

Influenza Pandemic Plan Version 1

March 2017

Summary:	This Influenza Pandemic Plan describes how Wrightington, Wigan and Leigh NHS Foundation Trust (WWL) will respond to cases of influenza and manage a pandemic influenza situation.
Keywords (minimum of 5): (To assist policy search engine)	Seasonal influenza, influenza, influenza management, pandemic, influenza pandemic, influenza plan, infection control.
Target audience:	All Directors and Senior Managers (On Call) will ensure that they are familiar with this Influenza Pandemic Plan and associated Action Cards and will have access to a current copy of this Plan. All WWL managers will maintain an up to date list of the names and contact details of the staff in their team which they will be able to access in the event of an influenza pandemic. This list will be maintained as part of the local Business Continuity Plan.
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Author:	Alison Whitehead, Head of Resilience In consultation with Lynda Barkess-Jones Deputy Director of Infection Prevention and Control
Associated documents:	Corporate business continuity plan Local business continuity plans Major incident plan Influenza: infection prevention and control - covers seasonal influenza including h1n1/'swine 'flu' virus TW 10 42 SOP 029 Control of Outbreaks of Infectious Conditions in Hospital TW 10 42 SOP 012 Respiratory Protective Equipment (RPE) – Training Guidance For Selection And Testing For Infection Control Purposes TW10 042 SOP 22) Linen Policy TW15 003 TW10 022 SOP 3 Waste Management Process.
Consultation Process:	Accountable Emergency Officer (Director of Operations) Directors of Operations (Surgery, Medicine, Specialist Services) Director and Deputy Director of Nursing and Patient Services (DIPC) Associate Director Estates and Facilities Consultant Microbiologist Director of Human Resources Heads of Nursing (Surgery, Medicine, Specialist Services) Senior Managers On-Call Ward Managers – A&E, Pemberton and Winstanley Governance Leads Directorate / Deputy Managers Waste Minimisation Officer

Version Control

Requested changes to be submitted to the Head of Resilience (Ext 2258)

Date	Author	Version	Page	Reason for Change

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1. Introduction

The risk of and potential impact from an influenza pandemic is such that it remains the top risk on the UK Cabinet Office National Risk Register of Civil Emergencies (2016) and continues to direct significant amounts of emergency preparedness activity on a global basis.

There are three types of influenza virus – A, B and C. Influenza A viruses cause most winter epidemics and can affect a wide range of animal species as well as humans. Pandemic influenza occurs when an influenza A virus subtype emerges or re-emerges which is markedly different from recently circulating strains. This new strain can spread widely because few people will have acquired immunity to it. It is readily transmissible from person to person and capable of causing illness in a large proportion of those infected (UK Influenza Pandemic Preparedness Strategy Department of Health 2011).

NHS England is responsible for leading the mobilisation of the NHS economy in the event of an emergency or incident; and for ensuring it has both the capability and capacity for service delivery and for NHS command, control communication and coordination and leadership of all providers of NHS funded care. Wrightington, Wigan and Leigh NHS Foundation Trust (WWL) will be notified of a pandemic influenza (as identified in the PHE North West England Pandemic Outbreak Plan (Manchester)) by NHS England. Infection Control and Head of Resilience will be the two main routes of receiving this information.

This Influenza Pandemic Plan describes how WWL will manage a pandemic influenza situation. This Plan and associated Action Cards are appendices to the WWL Major Incident Plan, and these documents should be read in conjunction. The Major Incident Plan provides the strategic framework by which WWL will plan, prepare for, practise and respond to major incidents and business continuity events and therefore meet its emergency preparedness responsibilities. The Major Incident Plan will be utilised as required alongside this plan in response to seasonal or pandemic influenza.

All Directors and Senior Managers (On Call) will ensure they are familiar with this Plan and associated Action Cards (Pages 18 - 19) and will have access to a current copy together with an up to date list of the names and contact details of the Senior Managers on Call in their On Call Packs.

All WWL managers will maintain an up to date list of the names and contact details of the staff in their team which they will be able to access in the event of an influenza pandemic. This list will be maintained as part of the local Business Continuity Plan.

2. Alerting WWL to an Influenza Pandemic

The 2011 UK Influenza Pandemic Preparedness Strategy (Department of Health – this guidance remains current) recognises a flexible approach to preparing for and responding to a pandemic influenza. Given the uncertainty about the scale, severity and pattern of development of future pandemic, three key principles should underpin all pandemic preparedness and response activity:

- Precautionary – the response should take into account the risk that it could be severe in nature
- Proportionality – the response to a pandemic should be no more or no less than that necessary in relation to the known risks
- Flexibility – there should be a consistent, UK wide approach to the response to a new pandemic but with local flexibility and agility in the timing of transition from one phase of response to another.

The Influenza Pandemic Preparedness Strategy identifies 5 stages (referred to as DATER):

- **Detection:** This phase would commence when an influenza-related 'Public Health Emergency of International Concern' (PHEIC) is declared by World Health Organisation (WHO). The indicator for moving to the next stage would be the identification of the novel influenza virus in patients in the UK.
- **Assessment:** The indicator for moving from this stage would be evidence of sustained community transmission of the virus.

Detection and Assessment together form the initial response. They may be relatively short and the stages may be combined depending on the speed with which the virus spreads, or the severity with which individuals and communities are affected.

- **Treatment:** Treatment of individual cases / or populations via the National Pandemic Flu Service (if necessary). When demands for services start to exceed available capacity, additional measures will need to be undertaken. This decision is likely to be made at a regional or local level as not all parts of the UK will be affected at the same time or to the same degree of intensity.
- **Escalation:** This will include prioritisation and triage of service delivery to maintain essential services.

The Treatment and Escalation stages form the Treatment Phase.

- **Recovery:** The indicator for this response would be when influenza activity is either significantly reduced compared to the peak, or when activity is considered to be within acceptable parameters. An overview of how services capacities are able to meet demand will also inform this decision.

Each stage is non-linear and has identified indicators for moving between them. These stages are not numbered as they may not follow in strict order and it should also be recognised that there may not be clear delineation between stages.

In 2013 the World Health Organisation (WHO) also published updated guidance on pandemic influenza risk management which are more flexible than previous guidance and reflects a continuum of influenza activity.

The World Health Organisation (WHO) is responsible for identifying and declaring influenza pandemic based on the global situation.

The WHO defines a pandemic as:

'The worldwide spread of a new disease. An influenza pandemic occurs when a new influenza virus emerges and spreads around the world, and most people do not have immunity'.

Upon initiation of a pandemic response in the UK, NHS England Incident Management Teams (IMTs) based at Area Team locations (e.g. Greater Manchester) will convene and meet as appropriate to coordinate and support the response of NHS organizations to the determined level of response.

Local Resilience Forums (LRF) will co-ordinate multi-agency planning for pandemic influenza. The Trust is a Category One member (under the Civil Contingencies Act 2004) of the Wigan LRF and represented at the GM Local Health Resilience Partnership (LHRP), which provides a strategic forum to facilitate health sector preparedness and planning.

It is anticipated that WWL staff will be aware of an impending influenza pandemic and will already be responding to an increased numbers of patients with flu. However, formal activation of this Plan in response to a declaration of an influenza pandemic will be communicated to staff and patients through the normal management cascade system. WWL will utilize this Pandemic Influenza Plan and the Major Incident Plan as appropriate.

3. WWL Response to an Influenza Pandemic

Following evidence of sustained community transmission of the virus, the WHO may make a declaration of a pandemic. WWL will establish a Pandemic Flu Management Team to manage the Trusts response to the pandemic influenza. This Management Teams core membership will comprise of:

- Director of Operations (or nominated Executive Director)
- Director / Deputy Nursing and Patient Services
- Head of Resilience
- Chief Pharmacist
- Medical Director
- Associate Director of Estates and Facilities
- Deputy / Assistant Director of Infection Prevention and Control
- Consultant Microbiologist / Infection Control Doctor
- Lead – Procurement
- Lead – Professional Practice
- Lead – Human Resources
- Lead – Communications
- Loggist

The Accountable Emergency Officer (Director of Operations and Performance) or nominated Executive Director will chair the Pandemic Flu Management Team, with the support of the Senior Manager On-Call, and will ensure that all relevant actions on the **Influenza Pandemic Action Cards (Page 17)** are achieved.

The Pandemic Flu Management Team will inform the WWL response to the pandemic and be responsible for briefing the Executive Team and Board, and for communicating with staff. WWL will also contribute, as appropriate, to the multi-agency partnership working within Wigan's Local Resilience Forum response. This will be co-ordinated under the umbrella of the *Greater Manchester Pandemic Influenza Strategic Response Plan*.

The Pandemic Flu Management Team will supersede the weekly Outbreak Management Meeting.

4. Managing Workforce Issues

From experience and analysis, the pandemic influenza could result in up to 50% of the population experiencing symptoms of pandemic influenza during one or more of the pandemic waves – a potential staff absence of up to 50% of the workforce.

The normal sickness reporting systems and processes will be used across the Trust. Human Resources will provide advice and support to the Pandemic Flu Management Team, when established, to enable the management of workforce resource to support critical functions and core service continuity.

The Department of Health and NHS Employers published guidance on the key human resources issues that could arise in the event of an outbreak of pandemic flu including:

- How staff can be redeployed and how organisations can work together to sustain services
- How the NHS should deal with the likely impact of the pandemic on staffing levels, e.g. by seeking to build up a reserve pool
- How to manage staff absence, in particular dealing with staff that have caring responsibilities, especially school age children
- Ensuring staff are used most effectively and reassuring staff around issues such as discipline
- Impact on terms and conditions of employment
- How to comply with the working time regulations
- Providing support to staff during the pandemic and the recovery phase.

In consultation with the Director of Human Resources and the Director of Operations, the nominated Executive Director will determine whether business continuity plans, the prioritization of services, and the Corporate Business Continuity Plan should be invoked.

5. Training

During the WHO pandemic phase, WWL staff will receive additional training as deemed appropriate i.e. vaccination, infection prevention and control, mask fit training. Specific requirements, and for which staff training will be made available, will be determined at the time.

6. Infection Control – All Patients with Known or Suspected Influenza

This guidance is taken from latest *Pandemic (H1N1) 2009: A summary of Guidance for Infection Control* which was developed by the Health Protection Agency (now Public Health England) and the Department of Health.

Influenza: Clinical features and transmission

Influenza is a respiratory illness characterised by fever, cough, headache, sore throat, aching muscles and joints. There is a wide spectrum of illness ranging from minor symptoms through to pneumonia and death. The most common complications of influenza are bronchitis and secondary bacterial pneumonia.

The typical incubation period for non-pandemic influenza is 1-4 days, with an average of 2-3 days. Adults can be infectious from the day before symptoms begin through approximately 5 days after illness onset. Children can be infectious for 7 or more days after onset of illness, and young children can shed virus for several days before their illness onset. Severely immunocompromised persons can shed virus for weeks or months.

Influenza is transmitted from person to person through close contact with a coughing or sneezing infected person or indirectly from a contaminated environment. Transmission almost certainly occurs through multiple routes including large droplets and direct and indirect contact. Airborne or fine droplet transmission may also occur in certain situations. However patterns of transmission observed during outbreaks suggest that large droplet and contact transmission are the most likely routes of transmission.

Influenza viruses can survive on hard surfaces for up to 48 hrs and on porous surfaces for up to 12 hrs. Influenza viruses are removed from the skin by washing with soap and water or inactivated by using alcohol hand rub, and similarly can be removed from surfaces by cleaning with normal detergents and cleaners.

Below is a summary of infection control guidance which aims to provide a resource for use in the management of patients with suspected or confirmed influenza. Standard infection control precautions and droplet precautions should be applied by all healthcare practitioners to the care of all patients with suspected or confirmed influenza all of the time.

6.1 Standard Infection Control Precautions

Good hand hygiene:

- Hands must be cleaned immediately before every episode of direct patient care or contact with patients, and after any activity, or contact that potentially results in hands becoming contaminated. This includes the removal of protective clothing (including gloves), cleaning of equipment and handling of waste
- Hands should be cleaned between caring for different patients and between different care activities for the same patient, even if gloves have been worn
- Hand hygiene includes hand washing with soap and water and thorough drying, OR the use of alcohol-based products (e.g. alcohol hand rub) that do not require the use of water

- If hands are visibly soiled or contaminated, they should be washed with soap and water and dried. If not visibly soiled, an alcohol hand rub can be used
- Hand washing and use of alcohol hand rub to clean hands must be carried out thoroughly, and for a time period sufficient to inactivate the virus, i.e. 40 to 60 seconds for hand washing (including thorough drying), 20 to 30 seconds when using alcohol hand rub
- Touching the face with gloved hands or hands that have not been recently cleaned should be avoided
- All staff, patients and visitors should clean their hands when entering and leaving areas where care is delivered

Good respiratory hygiene remember the ‘Catch it, bin it, kill it campaign’:

Patients, staff and visitors should be encouraged to minimise potential influenza transmission through good respiratory hygiene measures:

- Hands should be kept away from the eyes, mouth and nose
- Disposable, single-use tissues should be used to cover the nose and mouth when sneezing, coughing or wiping and blowing noses
- Used tissues should be disposed of promptly in the nearest waste bin
- Tissues, waste bins (preferably lined and foot operated), and hand hygiene facilities should be available for patients, visitors and staff
- Hands should be cleaned (using soap and water if possible, otherwise using alcohol hand rub) after coughing, sneezing, using tissues, or after any contact with respiratory secretions and contaminated objects
- Some patients (e.g. older people and children) may need assistance with containment of respiratory secretions. Those who are immobile will need a container (e.g. a plastic bag) readily at hand for immediate disposal of tissues
- In common waiting areas or during transport, symptomatic patients may wear surgical masks to minimise the dispersal of respiratory secretions and reduce environmental contamination.

6.2 Personal Protective Equipment

Personal Protective Equipment (PPE) is worn to protect staff from contamination with body fluids and to reduce the risk of transmission of influenza between patients and staff, and from one patient to another. Appropriate PPE for care of patients with pandemic influenza is summarised in the table below:

	Entry into the cohorted area but no patients contact	Close patients contact (within 1 metre)	Aerosol generating procedures
Hand hygiene	✓	✓	✓
Gloves	✓	✓	✓
Plastic apron	✓	✓	X
Gown	X	X	✓
Surgical mask	✓	✓	X
FFP3 respirator	X	X	✓
Eye protection	X	Risk assessment	✓

Eye protection

- As part of standard precautions, eye protection should be used when there is a risk of contamination of the eyes from splashing, e.g. by secretions (including respiratory secretions), blood, body fluids or excretions
- An individual risk assessment should be carried out at the time of providing care
- Disposable, single use eye protection is recommended
- Eye protection should always be worn by all those present in the room during potentially infectious aerosol-generating procedures.

Droplet precautions

In addition to standard infection control precautions, droplet precautions should be used for patients known, or suspected, to be infected with influenza. Droplet transmission occurs when droplets are expelled from the respiratory tract of an infected individual (e.g. during coughing and sneezing) directly onto a mucosal surface or conjunctiva of a susceptible individual. Droplets travel only short distances through the air. Traditionally a distance of 1 metre has been used for employing droplet precautions, however, this distance should be considered as the minimum rather than an absolute distance. Droplet precautions should be continued until the resolution of fever and respiratory symptoms, and can be achieved by the following precautions:

Fluid Repellent Surgical masks

Surgical masks are worn to protect the wearer from the transmission of influenza by respiratory droplets. Trials suggest that masks and respirators offer a similar level of protection against infection of influenza to healthcare workers during routine patient care (this does not apply to infectious aerosol-generating procedures).

- Surgical masks should be fluid repellent and should be worn by healthcare workers for any close contact with patients with influenza symptoms (i.e. within approximately one metre). The mask will provide a physical barrier and minimise contamination of the nose and mouth by droplets
- When influenza patients are cohorted in one area and several patients must be visited over a short time or in rapid sequence, it may be more practical for staff to put on a surgical mask on entry to the area and to keep it on for the duration of the activity or until the surgical mask requires replacement (i.e. when it becomes wet or damaged)
- Surgical masks should:
 - Cover both nose and mouth
 - Not be allowed to dangle around the neck after or between each use
 - Not be touched once put on
 - Be changed when they become moist or damaged
 - Be worn once and then discarded as clinical waste
 - Hand hygiene must be performed after disposal

6.3 Aerosol-Generating Procedures

The following procedures when undertaken on patients with influenza are considered likely to generate aerosols capable of transmitting influenza:

- Intubation, extubation and related procedures e.g. manual ventilation and open suctioning
- Cardiopulmonary resuscitation
- Bronchoscopy
- Surgery and post-mortem procedures in which high-speed devices are used
- Dental procedures
- Non-invasive ventilation (NIV)
- High-frequency oscillating ventilation (HFOV)
- Induction of sputum

For patients with suspected or confirmed influenza, any of these potentially infectious aerosol-generating procedures should only be carried out only when essential. Where possible, these procedures should be carried out in well-ventilated single rooms with the doors shut. Only those healthcare workers who are needed to undertake the procedure should be present. A fluid repellent gown, gloves, eye protection and an FFP3 respirator should be worn by those undertaking these procedures and by those in the same room. As aerosols may still be present in the environment health care staff must wear a FFP3 respirator when entering a room within one hour of this procedure taking place.

Where feasible, environmental cleaning should be performed when it is considered appropriate to enter without a respirator.

Visitors to patients ventilated with non-invasive ventilation (NIV) or high-frequency oscillating ventilation (HFOV) may be exposed to potentially infectious aerosols. The number of such visitors should be limited where possible. Visitors should be made aware of the risks and be offered PPE as recommended for staff.

The procedures below, while generating aerosol from material other than patient secretions, are not considered to represent a significant infectious risk:

- Administration of pressurised humidified oxygen
- Administration of medication via nebulisation - during nebulisation, the aerosol derives from a non-patient source (the fluid in the nebuliser chamber) and does not carry patient-derived viral particles. (Public Health England, 2012)

For such procedures, gloves, an apron and a surgical mask (plus eye protection if there is a risk of splashes to the eyes) are recommended as per standard infection control and droplet precautions.

Respirators

A disposable respirator providing the highest possible protection factor available (i.e. a FFP3 respirator) should be worn by healthcare workers when performing procedures that have the potential to generate infectious aerosols. As per HSE requirements every user of a FFP 3 respirator should be fit tested and trained in the use of the respirator. Fitting the respirator correctly and training is critical for the provision of proper protection. Disposable respirators should be replaced after each use and changed if:

- Breathing becomes difficult
- The respirator is damaged or distorted
- The respirator becomes obviously contaminated by respiratory secretions or other body fluids
- A proper face fit cannot be maintained

When should a repeat fit test be conducted? When the wearer:

- Loses or gains weight
- Undergoes any substantial dental work
- Develops any facial changes (scars, moles, etc.) around the face seal area

Staff providing Fit Test training must be deemed competent as per the Trust Fit Testing Guidelines (Respiratory Protective Equipment (RPE) – Training Guidance For Selection And Testing For Infection Control Purposes TW10 042 SOP 22)

Respirators should be disposed of as clinical waste. In the community setting (patient's own home) respirators can be disposed of in the domestic waste stream.

Putting On and Removing Personal Protective Equipment

Putting on PPE:

The level of personal protective equipment (PPE) used will vary according to the procedure being carried out, and not all items of PPE will always be required. PPE should be put on before entering a side room or cohorted area / patient area if at home. If full PPE is required, for example for a potentially infectious aerosol generating procedure, all staff in the room, or entering within one hour of the procedure, should wear the following PPE put on in the following order:

1. Gown (or apron if not a potentially infectious aerosol-generating procedure)
2. FFP3 respirator (or surgical mask if not a potentially infectious aerosol-generating procedure)
3. Eye protection, i.e. goggles or face shield (for a potentially infectious aerosol generating procedures and as appropriate after risk assessment)
4. Disposable gloves

Removal of PPE:

PPE should be removed in an order that minimises the potential for cross contamination. Before leaving the side room or cohorted area, gloves, gown and eye protection should be removed. The respirator or surgical mask should be removed after leaving the side room / cohorted area. PPE should be removed in the following order and placed in a clinical waste bag:

1. Gloves
2. Gown or apron
3. Eye protection
4. Respirator or surgical mask

Staff Uniforms:

The appropriate use of PPE will protect uniforms from contamination in most circumstances. During a pandemic, healthcare workers should not wear their uniform when off duty. Hospital / facility laundry services should be used to launder uniforms if they are available. If there are no laundry facilities available then uniforms should be laundered in a domestic washing machine in water as hot as the fabric will tolerate, then ironed or tumbled-dried. Uniforms must be machine washed, and if transported dirty, transport them home in a sealed plastic bag.

6.4 Clinical and Non-Clinical Waste

No special handling procedures beyond those for Standard Infection Control Precautions are recommended for clinical and non-clinical waste that may be contaminated with influenza virus i.e. use the appropriate coloured clinical waste bags as per SOP (TW10 022 SOP 3 Waste Management Process).

Liquid waste such as urine and faeces can be safely disposed of into the sewerage system. All waste collection bags should be tied and sealed before removal from the patient area. Gloves should be worn when handling ALL waste and hand hygiene performed after removal of gloves. In the community setting (patient's own home) a limited amount of PPE can be discarded into a bag, sealed, and then disposed of into the patient's own domestic waste stream. Vast amounts of clinical waste or waste which normally wouldn't be produced in a home setting should be bagged up appropriately and discarded at the clinical staff's place of work.

6.5 Patient Care Equipment

- Effective cleaning of patient care equipment is essential prior to both disinfection and sterilisation. Standard practices for handling and reprocessing used and soiled patient-care equipment, including re-usable medical devices, should be followed for both influenza and non-influenza areas of hospital and primary care settings:
- Prevent exposure of the skin and mucous membranes and contamination of clothing and the environment. Gloves should be worn when handling and transporting used patient-care equipment

- Clean heavily soiled equipment with SoChlor before removing from the patient's room or consulting room
- Reusable equipment (e.g., stethoscopes, patient couch in treatment and consulting rooms) must be scrupulously decontaminated between each patient; equipment that is visibly soiled should be cleaned promptly. If applicable, follow local and manufacturers recommendations for cleaning and disinfection or sterilization of reusable patient-care equipment
- Wipe external surfaces of portable equipment for performing x-rays and other procedures in the patient's room with SoChol upon removal from the patient's room or consulting room.
- Whenever possible, non-critical patient equipment should be dedicated for use by influenza patients only.
- Use of equipment that re-circulates air (e.g. fans,) should be avoided.

Furnishings

During a pandemic all non-essential furniture must be removed, especially soft furnishings from reception and waiting areas in hospitals, day rooms and clinic locations. The remaining furniture should be easy to clean and should not conceal or retain dirt and moisture. Toys, books, newspapers and magazines should be removed from the waiting areas.

6.6 Hospitals

Isolation (Isolation SOP TW10-042)

- Ideally, patients with suspected or confirmed influenza should be placed in single rooms. When this is not possible, patients should be cohorted (grouped together with other patients who have influenza or the symptoms of influenza and no other infection) in a segregated area to reduce the risk to other patients. Display signage to control entry into isolation/cohort areas
- Limit transport and movement of patients outside of their room to medically necessary purposes. If patient movement or transport is necessary, then if possible the patient should wear a surgical face mask to minimise the dispersal of respiratory secretions and reduce environmental contamination.
- A distance of at least one metre should be maintained between patients' beds. In communal areas where there are no beds, patients should be kept at least one metre apart
- Special environmental controls, such as negative pressure rooms, are not necessary to prevent the transmission of influenza either by respiratory droplets or aerosols
- The duration of isolation precautions for hospitalised patients should be continued for 24hrs after the resolution of fever and respiratory symptoms. For prolonged illness with complication i.e. pneumonia, control measures should be used during the duration of acute illness ie until the patient has improved clinically. Immunosuppressed patients may remain infectious for a longer time period and are also at risk of development of antiviral-resistant virus. The decision to discontinue isolation should be based on assessment of the patient's clinical condition and agreement with the IP&C team. (PHE guidance 2012).

Cohorting

A designated area / ward should be used for the treatment of care of patients with influenza. This area should include:

- a reception area that is separate from the rest of the hospital and if feasible a separate entrance/exit (AAA)
- not be used as a thoroughfare by other patients, visitors or staff including patients being transferred, staff going for meal breaks and staff and visitors entering the building
- be separated from non-segregated areas by closed doors
- having signage to control entry, displaying warnings of the segregated influenza area

For WWL, low numbers will be accommodated on Pemberton Ward until capacity is exceeded. Winstanley Ward will then be converted into a mixed sex ward for pandemic flu with the non-invasive positive pressure ventilation (NIPPY) service being run from Ince Ward.

Visitors

Visitors to all areas of the hospital or healthcare facility should be kept to a minimum. Visitors with influenza symptoms should not enter the healthcare facility and should be encouraged to return home.

All visitors entering a cohorted area must be instructed on hand hygiene practice and the use and removal of appropriate PPE.

Environmental Infection Control

Linen and Laundry (Linen Policy TW15 003)

Linen used during the patient's care should be managed safely as per Standard Infection Control precautions. Linen should be categorized as 'infected'.

In hospital:

- linen should be placed in appropriate receptacles immediately after use and bagged at the point of use
- linen bags must be tied and sealed before removal from the influenza patient care area
- gloves and aprons should be worn for handling all contaminated linen
- hand hygiene should be performed after removing gloves that have been in contact with soiled linen and laundry.

Bed curtains should be changed following patient discharge wherever possible.

Crockery and Utensils

No special precautions, beyond those for Standard Infection Control Precautions, are recommended for dishes and eating utensils used by a patient with influenza.

The combination of hot water and detergent used in dishwashers is sufficient to decontaminate dishes and eating utensils used by patients with influenza. Washing up by hand using household detergent and hand hot water is also sufficient. There is no need to use disposable plates and cutlery.

Environmental cleaning and disinfection (Isolation SOP TW10-042)

- Patient cohorted areas and clinical rooms should be cleaned daily at a minimum with SoChor solution.
- In a hospital, this should be as a minimum, daily and after patient discharge
- For frequently touched surfaces (e.g. medical equipment, door knobs): at least twice daily and when known to be contaminated with secretions, excretions or body fluids.
- Damp rather than dry dusting should be performed to avoid generating dust particles.
- During wet cleaning a routine should be adopted that does not redistribute microorganisms. This may be accomplished by cleaning less heavily contaminated areas first and by changing cleaning solutions and cloths frequently.
- The use of vacuum cleaners should be avoided.
- Dedicated or single-use/disposable equipment should be used. Non-disposable equipment, including mop heads, should be laundered after use.
- Any spillage or contamination of the environment with secretions, excretions or body fluids should be treated in line with the local spillage policy.

Domestic staff should be allocated to specific areas and not moved between influenza and non-influenza areas. They must be trained in the correct methods of wearing PPE and the precautions to be taken when cleaning cohorted areas. Domestic staff should wear gloves and aprons; in addition a surgical mask should be worn when cleaning in the immediate patient environment in cohorted areas.

Patient transport

The movement and transport of patients from their room or the cohorted area should be limited to essential purposes only

- Staff at the destination must be informed that the patient has, or is suspected to have, influenza
- If transport or movement is necessary, the patient should be offered a surgical mask to be worn during transport and until the patient returns to the segregated area in order to minimise the dispersal of respiratory droplets
- Good respiratory hygiene should be encouraged – ‘Catch it, bin it, kill it’
- Staff involved in transfers should practice good hand hygiene, and hand hygiene facilities should be available to patients when feasible

7 Surveillance

When WWL is alerted to an influenza pandemic WWL staff will contribute to the local surveillance of the influenza pandemic.

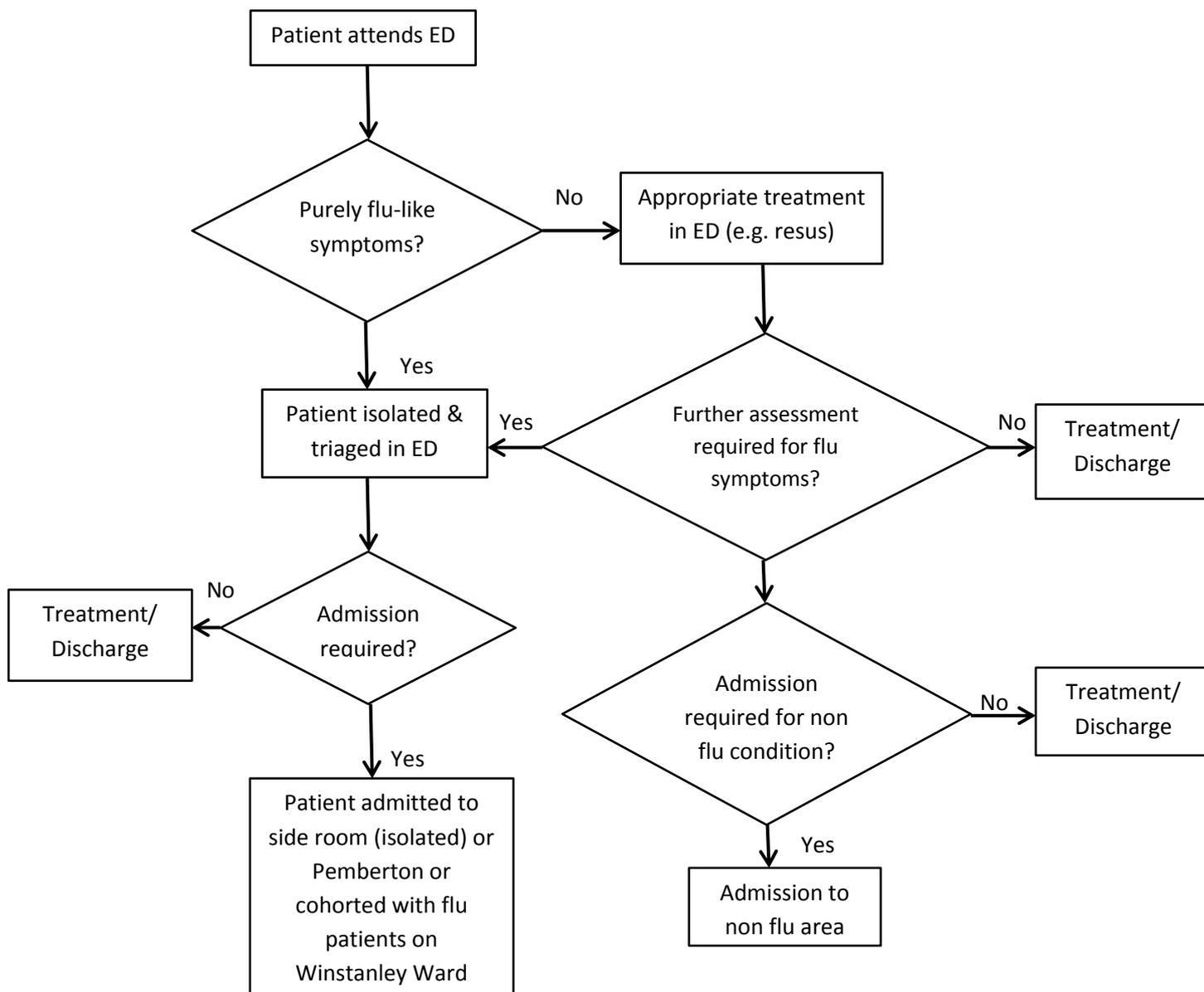
The clinical diagnostic criteria will depend on the pandemic influenza virus. The following clinical diagnostic criteria were used in the UK for H1N1 (2009) swine flu pandemic influenza:

- Fever (pyrexia 38°C) or a history of fever
- And
- Influenza-like illness (two or more of the following symptoms: cough, sore throat, rhinorrhoea (runny nose), limb or joint pain, headache, vomiting or diarrhoea)
- Or
- Severe and/or life-threatening illness suggestive of an infectious process

If staff become aware of any suspected cases they will advise their line manager, arrange for the patient to be isolated and seek advice from the Infection Prevention and Control Team.

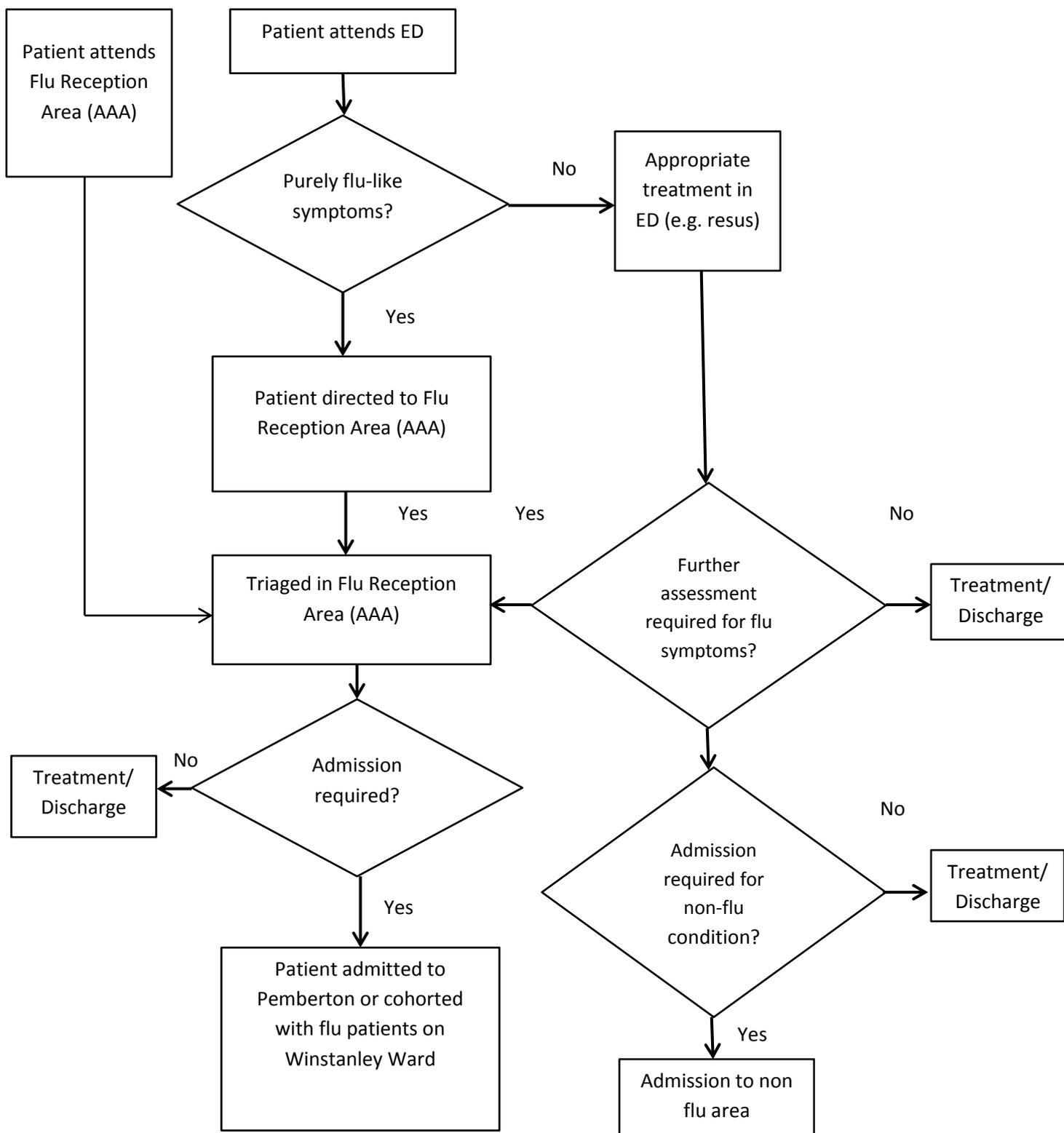
Response Summary - Isolation Phase

A simplified adult & paediatric patient process is shown below:



Full Escalation Phase Utilising a Flu Reception Area (AAA)

A simplified adult & paediatric patient process is shown below.



Appendix A: References

Department of Health (2009) Pandemic (H1N1) 2009 Influenza – A summary of guidance for infection control in healthcare settings. <https://www.gov.uk/government/publications/pandemic-flu-infection-control-guidance-for-healthcare-settings>

Department of Health (2011) UK Influenza Pandemic Preparedness Strategy 2011 Available at: www.dh.gov.uk/publications

NHS England (2013) Operating Framework for Managing the Response to Pandemic Influenza. Available at www.dh.gov.uk/publications

Department of Health (2012) Health and Social Care Influenza Pandemic Preparedness and Response. Available at: www.dh.gov.uk/publications

Health and Safety Executive (2010) Fit Testing of Respiratory Protective Equipment Facepieces (Operational Circular OC 282/28). Available at: www.hse.gov.uk

Health Protection Agency (2012) Infection control precautions to minimise transmission of Respiratory Tract Infections (RTI's) in the health care setting. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/309865/RTI_infection_control_guidance_v1.pdf

NHS England (2013) Operating Framework for Managing the Response to Pandemic Influenza. Available at: www.england.nhs.uk

UK Pandemic Influenza Communications Strategy 2012. Available at: www.dh.gov.uk/publications

NHS England Flu Plan Winter 2016/17 (PHE Gateway Ref 2016027, NHS England Gateway Ref 05268)

APPENDIX B: Influenza Pandemic Action Cards

The Accountable Emergency Officer (or nominated Executive) will take charge of co-ordinating the Trust response (ensuring liaison with the Chief Executive) at each level of flu alert as follows. During the influenza pandemic period the Senior Managers On-Call will support the nominated Executive in facilitating the Pandemic Flu Management Team.

Action Card 1: Detection Stage

This is known by the WHO as the alert stage or stage when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels are characteristic of this phase:

		✓ / ✗
1	Follow guidance issued by PHE / NHE England	
2	Liaise with the Head of Communications to ensure that staff are aware of the situation	
3	Advise all teams to review arrangements in local business continuity plans for potential staff loss due to pandemic influenza	
4	Ensure that any requests for information (e.g. PHE / NHS England / CCG) are dealt with promptly	

Review of business continuity planning may include:

- Whether staff have dependents
- Whether staff have underlying health conditions that may make them more at risk from influenza
- Where staff live and how they travel to work
- Whether staff are prepared to 'live in' at work during the pandemic (if needed)
- Review essential functions (See Corporate Business Continuity Plan)
- Check business continuity arrangements of essential contractors
- Review staff skill mix to identify vulnerabilities if staff loss were to occur

Action Card 2: Detection / Assessment Stage

The indicator for moving to the assessment stage would be the identification of the novel influenza virus in the UK and evidence of sustained community transmission i.e. cases not linked to any known or previously identified cases.

		✓ / ✗
1	Follow guidance issued by PHE / NHE England	
2	Liaise with the Head of Communications to ensure that staff are aware of the situation	
3	Advise all teams to review arrangements in local business continuity plans for potential staff loss due to pandemic influenza	
4	Ensure that any requests for information (e.g. PHE / NHS England / CCG) are dealt with promptly	
5	Convene a meeting of the Pandemic Flu Management Team (Page 6)	
6	Forward plan meetings of the Pandemic Flu Management Team, ensuring that they are minuted and feedback / actions shared in a timely manner	
7	Consult the Infection Prevention and Control Team. Ensure that infection and control measures are put in place as soon as possible to reduce the spread of the infection. Refresher training to be given to all staff with special regard to flu.	
8	Confirm arrangements for investigating and managing any suspected cases for patients and staff across all teams. Ensure that details of those affected are collected on a regular basis and passed to the Pandemic Flu Management Team in order to keep a record of number affected for onward reporting.	
9	Provide local guidance about the use of antivirals (if available) for early cases (taking direction from NHS England and Public Health England)	
10	Review plans for the supply and distribution of essential medicines and supplies with the Chief Pharmacist	

Continued ...

11	Consider establishing a Flu Vaccination Group to prepare arrangements for possible vaccinations of patients of staff for a flu pandemic e.g. ordering equipment. If the Government declare a national pandemic, it will take 7 – 10 days for national stockpiles of PPE and anti-viral medicines to be issued therefore there needs to be local stocks to last 7 – 10 days	
12	Ensure regular feedback from the IPCT on training and monitoring of arrangements on the wards	

Action Card 3: Treatment and Escalation Stage

The indicator for moving to the Treatment Stage would be when demands for services start to exceed the available capacity. This decision is likely to be made at a regional level as not all parts of the UK will be affected at the same time or to the same degree of intensity.

		✓ / ✗
1	Follow guidance issued by PHE / NHE England	
2	Liaise with the Head of Communications to ensure that staff are aware of the situation	
3	Co-operate with any local media campaign co-ordinated by PHE / NHS England	
4	Advise all teams to review arrangements in local business continuity plans for potential staff loss due to pandemic influenza	
5	Ensure that any requests for information (e.g. PHE / NHS England / CCG) are dealt with promptly	
6	Forward plan meetings of the Pandemic Flu Management Team, ensuring that they are minuted and feedback / actions shared in a timely manner	
	<p>The Pandemic Flu Management Team will be responsible for:</p> <ul style="list-style-type: none"> • Command and control • Identifying and communicating with the relevant teams • Identify and reallocating resources where appropriate • Ensuring that all wards and departments have up to date business continuity plans in place • Prioritising the work of teams as needed • Logging key decisions • Keeping the LHRP and CCG updated on the Trust operational / situational status on a daily basis • Conducting a full debrief on the incident 	
7	Make arrangements to provide pre-pandemic vaccination if available to front line staff as per national policy	
8	Review local sitrep reporting arrangements and decide a timetable for teams to return the information to the Pandemic Flu Management Team to ensure timely return of external sitreps e.g. NHS England	
9	Issue reminders to patient facing staff of infection prevention advice	
10	Review arrangements for any local anti-viral distribution / patient assessment	
11	Ensure contractor business continuity arrangements continue to be in place	
12	Ensure liaison between supplies and contractors to monitor the continued provision of services in the event of staff absence	
13	Support the set-up of anti-viral collection points in the hospital if required	
14	Consider closing non-essential day care services to reduce the risk of spreading infection	
15	Consider discharge of inpatients if appropriate	
16	Monitor local health and social care response by liaising with partners	
17	Convene a Recovery Co-ordination Group to facilitate a move back to business as usual when the pandemic recedes	
18	Restrict leave arrangements where local indications are that severe staff shortages are expected, dependent on whether the impact is expected to be low, medium or high. This will be reviewed as required and linked to HR policy	

Action Card 4: Recovery Stage

The indicator for this stage will be when the influenza activity is either significantly reduced compared to the peak or when the activity is considered to be within acceptable parameters. An overview of how services capacities are able to meet demand will also inform this decision.

		✓ / ✗
1	Follow guidance issued by PHE / NHE England	
2	Liaise with the Head of Communications to ensure that staff are aware of the situation	
3	Ensure that any requests for information (e.g. PHE / NHS England / CCG) are dealt with promptly	
4	Monitor local health and social care response via liaison with partners	
5	Monitor essential services and review business continuity via sitreps	
6	Consider transfer of staff from non-critical services to begin supporting areas that will be most heavily impacted upon by the pandemic	
7	Consider use of bank staff to deal with shortages and consider mutual aid if available	
8	Introduce more flexible working arrangements to support staff to attend work	
9	Maintain regular contact with the IPCT	
10	Consult with the Recovery Co-ordination Group on progress to facilitate a move back to business as usual when the pandemic recedes	
11	Restrict leave arrangements where local indications are that severe staff shortages are expected, dependent on whether the impact is expected to be low, medium or high. This will be reviewed as required and linked to HR policy	
12	Ensure liaison between supplies and contractors to monitor the continued provision of services in the event of staff absence	
13	Facilitate a debrief to discuss lessons to be learned and good practice to improve any future response to a pandemic influenza	