by a GP or suitably qualified and experienced (in the care of children) healthcare professional

- aged 3 years or over - can be assessed by the National Flu Line service staff using a clinically based paediatric triage protocol and referred for antivirals and/or to a medical practitioner if indicated (eg those at risk of suffering complications of influenza).
6.1.3 Access for those who are ill at work

People who become symptomatic at work should be advised to contact the National Flu Line service and to go home as quickly as possible, isolating themselves from well members of the family where possible. Whilst travelling home they should seek to have as little contact with other people as possible, and should ensure that they follow basic infection control measures to limit spreading the virus to others (ie to cover the nose and mouth with a tissue when coughing or sneezing and to dispose of dirty tissues promptly and carefully - bagging and binning them).

See section 7.1 of the National framework for information on the use of face masks and respirators, and section 7.2 for information on informing and educating the public on how to protect themselves and others.

6.2 Distribution of antiviral medicines

Within an estimated 24 hours of UK alert level 2 being announced, PCT antiviral collection points will receive an initial allocation of two weeks’ supply of antiviral medicines for adults and children aged 7 years or over. Collection points will also receive a supply of antiviral solution for children aged under 7 years, and as far as possible this will also be a two-week supply. The initial allocation of a two-week supply will be based upon resident population and a 25% clinical attack rate. Allocations will also include military establishment and detention centre populations, and will be adjusted to take account of any transient population or other factors as the pandemic develops.

After the initial supply of antivirals, further allocations will be made on an ordering and re-supply basis, and will be adjusted to reflect the actual attack rate, supply position and demand. Routine regular delivery brings reassurance and predictability to the process and ensures that locations do not have to store their entire allocation at one point (which has security risks). It also allows for the fact that the solution has a limited shelf life, and ensures a higher degree of national and PCT control over the allocation of the stockpile.

A national coordination centre will be established to receive orders for further supplies of antivirals, to coordinate the transportation of antivirals to the PCT collection points, and to monitor and manage the national antiviral stockpile.

PCTs will have a key role in coordinating and monitoring the distribution of antiviral medicines within their locality, and are responsible for:

- risk assessing and identifying antiviral collection points and other points of use (eg hospitals for inpatient use) within their locality
- ensuring that all antiviral collection points and points of use have appropriate operational, business and resilience procedures in place, and that they are kept under review
- ordering further supplies of antivirals from the national coordination centre to the collection points and other points of use as appropriate, and monitoring their use
- ensuring adequate access to antiviral collection points across the locality
- coordinating the delivery of antiviral medicines from the collection points to a patient where, under exceptional circumstances, the patient does not have a representative who is able to collect their medication for them
- nominating a team of appropriately skilled staff who are responsible for antiviral distribution coordination within the PCT. This team should be part of the PCT coordination centre (see section 3.2.1).

### 6.2.1 Manufacture of antiviral solution for children under 7 years

A number of licensed hospital pharmacy manufacturing units have been identified to manufacture oral oseltamivir solution for use by children under 7 years during a pandemic. During UK alert level 1 (and after being alerted of the need to have arrangements in place), the manufacturing units will be asked to start production of the solution in preparation for UK alert level 2. As the restricted shelf life of oral oseltamivir (the solution is stable for approximately eight weeks at room temperature) makes significant stockpiling of the solution effectively impossible, all PCT plans must assume severe pressure on stocks at all times. Measures to avoid waste and ensure that supplies are used only in accordance with national clinical guidelines will be especially critical.

In order for the designated licensed hospital pharmacy manufacturing units to respond effectively to demand for solution during a pandemic, and to make the necessary changes to their production capacity, they will also require real-time data on usage. This will require regular communication with, and instruction from, the national coordination centre.

Once the solution has been manufactured, it will be bottled and labelled at the manufacturing units. Transportation of the bottled solution, and the syringes required to administer the solution, to the PCT collection points and other points of use will be arranged nationally. See sections 6.2.2 and 6.2.3 on ordering and re-supply and transportation for further information.

The Department of Health is currently reviewing the arrangements for the supply of solution for children less than 3 years of age – ie whether doctors or appropriately trained and experienced healthcare professionals will need to issue a prescription for those they assess over the telephone so that they can advise the family, friend or carer to collect the prescription from the practice to present at the antiviral collection point.
Roche has also now received a licence to manufacture 30mg and 45mg capsules. The options for developing alternative formulations, such as a lower dosage capsule for children, are currently being examined.

6.2.2 Ordering and re-supply

PCTs are responsible for monitoring the stock levels of antivirals in their locality and re-ordering supplies to the antiviral collection points and points of use. PCTs will need to ensure that robust arrangements are in place at collection points and other points of use in their locality to ensure the timely re-ordering of antivirals and maintenance of local stocks.

In order to ensure that appropriate supplies of antivirals are ordered and that delivery to the correct locations is timely, PCTs will need to:

- notify the national coordination centre of the collection points and other points of use, including minimum details (ie name, address, postcode, telephone, email and fax contact details, special delivery requirements)
- notify the national coordination centre of any changes to the collection centres or points of use, or any issues or problems they are experiencing
- monitor antiviral medicines stock levels at all collection points and other points of use
- utilise regional and national surveillance information to help monitor demand and supply
- ensure follow-up where the local use is not in line with expected take-up and use
- arrange for supplies that are not needed to be returned to the national stockpile.

Some of the information above, for example changes to the location or opening hours of local collection points, will also need to be communicated to the National Flu Line service so that callers are referred appropriately.

Further guidance on the re-ordering and re-supply of antiviral medicines will be issued as part of an operations manual. This would include further detail such as whether or not PCTs will be expected to authorise antiviral orders on an exception reporting basis only.

6.2.3 Transportation arrangements

The transportation of the antiviral capsules and the antiviral solution from the national stockpile to PCT antiviral collection points and other points of use will be arranged
nationally. On receipt of orders for antiviral supplies, the national coordination centre will authorise and instruct delivery of the order. Delivery of the order to the collection point or other point of use will take place within 24 hours. Delivery time will be reduced to 12 hours if an emergency order is made.

PCTs will be required to coordinate the delivery of antiviral medicines from the collection points to a patient where, under exceptional circumstances, the patient does not have a representative who is able to collect their medication for them.

### 6.2.4 Antiviral collection points

Antiviral collection points are the locations from which family, friends or carers of symptomatic patients (a patient representative) can collect their antiviral medicines for them, on referral from the National Flu Line service (ie if they are eligible for antiviral treatment). PCTs will need to identify a number of antiviral collection points for this purpose within their locality. In order to identify appropriate antiviral collection points, PCTs will wish to conduct a formal risk assessment of possible venues and should ensure that this is done in conjunction with key stakeholders such as the police (ie police public order tactical advisers), local pharmacy advisers and other partner agencies.

Minimum requirements for an antiviral collection point include:

- ability to store cases containing antiviral capsules (one case contains 440 packs of antivirals – or 440 treatment courses – and is approximately 595mm x 390mm x 360mm in dimension)
- ability to store antiviral solution (refrigeration will only be necessary if stocks were held and not dispensed before eight weeks of being manufactured, though this should not be the case)
- appropriately trained staff (and staffing levels) to supply the medicines
- computers
- printers
- internet connection
- access to the NHS net (the new N3 structure)
- access to local IT support
- telephone line(s)
- fax machine(s)
- accessible to the public
accessible to GPs and healthcare professionals where they wish to access antiviral medicines for home visits

- access to pharmaceutical advice if the distribution point is not a community pharmacy or dispensing general practice
- secure site (and/or security measures can be put in place)
- business continuity and resilience procedures.

When identifying distribution sites, PCTs will also wish to consider the following:

- logistics of receiving supplies, particularly as the pandemic progresses and deliveries may be affected
- maintaining security of the sites and the possibility of increased public unrest and attempts to obtain antiviral medicines unlawfully
- the ‘normal’ use and role of the site and whether this would be compromised
- availability of the service (staffing and security) out of hours
- possibility of fuel shortages, which may mean difficulties in accessing sites
- possibility of queues and congestion if there are too few sites (which may lead to increased anxiety and public discontent).

PCTs will wish to ensure that the choice of collection sites is coordinated so that at least some of the sites provide a service out of hours (ie there is 24-hour access), both to ease pressure on existing out-of-hours services and to aid rapid access to antiviral medicines.

Possible options for distribution centres include:

- NHS facilities (non-acute)
- community pharmacies
- dispensing practices (not non-dispensing practices)
- out-of-hours bases
- non-healthcare secure facilities
- partner agency facilities.

Aside from the antiviral collection points, other points of use may include:

- hospitals for inpatient use
- places of state detention
- out-of-hours services.
**Process for collecting antiviral medicines**

When a representative of a patient collects the antiviral medicines from the antiviral collection point they will need to present the unique reference number (URN) to the person issuing the medicines. The Department of Health is currently working with security and fraud services to determine whether the patient representative will need to present any further evidence (e.g., a utility bill or proof of address of the patient, as is required for postal services) to prove that they are obtaining the antiviral medicines legitimately.

On presentation of the URN, the person issuing the medicines will need to:

a) access the National Flu Line service database (a web-based database) and reconcile the URN with the patient details to:
   - determine whether the URN is legitimate and matches the correct patient
   - log that the antiviral medicine has been collected on their behalf

b) write the name of the person and the date the medicine is supplied on the label of the antiviral medicines course (both capsule and solution courses will come with labels)

c) supply the antiviral medicines, with a patient information leaflet (both capsule and solution courses will come with a leaflet)

d) offer any further information, advice and/or treatment as appropriate and where they are trained to do so. Non-clinical staff may be able to offer basic self care advice and/or refer people to information where appropriate.

If a person is admitted to hospital after being allocated antiviral medicines, they should be encouraged to take their medicines with them. This will avoid wastage and help healthcare professionals in the acute setting to identify what medicines they are taking.

Where home delivery is required, PCTs will need to ensure that the patient’s URN is reconciled with the information on the National Flu Line service database, and that the delivery has been logged on the system.

**Supply of antivirals**

It is proposed that as well as enabling antiviral medicine treatment to be authorised via the National Flu Line service, it can be supplied without a prescription and by a broader range of professionals. An influenza protocol will be developed to enable this. This protocol is subject to public consultation and formal agreement under Proposals to amend medicines and associated legislation during an influenza pandemic. Access to prescription-only medicines without a prescription will be possible only during the time of a pandemic.
Stock management arrangements

Antiviral collection points will also be required to receive, store and stock-manage the antiviral medicines.

Antiviral collection points will therefore need to ensure that they have appropriate operational procedures and/or protocols in place for the following:

- receipt and storage of antiviral medicines
- supply of antiviral medicines
- logging quantities of antiviral medicines that have been allocated to general practices or to healthcare professionals for home visit use
- stock management of antiviral medicines and timely re-ordering to ensure re-supply
- reconciliation between what has been ordered and what has been supplied
- separate records for capsules and liquids.

Antiviral collection points will also wish to have business and resilience procedures in place to ensure the continued operation of the service and maintenance of security.

6.3 Access to other essential and over-the-counter medicines

Demand for essential medicines and over-the-counter remedies is likely to be high in a pandemic, and re-supply may be uncertain. The Department of Health is reviewing available stock levels of both influenza-specific and non-influenza medicines and is working with the pharmaceutical sector and others to enhance stocks, increase supply chain resilience and consider options for enhancing the supply of such medicines.

In order to ensure, as far as possible, that people have ready access to the medicines they need, it is proposed that once an influenza pandemic is declared by WHO, amendments to medicines and related legislation will be brought into force for its duration. These changes are outlined in Proposals to amend medicines and associated legislation during an influenza pandemic document, and if agreed to would include:

- protocols for the mass supply of key influenza-related medicines
- new powers of emergency medicines supply for pharmacists
- powers for dispensers to repeat ongoing prescriptions without recourse to a doctor
- access to over-the-counter medicines and healthcare products, through schemes developed by PCTs, that would authorise supply of a limited list of medicines on the NHS, without a doctor's prescription and free of charge. These schemes would be for the group of people who are exempt from
prescription charges and would otherwise have made an appointment with a GP to obtain a prescription.

Any final legislation resulting from full consultation would be enacted only when a pandemic influenza outbreak was declared in the UK. It would cease to be law when the pandemic ended.

PCTs will wish to consider opportunities to encourage the public to think about what basic supplies of medicines they would require in a pandemic and whether they are in date.

**Key actions**

- Ensure that a contingency arrangement is in place that could be activated if an influenza pandemic was to take place before the National Flu Line service was set up, or in the event that additional local arrangements are required to support the National Flu Line service during a pandemic. PCTs will need to liaise with their SHA Pandemic Influenza Coordinator and NHS Direct on the contingency arrangement.

- Identify what clinical resources could be used from the healthcare team to support NHS Direct in administering the National Flu Line service or its core non-influenza business in the event of a pandemic, and communicate this to NHS Direct.

- Risk assess and identify antiviral collection points, and other points of use (ie hospitals for inpatient use), within their locality and communicate these to the Department of Health (a template will be provided to SHA Pandemic Influenza Coordinators).

- Ensure that robust arrangements are in place at collection points and other points of use in the PCT’s locality to ensure timely re-ordering of antivirals and maintenance of local stocks.

- Nominate a team of appropriately skilled staff who are responsible for antiviral distribution coordination within the PCT. This team should be part of the PCT coordination centre (see section 3.2.1).

- Encourage all members of the public to identify a representative (ie a friend, relative or carer - their ‘flu friend’) who could collect their antiviral medication for them in the event of a pandemic.

- Ensure that an arrangement is in place to coordinate the delivery of antiviral medicines from the collection points to a patient where, under exceptional circumstances, they do not have a representative who is able to collect their medication for them.

- Consider opportunities to encourage the public to think about what basic supplies of medicines they would require in a pandemic and whether they are in date.
Vaccination is a potentially vital tool in combating a new pandemic influenza virus. This chapter sets out the practical means by which a specific pandemic vaccine will be delivered to the population.

As we are planning for vaccination against a new influenza virus (be it an A/H5N1 or another influenza strain) that currently does not exist, vaccine policy and its implementation will necessarily have to be adapted in light of the epidemiology of the evolving pandemic and the effectiveness of current or new vaccines.

### 7.1 Delivery model

The provision of specific pandemic vaccine will unavoidably take place over several months, as explained in section 7.2.1 and in chapter 4. Emergency response arrangements should also build on normal delivery mechanisms whenever possible and bolster capacity as necessary in a flexible way in support of this approach.

Primarily for these reasons, this chapter describes a primary-care-based model for population-wide specific pandemic vaccination, and this includes the important provision to support primary care delivery by, as necessary, redeploying other staff to work in general practices.

However, local needs may require tailored solutions, and there needs to be flexibility in national plans to allow for this. PCTs have already done considerable planning for the provision of mass vaccination centres and may choose to use this alternative model to deliver population-wide immunisation in the event of a pandemic.

A national guidance document for PCTs, Mass prophylaxis centres: An operational planning framework for mass prophylaxis or vaccination, is due to be published by the Department of Health and the HPA in 2007 and can be used to support this alternative approach. It should be noted that this guidance is focused on situations where it would be necessary to deliver treatment to large numbers of patients as quickly as possible.
The general guidance in this chapter should also be used to inform plans to deliver specific pandemic vaccine via mass vaccination centres, if the circumstances warrant this approach.

Although the intention will be to maintain normal services as far as possible, the unique nature of the threat presented by a pandemic may require the curtailment of services and activities. It is acknowledged that services, including primary care, will be ‘catching up’ with a backlog of non-urgent work following a pandemic wave, when vaccination may start.

7.2 Planning assumptions

Policy decisions on vaccination made in advance of a pandemic will inevitably have to be reviewed, and quite possibly substantially modified, in light of the characteristics of an emerging pandemic. However, the likely key parameters of pandemic vaccination policy are as follows:

- Two doses of influenza vaccine will be needed in order to increase the chance of adequate immunity against a novel virus.
- These doses would need to be given at least three weeks apart.
- Vaccine production capacity is finite, and production of sufficient vaccine for the whole population will take several months.
- Provision of a specific pandemic vaccine in part during a second wave of a pandemic is possible, given this lengthy timescale.
- Priority groups will need to be agreed (at national level) in some detail, particularly over the first few weeks of vaccination.
- The choice of priority groups (as specified by the Government) would be based on a number of factors – including ethical considerations as well as scientific factors – such as the incidence and risk of clinically severe disease in different population groups, and the possible impact on slowing the spread of disease by prioritising particular population groups.
- It may not be possible, on the population scale needed, to reliably distinguish those who have been infected with pandemic influenza previously.

7.2.1 Vaccine availability

Sleeping contracts for specific pandemic vaccine have been finalised with vaccine manufacturers. This allows for the provision of up to 132 million doses for the UK population. This allows for two doses per head of population, with an allowance for vaccine wastage.
The maximum pandemic vaccine available to the UK, at the peak manufacturing point, is estimated to be three million doses per week. Once vaccine production has started, it would take over 12 months to receive delivery of the full quantity of vaccine. On this basis we have estimated the vaccine availability for the patients of a typical GP, or for a population of 250,000 people.

For a typical GP, with a patient list size of 1,860 patients, this would mean, on average, that 85 of their patients would need to be immunised per week over the course of the specific pandemic vaccine immunisation campaign. For a population of 250,000 people, we can estimate that an average of 11,364 people would be immunised each week.

7.2.2 Further clinical advice

In the event of a pandemic, or the increased threat of a pandemic, further detailed guidance will be provided by the Department of Health – covering clinical advice such as the dosage schedule, contraindications and likely side effects of the vaccine.

For planning purposes, however, it can be assumed that, although the presentation and dosage schedule might be different from the current seasonal influenza vaccines, the general clinical advice regarding administering the new pandemic vaccines is likely to be similar.

Further specific clinical guidance would be provided within the context of the general vaccination advice already provided by Immunisation against infectious disease (Department of Health, 2006).

7.2.3 Provision for schoolchildren

The National framework makes it clear that widespread and extended school closures are a possibility, in order to reduce the impact of the pandemic. It would be a significant risk to assume that children could be immunised in schools that could be closed. Therefore, this section assumes that the immunisation of school-age children would take place in primary care.

It is important to note that school nurses, who are generally very skilled in immunisation, are a key resource and are likely to be one of the first groups called upon to support delivery through primary care if necessary.

7.3 National arrangements

A successful programme of vaccination, particularly when undertaken on a population-wide scale, will require a coordinated effort from many organisations, ranging from central government to PCTs, as well as needing the active support of local communities.
Whilst vaccination will be delivered locally, important responsibilities lie at the national level. This includes the setting of vaccination policy, including the possible impact that the delivery of pandemic vaccines may have on routine immunisation programmes, and also the choice of priority groups.

The Department of Health, as the lead government department in the event of a pandemic, will provide overall leadership in the event of a pandemic and, more specifically, will review, finalise and initiate national vaccination policy.

At WHO influenza pandemic Phase 4 a review will be needed not only of vaccination policy but also of delivery plans. A Department of Health vaccination implementation group will be established to coordinate the national response.

7.3.1 Vaccine distribution

The delivery arrangements for a pandemic-specific vaccine are currently being reviewed with key stakeholders, including PASA and the NHS Business Services Authority. Given that specific pandemic vaccine can be provided by manufacturers only at a limited rate, that it will be provided in relatively space-saving multi-dose vials and that it should be used promptly, it is less likely that a specific pandemic vaccine will cause major distribution or storage problems nationally or locally.

7.3.2 Key consumables

For ease of use in general practice, pre-filled syringes are preferable. However, the larger bulk of such syringes would create cold storage difficulties. Moreover, producing pre-filled syringes will significantly delay vaccine availability. Multi-dose vials can be manufactured more quickly and for this reason are the most appropriate vaccine presentation.

As vaccine will be in multi-dose vials, needles and syringes will be needed in considerable quantities. Their supply will form part of the national purchasing and distribution arrangements, for which a framework agreement is in place.

Printing small adhesive labels with the details of the vaccine, including the batch number, on a sheet and including them with multi-dose vials would enable quicker use in some general practices. Other practices might benefit from a bar-code system. These possibilities will be investigated by the Department of Health.

7.3.3 Monitoring arrangements

Vaccine coverage, effectiveness and safety will need to be carefully monitored in the event of a pandemic. The Department of Health and the Medicines and Healthcare products Regulatory Agency (MHRA) will, working with the HPA’s Centre for Infections, define clear data requirements in order to ensure that these requirements are met.
Monitoring vaccine safety will be a legal requirement of the vaccine manufacturer and is particularly important for the use of novel vaccines. Healthcare workers may be an appropriate cohort for early field studies of vaccine efficacy using serological and clinical endpoints.

Immunisation coverage will be monitored using the expanding Health Protection Informatics Portal, the website currently used for seasonal influenza immunisation and pneumococcal immunisation coverage. Currently general practices can upload data directly to that portal, data can be extracted from general practice computer systems or practices can pass data forms to the PCT for inputting.

The MHRA has responsibility for collection and evaluation of information on vaccine safety in the UK. The MHRA also works in conjunction with other European regulatory bodies and ensures that vaccine manufacturers are meeting their legal obligations in respect of vaccine safety evaluation.

Where possible, existing national systems for collection of vaccine safety data will be used. However, depending on the situation at the time, there may be a requirement to implement special measures for reporting of information on suspected side effects. The MHRA and Department of Health will issue further guidance on reporting of vaccine side effects, as appropriate, if an immunisation campaign is implemented.

7.4 Local planning by primary care trusts

PCTs have overall responsibility for the protection of public health within their geographical area and are responsible for planning the response to an influenza pandemic in that area, including the delivery of vaccination. Local planning for delivering vaccination should be undertaken in liaison with local stakeholders, particularly colleagues in primary care, and led by a designated person of sufficient seniority, normally the PCT pandemic influenza coordinator.

A planning group will be needed to support and advise the designated lead. This may be a sub-group of the local Pandemic Influenza Planning Committee (or equivalent) or existing local influenza groups.

The key tasks of the planning group will be to:

- take lead responsibility for ensuring that local health response plans would be able to deliver population-wide immunisation in the event of a pandemic
- agree arrangements for reporting progress to the PCT, focusing on any areas of concern
- assign roles and responsibilities to group members and list personal actions
- ensure that planning is coordinated with relevant local stakeholders, particularly primary care colleagues
- consider the needs of vulnerable or hard-to-reach groups
- develop contingency plans in the event that particular general practices or other services are unable to deliver the immunisation programme in the event of a pandemic
- ensure that there is proactive dissemination of information that comprehensively covers the likely questions the public will ask about local vaccination arrangements. This includes providing clear information about how to access vaccination locally, the nature of the vaccination, and making clear any vaccine contraindications.

The primary-care-based vaccination delivery model described in this section builds on normal arrangements, particularly those of general practice, where providing vaccination clinics is a routine activity. Whilst this may mean that specific live exercises involving local practices are not needed, it is nonetheless particularly important that primary care teams are involved in the discussion about the delivery of this plan locally.

See Annex C for advice on membership of the vaccine delivery planning group.

### 7.4.1 Contingency arrangements

Some general practices, particularly smaller practices, may face particular problems in making suitable arrangements, or be unable to deliver immunisation temporarily because of problems such as staff sickness. Similarly, a nursing home, prison or residential school could need additional support. PCTs will need to monitor vaccine delivery across their area and provide additional support if necessary.

Consideration should be given to how to create, at short notice, a flexible back-up team able to be sent to particular locations when there are justifiable reasons that a particular service is struggling to deliver immunisation.

### 7.4.2 Vulnerable and hard-to-reach groups

Some sections of the population will need specific consideration when PCTs plan for a pandemic. PCTs should pay particular attention to these groups, gathering further information as needed to assess their needs and the services they require.

Service provision should be based on current healthcare arrangements where appropriate services already exist. Although local circumstances may dictate more appropriate solutions for providing immunisation for specific groups, Annex D makes suggestions that should be considered in drawing up local plans.

See also section 5.5 for further information on identifying and supporting vulnerable and seldom heard groups.
7.4.3 Capacity to deliver the vaccination programme

Working practices will need to be flexible during a pandemic in order to mount the challenging response needed, particularly as there may be staff shortages as a result of illness. It is particularly important that administrative support for vaccination is strong, allowing those actually carrying out the vaccination to focus on that more specialised task.

Staff may need to work in different ways or in different settings from usual. PCTs should consider how the local workforce can be used flexibly in the event of a pandemic, and identify which staff groups could be redeployed (if necessary) to support vaccination in primary care. Pandemic influenza: Human Resources guidance for the NHS provides advice on indemnity issues associated with movement of NHS staff beyond their normal posts and locations.

Professional groups who could be called upon to vaccinate

Key groups that could be called upon to administer vaccines are:

- GP practice nurses – the key organisers and key staff resource
- school nurses – who already will be trained and experienced in mass immunisation and who can be attached to local general practices temporarily
- health visitors – who may need immunisation training and who can also be called upon to assist
- district nurses – already normally trained to immunise and who usually have close links to general practices.

PCTs need to make contact with these professional groups and identify any training needs they may have, particularly those of health visitors. PCTs will also need to clarify, within the context of business continuity planning, which duties these staff groups currently undertake that could be curtailed or deferred if they were needed to assist with immunisation in general practices.

Given the possibility of a high rate of sickness absence among staff, and the need to plan for the most challenging scenario, there will be a need to think creatively as to how to use the wider health workforce to deliver immunisation. Other professional groups that could possibly be called upon to immunise, with appropriate training and within clear clinical governance arrangements, include:

- agency staff
- retired staff, particularly those recently retired
- healthcare assistants
- nurses and doctors in non-clinical or administrative roles, such as research
### Staff training

All vaccinators will need to be up to date with immunisation, resuscitation and anaphylaxis procedures. Provision of necessary training of healthcare workers will be a key task if untrained or partially trained staff are needed to assist in the immunisation effort.

The PCT will already have information on training of their own staff and, in the event of a pandemic, will need to build upon these data to ensure there is a comprehensive list of all staff who are trained to immunise and can be called on to assist.

In addition to general immunisation training, educational sessions should be provided by the PCT for all vaccinators to explain the immunisation programme and its rationale, the overall context of the pandemic and how to report adverse events, and to answer questions about issues such as the side effects of the vaccine.

The information provided should be based on national advice and assistance sought from those with particular local knowledge and expertise, such as the trust’s consultant in communicable disease control.

### Vaccine storage and distribution

Appropriate vaccine storage and distribution needs to be considered in local plans. The delivery arrangements are currently being reviewed with key stakeholders, including PASA and the NHS Business Services Authority.

Specific tasks in the event of a pandemic that need to be considered at the planning stage include:

- identifying a named individual, and a deputy, from local pharmacy services to take the lead role in coordinating the storage, distribution and stock control arrangements
- ensuring business continuity, identifying key personnel within the pharmacy department to support the lead individual and who can, in their absence, organise and authorise the order, delivery, storage and distribution of vaccine
- ensuring sufficient cold storage capacity
the storage of the necessary needles, syringes and any other consumables

- ensuring the security of vaccine supplies.

Whilst the population generally responds to emergencies in a calm and responsible way, a pandemic is likely to cause high levels of concern and anxiety. Demand for vaccination may be high, and the security of vaccine supplies needs to be carefully considered locally.

Standard security arrangements, such as locks and alarms, are in place in general practices. Whilst having highly rigorous security measures in all individual general practices is not realistic, general practices should review their current building and other security arrangements. PCTs will need to support this process, seeking advice from the police (ie police public order tactical advisers) in doing so.

7.5 Organising vaccination clinics in primary care

This section provides suggestions to practices as to how vaccination clinics may best be delivered in the event of a pandemic. It is acknowledged that the specific mechanism and logistics for delivering the immunisation programme may appropriately vary between practices.

7.5.1 Key elements

Several elements are key to the successful organisation of vaccination clinics:

- The arrangements should build, as much as possible, on current arrangements for seasonal influenza vaccination.
- There needs to be a lead within each practice (such as the practice manager) to coordinate arrangements.
- Where the overall lead is not a clinical member of staff, a clinical lead (usually a practice nurse) will also be needed to work closely with the overall lead.
- Administrative support is important, including for notifying patients of clinics, and the identified lead will have to liaise closely with practice administrative staff.
- Careful preparation, particularly for the first clinics, is essential, ranging from ensuring that enough fully trained staff and adequate rooms are available, to checking that sufficient consumables have been ordered.
- In vaccination clinics, it is most efficient if as much of the overall process as possible is delegated to supporting administrative staff, aided possibly by local volunteers, leaving the vaccinators as free as possible to focus on the specific task of vaccination.
7.5.2 Separate vaccination clinics

If vaccination occurs between pandemic waves, clinics could take place at any time and within the main surgery area. However, as vaccination could occur in part during a pandemic wave, it is important that there are plans for vaccination clinics to be physically separate from ordinary surgeries if necessary.

Although patients who may have influenza will be encouraged to remain at home, some symptomatic patients may (unknowingly) attend their practice, so there should be segregation of patients who could have influenza from those who are well and attending only for immunisation. It may also be logistically easier to organise vaccination separately from the regular work of the practice. Suggestions are given below for organising separate vaccination clinics, in case this is required for infection control purposes, or because it will be more efficient.

Four options for providing separate vaccination clinics in primary care are as follows, although these are not mutually exclusive:

- Although this may not always be possible, the physical layout of the general practice building may allow for vaccination clinics to be run at the same time, but separately from, ordinary surgeries. If this is done for infection control purposes, separate entrances would be needed (for instance, using the back entrance for the vaccination clinic), and it would be necessary to have separate waiting areas and consulting rooms.

- A second approach is to run vaccination clinics at a different time to ordinary surgeries. Separate morning and afternoon clinics may be possible, although cover arrangements would be needed for ill patients who need to be seen urgently. Some practices may choose to run clinics out of hours, on Saturday or Sunday mornings or early evenings, and this will be helpful to those patients who have difficulty attending during surgery hours.

- Practices could coordinate their efforts by ‘buddying up’. For instance, two nearby practices could pair up, with one providing vaccination on a given day, or part of the day, whilst the other practice provides cover for ill patients who need to be seen urgently. This may, however, present problems for record keeping.

- It might be possible to agree the use a separate building local to the practice, such as a community centre or church hall, to hold vaccination clinics. Such clinics could possibly cover the patients of multiple practices by mutual agreement and if record-keeping arrangements were robust.
7.5.3 **Suggested primary care clinic process**

A suggested process for organising vaccination clinics in primary care is detailed in Annex E. The approach outlined may need to be adapted, depending on the size of the clinics and the particular circumstances of an individual practice, and includes advice on:

- preparing and planning for clinics
- patients’ information needs
- recording of patient data
- roles and responsibilities.

### Key actions

- Establish a plan for delivery of specific pandemic vaccine in accordance with the guidance set out in this chapter.

- Establish a planning group (may be part of the Pandemic Influenza Planning Committee’s or equivalent group’s agenda) that oversees the delivery plan and arrangements, and ensure that it addresses its ‘key tasks’ as outlined in this chapter.

- Ensure that the plan identifies how specific groups such as vulnerable and seldom heard groups will be supported in accessing the service.

- Ensure contingency arrangements are in place in the event that individual practices are overwhelmed and unable to deliver immunisation.

- Identify which professional groups will support delivery of immunisation, any training needs they may have, and a plan for how these will be met in advance of a pandemic.

- Ensure arrangements are in place for appropriate vaccine storage, distribution and stock control.

- Ensure that clinic plans for administering the vaccine are in place and updated to meet the specific requirements of a pandemic.

- Where PCTs, in liaison with key stakeholders, choose to opt out of delivering specific pandemic vaccine via the primary care model, and decide to use the alternative mass vaccination model, this should be validated by a risk assessment.
The UK has limited stocks of an A/H5N1 vaccine purchased specifically for the protection of healthcare workers. This chapter outlines the practical arrangements for administering a pre-pandemic vaccine.

Further guidance is required to clarify the definition of a frontline healthcare worker, and therefore this section currently only gives guidance on the provision of vaccination for staff employed by NHS trusts and general practices. Given sufficient additional stocks, a suitable vaccine could be used to provide partial protection for other workers likely to be frequently exposed to symptomatic patients or key staff crucial to the maintenance of essential services. This is currently under review.

Whilst PCTs would provide the necessary vaccine, oversee the suitability and completeness of local arrangements, and ensure monitoring of vaccine coverage among healthcare workers, occupational immunisation is primarily an employer responsibility.

Employer-led immunisation allows more accurate identification of the occupational status of individuals and also has the practical advantage that there are already systems in place for healthcare workers to be immunised against seasonal influenza. These systems will need to be strengthened, bearing in mind that uptake of seasonal influenza vaccination in healthcare workers is usually not high. Employers will also be responsible for ensuring that data are provided on vaccine uptake among their staff.

### 8.1 Immunisation of healthcare workers employed by NHS trusts

NHS occupational health departments should provide the professional lead in planning for, and ensuring the delivery of, immunisation of those NHS staff groups for whom they are responsible. The PCT should work with NHS occupational health departments to ensure that suitable arrangements are in place.

NHS occupational health departments will, in liaison with PCTs, need to ensure that:

- staff are clearly identified by their occupation, and all necessary details recorded
- if national policy requires it, staff are immunised in a priority order
● preparatory planning considers all the practical issues involved, including the need for enhanced vaccination capacity

● the guidance given elsewhere in this plan regarding clinic arrangements in primary care is considered, as it is also relevant to an occupational health setting.

8.1.1 Adequate capacity for immunising healthcare workers employed by NHS trusts

Several practical issues need to be considered at the preparatory planning stage when planning for the pre-pandemic immunisation of healthcare workers employed by NHS trusts. The need for an adequate number of staff to provide this service, particularly trained vaccinators, is crucial.

It will need to be discussed with the PCT whether community nursing staff, such as school nurses, could assist, if necessary. It may be necessary to enlist support from groups such as recently retired staff, nurse managers who are in non-clinical roles, or medical and nursing students. Nursing staff who normally provide routine services might also be an appropriate group to call upon. The training needs of these staff groups will need to be considered.

Clerical support to the vaccination team is vital, and clerical staff may be redeployed from other services. The training needs of support staff should also be considered.

The occupational health department should liaise with organisations such as Hospital Volunteers or the League of Friends, who may be able to provide valuable help in clinics by greeting staff attending for vaccination, handing out forms, providing refreshments and other routine tasks.

8.1.2 Choice of clinic location for NHS trust employees

In deciding where vaccination clinics will be held, the following issues need to be considered:

● Is it practical, in terms of available space, for the vaccinations to be given in the occupational health department, with additional staff being brought in to assist?

● Is a larger venue needed and, if so, which is most suitable?

● Would a venue centrally located in the hospital be most appropriate for hospital staff, for instance a social club or the outpatient department?

● Could vaccination sessions be held in the evenings or weekends to minimise the impact on the running of the hospital?
Is the proposed clinic location(s) close enough to clinical areas to reduce the impact on the running of services?

Should a team of immunisers with their own equipment visit each ward to give the vaccinations to staff?

What are the arrangements for cold chain storage?

How are staff groups who may have difficulty accessing daytime clinics going to be immunised, eg staff who only work nights, weekends or evenings or ambulance staff?

8.2 Immunisation of healthcare workers employed by primary care contractors

It is common for general practices to provide seasonal influenza vaccine to their own practice staff, although such staff may also have access to a local NHS occupational health service. Local consideration will need to be given to suitable arrangements in a pandemic, particularly given the need for detailed recording of vaccine usage (in order to measure vaccine coverage and effectiveness, but also to allow robust stock control).

Practical considerations, such as proximity to trust premises, may guide plans for the provision of vaccination to staff employed by general practices, but such provision must be clearly coordinated, and the gathering of coverage data robust.

Key actions

- Establish a plan for delivery of pre-pandemic vaccine in accordance with the guidance set out in this chapter, including information on the clinic location and times, resourcing and staffing arrangements, and appropriate vaccine storage and stock control.

- Where further professional groups are required to support delivery of immunisation, identify any training needs they may have, and a plan for how these will be met in advance of a pandemic.
9 Managing demand surge: key roles and services

Key points

- In order to manage demand surge, prioritisation of services will be required.

- A graded approach to configuring services (i.e., that states which non-essential activity can be reduced, ceased and/or transferred to other trained workers earlier than others) will be appropriate, so that the response is proportionate to the severity of the pandemic in a particular locality.

- Integrated plans and a whole-systems approach to managing surge demand is critical to ensure patient pathways are maintained and all partners understand what will and will not be delivered by whom.

- Arrangements for admission and discharge are also critical in managing demand surge and need to be comprehensive and transparent to all health and social care professionals.

9.1 Managing demand surge

In a pandemic, more people will require care and treatment within primary care, some of whom would ‘normally’ be cared for in a hospital setting. This will be due to illness from the pandemic itself and because secondary care services are likely to become overwhelmed. In order to manage this surge in demand, primary care services will need to focus upon delivering care to those individuals in greatest need of their services and who cannot be managed with alternative means. This will require a focus on delivering essential services and on mobilising staff within a locality (including those who are recently retired) to bolster frontline resources. Supporting the public to self care, effective management of the flow of patients between primary and secondary care (including care homes and residential settings), and interventions such as the National Flu Line service and information line will also be important in managing demand. PCTs will need to ensure that their response plans include how demand surge will be managed and essential services maintained.

Specific guidance for managing demand surge across the whole of the health and social care system is being developed by the Scottish Government, in partnership with the Department of Health, devolved administrations and key stakeholders. This will include national admission criteria to aid the management of demand across the primary and secondary care interface. In the interim, the Department of Health (in partnership with the devolved administrations) has developed provisional guidance on the management of additional capacity and prioritisation of services. Feedback on this document will be used to inform the work of the Scottish Government. See Pandemic influenza: Surge capacity and prioritisation in health services.
This chapter supplements the provisional guidance on managing surge capacity by providing advice on what are considered key roles and services in the event of a pandemic. Identifying what might be considered key services will help determine what roles are usefully played by other health providers and professionals, and what the needs for support and coordination (by the PCT) are. No attempt is made to differentiate between what may be critical, core or non-core services, as this level of detail will be considered when developing the broader surge demand and admission/discharge frameworks. It is also recognised that as different localities have varying needs, there may be additional services that PCTs, in consultation with providers, wish to define as being ‘key’ services.

### 9.1.1 Integrated configuration of services

Integrated plans and a whole-systems approach to managing surge demand are critical to ensure that patient pathways are maintained and all partners understand what will and will not be delivered by whom. If, for example, it is agreed that general practices plan to suspend some more routine work to enable them to focus on caring for and treating those with more acute or urgent needs, it will be important to maintain pharmacy services such as medicines management for those with long-term conditions and repeat dispensing schemes (where they are established). In order to promote integrated response plans, PCTs should seek to fully involve practices, regional or head office teams (for pharmacy multiples), local medical, pharmaceutical and (where appropriate) dental and ophthalmic committees, and acute and mental health trusts in the development and testing of plans. PCTs should also demonstrate how surge demand will be managed and coordinated across primary care services within their plans.

### 9.2 Framework for local decision-making on service priorities during a pandemic

It will be important for PCTs and all independent contractors to maintain normal services for as long as possible and appropriate, and then activate a proportionate response to the pandemic.

During WHO Phase 6, UK alert level 2 it is anticipated that there will be central delegation of decision-making powers concerning key responsibilities to SHAs. At this point, the SHAs will need to use their responsibility for managing health services under special/exceptional circumstances1 and lead the strategic response across the health economy. This will include decisions (in line with national guidance) about which services receive priority and which targets and standards can be explicitly suspended whilst maintaining internal NHS bodies’ governance arrangements. In making these decisions, SHAs will need to liaise with PCTs (who should also liaise with their Local

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1 The NHS Operating Framework has a specific role for the SHA in identifying exceptional circumstances when parts of the framework can be suspended for a fixed period of time, with the same discipline and rationale as for special circumstances.
Medical Committee and Local Pharmaceutical Committee) in their region to determine if and when resources are stretched to the point at which services should focus on delivering essential work, and in effect reduce or cease (some) non-essential activity.

These decisions will need to be confirmed with the Department of Health, who will discuss the effect of the circumstances on the Annual Health Check with the Healthcare Commission and liaise with Monitor where there is an impact on foundation trusts. The targets and standards that SHAs may need to consider include National Standards, National Targets (including ambulance and mental health) and the Quality and Outcomes Framework.

A graded approach to configuring services (i.e., that states which non-essential activities can be reduced, ceased and/or transferred to other trained workers earlier than others) may be appropriate, so that the response is proportionate to the severity of the pandemic in a particular locality. PCTs will need to ensure that their response plans include how services will be enhanced, scaled back and/or stopped as the pandemic threat increases.

9.3 General practices: key roles and services

9.3.1 Role of general practice

General practice will play a pivotal role in providing and coordinating community-based health services in a pandemic, and in managing the flow of patients to secondary care services, care homes and other residential settings. As general practice will be subject to a very high level of demand, at a time when the practice workforce will be under considerable stress, it is not expected that practices will have the resources to conduct all of their usual activities during a pandemic. In addition to this, once available hospital capacity has been exceeded, there will be more patients with acute and urgent healthcare needs who will require care in the community. It is anticipated that GPs in particular, therefore, will need to focus on providing medical care and treatment to both influenza and non-influenza patients with acute clinical illness. This will require ceasing services which are not immediately relevant to patient care, such as continuing professional development and some administrative work, and ceasing or reducing some more routine work such as elective procedures.

In some instances, the care normally provided to someone who does not have an immediately life-threatening condition may be deferred. It is important in the pre-pandemic period to use the national guidance to agree, across a local health economy, a phased approach to the types of patients and treatments that will be deferred or prioritised. It must be clear to patients that such decisions are made consistently and equitably, and are not a caprice of the individual practitioner. Good communication throughout the pandemic will be essential to ensure equitable use of scarce healthcare resources and to reflect the varying levels of capacity and demand.
As symptomatic (influenza) patients will be advised to remain at home, where influenza patients do require face-to-face care by a healthcare professional, care should be taken to the patient as far as this is possible. This will require configuring services to ensure the continuation of practice-based care for those who have non-influenza needs, and a combination of telephone assessment and home-based care (as far as this is practical and possible) for influenza patients.

As there is a high workload associated with widespread home visiting, arrangements that may support practices in delivering care to the patient are as follows:

- Make early ‘buddying up’ arrangements or consolidate general practice services, particularly where small practices are involved. This will help to ensure service continuity and a wider pool of staff and skills to draw upon.

- Mobilise and utilise the skills of the whole healthcare team. For example, physiotherapists could provide breathing control advice and exercises to those patients with respiratory problems as routine appointments in hospital settings are reduced or suspended. Nursing staff, practitioners with a special interest, and non-medical prescribers could also support specific groups of patients, which would free up GPs’ time, enabling them to focus on other patients.

- If possible, rotate staff who care for influenza patients so that not all of the staffing pool are in increased direct contact with symptomatic patients over the same period.

- Provide initial assessment and triage over the phone to minimise unnecessary home visits.

- Signpost patients to other services where appropriate, including services that have been established to reduce routine information requests on general practice (eg the National Flu Line service).

- Link practices to care homes and residential settings to avoid requests for a number of GPs (from different practices) to visit patients in the same care home or setting.

- Liaise with out-of-hours services and other practices to learn from their experiences of providing care through a combination of access arrangements, including telephone assessment/advice and home visits.

General practice will also play an essential role in governing the flow of patients to secondary care services, care homes and other residential settings. Practices will need to work closely with their PCT to ensure that arrangements for admission and discharge are comprehensive and transparent to all health and social care professionals. Arrangements will also need to ensure regular contact and reporting between practices and PCTs, so that practices are up to date with local hospital service availability. The work
taking place in conjunction with the Scottish Government will consider how localities can be supported to manage demand across the primary and secondary care interface. This will also consider what will need to be maintained by secondary care services to ensure that primary care capacity is not compromised. See also the UK provisional guidance on managing surge capacity: Pandemic influenza: Surge capacity and prioritisation in health services.

9.3.2 Key general practice services in the event of a pandemic

In the event of a pandemic, general practices will need to manage additional demand by focusing their resources on maintaining essential influenza and non-influenza services to the public. GPs will wish to focus on those patients with more urgent or complex healthcare needs, whilst other practice staff and staff available within the locality will need to be mobilised to ensure the continuation of some other key services, for example to patients with chronic disease needs or the administration of a pandemic-specific vaccine.

Key service areas that will need to be maintained to some level include:

- acute clinical disease management
- screening
- procedures
- monitoring (ie of certain therapies such as anticoagulation therapy)
- childhood immunisations
- child protection.

Practices will also wish to consider how out-of-hours care can be maintained (where this service is already provided) or if there are opportunities to supplement the work of providers of out-of-hours and unscheduled care within their locality. Core skills that will be required to care for influenza patients are diagnostic, management and prescribing skills, whilst these and a broader knowledge base will be required for non-influenza patients.

The Royal College of General Practitioners (RCGP) and the British Medical Association (BMA) have issued joint guidance on service continuity, which those working in primary care will wish to refer to. The guidance suggests that some functions and activities could be ceased, reduced or delivered by alternative means to enable practices to focus on delivering essential work:

- cancellation of outside activities (meetings, teaching etc)
- defining minimum safe staffing levels
● suspension of (some) chronic disease management
● suspension of (some) new routine referrals
● suspension of minor surgery
● having emergency-only open surgeries
● team working with neighbouring practices
● identifying recently retired or non-practising colleagues who might be utilised.

(Source: RCGP/GPC, Service continuity planning framework, January 2006.)

After the pandemic, it is likely that there will be a backlog of work relating to chronic disease complications, ‘non-urgent’ presentations, simple elective procedure cases, and the psychological effect of a pandemic on the general population. Practices will wish to consider arrangements for the re-provision of services and which are a priority to provide first.

Because of the higher levels of sickness and death in a pandemic, it is likely that new powers will come into force (subject to consultation and Parliamentary approval) on sickness and death certification, which will aim to ease pressure on GP surgeries and other services. (See Pandemic influenza: Guidance on the management of death certification and cremation certification.) The Department of Health is currently working with the Department of Work and Pensions and other key stakeholders to develop guidance on sickness certification.

9.3.3 Financial payment for general practices

The Department of Health recognises that GPs may be concerned about how the significant increase in the more acute aspects of their workload, which could accompany pandemic influenza, could impact adversely on the finances of their practices. The Department of Health does not intend any general practice to be disadvantaged financially by its participation in responding to an influenza pandemic. Details are being negotiated in the usual way via NHS Employers for GMS contractors. The Department of Health expects that PCTs would apply comparable arrangements to their other contractors.

9.4 Community pharmacy: key roles and services

9.4.1 Role of community pharmacies

Community pharmacies will play a critical role in responding to an influenza pandemic and should be fully integrated into the primary care response. As general practices will need to focus on caring for those with more critical and urgent healthcare needs, it is likely that many patients who are not able to gain access to a GP (quickly) will turn to
their community pharmacies for advice and care. Demand for information, prescribed and over-the-counter medicines, and flu-related medicines and advice is likely to be high. As this could mean that community pharmacies become quickly overwhelmed, it will be important for them to have arrangements in place prior to a pandemic that allow them to focus on delivering essential business.

Assuming that stock availability can be maintained, pharmacists will be expected to ensure that patients continue as far as possible to have uninterrupted access to the medicines they need. Medicines will continue to be needed to maintain the health of patients with long-term conditions such as asthma, diabetes and hypertension, for example, as well as those who have illnesses that arise as a consequence of the pandemic. In addition, during a pandemic, community pharmacists and their staff will play a key role in encouraging self care so that people who are able to manage their own symptoms can do so safely and effectively without placing an extra burden on the healthcare system. Pharmacies should also maximise opportunities to work in partnership with other agencies where they may be able to provide support or a joint approach to supporting patients (eg the voluntary sector and supporting patients to self care).

In line with the planning principle of encouraging symptomatic patients to remain at home, community pharmacies will not wish to encourage symptomatic patients to attend community pharmacy premises where they could potentially infect other members of the public. Support to symptomatic patients during a pandemic will therefore largely need to be achieved by advising and/or supplying medicines to a representative (ie family member, friend or carer) of the patient or through leaflets or web-based information or over the telephone. Pharmacies will wish to ensure that communication with patients or their representative over the telephone does not compromise their ability to receive calls and communicate with their PCT, management and other partner agencies.

9.4.2 Preparing the public for a pandemic

As pharmacies are well placed to promote public health messages, a key role for community pharmacy is in supporting the public to prepare for an influenza pandemic. This includes informing and educating the public on how to protect themselves and others from contracting and spreading influenza, and on what preparations they can make now. PCTs will wish to work with community pharmacies to decide how best to utilise their services to promote good hygiene practices and support national communications on pandemic influenza preparedness ahead of the pandemic. PCTs will also wish to work with pharmacies to consider opportunities for encouraging the public to keep basic supplies of medicines in their cupboard and ensure that they are rotated so that they are kept in date.

Leaflets and resources that can be used by practices are located on the Department of Health website at www.dh.gov.uk/pandemicflu
9.4.3 Key community pharmacy services in the event of a pandemic

In the event of a pandemic, key pharmacy services will include:

- support for self care, including advising on the use of over-the-counter medicines for symptoms of influenza and other conditions, and managing shortages by, for example, limiting the number of packs sold
- dispensing and repeat dispensing
- signposting to other available NHS and social care services
- accepting unwanted medicines
- supplying regular medicines to vulnerable people such as residents of care homes or patients with long-term conditions
- maintaining medicines supplies under contracts with other bodies, e.g., mental health trusts, hospices and prisons
- supporting and promoting national public health campaigns on basic hygiene measures such as hand hygiene and other positive health messages.

PCTs will also wish to ensure out-of-hours access to medicines within the PCT locality, and will need to liaise with services (including community pharmacies and out-of-hours providers) as and where appropriate.

To ease pressure on general practices and community services, new powers may be given to community pharmacists (subject to consultation and Parliamentary approval). These might include derogations to medicines legislation to allow 28-day emergency supplies of all medicines.

Other supporting activities may include:

- supply of over-the-counter medicines on the NHS for those people who would have otherwise gone to a GP or accident and emergency department to obtain such a medicine. Options for implementation through primary care organisations will be the subject of consultation
- maintaining public confidence in supplies of medicines (e.g., managing short-term supply problems or substitutions of products, in accordance with an algorithm or cascade protocol).

(See the proposed Medicines and associated legislation changes for pandemic influenza document for further information on proposed amendments to medicines and related legislation.)
Pharmacists provide many other key services that are likely to need to be continued during a pandemic. Careful consideration will be required with PCTs (including the PCT pharmacy coordinator) on which services will need to continue, eg supply of substitution therapy to substance misuse clients, emergency contraception, and anticoagulant monitoring. Many pharmacists also provide support to clients with disabilities and social care needs, to help them maintain independent living, eg medicines use review.

Community pharmacies may also be involved in a number of other pandemic-specific roles. They will need to liaise with their PCT to determine their level of involvement. These roles might include:

- antiviral medicine distribution (ie community pharmacies act as antiviral collection points and/or use the delivery infrastructure and drivers to transport medicines to those patients who, in exceptional circumstances, do not have somebody to collect their medicines for them)
- administration of a pandemic-specific vaccine
- any other locally identified services and roles that are specific to a pandemic situation, subject to appropriate training.

PCTs will, however, wish to ensure that community pharmacies are involved in the above roles only where this does not prevent the community pharmacy from providing its core services.

Community pharmacies have already received guidance to develop their own business continuity plans, but they may wish to consider:

- team working with neighbouring pharmacies
- identifying recently retired, pre-registration or non-practising colleagues who might be able to support service continuity
- security arrangements with the PCT, if they are asked to distribute or administer antiviral medicines or vaccines.

(See Service continuity planning for pandemic flu (www.psnc.org.uk/uploaded_txt/Flu_Pandemic%20continuity%20planning.pdf), which was jointly developed by the National Pharmacy Association, Pharmaceutical Services Negotiating Committee, Company Chemists’ Association and Royal Pharmaceutical Society of Great Britain with input from the Department of Health.)

9.4.4 Financial payment for community pharmacies

Community pharmacists may be concerned about how the changes in working practice that accompany pandemic influenza could impact on the NHS income of their business. These issues will be discussed through the usual channels.
9.5 The role of other healthcare professionals

Community health professions represent an important workforce that will be called upon in the event of a pandemic. Community nurses, practice nurses, healthcare assistants, allied health professionals, physiotherapists, dentists, opticians and a range of other professionals in the broader ambit of primary healthcare will be required to ensure that a comprehensive service is maintained as far as possible. Nursing staff, for example, will be critical in providing key diagnostic, management and prescribing skills to support essential services and in ensuring the delivery of certain pandemic-specific services such as the administration of a pandemic-specific vaccine.

In order to bolster practice capacity and ensure the delivery of essential services, healthcare and administrative staff may be required to work outside their usual roles (though within their skill base). PCTs and general practices will wish to give thought to training requirements for the primary care workforce, and how to ensure that appropriate training has taken place before a pandemic. PCTs will also wish to have arrangements in place to ensure the full mobilisation of staff within their locality. This includes staff who are not yet qualified (e.g. pre-registration students) and those who are employed in non-patient-facing environments such as the pharmaceutical industry. PCTs should also ensure that the allocation of staff to different services, including locum resource, is coordinated across the locality so that priority services and locations receive a proportionate share of the resource available.

Further advice on the redeployment, mobilisation and coordination of staff can be found in section 11.7 of this guidance and in Pandemic influenza: Human Resources guidance for the NHS.

9.5.1 Support staff

General practices and community pharmacies will need to have plans in place that enable them to make the best use of all of the skills and expertise available to them. For example, it will be critical for support staff such as healthcare assistants, medicines counter assistants and pharmacy technicians to provide more routine advice and services to free up GP, nursing, and pharmacist time for delivering care to those with higher healthcare needs. Practice managers and administrative staff will also play a crucial role in helping to manage demand through management of phone calls from the public, advising the public on basic self care measures, signposting them to other services where appropriate, and in managing appointments, for example.

9.5.2 Dentistry

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 because patients themselves may defer treatment. 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 should be explored in local planning. Local plans should, however, ensure that emergency care remains available throughout a pandemic.

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.

9.6 The role of community hospitals

Community hospital capacity, like acute services, will be extremely limited, and it will be important to ensure that there are clear admission and discharge criteria that are transparent to all health and social care professionals. Bed management and communication of available capacity during a pandemic will also be key. The interface arrangements between hospital and primary care need joint review, and appropriate protocols need to be agreed with acute trust and PCT representatives at the planning phase. Ambulance service and other appropriate representatives should also be involved in these discussions.

Whilst most community hospitals are unlikely to have the breadth of skills or equipment necessary to provide care to those who are ill enough to require admission to an acute hospital, they will be an important ‘step facility’. They will, for example, be critical in facilitating earlier discharge following the acute phase or an intermediate/respit/hospice facility for those who are too ill or vulnerable to be managed at home but would not benefit from acute intervention. This will require pre-planning to ensure that the equipment and staffing needs are in place or can be rapidly assembled in the event of a pandemic.

It is likely that, from a clinical perspective, the key skills required for handling influenza pandemic cases in a community hospital setting will include (although this list is not exhaustive):

- emergency care
- basic nursing care
- medicine management
- infection control
- venous access
- basic respiratory care/monitoring
- care of older people
9.7 Out-of-hours services and unscheduled care arrangements

Out-of-hours services and unscheduled care providers are key to the pandemic influenza response. PCTs should work closely with their out-of-hours services and unscheduled care providers, to ensure that response plans are robust and that arrangements for a pandemic are in place. As out-of-hours services are likely to be under intense pressure during a pandemic, PCTs will wish to utilise opportunities for bolstering their service with additional resource where this is possible (see chapter 11 and Pandemic influenza: Human Resources guidance for the NHS for advice on utilising the staffing pool). Opportunities to extend the hours of some other services may also help to alleviate some demand on out-of-hours and unscheduled care services. Careful monitoring of extended and out-of-hours service demand and capacity will be required to ensure careful positioning of additional resources and resilience to where they are most required.

9.8 Local response management and the role of the primary care trust

PCTs will need to coordinate the development of health plans and provision of services (within the broader scope of SHAs’ plans) in the event of a pandemic, and will need to define in detail the functions that are needed to perform the coordination of services locally. In particular, local response management will be required in order to:

- engage with frontline practitioners
- monitor service continuity amongst primary care contractors, and act as a conduit for information to the SHA and higher-level planners
- communicate to primary care contractors when essential services may be suspended (and when they are re-commissioned)
- coordinate cooperative arrangements to strengthen service continuity, such as staggered opening hours amongst contractors
- coordinate any consolidation that may be required amongst primary care contractors if service continuity fails, including the redeployment of both staff and stock resources (recognising that pharmacy multiples will wish to consolidate their resources using existing procedures)
coordinate the development of admission and discharge criteria with the engagement and input of all key stakeholders

ensure that any change in service is communicated to the public

coordinate regional implementation of measures such as pandemic influenza protocols

coordinate public health information

link with local authority services, particularly social care services but potentially also including transport, housing and others.

### Key actions

- Develop a plan for how demand surge will be managed and coordinated across primary care, taking into account further national guidance on managing demand surge.

- Identify, with the involvement of key stakeholders, which influenza and non-influenza services are considered essential (informed by an assessment of risk, need and available resources as referred to in chapter 3) and which could be stopped, reduced or delivered by alternative means.

- Ensure decisions are ethically sound.

- Establish how essential services will be maintained during a pandemic, and have appropriate arrangements in place to ensure this (including training for staff).

- Establish a graded approach to stopping or scaling back services, and for the re-introduction of services during the recovery period.

- Establish how community hospital capacity is best utilised within the locality, and ensure that arrangements are in place to support this.

- Establish the arrangements required for the PCT to fulfil its ‘local response management’ role as described above.

- Develop admission/discharge criteria plans with secondary care and local partners, taking into account further national guidance when this becomes available.
The demands and uncertainties associated with an influenza pandemic require flexible plans based on a combination of strategies to develop an effective and sustainable response. Medical and pharmaceutical countermeasures, combined with public health and personal infection control initiatives, and the possible application of measures to reduce social mixing, form the basis of the UK’s mitigation strategy.

### 10.1 Infection control

Applying basic infection control measures and encouraging compliance with public health advice are likely to make an important contribution to the UK’s overall response to an influenza pandemic. Simple measures that will help individuals to protect themselves and others are listed in chapter 5.

Infection control guidance for hospital and primary care settings is available and located on both the Department of Health and HPA websites. The advice and principles within this guidance should be applied across all local plans to assist in limiting and preventing the spread of infection. See [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)

Some professional bodies have also developed infection control guidance, such as the RCGP and the BMA. See [www.rcgp.org.uk/service_continuity/service_continuity_home.aspx](http://www.rcgp.org.uk/service_continuity/service_continuity_home.aspx) and [www.bma.org.uk/ap.nsf/content/flupanprep](http://www.bma.org.uk/ap.nsf/content/flupanprep)

PCTs and primary care contractors will wish to think about the importance of their staff acting as role models for good practice in infection control. They will also need to take action to minimise the potential for their premises to spread the virus. This will include consideration of the following:

- how they will reduce the risks of droplet spread in seated areas, such as waiting areas and antiviral collection points
- the availability and adequacy of hand washing facilities and hand washing procedures/advice for staff, patients and patients’ relatives and carers

### Key points

- Public support and compliance with public health measures will be critical.
- Applying basic infection control measures and encouraging compliance with public health advice are likely to make an important contribution to the response.
- Maintaining surveillance on the virus strain or any illness attributable to it, as well as information on the impact and effectiveness of interventions, will be critical in informing the national and local response to a pandemic.
the availability and adequacy of other facilities that help minimise virus spread, eg tissues and tissue disposal facilities for those people coughing and sneezing in areas of close person-to-person contact

- how mixing can be minimised in areas of high person-to-person contact, such as reception areas, waiting rooms and triage stations

- standards and procedures to ensure high-quality cleaning of premises and facilities before and after use, with particular attention given to places affected by droplet spread

- the duty of care to their staff so that they can continue to provide their services whilst minimising social exposure where possible, eg by using screens between reception staff and patients or telephone interaction systems.

Infection control standards are important at all times, regardless of the presence of an influenza pandemic. It is important to have the above arrangements in place even when influenza patients are not advised to attend practices, as there is the possibility that some patients may still present or attend a practice when they unknowingly have influenza (such as in the very early stages of the pandemic).

### 10.2 Health and safety and risk mitigation

In an influenza pandemic, it is possible that staff could be adversely affected. Trusts will be expected to consider and mitigate these risks where possible.

Patients could also be put at higher than normal risk by contact with staff or using treatment locations not usually used for the types of care required in an influenza pandemic. Again, PCTs will be expected to consider and mitigate these risks where possible. Examples of such risks include:

- **Staff at high personal risk of influenza complications** (eg those who have pre-existing respiratory disease or another chronic disease likely to be exacerbated by influenza). Consideration should be given to reallocating such staff to work where they are less likely to be exposed.

- **Exposure risk from clinical activity and risks of infection**. Personal protective equipment measures will need to be considered for all staff. Employers have a duty of care to provide a safe working environment for their staff. This includes the provision of adequate personal protective equipment where appropriate. Although there is national-level work examining the provision of personal protective equipment to personnel during an influenza pandemic, employers should in the interim review the adequacy of their provision and make local arrangements to improve availability where provision is deficient.
FFP3 masks require fit-testing for all relevant staff, in particular those who will be undertaking or will be exposed to aerosol-generating procedures as part of their work. Fluid-repellent masks will be used for most interactions involving close contact with patients to prevent droplet spread of the disease but will not be sufficient where an aerosol-generating procedure is undertaken. PCTs are therefore advised to arrange for fit-testing of FFP3 masks to be carried out on these staff. A fit-testing programme may take a considerable length of time to deliver and also will need to take account of alterations in staffing.

There may be other individual staff health issues that have to be considered when assessing fit of FFP3 masks. These should be addressed as part of the process. Staff health issues will also affect decisions over appropriate staff deployment where underlying health problems are a relevant consideration.

The Health and Safety Executive has issued guidance on workforce planning in a pandemic, including advice on the use of personal protective equipment. This is available at www.hse.gov.uk/biosafety/diseases/pandemic.pdf

The Department of Health has also issued guidance on the use of personal protective equipment within the infection control guidance as referenced above.

### 10.3 Dealing with a large number of deaths

Local authorities are responsible for producing local multi-agency plans for managing excess deaths. PCTs and primary care contractors should be engaged in this planning process.

A draft guidance paper, Planning for a possible influenza pandemic: A framework for planners preparing to manage deaths, has been prepared by the Home Office and is available at www.ukresilience.info/news/manage_deaths_guidance.aspx

Concerns have been reported that certification of the excess deaths resulting from a pandemic will further stretch the resources of GPs. Work is ongoing at a national level to identify and address these issues, and it is likely that new powers will come into force (subject to consultation and parliamentary approval) on sickness and death certification, which will aim to ease pressure on general practices and other services. Consideration is being given to legal requirements (eg the Medical Act 1983, the Registration of Births and Deaths Act 1953, and the Coroners Act 1988). Once options are finalised, multi-agency guidelines will be issued to doctors and healthcare workers, coroners and coroners' officers, and registrars.

### 10.4 Surveillance, reporting and data collection

The Department of Health is developing guidance on surveillance activity that health organisations, including PCTs, should undertake in an influenza pandemic. More details
Maintaining surveillance to detect the emergence of a novel virus strain or any illness attributable to it, as well as information on the impact and effectiveness of interventions, will be critical in informing the response to a pandemic. It is proposed that pandemic influenza surveillance systems will build on existing data collection mechanisms already in place to monitor seasonal influenza. This includes utilising existing systems such as sentinel surveillance schemes in general practice (e.g., that of the RCGP), QFlu, and influenza activity in boarding schools. Other plans include gathering detailed clinical data on the first few hundred cases of pandemic influenza in an ‘avian influenza database’ and utilising information from calls to NHS Direct, NHS 24 and the National Flu Line service (once this is in place).

Situation reports (SITREPs) will be required by SHAs and, although the minimum dataset to be collected have not yet been confirmed, local planners should be mindful that regular reporting will be needed and should plan flexibly so that information can be gathered quickly. This will be used to monitor how health services are coping.

See the National framework for reference to broader public health measures such as school closures and restrictions on public gatherings.

**Key actions**

- Ensure robust infection control arrangements are in place and staff are adequately trained.
- Develop educational resources for staff, patients and relatives/carers, especially around reducing infection spread.
- Have plans in place to mitigate health and safety risks as far as possible.
- Engage with local authorities on plans to manage deaths.
- Ensure surveillance systems are in place.
11 Business continuity arrangements

Key points

- All PCTs should have robust business continuity plans in place for responding to an influenza pandemic.
- Plans should be developed according to risk assessments.
- All partners should be involved from an early stage to ensure the development of integrated response plans and arrangements.
- An influenza pandemic will result in increased demand for supplies at a time when the ability of suppliers to maintain deliveries will be compromised.
- Robust workforce planning will be required to ensure as far as possible that there is sufficient appropriate staffing and level of competencies in the areas of most need.

11.1 Business continuity plans

All PCTs should have business continuity plans in place in accordance with the BS25999 standard, for managing the continuity of critical functions and recovery of primary care services from disruption due to any emergency, including pandemic influenza.

Contingency planning for a range of disruptive risks is a key business activity, and maintaining adequate staffing levels is critical to every organisation’s ability to maintain its essential functions. However, the unique nature of some of the characteristics of an influenza pandemic needs to be factored specifically into local business continuity plans, in particular the likely duration and higher levels of absenteeism.

Identifying the risks threatening the performance of critical functions in the event of an influenza pandemic will enable PCTs to target resources at the right areas and develop appropriate plans. The UK Cabinet Office has issued business contingency planning guidance for a possible influenza pandemic, which contains specific guidance for Civil Contingencies Act Category 1 responders and therefore has specific relevance to PCTs.

The full document can be accessed at www.ukresilience.info/publications/060710_revised_pandemic.pdf

Primary care contractors and other agencies (ie subcontracted services) should also ensure that they have robust business (service) continuity plans in place. Some professional and/or representative bodies have developed service continuity guidance, which primary care professionals will wish to refer to:

- Royal College of General Practitioners (RCGP)
  www.rcgp.org.uk/guidance/pandemic_planning.aspx
11.1.1 Risk assessment-based planning

As part of the influenza pandemic planning process, PCTs should take a risk assessment-based approach in order to understand each of the risks faced, set them in priority order, act on them accordingly and evaluate their progress in achieving optimum preparedness. Primary care contractors are also advised to undertake risk assessment-based planning.

A risk assessment grid framework tool, which assesses the likelihood of event occurrence against the degree of impact if it occurs, may be a helpful way forward in developing this work.

The Business Continuity Institute has developed a business continuity management process, which is widely accepted and has been incorporated into a British Standards Institute Publicly Available Specification (B25999). More details can be found on the Business Standards Institute website at www.bsi-global.com/

11.1.2 Exercising and reviewing business continuity plans

PCTs should not only put business continuity plans in place, but should also ensure that they are reviewed regularly and kept up to date.

Particular attention may need to be paid where changes have occurred to:

- staffing
- functions or services (including non-clinical functions such as facility maintenance, catering, cleaning, information technology, and waste handling)
- structure
- suppliers or contractors
risk assessments

- business objectives or processes

- new guidance from the Department of Health.

A business continuity plan cannot be considered reliable until it has been exercised and has been found to be robust. False confidence may be placed in the plan if there has not been rigorous testing. Exercising should involve plan validation, key staff role rehearsal and systems testing where systems are relied on to deliver resilience (e.g., uninterrupted power supply). The frequency and type of exercises will depend on the individual circumstances of the PCT, but should take into account the rate of change and the outcomes of previous exercises (if particular weaknesses have been identified and changes made). Testing of response arrangements and plans should involve those partners who are key to the response, including primary care contractors.

### 11.2 Partnership working and integrated planning

Planning should be undertaken in conjunction with local partners, particularly primary care contractors (and their field or head office teams where applicable), local medical and pharmaceutical committees, and social care providers. All partners should be involved from an early stage to ensure the development of integrated response plans and arrangements. Primary care contractors will also wish to ensure they develop good working arrangements between their services prior to a pandemic, so that opportunities for joint working can be maximised in the event of a pandemic (e.g., services supporting self-care and those that help to ensure continued access to medicines such as repeat dispensing schemes).

Local stakeholders that PCTs will wish to ensure are involved in planning for a pandemic include:

- patients and the public
- primary care contractors
- local medical, pharmaceutical, dental and ophthalmic committees
- acute and foundation trusts
- other secondary care providers in the locality
- mental health trusts
- ambulance trusts
- NHS Direct
- local authorities
out-of-hours services and unscheduled care providers
health protection units
the police
prison representatives
the voluntary sector
private healthcare providers (for both care homes and hospital services)
hospices and palliative care providers
education providers
Local Resilience Forums
the Influenza Pandemic Committee (for London)
military establishments
suppliers and contractors
local businesses.

11.3 Contracts and service level agreements to ensure continued service delivery

Where possible, prior to a pandemic occurring, PCTs should give consideration to which contracts may need to be suspended or renegotiated in the event of an influenza pandemic, and where new contracts will be required. It would be sensible to build contingencies for emergencies in general and pandemic influenza in particular into any negotiations over new contracts or service level agreements. Arrangements should not destabilise other organisations in the post-pandemic period.

11.4 Supplies and consumables

An influenza pandemic will result in increased demand for supplies at a time when the ability of suppliers to maintain deliveries will be compromised. Most healthcare organisations do not hold large amounts of stock, instead relying on timely deliveries. Small stock reserves have implications for how a PCT and healthcare facility can continue to function in a prolonged emergency, particularly at its peak.

There are a number of key groups of supplies that should be considered. This list is not exhaustive, and will need to be supplemented according to local needs. These are:

- pharmaceuticals
- personal protective equipment
- utilities
- food supplies
- linen
- consumable medical items such as dressings, syringes and surgical stitches
- non-consumable medical items such as diagnostic equipment
- consumable non-medical items such as hand washing soaps, cleaning liquids and waste disposal bags
- non-consumable, non-medical items such as cleaning equipment and vehicles
- sterile supplies
- stationery, administration supplies and storage
- information technology.

PCTs should consider what the vital supply requirements for their locality are (both in terms of specific influenza-related use and general use) and ensure that they have systems in place that are capable of receiving, storing and distributing any share of national stockpiles they may be allocated. Local plans should also be made as to how these supplies could be conserved and maintained. PCTs will wish to engage their procurement departments in this planning.

PCTs should also ensure that they have robust tracking systems in place for their medical and non-medical supplies to enable deteriorating stock positions to be readily highlighted. It would be advisable for PCTs to have contingency plans in place for managing the situation when the availability of specific supplies becomes limited. PCTs and primary care contractors will also wish to refer to the proposed document Proposals to amend medicines and associated legislation during an influenza pandemic, which aims to ensure, as far as possible, continued access to medicines during a pandemic.

In preparing these plans, PCTs will also need to consider the possibility of an influenza pandemic occurring sooner rather than later. PCTs will therefore need to seek reassurance that suppliers have robust contingency plans in place to continue supplying their services in a prolonged emergency. Even where suppliers can give such assurances, the generalised effect of the emergency will impact on their resilience. PCTs should explore whether there is a need to stockpile some supplies, especially where suppliers cannot provide adequate assurances, or items are of particularly critical importance.
11.5 Blood, tissue and organ donation

Continuation of the collection and supply of blood, tissue and organs will be critical. Community healthcare providers should continue to help promote and encourage donation. It is likely that potential blood donors will contact their local healthcare centre, which should refer callers to the National Blood Service on 0845 7711 711 (www.blood.co.uk).

11.6 Mutual aid and ‘buddying up’ arrangements

An influenza pandemic is likely to affect many areas simultaneously, and so the ability to provide and receive mutual aid from other providers will be limited. PCTs should establish dialogue with the SHA and other local or regional healthcare providers (NHS and independent sector) about providing mutual aid and support. Elements of mutual aid provision that should be considered include sharing staff (especially those with specific expertise), allocation of reserve staff, material resource sharing (clinical and non-clinical), pharmaceuticals, beds (where appropriate) and transport.

Single-handed general practices with low numbers of staff are likely to face the biggest challenges during a pandemic. This will have associated effects on the management of care for patients presenting with influenza and other serious health issues and where they can best access care at a time when capacity across the community setting and hospitals will be stretched. As well as needing to develop local (practice-level) response plans, there will be a need for local coordination across a locality to consider how practices can best work with and/or cover for other practices to cope with demand and to maintain access to care. (In areas such as London this coordination may need to be organised above the level of the PCT area.) Practices will need clear guidance from the PCT as to whom they contact to report sudden changes in their workforce capacity, and there needs to be clear contingency plans for coping with such reports. These issues will require planning at both practice and PCT level in advance of a pandemic.

11.7 Workforce planning

Workforce planning for a pandemic should be taking place at SHA, PCT and individual employer level, with PCTs playing a key coordination role at the local level. This planning needs to incorporate the whole of the health and social care workforce and all other organisations employing healthcare or other staff that could contribute to the healthcare response. The challenge during a pandemic is to ensure as far as possible that there is sufficient appropriate staffing and level of competencies in the areas of most need. This will require, for example, utilisation of the skills and expertise of the workforce to the full, training and refresher training for groups of staff, and enhancing the staffing pool through ‘buddying up’ arrangements and mobilisation of non-practising staff (eg recently retired staff).
Human resources guidance for pandemic flu planning has been developed by NHS Employers in partnership with the Department of Health and key stakeholders. This guidance addresses the full range of workforce issues, including those around professional registration, and liability and indemnity issues associated with using staff outside their normal role and using volunteers or recently retired staff. PCTs and primary care contractors will wish to refer to this guidance, which is currently in draft for public discussion. The most recent version of this guidance, and other guidance, is located on the Department of Health website at www.dh.gov.uk/pandemicflu

The Department of Health is currently reviewing specific indemnity issues for primary care contractor staff, and further advice will follow.

11.7.1 Staffing and optimising available resources

Response plans should contain a strategy for coping with widespread staff shortages. As a minimum, organisations should ensure that plans are in place for handling staff absence rates of up to 15% to 20% over the two- to three-week peak of a pandemic (and up to 30% for smaller organisations). Each organisation should estimate the level of staff absence and its potential impact on its own activities in the period leading up to and during an influenza pandemic.

When identifying resources available for the local response, PCTs and primary care contractors will wish to consider:

- embracing the multi-agency team approach by taking a holistic view of the health and social care staff who can assist in the pandemic response
- undertaking a mapping exercise to identify:
  - those staff who have transferable skills in ‘non-essential’ functions and how they could be utilised to support core activities and the pandemic response. This may include dental staff and hospital practitioners, such as ophthalmologists, with a mostly elective workload (as elective workload is suspended)
  - those staff who could be ‘skilled up’ to perform specific tasks that will be in high demand
  - non-practising staff, such as those on career breaks and recently retired nurses, GPs and pharmacists, who would be willing to contribute to the pandemic response
  - pre-registration staff and volunteers who might be able to support service continuity
• ensuring that contact details and characteristics of the available workforce are captured so that they can be easily contacted in the event of a pandemic, and identifying possible risks in service delivery and find solutions where possible. Where a specific workforce or team has a high proportion of people with young children and other personal caring responsibilities that may impact upon their ability to attend work during ‘normal’ hours, it may be possible for them to work a different shift or perform some tasks from home.

• developing a training and education programme that builds capacity into the existing workforce through teaching new skills and updating existing ones (both clinical and non-clinical). This will allow some staff to take on additional duties, so that those with higher clinical skills or experience can focus on those patients who may be at particular risk or on treating those suffering from the complications of influenza.

• pooling staff as a ‘critical mass’, which would enable staff without a set stream of work to be directed towards the most necessary task within their capability.

• ensuring that consideration has been given to employing and allocating locum staff to support the coordination of locum resource across the locality and, where this is possible, ensuring that appropriate arrangements are in place (ie that stipulate terms and conditions) prior to a pandemic.

• facilitating arrangements for joint working in primary care and ‘buddying up’ of practices.

• building on or developing any existing links with voluntary organisations, community partnerships and local businesses to maximise opportunities to support the community at large as well as the health service response.

• reviewing normal and acceptable minimum staffing levels of core functions and services and addressing any potential changes to working practices that may be needed to facilitate this.

• developing internal systems for monitoring and reporting real-time absence rates. Using this in conjunction with information on minimum staffing levels, PCTs will have an accurate picture of which areas require additional resources and an indication of whether the necessary support can be sourced internally.

• informing staff in an appropriate way of the risks associated with pandemic influenza and what action they can take to protect themselves and others, and instructing them not to attend work when they are symptomatic but to attend work when they are well.
reviewing locations of staff at home and at work, so that, if necessary, staff can be identified who can work closer to home to reduce travel, share journeys etc

- with partners, mapping out those health and social care professionals who provide services to the same patient and where care could be consolidated.

PCTs will wish to refer to Pandemic influenza: Human Resources guidance for the NHS for advice on use of staff and volunteers, and will need to ensure that staff are not being double counted or expected to deliver elsewhere.

### 11.7.2 Staff support

It is recognised that, during a pandemic, healthcare workers will be under significant pressure for a sustained duration and may require support. In the lead up to a pandemic, many members of staff are likely to be anxious or apprehensive and to have a subjective perception of the degree of risk. As the pandemic develops, they may also experience fears for their own health, grief for the loss of relatives or friends, concern for family members, a sense of social isolation or other potential causes of psychological distress. Whilst some may be able to cope with little or no professional or specialist intervention, local plans should consider how the workforce could be supported. This will include how self-help and other explanatory material could be made available, how those experiencing particular problems might access assistance, and how mental health services, voluntary organisations and social care agencies might best be organised to offer support.

Local plans should also consider:

- identifying, developing and promoting arrangements for staff to access counselling services
- reviewing local human resources policies and procedures to maximise flexibility for staff to be able to work and accommodate caring obligations, annual leave and special leave (carer’s leave, bereavement leave, etc)
- education and training on pandemic influenza and infection control.

### 11.7.3 Occupational health considerations

Employers and occupational health providers will wish to consider how best to support the Government’s efforts to reduce the impact of an influenza pandemic by taking all reasonable steps to ensure that employees who are symptomatic with influenza are positively encouraged not to come into work. Personnel policies may need to be reviewed to achieve this aim. Employers will therefore need to have systems in place for detecting staff who are symptomatic on arrival at work or who become ill whilst at work.
It may be appropriate for those staff who have recovered from pandemic influenza to work in areas with infected patients, as they may be naturally immune. PCTs will need to consider how they will use these staff safely, on the basis of any additional information on the virus at the time, and without putting them at additional risk. This will include ensuring the maintenance of infection control procedures and use of personal protective equipment, as they will still be at risk from secondary infections.

In order to protect the health and wellbeing of staff as far as possible, and encourage staff to attend work when they are well, employers should ensure that the health and safety responsibilities to employees continue to be fully discharged. This includes responsibilities listed in section 10.1 on infection control and section 10.2 on health and safety and risk mitigation.

**Key actions**
- Review relevant contracts and service level agreements to ensure they can meet the challenges of a pandemic as far as possible.
- Develop mutual aid and/or shared agreements to support service delivery.
- Review the likely impact of a pandemic on consumables and supplies availability. Plan for how the organisation will manage if supplies become compromised and make provision as appropriate.
- Plan, with key stakeholders, how staff resources can be best utilised and maximised.
- Develop skills audits and plan redeployments using the results.
- Review working practices to ensure suitability for responding to a pandemic.
- Plan and make provision for the occupational health needs of staff.
- Develop and implement programmes of education and training.
- Consider how blood and organ donation will be promoted.
- Test response arrangements and plans with those partners who are key to the response, including primary care contractors.
As the impact of the pandemic wave subsides and it is considered that there is no threat of further waves occurring, the UK will move into the recovery phase. Although the objective is to return to inter-pandemic levels of functioning as soon as possible, the pace of recovery will depend on the residual impact of the pandemic, ongoing demands, backlogs, staff and organisational fatigue, and continuing supply difficulties. Therefore, a gradual return to normality should be anticipated and expectations shaped accordingly. Plans at all levels should recognise the potential need to prioritise the restoration of services and to phase the return to normality in a managed and sustainable way.

Restoration of normal working will include:

- assessment of the clinical and non-clinical workforce available to return to work
- a phasing-in period to allow the resumption of normal services, depending upon the residual skills and resources available
- provision of psychological support to staff
- recruitment at a potentially difficult time, owing to the nature of the work and sensitivities around loss of staff, and the potentially competitive environment
- ensuring that buildings are adequately cleaned, sanitised and otherwise made ready for resumption of normal service.

Primary care services are likely to experience persistent secondary effects for some time, with increased demand for continuing care from:

- patients whose existing illnesses have been exacerbated by influenza
- those who may continue to suffer potential medium- or long-term health complications (e.g. the encephalitis lethargica that may have been linked to the 1918 pandemic)
- a backlog of work resulting from the postponement of treatment for less urgent conditions.

The reintroduction of performance targets and normal care standards also needs to recognise loss of skilled staff and their experience. Most services will have been working under acute pressure for prolonged periods and are likely to require rest and continuing support. Facilities and essential supplies may also be depleted, re-supply difficulties might persist, and critical physical assets are likely to be in need of backlog maintenance, refurbishment or replacement. Impact assessments will therefore be required.
Other available support and guidance

Information available for health professionals

GPs and doctors
Royal College of General Practitioners
www.rcgp.org.uk

British Medical Association
www.bma.org.uk/ap.nsf/content/flupanprep

Pharmacists
Royal Pharmaceutical Society of Great Britain
www.rpsgb.org/pdfs/servcontplanguid.pdf
www.rpsgb.org/pdfs/servcontplantemplate.doc

Pharmaceutical Services Negotiating Committee
www.psnc.org.uk/uploaded_txt/LPC%20BRIEFING%20FLU%20PANDEMIC.pdf

Nurses
Royal College of Nursing
www.rcn.org.uk

Other organisations providing information

Health Protection Agency
The HPA website has a wide range of information and guidance on pandemic influenza, including surveillance, emergency planning, exercises and training, as well as contact details for local health protection units and regional and national centres.
www.hpa.org.uk

Department of Health
All documents available at www.dh.gov.uk/pandemicflu

Explaining pandemic flu: A guide from the Chief Medical Officer
Pandemic flu: A national framework for responding to an influenza pandemic
Pandemic influenza: Guidance on preparing acute hospitals in England
An operational and strategic framework: Planning for pandemic influenza in adult social care
Pandemic influenza: Guidance for ambulance services and their staff in England
Responding to pandemic influenza: The ethical framework for policy and planning
Pandemic influenza: Guidance for pandemic influenza: Infection control in hospitals and primary care settings
Pandemic influenza: Guidance on the management of death certification and cremation certification (draft)
Pandemic influenza: Surge capacity and prioritisation in health services, Provisional UK guidance (draft)
Pandemic influenza: Guidance on preparing mental health services in England (draft)
Pandemic influenza: Human Resources guidance for the NHS (draft)
Supporting people with long term conditions to self care: A guide to developing local strategies and best practice
(A section on where to find further advice and case studies is given on pp 36–7.)

Cabinet Office
Contingency planning for a possible influenza pandemic
Pandemic influenza checklist for businesses

Department for Children, Schools and Families
Planning for a human influenza pandemic: Guidance to schools and children's services

UK Resilience
www.ukresilience.info/ccact/index.shtm
### Annex A: Expected healthcare demand during the peak week of a pandemic

<table>
<thead>
<tr>
<th></th>
<th>25% attack rate</th>
<th>35% attack rate</th>
<th>50% attack rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per 100,000 population</td>
<td>Per general practice</td>
<td>Per 100,000 population</td>
</tr>
<tr>
<td>Clinical cases</td>
<td>5,500</td>
<td>330</td>
<td>7,700</td>
</tr>
<tr>
<td>Expected number of telephone calls</td>
<td>6,880</td>
<td>420</td>
<td>9,630</td>
</tr>
<tr>
<td>100,000 population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*GP consultations</td>
<td>1,570</td>
<td>95</td>
<td>2,200</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>200</td>
<td>15</td>
<td>310</td>
</tr>
<tr>
<td>(rate of 4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td>140</td>
<td>10</td>
<td>200</td>
</tr>
<tr>
<td>(fatality rate of 2.5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Assuming the National Flu Line service is in place for purposes of initial assessment and access to antivirals.*

Assuming alternative attack rates of 50%, 35% and 25%, the pandemic flu demand given in the table represents a reasonable worst-case scenario based on the following assumptions:

- 22% of cases occurring during the peak week of a pandemic wave
- 4% of symptomatic patients requiring hospital admission (given sufficient capacity)
- a 2.5% case fatality rate
- 25% of clinical cases having complications
- general practices seeing all complications (25%) and children under 3 years old or under 15kg (3.5%)
- 25% of hospitalisations requiring critical care
- 25% of clinical cases making a second call
- average length of stay in hospital of six days for patients not requiring critical care
- average length of stay in hospital of ten days for patients requiring critical care.
### Annex B: WHO international phases and UK alert levels

WHO has defined phases in the evolution of a pandemic that allow for a step-wise escalation in planning and response. If a pandemic were declared, action would depend on whether cases had been identified in the UK and on the extent of spread. For UK purposes, four additional alert levels have therefore been included within WHO Phase 6; these are consistent with those used for other communicable disease emergencies.

<table>
<thead>
<tr>
<th>Phase</th>
<th>WHO international phases</th>
<th>Overarching public health goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inter-pandemic period</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>No new influenza virus subtypes detected in humans</td>
<td>Strengthen influenza pandemic preparedness at global, regional, national and sub-national levels</td>
</tr>
<tr>
<td>2</td>
<td>Animal influenza virus subtype poses substantial risk</td>
<td>Minimise the risk of transmission to humans; detect and report such transmission rapidly if it occurs</td>
</tr>
<tr>
<td><strong>Pandemic alert period</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Human infection(s) with a new subtype, but no (or rare) person-to-person spread to a close contact</td>
<td>Ensure rapid characterisation of the new virus subtype and early detection, notification and response to additional cases</td>
</tr>
<tr>
<td>4</td>
<td>Small cluster(s) with limited person-to-person transmission but spread is highly localised, suggesting that the virus is not well adapted to humans</td>
<td>Contain new virus or delay its spread to gain time to implement preparedness measures, including vaccine development</td>
</tr>
<tr>
<td>5</td>
<td>Large cluster(s) but person-to-person spread still localised, suggesting that the virus is becoming increasingly better adapted to humans</td>
<td>Maximise efforts to contain or delay spread, to possibly avert a pandemic and to gain time to implement response measures</td>
</tr>
<tr>
<td><strong>Pandemic period</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Increased and sustained transmission in general population</td>
<td>Minimise the impact of the pandemic</td>
</tr>
</tbody>
</table>

**UK alert levels**
- 1. Virus/cases only outside the UK
- 2. Virus isolated in the UK
- 3. Outbreak(s) in the UK
- 4. Widespread activity across the UK
Annex C: Membership of vaccine delivery planning groups

A core group membership, at the preparatory planning stage, is suggested below (note that some of these roles may be filled by the same individual).

- PCT Pandemic Influenza Coordinator
- PCT immunisation coordinator
- consultant in communicable disease control
- senior PCT nurse(s)
- general practice representatives and/or Local Medical Committee representative(s)
- occupational health representative(s)
- pharmacy representative(s)
- community nurse representative(s)
- PCT communications representative
- user representative(s).

Local planners should also consider the possible additional group members listed below. Although possibly not needed at the preparatory planning stage, these additional members would be required in the event of pandemic, when the planning group should be strengthened:

- PCT Chief Executive or their deputy, such as the Director of Operations
- Director of Public Health or their deputy
- PCT Medical Director
- IT representative
- supplies representative
- security representative
- local authority emergency planning officer.
In the event of a pandemic, the planning tasks outlined throughout this guidance would need to be re-addressed urgently by the planning group - within the context of the overall local command and control arrangements for a pandemic. The PCT would assume further responsibilities in the event of a pandemic, and these should also be considered at the preparatory planning stage:

- ensuring that revised national guidance on the vaccination programme is implemented
- planning for timely and effective communication with the public and professionals regarding the vaccination programme
- receiving feedback on local vaccination arrangements, overseeing vaccination coverage monitoring and addressing any problems identified
- ensuring that local media spokespersons are fully briefed on the vaccination programme and its implementation.
## Annex D: Suggestions for vaccine service provision for vulnerable and seldom heard groups

<table>
<thead>
<tr>
<th>Specific group</th>
<th>Suggestions regarding local provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those not registered with a GP, particularly homeless people</td>
<td>The PCT should work with primary care to encourage all those needing vaccination to register with a local GP. However, special provision may be needed for homeless people and for others who are not registered with a GP. Dedicated clinics in a central location, or even mobile clinics, may be appropriate.</td>
</tr>
<tr>
<td>Travellers</td>
<td>Primary care staff currently providing services to traveller sites may be best placed to deliver vaccination, but mobile teams provided by the PCT should also be considered.</td>
</tr>
<tr>
<td>Non-English speakers</td>
<td>The PCT should ensure that those who do not speak English are given translated information materials and that translators are provided as appropriate.</td>
</tr>
<tr>
<td>People with disabilities</td>
<td>The PCT should support primary care to ensure that the needs of those with disabilities are fully met.</td>
</tr>
<tr>
<td>The housebound</td>
<td>Those who are normally housebound will be a particularly vulnerable group, and arrangements for vaccination should build on services already in place for this group.</td>
</tr>
<tr>
<td>Nursing and residential homes</td>
<td>Arrangements should already be in place for annual seasonal influenza vaccination in nursing and residential homes, whose residents are particularly at risk from influenza. These arrangements should be strengthened in the event of a pandemic.</td>
</tr>
<tr>
<td>Prisons and detention centres</td>
<td>PCTs should work with the healthcare services currently provided to prisons and detention centres to ensure adequate vaccination provision for those who are detained.</td>
</tr>
</tbody>
</table>
**Annex E: Suggested approach for organising vaccination clinics in primary care**

The following approach may need to be adapted, depending on the size of clinics and the circumstances of each particular practice.

<table>
<thead>
<tr>
<th>Key steps</th>
<th>Staff responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Careful preparation and planning are needed to ensure that staff, rooms and consumables are available</td>
<td>Identified lead supported by clinical lead (if different)</td>
</tr>
<tr>
<td>2. As soon as possible after the vaccination programme has been put in place, all practice patients should receive a letter telling them when the vaccine will be available, the appointment system to be used and how they will be notified of when to attend. Consideration should be given to transport arrangements, particularly for older people and the housebound and people in rural areas</td>
<td>Identified lead</td>
</tr>
<tr>
<td>3. Clear written information (in the form of a letter from the practice, enclosing a relevant leaflet) should be sent to patients when they are due to attend for vaccination, detailing when and where to attend, what to expect, the possible side effects of vaccination and what to do if they become ill (with influenza or other illness) before the date of their vaccination. The patient should be asked to bring the letter and leaflet with them</td>
<td>Administrative staff</td>
</tr>
<tr>
<td>4. The vaccination team will need briefing prior to the first session, to ensure that all concerned are clear about the process involved, their role and the roles of other team members</td>
<td>Identified lead supported by clinical lead (if different)</td>
</tr>
</tbody>
</table>
### Key steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Staff responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>A member of staff should ‘meet and greet’ patients as they arrive and explain what is going to happen. The patient should fill in a consent form recording their details, including risk group if applicable, and be given another copy of the information leaflet to read if they have not brought it with them.</td>
<td>Administrative staff (perhaps supported by local volunteers who could do tasks such as handing out forms and information leaflets and offering directions)</td>
</tr>
<tr>
<td>6.</td>
<td>Adequate waiting room (and car parking) space will be needed, bearing in mind that patients will need time to read the leaflet and fill in the data/consent form.</td>
<td>Identified lead</td>
</tr>
<tr>
<td>7.</td>
<td>A clear process is needed to direct patients to the vaccinators as soon as they become free and the patient is ready, to ensure maximum throughput of patients.</td>
<td>Administrative staff (perhaps supported by local volunteers)</td>
</tr>
<tr>
<td>8.</td>
<td>The vaccinators will need to have assigned roles during the session, such as stock control and waste disposal.</td>
<td>Clinical lead</td>
</tr>
<tr>
<td>9.</td>
<td>Any questions the patient has should be answered, a check made for any contraindications and verbal consent obtained.</td>
<td>Vaccinators</td>
</tr>
<tr>
<td>10.</td>
<td>Once the vaccine has been given, this is recorded on the data/consent form filled in by the patient and the form signed. The vaccine batch number must be recorded.</td>
<td>Vaccinators</td>
</tr>
</tbody>
</table>
### Key steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Staff responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Data entry can be done separately, and at a later point, by using a completed data record form. It is essential that primary care teams keep accurate records for clinical care purposes, as well as for stock control and monitoring vaccine coverage</td>
<td>Administrative staff</td>
</tr>
<tr>
<td>12.</td>
<td>Any patients who wish to wait after vaccination before leaving the building can go back to the waiting room for a short period and be supervised there*</td>
<td>Administrative staff</td>
</tr>
</tbody>
</table>

* A specific period of post-vaccination waiting is not required, so there is no need for a post-vaccination waiting area
<table>
<thead>
<tr>
<th>DH INFORMATION READER BOX</th>
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<tbody>
<tr>
<td><strong>Policy</strong></td>
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<td><strong>HR/Workforce</strong></td>
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<td><strong>Management</strong></td>
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<td><strong>Planning/</strong></td>
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<td><strong>Clinical</strong></td>
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<td><strong>Title</strong></td>
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<tr>
<td><strong>Author</strong></td>
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<td><strong>Publication date</strong></td>
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<td><strong>Target audience</strong></td>
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<td><strong>Circulation list</strong></td>
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<tr>
<td><strong>Description</strong></td>
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<tr>
<td><strong>Cross reference</strong></td>
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<tr>
<td><strong>Superseded documents</strong></td>
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<td><strong>Action required</strong></td>
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<td><strong>Timing</strong></td>
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<td><strong>Contact details</strong></td>
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<td><strong>For recipient’s use</strong></td>
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Pandemic influenza

Guidance for primary care trusts and primary care professionals on the provision of healthcare in a community setting in England

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