Department of Health

# 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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# 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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# 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 could 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 pandemic influenza can be found in the guidance document on adult social care (see list below).

This document is the updated version of the guidance that was originally published in November 2007. It 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 (with some available from the Home Office, as indicated) 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*
- *Pandemic influenza: Human resources guidance for the NHS*
- *Pandemic influenza: Guidance on preparing mental health services in England*

- *Pandemic influenza: Guidance on the delivery and contract arrangements for primary care dentistry*
- *Pandemic influenza: Guidance for dental practices*
- *Pandemic influenza: Guidance on preparing maternity services in England*
- *Pandemic influenza: Surge capacity and patient prioritisation in health services – provisional UK guidance*
- *Pandemic influenza: Guidance on planning for vulnerable groups*
- *Possible amendments to medicines and associated legislation during an influenza pandemic*
- *Pandemic influenza: Guidance on the management of death certification and cremation certification*
- *Planning for a possible influenza pandemic: A framework for planners preparing to manage deaths (Home Office)*
- *Planning for a possible influenza pandemic: Registrar General's guidance on death registration services for Registration Service Managers and Practitioners (Home Office/General Register Office)*
- *Supporting people with long term conditions to self care: A guide to developing local strategies and good practice* (a section on where to find further advice and case studies is given on pages 36–37)
- *NHS emergency planning guidance 2005*
- *Strategic command arrangements for the NHS during a major incident*

Specific guidance on surge capacity and patient prioritisation in health services and maternity services, as well as operational guidance for GP practices, has also been commissioned and final versions will be published in the near future and made available at www.dh.gov.uk/pandemicflu

This guidance is for England only. Parallel guidance has already been issued by the Scottish Government. The Welsh Assembly Government and the Department of Health, Social Services and Public Safety, Northern Ireland will issue equivalent guidance in the near future. While 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, as far as possible, 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, and 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 from treatment
- 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) either on a stand-alone basis or 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 1 year 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 medicines) 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, supplies 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 (including medical 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 and clinical characteristics of an emergent influenza pandemic virus 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 should therefore 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

In an average GP practice with three full time doctors and a list of 6,000 patients in England:

- up to 3,000 of the local population may show clinical symptoms of influenza over the entire period of a pandemic, and up to 750 of these may develop complications

- as many as 75 of those who become symptomatic may die
- around 660 influenza cases can be expected during the 'peak week' of a pandemic wave
- as many as 855 symptomatic patients (which include those with complications and all children under 1 year) could 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 through the National Pandemic Flu Line Service (see chapter 7 for further information)
- as many as 120 of those who are symptomatic may require hospital admission if sufficient capacity is available (with up to 30 of them 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, as 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 an influenza pandemic 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 accessed through the National Pandemic Flu Line Service (see chapter 7).

Symptomatic patients with complications, those with more complex needs, and children under 1 year of age will need to be assessed by a GP or suitable health professional (see chapter 7 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 1 year 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 week. These are for pandemic-related consultations only and assume that symptomatic older children and adults without complications will access antiviral medicines treatment through the National Pandemic 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 demands (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 taking time off to provide care for dependants (eg children), family bereavement, other psychosocial impacts, other illnesses, 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 among children. This advice will be provided only if closure is anticipated to produce significant health benefits.

Closures will be area specific (while 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; this is based on the assumption that informal childcare is available for parents.

See chapter 3 and *Pandemic influenza: Human resources guidance for the NHS* (2008) for advice on how PCTs and primary care contractors can help to manage the impact of staff shortages.

The Department of Health is preparing guidance for health and social care services for their contribution to psychosocial responses required by people who are involved in major incidents and events of all kinds including pandemic influenza. A draft will be published for consultation in the near future.

## 2.3 Key planning principles

It is also important that PCTs and primary care contractors (eg GPs and pharmacists) 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 3.2).

*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 3.7).

*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 10).

*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, ie to look after themselves at home (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 increased morbidity and mortality (see section 5.1.2). In order to maximise individual health benefits and limit the spread of infection, any patient who has been symptomatic for less than 48 hours 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 7).

*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 through 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 10).

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*.

# 3 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 there are sufficient staff with the appropriate level of competencies in the areas of most need.

## 3.1 Business continuity plans

All PCTs should have business continuity plans in place under the Civil Contingencies Act (CCA) 2004, in accordance with the BS 25999 standard, for managing the continuity of critical functions and the 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 important to every organisation's ability to maintain its critical 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 as well as the potential occurrence of subsequent pandemic waves and local variation in their timing.

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 Civil Contingencies Secretariat (CCS) has issued business contingency management guidance for a possible influenza pandemic, which contains specific guidance for CCA 2004 Category 1 and 2 responders and therefore has specific relevance to PCTs.

The full document can be accessed at
www.preparingforemergencies.gov.uk/bcadvice/index.shtm

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/clinical_and_research/pandemic_planning.aspx
- British Medical Association (BMA), including the General Practitioners Committee (GPC)
  www.bma.org.uk/ap.nsf/content/flupanprep
- Royal College of Nursing (RCN)
  www.rcn.org.uk
  (The RCN is currently developing guidance for its members, which, once completed, will be added to its website.)
- Royal Pharmaceutical Society of Great Britain, National Pharmacy Association, Company Chemists' Association and Pharmaceutical Services Negotiating Committee
  www.rpsgb.org/pdfs/servcontplanguid.pdf
  www.rpsgb.org/pdfs/servcontplantemplate.doc
  www.psnc.org.uk/publications_detail.php/218/flu_pandemic_continuity_planning

### 3.1.1 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. This approach identifies, quantifies and qualifies the business impacts of a loss, disruption or interruption of business processes so that management can determine at what point in time the disruption will become intolerable. It can help organisations understand how long an activity can be suspended before it becomes intolerable. It makes organisations look at how long they can do without each activity and therefore prioritises recovery of urgent activities. Primary care contractors are also advised to undertake risk assessment based planning.

A risk assessment matrix, which assesses the likelihood of an event occurring against the degree of impact if it does occur, may be a helpful way forward in developing this work.

The British Standards Institution has developed a Business Continuity Management Standard, BS 25999 parts 1 and 2, which is widely accepted and used across government and within the NHS. More details can be found on the BSI website at www.bsi-global.com/

### 3.1.2 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, practised in exercises 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)
- infrastructure
- suppliers or contractors
- risk assessments
- business objectives or processes
- guidance from the Department of Health.

A business continuity plan cannot be considered reliable until it has been tested through exercises 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 (eg 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.

## 3.2 Partnership working and integrated planning

Planning should be undertaken in conjunction with local partners, particularly primary care contractors and local medical and pharmaceutical committees, as well as local dental and ophthalmic 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 that they develop good working arrangements between their services **prior** to a pandemic, in order to maximise opportunities for joint working (eg between services supporting self care and those that help to ensure continued access to medicines, such as repeat dispensing schemes).

PCTs will wish to ensure that the following local stakeholders are involved in planning for a pandemic:

- patients
- the wider 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 Agency (HPA) health protection units
- the police
- prison representatives
- the voluntary sector
- private healthcare providers (for both care homes and hospital services)
- hospices and end of life care providers
- undertakers, coroners and cremation services
- education providers
- Local Resilience Forums
- the Influenza Pandemic Committee (for London)
- military establishments
- suppliers and contractors
- local businesses.

## 3.3 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. A good example might be the GPC/NHS Employers arrangements for general medical services (GMS) practices.

## 3.4 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 just in time deliveries. Small stock reserves have implications for how a PCT and healthcare facilities within the PCT 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 within business continuity planning. 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.

The Department of Health is currently undertaking work with regards to oxygen provision during a pandemic.

Separate arrangements are being made for the procurement of face masks and respirators for health and social care workers.

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 consultation document *Possible amendments to medicines and associated legislation during an influenza pandemic* (www.dh.gov.uk/en/Consultations/closedconsultations/DH_080768), which aims to ensure, as far as possible, continued access to medicines during a pandemic. Following this consultation, the Medicines and Healthcare products Regulatory Agency (MHRA) will launch a second technical consultation on changes to the relevant legislation.

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 business 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 critical importance; however, actions to build any local stockpiles should not disrupt the current supply chain.

## 3.5 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 7 711 711 (www.blood.co.uk).

## 3.6 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 strategic health authority (SHA) and other local or regional healthcare providers (NHS and independent sector) about providing mutual aid and support if possible. 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.

Small practices and community pharmacies will face the biggest challenges in terms of providing resilient basic care during a pandemic due to the effect of staff and doctor sickness. 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 coordination across a locality to consider how practices can best work together. There will be a need for practices to cover for each other in order to cope with demand and therefore maintain access to care. For example, in areas such as London, this coordination may need to be organised above the level of the PCT area, ie by the SHA. 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.

## 3.7 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 there are sufficient staff with the appropriate 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 influenza 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 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.

### 3.7.1 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. For pharmacists, this is pending legislative changes and parliamentary approval
  - staff with children/caring responsibilities
  - 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, identifying possible risks in service delivery and finding 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 to ensure that the most effective arrangements are developed
- 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* (2008) 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.

### 3.7.2 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. While 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.

The Department of Health is preparing guidance for health and social care services for their contribution to psychosocial responses required by people who are involved in major incidents and events of all kinds, including pandemic influenza. A draft will be published for consultation in the near future.

### 3.7.3 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 to support staff who are symptomatic on arrival at work or who become ill while 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 11.1 on infection control and section 11.2 on health and safety and risk mitigation.

## 3.8 Recovery phase: returning to normality

Recovery should be an integral part of the combined response from the very beginning of a pandemic, as action taken at all times can influence the longer-term outcomes.

During and between pandemic waves, the strategic focus should therefore always be on both response and recovery activities.

As soon as the situation allows, efforts should be undertaken to start the recovery process to the 'new' reality. However, subsequent pandemic waves might impact on this process, which would shift the focus back to response activities.

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.

The recovery process comprises the following overlapping activities:

*Consequence management*

- Taking steps to prevent the escalation of the impacts of an emergency (eg restoring essential services following a disruption).

*Restoration of the wellbeing of individuals, communities and the infrastructure, which supports them as well as the organisation*

- Identifying enduring impacts early on.
- Ensuring that these impacts are adequately addressed.
- Reintroducing targets, budgets and financial management.

*Exploiting opportunities afforded by emergencies*

- Establishing what happened, identifying potential improvements and applying lessons learned.
- Proactively adapting systems, services and infrastructure affected by emergencies to meet future needs.

Plans at all levels should recognise the potential need to prioritise the restoration of services and to phase the return to the 'new' 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 (eg 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, resupply difficulties might persist, and critical physical assets are likely to be in need of backlog maintenance, refurbishment or replacement. Local impact assessments will therefore be required.

**Key actions**

- Review relevant contracts and service level agreements to ensure that 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.

# 4 Influenza pandemic coordination

**Key points**

- PCTs are responsible for ensuring that local health plans and arrangements are in place in advance of a pandemic, and for managing the local health response during a pandemic.
- 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.
- Clear command and control arrangements will be critical in ensuring a robust response and these arrangements build on existing NHS command and control arrangements.
- Coordination arrangements will need to include the establishment of a PCT coordination centre to monitor and coordinate the overall health response.

An influenza pandemic will place considerable demands on the coordination of responses to the emergency. It is vital, therefore, that PCTs ensure that roles and responsibilities are clearly defined during the planning stage. For a pandemic influenza outbreak to be managed effectively, the command and control arrangements must build on the existing health command and control arrangements already in place for other emergencies. PCTs will need to link in their local arrangements with regional coordination structures to ensure that a robust system of crisis management is in place. Building on current arrangements, this will allow both PCTs and the wider health economy to manage the pandemic more effectively.

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:

- *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
- *Strategic command arrangements for the NHS during a major incident* (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081507), which provides guidance to NHS organisations regarding command, control and coordination arrangements required in planning, preparing and responding to emergencies.

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

## 4.1 Planning for an influenza pandemic

### 4.1.1 Roles and responsibilities of primary care trusts

PCTs, along with other Category 1 responders under the CCA, are responsible for assessing local risk. For pandemic influenza, PCTs, in association with the HPA, will lead on the risks associated with it. While this advice will be used by all agencies to assist them in planning for and responding to the incident, PCTs will also need to ensure that commissioners are aware of the need to factor in resilience and capability to contracts in order to manage the incident effectively. As detailed in the NHS strategic command arrangements, SHAs are collectively responsible for coordinating the health economy's response to widespread incidents. Therefore, PCTs need to ensure that local response arrangements dovetail with regional structures to provide 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 into account closed communities in their areas, eg prisons.

In preparing for a pandemic, key PCT responsibilities are to:

*Assess local needs and risks*

- 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 people who will be or may become vulnerable in a pandemic, including putting in place any special arrangements that may be needed (see section 6.5)
- 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 3.7)

*Plan for the mobilisation of resources during a pandemic*

- ensure that robust commissioning arrangements are in place to support the continued provision of key services
- 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 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 3), and train and exercise in conjunction with local stakeholders and regional partners

*Plan for the delivery of pandemic-specific services*

- 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 Pandemic Flu Line Service (see chapter 7), and planning for the delivery of the pre-pandemic and pandemic-specific vaccination programmes (see chapters 8 and 9)

*Ensure that the response is integrated across agencies*

- 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

*Develop effective command and control structures*

- develop within the PCT a command and control structure that allows appropriate linkages to, membership of, and communication with Local Resilience Forums (LRFs) (during the planning stage) and existing incident management arrangements through the local Strategic Coordination Group (SCG)
- ensure that the local PCT command and control structure links with regional resilience mechanisms through the SHA. The SHAs will be responsible for interfacing with the Department of Health centrally, especially the major incident coordination centre

- ensure that there are clear protocols in place, with nominated senior postholders identified to lead the coordination and response of the local health economy, and where necessary, clearly agreed arrangements for NHS chief executives to commit resource and funding on behalf of other local NHS organisations

*Prepare communications strategies for the public and local health professionals*

- 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 6)

- ensure that a robust process is in place for cascading routine and urgent information to local health professionals, including to GPs, practice nurses and community pharmacies through agreed communication channels including the HPA regional communication leads.

For PCTs that fulfil the role of lead PCT for emergency planning preparedness, there will be additional responsibilities. These are outlined in the *NHS Emergency Planning Guidance* (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4121072) and *Strategic command arrangements for the NHS during a major incident* (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081507).

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 10 of this guidance.

### 4.1.2 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. While 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*

Most PCTs already have a named pandemic influenza coordinator to lead on the arrangements for providing an effective and sustainable community-based response during an influenza pandemic. This is usually 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, ambulance services and primary care contractors. In some areas, these committees have been established as (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 including links with local stakeholders and regional partners. 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 LRF, the principal mechanism for the coordination of multi-agency (ie broader than health) planning at the local level (see section 4.2.4).[1]

*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, Regional Civil Contingencies Committees (RCCCs) and LRFs/SCGs

[1] In London, local pandemic influenza planning committees feed in at the level of the Regional Civil Contingencies Committee (RCCC).

- 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 has developed a revised communications strategy, which will need to be underpinned by local communications plans. 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 6.2 of this guidance.

## 4.2 Responding to an influenza pandemic

### 4.2.1 Declaration of an influenza pandemic

The Department of Health will inform health and social care organisations of any change to World Health Organization (WHO) phases or UK alert levels (see the *National framework* and Annex B for more information on WHO phases and UK alert levels) through the SHA and the Central Alert System (CAS), as a Chief Medical Officer emergency broadcast. 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.

### 4.2.2 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 PCT 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 7 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 8)
- liaise with key partners such as local authorities to ensure a coordinated response
- liaise with commissioning partners to ensure that 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.

### 4.2.3 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.

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 (through 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.gov.uk/response.aspx

Further guidance on command and control arrangements are also sited on the Department of Health emergency planning web page at www.dh.gov.uk/en/Managingyourorganisation/Emergencyplanning/index.htm

### 4.2.4 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 CCA 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.

## 4.3 Roles and responsibilities of partner agencies in the planning and response

### 4.3.1 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
- act as the primary strategic management link with the Department of Health, PCTs, health organisations, respective regional Government Offices, the media, and organisations such as the 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
- ensure effective and coordinated planning for pandemic influenza across the regional health economy

- 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 10.2 for further information) through the chief executive or a nominated deputy.

Each SHA has 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.

### 4.3.2 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. PCTs should engage with them 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 those people who will be or may become vulnerable in a pandemic

### 4.3.3 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 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 1.2).

### 4.3.4 NHS Direct

During a pandemic, NHS Direct will have a dual role to play: it will set up and manage the National Pandemic Flu Line Service (see chapter 7), and it will continue to provide a core service for high priority, non-influenza patients.

### 4.3.5 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.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1191942171181

## 4.4 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 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 a protocol for the management of visitors and travellers returning from countries affected by avian influenza (A/H5N1) and presenting with febrile respiratory illness.

### 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 those people who will be or may become vulnerable in a pandemic.
- 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 that robust commissioning arrangements are in place to support the continued delivery of key services.
- Ensure that the organisation has senior-level leadership driving preparedness arrangements.
- Ensure that 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 that 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 that clear arrangements and protocols for command and control are in place (and communicated) which 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.

# 5 Overview of 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.

## 5.1 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 (ie look after themselves), from their own homes as far as possible. In order to support this (and primary care capacity more generally), a National Pandemic 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 'flu friends' who can collect their antiviral (and other) medicines for them when they are symptomatic (see chapter 7). A flu friend is a representative of a symptomatic patient who collects antivirals on their behalf. A flu friend may be a family member, a friend, a carer or a trusted individual allocated by a PCT.

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 that 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', while chapters 6 to 11 provide detailed operational guidance, specifically for planners, on each of the intervention areas.

### 5.1.1 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. It is important to address the specific self care needs of those people:

- with long term conditions
- at the end of their lives who are or may become vulnerable in a pandemic, including their families and informal carers.

These are discussed in more detail in chapter 6.

### 5.1.2 Access to essential 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. Essential 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%. The Government has announced plans to cover 50% of the population. 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 7.

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 the medicine 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 (ie when 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 during which individuals are able to shed the virus and so pass on the infection to others.

See chapter 7 for guidance on access to antiviral medicines through the National Pandemic 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.

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 pandemic-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 8 for detailed guidance on delivering a pandemic-specific vaccine and chapter 9 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 Government has announced plans to procure a stockpile of antibiotics.

### 5.1.3 Managing surge capacity and patient prioritisation in primary care

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 patients 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 10 for further guidance on managing surge capacity and patient prioritisation.

### 5.1.4 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.

# 6 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.
- The National Pandemic 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, community pharmacists, 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.

## 6.1 Why self care is important

Self care (ie enabling people to look after themselves at home) 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 them 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 through the National Pandemic 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, such as:

- Long term conditions support networks
- community pharmacy advice
- support for good hygiene measures
- medicines management
- provision of healthy lifestyle advice
- assistive technologies
- integration with social services
- Partnerships for Older People Projects
- Connecting for Health
- National Primary Care Development Team (NPDT).

## 6.2 National communications on self care

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.

At WHO Phase 3 national communications focus on good hygiene practices as they are the single most important way to stop the spread of the disease. The respiratory and hand hygiene campaign aims to lay strong foundations for preventative behaviours.

Two leaflets are being prepared that will be sent to all households – one at WHO Phase 4 and another at WHO Phase 5. These give members of the public clear and simple messages on pandemic influenza and how to protect and care for themselves and others. A national print and broadcast advertising campaign, as well as the Pandemic Flu Information Line will be in operation from WHO Phase 4.

Local healthcare communications are the responsibility of the PCT. Effective internal and external communications will be vital in responding to a pandemic. Local communications plans that reflect national activities should be developed in conjunction with stakeholders. These will include all aspects of the health service, pharmacies, social services and the voluntary sector.

### 6.2.1 The National Pandemic Flu Line Service

At WHO Phase 6, UK alert level 2, the National Pandemic Flu Line Service will be activated to provide assessment and access to antiviral medicines for symptomatic patients (see chapter 7). This service will be managed by NHS Direct and will remain operational until the impact of the pandemic and the threat of further waves subside.

## 6.3 Supporting self care at the local level

### 6.3.1 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, vaccines and messages about good respiratory and hand hygiene.

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 hand gel, 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. Tissues and disposal bins as well as 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 through the Pandemic Flu Information Line and antiviral medicines through the National Pandemic Flu Line Service)
- identify flu friends who may be able to provide assistance and support during the pandemic and who are able to collect their antiviral medicines (and other medicines) for them when they are symptomatic. This may be a family member, a friend or a carer
- 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 plans.

### 6.3.2 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 those people who will be or may become vulnerable in a pandemic. 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 that they are coping. All forms of support are important in enabling and supporting people to remain in their homes while 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 6.3.1). PCTs will need to build this requirement into their education programmes.

Types of support network may include:

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

PCTs should 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 those people who will be or may become vulnerable in a pandemic 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.

### 6.3.3 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 advice and support for the safe use of medicines 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 10 for further information on the key roles and work of health professionals.

## 6.4 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 how self monitoring devices and assistive technology are used best during a pandemic

- 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. Guidance is expected to be published in the near future, which will identify the role that pharmacy can play during a pandemic but will also discuss how the impact of shortages of medicines may be dealt with.

## 6.5 Identification of, and provision for, those people who will be or may become vulnerable in a pandemic

Everyone will be vulnerable to the pandemic at some level. However, some people will be or may become particularly vulnerable – for example those who, for various reasons, are less self-reliant than others or who will face particular challenges in accessing the care and support that they need.

People who will be or may become vulnerable in a pandemic include:

- **those who normally need extra support from health and social care services to maintain daily life,** for example people in receipt of domiciliary care or other support, or people with learning difficulties. These services may be susceptible to disruption arising from staff illness or absence
- **those who are not normally in receipt of support from health and social care services but who may need extra support because of the pandemic,** for example those who are isolated or reliant on care from friends or relatives, as well as those who are not registered with a GP, such as those who are rough sleepers, asylum seekers without leave to remain, or individuals who are otherwise unwilling to engage with support
- **those who may not have ready access to communications about the pandemic response and how to access care,** for example some refugees and asylum seekers, recent arrivals in the UK, some travellers and homeless people
- **those who may find it difficult to use the National Pandemic Flu Line Service,** for example people with language barriers, and people who do not have a flu friend.

Wherever possible, service provision should be based on current health provision where appropriate arrangements already exist. PCTs should work with other agencies, including general practices, community pharmacies, providers of out of hours and unscheduled care, social services, voluntary sector organisations and other agencies, to identify those patients and groups who are potentially 'at risk' and to ensure that business continuity and service delivery plans take their needs into account. For example:

- as some individuals are in receipt of services from a number of different agencies, agreeing joint working arrangements to maintain care while reducing workload
- maintaining up-to-date lists of organisations with links to particular communities and agreeing ongoing arrangements for information sharing and training in relation to pandemic flu
- including in individual care plans sufficient detail to enable an alternative carer to know what tasks as a minimum need to be undertaken with, or for, an individual if they, their key worker or their carer are incapacitated
- ensuring that arrangements are in place for staff to act as flu friends or to be able to access alternative flu friends with regard to the collection of antivirals for users who have no other identifiable support
- taking care to ensure that where services that provide low level support to users to access services are reduced or curtailed to manage reduced resources during a pandemic that the impact on those that rely on the service are carefully considered and alternatives put in place where necessary.

Voluntary organisations that support particular groups, for example older people, children with special needs, mental health groups, people with long-term conditions and refugee and asylum seekers will have an important role in communicating with and supporting those individuals. These organisations are well placed to provide information and advice and also act as a support network to their members. PCTs should seek to engage the voluntary sector in planning for pandemic influenza and in promoting opportunities for a joint approach to self care and supporting vulnerable individuals to remain in their own homes during a pandemic.

Work is under way on detailed proposals to facilitate access to antivirals by those who might be unable to use the 'standard' National Pandemic Flu Line Service. As a general principle, individuals should be encouraged and supported, wherever possible, to use the 'standard' arrangements and to build on their normal arrangements for accessing emergency care. For example, individuals who do not speak English or are unable to use the language options available on the internet may have relatives that can phone on their behalf. Those living in supported care in the community will need advice and support on what to do if they become unwell with flu-like symptoms.

PCTs should identify agencies, for example voluntary organisations, community groups and others, who may be able to provide flu friends for those who are unable to identify their own. LRFs will be a natural point of contact for this as they generally have voluntary sector liaison groups for those agencies that are able to support emergency responses. PCTs should agree with the organisations in advance how the service will operate, what training and support may be required and how the costs of providing the service will be met.

Specific guidance to address the needs of those who will be or may become vulnerable in a pandemic is currently being developed.

## 6.6 Supporting people at the end of their lives – bereavement and end of life care

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 include:

- affirmation of life and regard of dying as a normal process
- relief from pain and other distressing symptoms (including easy access to appropriate medicines)
- 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 end of life 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 Pandemic Flu Information Line.

## 6.7 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 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 – including staff, carers, those whose first language is not English, those people who will be or may become vulnerable in a pandemic, families/carers of those who are very ill or need end of life care, 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 those people who will be or may become vulnerable can be supported to self care during a pandemic.
- Engage with those providing end of life 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 flu friends who they can gain support from during a pandemic. These friends can be family members, friends, carers or individuals allocated by the PCT.
- Involve patients, lay experts and appropriate local professionals in identifying best practice in approaches to needs, information and communication.

# 7 Antiviral implementation strategy

**Key points**

- The UK is establishing a stockpile of oseltamivir (Tamiflu) antiviral medicine that allows for the treatment of all symptomatic patients at clinical attack rates of up to 50%.
- The National Pandemic Flu Line Service will be mobilised 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).
- Designated licensed hospital pharmacy manufacturing units will manufacture oral oseltamivir solution for infants under 1 year old, from the active ingredient powder that has been stockpiled, 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.

In order to limit the spread of infection and maximise individual health benefits, patients should take an antiviral medicine as soon as possible after the onset of symptoms – ideally within 12 hours, but, in any case, within 48 hours. Rapid antiviral provision is therefore specified as an important planning aim in the *National framework*.

The objective of the antiviral implementation strategy is to contribute significantly to the Pandemic Influenza Preparedness Programme (PIPP) objective 'to ensure that the UK responds effectively to a pandemic, employing a range of measures in advance of and during a pandemic to mitigate its impact on health and social care services', through project work in three focal areas:

- providing assessment and authorisation of antivirals during a pandemic, through the National Pandemic Flu Line Service for standard cases and through healthcare professionals for people with no access to the National Pandemic Flu Line Service
- ensuring that there is a robust system in place to distribute antivirals (ie collection points and local arrangements)
- ensuring that there is a robust system in place to manage antiviral stock during a pandemic (ie stock management, storage and distribution).

The antiviral implementation strategy is based on the following principles:

- symptomatic patients in the UK should be eligible for treatment
- capabilities will be subject to national structures and guidance for consistency but will allow for local variance
- symptomatic patients will be directed to use a standard process for accessing treatment in order to reduce societal disruption
- alternatives to clinicians will be used where possible so that clinicians are available to manage flu complications
- symptomatic patients will be encouraged to stay at home and ask flu friends to collect their antivirals, so as to limit the spread of the virus
- a flu friend is a representative of a symptomatic patient who collects antivirals on their behalf. A flu friend may be a family member, a friend, a carer or a trusted individual allocated by a PCT.

## 7.1 Supply of antivirals – overview

*Clinical overview and legislation governing the supply of antivirals*
For maximum treatment benefit, oseltamivir (Tamiflu) 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.

The UK currently has a stockpile of oseltamivir built on the basis of a 25% clinical attack rate. The Government has announced plans to increase the stockpile to cover 50% of the population. This is in line with the planning assumptions in the *National framework* and will allow the treatment of all symptomatic patients.

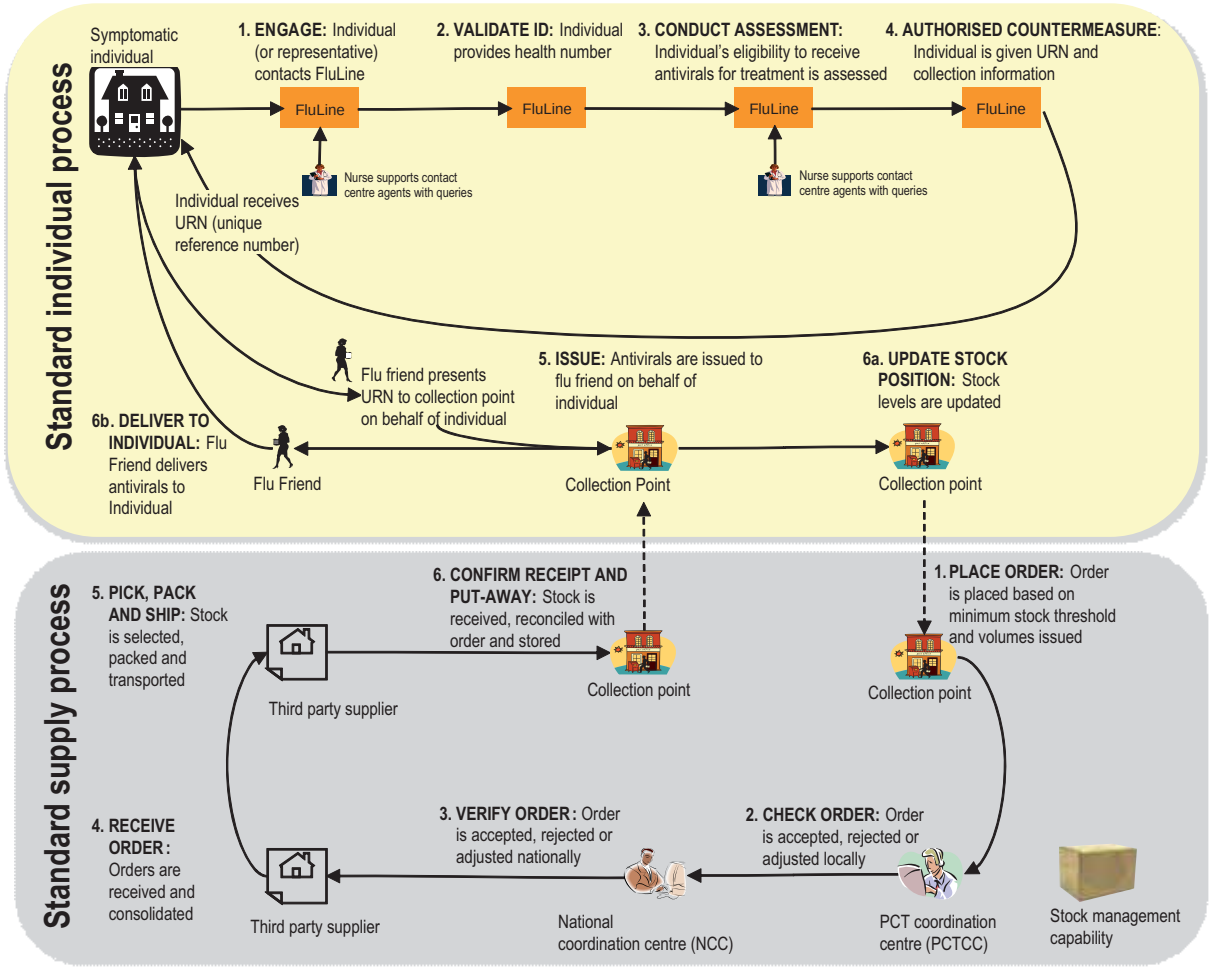
For the treatment of influenza, the normal adult dose is a 75mg capsule twice daily for Five days. Low dose capsules are available for children and a special formulation is being manufactured for children under 1 year (see chapter 7.6).

It is proposed that as well as enabling antiviral medicine treatment to be authorised through the National Pandemic Flu Line Service, it will be supplied without a prescription and without always being under the supervision of a pharmacist or other relevant healthcare professional. Protocols for the supply of 75mg, 45mg and 30mg capsules are being developed. The legal changes enabling the use of the antiviral protocols are the subject of a technical consultation being conducted by the MHRA on changes to the medicines legislation and other related legislation, eg concerning NHS pharmaceutical services. Specific advice on the operation of the antiviral protocols will be given to PCTs when the protocols are agreed. Access to prescription-only medicines without a prescription will be possible only during the time of a pandemic.

The Government is also planning to procure zanamivir (Relenza) as part of the stockpile. This will be made available in specific clinical circumstances that will depend on the pandemic virus and the individual patient.

*High level end-to-end process*

This section of the document provides an overview of the high level end-to-end standard process from patient contact to antiviral receipt.




Symptomatic patients will contact the National Pandemic Flu Line Service, which will provide a standard route for large numbers to be assessed, receive advice, obtain authorisation for antivirals for treatment and receive information on collection points. The National Pandemic Flu Line Service will be accessible by telephone or via the internet. Patients will be processed as follows:

1. The symptomatic patient's identity will be validated using their NHS number[2]
2. The symptomatic patient will be taken through a clinical protocol and assessed to determine eligibility for antivirals

[2] Patients in England will use their NHS number during a pandemic. Patients registered for health services in Scotland, Northern Ireland or Wales will use their local equivalent health identifiers.

3. If antivirals are authorised, the symptomatic patient will be given a unique reference number (URN) to be used at the collection point and advised of their nearest collection point

4. Symptomatic patients should then contact a flu friend to arrange collection of authorised antivirals on their behalf from a convenient collection point.

To support this process:

- a nationally coordinated distribution process will supply collection points with antivirals from a national stockpile
- stock will be ordered automatically by means of a threshold system: the National Pandemic Flu Line Service will be activated at the start of World Health Organization (WHO) Phase 6, UK alert level 2. This level will be triggered by the advice of the HPA that there is evidence of pandemic flu in the UK
- there will be a Pandemic Flu Information Line (information-only service on a different telephone number) for 'worried well' members of the public
- communications will provide information about pandemic flu to all organisations involved, helping them to manage alert levels and make decisions to resolve escalated issues
- the National Pandemic Flu Line Service will be designed for routine cases, but some individuals who are symptomatic or have complications, and some of those who cannot access the National Pandemic Flu Line Service, will be referred to existing services such as GPs for medical attention
- where symptomatic patients cannot access the National Pandemic Flu Line Service, provision of care will need to be made available locally (without compromising the incentive for other symptomatic patients to use the National Pandemic Flu Line Service). This is necessary to reach those in closed communities, such as prisons and mental health institutions, and those with access barriers, such as people with no verifiable proof of identity and non-English speakers.

## 7.2 The National Pandemic Flu Line Service

The National Pandemic Flu Line Service will offer self-service assessment, care advice and antiviral authorisation during a flu pandemic. The service will be available on the internet, automated telephony or through call centres.

Antivirals are an important part of the country's countermeasures against pandemic flu as, if taken within 48 hours, ideally 12 hours, of a patient becoming symptomatic, they reduce the likelihood of that person contracting secondary infections (eg pneumonia) and therefore lessen the risk of mortality. To maximise accessibility, the National

Pandemic Flu Line Service will be available across the UK and will be contactable 24 hours a day, seven days a week.

In providing an assessment and antiviral authorisation service the National Pandemic Flu Line Service will be focused on all routine cases of pandemic flu and in doing so will enable frontline NHS staff to concentrate on those with the greatest needs.

The National Pandemic Flu Line Service assessment is centred on a clinical protocol which has been developed by NHS Direct in partnership with the Royal Colleges and a range of other stakeholders to establish clinically safe outcomes for individuals including referral to 999, referral to primary care, antiviral authorisation and/or provision of self care advice.

Surveillance data will be collected by the National Pandemic Flu Line Service and will be a vital management information tool for government coordination of the pandemic response.

The National Pandemic Flu Line Service will be targeted specifically at those who believe themselves to be symptomatic with pandemic flu. All general public health information on pandemic influenza will be available through the Pandemic Flu Information Line.

The separation of these two services has been designed for resilience purposes to enable each service to cope with the spikes of demand expected during a severe pandemic.

The National Pandemic Flu Line Service will be ready to be mobilised at short notice when pandemic flu arrives in the UK. The National Pandemic Flu Line Service will undergo regular tests to ensure that the service and its underlying infrastructure are in a constant state of readiness.

All users of the National Pandemic Flu Line Service will use a unique identifier to validate their identity using their NHS number or something similar. The purpose of this check is to prevent fraud and to maintain clinical safety. Initially, it is intended that all UK nationals will be identified through their NHS number. Current awareness of NHS numbers is low across the population, but the Department of Health is considering options for raising awareness. The Department is exploring the potential for use of passports for non-UK nationals and overseas visitors.

The Department of Health is also developing processes in consultation with external stakeholders to ensure that people who cannot use the standard process can access antivirals locally. These special considerations include people in care homes and vulnerable groups. Furthermore, the Department of Health is also working with local organisations to develop guidance on local exception processes that is aimed at such special considerations and people that may not have access to the National Pandemic Flu Line Service.

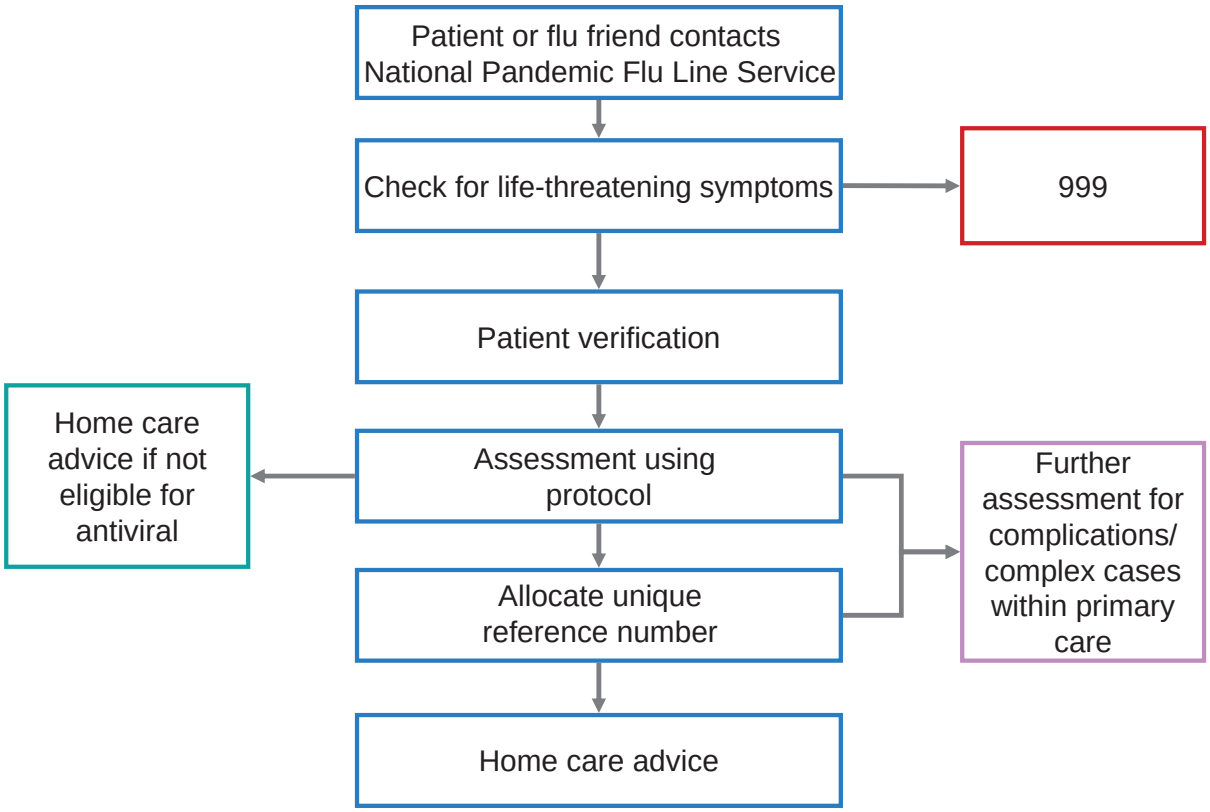
### 7.2.1 National Pandemic Flu Line Service processes

The standard National Pandemic Flu Line Service process is:

- A person, ie a patient or someone acting on behalf of a patient, contacts the National Pandemic Flu Line Service either by telephone or through the FluLine website. The person identifies which of the UK countries is to handle their call. Callers who have no touch-tone telephone or with special needs will be passed to an 'operator' function which will then redirect them to the appropriate call centre.
- An initial assessment checks whether the person is using the correct service. This check determines whether the person should be accessing the Pandemic Flu Information Line, for information and advice, rather than the National Pandemic Flu Line Service, for a flu assessment, or whether they are a medical emergency case in which case they are asked to hang up and contact 999 emergency services.
- If the person is using the correct service then:
  - UK residents are asked to provide the patient's NHS number or equivalent, followed by date of birth and corresponding postcode digits or name (first name and surname) in order to verify the patient's identity.
  - Foreign visitors, who can contact the National Pandemic Flu Line Service through the internet or call centre only, are asked to provide the country or authority issuing their passport, their passport number and their current postcode.
- Those without an NHS number or passport and who fail all subsequent identity tests are directed to local exception processes outside the National Pandemic Flu Line Service. These are managed by the local PCT.
- Once a patient's identity is verified, a clinical assessment (ie a series of questions) is undertaken, based on a clinical protocol. Certain responses result in referrals to primary care (either as a message to contact your local GP or, in Scotland, to a central hub call-back service that coordinates access to GPs). The outcome of the assessment is a referral and/or appropriate home care advice and/or the provision of an antiviral authorisation code (a URN).
- As appropriate, the National Pandemic Flu Line Service informs the person of the patient's URN and the closest collection point address, based on the postcode as held in their health record and stock availability.
- In order to collect the antiviral, the URN will need to be taken to a collection point by the patient's flu friend. Antivirals can be collected from any collection point.

### 7.2.2 Patient pathway

An overview of the patient pathway is provided below. This is the standard procedure that symptomatic patients and flu friends will experience. The pathway is as straightforward as possible to make antivirals accessible without unduly compromising security or patient data.




The National Pandemic Flu Line Service also provides the following:

- enabling a member of the public to register a complaint which is followed up by the National Pandemic Flu Line Service operations team
- enabling a caller/user to obtain a new URN when an earlier one is lost (for security reasons this replaces the previous URN)
- supporting a 'National Pandemic Flu Line Professional' portal which provides a secure web-based mechanism for authorised National Pandemic Flu Line Service health professionals to record on the National Pandemic Flu Line Service database that an antiviral has been authorised or given to a patient without the need to work through the National Pandemic Flu Line Service protocol. This enables the National Pandemic Flu Line Service to keep track of antivirals issued or authorised by GPs, hospitals, care homes, prisons and other institutions outside of the normal National Pandemic Flu Line Service processes and thereby minimise the risk of multiple antiviral authorisations for patients. Medical professionals can choose to give a second antiviral if they deem it to be appropriate, but the normal National Pandemic Flu Line Service cannot

- providing real-time monitoring of operational aspects of the National Pandemic Flu Line Service, such as inbound calls received/handled, usage of call centres, use of the website and the ability to manage operational loads
- reporting of National Pandemic Flu Line Service activity based on contact records and patient data, such as postcodes and ages – including fraud detection and management, protocol question responses, authorisations and collections, trends etc
- providing regular surveillance data to the national influenza surveillance system: A key benefit of the National Pandemic 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. 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
- enabling updates to the clinical protocol (such as changes to questions and response actions) which can be implemented consistently and quickly across all the channels.

### 7.2.3 The role of NHS Direct in setting up and managing the National Pandemic Flu Line Service

NHS Direct has been commissioned by the UK health departments to develop and manage the National Pandemic Flu Line Service. NHS Direct is the national health line, providing expert health advice, information and reassurance, using world class telephone and website services 24 hours a day, 365 days a year.

NHS Direct has utilised its core service expertise to develop the National Pandemic Flu Line Service, basing the delivery model on its existing framework with which members of the public are already familiar. The National Pandemic Flu Line Service will have a stand-alone infrastructure to ensure resilience to maintain service during the expected peaks of demand. The National Pandemic Flu Line Service has been designed to meet upwards of 100,000 contacts per hour.

NHS Direct will therefore:

- establish the operational requirements of the National Pandemic Flu Line Service, including the contact centres, training of call centre agents, operational systems and processes
- manage the development of the technology infrastructure that will underpin the service and oversee rigorous technology and user acceptance testing
- manage the service during a pandemic.

*Building and testing the National Pandemic Flu Line Service*
The National Pandemic Flu Line Service will be rigorously tested to ensure that the operational model and IT infrastructure are robust and fit for purpose and that the service is user-friendly for the public. Key stakeholder groups will be involved in the user acceptance testing.

### 7.2.4 Resourcing the National Pandemic Flu Line Service

The National Pandemic Flu Line Service will be accessible to the public through a website, touch-tone telephony and call centre agents to maximise the resilience of the service.

Touch-tone telephony backs up the call centre access channel to ensure that the service remains available even during a severe pandemic where call centre agents will themselves become sick or may have difficulty travelling to work.

Public and private sector call centres will be used to deliver the service and between 5,000 and 7,500 seats are being sought.

Call centre agents will be supported by nurses to ensure the clinical safety of the service.

### 7.2.5 The role of PCTs

PCTs will be required to engage with the Department of Health to provide the nursing resources to oversee the interactions of the call centre agents. PCTs will also need to have contingency arrangements in place, in the event that:

- an influenza pandemic was to take place before the National Pandemic Flu Line Service is available
- the National Pandemic Flu Line Service or any other aspect of the antiviral implementation strategy does not operate as intended during a pandemic and the local antiviral assessment and authorisation processes need to be activated.

Arrangements could include bolstering critical access points such as general practice and out-of-hours services.

## 7.3 Stock management

### 7.3.1 Delivering antivirals

As outlined in the *National framework*, current modelling assumptions suggest that in a worst case scenario it could be 2–4 weeks from when we have the first indications that human-to-human transmission has taken place somewhere in the world, to a pandemic being declared in the UK (WHO Phase 6, UK alert level 2).

In the event of these circumstances, a delivery of antivirals will be made to a limited number of pre-identified delivery locations in each PCT. In the event that the virus spreads less quickly we would look to deliver antivirals to a greater number of locations, in each PCT. PCTs will be expected to activate local coordination links once UK alert level 2 is reached.

PCTs will be asked to ready themselves for the above delivery from UK alert level 1 (ie when a pandemic is declared somewhere in the world).

Further consideration of the point of distribution of the oral solution is still taking place. However, collection points will receive antivirals for children aged 1 year or older.

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.

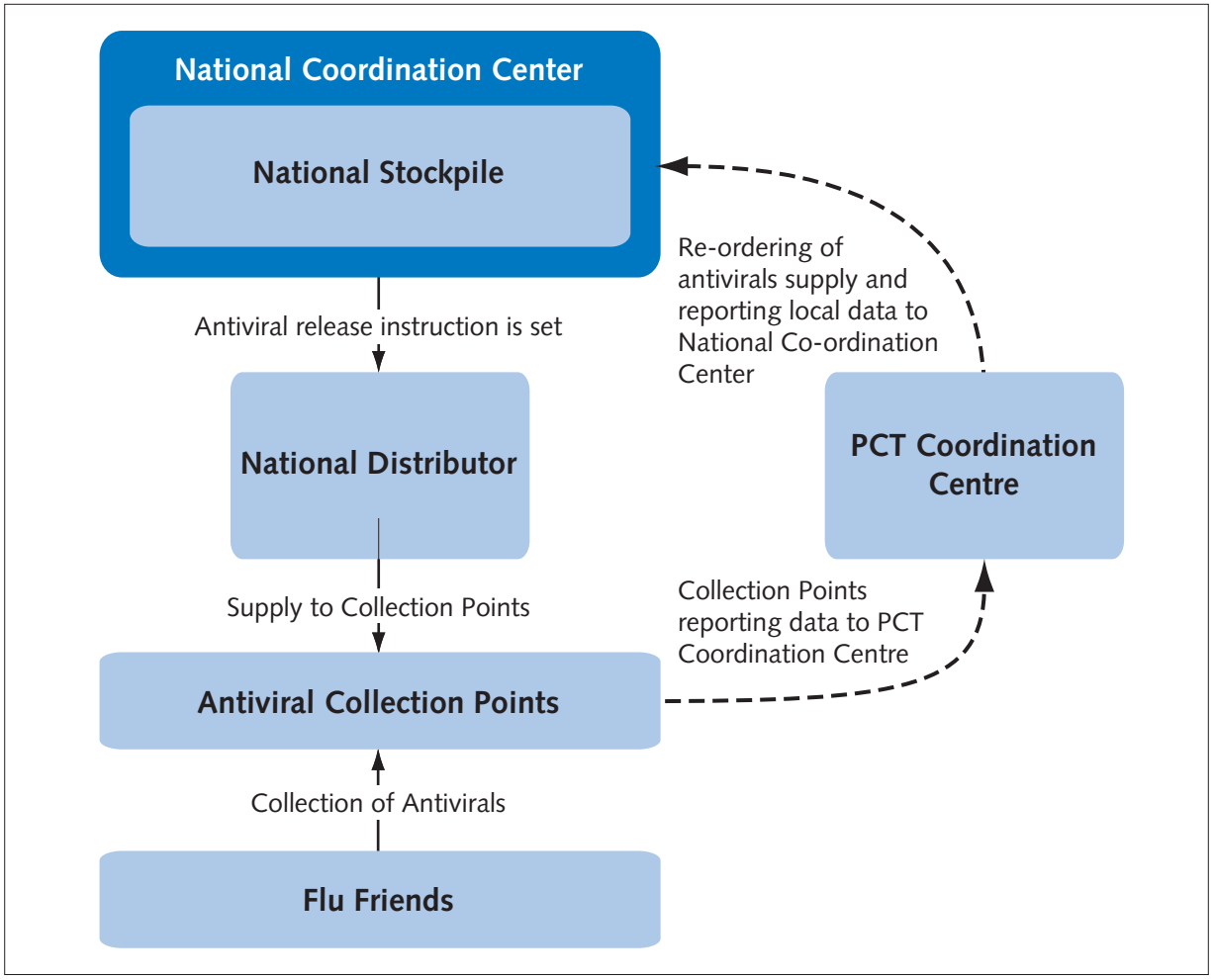
### 7.3.2 Stock management system

Within an estimated 48 hours of UK alert level 2 being announced, a delivery of antivirals will be made to a limited number of pre-identified collection points to prepare them for the pandemic demand. The initial push of antiviral supply will be based upon resident population.

Powder that is being stockpiled for the manufacture of oral oseltamivir solution for infants under 1 year of age will be distributed to the designated licensed hospital pharmacy manufacturing units, so they can start manufacturing the solution.

After the initial supply of antivirals, further allocations will be on an ordering and re-supply basis, and will be adjusted to reflect the actual attack rate, actual availability of stock at collection points and supply position.

**Illustrative representation of the antiviral distribution network**




Primary objectives of the stock management system are to achieve the following:

- to provide an initial allocation of antiviral stock to the registered antiviral collection points for preparation:
  - initial allocation of stock is the quantity that will be dispatched to collection points within an estimated 48 hours of UK alert level 2 being announced
  - similarly the active ingredient powder for the manufacture of antiviral solution for children under the age of 1 will be distributed to the designated hospital pharmacy manufacturing units so they can start preparing for manufacture
- to maintain supply of antivirals to the antiviral collection points with minimum manual interventions:

  - in the pandemic phase, the pandemic coordination centre that has been set up to monitor and coordinate the overall health response, will monitor the level of stock at each registered collection point at regular intervals and will create antiviral re-orders in the system for all the collection points which have stock levels at/or below contingency stock. This leads to automatic creation of re-orders in the system that will be reported to the national coordination centre which will confirm orders. (For more information on the pandemic coordination centre please refer to section 4.2.2.)

- to have traceability of the stock that has been sent to collection points, the stock management system will provide a complete order history to the PCT.
- to provide the available collection point information to the National Pandemic Flu Line Service:
  - on the basis of available stock at collection points, the stock management system will provide details to the National Pandemic Flu Line Service so that callers can be referred to appropriate collection points.
  - PCTs may change opening and closing times of collection points. The stock management system will communicate the changes to the National Pandemic Flu Line Service.
- to provide reports on the usage of stock:
  - PCTs will provide regular antiviral stock reports from collection points to enable effective monitoring and follow-up where local use of stock is not in line with expected demand.

## 7.4 Collection points

Collection points are PCT-nominated locations where flu friends can collect antivirals on behalf of a symptomatic person, on presentation of the person's valid URN.

The purpose of a collection point is to:

- enable symptomatic patients to remain at home but still gain access to antivirals
- help prevent people burdening hospitals and GPs unnecessarily during a pandemic (standard cases will be directed to the National Pandemic Flu Line Service and then to collection points)
- enable GPs and other healthcare staff to access antivirals for people with no access to the National Pandemic Flu Line Service where appropriate.

Collection points are also intended to minimise the impact on secondary care facilities, as:

- hospitals will have antivirals for inpatients only
- accident and emergency departments will not issue antivirals
- GPs will not have antivirals
- prescriptions will not be issued for antivirals.

*Collection point functions*

Collection points will vary in size and location depending on the population of the PCT. However, all collection points will have five key functions:

- verifying patient URNs and checking them against the collection point issuing system
- issuing antivirals to flu friends and confirming their identity
- issuing information leaflets to flu friends
- receiving and securely storing supplies of antivirals
- signing off deliveries of supplies.

Collection points should undertake daily stock checks. This guidance details the arrangements and processes required to complete these key functions. PCTs are required to identify a number of antiviral collection points within their locality. 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), PCT pharmaceutical advisers and other partner agencies.

### 7.4.1 Collection point checklist

Below is a checklist of basic requirements for collection points. This has been designed to assist PCTs in planning collection points.

| Requirement category | Requirement |
|---|---|
| Technical | Computers (Internet Explorer 6 or newer) |
| | Internet connection |
| | Telephones |
| | Fax |
| | Printer |
| Physical (including storage and security) | Lockable building |
| | Lockable storage area to prevent unauthorised people accessing antivirals |
| | Ability to store antivirals |
| | Space for queues in times of high demand |
| | Have a separate entrance and exit (in times of high demand there will be a requirement for security on the door to check that people have a URN and also to maintain order) |
| | Ability to receive a delivery from a 17.5 tonne lorry |
| Location | Is the collection point located on a red route? |
| | Accessibility by public transport |
| | Disability access available |
| Resourcing | Availability of appropriately trained staff |
| Communications | Space for customised signage at collection points where required |

### 7.4.2 Location options

Depending on requirements, there are a number of options to be considered when identifying locations for collection points. It is recommended that PCTs should, where possible, consider sites that have been identified previously for dealing with other emergencies.

When determining locations, PCTs will also wish to consider the following:

- the 'normal' use and role of the site and whether this would be compromised – for example, if a collection point was sited in a community pharmacy or a supermarket would normal business procedures be able to continue?
- the availability (staffing, security and accessibility) of the service out of hours
- the location's current business continuity, resilience and emergency procedures.

Possible options for collection points include (if they meet required criteria):

- non-acute NHS facilities
- non-healthcare secure facilities such as libraries, community halls and leisure centres
- partner agency facilities
- walk-in centres
- retail sites
- private healthcare facilities
- community pharmacies.

## 7.5 The role of PCTs

PCTs will be responsible for setting up, monitoring and managing collection points. They will also be responsible for developing local arrangements to ensure that people who cannot use the National Pandemic Flu Line Service are able to gain access to antivirals. It is envisaged that to carry out these functions PCTs will have a central coordination role.

The activities they are expected to carry out are as follows.

*1. Collection points:*

- Identification and confirmation of suitable collection point locations and facilities
- Notifying 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)
- Setting up collection points

- Management and maintenance of collection points
- Notifying the national coordination centre of any changes to the collection centres or points of use, or any issues or problems they are experiencing
- Reporting any alterations to opening times

*2. Delivering care to people with no access to the National Pandemic Flu Line Service:*

- Developing and implementing local arrangements to serve people with no access to the National Pandemic Flu Line Service
- Managing relationships with voluntary organisations and community groups and charities to ensure that members of such groups of people with no access to the National Pandemic Flu Line Service are treated if they fall ill
- Managing local arrangements for closed communities such as prisons and mental health institutions (eg prisons could be allocated a non-public-facing collection point; or the PCT may wish to have control over the stock and locally deliver from a collection point to a prison)
- Making arrangements for the delivery of antivirals for home visits
- Allocating a flu friend to people with no access to the National Pandemic Flu Line Service if needed in exceptional circumstances

*3. Management reporting and reporting to the national coordination centre:*

- Management and reporting of stock to the national coordination centre
- Reporting on the levels of stock to the national coordination centre informing the stock management system on a timely basis (at least once a day) of operational collection points in their area
- Utilising regional and national surveillance information to help monitor demand and supply
- Ensuring follow-up where local use is not in line with expected take-up and use

*4. System access management and technical support:*

- Designating National Pandemic Flu Line Professional users within their area so that log-on information can be provided and then managed
- Designating, managing and monitoring trusted users for the collection point issuing system and National Pandemic Flu Line Professional system
- Providing local technical support, such as password resets for the issuing system and National Pandemic Flu Line Professional system
- Managing the registration of individuals and their security password

*5. Stock management processes*

- Stock will be automatically re-ordered for collection points; the PCT will have a role in managing this process. The PCT will also be responsible for reporting stock usage and managing local stockpiles at collection points. Usage will be reported to the national coordination centre to assist with the management of the national stockpile.
- Reporting on stock usage and investigating unusual patterns to assist the national coordination centre in managing stock
- Moving stock around locally to accommodate local surges in demand or collection point closures
- Arranging for supplies that are not needed to be returned to the national stockpile
- Operating manual re-ordering processes should the stock management system fail

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. Communications:*

PCTs will be provided with leaflets to issue with the antivirals; these leaflets will be centrally produced and will provide information on a number of areas. For example:

- how and when to take the antivirals
- what to do if the patient's condition worsens
- possible side effects and what to do if they occur.

PCTs will be required to produce local communications detailing, for example, which collection points are open. PCTs should also consider how and when they communicate simple information about the collection point function. An important way of managing demand will be to supply clear, simple knowledge and advice about local arrangements. The national communications strategy will explain the process for accessing antivirals and the role of collection points.

*Business continuity planning:*

Local business continuity and contingency plans need to be in place. These should state the possible issues and risks faced and the process and actions for mitigation and/or the contingency arrangement(s).

The business continuity plan should consider (though this is not an exhaustive list) maintenance and contingency arrangements for the following functions:

- antiviral functions or services
- non-antiviral functions or services that may impact upon the distribution of antivirals
- staffing
- security
- maintenance of site
- utilities, eg electricity, water, fuel (for heating)
- telecommunications (including emergency back-ups – if not on N3, ADSL users need to make local arrangements)
- maintenance of IT equipment
- cleaning
- suppliers or contractors.

Business continuity plans must be developed in conjunction with the SHAs and any other local partners, eg collection points could 'buddy up' to ensure business continuity.

Robust workforce planning will be required to ensure, as far as possible, that there is sufficient and appropriate staffing and levels of competencies to enable distribution of the antivirals.

## 7.6 Antiviral therapy for children

### 7.6.1 Access for children

Oseltamivir is licensed for use in children over 1 year old and the Government has procured appropriate dose capsules from the manufacturer for use in children under 13 years old.

Unless the child is obviously over or under weight, the dose is determined by age as a proxy and is set out below:

- age 1 year or over but under 3 years (body weight under 15kg) – 30mg twice daily for five days
- age 3 years or over but under 7 years (body weight between 15kg and under 23kg) – 45mg twice daily for five days
- age 7 years or over but under 13 years (body weight 24kg and above) – 60mg twice daily for five days
- age 13 years and over – 75mg twice daily for five days.

Oseltamivir is not licensed for use in children under 1. There is, however, published evidence from Japan that it has been used safely at a dose of 2mg per kg twice daily in children under 1 year of age. 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. The Government has purchased the active ingredient powder for reconstitution into a solution for use during a pandemic. There are sufficient drums to make up antiviral solution to treat the UK population of under-1s at a clinical attack rate of 50%. This will continue to be made up in designated licensed manufacturing units in NHS hospitals.

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 children of all ages if at high risk of complications (due to co-morbid disease), be seen and assessed by a GP or suitably qualified practitioner
- aged 1 year or over, be assessed by the National Pandemic Flu Line Service staff using a clinically based paediatric triage protocol and referred for antivirals. Those at risk of suffering complications of influenza may be referred to a suitably qualified practitioner if needed.

### 7.6.2 Manufacture and distribution of antiviral solution for children under 1 year

A number of licensed hospital pharmacy manufacturing units have been designated to manufacture oral oseltamivir solution for use by children under 1 year during a pandemic. At UK alert level 2 (and after being alerted of the need to have arrangements in place), the manufacturing units will be asked to start production of the solution once the active ingredient powder is distributed to them and will continue to manufacture during the pandemic. The shelf life of oral oseltamivir has now been extended to 12 weeks following further validation.

In order for the designated licensed hospital pharmacy manufacturing units to respond effectively to demand for oral 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. As an ambient product, it does not need to be refrigerated. Further consideration of the point of distribution of the oral solution is still taking place.

## 7.7 Access for those who are ill at work

People who become symptomatic at work should be advised to contact the National Pandemic Flu Line Service and to go home as quickly as possible, isolating themselves from well members of the family where practical. While 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 covering the nose and mouth with a tissue when coughing or sneezing and disposing of dirty tissues promptly and carefully by bagging and binning them).

## 7.8 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, any amendments to medicines and other related legislation will be brought into force for its duration. These changes were outlined in the *Possible amendments to medicines and associated legislation during an influenza pandemic* document, and 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 without a doctor's prescription and at NHS expense. 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.

Following the consultation mentioned above, the MHRA will launch a technical consultation on changes to the relevant legislation. 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.

In line with seasonal flu planning, PCTs will wish to consider opportunities to encourage the public to think about what basic supplies of medicines they should stock in their medicine cupboards at home (eg paracetamol or ibuprofen and any other medicines that they might use regularly and would require in a pandemic) and whether they are in date. PCTs should consider the impact of any increased stock holding messages on the current supply chain.

### Key actions

- Ensure that a contingency arrangement is in place that could be activated if an influenza pandemic occurs before the National Pandemic Flu Line Service was set up, or in the event that additional local arrangements are required to support the National Pandemic Flu Line Service during a pandemic. PCTs will need to liaise with their SHA pandemic influenza coordinator on contingency arrangements.
- Identify what clinical resources could be used from the healthcare team to support NHS Direct in administering the National Pandemic Flu Line Service or its core non-influenza business in the event of a pandemic, and communicate this to the Department of Health.
- 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 4.2.2).
- Encourage all members of the public to identify representatives (ie a friend, relative or carer – their 'flu friends') who could collect their antiviral medication for them in the event of a pandemic.
- In exceptional circumstances, ensure that an arrangement is in place to coordinate the delivery of antiviral medicines from the collection points to patients who 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 the medicines they already have are in date.

# 8 Delivery of pandemic-specific vaccine population-wide

**Key points**

- The provision of specific pandemic vaccine will take place over several months. This is unavoidable.
- A primary care based model is the favoured approach for population-wide delivery of a specific pandemic vaccine. This includes the important provision to support primary care delivery by redeploying other staff to work in general practices as necessary.

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 have to be adapted in light of the epidemiology of the evolving pandemic and the effectiveness of current or new vaccines.

## 8.1 Delivery model

The provision of a specific pandemic vaccine will have to take place over several months, as explained in section 8.2.1 and in chapter 5. Emergency response arrangements should also build on normal delivery mechanisms whenever possible and, where necessary, bolster capacity in a flexible way in support of this approach.

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

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 in the event of a pandemic they may choose to use this alternative model to deliver population-wide immunisation.

A national guidance document for PCTs, *Mass prophylaxis centres: An operational planning framework for mass prophylaxis or vaccination*, is currently being drafted by the Department of Health and the HPA and will require some further consultation and amendment before publication.

This document should be used to support this alternative approach. It should be noted that the above 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 that 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.

## 8.2 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
- the 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 – and further national guidance will need to be made available to PCTs and other responsible organisations in the NHS
- 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.

### 8.2.1 Vaccine availability

Sleeping contracts for specific pandemic vaccine have been finalised with vaccine manufacturers. These allow for the provision of up to 132 million doses for the UK population, which provides 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 3 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 an average GP practice with three full time doctors, or for a population of 250,000 people.

For an average GP practice with three full time doctors and a patient list size of approximately 6,000 patients, an average of 274 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.

### 8.2.2 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).

### 8.2.3 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, because schools might be closed. Therefore, this section assumes that the immunisation of school-age children would take place in primary care. However, 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.

## 8.3 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.

While vaccination will be delivered locally, important responsibilities lie at the national level. This includes the setting of vaccination policy (including the impact that the delivery of pandemic vaccines may have on routine immunisation programmes) and 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 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.

### 8.3.1 Vaccine distribution

The delivery arrangements for a pandemic-specific vaccine are currently being reviewed with key stakeholders, including the NHS Purchasing and Supply Agency and the NHS Business Services Authority. Given that specific pandemic vaccines 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.

### 8.3.2 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 they are the most appropriate vaccine presentation.

As vaccines 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 barcode system. These possibilities will be investigated by the Department of Health.

### 8.3.3 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 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, which is the website currently used for seasonal influenza immunisation and pneumococcal immunisation coverage. At present, 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 the 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 the reporting of information on suspected side effects. The MHRA and the Department of Health will issue further guidance on the reporting of vaccine side effects, as appropriate, if an immunisation campaign is implemented.

## 8.4 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.

### 8.4.1 Key tasks of the planning group

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 those people who will be or may become vulnerable in a pandemic
- 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. While 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 the plan locally.

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

### 8.4.2 Contingency arrangements

Some general practices, particularly smaller ones, may face particular problems in making suitable arrangements, or they may be unable to deliver immunisation temporarily because of problems such as staff sickness. Similarly, nursing homes, prisons or residential schools might 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, for justifiable reasons, a particular service is struggling to deliver immunisation.

### 8.4.3 Those people who will be or may become vulnerable in a pandemic

PCTs will need to give special consideration to ensuring that vaccination is available to **all** members of the population, including those who are not registered with GPs or who may not have ready access to mainstream communications. This might include, for example, some homeless people or immigrant communities. Service provision should be based on current healthcare arrangements where appropriate services already exist, and PCTs should work with agencies already working with those communities in order to identify the most appropriate solutions.

See section 6.5 for further information on those people who will be or may become vulnerable in a pandemic.

### 8.4.4 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 should identify which staff groups could be redeployed (if necessary) to support vaccination in primary care. *Pandemic influenza: Human resources guidance for the NHS* (2008) provides advice on indemnity issues associated with movement of NHS staff beyond their normal posts and locations.

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

- GP practice immunisers, who are the key organisers and key staff resource
- school nurses, who will already 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, who are already trained to immunise and who usually have close links to general practices
- community pharmacists, who are already used by some PCTs to administer vaccines during the seasonal influenza season.

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, medical and nursing students.

Calling upon these professional groups as an additional reserve capacity for providing specific pandemic vaccination would need to be negotiated with the relevant professional groups, and training would have to be provided by the PCT as necessary.

### 8.4.5 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 the training of their own staff and, in the event of a pandemic, will need to build upon these data to ensure that there is a comprehensive list of all staff who are trained to immunise and can be called upon to assist.

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

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

### 8.4.6 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 the NHS Purchasing and Supply Agency and the NHS Business Services Authority.

Specific tasks arising 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; an appropriate lead individual might be the PCT's pharmaceutical adviser or a senior person from the local central pharmacy
- ensuring business continuity and identifying a deputy or deputies to support the lead individual and in their absence organise and authorise the ordering, delivery, storage and distribution of vaccines
- ensuring sufficient cold storage capacity for the storage of the necessary needles, syringes and any other consumables
- ensuring the security of vaccine supplies.

While 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. While having highly rigorous security measures in all individual general practices is not realistic, general practices should review their current buildings and their security arrangements. PCTs will need to support this process, seeking advice from the police (ie police public order tactical advisers) in doing so.

## 8.5 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.

### 8.5.1 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, for example 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.

### 8.5.2 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 practices 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 are 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, either in case they are required for infection control purposes or because they will be more efficient from the start.

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

1. Although this may not always not be possible, the physical layout of the general practice building may allow for vaccination clinics to be run at the same time as, 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.

2. A second approach is to run vaccination clinics at different times from ordinary surgeries. Separate morning and afternoon clinics may be possible, although cover arrangements would be needed for unwell 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.

3. 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, while the other practice provides cover for unwell patients who need to be seen urgently. This may, however, present problems for record keeping.

4. It might be possible to agree the use of a separate building local to the practice, such as community pharmacies, a community centre or a church hall, in which to hold vaccination clinics. Such clinics could cover the patients of multiple practices by mutual agreement and provided that record-keeping arrangements were robust.

### 8.5.3 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 according to 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 the delivery of a specific pandemic vaccines in accordance with the guidance set out in this chapter.
- Establish a planning group (this may be part of the pandemic influenza planning committee or equivalent group's agenda) that oversees the delivery plan and arrangements and ensure that it addresses its 'key tasks' as outlined on page 80.
- Ensure that the plan identifies how specific groups within your health economy will be supported in accessing the service.
- Ensure that 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 needs will be met in advance of a pandemic.
- Ensure that 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 a specific pandemic vaccine via the primary care model and decide to use the alternative mass vaccination model instead, this should be validated by a risk assessment.

# 9 Delivery of pre-pandemic vaccines to healthcare workers

**Key points**

- Anticipating a suitable vaccine strain has the inherent risk of it being ineffective against the ultimate pandemic strain.
- The UK has limited stocks of an A/H5N1 vaccine purchased specifically for the protection of healthcare workers.
- Immunisation with the pre-pandemic vaccine will be employer led.

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.

In the first instance, this will be targeted at frontline healthcare workers, and therefore this section currently only gives guidance on the provision of vaccination for staff employed by NHS trusts and general practices. If stocks allow, the aim would be to offer this to all PCT staff, but some prioritisation might be necessary depending on dosage and uptake.

While 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's 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.

## 9.1 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 in section 9.1.2 below regarding clinic arrangements in primary care is considered, as it is also relevant to an occupational health setting.

### 9.1.1 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, particularly trained vaccinators, to provide this service is crucial.

The occupational health department and the PCT will need to discuss 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, which may be able to provide valuable help in clinics by greeting staff attending for vaccination, handing out forms, providing refreshments and other routine tasks.

### 9.1.2 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, for instance a social club or the outpatient department, be most appropriate for hospital staff?
- Could vaccination sessions be held in the evenings or at 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, eg staff who only work nights, weekends or evenings or ambulance staff, going to be immunised?

## 9.2 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, and 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.

# 10 Managing surge capacity and patient prioritisation: key roles and services

**Key points**

- In order to manage demand surge, prioritisation of services will be required.
- A graded approach to configuring services (ie one that states which non-essential activities 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.

## 10.1 Managing surge capacity and patient prioritisation

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 experience significant extra pressures. 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 by 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 Pandemic Flu Line Service and the Pandemic Flu 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 surge capacity and patient prioritisation across the whole of the health and social care system has been developed. This includes national admission criteria to aid the management of demand across the primary and secondary care interface. The final version of this guidance will be published in due course.

This chapter supplements the provisional guidance on managing surge capacity and parent prioritisation 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 PCT needs to support and coordinate. 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.

### 10.1.1 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.

## 10.2 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 circumstances[3] 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 while maintaining internal NHS bodies' governance arrangements. In making these decisions, SHAs will need to liaise with PCTs (who should also liaise with their Local Medical Committee (LMC) 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.

[3] 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.

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. SHAs may need to consider all national standards and targets, including the Quality and Outcomes Framework (QOF).

A graded approach to configuring services (ie one 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.

More information on financial arrangements for GPs is available in section 10.3.3.

## 10.3 General practices: key roles and services

### 10.3.1 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 to general practice (eg the National Pandemic Flu Line Service/Pandemic Flu Information Line)
- 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 secondary care services will need to maintain to ensure that primary care capacity is not compromised. See also the UK guidance on managing surge capacity: *Pandemic influenza: Surge capacity and patient prioritisation in health services*. GP practice-specific operational guidance will be published in the near future.

### 10.3.2 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, while 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, while these and a broader knowledge base will be required for non-influenza patients.

The Royal College of General Practitioners (RCGP) and the 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 eg:

- cancelling outside activities (meetings, teaching etc)
- defining minimum safe staffing levels

- suspending (some) chronic disease management
- suspending (some) new routine referrals
- suspending minor surgery
- holding emergency-only open surgeries
- implementing team working with neighbouring practices
- identifying recently retired or non-practising colleagues who might be utilised.

(Source: RCGP/BMA *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.

*Sickness certification and death certification*
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 for Work and Pensions and other key stakeholders to develop guidance on sickness certification.

### 10.3.3 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.

Ministers have endorsed an agreement reached between NHS Employers and the BMA's General Practitioners Committee (GPC) to ensure that GP practices are not disadvantaged financially by their involvement in responding to an influenza pandemic. This is in line with the principle set out above.

The agreement will come into effect at the start of WHO Phase 6, UK Alert Level 2.

The Pandemic Flu Agreement and Costings Methodology can be found on the NHS Employers website at
www.nhsemployers.org/pay-conditions/pay-conditions-3721.cfm

*Content of the Pandemic Agreement*

In the event that some or all routine work is suspended due to an influenza pandemic, GP practice NHS income will be protected in line with the previous year's earnings and any pre-agreed uplift (eg Doctors' and Dentists' Review Body award). An agreed methodology will ensure income is maintained, while preventing practices from exploiting the system. Personal GP pay from NHS sources is expected to be comparable to the previous year for a comparable working week. In addition PCTs will be expected to pay any reasonable additional expenses arising from the pandemic.

All local clinical and administration staff will be expected to work flexibly within their PCT area to provide support under local arrangements in the event of a pandemic. The agreement is based on the principle that practices will make themselves available to support the national and PCT response to the pandemic outbreak.

The agreement states that the PCT and LMC should attempt to resolve any disputes using existing processes locally, with the assistance of an independent mediator where necessary. In the event of not reaching local resolution the matter may be referred to the NHS Litigation Authority (or equivalent).

The legislation being prepared to be put in place in the event of a pandemic will include appropriate legislative provisions to give effect to the principle agreed. The Pandemic Agreement will be reviewed on a regular basis to ensure it is up to date.

It will be important for GP practices to maintain normal services for as long as possible and appropriate, and then activate a proportionate response to the pandemic. GP practice decisions to reduce routine activity should be agreed with the PCT, and in accordance with the Department of Health's guidance on the process for suspension of (specific) targets and standards.

The responsibility for managing the response to a pandemic for their local population lies with the PCT, but the Department of Health would expect PCTs to work in partnership with LMCs during any pandemic to ensure that the most effective use can be made of all resources.

The Pandemic Agreement only applies to the national arrangements for the General Medical Services (GMS) contract. The Department of Health would expect the same principles of pay protection to apply to other payments made under local contractual arrangements, including Local Enhanced Services and services provided by GP practices operating outside GMS (under Personal Medical Services and Alternative Provider Medical Services contracts).

The additional expenses referred to in the Agreement, which PCTs would be expected to pay, would be expenses that are incurred by a practice directly as a result of cooperating with the response to the pandemic as managed by the PCT and which are not already covered by payments already received by the practice.

Examples of reasonable additional expenses include travel outside the normal remit of GPs and practice staff and employment of additional staff to cover sick leave/death. Expenses that are already covered by payments received by practices include home visits for registered patients, which would be covered by the protected global sum payments rather than being considered a new expense.

The decision on whether additional expenses claimed by practices are reasonable is for the PCT to make in the light of local circumstances. The Agreement sets out a procedure for dispute resolution. The cost of additional expenses arising from the response to the pandemic will be resourced from emergency funding.

## 10.4 Community pharmacy: key roles and services

### 10.4.1 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 at home 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 the flu friend 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 representatives over the telephone does not compromise their ability to receive calls and communicate with their PCT, management and other partner agencies.

### 10.4.2 Preparing the public for a pandemic

As pharmacies are well placed to promote public health messages, a key role for community pharmacy is to support the public in preparing 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 eg paracetamol and ibuprofen, as well as any regular medication, and ensure that they are 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

### 10.4.3 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 those people who will be or may become vulnerable in a pandemic such as residents of care homes or patients with long-term conditions
- maintaining medicines supplies under contracts with other bodies, eg 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 30-day emergency supplies of 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. Many PCTs are already commissioning pharmacist-led minor ailment clinics. PCTs may need to give consideration to altering existing formularies to include the kinds of medicines that may be needed during a pandemic. A national template for a service specification for managing minor ailments is available from the Primary Care Contracting website www.pcc.nhs.uk, for PCTs who wish to commission such a service
- maintaining public confidence on supplies of medicines (eg managing short-term supply problems or substitution of products). (See the *Possible amendments to medicines and associated legislation during an influenza pandemic* www.dh.gov.uk/en/Consultations/closedconsultations/DH_080768 for further information on proposed amendments to medicines and related legislation. Following this consultation, the MHRA will launch a second technical consultation on changes to the relevant 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 pharmaceutical adviser) on which services will need to continue, eg supply of substitution therapy to substance misuse clients, emergency hormonal therapy and anticoagulant monitoring. Some pharmacists also provide support to clients with disabilities and social care needs, to help them maintain independent living.

A Medicine Use Review service is also available from accredited pharmacies and accredited pharmacists. The purpose of such a service is to help people use their medicines effectively and as intended.

Greater uptake of repeat dispensing could also go a long way to reducing the burden on GPs during a pandemic. Repeat dispensing allows a GP to issue a prescription for up to a year, with pharmacies being able to dispense medicines on an instalment basis.

Some PCTs may wish to consider using patient group directions for specific groups of medicines. Maximising the use of non-medical prescribers may also help.

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:

- acting as antiviral collection points and/or, in exceptional circumstances, using the delivery infrastructure and drivers to transport medicines to those patients who do not have somebody to collect their medicines for them. If community pharmacies are used as collection points, PCTs will need to ensure that appropriate security arrangements are in place in line with the requirements for all collection points. As community pharmacies will be playing an important part in supporting self care and ensuring that people, as far as possible, get the medicines they need during a pandemic, the use of pharmacies as collection points may not be the best use of the staff and premises
- administering a pandemic-specific vaccine, following training
- providing 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 pending regulatory changes and parliamentary approval
- security arrangements with the PCT, if they are asked to distribute or administer antiviral medicines or vaccines.

(See *Guidance on service continuity planning for pharmacy* www.psnc.org.uk/publications_detail.php/84/guidance_on_service_continuity_planning_for_pharmacy_, 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.)

Guidance is being developed to identify pharmacy's contribution in the case of an influenza pandemic, and this is expected to be published in the near future. This guidance will also deal with aspects that were included in the consultation on improving access to medicines during a pandemic and the technical consultation that is expected to be published.

### 10.4.4 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.

## 10.5 The role of other healthcare professionals

Community health professionals 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 (eg 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 3.7 of this guidance and in *Pandemic influenza: Human resources guidance for the NHS* (2008).

### 10.5.1 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.

### 10.5.2 Dentistry

*Delivery and contract arrangements for primary care dentistry*
This section provides specific advice to the NHS on the delivery and contract arrangements for primary care dentistry in the event of a pandemic. It supplements and should be read with other guidance on pandemic flu available on the Department of Health's website: www.dh.gov.uk/en/Publichealth/Flu/PandemicFlu/index.htm

*Impact of pandemic flu on the delivery of primary care dentistry*
While the pattern of development of a pandemic in the UK cannot be absolutely predicted, it is most likely that a pandemic would spread over a matter of weeks and not necessarily uniformly everywhere in the initial phase. It is therefore important for each PCT to determine the impact on dental services in the light of the development of the pandemic locally.

It is expected that the principle of 'business as usual' will operate for NHS primary care dentistry until this is no longer feasible. Possible situations that may prevent business as usual at individual provider level or more widely within a PCT include:

- insufficient clinical and non-clinical practice staff available to enable safe running of the service due to illness or needing to be absent to care for dependants
- well/asymptomatic patients choosing not to attend for treatment
- pandemic penetration at such levels that a significant proportion of the population are ill, and therefore not able to attend.

*Contract compliance*
Many General Dental Services (GDS) and Personal Dental Services (PDS) contracts will include a section relating to 'Force Majeure' (see page 105). If a provider can demonstrate that they cannot perform their obligations and duties under their contract due to the impact of a flu pandemic then they may invoke the Force Majeure clause of their contract.

PCTs will wish to ensure that the provider takes all action within its power to comply with the terms of the contract as fully as possible. However, it is acknowledged that a significant pandemic could affect the delivery of a contract.

PCTs need to inform providers regarding the information they need them to provide in such circumstances. These can then be taken into account at the contract review at the end of the financial year. Examples might include: keeping records of staff absence and illness and numbers of patients failing to attend appointments for defined time periods.

*Contractual payments to providers*
Contractual payments should continue to be made to providers with no penalty, subject to providers having taken all action within their power to comply with their contractual

terms. The PCT and the provider would be expected to agree a reasonable and proportionate response to the disruption of normal service provision.

If a pandemic commences near the beginning of a financial year the PCT could agree a temporary variation of the number of commissioned Units of Dental Activity (UDA) or Units of Orthodontic Activity (UOA) proportionate to the number of days/sessions or weeks lost during the pandemic. If later in the period, the loss could simply be taken into account at the year-end review.

If business as normal is no longer feasible then in order for the contract value to be paid it is considered reasonable for PCTs to expect providers to be willing to support the delivery of essential dental services; for those staff able to work to attend their place of work to carry out agreed practice based duties; and to support the wider NHS.

*Supporting the delivery of primary care dentistry and the work of the wider NHS*
Unlike primary medical care, it is unlikely that the total PCT dental practice capacity will be challenged by an increased number of patient attendances. Consideration needs to be given as to how primary care dental staff who are well and able to attend work might be able to contribute to supporting the NHS in dentistry and other roles during the pandemic period.

As part of this process, PCTs should work with their local providers to address these issues. PCTs may wish to consider developing a Memorandum of Understanding. The following could be considered:

- PCTs should ensure that arrangements are in place to ensure that asymptomatic individuals with an urgent dental problem can access appropriate care if their usual practice is not able to provide care due to circumstances related to the pandemic.
- PCTs should work with dental providers to ensure that individuals with influenza can access emergency dental treatment. It is anticipated that relatively few people within a PCT area will need such treatment each day.

Clinical and non clinical staff may be able to provide support to the wider NHS where roles have been identified which are within the skills set of staff and where support and training is available to ensure competence and confidence of staff. PCTs should consider the potential roles that members of the dental team could support and discuss this with their local profession/providers. Examples include helping to staff phones, triage patients, provide information, sign-post them to other services.

If primary care dentistry is no longer possible in a practice then it would be reasonable for those who are able to attend work to do so in order that patients contacting the practice can be appropriately advised. PCTs should also engage with local providers to consider how primary care dental practice staff could best be deployed within the practice. Examples might include updating practice policies, undertaking audits based on record card information, and other activities that enhance the service the practice provides.

In considering whether to treat symptomatic patients with urgent dental needs, PCTs would expect members of the dental team to put patients' interests first and act to protect them. In doing so, and provided that appropriate personal protective equipment is available and training on its use has been provided, dental team members should be aware of their ethical responsibilities for providing treatment to such patients.

Further information on personal protective equipment can be found at chapter 4 of the Guidance for infection control in hospitals and primary care settings. www.dh.gov.uk/pandemicflu

*Staff Sharing*
There may be situations where the sharing of dental practice staff between dental practices may help to enable a dental practice to continue to provide a dental service. The employment law implications of this are complex and appropriate advice should be sought in such situations.

*Indemnity for primary dental care staff agreeing to work in NHS healthcare settings*
Where primary care dental staff working in the independent contractor setting agree to work in NHS healthcare settings or organisations outside their usual workplace, arrangements for them to be covered by the NHS indemnity should be arranged.

*Education and Support for NHS primary care dental staff*
PCTs should include primary care dental staff in all communications and relevant training regarding pandemic 'flu to increase knowledge and understanding and reduce unnecessary concerns.

PCTs should ensure that primary care dental teams have access to appropriate occupational health support services to minimise the impact of a pandemic on their ability to work and their health and well being.

*Private Dental Practices*
Pandemic flu is a public health matter and private dental practices should comply with the general guidance for dentists to ensure the infection is contained as far as possible. There will be no obligation for PCTs to reimburse private practices when workload (and therefore income) is affected. Ad hoc arrangements might arise when private dental healthcare workers undertake dental and or non-dental duties at the request of the PCT.

*Resuming 'business as usual'*
A gradual return to normality should be anticipated and expectations regarding service delivery shaped accordingly. The pace of recovery will depend on the residual impact of the pandemic, ongoing demands, backlogs, staff recovery, and continuing supply difficulties. The rate of recovery may differ from provider to provider.

### 10.5.2 Force majeure[4]

The following represents the wording at Clauses 372-375 of the Standard GDS Contract and at Clauses 350-353 from the Standards Clauses for a PDS agreement where the primary care trust is not providing services under the agreement.

372. Neither party shall be responsible to the other for any failure or delay in performance of its obligations and duties under this Contract, which is caused by circumstances or events beyond the reasonable control of a party. However, the affected party must promptly on the occurrence of such circumstances or events:

- inform the other party in writing of such circumstances or events and of what obligation or duty they have delayed or prevented being performed; and
- take all action within its power to comply with the terms of this Contract as fully and promptly as possible.

373. Unless the affected party takes such steps, clause 372 shall not have the effect of absolving it from its obligations under this Contract. For the avoidance of doubt, any actions or omissions of either party's personnel or any failures of either party's systems, procedures, premises or equipment shall not be deemed to be circumstances or events beyond the reasonable control of the relevant party for the purposes of this clause, unless the cause of failure was beyond reasonable control.

374. If the affected party is delayed or prevented from performing its obligations and duties under the Contract for a continuous period of 3 months, then either party may terminate this Contract by notice in writing within such period as is reasonable in the circumstances (which shall be no shorter than 28 days).

375. The termination shall not take effect at the end of the notice period if the affected party is able to resume performance of its obligations and duties under the Contract within the period of notice specified in accordance with clause 374 above, or if the other party otherwise consents.

## 10.6 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.

[4] This clause is not required by the Regulations, but is recommended.

While 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/respite/hospice facility for those who are too ill 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
- basic imaging
- basic diagnostic laboratory tests (biochemistry, haematology, microbiology, virology)
- pharmacy
- counselling.

## 10.7 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 3 and *Pandemic influenza: Human resources guidance for the NHS* (2008) 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 where they

are most required. 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.

## 10.8 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 to define in detail the functions that are needed to coordinate services locally. In particular, local response management will be required in order to:

- engage with frontline practitioners
- monitor service continuity among 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 among contractors
- coordinate any consolidation that may be required among 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.

# 11 Other public health measures

**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 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.

## 11.1 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 6.

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 and 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/default.aspx?page=3908 and 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

- 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 services while 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).

## 11.2 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. There should also be a strong emphasis on best practice around general infection control measures.

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.htm

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

## 11.3 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.

The guidance *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 Births and Deaths Registration 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.

## 11.4 Surveillance, reporting and data collection

It will be important that information is available in a timely, systematic, consistent and accurate manner to assess the impact of a pandemic in the UK and to inform national and local planning. Pandemic surveillance will be build on existing information systems wherever possible and will keep to a minimum any additional data collection burden on the NHS during a pandemic.

During a pandemic, the primary sources of information for managing the national response will be the National Pandemic Flu Line Service (and stock management and collection point systems), the Office for National Statistics (ONS) and the existing seasonal flu reporting systems (Q-flu and GP sentinel schemes). Incidence figures will be based on the number of people who are authorised to receive antivirals.

Service pressures on the NHS capacity will be captured through daily winter pressures reports, with an additional assessment of the impact of the pandemic surge on a consistent basis. This will be similar to a Red/Amber/Green-type assessment, the criteria for which are currently under development. Arrangements for capturing this information from mental health trusts, specialist trusts, primary care and other organisations that do not normally provide daily pressures reports are also under consideration.

Additional information on detailed epidemiological and clinical information will be collected centrally on a sample basis through a Clinical Information Network (CIN) and HPA laboratories (for virological and bacteriological testing). In addition the HPA is developing a database to capture data on the first few hundred cases to provide early information on the nature of the virus.

The PIPP surveillance programme is currently working to ensure that the arrangements for collecting the information during a pandemic are robust and resilient and to confirm the arrangements for providing information back to local areas. Local arrangements will need to be put in place to collect any further information required by PCTs to manage their response.

**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 on 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.

# 12 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/publications_detail.php/219/government_contingency_plans_for_a_flu_pandemic

### 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*
*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*
*Pandemic influenza: Guidance for infection control in hospitals and primary care settings*
*Pandemic influenza: Human resources guidance for the NHS*

*Pandemic influenza: Guidance on preparing mental health services in England*
*Pandemic influenza: Guidance on the delivery of and contract arrangements for primary care dentistry*
*Pandemic influenza: Guidance for dental practices*
*Pandemic influenza: Guidance on preparing maternity services in England*
*Pandemic influenza: Surge capacity and patient prioritisation in health services – provisional UK guidance*
*Operational Guidance for GP practices* (in development)
*Pandemic influenza: Guidance on planning for vulnerable groups* (in development)
*Possible amendments to medicines and associated legislation during an influenza pandemic*
*Pandemic influenza: Guidance on the management of death certification and cremation certification*
*Planning for a possible influenza pandemic – A framework for planners preparing to manage deaths* (Home Office)
*Planning for a possible influenza Pandemic – Registrar General's guidance on death registration services for Registration Service Managers and Practitioners*
(Home Office/General Register Office)
*Supporting people with long term conditions to self care: A guide to developing local strategies and good practice* (includes case studies and a section on where to find further advice)

*NHS Emergency Planning Guidance 2005*
*Strategic command arrangements for the NHS during a major incident*

**Cabinet Office**

*Overarching government strategy to respond to pandemic influenza: Cabinet Office analysis of the scientific evidence base*
*Guidance: Contingency planning for a possible influenza pandemic*
*Introductory advice to staff on planning for pandemic influenza*
*Pandemic influenza checklist for businesses*
*Preparing for pandemic influenza: Guidance to Local Planners*
*Preparing for pandemic influenza: Supplementary Guidance for Local Resilience Forum Planners*
*Preparing for pandemic influenza: Supplementary Guidance for Local Resilience Forum Planners in Wales*

**Department for Children, Schools and Families**

*Planning for a human influenza pandemic: Summary guidance for schools*

**UK Resilience**

www.ukresilience.gov.uk/

# Annex A: Expected healthcare demand during the peak week of an influenza pandemic

| | 25% attack rate | | 35% attack rate | | 50% attack rate | |
|---|---|---|---|---|---|---|
| | Per 100,000 population | Per general practice | Per 100,000 population | Per general practice | Per 100,000 population | Per general practice |
| Clinical cases | 5,500 | 330 | 7,700 | 470 | 11,000 | 640 |
| Expected number of telephone calls | 6,880 | 420 | 9,630 | 590 | 13,750 | 800 |
| *GP consultations | 1,570 | 95 | 2,200 | 135 | 3,135 | 185 |
| Hospital admissions (rate of 4%) | 220 | 15 | 310 | 20 | 440 | 30 |
| Deaths (fatality rate of 2.5%) | 140 | 10 | 200 | 15 | 280 | 20 |

*Assuming the National Pandemic 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 1 year old or under 10kg (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: World Health Organization international phases and UK alert levels

The World Health Organization (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.

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

# 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
- Public and Patient Initiative representative(s).

Local planners should also consider the possible additional group members listed below. Although they may not be needed at the preparatory planning stage, these additional members will be required in the event of a pandemic to strengthen the planning group:

- 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: Suggested approach for organising vaccination clinics in primary care

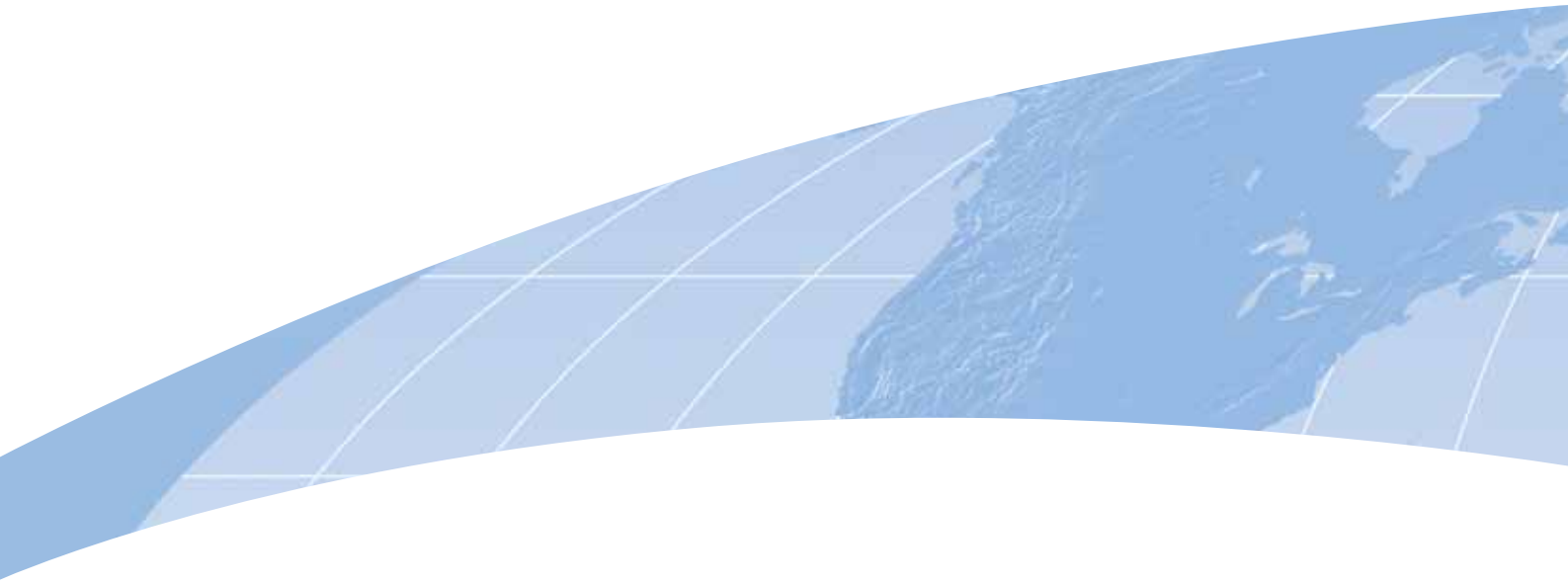
The following approach may need to be adapted, depending on the size of clinics and the circumstances of each particular practice.

| Key steps | Staff responsible |
|---|---|
| 1. Careful preparation and planning are needed to ensure that staff, rooms and consumables are available | Identified lead supported by clinical lead (if different) |
| 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 | Identified lead |
| 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 another illness) before the date of their vaccination. The patient should be asked to bring the letter and leaflet with them | Administrative staff |
| 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 | Identified lead supported by clinical lead (if different) |

| Key steps | Staff responsible |
|---|---|
| 5. 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 | Administrative staff (perhaps supported by local volunteers who could do tasks such as handing out forms and information leaflets and offering directions) |
| 6. 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 | Identified lead |
| 7. 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 | Administrative staff (perhaps supported by local volunteers) |
| 8. The vaccinators will need to have assigned roles during the session, such as stock control and waste disposal | Clinical lead |
| 9. Any questions the patient has should be answered, a check made for any contraindications and verbal consent obtained | Vaccinators |
| 10. 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 | Vaccinators |

| Key steps | Staff responsible |
|---|---|
| 11. 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 | Administrative staff |
| 12. 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* | Administrative staff |

* A specific period of post-vaccination waiting is not required, so there is no need for a post-vaccination waiting area.

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