Northumberland, Tyne and Wear NHS

NHS Foundation Trust

Emergency Preparedness, Resilience and Response

Strategic Pandemic Influenza Plan

Version 6.1 – April 2015

Shining a light on the future

Document Control

Document Title	Strategic Pandemic Influenza Plan		
Lead Officer	**Executive Director of Nursing and Operations**		
Author(s) (name and designation)	Dr Damian Robinson, Director of Infection Prevention and Control and Emergency Preparedness, Resilience and Response. Carole Rutter, Modern Matron – Infection Prevention and Control. Andy Hindhaugh, Emergency Preparedness, Resilience and Response Officer.		
Ratified by	**Strategic Emergency Preparedness Group**		
Date ratified	11 May 2015		
Implementation Date	11 May 2015		
Review Date	May 2016		
Version number	6.1		
Change Control	Date	Version	Reason
	April 2015	6.1	Group Changes Research Section
	July 2014	6.0	Full Review
	Apr 2013	5.0	Full Review
	Sep 2010	4.0	Full Review

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

2

Contents   Page

Vaccination

Consumables

Clinical Services

Promoting Self Care

Vulnerable Service Users

Mental Health Surge Management

Supporting Services

Appendices:

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

4

Section 1   Introduction

Background

A pandemic is the worldwide spread of a disease, with outbreaks or epidemics occurring in many countries and in most regions of the world. A pandemic of influenza results when a new influenza virus emerges which is markedly different from recently circulating strains and is able to:

- infect people (rather than, or in addition to, other mammals or birds);
- spread readily from person to person;
- cause illness in a high proportion of the people infected; and
- spread widely, because most people will have little or no immunity to the new virus and will be susceptible to infection (they will not previously have been exposed to it or a similar strain of virus, and any previous vaccinations will not have covered the strain).

Influenza pandemics generally occur two or three times each century. Case studies of previous pandemics are included in Appendix 1.

It is uncertain when a new pandemic virus might appear. Until it emerges and affects a significant number of people, it will not be possible to identify the key features of the disease, such as any pre–existing immunity, the groups most affected, and the effectiveness of clinical countermeasures. Given this, there are three main principles that must underpin planning and response:

- Precautionary – plan for an initial response that reflects the level of risk, based on information available at the time, accepting the uncertainty that will initially exist about the scale, severity or level of impact of the virus.
- Proportionality – plan to be able to scale up or down in response to the emerging epidemiological, clinical and virological characteristics of the virus and its impact at the time.
- Flexibility – plan for the capacity to adapt to local circumstances that may be different from the overall UK picture – for instance in hotspot areas.

Aim of the Plan

This document outlines the strategic planning approach that Northumberland, Tyne and Wear NHS Trust (NTW) is adopting in preparing for a UK influenza pandemic.

Scope

This plan covers all clinical and non-clinical services delivered by NTW Trust in response to an Influenza Pandemic. This works with the Trustwide Business Continuity system for NTW.

This plan relates specifically to a Pandemic Influenza outbreak but does not encapsulate the Trust response to a seasonal outbreak or other types of infectious diseases (i.e. norovirus).

Objectives

In order to deliver this aim, the plan will achieve the following objectives:

- Protecting the health of service users, staff and visitors.
- Delivering a skilled, informed and flexible workforce.
- Conveying consistent messages to service users and staff.
- Enabling service users to self care.
- Identifying and supporting vulnerable service users.
- Working within legal and ethical frameworks.
- Collaborating with partner statutory and non-statutory organisations.
- Revisiting Department of Health and other relevant guidance.

Training / Exercising

The Trust will continue to participate in all influenza related exercises and workshops conducted in the North East by the Local Health Resilience Partnership, NHS England and Local Resilience Forums. Learning from internal and external exercises will be shared within the Trust and with partner organisations.

The Trust has also delivered a programme of internal exercises, attended by staff from across the Trust, as well as observers from other organisations:-

Date	Exercise
2007	Winter Willow
	NHS North East Coldplay 2

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

6

December 2008	Peak Practice
September 2009	FluZone
March 2009	NTW Coldplay 2
April 2009	NTW Coldplay 2
May 2009	NTW Coldplay 2
September 2009	NTW Coldplay 2
January 2012	South Command Tabletop

A national pandemic influenza exercise planned for 2014 is still to be held. The exercise will be led by the Department of Health with strong engagement from Public Health England, NHS England and NHS organisations.

The exercise does not include all areas of England and the North East is one of the areas which is not participating. However, lessons identified will be published and shared across the resilience community. The Trust will incorporate this learning into its Emergency Preparedness arrangements.

Review and Maintenance

The nature of the plan means that it will be continually subject to review and change in the light of experience and new guidance received. As they are shared with partner organisations, further modifications will be needed. Updates to this plan will be shared further through the Local Health Resilience Partnership.

The Trust will also work with the NHS North of England Mental Health Forum for Emergency Preparedness to ensure, as far as possible, equity of access to mental health and learning disability services across the whole region.

Section 2 Pandemic Influenza

Pandemic Characteristics

Pandemics can occur in a single wave or multiple waves spaced weeks or months apart. Second and subsequent waves can be more serious than the initial wave. Use of antiviral medication and vaccination, if available, may reduce the peak incidence. It is possible that within a local area the epidemic may be more or less peaked than the national profile, and consequently shorter of longer.

Pandemic Planning Assumptions

- A pandemic is most likely to be caused by a new subtype of the Influenza A virus but plans could be appropriately adapted and deployed for any epidemic infectious disease.

- An influenza pandemic could emerge at any time of the year anywhere in the world, including in the UK. Regardless of where or when it emerges, it is likely to reach the UK very rapidly and, from arrival, it will probably be a further one to two weeks until sporadic cases and small clusters of cases are occurring across the country.

- The potential scale of impact, risk and severity from related secondary bacterial infection and clinical risk groups affected by the pandemic virus will not be known in advance.

- It will not be possible to completely stop the spread of the pandemic influenza virus in the country of origin or in the UK, as it will spread too rapidly and too widely.

- Initially, pandemic influenza activity in the UK may last for up to three to five months, depending on the season. There may be subsequent waves of activity of the pandemic virus weeks or months apart, even after the WHO has declared the pandemic to be over.

- Following an influenza pandemic, the new virus is likely to persist as one of a number of seasonal influenza viruses. Based on observations of previous pandemics, subsequent winters are likely to see increased seasonal flu activity compared to pre-pandemic winters.

Any presumption that the relatively mild H1N1 (2009) influenza pandemic is representative of future pandemics is dangerous. Nonetheless, the health response required for a

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

8

pandemic predominantly reflects established issues in managing other adverse incidents or events, such as winter pressures or severe weather, such as:

- **Uncertainty:** there will be little or no information at the outset of a new pandemic about the severity of the illness, requiring accurate and detailed surveillance data to be gathered as an early priority.
- **Speed:** in local areas, the number of cases and demand for services can be expected to develop with great pace, requiring an agile yet coordinated response.
- **Profile:** the media and public and professional appetite for information is likely to be intense at times, requiring frequent, consistent and coordinated communications.
- **Cross-sector:** whilst the health sector will be under particular pressure, the response will span different sectors and organisations, requiring close working and mutual support.
- **Local hotspots:** the demands of the pandemic are unlikely to be uniform, but different areas will be under pressure at different times (and some not at all), requiring flexibility of approach, as well as planning for easy access to antiviral medicines.

Severity of illness

Up to 4% of affected persons may develop an illness of such severity that, if resources were available, acute hospital care would be indicated. These cases are usually associated with complications of influenza such as pneumonia.

Mortality

Mortality rates in previous pandemics ranged from 0.2% to 2%. Planning guidance considers a range of mortality rates up to 2.5%. Combined with the possible clinical attack rates, the number of excess pandemic related UK deaths ranges from 55,500 to 750,000, dependent on the pathogenicity of the organism.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

9

Section 3   Impact on Trust Services

It is important to have plans in place to enable mental health services to deal with potential increased staff shortages during a pandemic. Plans need to ensure the continued ability to safeguard patients in accordance with the Mental Health Act 1983, and that the Act can continue to be used to detain and treat people, where it is necessary.

Increasing the numbers of people cared for within mental health facilities may increase the scope for self-harm. Also, acute illness, such as influenza, can worsen depression, which can complicate the risk assessment, treatment and recovery for some service users. Thorough risk assessments for all service users, based on their clinical presentation must continue to be made.

In a moderate impact pandemic, pressures on local acute services may mean that mental health units cannot transfer service users who develop increased physical health needs to acute hospitals as regular practice would require. Access to primary care could also be limited, and mental health services may be required to care for service users who are suffering from influenza or its complications.

Discharging service users from general inpatient wards to the community may be difficult during a pandemic. It will be necessary to evaluate the risk of discharge to the service user, and to others, compared with the risks of catching flu if remaining as inpatients and any loss of liberty that might be involved. This assessment should include assessing the level of support at home for individuals ready to be discharged, and the capacity of community services to provide care when their workloads may have already been increased by a pandemic.

Forensic services pose an additional management challenge in that some service users are on restriction orders imposed under mental health legislation (administered by the Ministry of Justice). Court appearances and procedures may be affected. Services should have guidelines and protocols in place for the transfer of service users to acute medical care including the consequent impact on staffing requirements.

Refreshment of staff training in medical care, including signs and symptoms of influenza, and ensuring that good infection control measures are in place will be important in maintaining good quality holistic care to mental health patients with flu and limiting transmission of the virus within any mental health closed community.

Advice and understanding of self-care will be important for service users, carers and staff in both hospital and community based services so communication messages should include basic infection control advice. In medium and high secure units, one-to one education by a staff member known to service users would be of benefit.

When service users, who may not have capacity to consent to treatment, need influenza-related medicines, usual consent procedures should be followed as set out in the Mental Capacity Act 2005 and its Code of Practice. Should a service user have made a Lasting Powers of Attorney (LPA) for welfare matters under the act, the attorney would need to be consulted about the person's treatment. This consultation may be affected if the LPA is affected by flu. Contingency plans will need to be in place to meet this.

There are certain drug treatments that may require additional contingency planning. For example, Clozapine, which is used to treat schizophrenia, may reduce the white blood cell count, so clients require regular monitoring. The Medicines and Healthcare Products Regulatory Agency (MHRA) have stated that this requirement will not change. The Trust is required to maintain monitoring requirements based on its own resources.

Factors for Consideration

While an influenza pandemic will place considerable stress on all NHS services, the impact on a mental health service, and NTW in particular, may result in particular risks for the following reasons:-

- The delivery of mental health services is highly dependant on the staff resource available to deliver it.
- NTW provides services across a wide geographical area from many locations ranging from large hospital sites to small sites based in the community.
- Delivery of care is highly dependant on transport of staff and resources between sites.

- Local arrangements can vary across the Trust, involving NTW working with multiple partners (CCG's, Local Authorities, acute hospitals) and delivering different services in different localities.

- NTW sources some key clinical support services from external agencies (laboratory and radiological services; occupational health, for example).

- Communication systems between service delivery points rely on public networks.

- Users of mental health and learning disability services may be particularly vulnerable during a pandemic because of limited personal resources and support networks to enable them to recognise illness and seek appropriate help.

- The Trust has a range of in-patient beds, including secure hospital facilities, children's and young people services.

- Clinical staff are primarily trained to deliver mental health interventions and have limited skills and experience in managing significantly physically ill people.

- The number of staff with expert knowledge and skills in key areas (such as infection prevention and control, emergency preparedness, health protection, mental health law, clinical physical health care, pharmacy) is small.

Constraints and limitations

It is important to acknowledge the constraints and limitations faced by NTW in developing its plans:

- Despite up skilling of the clinical workforce NTW Trust is not able to provide a full range of acute physical care services such as would be provided in an acute medical care environment.

- Care requiring the use of equipment and facilities not normally available in a mental health setting, and care requiring expert medical and nursing skills and knowledge will not be provided, for example, advanced respiratory support or critical care.

- If there is a significant impact on the availability of staff, then the normal range and extent of mental health and learning disability services will need to be prioritised. This will lead to a reduction in routine and non-urgent reviews, assessments and meetings, and suspension of some community and liaison services, such as day hospitals. The priorities will be to continue to provide in-patient services for those most severely mentally unwell and community based crisis management teams.

Section 4   Roles and Responsibilities

This section outlines the arrangements in the Trust for planning for an influenza pandemic and how the Trust works with other organisations.

To ensure an effective response, the Department of Health (2011) identify the aspects to

- visible director level leadership, direction, and ownership of plans;
- engagement, motivation and support for staff;
- pre-established and tested command and control arrangements;
- good coordination, and
- appropriate channelling of communications to maintain public confidence.

Individual roles and responsibilities:

- The Chief Executive has overall responsibility for ensuring that the Trust has implementable plans for responding to a influenza pandemic
- The Executive Director of Nursing and Operations has Board level strategic responsibility for pandemic influenza planning.
- The Director of Infection Prevention and Control and Emergency Preparedness, Resilience and Response (IPC & EPRR) has responsibility for the development of the pandemic influenza plan. The Director of IPC & EPRR is the chair of the Trustwide Pandemic Influenza Planning Group and will also represent the Trust at partnership meetings, including the Local Health Resilience Partnership and the Local Resilience Forum. In the absence of the Director of IPC and EPRR, the EPRR Officer will represent NTW.
- Directors of clinical and core services have responsibility to ensure that their services have current continuity plans to manage the identified risks which may arise from a pandemic.
- Directors acting as Chairs of Northern and Southern command teams have responsibility to ensure that each locality is prepared to manage the identified risks which may arise from a pandemic.

**Pandemic Influenza Planning Group (PIPG):**

- The Trust has established a Trustwide Pandemic Influenza Planning Group (PIPG) which is chaired by the Director of IPC & EPRR. Under normal circumstances pandemic influenza planning issues will be incorporated into the Strategic EPRR Group

agenda. The re-instigation of the PIPG will be under the direction of the Strategic EPRR Group.

- This reporting is supplemented by exception and information reporting directly to the Trust Board, and by the publication of an annual report for public health which outlines actions taken in the area of pandemic influenza planning.

- There is representation from clinical and core services. Full terms of reference are available, see Appendix 4.

- The PIPG co-ordinates the activities of a number of work streams and expert reference groups. The membership has been identified to lead planning within each area.

- THE PIPG will become the Flu Control Team upon notification of a potential pandemic to the Trust.

Section 5   ALERT AND ESCALATION FRAMEWORK:

World Health Organisation alerting system
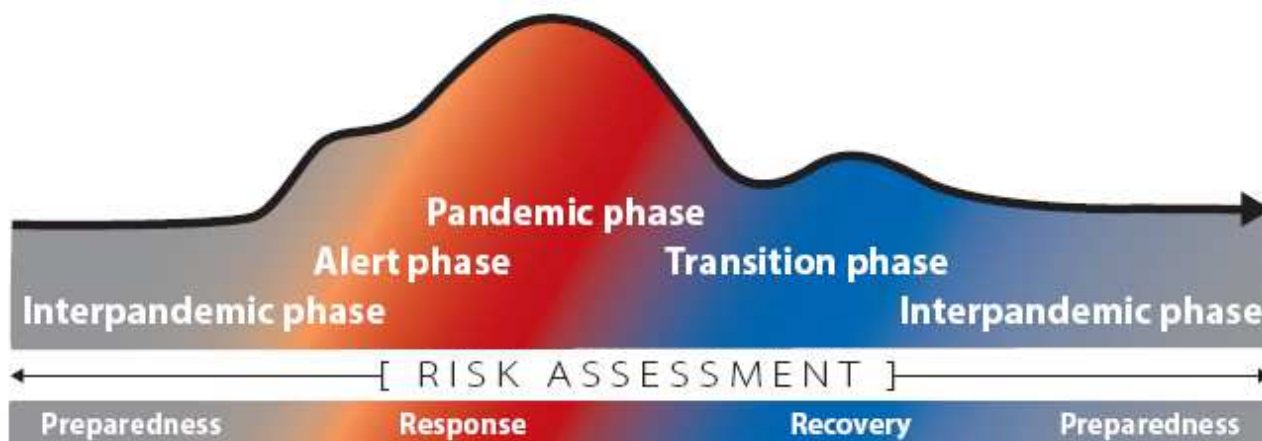
Interpandemic phase: This is the period between influenza pandemics.

Alert phase: This is the phase 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. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur.

Pandemic phase: This is the period of global spread of human influenza caused by a new subtype. Movement between the interpandemic, alert and pandemic phases may occur quickly or gradually as indicated by the global risk assessment, principally based on virological, epidemiological and clinical data.

Transition phase: As the assessed global risk reduces, de-escalation of global actions may occur, and reduction in response activities or movement towards recovery actions by countries may be appropriate, according to their own risk assessments.

(Source: Pandemic Influenza Risk Management, WHO Interim Guidance, 2013)

National governments are informed whenever there is movement in the international phase.

UK Approach to Phases of Pandemic Response

The Department of Health Strategy 2011 revised the UK phases for pandemic, following the review of the H1N1 pandemic to enable a more proportionate and flexible approach:

Detection

This stage would commence on the basis of reliable intelligence or if an influenza-related 'Public Health Emergency of International Concern' (PHEIC) is declared by the WHO.

The focus in this stage would be:

- intelligence gathering from countries already affected
- enhanced surveillance within the UK
- the development of diagnostics specific to the new virus
- information and communications to the public and professionals
- The indicator for moving to the next stage would be the identification of the novel influenza virus in patients in the UK.

Assessment

The focus in this stage would be:

- The collection and analysis of detailed clinical and epidemiological information on early cases, on which to base early estimates of impact and severity in the UK.
- Reducing the risk of transmission and infection with the virus within the local community by:
    - actively finding cases;
    - encourage self isolation of confirmed and suspected cases; and
    - treatment of cases/ suspected cases and use of antiviral prophylaxis for close/vulnerable contacts, based on a risk assessment of the possible impact of the disease

The indicator for moving from this stage would be evidence of sustained community transmission of the virus, i.e. cases not linked to any known or previously identified cases.

These two stages together form the **initial response**. This may be relatively short and the phases may be combined depending on the speed with which the virus spreads, or the severity with which individuals and communities are affected. It will not be possible to halt

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

16

the spread of a new pandemic influenza virus, and it would be a waste of public health resources and capacity to attempt to do so.

Treatment

The focus in this stage would be:

- Treatment of individual cases and population treatment through routine NHS services, including the potential for using the National Pandemic Flu Service (NPFS) if the level of pressures on primary care necessitate this
- Enhancement of the health response to deal with increasing numbers of cases
- Consider enhancing public health measures to disrupt local transmission of the virus as appropriate, such as localised school closures based on public health risk assessment
- Depending upon the development of the pandemic, to prepare for targeted vaccinations as the vaccine becomes available.

Arrangements will be activated to ensure that necessary detailed surveillance activity continues in relation to samples of community cases, hospitalised cases and deaths. When demands for services start to exceed the available capacity, additional measures will need to be taken. 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

The focus in this stage would be:

- Escalation of surge management arrangements in health and other sectors
- Prioritisation and triage of service delivery with the aim to maintain essential services
- Resiliency measures, encompassing robust contingency plans
- Consideration of de-escalation of response if the situation is judged to have improved sufficiently

These two stages form the **Treatment** stage of the pandemic. Whilst escalation measures may not be needed in mild pandemics, it would be prudent to prepare for the implementation of the **Escalation** stage at an early part of the **Treatment** stage, if not before.

Recovery

The focus in this stage would be:

- Normalisation of services, perhaps to a new definition of what constitutes normal service

- Restoration of business as usual services, including an element of catching-up with activity that may have been scaled-down as part of the pandemic response e.g. reschedule routine operations

- Post-incident review of response, and sharing information on what went well, what could be improved, and lessons learnt

- Taking steps to address staff exhaustion

- Planning and preparation for a resurgence of influenza, including activities carried out in the Detection phase

- Continuing to consider targeted vaccination, when available

- Preparing for post-pandemic seasonal influenza.

The indicator for this stage would be when 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.

Northumberland, Tyne and Wear Escalation framework

The alert system used by NTW has been adapted to correspond with the North East Escalation Plan framework (NEEP) agreed within the region to facilitate alignment of plans from different NHS organisations.

NTW Phase	Description of Trigger
NEEP 1 Normal (White)	
NEEP 2 Concern (Green)	- Minimal impact on delivery of service. - Likely to be able to continue to deliver a comprehensive range of services through maximising staffing to direct clinical care - Typical staff absence up to 5% above normal baseline
NEEP 3 Pressure (Amber)	- Moderate impact on services. - Pressure on delivery of normal range of services requiring redeployment of staff to maintain category A and B services - Typical staff absence between 5% and 20% above normal baseline. - May occur during the peak weeks of a pandemic wave due to staff sickness and

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

18

	• some carer linked absence. • Decision to trigger taken by CEO or acting CEO or Director of Nursing and Operations or on-call Director (in that order) • May be triggered by CCG's or NHS England
NEEP 4 **Severe Pressure** **(Red)**	• Significant impact on services. • Pressure on delivery of normal range of services requiring redeployment of staff to maintain category A services • Typical staff absence between 20% and 30% above normal baseline. • May occur during the peak 4 weeks of a pandemic wave if staff absence is increased by significant carer linked absence, for example if schools close. • Decision to trigger taken by CEO or acting CEO or Director of Nursing and Operations or on-call Director (in that order) • May be triggered by CCG's or NHS England
NEEP 5 **Critical** **(Purple)**	• Critical impact on services • Stress to continue to provide category A services • Typical staff absence between 30% and 40% above normal baseline • Unlikely to occur during this pandemic but may occur during peak weeks of pandemic if staff absence is increased by extreme carer linked absence (e.g. school closures). • May be triggered by CCG's or NHS England
NEEP 6 **Potential** **service failure** **(Black)**	• Catastrophic impact on services • Not anticipated to occur during this pandemic • May occur in the unlikely event of staff absence increasing beyond 40%. • Not feasible to realistically plan for this phase • May be triggered by CCG's or NHS England
Recovery **(Blue)**	• Staffing levels begin to return to normal. • Likely post pandemic surge due to backlog of waiting lists • Possible post pandemic surge due to effects of pandemic on community mental health. • Decision to trigger taken by CEO or acting CEO or Director of Operations (in that order)

Consultation on changes in escalation phase

Any proposed change in the escalation phase will be advised to the appropriate commissioners by the Flu Control Team. The transition between phases will be confirmed by the Chief Executive or acting Chief Executive or Director of Nursing and Operations or on-call Director (in that order) on advice from the Flu Control Team and Directors of Clinical Services.

Different localities and services may be experiencing different impacts on services, which may result in Northern and Southern Command areas being at different levels at any single point in time.

Communication of change of phase within the Trust

Any change in the escalation phase will be conveyed throughout the Trust by:

1) Notifying all Executive and Group Directors by email, who will cascade the information to managers in their services

2) Issuing a CAS alert via the Trust email system (Patient Safety)

3) Issuing an all user email (Communications)

4) Issuing a special edition of the Chief Executive's Bulletin (CEO / Communications)

5) Placing notification on the Trust intranet (Informatics / Communications)

Activation of Trust command and control structure

Moving into NEEP3 (AMBER) phase will automatically activate the Trust internal command and control arrangements, unless there is an unforeseen reason not to. The CEO (or acting CEO or Director of Nursing and Operations or on-call Director) will make that decision. However, the Trust may also be instructed to implement full command and control arrangements by the NHS England or CCG partners regardless of our own declared internal phase where the impact on the health community warrants it.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

20

Section 6   Command and Control Arrangements

Role and Function of NHS England

In the event of a surge in activity resulting from the Influenza Pandemic the NHS England Area Team will establish a **Health Gold** command at its Headquarters in Newburn, Newcastle upon Tyne.

It is anticipated that NHS Organisations in the North East will establish tactical (silver) command to avoid confusion and ensuring clarity in command and control. The Area Team will command and primarily communicate via CCG's and direct to NHS providers.

Incident Command & Control Structure in Pandemic

NHS Guidance suggests that teams will comprise of senior representatives of organisations and will be led by a Director. It is a responsibility of organisations and their flu directors to have rota's and processes, with appropriately trained staff in place prior to surge to enable the effective operation of command, control and communication at each level of surge.

It is acknowledged that through the LRF structure, LRF Chairs may wish to invoke SCG's (Strategic Coordination Groups) in which case multi-agency gold will be established and that a representative of the local NHS may be requested to attend the SCG (Chief Executive or nominated deputy).

NTW Command and Control Structure

The Trust command and control structures and arrangements will depend on the declared NEEP phase to ensure that the response is proportional to the impact that flu is having on the normal delivery of services.

Command and Control at NEEP 1 to NEEP 2

During these phases it is anticipated that a normal range of clinical services can be delivered within the normal Directorate management structure, and that a formal command

and control structure will not be required. The Trust Flu Team will monitor the impact of flu on the Trust and communicate with external partners.
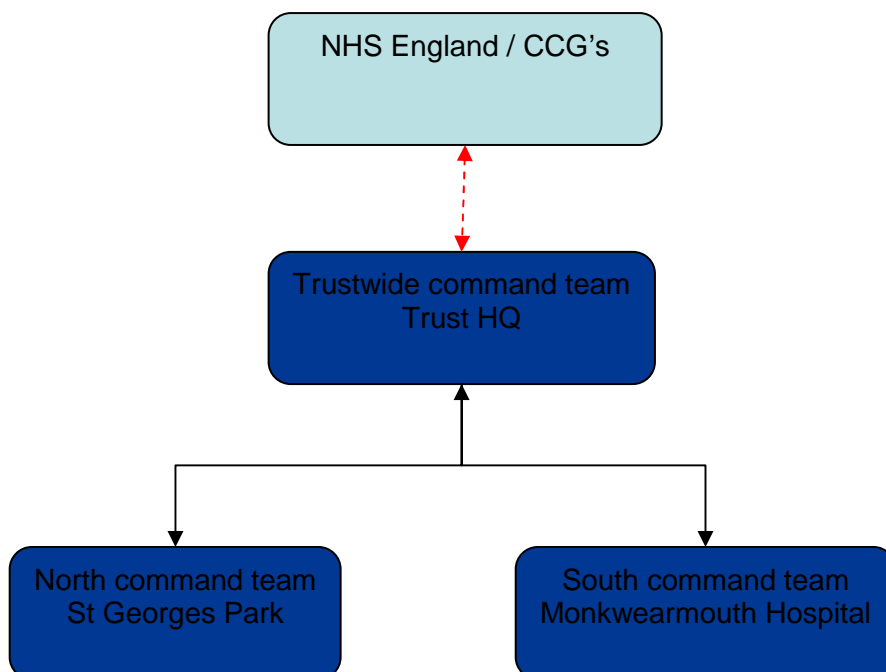
Command and Control at NEEP 3 to NEEP 5

During these phases it is anticipated that there will be a planned retraction of services and redeployment of staff to higher priority services. Other organisations in a locality may also be under pressure. Accordingly, there will be implementation of the Trust full command and control structure as outlined below.

Because of the large geographical spread of the Trust, the variations in services provided in different localities, and the complexity of local partner arrangements, the command and control arrangements are based on a hub and spoke model with a transfer of locality management arrangements from a Directorate based model to a Locality based model. The structure will comprise:

- a TRUSTWIDE command team based at St Nicholas Hospital, Trust Headquarters,
- two AREA command teams –
    - o a NORTHERN command team based North of Tyne
    - o a SOUTHERN command team based South of Tyne

Command and Control at NEEP 6

This command structure will be maintained throughout the pandemic, unless the phase is escalated to NEEP 6, when there is a risk of service failure. At this point it may necessary to stand down the northern and southern commands, in order to ensure all available resources are dedicated towards the delivery of essential services.

TRUSTWIDE Command team

A Trustwide command team will initially be established in the Conference Suite, St Nicholas House. This will formally be known as the Incident Coordination Centre (ICC). Boardroom at Trust Headquarters (St Nicholas Hospital, Newcastle)

The function of the TRUSTWIDE command team will be to -

- Act as the strategic group for the Trust
- Co-ordinating communications between the Trust and Category 1 and 2 responders, the wider NHS and the media.
- Co-ordinating the activities of the Locality response teams.

Locality Command teams

Locality command teams established in two locations across the Trust, one North of Tyne and one South of Tyne, corresponding to Local Authority boundaries, supported by local control rooms located in St George's Park, Morpeth and Hopewood Park, Sunderland.

The function of the Locality response teams will be to manage local resources to ensure delivery of mental health services in the locality following the locality pandemic flu plan as detailed in the relevant escalation framework. This will include emergency response equipment (such as local stocks of personal protective equipment), new services set up to deliver care (such as clinical support areas) and teams established to deliver special care, (such as clinical support teams).

All response teams and control rooms will operate according to agreed protocols and procedures for ensuring the timely delivery of situation reports (SITREPS) and retention of records.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

23

Expert Advisory Group (EAG)

During the activation of full command and control arrangements (amber, red, black phases) the TRUSTWIDE and AREA response teams will be supported by the establishment of an Expert Advisory Group (EAG). The role of this group is to provide advice to clinical staff and management on the following areas

- Infection Prevention and Control (general as well as influenza related)
- Clinical Care (of sick service users and staff)
- Public Health and Health Protection
- Mental Health Law

The rationale for establishing this group is to centralise scarce personnel with the expert knowledge and ensure that access to specialist advice is readily available Trustwide throughout an extended working day.

The EAG will be co-located with the TRUSTWIDE command team and control room. Access to advice will be through the TRUSTWIDE control room and channelled from localities via the Locality response teams.

The EAG will be staffed accordingly by IPC services, Mental Health Act office and medical/nursing staff who have received enhanced clinical care training. Access to advice required urgently out of hours will be through an on-call system.

Internal Communications

Locality command teams will be the main communication point for clinical services in the relevant locality. All clinical services will provide situation reports (SITREPS) to the Locality command room on a regular basis, to include staffing levels, number of staff reporting sick with influenza like illness (ILI), number of service users reported with symptoms of ILI, planned and unplanned curtailment or suspension of services.

Battle rhythms and detailed SITREP protocols will be developed based on the level of impact on the Trust and requirements of the NHS England Area Team. An internal SITREP template is included at Appendix 3.

External Communications

The Trust will report to the CCG's and NHS England Area Team. The details of the communications systems between Trusts and the CCG's / Area Team is yet to be clarified.

The Trust will, if technically possible, collaborate with any proposed CCG / NHS England bed management system.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

25

Section 7   Responding to a Pandemic

The Health and Social Care Influenza Pandemic Preparedness and Response guidance (2012) identifies that an effective response to a pandemic will include:

- A sustainable community-based response -with effective arrangements for providing initial assessment, access to antiviral medicines (and vaccines, when available), treatment of complications, home care and access to hospital care;

- An integrated approach to planning and response that effectively employs all of the health and social care services in a local area, using flexible working across all agencies and making best use of potentially scarce facilities and resources, including the skills of volunteers;

- Clear and comprehensive arrangements for admission, discharge and transfer between appropriate levels of health and social care based on established ethical and equalities frameworks to assist in managing local demand;

- Effective monitoring and communications systems and dialogue to permit:
  (i) timely exchange of essential information needed for management of the influenza pandemic and;
  (ii) local messaging to the public and staff;

- Effective management of the increases in demand resulting from the pandemic including:
  o a graded approach to configuring services, (ie identifying non-essential activity that can be reduced or ceased to increase capacity, and indicating when these changes will need to take place) allowing the local response to be proportionate to the severity of the pandemic and be escalated and de-escalated as needed;
  o continuation of essential care including mechanisms for recognition and management of patients with urgent non-flu medical conditions, other emergencies and individuals with long-term conditions requiring regular intervention, and
  o psychosocial support for staff and patients/clients when needed including plans to afford necessary rest time for hard-pressed staff.

Ethical Principles

During a pandemic, decisions will be needed on how to make the fairest use of resources and capacity, in proportion to the demands of the pandemic alongside other pressures that may be in place at the same time, in order to minimise the harm caused by the pandemic

as a whole. Many people are also likely to face individual dilemmas and tensions between their personal, professional and work obligations.

Given the potential level of additional demand, capacity limitations, staffing constraints and potential shortages of essential medical material, including medicines, hard choices and compromises may be particularly necessary in the fields of health and social care. People are more likely to understand and accept the need for, and the consequences of, difficult decisions if these have been made in an open, transparent and inclusive way.

National Pandemic Flu Service (NPFS)

Any decision to make the NPFS operational will be taken at a UK level. It will be initialised if the service is required to supplement normal primary care services because of pandemic pressures. The NPFS aims to:

- reduce pressure on primary care services;
- allow people with flu like symptoms to remain at home;
- enable rapid self-service assessment, care advice, GP referral and antiviral authorisation, and
- provide an additional source of data relating to trends in activity and profile of people assessed as suffering from pandemic symptoms.

Antiviral stock management

NHS England Area Teams will identify the sites to receive antiviral drugs from the national stockpile (identified NHS trust hospital pharmacies) and potentially some more local sites. In the assessment phase, a quantity of the UK antiviral medicine stockpile will be delivered to these agreed sites. The quantities of antiviral drugs and sites will vary depending on local needs. Initial delivery and the subsequent replenishment of stock will be controlled centrally by the Department of Health

Vaccination

As the development of a new pandemic specific vaccine can only begin once the new pandemic strain has been identified and isolated, will not be available until four to six months after the declaration of a pandemic. It is likely that initial supplies will be limited so prioritisation of individuals will need to take place, as determined by the Department of Health. The Trust Seasonal Flu Vaccination Plan sets out the agreed processes for

vaccinating large numbers of patients and staff and would also be used in a Pandemic Flu situation.

Consumables

The Trust maintains a stock of pandemic specific equipment at Northgate Hospital, which includes masks, goggles and aprons. The Department of Health has stockpiled a wide range of consumable products which may become in short supply in a pandemic. The distribution strategy for these products would ensure that NHS providers are supplied with an initial push of products which are likely to be in high demand as they are not used in the quantities which might be needed in a pandemic or are specific to the response. Other products would be on a demand led basis. More detailed information on stocks held and how to access them would be made available in the event of a pandemic.

Section 8   Business Continuity

Business Continuity - Clinical Services

During a pandemic it is possible that the normal range of clinical services cannot be maintained in full, due to the effect of flu on staff and other resources. Also, there may be external events which either directly or indirectly impact on the ability of the Trust to ensure normal operations of services even when its internal resources are adequate.

It is likely that clinical and other services will need to be prioritised to inform a planned retraction of services should the impact on staff result in an inability to continue to provide a normal range of services. All services and activities (both clinical and non-clinical) will be categorised according to the following criteria. These categories will indicate the NEEP level (1 to 6) at which services will be curtailed or suspended and this table should be read in association with the NTW Escalation Plan.

In considering which category to place a service or activity, consideration is needed of the potential risks of suspension or significant curtailment for the associated time period.

Category	Description	Potential risks of retraction
A	Services and activities which are essential to maintain throughout a pandemic wave. Such services may need to be provided through a different mechanism at the peak of a pandemic. Examples might include: in-patient services, crisis intervention teams (possibly with augmented staffing and functions), some out-patient and community services. Such services are essential because of the high risk to service users if they were to cease.	
B	Services and activities which could be suspended, significantly curtailed or partially reprovided for a period of up to 4 weeks at the peak of a pandemic wave. Examples might include: some out-patient and community services, liaison services.	• Backlog of appointments on recovery • Service users wait longer for assessment, diagnosis and treatment • Failure to achieve targets related to above e.g. 18 week wait.
C	Services and activities which could be suspended or significantly curtailed for a period of 8 weeks, though possibly up to 12 weeks. Examples might include: routine, non-urgent clinical appointments.	• Backlog of routine appointments on recovery • Service users wait longer for assessment, diagnosis and treatment • Failure to achieve targets related to above e.g. 18 week wait.
S	Services and activities which are supplemental to the delivery of clinical care, but which could be suspended or significantly	• Backlog of training. • Backlog of supervision

	curtailed for the duration of a pandemic wave. Examples include: study leave, non-flu related training, non essential internal meetings, non essential external meetings, non-flu related supervision, appraisals and JDRs	• Backlog of appraisal and JDRs • Failure to achieve targets related to above

Inpatient Services

The maintenance of in-patient services is core to the delivery of safe care and these are therefore generally designated as CATEGORY A services.

In order to manage the increased care requirements for physical care, achieve adequate levels of isolation and allow for further urgent admissions, it is desirable that in-patient occupancy should be kept at a minimum, wherever this is safe.

It is unlikely that there will be a large number of people in in-patient beds who could be discharged home at short notice. Some in-patients may be awaiting placement in residential care. During NEEP 1/2 alert all clinical services should identify any persons who might be able to be discharged prior to the pandemic phase and this list should be kept up to date and under review.

Where an in-patient is discharged during a pandemic they must have a care plan in place prior to discharge to ensure that they have adequate support in the community and are supported to obtain advice and treatment if necessary.

Current epidemiology suggests that older service users are less likely to become unwell than younger persons, although they are more likely to develop complications if they contract flu. Staff working within older peoples services are often better equipped to manage physical health problems. There may be increased demand for respite care if carers fall ill and a clear understanding of whether this is provided in NHS or social care is required locally.

Localities will establish referral and admission criteria for use in the AMBER and RED alert phases to limit admissions to urgent cases only. These will be agreed with local primary care and secondary care providers. Current admission criteria are generally stringent, but elective admissions may be curtailed or suspended. In particular, tertiary care services will explore whether they can release capacity by restricting admissions.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

30

Any surge demand for in-patient services is likely to have greater impact in the recovery (BLUE alert) phase, but some service users may require admission when the community services which would normally have supported them cannot be provided.

Admissions to Inpatient Areas

All admissions should have their flu status determined prior to admission. Any person requiring admission and who is showing current symptoms of flu must be admitted to a clinical area where isolation can be adequately provided, wherever this is possible. This may need to be discussed with the IPC team through the Expert Advisory Group arrangement at GOLD command if convened.

There may need to be more flexibility around where people are admitted to, for example, with a mixing of ages not normally used. Wherever possible, the usual privacy & dignity, and single sex accommodation guidance applies but the need to provide adequate isolation will take priority. Children under 16 **must not** be admitted to wards with adults, unless there is a clear relaxation of this requirement.

Day Hospitals and Day Services

While day hospitals and other day services provide essential support for some service users, their continuation in a pandemic may be problematic. Attendance will always constitute social mixing, with risk of transmission of infection between service users and to staff. Transport, especially by ambulance services, may well be restricted, further limiting attendance. Day hospital and other day care services are therefore identified as CATEGORY B services.

During the NEEP 1/2 alert phase, day services should identify alternative support arrangements for service users, wherever possible. This may involve CMHTs (or equivalents), or may be delivered by day services staff providing outreach. Alternatives sources of transport, for example volunteer drivers, taxis or relatives, could be explored in case of suspension of normal passenger transport services (subject to human resources guidance). In a few cases it may be necessary to consider admission if there is no other safe way to maintain a person in the community. These alternative arrangements must be documented in care plans and shared with the service user and carer. An example of a

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

31

Care Plan from the WHO used during the 2009 swine flu pandemic is attached as Appendix 5. This can be reviewed and adapted to suit future pandemics.

Community Services

Vulnerable service users in the community should have Pandemic Influenza Care Plans developed during the NEEP 1/2 alert phase and reviewed during the AMBER alert phase. These identify how these service users will access, or be facilitated to access, anti viral medication if they develop symptoms of influenza.

The Trust provides a wide range of community based services based on community mental health team models or specialist teams delivering care and support in the community. Many of these teams are core to the safe delivery of mental health care and are therefore designated as CATEGORY A services; other community services may not be core, or could be temporarily curtailed, suspended or delivered by other teams, and are therefore CATEGORY B services.

With staff absences of up to 10% it is likely that most community services could continue to be delivered within normal management arrangements. As staff absences rise to 25%, some services may need to be curtailed, suspended or amalgamated. If staff absence rises to 50%, it is unlikely that community teams could continue to operate safely within specialities and a locality based generic community based mental health service may be necessary managing a wide variety of needs and staffed from a variety of specialities. This service will be managed by the Locality Management teams.

While face to face contacts will remain essential for many service users, alternatives should be considered such as phone contact. Community staff undertaking home visits will be provided with suitable PPE, although this is not necessary unless the service user is showing signs or symptoms of flu. Phone contact prior to visiting may help establish if this is the case, following which an assessment of the risks faced by the service user and staff member will inform a decision about if the visit is necessary at that time.

Crisis Assessment Teams

Crisis assessment teams are the first point of contact for many service users in the community and may have a function as the gatekeepers to acute care beds. They

therefore have a pivotal role in delivering services and are identified as CATEGORY A services.

The role and scope of these teams will be reviewed as part of the locality planning process to ensure that they continue to be delivered. In the face of significant staff shortages, an augmented crisis team covering a wider range of urgent and emergency presentations will be provided.

Where these teams work in the Accident and Emergency / Casualty departments of acute general hospitals, there must be a clear understanding of their role in triaging persons presenting with symptoms of flu and mental illness.

As gatekeepers of acute beds, these teams will have a key role in ensuring that service users are admitted to appropriate isolation areas if appropriate (see above)

Forensic Services

Forensic services face particular problems due to the legal status of their service users for whom freedom of movement is limited. These services will need to consider how they provide isolation areas, as their in-patients cannot move to other site based facilities; who they might arrange supervision of in-patients transferred to acute hospitals; or how such a transfer could be managed if authorisation from the Ministry of Justice is not available. Additional guidance will be available in "Working within Legal frameworks"

Children's Services

Some children may be subject to restrictions in liberty. In addition, children under 16 must not be placed on wards with adults. Therefore, all children's wards will have to identify isolation areas within the ward and consider the same legal issues as forensic services.

Promoting Self Care

A key element of the national strategy is to promote self care and management wherever possible, rather than reliance on health and other services. This involves the public being given clear and consistent messages about preventing, identifying and treating pandemic flu. Much of this will be delivered through national publicity campaigns, but all public bodies have a responsibility to augment this by raising awareness and repeating the

national messages to their service users. This will be implemented upon instruction from the SHA in accordance with the Regional Communications Strategy.

The Trust Communications department will co-ordinate the delivery of these messages which may need to be specifically tailored to service users with particular communication needs.

Vulnerable Service Users

Many users of mental health and learning disability services may be unable to care adequately for themselves during a pandemic. They may rely on formal or informal carers who may themselves fall ill or become unavailable, or a service user who can normally self care may be unable to do so when they fall ill.

While it is possible to identify groups of service users who may be at higher risk of becoming vulnerable in a pandemic, any individual may, because of their personal circumstances, become vulnerable. Therefore, all service users will require an assessment to be made of the risks that they personally might face, and relevant information added to care to manage the risks in the event of a pandemic. This will include ensuring that they are aware of the signs and symptoms of flu, how and when to obtain other key information which may be applicable.

Mental Health Surge Management

Surge in demand for mental health services is likely to arise from two main sources:-

- Firstly, there may be localised surges arising from increased or different needs of current service users. For example, a reduction in day hospital care may cause an increased demand for in-patient care, or reduced community supervision may lead to relapse requiring an increased need for care or possible admission. This surge will typically occur during the pandemic phase and possibly beyond.

- The second type of surge arises as the community prevalence of mental disorder increases as a result of the consequences of the pandemic (bereavement, for example). Modelling of past catastrophes indicates that this demand will lag behind

the pandemic itself, perhaps over the following six months. This, then, is an issue primarily for the recovery phase (BLUE alert)

During a pandemic many people will suffer illness and loss and will become acutely distressed. Some will seek counselling and treatment through primary care. It is unlikely that NTW Trust will be able to provide additional services to help primary care manage this demand as these are not services normally provided or staffed. The expansion of training in psychological first aid may help all organisations respond to this demand.

The size of the mental health surge is difficult to predict with certainty. The consolidation of community assessment and treatment services will help to accommodate any surge during a pandemic, and any post pandemic surge will have to be managed as services begin to re-establish themselves. This may mean that during the BLUE alert (recovery) phase some services will continue to be curtailed for some time in order to divert resources to managing any increased demand elsewhere.

Business Continuity - Supporting Services

Pandemic specific action plans are held by key services which will support the requirements of clinical services. These include:

- Infection Prevention & Control
- Pharmacy
- Workforce
- Facilities
- Estates
- Communications
- Supplies
- Informatics
- Mental Health Act
- Finance

Section 9   Data Collection and Reporting

NTW will be required, along with all other health organisations, to provide daily situation reports during a pandemic. Future reporting in pandemics will be determined according to the impact of the virus.

Once a circulating new & novel strain of influenza is detected in the UK, NTW will initiate the collection of data to monitor any impact upon service users and staff. This will include staff absenteeism and patient health. There may be a requirement to collect further information which will be determined by the NHS England Area Team.

Appendix 3 includes an example of the Situation Report (SitRep) template used for daily reporting during a pandemic and will be reviewed prior to use to ensure all information captured is relevant.

The flu team will collect weekly vaccine uptake rates in staff. It is anticipated that this information will be requested in future pandemics. The current system for inputting this information is through IMMFORM and will be completed by the flu team.

Section 10   Research

NTW is a research active organisation that hosts a number of National Institute of Health Research (NIHR) funded staff. Following an urgent public health outbreak it is recognised that clinical staff are unlikely to have the time to contribute to research activities. However the Trust must ensure business continuity in support of the following:

- Research Management and Governance processes in expediting urgent studies (there are a number of 'sleeping studies' that will be opened when an urgent health outbreak is declared)

- Prioritising delivery of urgent studies – the setup, recruitment and follow up of patients on studies would be put on hold unless there would be potential harm by stopping recruitment or follow up (e.g. Clinical Trial of an Investigational Medicinal Product (CTIMP)), this would enable clinical staff to be mobilised elsewhere and support urgent public health studies only. Where appropriate it may be required that some non-clinical research staff support some of the work associated with network studies. Decisions regard which studies and staff this would affect will be discussed with the R&D Department following advice from the North East and North Cumbria Local Clinical Research Network (NENC LCRN)

Sleeping studies

It is important that there is awareness of the urgent public health studies that may be activated following an outbreak, an updated list of studies will be held on the NENC Hub, please contact the R&D Department for more information.

Section 11   Principles of Communications

Effective and timely communication with service users and staff is identified as a vital component of the Trusts planning and response to a pandemic, and as such is an essential service to be maintained throughout the pandemic period. The PIP Communications Lead represents the communications department on the PIP Group. Communications is a key member of the Trust Command team.

The Trust shares responsibility with all other NHS and statutory authorities to distribute uniform messages to the public. A Communications Action Plan has been developed and is held by the Communications Team for Pandemic response.

Key public messages for preparing in advance of a pandemic

An influenza pandemic is one of many types of emergency that can disrupt normal daily
life. Developing a household emergency plan or talking to your family about what you would do in an emergency can help you to prepare and respond to such events.

Ensure that you are routinely vaccinated against seasonal influenza and pneumonia if you are in a high-risk group because you are at greater risk of getting seriously ill.

To reduce the risk of catching viruses, cover your mouth and nose with a tissue when coughing or sneezing, dispose of tissues quickly and regularly wash your hands with

---

Key public messages during a pandemic

Follow public health advice and consider how you and your family might prepare for disruption such as closure of schools or childcare facilities due to staff absence or shortages.

Get ready in case you or your family catch influenza by ensuring that you have supplies of normal over-the-counter cold and 'flu medicines and other basic necessities and that you can care for any existing health conditions.

Familiarise yourselves with local arrangements for accessing health and social care support early should you need them, including getting antiviral medicines if needed.

Help friends and family who are ill. They might need you to pick up medicines for them or help in other practical ways.

Be a good neighbour – you may know of those in your community who are more vulnerable than others or could be made vulnerable due to a pandemic. You can help them by checking if they are alright or need help.

If infected with pandemic influenza, stay at home, keep warm and drink plenty of fluids. If you have influenza and your symptoms are getting worse, or you have a long-term medical condition, you should contact your GP or other health professional for assessment and advice.

Take advantage of pandemic vaccine as soon as possible if you are in one of the risk groups where vaccination is recommended.

Particular challenges faced by a mental health and learning disabilities Trust include ensuring that information is available to service users in a form that can readily understood. In some case this may involve the use of pictograms or diagrams to emphasis important messages, rather than written language, and requires communications to work with clinical services to develop suitable communications methods.

Section 12   Recovery

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.

Furthermore, many people will require a period of convalescence and some assistance with basic self care above the level of assistance they normally require. Plans at all levels should recognise the potential need to prioritise the restoration of services and to phase the return to normality in a managed and sustainable way.

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 maintenance, refurbishment or replacement. Impact assessments will therefore be required.

Specific recovery actions set out in the action card in Appendix 4.

APPENDICES

Appendix 1:   **History of Pandemics**

Appendix 2:   **Pandemic Guidance**

Appendix 3:   **SITREP Forms**

Appendix 4:   **Action Cards**

Appendix 5:   **Example Pandemic Care Plan**

Appendix 1 – History of Influenza Pandemics

During the last century there were three influenza pandemics. The most significant of these, the so-called Spanish Flu of 1918/1919, was estimated to responsible for between 20-50 million deaths more than would usually be expected.

The other two declared pandemics of the last century, the Asian Flu of 1957/58 and the Hong Kong Flu of 1968/69, although associated with less morbidity and fewer deaths than the 1918 pandemic, nevertheless caused significant illness in the working population, affecting the UK's capacity to care for the sick and to maintain services essential to the national infrastructure. The true extent of the H1N1 (2009) pandemic and its impact on the population is still being assessed.

Pandemic	Area of emergence	Estimated Case fatality ratio	Estimated attributable excess mortality worldwide	Age groups most affected (simulated attack rates)
1918-1919 "Spanish Flu"	Unclear	2-3%	20 – 50 million	Young adults - 16.9 to 2.4
1957 – 1958 "Asian Flu"	Southern China	0.1 -0.2%	1 – 4 million	Children -3.5 to 0.4
1968 – 1969 "Hong Kong Flu"	Southern China	0.2-0.4%	1 – 4 million	All age groups
2009 – 2010 "Swine Flu"	Mexico	<0.025%	WHO estimates awaited. Likely to be significantly less than one million	Children (5-14), young adults and pregnant women

Despite over sixty years of scientific scrutiny there is still controversy and debate over many issues related to influenza, including:

- The changes in animal viruses that are associated with human transmission and that might allow early warning.
- The genetic changes that indicate whether a new influenza virus is going to be associated with severe disease (pathogenicity) or the ease of transmission or periods of infectivity.

- The factors or circumstances that can cause severe illness and death in apparently healthy individuals infected with the virus, or why different influenzas attack different age groups.

The interval between influenza pandemics is variable, ranging from 11 to 39 years during the last century. There are no known markers that herald the start of a new pandemic. H5N1 emerged as a potential threat in 1997 and again in 2003; eight years on, the threat from the virus remains unchanged, although the emergence of a subtype capable of being efficiently transmitted to humans has not yet occurred, despite the global spread of the virus. In contrast, the common ancestor of H1N1 (2009) is estimated to have appeared between 3 November 2008 to 2 March 2009 and caused the first pandemic of the 21st century later in 2009.

Lessons from the H1N1 (2009) influenza pandemic

Pandemic planning in the first decade of the 21st century was largely driven by concerns about the potential of a pandemic associated with significant morbidity and mortality arising from the H5N1 (avian flu) virus. The emergence of the H1N1 (2009) influenza pandemic demonstrated the unpredictability of influenza pandemics. Most people experienced relatively mild illness. The recorded level of illness from influenza in the community in 2009 was below that experienced in the 1999/2000 influenza season – the most recent severe influenza season - and day-to-day life for most people continued largely unaffected.

Nonetheless, some younger adults and children, particularly those with underlying health conditions, and some women who were pregnant, experienced severe or even fatal illness and NHS primary and critical care services came under pressure. Furthermore, the virus re-emerged in the 2010/11 winter season again causing widespread illness.

Appendix 2 – Pandemic Guidance

- Pandemic Influenza Risk Management, WHO Interim Guidance
  http://www.who.int/influenza/preparedness/pandemic/GIP_PandemicInfluenzaRiskManagementInterimGuidance_Jun2013.pdf

- Preparing for Pandemic Influenza, Guidance for Local Planners
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225869/Pandemic_Influenza_LRF_Guidance.pdf

- UK Influenza Pandemic Preparedness Strategy 2011
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/134747/dh_131040.pdf.pdf

- Health and Social Care Influenza Pandemic Preparedness and Response
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/134379/dh_133656.pdf.pdf

- UK Pandemic Influenza Communications Strategy 2012
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/127380/UK-Pandemic-Influenza-Communications-Strategy-2012.pdf.pdf

- NHS England Operating Framework for Managing the Response to Pandemic Influenza
  http://www.england.nhs.uk/wp-content/uploads/2013/12/framework-pandemic-flu.pdf

- Roles and Responsibilities of Clinical Commissioning Groups (CCGs) in preparing for and responding to an influenza pandemic
  http://www.england.nhs.uk/wp-content/uploads/2013/12/roles-resps-panflu-ccgs.pdf

- Scientific Summary of Pandemic Influenza & its Mitigation (Scientific Evidence Base Review)
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147382/dh_125333.pdf.pdf

- WHO global influenza preparedness plan
  http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf

- Swine Flu H1N1 - Updated Guidance for mental health services in England
  http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/@sta/@perf/documents/digitalasset/dh_109170.pdf

- Pandemic influenza: guidance on preparing mental health services in England
  No longer available on internet. Copy in Pandemic Influenza Planning Group folder.

- Human resources guidance for the NHS
  No longer available on internet. Copy in Pandemic Influenza Planning Group folder.

- HSE Pandemic Influenza Workplace Guidance
  http://www.hse.gov.uk/biosafety/diseases/pandemic.htm

- Pandemic Flu: A National Framework for Responding to an Influenza Pandemic
  http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAnd
  Guidance/DH_080734

- The 2009 Influenza Pandemic – An independent review of the UK response to the
  2009 influenza pandemic
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61252/
  the2009influenzapandemic-review.pdf

Appendix 3

Northumberland, Tyne and Wear NHS

Situation Report (SITREP 1)

Information reported below will need to be added to the Incident Coordination Centre Log

Initial Information Report

Type of Incident:
Hazards or Risks:
Number of Service Users/Staff Involved:
Impact on Human Resources:
Impact on Material Resources:
Impact on Services: - - Short Term - Medium Term - Long Term
Time: Date: Reporting Person: (Name & Title)

Northumberland, Tyne and Wear NHS

NHS Foundation Trust

Situation Report (SITREP *)

Ongoing and updated information reported below will need to be added to the Incident Command Room Log

Progressive SITREP

Any additional Incident Information:
Any new Hazards or Risks not already reported:
Any additional Patients/Clients Involved:
Any new impacts on Human Resources or possible/envisaged problems which may impact on the operational capability of the Trust:
Any new impacts on Material Resources or possible/envisaged problems which may impact on the operational capability of the Trust:
Time: Date: Reporting Person:

Appendix 4: Action Cards

<table>
<tr>
<td>

ACTION CARD - DETECTION PHASE

</td>
</tr>
<tr>
<td>

This is known by the World Health Organisation 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.

</td>
</tr>
<tr>
<td>

- Follow guidance issued by Public Health England/NHS England.
- Liaise with Head of Communications to ensure all staff are aware of the situation.
- Advise all Service Managers to review arrangements in business continuity plans for potential staff loss due to pandemic influenza.

Such 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/from work.
- Whether staff are prepared to 'live-in' at work during the pandemic (if possible or required).
- Review of essential functions and production of action cards for those functions that may be used by new or temporary staff from other services if required.
- Checking of business continuity arrangements of essential suppliers/contractors.
- Review of skill mix to identify vulnerabilities if staff loss were to occur.
- Provide timely responses to requests from Public Health England/NHS England.

</td>
</tr>
</table>

ACTION CARD - ASSESSMENT PHASE

The indicator for moving to the assessment stage would be the identification of the novel influenza virus in patients in the UK.

- Follow guidance issued by PHE/NHS England.

- Liaise with Head of Communications to ensure all staff are aware of the situation.

- Advise all teams to review arrangements in team business continuity plans for potential staff loss due to pandemic influenza.

- Provide timely responses to requests from Public Health England/NHS England.

- Consider declaring Major Incident "Standby" (See Incident Response Plan).

- Set up Flu Control Team. Ensure infection prevention and control procedures are in place as soon as possible to reduce the spread of infection and refresher training given to all staff with special regard to flu.

- Confirm arrangements for investigating and managing and managing any suspected cases for patients and staff across al teams. Ensure that details of those affected are collected on a regular basis and passed to the Accountable Emergency Officer in order to keep a record of numbers affected for outside agencies such as CCG's, Public Health England and NHS England.

- Provide local guidance about use of antivirals (if available) for early cases (liaise with partners for further details).

- Review plans for supply and distribution of essential medicines/supplies with Chief Pharmacist.

- Consider convening Flu Vaccination Group to prepare arrangements for possible vaccinations of patients and staff for flu pandemic (e.g. ordering of equipment). If there is a decision

- Ensure attendance at external meetings and feedback is shared appropriately.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

49

ACTION CARD - TREATMENT PHASE

The indicator for moving to the treatment phase would be evidence of sustained community transmission of the virus (i.e. cases not linked to any known or previously identified cases).

- Continue with Major Incident procedures ensuring regular meetings of Flu Control Team.

- Follow guidance issued by Public Health England/NHS England.

- Liaise with Head of Communications to ensure all staff are aware of the situation.

- Advise all teams to review arrangements in team business continuity plans for potential staff loss due to pandemic influenza.

- Provide timely responses to requests from Public Health England/NHS England.

- Monitor local health and social care response through liaison with partners.

- Monitor essential services and business continuity via situation reporting.

- Consider transfer of staff from non-critical services to begin supporting areas that will be most heavily impacted by the pandemic.

- Increase use of bank staff if possible to deal with staff shortages and consider mutual aid if available.

- Introduce flexible working arrangements to support staff to attend work.

- Review local vaccination arrangements and antiviral arrangements as appropriate.

- Maintain regular contact between Flu Control team.

ACTION CARD ESCALATION PHASE

The indicator for this stage would be when 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 this demand will also inform this decision.

- Continue with Major Incident procedures ensuring regular meetings of Flu Control Team.
- Follow guidance issued by Public Health England/NHS England.
- Liaise with Head of Communications to ensure all staff are aware of the situation.
- Advise all teams to review arrangements in team business continuity plans for potential staff loss due to pandemic influenza.
- Provide timely responses to requests from Public Health England/NHS England.
- Monitor local health and social care response through liaison with partners.
- Monitor essential services and business continuity via situation reporting.
- Consider transfer of staff from non-critical services to begin supporting areas that will be most heavily impacted by the pandemic.
- Increase use of bank staff if possible to deal with staff shortages and consider mutual aid if available.
- Introduce flexible working arrangements to support staff to attend work.
- Review local vaccination arrangements and antiviral arrangements as appropriate.
- Maintain regular contact between Flu Control team.

ACTION CARD - RECOVERY PHASE

The indicator for this stage would be when 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 this demand will also inform this decision.

The focus in this stage would be:

- Normalisation of services, perhaps to a new definition of what constitutes normal service.

- Restoration of business as usual services, including an element of catching-up with activity that may have been scaled-down as part of the pandemic response e.g. reschedule routine operations.

- Post-incident review of response, and sharing information on what went well, what could be improved, and lessons learnt.

- Taking steps to address staff exhaustion.

- Planning and preparation for a resurgence of influenza, including activities carried out in the Detection phase.

- Continuing to consider targeted vaccination, when available.

- Preparing for post-pandemic seasonal influenza.

Restoration of normal working to 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.

- Undertaking a lessons learned exercise internally and contributing to any multi-agency debriefs.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

52

Appendix 5 – Pandemic Care Plan

Patient Care Checklist
New influenza A (H1N1)　　　June 2009

Replaces: 15 May 2009
Expires: December 2009.

This checklist is intended for use by hospital staff treating anyone with a medically suspected or confirmed case of new influenza A (H1N1) per local definition. This checklist highlights areas of care critical for the management of new influenza A (H1N1).

It is not intended to replace routine care.

UPON ARRIVAL TO CLINICAL SETTING/TRIAGE

- ☐ Direct patient with flu-like symptoms to designated waiting area
- ☐ Provide instruction and materials to patient on respiratory hygiene/cough etiquette
- ☐ Put medical/surgical mask on patient if available and tolerable to patient

UPON INITIAL ASSESSMENT

- ☐ Record respiratory rate over one full minute and oxygen saturation if possible
- ☐ If respiratory rate is high or oxygen saturation is below 90% alert senior care staff for action#
- ☐ Record history including flu-like symptoms, date of onset, travel, contact with people who have flu-like symptoms, co-morbidities
- ☐ Consider specialized diagnostic tests (e.g. RT-PCR)
- ☐ Use medical/surgical mask, eye protection, gloves when taking respiratory samples
- ☐ Label specimen correctly and send as per local regulations with biohazard precautions
- ☐ Consider alternative or additional diagnoses
- ☐ Report suspected case to local authority

INITIAL AND ONGOING PATIENT MANAGEMENT

Supportive therapy for new influenza A (H1N1) patient as for any influenza patient including:
- ☐ Give oxygen to maintain oxygen saturation above 90% or if respiratory rate is elevated (when oxygen saturation monitor not available)
- ☐ Give paracetamol/acetaminophen if considering an antipyretic for patients less than 18 years old
- ☐ Give appropriate antibiotic if evidence of secondary bacterial infection (e.g. pneumonia)
- ☐ Consider alternative or additional diagnoses
- ☐ Decide on need for antivirals* (oseltamivir or zanamivir), considering contra-indications and drug interactions

BEFORE PATIENT TRANSPORT/TRANSFER

- ☐ Put medical/surgical mask on patient if available and tolerable to patient

BEFORE EVERY PATIENT CONTACT

- ☐ Put on medical/surgical mask
- ☐ Clean hands
- ☐ Put on eye protection, gown and gloves if there is risk of exposure to body fluids/splashes
- ☐ Clean and disinfect personal/dedicated patient equipment between patients
- ☐ Change gloves (if applicable) and clean hands between patients

IF USING AEROSOL-GENERATING PROCEDURES ALSO (e.g. intubation, bronchoscopy, CPR, suction)

- ☐ Allow entry of essential staff only
- ☐ Put on gown
- ☐ Put on particulate respirator (e.g. EU FFP2, US NIOSH-certified N95) if available
- ☐ Put on eye protection, and then put on gloves
- ☐ Perform planned procedure in an adequately ventilated room

BEFORE PATIENT ENTRY TO DESIGNATED AREA (isolation room or cohort)

- ☐ Post restricted entry and infection control signs
- ☐ Provide dedicated patient equipment if available
- ☐ Ensure at least 1 metre (3.3 feet) between patients in cohort area
- ☐ Ensure local protocol for frequent linen and surface cleaning in place

This checklist is not intended to be comprehensive.

Additions and modifications to fit local practice are encouraged.

BEFORE ENTERING DESIGNATED AREA (isolation room or cohort)

- ☐ Put on medical/surgical mask
- ☐ Clean hands

　　　　　　The above applies to visitors also

BEFORE LEAVING DESIGNATED AREA (isolation room or cohort)

- ☐ Remove any personal protective equipment (gloves, gown, mask, eye protection)
- ☐ Dispose of disposable items as per local protocol
- ☐ Clean hands
- ☐ Clean and disinfect dedicated patient equipment and personal equipment that has been in contact with patient
- ☐ Dispose of viral-contaminated waste as clinical waste

　　　　　　The above applies to visitors also

BEFORE DISCHARGE OF CONFIRMED OR SUSPECTED CASE

- ☐ Provide instruction and materials to patient/caregiver on respiratory hygiene/cough etiquette
- ☐ Provide advice on home isolation, infection control and limiting social contact
- ☐ Record patient address and telephone number

AFTER DISCHARGE

- ☐ Dispose of or clean and disinfect dedicated patient equipment as per local protocol
- ☐ Change and launder linen without shaking
- ☐ Clean surfaces as per local protocol
- ☐ Dispose of viral-contaminated waste as clinical waste

*# See instructions on the back side for additional information and references. Equipment on this checklist is recommended if available.

World Health Organization

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

53

ABOUT THIS CHECKLIST

The WHO *Patient Care Checklist: new influenza A (H1N1)* is intended for use by hospital staff treating a patient with a medically suspected or confirmed case of new influenza A (H1N1). This checklist combines two aspects of care: i) clinical management of the individual patient and ii) infection control measures to limit the spread of new influenza A (H1N1).

WHO Patient Safety Checklists are practical and easy-to-use tools that highlight critical actions to be taken at vulnerable moments of care. They are produced in a format that can be referred to readily and repeatedly by staff to help ensure that all essential actions are performed. WHO Patient Safety Checklists are not comprehensive protocols and are not intended to replace routine care.

How to use the checklist

Staff can use this checklist in a variety of ways - ticking the boxes is optional. The objective is to ensure that no critical patient care items are missed during or immediately following care.

The checklist can be:
- used as part of the patient's clinical record;
- reproduced as wall posters for hospitals or clinics; or
- printed up as cards for staff members to carry around with them.

Parts of the checklist can also be extracted for use in any of these formats.

This checklist does not replace clinical guidance or clinical judgment. Its users should also familiarize themselves with the relevant WHO guidance documents referenced below, which were used in the development of the checklist.

Local modification

The WHO *Patient Care Checklist: new influenza A (H1N1)* may be reformatted or revised to accommodate local practice. Facilities and individuals are cautioned, however, against making the checklist too complex.

Related guidance

Guidance relating to infection control:

Infection prevention and control in health care in providing care for confirmed or suspected A (H1N1) swine influenza patients Interim guidance (Publication date: 29 April 2009) http://www.who.int/csr/resources/publications/infection_control/en/index.html

Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care. WHO Interim Guidelines (Publication date: June 2007) http://www.who.int/csr/resources/publications/WHO_CD_EPR_2007_6/en/

Guidance relating to clinical management:

Clinical management of human infection with new Influenza A (H1N1) virus (Publication date: 21 May 2009) http://www.who.int/entity/csr/resources/publications/swineflu/clinical_managementH1N1_21_May_2009.pdf

*Currently there are a lack of data on the clinical effectiveness of antivirals for this disease. Antiviral drugs are to be used according to national pandemic influenza preparedness plans. If antivirals are prescribed, oseltamivir or zanamivir should be used for influenza A (H1N1) patients because of increased risk of the resistance with other antivirals. Where antiviral drugs are available for treatment, clinicians should make decisions based on assessment of the individual patient's risk. Risks versus benefits should also be evaluated on a case-by-case basis.

Such guidance may be updated as the situation evolves. For the most up-to-date guidance on the checklist and other documents, refer to the WHO web site (www.who.int) or contact your WHO country office.

GLOSSARY OF SELECTED CHECKLIST TERMS

Clean hands: Hands can be cleaned either by handwashing with soap and water or by handrubbing with an alcohol-based handrub formulation. The preferred technique while caring for suspected or confirmed cases of new influenza A (H1N1) is handrubbing, unless hands are visibly soiled. Hands must be cleaned at five key moments: 1) before touching a patient; 2) before clean/aseptic procedure; 3) after body fluid exposure risk; 4) after touching a patient; and 5) after touching patient surroundings.

Designated area (isolation room / cohort): The placing of patients either colonized or infected with the same pathogen in one designated area. It is specifically used when single or isolation rooms are not available. It allows for identified health-care workers to provide care to these specific patients with the aim of trying to prevent spread of infection to others. Patients with confirmed infection should ideally be in a separate cohort to those with suspected infection.

Cough etiquette: Health-care workers, patients and family members should cover mouth and nose (e.g. with a tissue) when coughing or sneezing. If a tissue is used, discard it in a bin with a lid and then clean hands. Cough etiquette should be communicated to patients through posters and leaflets.

Separate waiting area: Waiting area for symptomatic persons should be separate from general waiting area. This can be a separate part of the general waiting area as long as there is at least one metre (3.3 feet) distance between the designated area and the regular waiting area. Maintain at least one metre between symptomatic patients within this designated area.

Eye protection: This can either be an eye visor, goggles, or a face shield. Conventional eye glasses are not designed to protect against splashes to eye mucosa and should not be used as eye protection.

Flu-like symptoms: Fever, cough, headache, muscle and joint pain, sore throat, runny nose, and sometimes vomiting and diarrhoea.

Gown: A clean, non-sterile long-sleeved gown.

Infection control guidance to patient/caregiver on discharge: If patient still symptomatic or if patient less than one year old (Patients less than one year old may continue to be infectious for three weeks after cessation of symptoms):
- Patient quarantined: the sick person should be placed in a separate room and should have limited social contact.
- Instruction on cough etiquette.
- All persons in the household should perform hand hygiene frequently and after every contact with the sick person.
- The caregiver should wear the best available protection to prevent exposure to respiratory secretions, and avoid contact with body fluids or contaminated items; minimize close (less than 1 metre) and face-to-face contact with the patient; perform hand hygiene when indicated.

Medical/surgical masks: Procedure or surgical masks to protect the wearer's nose and mouth from inadvertent exposures (e.g. splashes).

Particulate respirator: A special type of fit-tested mask with the capacity to filter particles to protect against inhaling infectious aerosols (e.g. EU FFP2 and US NIOSH-certified N95).

Respiratory hygiene: See cough etiquette

#RESPIRATORY RATE
(reference for high values):

AGE	RESPIRATORY RATE
<2 months	≥60/minute
2–11 months	≥50/minute
1–5 years	≥40/minute
>5–12 years	≥30/minute
≥13 years	≥20/minute

CHECKLIST DEVELOPMENT PROCESS

In response to the pandemic threat by a new influenza A (H1N1) strain, the checklist development process began on 30 April 2009. The checklist development group in the WHO Patient Safety Programme collaborated with technical experts in WHO Health Security and Environment. They consulted experts in three areas: i) infection control, ii) clinical management of pandemic-prone Influenza, and iii) health care checklists. The design and content of the checklist were developed iteratively through successive rounds of consultation. Clinical teams in a number of settings tested its clarity and usability. Its use in clinical practice will be the subject of ongoing evaluation.

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

54

Northumberland, Tyne and Wear NHS
NHS Foundation Trust

PANDEMIC STRUCTURE – FLOWCH

```
                    BOARD OF DIRECTORS

                    PATIENT SAFETY GROUP

                    STRATEGIC EMERGENCY
                    PREPAREDNESS RESILIENCE
                    AND RESPONSE GROUP

        SoT ──────→ FLU CONTROL TEAM ←────── NoT

DIRECTORS           CORPORATE WORKSTREAMS          DIRECTORS

Locality Sub    Finance | Supplies | IPC | Estates | Facilities | Clinical Management | Pharmacy | IT | HR | MHA | Comms    Locality Sub
Group                                                                                                                       Group
```

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

55

Guidance is subject to continual change. Please ensure that all earlier versions are destroyed.
This version is dated April 2015

57