

GUY'S AND ST THOMAS'
EMERGENCY PREPAREDNESS
PLANS

PART 6

LOCAL PANDEMIC
INFLUENZA
PREPAREDNESS PLAN
VERSION 4.1

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PART 1

Strategic Overview

This document describes the Trusts strategic and operational approach to and preparations for an influenza pandemic. It provides general information on the likely impact and sets out the key assumptions provided by the Department of Health for planning purposes. It also provides the operational guidance necessary for individual Clinical Divisions, Clinical Directorates, Specialities and Corporate Directorates and departments to plan their individual response within the overall arrangements outlined in this plan.

Aim

The aim of this document is to provide both general and specific guidance to managers and staff and to support the integrated approach with other organisations necessary for the Trust to achieve its operational goals during a pandemic.

Background

A pandemic is the worldwide spread of a disease, with outbreaks or epidemics occurring in many countries and in most regions in the world. The principle influenza pandemics of the last century were in 1918/19, 1957/58 and 1968/69. There is little doubt that there will be another influenza pandemic, it is just a matter of time. There remain concerns about the potential of avian flu (bird flu) spreading to humans and creating the conditions through re-assortment or mutation whereby the virus becomes easily transmissible between humans and a pandemic occurs. Recent outbreaks of Swine Flu AH1N1 virus during the early part of 2009 has resulted in a first wave of pandemic and it is anticipated that a second wave will occur in the later part of 2009. It is also thought that Swine Flu AH1N1 might become the dominant seasonal flu strain in future years.

The World Health Organisation (WHO) defines (2005) three periods of a pandemic: the inter-pandemic period, the pandemic alert phase and the pandemic period. We are currently in the phase 6 of the pandemic alert phase. The WHO in (May 2005) recommended that steps should be taken to complete pandemic preparatory actions in all countries.

In April 2009 the Governments of Mexico and USA reported a sudden occurrence of large numbers of H1N1 influenza patients. This strain of influenza subsequently identified as Swine Flu spread rapidly and the WHO raised the Alert level from 3 to 4 on 27 April 2009 and from Alert level 4 to 5 on 29 April 2009. On 11 June 2009 the WHO raised the Alert level from 5 to 6 and declared an Influenza Pandemic.

The trust Pandemic Influenza Plan is based on a number of source documents:

This plan is drawn from a wide range of documents covering a variety of issues important in the local preparation for pandemic influenza at Guy's and St. Thomas' NHS Foundation Trust. The content is subject to change as planning assumptions may turn out to be different from the actual situation and specific guidance may replace provisional guidance as the pandemic evolves. As such, the document should be considered as "living" and must be reviewed regularly. The first version of this document was published in November 2005 and a second version in April 2007. This current document is version 4. This plan is in line with the pandemic influenza plans from the Health Protection Agency (February 2005), the UK Health Departments (March 2005, October 2005, November 2006), the Department of Health operational guidance for health service planners (May 2005), London Mass Fatality plan (March 2007), Planning for a Possible Influenza Pandemic – A Framework for Planners Preparing to Manage Deaths (August 2007), National framework for responding to an influenza pandemic (November 2007), Ethical framework for policy and planning (November 2007), Surge capacity and prioritisation in health services (April 2009), Guidance for

infection control in hospitals and primary care settings (November 2007) and Pandemic flu guidance for funeral directors (January 2008) and the Cabinet Office/DH Planning Assumptions on Swine Flu dated 03 September 2009.

Scope

The arrangements in this plan describe the response necessary to deal with a declared influenza pandemic and not for a specific response to seasonal influenza or any isolated outbreaks of avian/swine influenza (H5N1 or H1N1) or any other influenza virus infection in birds or human. Response to these events is covered by the current associated plans for dealing with "Winter Pressures" using the Inpatient Services Winter Planning document and the Trust Infection Control Plan for dealing with isolated outbreaks of infection.

This plan outlines in each section the specific arrangements for those specialities that need individual arrangements and cover A&E, Mortuary, Management of the Trust, bed management and patient movement, etc.

The plan also outlines the clinical arrangements for referral from primary care and the management of cases within the Trust. An outline of the referral protocol from primary care is also included in this plan.

Legal Framework

Public health powers in the UK are provided by the Public Health (Control of Disease) Act 1984, the National Health Services Act 1977 provides relevant powers such as the power to direct as to exercise of functions in Section 17 (Secretary of State's directions; exercise of functions and the power to provide a microbiological service in Section 5(2) (other services)).

Under the Civil Contingencies Act (2004) a range of provisions could become available if the situation causes or may cause amongst other things 'loss of human life, human illness or injury or disruption of services relating to health' (Section 19 (2) a, b, h,) in the event of a pandemic affecting the UK. These powers allow senior Ministers of the Crown to arrange by Order in Council to make emergency regulations where:

- An emergency has, is occurring, or is about to occur,
- It is necessary to make provision for the purpose of preventing, controlling or mitigating an aspect or effect of the emergency, and
- The need for such provision is urgent.

Amongst other things, those regulations may:

- prohibit or require, or enable the prohibition or requirement of, movement to or from a specific place,
- prohibit, or enable the prohibition of, assemblies of specified kinds, at specific places or at specific times,
- prohibit, or enable the prohibition of, travel at specified times,
- prohibit, or enable the prohibition of, other specified activities, and
- create an offence of failing to comply with a provision of the regulations or direction or order given under them or obstructing a person in the performance of a function under regulations.

N.B. For planning purposes, it is presumed that the government will rely on voluntary quarantine and other containment/control methods and is unlikely to invoke emergency or compulsory powers unless they become necessary, in which case the least restrictive measures will be applied first.

Organisational Arrangements

The Trust Medical Director is the Board level person responsible for all Trust planning arrangements for Emergency Planning which includes planning for an Influenza Pandemic and chairs the Pandemic Policy Working Group, although this is normally delegated to the Consultant in Infectious Diseases leading on Pandemic influenza as specialist clinical lead within the Trust for this topic. Operational response to an Influenza Pandemic is lead by the Chief Nurse/Chief Operating Officer who chairs the Pandemic Operational Management Group and is the trust Designated Flu Lead Director.

The detailed planning arrangements are managed within the Trust by the Pandemic Policy Working Group which reports the Emergency Planning Working Group who in turn reports to the Clinical Governance & Risk Management Committee, the Trust Management Executive Group (quarterly) and the Board Assurance & Risk Committee. The deputy chair (Consultant in Infectious Diseases) of the Pandemic Policy Working Group is responsible for the updating of the trust pandemic plan, supported by the trust emergency planning team.

Exercises

The trust will exercise the GSTFT Local Pandemic Influenza Preparedness Plan by use of a table top exercise and by a multi agency command post exercise annually. The results/lessons learnt from these exercises will be incorporated into the latest version of the plan. Reports on the exercise are sent to the Pandemic Policy Working Group and the Emergency Planning Working Group.

A list of exercises and a reference to the appropriate reports are shown in Section 6 and will be updated with each version of the plan issued. This section identifies where lessons learnt have been incorporated into the main plan.

Business Continuity

The trust Business Continuity Policy version 3 provides guidance on managing critical services during a period of unusual pressures or interruptions to service supply. The Capital Estates & Facilities Plan which covers all essential services provides guidance for the management of these facilities.

Individual Clinical Divisional continuity plans are contained in this document as separate sections (Clinical Divisional plans – section 20, 21 & 22, Laboratory Preparedness – Section 25, etc.)

Pandemic Committees

The trust has two internal committees managing the response to pandemic flu and trust representatives sit on a number of external committees:

Pandemic Policy Working Group – TORs and membership see Section 7.
Pandemic Staffing Sub-Group - TORs and membership see Section 7

The trust has representatives attending a number of external committees:

NHS London Influenza Steering Group – Consultant in Infectious Diseases/Deputy Chair Trust
Pandemic Policy Working Group
Trust Emergency Planning lead
NHS London Acute Working Group - Trust Emergency Planning Lead - Chair
Lambeth & Southwark PCTs – Joint IPC - Consultant in Infectious Diseases/Deputy Chair Trust
Pandemic Policy Working Group
Trust Emergency Planning lead

Section 1 Planning Assumptions

Pandemic potential

There were three pandemics in the 20th century; in 1918, 1957, and 1968. The emergence of another pandemic is unpredictable but the probability is considered sufficiently high to warrant detailed planning. With the advent of the recent and on going declared pandemic involving H1N1 virus it is essential that the trust is prepared for any eventuality.

Place of emergence

The location from which the next pandemic will emerge is unknown although South America has been the source of the current AH1N1 outbreak whilst H5N1 Avian virus still continues to be present in South East Asia and if this becomes the next pandemic then is likely to emanate from there.

Time of onset

The pandemic may not follow the normal seasonal winter pattern of inter-pandemic influenza; the current pandemic began in South America and arrived in the UK in May 09.

Point of entry into the UK

This may be through multiple locations either directly from the pandemic source country or via intermediate countries in Europe or elsewhere.

Length of first wave

Approximately 15 weeks, depending on seasonal timing of first wave activity, this may be slightly reduced in large urban conurbations (London, Manchester, etc) to 8 to 10 weeks.

Mode of transmission

Droplet transmission (>5 mm) occurs

Airborne or aerosol transmission (<5 mm particle size) occurs

The usual route of transmission is through contact with live virus particles on surfaces and then transmission to exposed area of mucous membranes (nose, mouth, eyes, etc.).

Environmental factors

Virus survival is considerably enhanced in conditions of cold temperature and low relative humidity.

Incubation period

One to three days, typically two.

Period of communicability

People are highly infectious from the onset of symptoms for 4-5 days (longer in children and people who are immunocompromised). People are likely to be infectious just before the onset of symptoms. Children have been shown to shed virus for longer (and at higher levels) than adults.

Likely R_0 in UK setting

Without intervention, and with no significant immunity in the population, the historical evidence suggests one person infects on average about 1.4 to 1.8 people (the R_0 or 'basic reproduction number'). This number is likely to be higher in closed communities.

UK Planning Assumptions

The planning assumptions produced by DH have been based on two distinct virus types and the details are contained in paragraphs below. For planning purposes the trust will plan for the worse case scenario or greatest potential risk and ensure that the graduated response makes appropriate allowance for a lower level of attack rate for other viruses.

Avian Flu Virus H5N1

-
- Up to 50% of the population may show clinical symptoms;
- Up to 25% of those with symptoms may develop complications;
- Up to 2.5% of those with symptoms may die;
- Up to 22% of flu cases can be expected during the “peak week” of a pandemic wave;
- Up to 28.5% of symptomatic patients will require assessment and treatment by a GP or suitably trained nurse;
- Up to 4% of symptomatic patients may require hospitalisation;
- Average length of stay with complications may be 6 days, 10 days if in ICU;
- Up to 25% of those symptomatic patients that warrant admission to hospital may require critical care.
- Up to 40% of staff could be absent either because they are ill or have to care for others (children, if schools, etc are closed).

Swine Flu Virus AH1N1

- Up to 30% of the population may show clinical symptoms (this may vary from 50% in children to less than 30% in older adults, and in the order of 15% in those over 65;
- The likely peak weekly attack rates are likely to be up to 6.5% of the population per week nationally and locally between 4.5% - 8% of the population per week.
- Up to 15% of those with symptoms may develop complications;
- Up to 0.1% of those with symptoms may die;
- Up to 28.5% of symptomatic patients will require assessment and treatment by a GP or suitably trained nurse;
- Up to 1% of symptomatic patients may require hospitalisation;
- Average length of stay with complications may be 6 days, 10 days if in ICU;
- Up to 25% of those symptomatic patients that warrant admission to hospital may require critical care.
- Up to 27% of staff could be absent either because they are ill or have to care for others (children, if schools, etc are closed) – 12% through illness in the peak weeks and a possible further 15% due to carer responsibilities.

Health Care Demand

Demand for hospital admission can be expected to increase to 440 new cases/100,000 population per week at the peak and demand for critical care beds could rise to 110 per 100,000 population per week at the peak (given a 50% clinical attack rate, and would exceed available capacity).

Staff absence

With Avian Flu (H5N1) there is a possibility that up to 40% of workforce may require time off at some stage over the entire period of the pandemic, with individuals absent for 7 – 10 working days. This ratio is likely to be lower if the pandemic remains the current H1N1 outbreak where the level is likely to be approximately 12% absence. Staff absence profile should follow the pandemic profile with an expectation that it will build to a peak lasting 2 - 3 weeks, when 12 – 15% of staff may be absent, and then decline. Small organisation (5 – 15 staff) or small teams within larger organisational units are likely to suffer higher percentage of staff absence, up to 30-35% over 2 -3 weeks at the local peak.

Time to availability of vaccine

Even with advance work to improve our preparedness for vaccine production, the lead time before a new vaccine becomes available in quantity is likely to be at least 2 to 3 months.

Supply of vaccine

In the short term, production capacity and delivery of the vaccine in the UK may be limited; therefore a priority list of those considered for early receipt of vaccines will be published by DH. A copy of the priority list for vaccination is contained in Appendix 1 to this section.

Number of doses of vaccine required

For novel subtypes (e.g. H5N1, H1N1) in completely unprimed populations a single dose of vaccine is likely to provide complete protection.

Effectiveness of neuraminidase inhibitors

Prophylaxis: the amount of antiviral drug required if it were to be taken to prevent people getting the disease over the entire pandemic period is prohibitive and a treatment strategy is the only realistic option, other than in some very specific circumstances.

Treatment: Likely to be effective in shortening illness, lessening morbidity and reducing hospital admissions if given within 48 hours after onset of symptoms (shortens average illness period by one day). Limited data from epidemic influenza suggests treatment to have an efficacy of around 50% for the prevention of severe outcomes if administered within 48 hours of symptom onset.

Sources:

HPA Influenza pandemic contingency plan version 7.0 February 2005 page 18-19. Modified using revised assumptions from UK Influenza Pandemic Contingency Plan October 2005 and National framework for responding to an influenza pandemic November 2007 (UK Health Departments).

Cabinet Office and Department of Health - Swine Flu UK Planning Assumptions – Issued 16 July 2009.

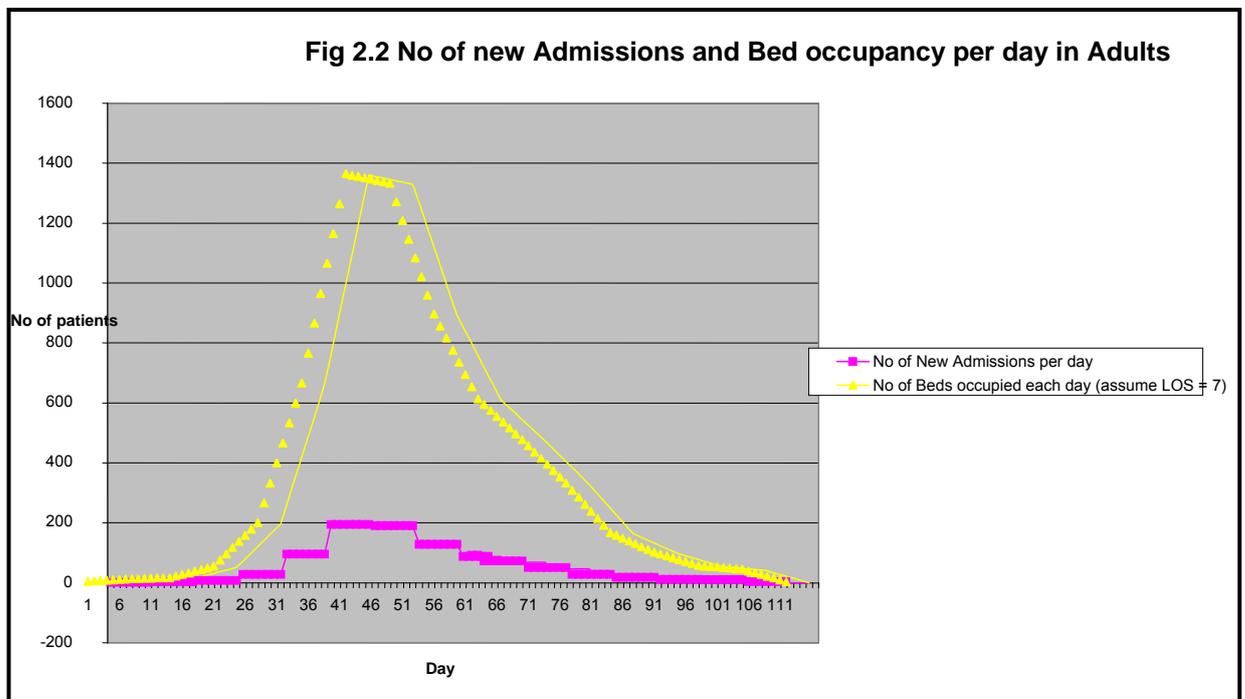
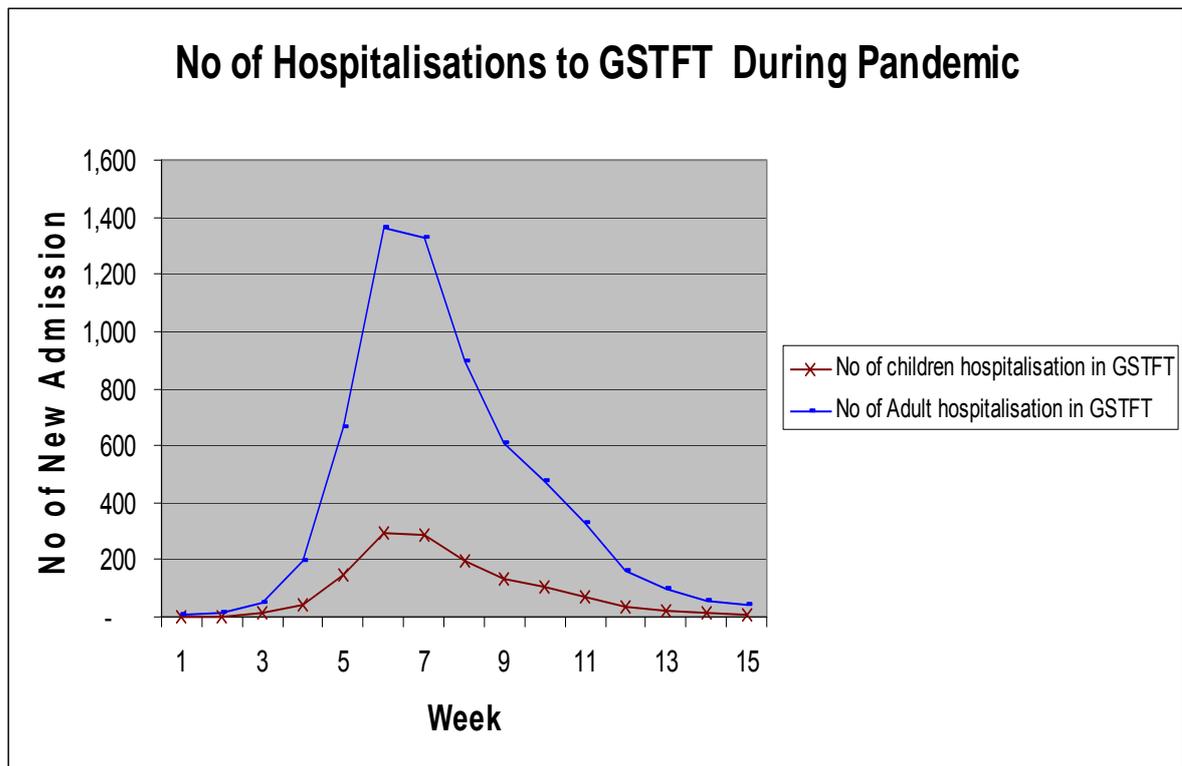
Section 2 Burden of illness

Table 2.1. No of hospitalisation to Guy's and St. Thomas' NHS Foundation Trust based on DH Planning Assumptions for Avian Flu (H5N1) (assuming same attack rate in all age groups)

Age	Population in Lambeth	Population in Southwark	GSTFT covers 60% of Lambeth + Southwark	No of Clinical cases (assume 50% attack rate)	Admission rate	Total no of admission during pandemic
Under 16	59,919	53,829	68,249	34,124	4.00%	1,365
16 - 65	258,658	209,588	280,948	140,474	4.00%	5,619
>65	30,000	25,610	33,366	16,683	4.00%	667
Total	348,577	289,027	382,562	191,281		7,651

Week	Hospitalisations UK-wide	Percentage of pandemic	No of children hospitalisation in GSTFT	No of hospitalisation in GSTFT aged 16-65	No of hospitalisation in GSTFT aged in > 65	No of Adult hospitalisation in GSTFT
1	119	0.14%	2	8	1	9
2	169	0.20%	3	12	1	13
3	676	0.82%	11	46	5	51
4	2,575	3.12%	43	175	21	196
5	8,704	10.54%	144	592	70	663
6	17,871	21.65%	295	1,216	144	1,360
7	17,458	21.15%	289	1,188	141	1,329
8	11,733	14.21%	194	799	95	893
9	8,014	9.71%	133	545	65	610
10	6,223	7.54%	103	424	50	474
11	4,316	5.23%	71	294	35	329
12	2,149	2.60%	36	146	17	164
13	1,292	1.57%	21	88	10	98
14	711	0.86%	12	48	6	54
15	541	0.66%	9	37	4	41
Total	82,551	100.00%	1,365	5,619	667	6,286

Figure 2.1 Chart showing predicted number of patients requiring hospitalisation to GSTFT during influenza pandemic.



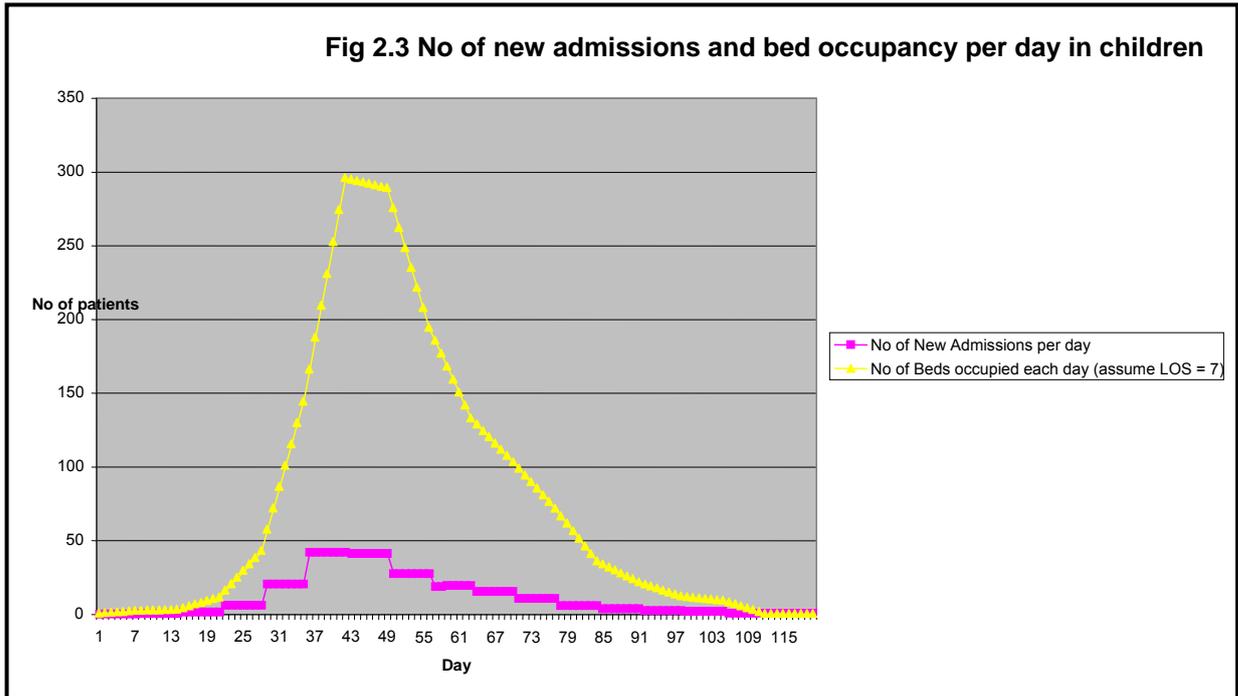


Table 2.2 : Range of possible excess deaths for various permutations of case-fatality rates and clinical attack rate based on UK population for Avian Flu (H5N1)

Case fatality rate	Clinical attack rate		
	25%	35%	50%
0.4%	55,500	77,700	111,000
1.00%	150,000	210,000	300,000
1.50%	225,000	315,000	450,000
2.50%	375,000	525,000	750,000

Figure 2.4 – Flu admissions for H1N1 Swine Flu based on population figures and attack rates of 5%, 15% and 30%.

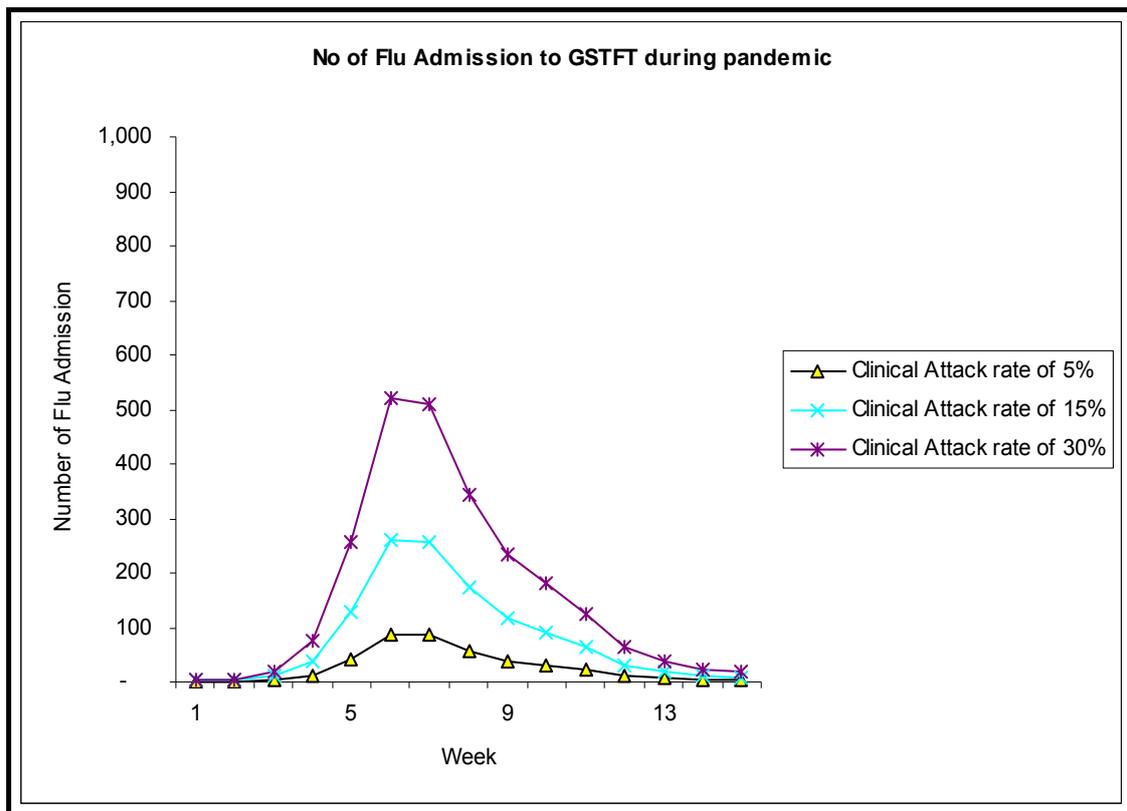


Table 2.3 -

No of admissions to GSTFT assuming a population of 400,000			
Week	Clinical Attack rate of 5%	Clinical Attack rate of 15%	Clinical Attack rate of 30%
1	1	2	4
2	1	3	5
3	4	10	20
4	13	38	75
5	43	128	255
6	87	260	519
7	85	255	509
8	58	172	344
9	39	117	233
10	30	90	180
11	21	63	125
12	11	32	63
13	7	20	39
14	4	11	22
15	3	9	17
Total	407	1,210	2,410

Figures based on 2% hospitalisation

Figure 2.5 Excess death rates for H1N1 Swine Flu from 0.35% - 2.5%

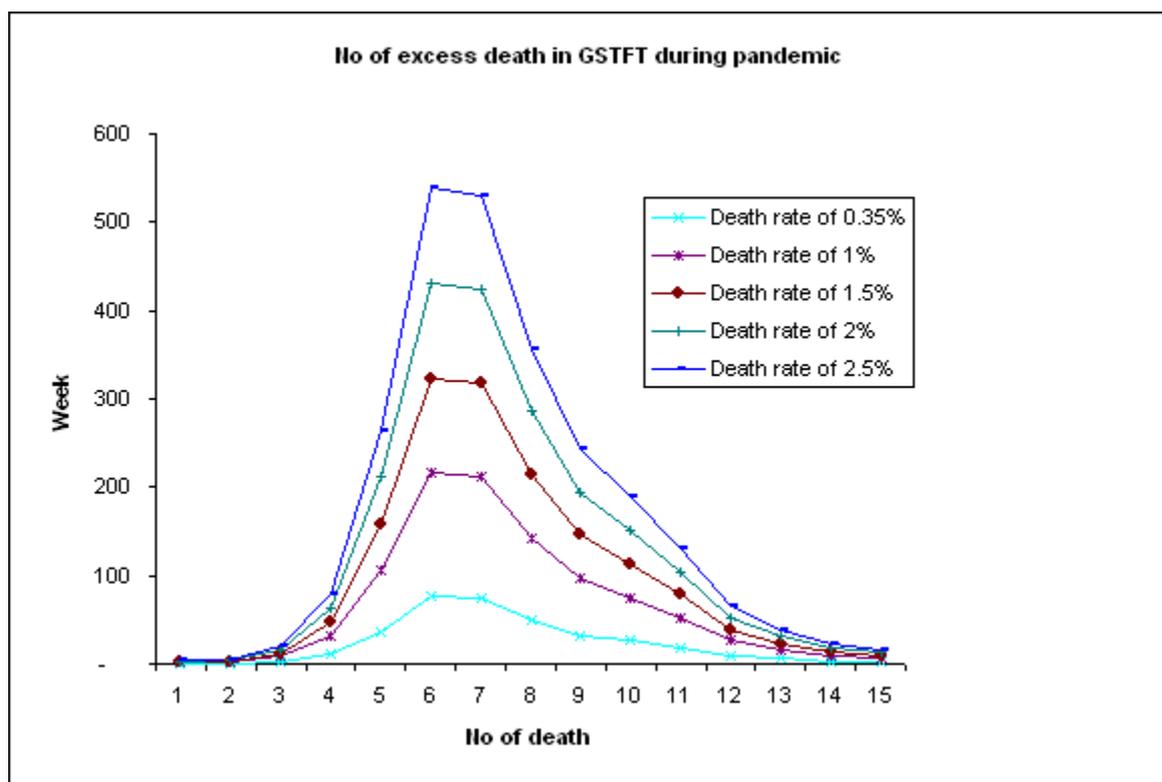


Table 2.4 -

No of death in GSTFT assuming a population of 400,000 and every death occurs in hospital				
Week	Case per 100,000	Cases per 400,000	Death rate of 0.35%	Death rate of 1%
1	36	144	1	1
2	51	204	1	2
3	205	820	3	8
4	780	3,120	11	31
5	2,638	10,552	37	106
6	5,388	21,552	76	216
7	5,290	21,160	74	212
8	3,568	14,272	49	143
9	2,428	9,712	32	97
10	1,886	7,544	27	75
11	1,308	5,232	19	52
12	651	2,604	10	26
13	392	1,568	6	16
14	216	864	3	9
15	164	656	2	7
Total	25,001	100,004	350	1,000

Table 2.5. No of hospitalisation to Guy's and St. Thomas' NHS Foundation Trust based on DH Planning Assumptions for Swine Flu (H1N1) (assuming same attack rate in all age groups)

Age	Population in Lambeth	Population in Southwark	GSTFT covers 60% of Lambeth + Southwark	No of Clinical cases (assume 30% attack rate)	Admission rate	Total no of admission during pandemic
Under 16	59,919	53,829	68,249	20,474	2.00%	410
16 - 65	258,658	209,588	280,948	84,284	2.00%	1,686
>65	30,000	25,610	33,366	10,009	2.00%	200
Total	348,577	289,027	382,562	114,769	1.00%	2,296

Week	Hospitalisations UK-wide	Percentage of pandemic	No of children hospitalisation in GSTFT	No of hospitalisation in GSTFT aged 16-65	No of hospitalisation in GSTFT aged in > 65	No of Adult hospitalisation in GSTFT
1	119	0.14%	1	2	0	2
2	169	0.20%	1	3	0	3
3	676	0.82%	3	14	2	16
4	2,575	3.12%	13	53	6	59
5	8,704	10.54%	43	178	21	199
6	17,871	21.65%	89	365	43	408
7	17,458	21.15%	87	357	42	399
8	11,733	14.21%	58	240	28	268
9	8,014	9.71%	40	164	19	183
10	6,223	7.54%	31	127	15	142
11	4,316	5.23%	21	88	11	99
12	2,149	2.60%	11	44	5	49
13	1,292	1.57%	6	27	3	30
14	711	0.86%	4	15	2	17
15	541	0.66%	3	11	1	12
Total	82,551	100.00%	411	1688	198	1886

Section 3 Trust Operational Plan

1. INTRODUCTION

The purpose of this document is to provide guidance and checklists to support the Trust in preparing the response to a flu pandemic.

The timing, extent and severity of a further pandemic remain uncertain, as influenza viruses undergo major change at unpredictable intervals. However, the World Health Organization (WHO) considers that the risk of pandemic influenza has increased over the last two years. This assessment is based on the emergence and continued circulation of highly pathogenic avian influenza (H5N1), and the recent emergence of the Swine Flu virus AH1N1.

A pandemic is likely to spread rapidly worldwide, and cause marked increase in illness over a matter of weeks. When the pandemic arrives it will impact on every aspect of health and social care for several months, and possibly years. Advance planning and preparedness are essential.

A flu pandemic will place increased demands on Trust services, both by increased illness in the population and from increased staff illness and absenteeism. The aims of flu pandemic planning are to:

- Reduce the impact of an influenza pandemic on the health of the population;
- Provide appropriate care to in-patients with influenza, and;
- Maintain essential core services.

Key services during a flu pandemic are:

- Management of flu pandemic patients
- Management of non-flu emergencies
- The provision of pre-identified essential clinical care, such as dialysis, cancer treatment, midwifery, etc.

The scale, severity of illness, and consequences caused by pandemic influenza generally exceed those of the most severe winter epidemics. It is unlikely that routine clinical services can manage their normal workload and also cope with the additional workload generated by flu pandemic. Modification to normal service delivery and the creation of additional, dedicated services specifically for flu pandemic will be needed. See Section 2 above for burden of illness.

The Trust will need to focus on maintaining core clinical emergency and essential services ('business continuity').

This flu pandemic operational plan proposed for the Trust will support the delivery of essential services in the community provided by the local primary care services and local borough social services which are linked to and are a key element of the Trust's response to a flu pandemic.

In addition, individual Directorates must have their own business and service continuity plans in place to maintain emergency and essential services during a flu pandemic.

National guidance for pandemic influenza continues to evolve. This Trust plan will be updated, as new guidance is made available from the Department of Health, the Health Protection Agency and the London Region Flu Planning Group.

A number of algorithms have been developed through work done in London to guide thinking on the implementation of a flu service. Disease burden and Health care demand is estimated based on figures in Tables 2 (Section 2).

2. ALERTING

The World Health Organisation has instituted an alerting system based on warning phases. This system is based on 6 levels shown in table 2 below. The WHO has declared Alert level 6 which is current at the time of publication of this plan.

Table 2

World Health Organisation alert phases of a flu pandemic outbreak.

NEW PHASES	OVERARCHING PUBLIC HEALTH GOALS
<p>Interpandemic period</p> <p>Phase 1. No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk^a of human infection or disease is considered to be low.</p> <p>Phase 2. No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk^a of human disease.</p>	<p>Strengthen influenza pandemic preparedness at the global, regional, national and subnational levels.</p> <p>Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.</p>
<p>Pandemic alert period</p> <p>Phase 3. Human infections^c with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.^b</p> <p>Phase 4. Small clusters^c with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.^b</p> <p>Phase 5. Larger clusters^c but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).</p>	<p>Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.</p> <p>Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.</p> <p>Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.</p>
<p>Pandemic period</p> <p>Phase 6. Pandemic: increased and sustained transmission in general population.^b</p>	<p>Minimize the impact of the pandemic.</p>
<p>^a The distinction between phase 1 and phase 2 is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction is based on various factors and their relative importance according to current scientific knowledge. Factors may include pathogenicity in animals and humans, occurrence in domesticated animals and livestock or only in wildlife, whether the virus is enzootic or epizootic, geographically localized or widespread, and/or other scientific parameters.</p> <p>^b The distinction between phase 3, phase 4 and phase 5 is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include rate of transmission, geographical location and spread, severity of illness, presence of genes from human strains (if derived from an animal strain), and/or other scientific parameters.</p>	

Source: WHO global influenza preparedness plan.

http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf

The Department of Health and the Health Protection Agency have also produced a 4 level Alert response system which comes into effect when the WHO Alert Phase 5 or 6 is reached. The DH alert phases are shown below in Table 3.

For UK purposes, should the UK have cases during the pre-pandemic period, the international (WHO) phases apply, once a pandemic has been declared (WHO – Phase 6), the 4 point UK specific alert mechanism applies, which is consistent with alert levels used in other UK infectious disease response plans. A move to a higher alert level may be triggered, after assessing the risk, if influenza due to a pandemic strain is affecting another country geographically close to the UK, although technically it is still ‘outside the UK’.

Table 3

Alert Level	Effects
Alert Level 1	Cases only outside the UK (in a country or countries with or without extensive UK travel/trade links)
Alert Level 2	New virus isolated in the UK
Alert Level 3	Outbreak(s) in the UK
Alert Level 4	Widespread activity across the UK

The assumption is that an influenza pandemic starts outside the UK and becomes established in one or more countries before reaching the UK. However, virus could newly emerge within the UK or be imported into the UK at an earlier (or even later) WHO phase. The UK alert levels would then apply at the earlier (or later) phase. A move to a higher alert level may be triggered, after assessing the risk, if influenza due to a pandemic strain is affecting another country geographically close to the UK, although technically it is still ‘outside the UK’.

Source: UK Health Departments. *UK influenza pandemic contingency plan March 2005 Section 3.2 Page 17*

3. TRUST ESCALATION POLICY

Note: This escalation policy is an action guide and will need to be applied flexibly to allow the trust to respond at a slower or faster rate depending on the rate of development of the current and any future pandemic.

3.1 Currently the Trust response is based on an escalation scenario system comprised of 4 distinct steps which are outlined in Annex A to this Section. The scenarios are linked to potential activity and staff reductions once WHO alert phase 5 and/or 6 has been reached.

3.2 To support the Trust response to this escalating scenario an Operational Management Group (Annex B) will meet twice a day (09.30 – 10.30 & 16.00 – 16.45) to assess the impact of the pandemic on Trust operational capability and agree the appropriate response by modifying elective activity, re-directing resources internally and managing which services continue at normal levels, which services continue to operate but at reduced or modified levels and which services are temporarily discontinued. This operational group will meet in Gassiot House and will be supported by administrative staff drawn from the Clinical Divisional Management teams or administrative staff drawn from the corporate teams based in Gassiot House.

3.3 The Operational Management Group will be supported, if required by a Command & Control Team which will operate from the Major Incident Command & Control Centre (KIC), although this will only operate for a limited time twice daily (09.00 – 11.00 & 15.00 – 17.00). An agreed communication and information strategy between other local organisations (PCTs, Metropolitan Police, Local Boroughs, London Fire Brigade, etc.) will

be established at this time so appropriate operational information can be transmitted as required. Outside of these hours communication on pandemic flu issues will be via the SNP 24/7 response e mail address :SiteNursePractitioners@gstt.nhs.uk

- 3.4 The Command & Control Centre will commence twice daily operation once the Operational Management Group decides there is a requirement. The Operational Management Group will only meet three times per week at the early level. However, once the pandemic status has necessitated scenario 2 level actions the Operational Management Group will commence meeting on a twice daily basis.
- 3.5 At the declaration of a WHO Pandemic Alert (Level 6) and Trust Scenario 1 (Annex A), the Trust will activate the Pandemic Admission and Discharge Policy. At scenario 2 (Annex A) the Operational Management Group will consider the implementing the individual Divisional Response Plans and at this point could authorise the reduction of or cancellation of some or all elective activity and out patient activity, depending upon the pace of development and impact of the pandemic outbreak.
- 3.6 At scenario 3 (Annex A) unless already completed at scenario 2 all theatre activity should be reduced to emergency admissions only. All ventilators stocks freed up by this reduced activity should be redeployed to the wards that have been identified to support flu patients (as outlined in the Trust's Pandemic Admission and Discharge Policy). Unless already completed at scenario 2 the Clinical Divisional Response Plans should be fully implemented, Trust activity reduced to identified core activities only and non clinical staff allocated to supporting roles. HR, Communications Team and Occupational Health to activate appropriate pandemic arrangements. In the event of the pandemic developing an disease impact whereby there is an increased demand for critical care beds whilst overall numbers of flu patients remains low, the Operational Management Group will need to decide on what theatre activity to continue as the trust's critical care bed expansion plans will require utilisation of OIR facilities. The current disease profile for Swine Flu indicates that this might be an issue during the peak of the pandemic.
- 3.7 The three clinical Divisions and the Corporate Directorates should carry out the following actions as soon as possible and no later than Scenario 1.

Action points for divisions based on the scenarios:

- Identify list of staff who live locally or who can come in to work without public transport (e.g. drive or walk to work)
- Identify skill mix of staff to allow re-deployment if necessary
- Establish a system to identify staff who became ill with influenza and those who have recovered (and therefore immune) who can be redeployed easily.

4. TRUST SUPPORTING ACTIONS

- 4.1 At WHO Alert level 5 the staff advisory brochure to be issued to all members of staff.
- 4.2 At WHO Alert level 5 Directorates and Divisions to finalising the updating of staffing records to include home location, if the individual is able to walk into work or get to work without the need for public transport, etc., see above.
- 4.3 At trust scenario 1 activate the trust Pandemic Flu Communications Plan
- 4.4 At trust scenario 1 commence upward reporting of trust status and readiness (UNIFY, SITREP and PCT weekly report), the communications team commence reporting deaths to NHS London using the special template provided.

- 4.5 At trust scenario 2 the Trust Operational Control Team to consider the need to institute a partial trust lockdown to prevent inappropriate ingress to trust property by members of the public or media.
- 4.6 At trust scenario 3, full lock down should be considered to manage entry to the trust. Patients may be limited to one visitor at a time and this will be controlled through the main trust entrance.
- 4.7 At trust scenario 3 the trust car park will be restricted to trust staff only and will be free of charge. Provision for disabled or elderly patients visiting the trust will be made on a case by case arrangement.
- 4.8 The trust CE, Medical Director or Chief Nurse/Chief Operating Officer can initiate activation of the trust response at WHO Alert level 5 in advance of the declaration of WHO Alert Level 6 (full pandemic) if it is considered operationally expedient to commence preliminary actions before the pandemic has actually reached the UK. If the spread outside the UK is perceived as particularly rapid this may require earlier activation of the trust response as the initial phases in the UK may be of extremely short duration.

5.0 Reporting

- 5.1 The trust is required to complete regular reports to external agencies. The table below outlines the various reports and the departments responsible for compiling the reports.

Who Reports	What is Reported	How is it reported	To Whom	When
Attendance & Admissions				
Site Nurse Practitioners	Activity and Attendances	UNIFY	NHS London	Daily
A&E Admin Team	A&E Attendances & Admissions	UNIFY	PCT	Weekly/ daily during Winter months
PICU Admin Team	PICU Cases		CATS> NHS London	Daily
Deaths				
Communications Team	Deaths	NHS London form UNIFY FluCon	NHS London	As occurs
Medical Directors Office	Deaths	Pre prepared form	CMO	As occurs
Trust Flu Status				
Emergency Planning Team – Command & Control Centre	Trust Flu Status	Flu Con Report	NHS London	Daily at 11.00 hours
As above	Critical Care Capacity	Crit Con included in Flu Con report	NHS London	Daily at 11.00 hours
As above	A & E Capacity	A & E Con included in Flu Con report	NHS London	Daily at 11.00 hours
Workforce				
HR Flu Response Team	Staff Status (Absence)	DH Workforce Return	NHS London	Weekly

6.0 Recovery

6.1 The Trust Operational Management Team will commence consideration of the requirements for post pandemic recovery. This will either be to a normal state (pre pandemic) or a preparatory state for a further pandemic wave, depending on advice and guidance from DH/HPA.

6.2 The Operational Management Team will consider the following issues as part of the daily meetings:

- Increased amount of patients including an increased amount of patients whose existing illnesses have been exacerbated by influenza (both physical and mental health) and patients who may have developed medium- or long-term health complications due to the pandemic
- Increased amount of deaths during as well as post-pandemic
- Backlog of work due to postponement of treatment for less urgent conditions
- Reduced availability of staff (absence / death)
- Loss of skill / experience
- Uncertainty, fear and anxiety
- Public displacement and disorder in hospitals
- New vulnerable groups
- Breakdown of community support mechanisms for effective discharges
- Disruption to daily life (e.g. educational establishments, welfare services, transport system) and its impact on staffing availability
- Disruption to utilities / essential services
- Disruption to internal / IT services
- Disruption to communication services
- Built up of infected waste and pollution
- Contaminated areas
- Disruption to supplies (incl. suppliers, partners, contractors, commissioners and other partners)
- Management of finances
- Stopping and starting targets as agreed with NHS London
- Change in competitive position
- Possible reputation damage
- Organisational fatigue

6.3 The Operational Management Team will consider re activation of normal services dependent on the following factors:

- The severity of the pandemic, which will have driven the decision making process over the services that have been reduced or cancelled.
- Which services have been most impacted on by the pandemic and are considered highest priority to be recovered first.
- Availability of staff, particularly specialist staff.
- Whether there is another wave predicted or if there is no indication of a further wave.

6.4 The detailed recovery plan is contained in Part 5 of this plan.

Annex A

GSTT Four Scenario Response

Scenario 1: Baseline (current situation) – Infection Outbreak Action Plan

< 10 suspected case per week admitted for investigation

Patients attend via A&E

Patient admitted to negative pressure rooms in Hillyers or William Gull

No excess death

Estimated staff absenteeism: 4% to 6% (baseline)

Scenario 2: Early pandemic (Week 2-3 of pandemic) – Normal Winter Pressures Plan – “if required” Stop non clinically urgent elective activity, move to core activity only.

15 – 50 suspected cases per week admitted for investigation

Flu Assessment Centre activated

Negative pressure rooms started to fill up – Use Albert Ward

Up to 15 flu patients requiring critical care

Increase in excess deaths

Estimated staff absenteeism: 8% to 10%

Recommend to the Operational Assessment Group the cancellation of all elective and OP activity

Scenario 3: Escalated pandemic (Week 4-5 of pandemic) – Activate cohorting wards.

Up to 200 to 600 patients admitted with influenza per week

Negative pressure rooms overwhelmed

Patients cohorted in influenza wards – starting on Hillyers Ward, then cohorting in NW Floors – William Gull Ward, Albert Ward & Victoria Ward, Sarah Swift & Doulton Wards and Stephen Ward and Beckett Ward

50 - 150 flu patients requiring critical care

Up to 160 excess deaths over the two week period

Estimated staff absenteeism: 10% to 20%

Scenario 4: Peak of pandemic (Week 6-7) – Activate critical core activity only plan

In excess of 800 patients admitted with influenza per week (weeks 6 & 7)

Cohorting influenza wards required across whole trust

Whole of NW used for flu patients, other facilities may also be used

300 + excess deaths over a two week period

Estimated staff absenteeism: Between 15% to 40%

The sequence of response is predicated on the alert state, see diagram in the next page:

WHO Alert
Level 6
Declared

UK Alert
State 2
Declared

Trust Scenario 1
activated

Trust Command & Control
Group commence twice
daily meeting to
communicate with other
agencies

Trust Operational Management
Group commences to meet on
agreed frequency not less than
twice weekly basis (this may be
increased if necessary)

Infection Outbreak Action Plan
implemented.
Commence upward reporting
on Trust Status.

UK Alert
State 3
Declared

Trust Scenario 2
activated

Trust Command & Control
Group continues to meet
twice daily to
communicate with other
agencies

Trust Operational Management
Group meets on twice daily basis

This may be reduced at this stage
to once daily if appropriate.

Trust's Pandemic Admission and
Discharge Policy activated.
Divisional Plans activated.
Elective activity
reduced/cancelled.
(These actions may take place at
this stage if appropriate).
Implement Trust Communications
Plan.
Extra wards for cohorting patients

UK Alert
State 4
Declared

Trust Scenario 3 activated
Patient hospitalisation figures between
200 and 600 per week.

Trust Command & Control
Group meets twice daily
to communicate with other
agencies

Trust Operational Management
Group meets on twice daily basis

If not already done:
Divisional Plans activated.
Elective & OP activity cancelled.
Start re-distribution of equipment.
Critical Clinical Core functions
only.
Expand CCU to maximum size
(211 beds)

UK Alert
State 4
Continued

Trust Scenario 4 activated
Patient hospitalisation figures at upper end
of worst case in excess of 1300 per week.

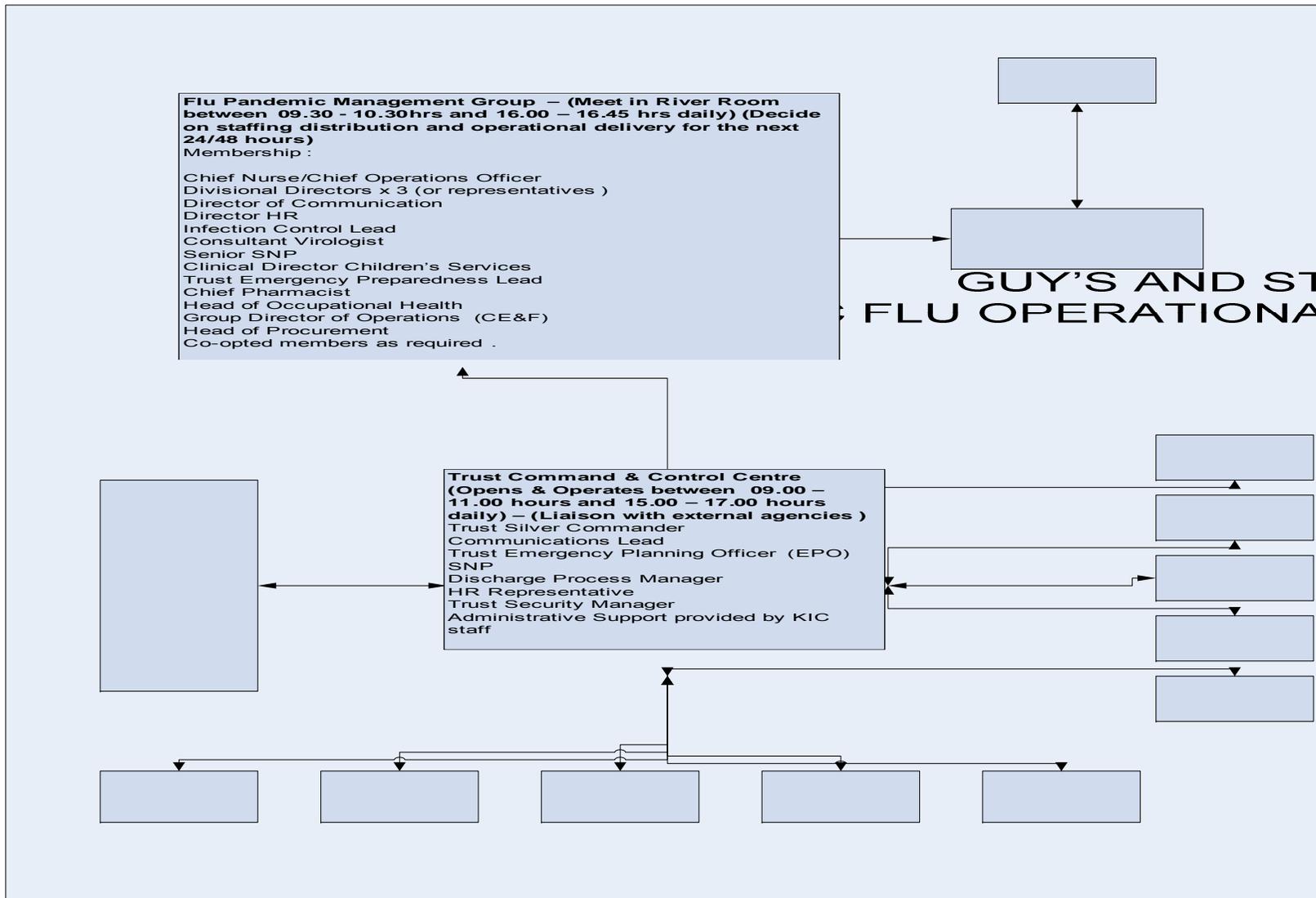
Trust Command & Control
Group meets twice daily
to communicate with other
agencies

Trust Operational Management
Group meets on twice daily basis

Commence planning for recovery
and re-introduction of normal
working.

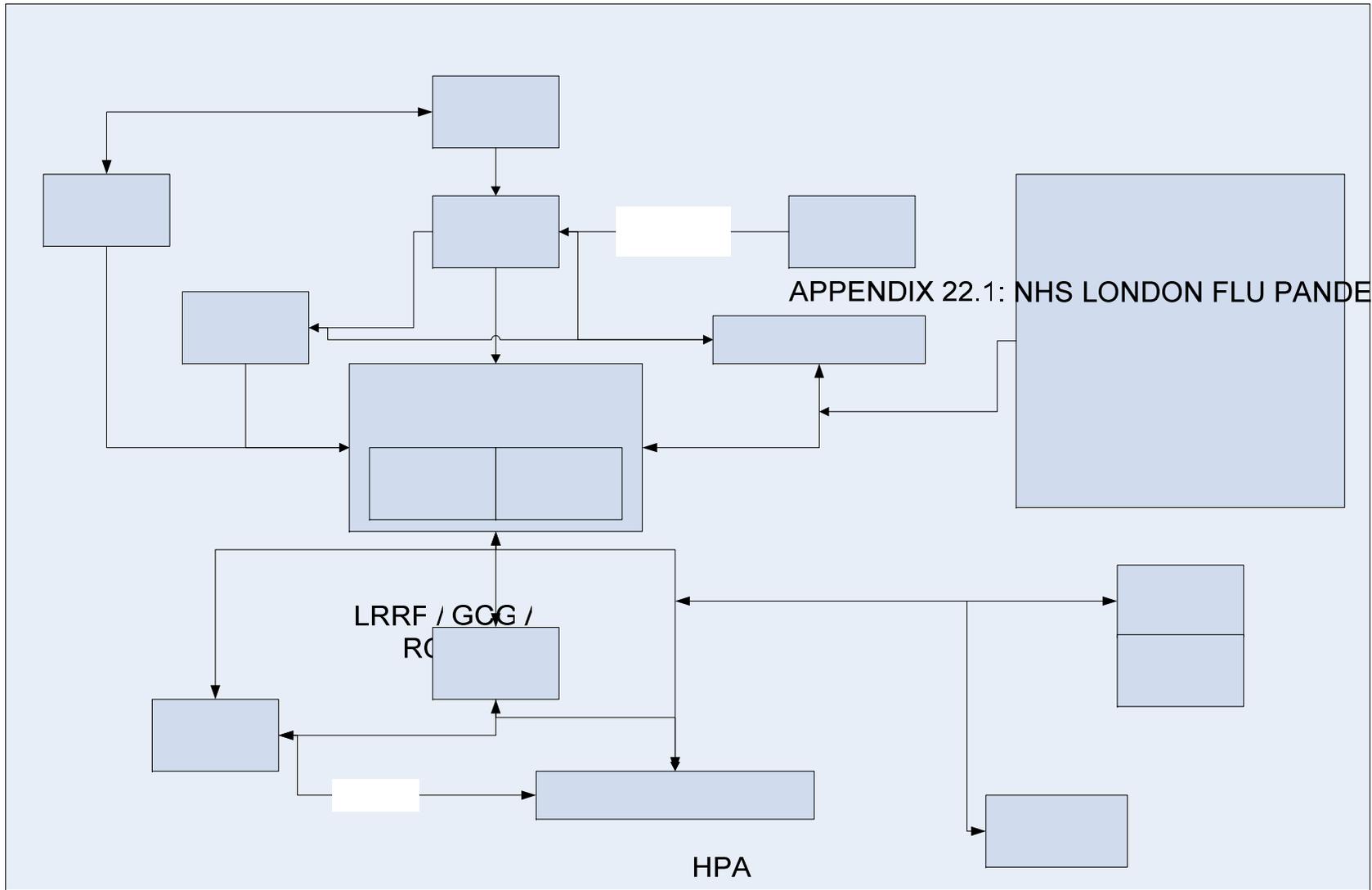
Sustain Critical Core functions
only.
Staff resources re-allocated as
necessary
Manage clinical delivery and
allocation of clinical and
equipment resources.

GSTT Operational Control Structure



GUY'S AND ST THOMAS' HOSPITAL
FLU OPERATIONAL CONTROL

Section 4 NHS London Command and Control Diagram



Section 5 Role, Responsibility and Contact Details

This section outlines the roles and responsibilities both within the Trust and for those organisations contributing to the pandemic influenza response in the Central London and South East London Sectors. Relevant contact details are also provided.

Internal

Structure

For information it should be noted that the Trust has the following Group / Committee Structure in place for developing a Pandemic Policy within the wider Emergency Planning and Resilience agenda:

- Pandemic Policy Working Group (Chair: Dr E Baker, Medical Director; Deputy Chair Dr. William Newsholme, Consultant in Infectious Diseases), reporting to:
- Emergency Planning Working Group (Chair: Dr. E Baker, Medical Director)

The membership of the Pandemic Policy Group is made up as follows:

- Medical Director (Chair)
- Consultant in Infectious Diseases for Pandemic Influenza (Deputy Chair)
- Emergency Planning Representative
- Consultant Virologist
- A&E Representative
- ICU Representative
- Site Nurse Practitioner
- Infection Control Team Representative
- Clinical Directorate Representatives (x3)
- Occupational Health Representative
- Communications Representative
- Estates & Facilities Representative
- Children's Services Representative
- Women's Service Representative
- Workforce (HR) Representative
- Security Representative
- Pharmacy Representative
- Mortuary Representative
- Staff side Representative
- Emergency Planning Lead Lambeth PCT
- Public Health Consultant Lambeth PCT

External

Lambeth PCT Influenza Pandemic Committee (IPC) – Membership and terms of reference

The Lambeth PCT IPC membership and Terms of Reference are outlined below. Subgroups might be needed to look at specific issues such as vaccines, use of anti-virals and communications.

Lambeth & Southwark PCTs – Joint IPC Membership:

- Director of Public Health NHS Lambeth & NHS Southwark (PCTs)
- Representative from the local Acute Trust (e.g. Consultant in Infectious Diseases, Infection Control Nurse, Microbiologist, EP Lead, etc.)
- Local authority representative
- PCT Operational Managers
- Consultant in Communicable Disease Control
- Health Protection Nurse
- Administrative support
- PCT Communications Lead
- Co-opted members as deemed necessary
- Patient and voluntary sector representatives
- Police Service
- LAS representative

NHS Lambeth & NHS Southwark (PCTs) - Joint IPC terms of reference

- To provide leadership for the health and social care economy in dealing with the local implications of an influenza pandemic;
- To communicate effectively within the borough
- To interpret and act upon national and regional guidance on the influenza pandemic;
- To make decisions about deployment of local resources, including restricting or withdrawing the usual standard of services in order to minimise the overall loss of life in the population at large during the epidemic;
- To maintain essential public services wherever possible (e.g. to work collaboratively with local businesses and others such as the armed forces);
- To encourage community cohesiveness, resilience and self-help;
- To ensure that full normal services are resumed as soon as possible.

The South East London Health Protection Unit

The South East London Health Protection Unit (SELHPU) provides specialist advice and operational support to the South East London SHA, PCTs, Local Authorities and other organisations whose formal responsibilities include preparing for, and responding to, influenza pandemic.

This will include:

- Working with local organisations on pandemic planning
- Confirming local diagnostic facilities for Influenza
- Communicating with professional colleagues in primary care and acute trusts
- Assisting with co-ordination of control measures including the use of anti-virals and vaccine
- Gathering local epidemiological information.

The following specialist divisions within the national Health Protection Agency support the SELHPU:

- Local and Regional Services Division, specifically HPA-London
- Centre for Infections
- Centre for Emergency Preparedness and Response
- Communications Division
- Action list for SEL HPU

Key actions for the SEL HPU are:

Inter pandemic and pandemic alert periods - planning and preparation

- Agree membership and terms of reference of SE London Pandemic Control Team
- Work with NHS and LA partners to keep the pandemic plan up to date, in line with HPA, DH and other relevant guidance
- Ensure there are good surveillance and early diagnosis systems in place.
- Prepare and maintain business continuity plan for SELHPU

Pandemic period - activation

- Monitor the impact of the pandemic in each ward in the boroughs, each GP practice, and each residential institution
- Modify actions in the light of experience, national guidance and other developments
- Identify HPU staff who have acquired immunity and recovered from influenza, posting them to appropriate front line positions

After the pandemic

- Review the local response to the pandemic and amend sector pandemic plan as appropriate
- Ensure continuing support to staff

CONTACT DETAILS

Regional Office: HPA London, 7th Floor, Holborn Gate, 330 High Holborn. London WC1V 7PP - Tel: 020 7759 2791 Fax: 020 7759 2840

South East London Health Protection Unit: 1 Lower Marsh, London SE1 7NT Tel: 0203 049 4280 (temporarily unavailable). Alternative contact number is 0203 049 4338
Email: londonseHPU@hpa.org.uk Out of hours: **0844 822 2888** and ask for **SELPH1** or if you receive no reply please contact: **0844 822 2888** and quote pager number **SELPH2**

Primary Care Trusts (PCTs)

All Primary Care Trusts (PCTs) have to be able to sustain patients in the community. An important aim during a pandemic is to keep hospital admissions to an absolute minimum, to encourage self-care and to keep people with influenza as much as possible at home or in the residential setting (care homes, nursing homes) they are living. Agreed systems should be in place for mutual support across PCTs and between PCTs and Acute Trusts.

The PCT will lead in the development of local flu preparedness plans and link up with the other organisations such as LA and acute trusts. The planning and preparation, and well as the implementation of this plan, is the responsibility of the Directors of Public Health, although this responsibility can be delegated (subject to local agreements). PCT duty directors will have to play an active role during a pandemic. The Chief Executive has ultimate responsibility for ensuring that arrangements for managing a pandemic are in place. At this stage (June 2005), each PCT needs to designate an Influenza Pandemic Co-ordinator and form an Influenza Planning Committee.

Action list for PCTs

Key actions for PCTs:

Inter pandemic and pandemic alert periods: planning and preparation

- Designate a Influenza Pandemic Co-ordinator supported by an Influenza Planning Committee in each PCT
- Identify the membership of the PCT/Borough Pandemic Control Team
- Consider list of essential staff in all essential services, not just health care
- Ensure that a system is in place to identify and vaccinate nationally identified priority groups
- Reach agreement with prisons on their plans for their detainees
- Ensure that care homes and nursing homes have flu pandemic contingency arrangements in place and provide training where needed. Ensure that the PCT has extra staff available to help care homes manage their patients in case of a pandemic.
- Liaise with the Acute Trust and ensure there will be staff available in case of a pandemic that can go out to nursing homes and help manage patients in nursing homes and prevent hospital admissions
- Prepare list of all local organisations and meeting places which could act as focal points for local communities (with local authorities) in case there will be a need for this
- Prepare decision-making framework for making difficult decisions e.g. rationing of services
- Prepare Patient Group Directions (PGDs) to allow nurses/community pharmacists to prescribe antibiotics and vaccines
- Ensure high risk groups receive pneumococcal vaccine
- Arrange for local stockpiling of anti-virals that are nationally recommended
- Consider how Occupational Health services can be used
- Each clinical directorate within PCT to have contingency arrangements for collaborative working in the event of crises (note particularly the problems of single handed practitioners) and negotiate PMS arrangements for such circumstances
- Prepare generic contracts to allow retired healthcare staff/medical students/volunteers etc to work in homes and community settings with appropriate indemnity cover, and agreed with unions
- Ensure all health and social care services have contingency arrangements in place, including dental services
- Ensure there are robust communication channels between the PCT, Borough and Trusts
- To work with the borough based emergency group to determine the lead responsibility for 'warn and inform' arrangements related to flu in accordance with the Civil Contingencies Act 2004
- Prepare for providing bereavement support and counselling

Pandemic period: activation

- Convene PCT/Borough Pandemic Control Team
- Activate contingency arrangements e.g. pooled budget and PGDs
- Activate local communications network, and issue first communications with staff and public
- Take national advice about ordering essential supplies
- Identify staff that has recovered from influenza and thereby acquired immunity and posting them to front-line positions if vaccine is still in limited supply
- Provide selective vaccination in second and subsequent waves (if available)
- Monitor deaths and the issuing of death certificates

After the pandemic

- Deal with any cross charging issues with cross charging between organisations
- Ensure business gets back to the “usual” as soon as possible, including review of those waiting for elective procedures
- Review the local response to the pandemic and amend PCT pandemic plan as appropriate
- Ensure continuing support to staff

CONTACT DETAILS

NHS Lambeth (PCT)

(Lead PCT for Emergency Planning)

2nd Floor
1 Lower Marsh
London SE1 7NT

Tel: 020 7716 7100
Fax: 020 7716 7018
www.lambethpct.nhs.uk

NHS Southwark (PCT)

NHS Southwark
160 Tooley Street
London SE1 2TD

Tel: 020 7525 0400
Fax: 020 7525 3987
www.southwark.nhs.uk

Chief Executive: Kevin Barton
EPLO Mike Fair
DPH Dr. Ruth Wallis

Chief Executive: Susanna White
EPLO
DPH Anne Marie Connolly

Acute trusts

Reporting:

Site Nurse Practitioners report on UNIFY daily.

Site Nurse Practitioners report to the PCT weekly, as a minimum.

Emergency Planning Team to complete Flu Con (inc. CritCon) reporting to NHS London on a Weekly basis or on change of state. Once Flu Con 3 reached commence daily reporting to update NHS London on current situation.

Local authorities

Local borough plans are crucial in ensuring a front line response to influenza pandemic. The aim of these plans is to minimise social disruption, and protect the life, health and safety of the population. In addition, they should address:

- Business continuity
- Essential services
- Emergency social care

Action list for Local Authorities

Key actions for local authorities are:

Inter pandemic and pandemic alert periods: planning and preparation

- Consider list of essential staff in all essential services, not just healthcare
- Have contingency arrangements for extra social and intermediate care
- Identify possibilities for venues where health care interventions can take place in case there will be a need for this
- Prepare decision-making framework for making difficult decisions e.g. rationing of services

- Explore procedures to ensure that robust communication channels exist between Borough and PCT/CT
- Work on communications systems to local communities
- Agree accelerated funeral arrangements with religious leaders for use in crises
- Prepare arrangements for additional mortuary facilities
- Have contingency arrangements for business continuity of essential services

Pandemic period: activation

- Activate contingency arrangements, like pooled budgets and PGDs
- Activate local communication network, and issue first communications with staff and public
- Activate arrangements for additional mortuary capacity
- Identify staff that has recovered from influenza and thereby acquired immunity and posting them to front-line positions if vaccine is still in limited supply

After the pandemic

- Review the local response to the pandemic and amend LA pandemic plan as appropriate
- Ensure continuing support to staff

CONTACT DETAILS

Lambeth Borough Council

Emergency Response Planning
Manager
London Borough of Lambeth
2 Herne Hill Road
London SE24 0AU

Tel: 020 7926 6148

Fax: 020 7926 6150

www.lambeth.gov.uk

Southwark Borough Council

Emergency Planning & Resilience
Manager
London Borough of Southwark
Central House
Town Hall
Peckham Road
London SE5 8UB

Tel: 020 7525 7417

Fax: 020 7525 7382

www.southwark.gov.uk

Department of Health

The Department of Health will be responsible for national oversight and monitoring of the pandemic influenza response. It will establish a national 'Operations Room' to support SHA management of incidents and to act as a focal point for links across Government and for coordination of health services, vaccine distribution and the prioritisation, purchase and distribution of antiviral drugs.

Regional Public Health Groups led by Regional Directors of Public Health will maintain a 24 hour capability to support both the SHAs and the rest of the Department of Health, and where necessary to co-ordinate the work of PCTs and NHS Trusts in responding to public health emergencies. The RDsPH will provide the Department of Health link to Regional Resilience mechanisms and act as the regional nominated co-ordinator in public health emergencies.

NHS Direct

NHS Direct is responsible for developing and maintaining up-to-date advice algorithms for influenza, with HPA and others, and activating them when instructed by the HPA or the Department of Health (England). NHS Direct plays an important role in early warning, and will have an important role in advising and signposting the public.

CONTACT DETAILS

E-mail: www.nhsdirect.nhs.uk

Tel: 0845 46 47

Out of hours / Emergency - Contact the Shift Lead (they will contact senior manager on-call):

Tel: 020 8676 7401 (Beckenham – main number)

020 8410 5598 (Croydon – back up number)

Section 6 Exercises / Operational Deployment

The Trust has participated in or is planning to participate in the following exercises:

Exercise Rubicon III

On 27th June 2006 the Trust participated in an exercise to test the arrangements of NHS organisations within the South East London Sector to manage the impact of a flu pandemic and to test the overall command and control network for South East London.

Exercise Phoenix

On 28th November 2007 the Trust participated in an exercise to determine the challenges the health and social community will face in the latter stages of an influenza pandemic as they look towards a new 'normality'.

Exercise Man Flu 2008/2009

On 12th March 2008 the Trust ran, in conjunction with Lambeth PCT, a joint management team exercise to test and confirm the communication and decision making processes between the two organisations. This was conducted at Management Team level and Executive Directors from both organisations participated. A second exercise was planned for March 2009 but cancelled due to a Major Internal Incident (Power Failure to Guy's site for 7 days) and was rescheduled for October 2009. However, subsequent Pandemic Outbreak and use of Cold Play II in September 2009 has resulted in cancellation of this further exercise.

Live Operational Activation of Pandemic Plan - 2009

The Trust activated its full pandemic flu plan in response to the Swine Flu Pandemic in April 2009. All aspects of the plan were activated including the Operational; Management Group to agree on capacity and operational delivery issues and the activation of a Flu Assessment Centre to remove possible flu patients from A&E. Patients were cohorted in the wards identified in the plan and the system proved to be effective.

Exercise Peak Practice - 2009

The trust participated in Exercise Peak Practice on 22 September 2009.

Exercise Cold Play II - 2009

The trust ran Exercise Cold Play II on the 8 September 2009.

Exercise Cold Play II - 2009

The trust participated in exercise Cold Play II run by NHS Lambeth & NHS Southwark (PCTs).

NHS Southwark (PCT) – 17 September 2009

NHS Lambeth (PCT) – 9 October 2009

Section 7 Committees

Terms of Reference of Pandemic Influenza Policy Working Group

1. PURPOSE

- 1.1 The purpose of this working group is to oversee the production of a Trust Pandemic Policy. This is to be undertaken by reference to pandemic guidance issued centrally, e.g. Department of Health etc.
- 1.2 The working group will provide reports to the Emergency Planning Working Group as a means of providing assurance that the issue of readiness for potential pandemics is being taken forward by the Trust.
- 1.3 The areas that the working group will be responsible for overseeing include:
 - i. Review of national and any other relevant guidance available
 - ii. Discussion and decision on the relevance of guidance documents for the Trust and its own Pandemic Policy
 - iii. Discussion and decision on contingency plans and other relevant work required by Trust staff
 - iv. Development and dissemination of an action plan detailing the work required across the Trust
 - v. Review of work undertaken by Trust staff on contingency plans etc.
 - vi. Monitoring of the production of policies
 - vii. Communication of policies
 - viii. Review of training needs regarding Pandemic Policy

2. DUTIES

- 2.1 Oversee production of Trust Pandemic Policy.
- 2.2 Monitor and oversee dissemination and implementation of Trust Pandemic Policy.

3. MEMBERSHIP

- 3.1 Membership
 - o Medical Director (Chair)
 - o Consultant in Infectious Diseases (Deputy Chair)
 - o Emergency Planning Representative
 - o Consultant Virologist
 - o A&E Representative
 - o ICU Representative
 - o Site Nurse Practitioner
 - o Infection Control Team Representative
 - o Clinical Division Representatives (x3)
 - o Occupational Health Representative
 - o Communications Representative
 - o Facilities Representative
 - o Children's Services Representative
 - o Women's Service Representative
 - o Workforce (HR) Representative
 - o Security Representative
 - o Pharmacy Representative
 - o Mortuary Representative
 - o Staff Side Representative

3.2 There will be two named representatives for each area, with one being the main representative and the other the deputy. All representatives will be kept up-to-date on the work of the Group. Only one representative from each area needs to be present at each meeting. The official deputy must not delegate this role.

4. REPORTING ARRANGEMENTS

4.1 The Working Group will provide reports to the Emergency Planning Working Group quarterly.

5. ATTENDANCE AT MEETINGS

5.1 Persons who are not Working Group members may attend at the invitation of the Chair.

6. QUORUM

6.1 A quorum shall consist of approximately one half of the membership.

7. FREQUENCY OF MEETINGS

7.1 Initially the Working Group will meet as frequently as considered necessary by the Chair. Thereafter the Working Group will meet quarterly.

8. REVIEW

8.1 It is intended that this Working Group will have a limited working life. If necessary, however, these terms of reference will be reviewed annually by the Working Group.

Terms of Reference of Pandemic Influenza Staffing Sub Group

1. PURPOSE

1.1 The purpose of this sub group is to oversee the production of a Trust Pandemic Core Staffing Policy.

1.2 The staffing sub group will provide reports to the Pandemic Influenza Working Group as a means of providing assurance that the issue of core activities that must be sustained during a potential pandemic are clearly identified and appropriate action is taken forward by the Trust.

1.3 The areas that the sub group will be responsible for overseeing include:

- Review of key core activity both clinical and non clinical
- Discussion and decision on the key areas of operational activity that must be sustained and what level of specialist staffing is necessary to sustain this activity.
- Discussion and decision on continuity plans necessary to utilise other trust staff to support these core activities.
- Development and dissemination of a spreadsheet outlining the identified core activities and necessary staffing required to provide support for these activities.
- Review of training needs and production of outline training policies for non specialist staff.

2. DUTIES

- 2.1 Oversee production of trust pandemic staffing policy.
- 2.2 Continuously monitor the trust pandemic staffing policy.

3. MEMBERSHIP

- 3.1 Membership
 - Assistant Director Resilience (Chair)
 - Consultant in Infectious Diseases lead on Pandemic Influenza
 - Clinical Directorate Representatives (x3 DCNs)
 - Communications Representative
 - Facilities Representative
 - Finance Representative
 - Workforce (HR) Representative

4. REPORTING ARRANGEMENTS

- 4.1 The Working Group will provide reports to the Pandemic Influenza Working Group.

5. ATTENDANCE AT MEETINGS

- 5.1 Persons who are not sub Group members may attend at the invitation of the Chair.

6. QUORUM

- 6.1 A quorum shall consist of one half of the membership.

7. FREQUENCY OF MEETINGS

- 7.1 Initially the sub group will meet as frequently as considered necessary by the Chair. Thereafter the sub Group will meet quarterly.

8. REVIEW

It is intended that this sub group will have a limited working life. If necessary, however, these terms of reference will be reviewed annually by the Pandemic Influenza Working Group.

Terms of Reference of Pandemic Operational Management Group

1. PURPOSE

1.1 Currently the Trust response is based on an escalation scenario system comprised of 4 distinct steps which are outlined in section 3, Annex A. The purpose of this management group is to oversee the response of Trust operational capability.

- Management of flu pandemic patients
- Management of non-flu emergencies
- The provision of pre-identified essential clinical care, such as dialysis, cancer treatment, midwifery, etc.

- Agree the recovery sequence once the peak of the pandemic has passed. This will be dependent on the level of attack and the impact on clinical and non clinical services.

- 1.2 To support the Trust response by meeting twice a day (09.30 – 10.30 & 16.00 – 16.45) to assess the impact of the pandemic on Trust operational capability and agree the appropriate response by modifying elective activity, re-directing resources internally and managing which services continue at normal levels, which services continue to operate but at reduced or modified levels and which services are temporarily discontinued.

2. DUTIES

- 2.1 Oversee the Trust response during the Pandemic phases and waves, following the Trust Pandemic Policy
- 2.2 Monitor and oversee dissemination of information and guidance to Trust staff and Patients.

3. MEMBERSHIP

- 3.1 Membership
- Chief Nurse/Chief Operating Officer or Director of Clinical services
 - Divisional Directors x 3 (or deputies)
 - Consultant in Infectious Diseases (Chair Planning Group)
 - Emergency Planning Representative
 - Consultant Virologist
 - Communications Representative
 - HR Representative
 - A&E Representative
 - ICU Representative
 - Site Nurse Practitioner
 - Infection Control Team Representative
 - Occupational Health Representative
 - Facilities Representative
 - Children's Services Representative
 - Women's Service Representative
 - Pharmacy Representative
 - Mortuary Representative
 - Staff Side Representative
 - Procurement Representative
 - Administrative support provided by Divisional Teams

4. REPORTING ARRANGEMENTS

- 4.1 The Management Group will provide regular reports to the TME and Trust Board.

5. ATTENDANCE AT MEETINGS

- 5.1 Persons who are not Operational Management Group members may attend at the invitation of the Chair.

6. QUORUM

- 6.1 A quorum shall consist of not less than 50% of the membership or as directed by the chair.

7. FREQUENCY OF MEETINGS

- 7.1 The Management Group will meet as frequently as considered necessary by the Chair, but not less than once a week.

8. REVIEW

- 8.1 It is intended that this Operational Management Group will have a limited working life predicted by the severity of the pandemic and the length of the impact on the operational ability of the Trust.

9. SUPPORT

- 9.1 This operational group will meet in Gassiot House and will be supported by administrative staff drawn from the Clinical Divisional Management teams or administrative staff drawn from the corporate teams based in Gassiot House.

Part 2

Background and Clinical Features

Section 8 Clinical features of influenza

Transmission

Influenza is spread mainly by droplets or fine respiratory aerosols produced when an infected person talks, coughs or sneezes. It may also be spread by hand to face contact after touching a person or surface contaminated with infectious respiratory droplets.

Symptoms

Sudden onset of fever, chills, headache, muscle and joint pain, sore throat, dry cough, prostration. Recovery usually occurs within seven days but complications such as bronchitis, pneumonia and otitis media can develop causing serious illness and death. The complications of influenza are primarily respiratory, but can affect other organs. In broad terms, the most likely clinical reasons for admission in adults will be (in order of frequency):

Lower respiratory tract complications:

Non-pneumonic bacterial exacerbation of chronic lung disease such as COPD (possibly with a mixed viral infection)

Secondary bacterial pneumonia

Mixed bacterial and viral pneumonia

Primary viral pneumonia

Cardiac complications:

Exacerbation of pre-existing cardiac disease with cardiac failure and/or arrhythmia

Primary myocarditis

Neuro-muscular complications:

Rhabdomyolysis

Other complications:

Exacerbation of other pre-existing disease, such as diabetes mellitus

Severe sinusitis

Children are most likely to exhibit the following complications:

Lower respiratory tract complications:

Secondary bacterial pneumonia

Mixed bacterial and viral pneumonia

Primary viral pneumonia

Acute respiratory distress syndrome

Croup

Bronchiolitis

Neurological complications:

Encephalopathy & encephalitis

Myositis

Other complications:

Febrile convulsions

Otitis media

Reye's syndrome

The most serious complications usually occur in vulnerable groups such as the chronically ill. However, pandemic viruses can have serious complications in any age group, and illness more severe than the usual seasonal influenza is likely in all population groups. The following pre-existing conditions are likely to worsen influenza outcomes:

Chronic cardiac disease

Chronic lung disease (including asthma)

Diabetes mellitus

Chronic renal failure
Chronic liver disease
Chronic neurological disease
Immunocompromise
Pregnancy
Age > 65 years
Non-ambulant children
Children under 5 years

Infectiousness

People are highly infectious for five to seven days from the onset of symptoms, longer in children and in people who are immunocompromised. Period of infectiousness may be reduced by antiviral treatment. The incubation period is one to three days, with about 10% of people infectious before they have symptoms. On average, one person will infect 1-1.5 people, but this is likely to be higher in closed communities.

Section 9 Diagnostic Criteria

HPA syndromic case definition for Influenza-like illness:

Fever >38°C, or history of fever,

And: 2+ of: cough, sore throat, rhinorrhoea, headache, myalgia, arthralgia, vomiting or diarrhoea

Or: severe and/or life-threatening illness suggestive of an infectious process

In general adult patients with any of the following signs should be considered for hospital admission:

- (1) severe breathlessness (unable to complete sentences, use of accessory muscles)
- (2) respiratory rate >30/min
- (3) respiratory exhaustion
- (4) oxygen saturation <92%
- (5) systolic BP <90 mmHg or diastolic BP <60 mmHg
- (6) abnormal mental status
- (7) other clinical concerns (rapid or unusual progression)

Paediatric presentation may vary with age:

Neonates: sepsis syndrome.

Infant: fever, diarrhoea and vomiting.

Older children: pharyngitis and headache.

Diarrhoea may be a presenting feature in a proportion of cases of AH1N1 influenza.

Patients with any of the following signs should be considered for admission:

- (1) respiratory distress
- (2) respiratory rate >50/min (<1 yr), >40/min (>1 yr)
- (3) respiratory exhaustion or apnoeic episode
- (4) oxygen saturation <92%
- (5) evidence of dehydration or shock
- (6) altered consciousness level
- (7) other clinical concerns (rapid or unusual progression)

<http://www.hpa.org.uk/HPA/Topics/InfectiousDiseases/Infections>

Section 10 Investigation and Management

Introduction

Patients identified with symptoms consistent with an influenza-like illness, as defined above (Section 9), must be issued with a surgical mask and moved to a single room or influenza cohort area for further assessment.

All cases must be assessed for risk of complications, severity of disease and need for admission, as above. Staff caring for the patient must use appropriate personal protective equipment: disposable gloves and apron and disposable single use FFP2/3 respirator or reusable FFP3 respirator (if fit-tested).

Patients requiring admission should be discussed with the Site Nurse Practitioner (SNP) or Paediatric SpR on-call, as appropriate. In-patients identified with influenza-like symptoms should be notified to the SNP for transfer to appropriate isolation facilities.

Laboratory Investigation:

Diagnostic samples should be collected from in-patients and patients requiring admission for suspected influenza. Follow-up samples should not be submitted on laboratory-confirmed cases unless specifically requested by Virology/Infection

Investigation of ventilated patients should include testing of a lower respiratory tract sample, usually a non-directed bronchoalveolar lavage (NBL) sample, in addition to the usual nose and throat swabs.

Specific Virus swabs are required; these are available for collection from:

- St Thomas' Infection/Central Specimen Receptions
- Guy's Central Specimen Reception

To order test on EPR, clear box ("Type here to enter order name"), type "swine". This will bring up the appropriate "Swine Flu Swabs (Sample for Respiratory Virus Screen)" request. Print labels.

Ensure appropriate PPE is used while taking specimens (single use FFP2 or reusable FFP3 respirator, eye protection, gloves, apron)

Send samples to Infection Specimen Reception, 5th Floor North Wing, St Thomas' Hospital.

Collecting nose & throat Swabs for diagnosis of swine 'flu

A nose and a throat swab is required from any case of suspected influenza or RSV (acute respiratory tract infection or acute bronchitis within five days of onset of illness). A good specimen for the detection of influenza or RSV must contain a substantial number of respiratory epithelial cells, which are mainly obtained from the nasal swab. A throat swab alone will contain mainly squamous epithelial cells in which influenza does not replicate

- Insert one of the swabs provided is into one nostril and rub it against and above the nasal turbinates
- Break the swab off into a tube of transport medium and replace the lid
- Write "N/S" (nasal swab) on the label and apply to the side of the tube
- Use a second swab to abrade the tonsils and pharynx (see Fig. below)
- Break the swab off into a *second* tube of transport medium and replace the lid.
- Write "T/S" (throat swab) on the label and apply to the side of the tube

It is possible that at the peak of pandemic, due to workload pressures, laboratory diagnosis will be abandoned and patients managed on a syndromic basis (as in the community during peak periods).

Treatment:

Any patient with symptoms consistent with an influenza-like illness should be offered treatment if presenting within 7 days of onset of symptoms.

Treatment of immunocompromised patients should be initiated regardless of the timing of presentation. Duration of therapy in immunocompromised patients should be discussed with Virology

See: http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1243581475043

Guidance for:

Paediatric antiviral dosage

Pregnancy antiviral dosage

The GTI Intranet link - as follows - ' [Pandemic swine influenza: clinical guidance](#) shows the most recent approved GSTT guidance and is regularly reviewed to reflect any changes.

Section 11 Pandemic Admission and Discharge Policy

Introduction

The purpose of this policy is to outline the admission and discharge process during an influenza pandemic. The protocol takes into account the following key factors associated with the pandemic which will affect the admission and discharge process.

- Acute respiratory admissions may rise by 25% or greater depending on the severity of the pandemic.
- GP workload is likely to rise by 25% or greater.
- Sickness levels amongst healthcare workers may be up to 25% and could be more, 1/3 of nursing staff may be affected either directly or indirectly
- Child care will be affected as current Government policy is that schools and crèche facilities will close at an early stage of the pandemic
- Transport infrastructure is likely to be widely affected

When considering the Trust's ability to manage its capacity the above needs to be offset against the following factors;

- Clinical and non-clinical staff will need to be released from non-essential duties in order to back fill essential posts
- Experience from 7/7 shows that approximately 1/3 of Trust bed capacity can be released rapidly
- There will be a reduction in general attendees to A&E, and therefore non-flu-like admissions, and also a reduction in attendance and/or closure of OPD activity
- The phased cancellation of non urgent and/or elective activity which will free up considerable resources and capacity, particularly in Critical Care Facilities.

The ability of the Trust to manage activity demand will be dependant on;

- The clinical attack rate of the pandemic, see scenarios in tables 8.3 to 8.4
- The timely removal of the requirement to meet national targets
- Key resource factors, i.e. availability of staff, equipment, supplies, etc
- The Trust's ability to activate additional capacity

Notification of pandemic alert

The Trust will be notified by the London Strategic Health Authority as part of the warning and reporting mechanism from the Department of Health. The Trust has decided not to respond to a flu pandemic by activating the Trust Major Incident Plan and has established a separate plan (Trust's Local Pandemic Influenza Preparedness Plan) to deal with this specific threat.

The management of the Trust during all phases of a pandemic outbreak are in accordance with Section 4 of the Trust Local Pandemic Influenza Preparedness Plan (Trust Pandemic Influenza Operational Management Plan).

The Trust Command and Control centre (KIC on the St Thomas' site) will be set up and activated in accordance with the requirements of the Trust Pandemic Influenza Operational Management Plan (See [section 4](#)). The Trust Flu Pandemic Operations Group will convene under the following circumstances:

- If there is wide scale ongoing cancellation of elective activity
- Capacity dictates the need for additional beds to be opened, or relocated to a neutral pressure area within either hospital site
- Reduced staffing including medical, nursing, ancillary, is impacting on service delivery
- There is insufficient supplies of stock, blood or medications due to failure in the supply chain

- DH via the London Strategic Health Authority instructs hospitals to discontinue all routine and/or elective activity.

The role of the Command Centre and the frequency of meetings will be dependant on circumstances, disruption to activity and the scale of the pandemic and are outlined in the Trust Pandemic Influenza Operational Management Plan (See [section 4](#)).

The decision to activate the Command centre will be lead by the Medical Director and Director of Clinical Services, who will take advice from;

- The Infection Control Director
- The Clinical Director for Accident and Emergency
- The Trust lead on Emergency Preparedness
- The Head of Nursing for Inpatient Services

GP/Community Hotline

To assist in the management of a Pandemic the Trust is required to have a GP and external agency hotline for the direct admission and communication with the Trust. Unless directed otherwise by the London SHA admissions will be from the GSTT catchments area only, see table 8.2.

A GP call line system is currently operational and manned between the hours of 10.00 and 18.00 by a qualified nurse, this could be extended and staffed up as necessary. This is operated from the Discharge lounge the telephone number is 020 7188 3193, and dedicated fax line is 020 7188 3194.

Table 11.1

Trust catchments area post codes			
SW 1	SW 8	SE 1	SE 14
SW 2	SW 9	SE 8	SE 16
SW 4	SW 16	SE 11	SE 17

Admission rates

Guy's and St Thomas' Trust consistently operates at high bed occupancy rate, admitting approximately 430 emergency admissions and 350 patients for planned care a week. This can often represent an occupancy level on the St Thomas' site of above 96%.

Disease burden and Health care demand during pandemic is estimated using the figures from Table 2.1 (See section 2). Also see Fig 2.1 – 2.3 for the estimated number of hospitalisations and daily admissions to the Trust during the pandemic period.

Admission, discharge and management of bed capacity

The Trust has in place an Admission, Discharge and Bed management policy (2006), this incorporates a well rehearsed bed escalation capacity management strategy. This is available on the Trust Intranet, and is summarised at the end of this policy.

It is anticipated that the Trust would operate at Green plus / Amber during early part of the pandemic. Depending on the rapidity of the pandemic and the subsequent admission rates, seasonal pressures and staffing levels, the escalation may move quickly to Amber / Red.

Status - Green Plus / Amber

The actions taken at the various stages in the escalation process are routinely managed by the Department of Inpatient Services. During the early pandemic stage the Trust should operate at bed escalation status **Green plus**. At the early part of the pandemic period this would where necessary be routinely escalated to **Amber** and the accelerated discharge process applied in circumstances where there was perceived to be insufficient capacity for admissions.

Full details of the Trust accelerated discharge plans can be found in the Trust Major and Mass Casualty Discharge Plans 2005. The roles and responsibilities of the staff involved are detailed in the Discharge Action cards (2005).

Status - Red

At escalation status Red, Trust Flu Pandemic Operations Group will be required to intervene and additional capacity, may be commissioned depending on circumstances. A general guide to the decision making regarding opening capacity is shown below in flowchart 1.

Placement of adult patients (see [Section 18](#) for children)

It is anticipated that patients presenting with flu symptoms would require negative pressure room facilities. The Trust currently has a total of 12 negative pressure rooms, 4 on Hillyers ward, 4 on William Gull ward and 4 on Albert Ward.

After the initial phase of the pandemic the Trust's 12 negative pressure rooms may be insufficient to cope with the demand placed on them. In these circumstances, bed placement should be in accordance to the following principles and in order according to [Flowchart 2](#).

- Where possible the flow of pandemic and non-pandemic emergency admissions should be segregated.
- Initially, suspected pandemic flu patients should be admitted to negative pressure rooms on Hillyers, William Gull and Albert ward. TB patients could be moved to Howard ward to make way for pandemic flu patients.
- When pandemic starts to escalate and all negative pressure facilities are filled, this would trigger stoppage of all electives, the decision of which would be made by the Trust Flu Pandemic Operations Group.
- Non pandemic emergencies admission would be based on Luke ward (10th Floor North Wing and Northumberland ward (11th Floor North Wing). Other designated wards for non flu patients include Alan Apley, George Perkins, all in North Wing.
- Once negative pressure rooms are filled, the strategy of cohorting in designated pandemic flu wards should be in place. Pandemic flu patients should be admitted to Victoria ward and Sarah Swift wards initially. When demand further increases, Doulton, Stephen and Beckett ward, all on East Wing, will be used. East wing wards are selected because of the availability of adequate oxygen supply and proximity to A&E and critical care facilities.
- Evans Jones ward and CCU on 3rd Floor East Wing will be kept for non flu patients. This is due to its proximity to the Cardiac Catheterisation Laboratory on 4th Floor East wing, which is expected to remain operational for cardiac emergency throughout the pandemic.
- Lifts will be programmed to segregate the flu floors from the non floors in East Wing.

- Depending on the scale of the incident non pandemic patients should be decanted in advance in order to create specific floors for managing pandemic activity.
- The pathways for patients requiring critical care is covered in [section 16](#). Pathway for non-critical care patients is shown in [flowchart 2](#).

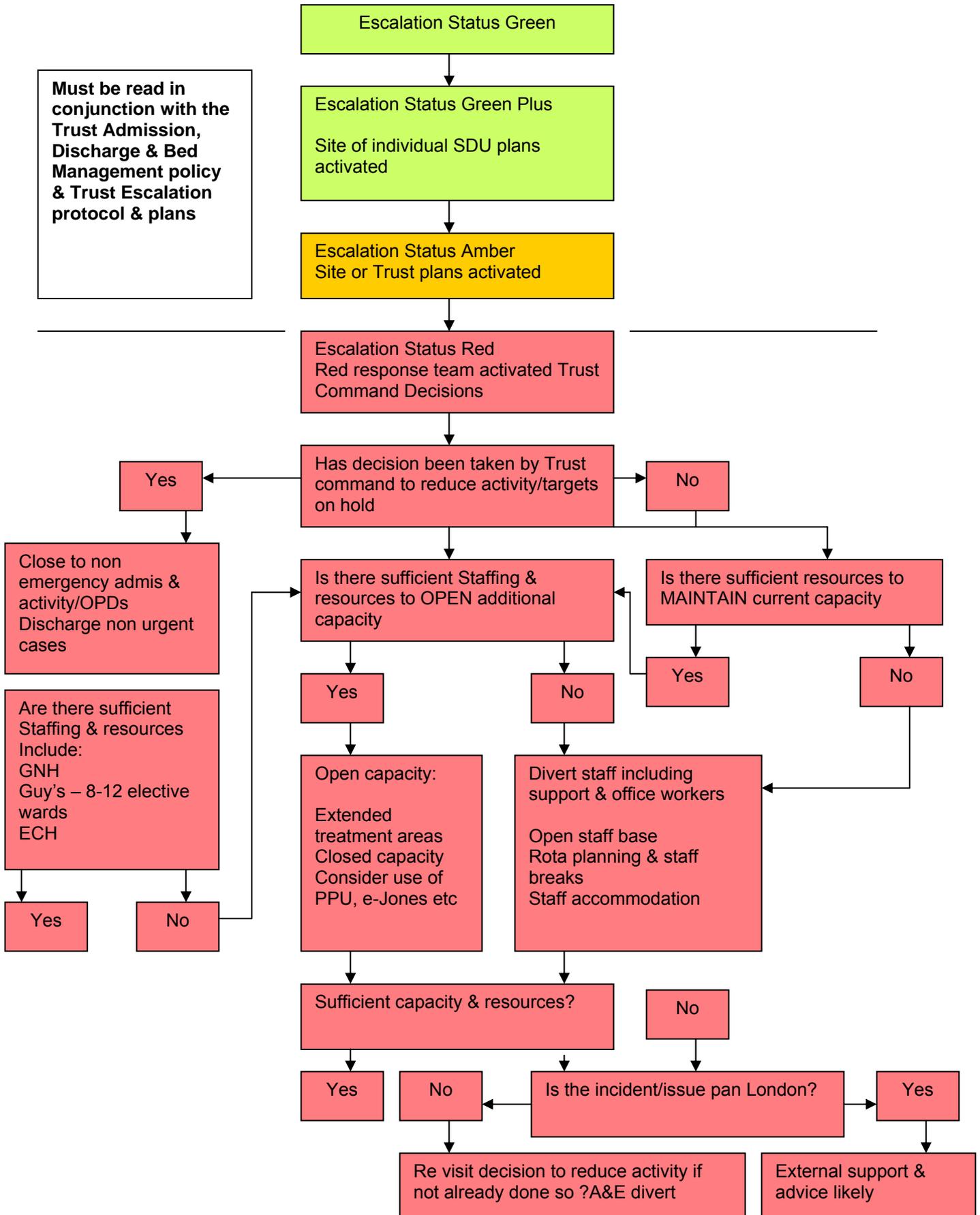
Consideration will also need to be given to;

- What if any specialties (electives) can continue at Guy's site
- Non pandemic emergency orthopaedic / plastic activity transferring to Guy's
- Transferring all staff from Guy's and diverting resources to the St Thomas' site

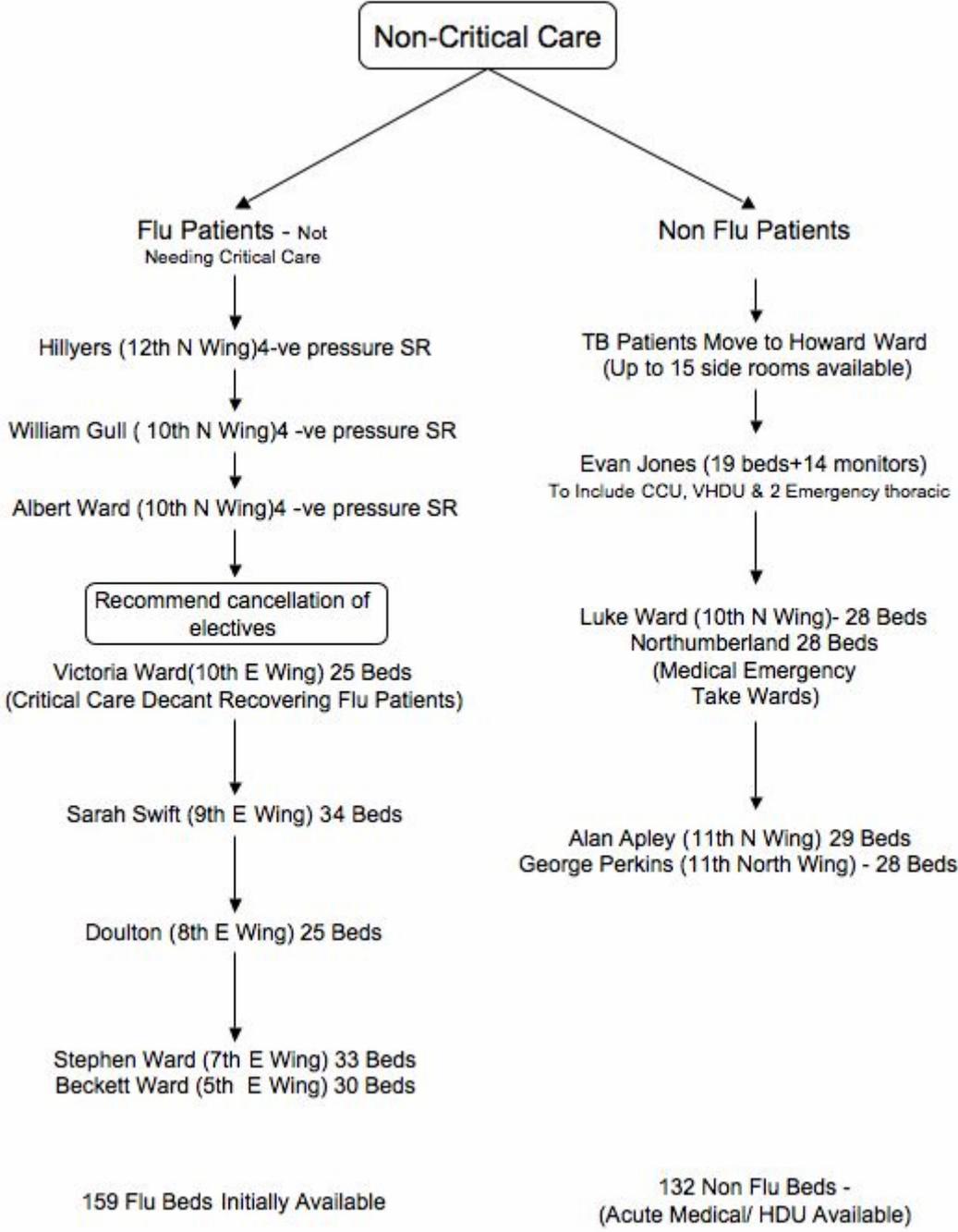
For the Trust to best manage its capacity this must be done using this the established capacity escalation process in the first instance but as soon as the National Pandemic Alerts 2 or above are activated then the strategy should be led by the Trust Flu Pandemic Operations Group. In circumstances where the pandemic impact is less or at the lower ends of the predicted scale and elective activity is not put on hold it is likely that additional capacity may be required during weeks 6 to 13. The need to do this will depend on current activity levels, expected admission and discharge rates on a daily basis. This can be calculated using the attached proforma.

Flowchart 1

**SNP Site Management Escalation Card No 12
Trust capacity and occupancy levels**



Flowchart 2



Responsibilities of staff

Heads of Nursing (HoN) and Clinical Nurse Manager (CNM) are responsible for ensuring that the Discharge Proforma is completed daily and is faxed to the Department of Inpatient Services. This form details actual and potential discharge, this is routine practice for ward staff.

As part of the escalation process during the alert / pandemic phase Divisional management teams are responsible for ensuring that there is Consultant or senior medical review of inpatients at least daily, i.e. that additional rounds take place in order to expedite discharges. Heads of Nursing and Clinical Nurse Managers are responsible for identifying patients for early discharge.

The decision to admit during an incident should be taken by a Consultant or SpR and when ever possible alternatives to admission sought. The admission process should follow the route agreed with Lambeth PCT and Southwark PCT to ensure that community services are only referring when essential. An assessment matrix has been agreed with both PCTs and referrals will follow this flow path.

Throughout the pandemic, SNPs will be responsible for managing the movement of patients, Trust bed stock and patient flow in consultation with the infection control team. The SNP service will advise the Trust Operational Group regarding capacity but the Operational Group is ultimately responsible for the strategy of bed management and will provide assistance and advice to the SNP service when required. In Children's service, paediatric nurse practitioners carry out the role of SNPs in bed management.

The decision to cancel elective surgery (unless otherwise directed by the London SHA) will be taken by the Trust Flu Pandemic Operations Group. Sufficient capacity will be created using the escalation strategy for emergency and high priority elective admissions.

The Director of Clinical Services and the Divisional Management teams will be notified if the Trust is bordering on escalation status amber/red, and, or there is likely to be clinically urgent elective cases cancelled, or in circumstances where the Trust's access targets are put at risk, due to capacity issues.

Inpatient admissions criteria from the A&E department

The decision to admit a patient presenting with respiratory type symptoms indicative of influenza should be based on clinical symptoms and the results of investigations in accordance with the algorithm and the assessment matrix that has been agreed with both PCTs.

Inpatient admission criteria to the Intensive Care Unit (ICU) - see [section 16](#) and [Figure 16.1 for Critical Care Pathway](#)

Discharge

The Trust has in place a robust discharge policy as part of its day to day running. This is incorporated in the Trusts Admission, Discharge and Bed management policy (2006).

If capacity cannot be managed via the bed escalation process then the Trust accelerated discharge plans must be activated. Where possible the discharge process should be controlled and staggered in order to avoid unnecessary or unsafe discharge.

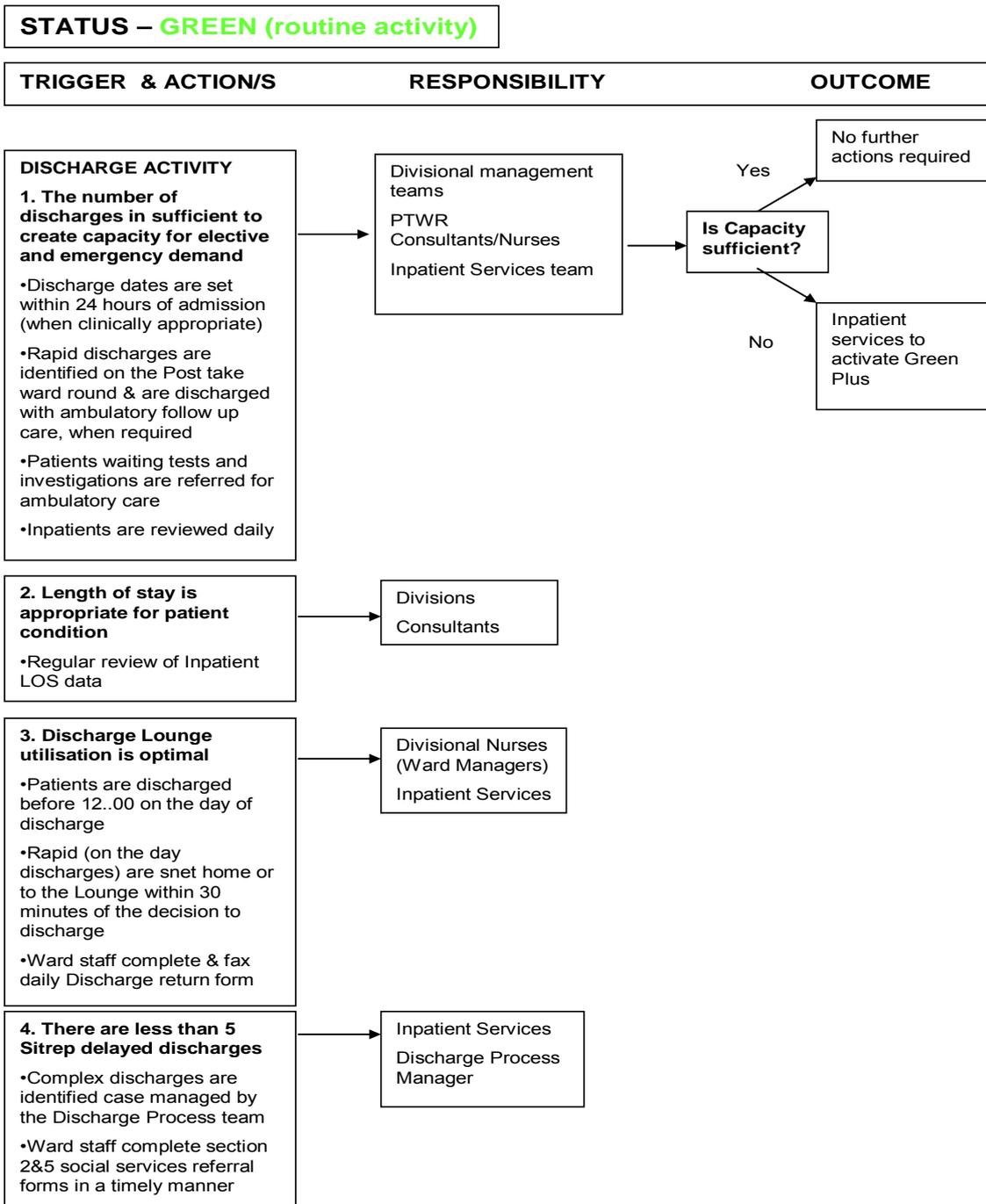
The accelerated discharge process must be the authorised Trust Commander. Table 8.4 below is a guide to the categories of inpatients and the preferred order they should be discharged in, depending on the circumstances.

Table 11.2 – Accelerated patient discharge categories

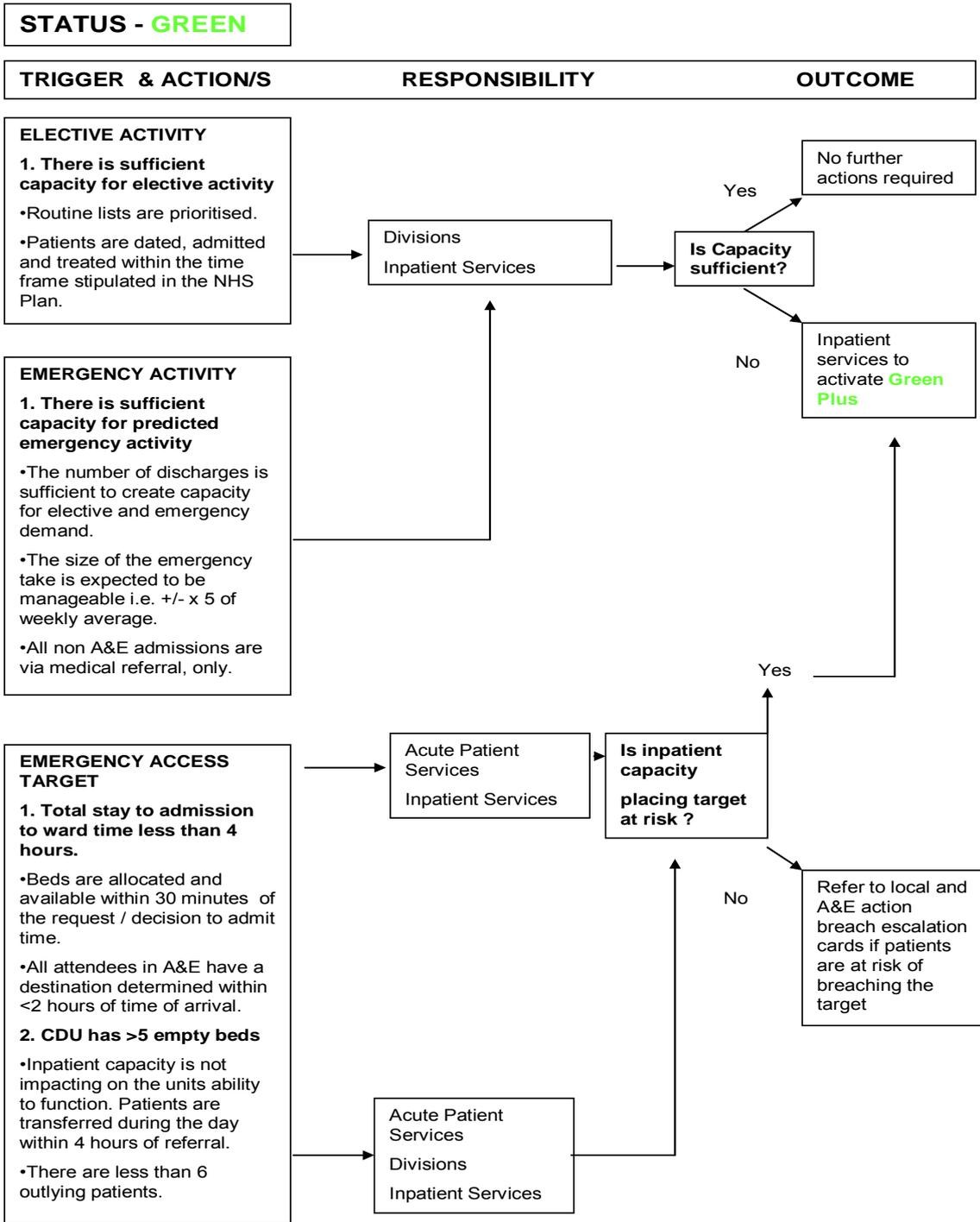
Category 1 – Elective and patients waiting procedures or non cardiac investigations
Category 2 – Patients deemed fit for discharge – waiting TTOs, tests, therapy review
Category 3 – Medical, Speciality or Post operative patients who are: CVS stable Able to eat and drink Do not require supportive treatment such as O2, IVI, IVAB
Category 4 – Patients who have social care needs who have carers at home

As the pandemic develops or continues the activity of the hospital would be governed by guidance from the DOH and PCT.

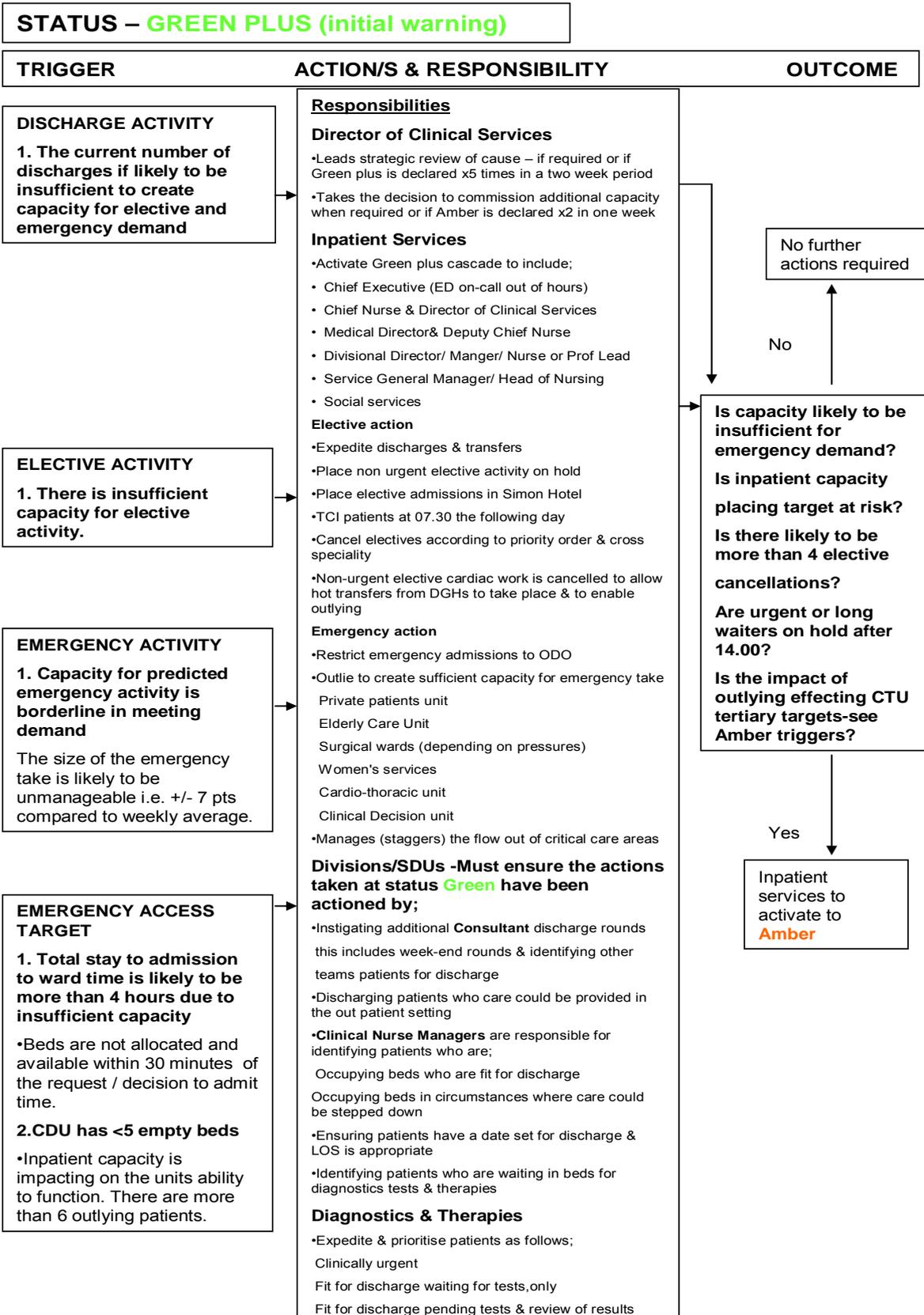
Escalation Action card 1 – Trust Status Green



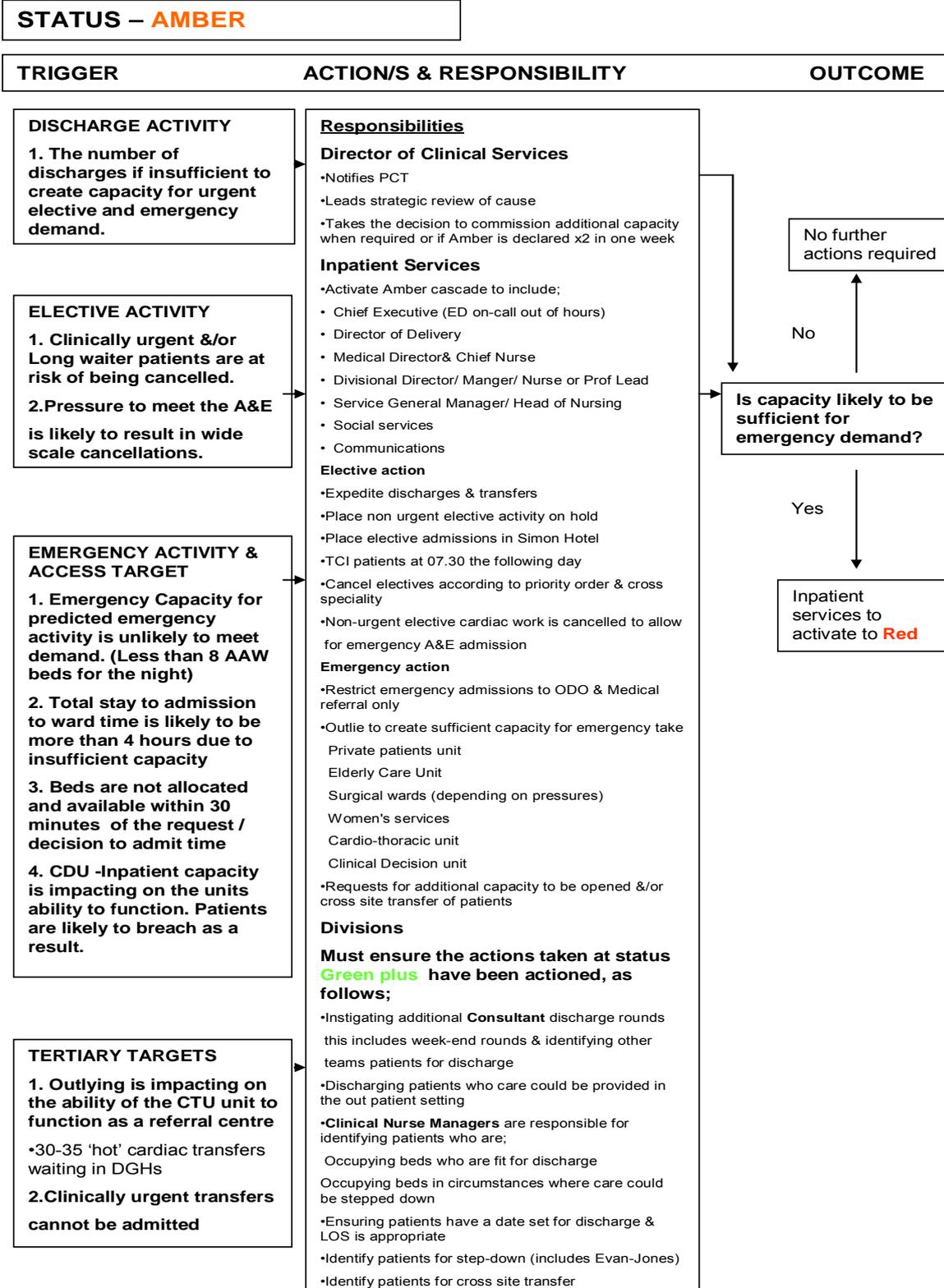
Escalation Action card 2 – Trust Status Green con't



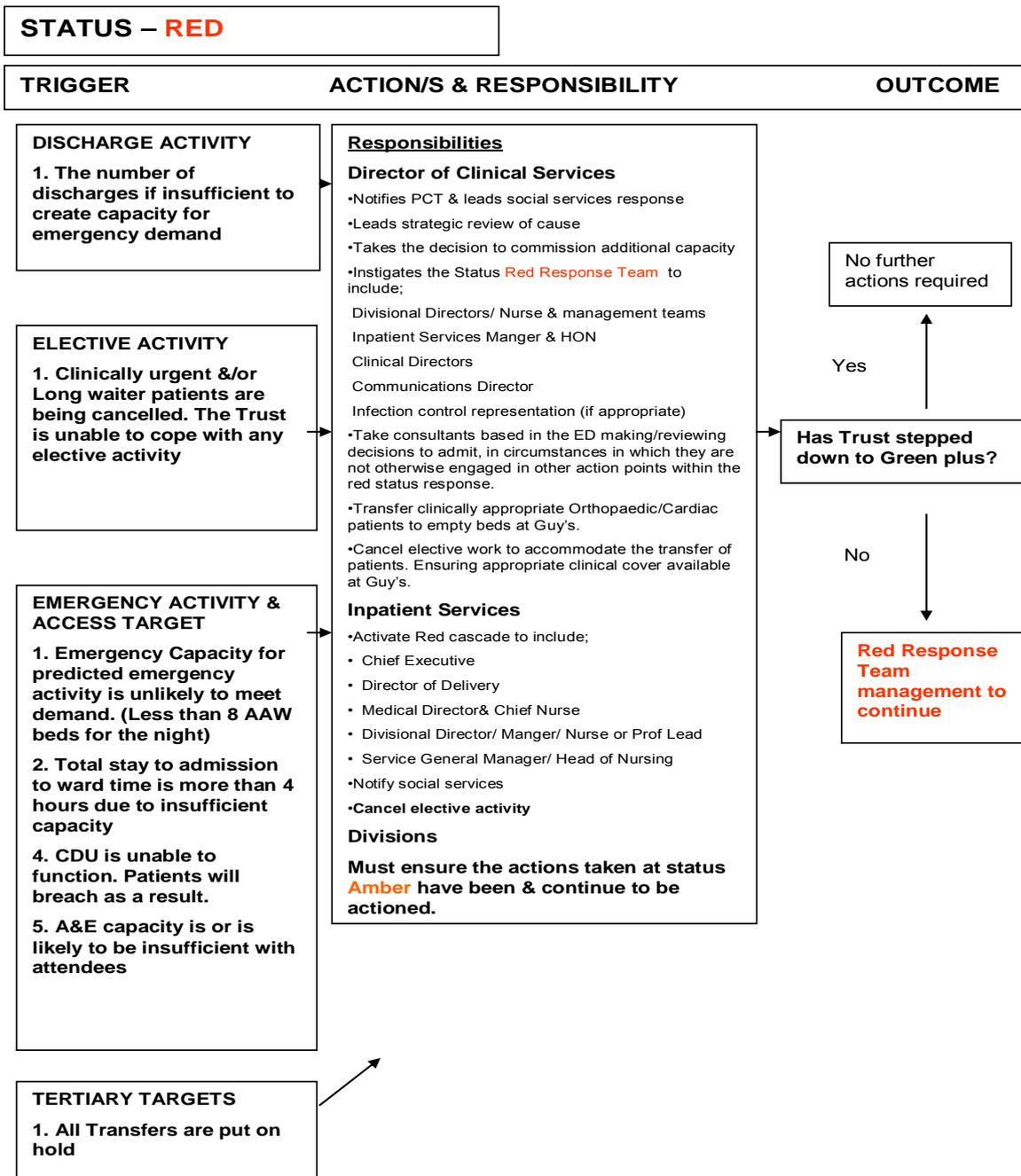
Escalation Action card 3 – Trust Status Green plus



Escalation Action card 4 – Trust Status Amber



Escalation Action card 5 – Trust Status Red



Section 12 Infection Prevention and Control Policy

KEY POINTS

Standard infection control principles and droplet precautions must be used where patients have or are suspected of having influenza

- Hand hygiene and containment of respiratory secretions are essential
- Signage and posters should be displayed prominently to raise awareness of these basic and critical infection control measures
- The use of PPE should be informed by the available evidence, proportional to the risk of contact with respiratory secretions and other body fluids, and type of work/procedure being undertaken.

Standard Infection control principles and droplet precautions must be used if patients have or are suspected of having influenza. Standard infection control principles should be applied by all staff to all patients all of the time and includes hospital hygiene, hand hygiene and use of PPE.

12.1. Hand hygiene

Hand hygiene is the single most important practice to reduce the transmission of infectious agents in healthcare settings and is an essential element of Standard Infection Prevention and Control Principles (IPC). **During outbreaks of pandemic influenza strict adherence to hand hygiene recommendations should be enforced.**

The term “hand hygiene” includes hand washing with soap and water and thorough drying, and the use of alcohol-based products (i.e., gels or foams) containing an emollient that do not require the use of water. If hands are visibly soiled or contaminated (for example, contaminated with respiratory secretions), they should be washed with soap and water and dried. When decontaminating hands using an alcohol rub, hands should be free of dirt and organic material. The hand-rub solution must come into contact with all surfaces of the hand, up to and including the wrist.

Hands should be decontaminated before and after all patient contact with an infected patient or their bed area, removal of protective clothing, and cleaning of equipment. Following hand washing, hands should be dried thoroughly using paper towels that are then discarded in the nearest waste receptacle.

Alcohol gel or an approved alternative should be available at the entrance to all wards, at each patient bedside and at the point of care in all clinical areas.

All staff, patients and visitors entering and leaving areas where care is delivered should perform hand hygiene with either soap or water followed by drying, alcohol hand rub or approved alternative.

12.2. Management of the coughing and sneezing patient

Patients, as well as staff, and visitors, should be encouraged to minimise potential influenza transmission through good hygienic measures as follows:

- Cover nose and mouth with disposable single-use tissues when sneezing, coughing, wiping and blowing noses
- Dispose of used tissues in nearest waste bin
- Wash hands after coughing, sneezing, using tissues, or contact with respiratory secretions and contaminated objects

- Keep hands away from the mucous membranes of the eyes and nose
- Certain patients (e.g., the elderly, children) may need assistance with containment of respiratory secretions; those who are immobile will need a receptacle (e.g., a plastic bag) readily at hand for immediate disposal of tissues and a supply of hand wipes and tissues.

Patient masking: Where possible, in common waiting areas or during transport (e.g., from one area of the hospital to another), coughing/sneezing patients should wear surgical masks to assist in the containment of respiratory secretions and to reduce environmental contamination.

12.3. Personal protective equipment (PPE)

Overview

PPE should be worn to protect staff from contamination with body fluids and thus reduce the risk of transmission of pandemic influenza between patients and staff and from one patient to another. Appropriate PPE for care of patients with pandemic influenza is summarised in Table 1. Care in the correct donning and removal of PPE is essential to avoid inadvertent contamination. All contaminated clothing must be removed before leaving a patient care area, masks being removed last.

Masks

Masks are used as physical barrier to minimise contamination of facial mucosa by large particle droplets, one of the principle ways influenza is transmitted. The most basic form of mask is the surgical mask. This is recommended for use with coughing/sneezing patients to reduce environmental contamination. Staff in close patient care (e.g. within 3 feet/1 metre) but not performing or assisting aerosol generating procedure should also use surgical mask for personal protection. When available, disposable FFP2 and FFP3 respirators could be used by staff for additional protection. When FFP respirators are used in such context, they are primarily used as a mask. Training is required for their donning but fit testing is not necessary. FFP respirators should not be used by patients as masks because the presence of the filter increases the labour of breathing.

If pandemic influenza patients are cohorted in one area and multiple patients must be visited over a short time or in rapid sequence (e.g., cohorted areas), it may be practical to wear a single mask upon entry to the area and to keep it on for the duration of the activity or until the mask requires replacement. However, other PPE (e.g. gloves, plastic apron, gown, etc) must be removed between patients, and hand hygiene performed. All contaminated PPE must be removed before leaving a patient care area. Masks should be removed last, followed by thorough hand hygiene.

Masks should:

- cover both the nose and the mouth and not be allowed to dangle around the neck after usage
- The mask's metal or plastic bar should be "pinch-fitted" across the bridge of the nose to ensure close conformity
- not be touched once put on
- be changed when they become moist
- Single use surgical mask must be worn once only and discarded in an appropriate receptacle as clinical waste; Hand hygiene must be performed after disposal is complete.

Respirators

Respirators are face masks with a filtration device. There are two grades: FFP2 respirators which are often used when nursing patients with open tuberculosis and FFP3, which is the designated respirator for protecting health care workers against pandemic influenza when undertaking aerosol generating procedures. It is envisaged that the Trust will stock a non-disposable type of FFP3 respirators and issue to staff who are required to perform aerosol generating procedures after training and fit testing. If the designated FFP3 respirator is not immediately available, a disposable FFP3 or FFP2 respirator could be used, provided that the user has previously passed a fit test with the disposable version. Respirators should not be used on patients as the presence of the filter increase the labour of breathing and the expiratory valve allows dissemination of infectious particles.

Fit testing: As per HSE requirements, every user should be fit tested and trained in the use of the respirator. Fit is critically important and a fit check should be carried each time a respirator is worn. The respirator must seal tightly to the face or air will enter from the sides. A good fit can only be achieved if the area where the respirator seals against the skin is clean-shaven. Beards, long moustaches, and stubble may cause leaks around the respirator.

Other types of respiratory protective equipment (e.g., hoods/helmets) are available if the local risk assessment indicates that they would also reduce the risk of exposure. This is particularly important if the wearer is not suitable for a half-mask respirator because of fit issues and also when the respiratory protective equipment must be compatible with other PPE (e.g., safety glasses) required for a procedure/process.

Changing and disposal: If breathing becomes difficult, the respirator becomes damaged or distorted or contaminated by body fluids, or if a proper face fit cannot be maintained, the wearer should go to a safe area and change the respirator immediately. Disposable respirators should be disposed of after each use. Non-disposable respirator should be disinfected according to protocol.

Aerosol-generating procedures: Procedures that were documented to be associated with increase in risk of pathogen transmission in patients with acute respiratory disease include: intubation and related procedures (e.g. manual ventilation and suctioning), cardiopulmonary resuscitation, Bronchoscopy, surgery (including dental procedures) and post-mortem procedures in which high speed devices are used. Some procedures are classified as having a controversial/possible role in the increase in risk of respiratory pathogen transmission – these include: non-invasive positive pressure ventilation, bi-level positive airway pressure, high frequency oscillating ventilation, nebulisation, nasopharyngeal aspiration and chest physiotherapy. Until data are available that allow better assessment of the risk associated with these procedures, it would be prudent to consider these as aerosol generating.

The performance of aerosol-generating procedures should be minimized as is feasible without compromising patient care. To avoid unnecessary exposures, only those health care workers needed to perform the procedure should be present. Where possible aerosol generating procedures should be carried out in well ventilated single rooms with the doors shut. Only those healthcare workers who are needed to perform the procedure should be present. In addition to respirators, eye protection must be worn to prevent eye contact with infectious material during such procedures.

12.4 Gloves

Gloves are not required for the routine care of patients with pandemic influenza per se. Standard Infection Prevention & Control (IPC) Principles require that gloves be worn for invasive procedures, contact with sterile sites, non-intact skin, and mucous membranes, during all activities that carry a risk of exposure to blood, body fluids, secretions (including respiratory secretions) and excretions, and when handling sharp or contaminated instruments.

Gloves should be removed immediately after use, disposed of as clinical waste, and hand hygiene performed. No attempt should be made to wash gloves for subsequent reuse.

If glove supplies become limited during a pandemic priorities for glove use may need to be established (Advice will be available from the IPC team). In this circumstance, gloves should always be prioritised for contact with blood and bloody fluids, invasive procedures, and contact with sterile sites.

Aprons

Disposable plastic aprons should be worn whenever there is a risk of personal clothes or uniform coming into contact with a patient's blood, body fluids, secretions (including respiratory secretions) and excretions or during activities that involve close contact with the patient (e.g., examining the patient). Plastic aprons should be worn as single use items for one procedure or episode of patient care and then discarded and disposed as clinical waste. **In cohorted areas, aprons need to be changed between patients.**

Gowns

Gowns are not required for the routine care of patients with influenza. However gowns should be worn if extensive soiling of personal clothing or uniform with respiratory secretions is anticipated, or there is risk of extensive splashing of blood, body fluids, secretions, and excretions onto the skin of the healthcare worker. Procedures such as intubation and activities that involve holding the patient close (e.g. in paediatric settings) are examples of when a gown may be needed. Fluid-repellent gowns are preferable, but if non fluid-repellent gowns are used a plastic apron should be worn beneath.

Gowns should:

- fully cover the area to be protected
- be worn only once and then placed in a waste or laundry receptacle as appropriate, and hand hygiene performed immediately after removal.

Eye protection

The use of eye protection should be considered when there is a risk of contamination of the eyes by splashes and droplets e.g., blood, body fluids, secretions, and excretions generated through patient care. This should be an individual risk-assessment at the time of providing care. Eye protection should always be worn during aerosol-generating procedures.

Eye protection can be achieved by the use of any one of the following:

- surgical mask with integrated visor
- full face visors
- polycarbonate safety spectacles or equivalent.

Of note, non-disposable eye protective equipment (e.g., polycarbonate safety spectacles issued as personal equipment to staff on a long-term basis) pose a potential cross-infection risk. It is important that any such items are decontaminated after soiling using agents recommended by the manufacturer, and when leaving an influenza patient segregated area prior to performing final hand hygiene.

Table 1. Personal protective equipment for care of patients with pandemic influenza ^a

	ENTRY TO COHORTED AREA BUT NO PATIENT CONTACT^a	CLOSE PATIENT CONTACT (<3 FEET)	AEROSOL GENERATING PROCEDURES^{b,c}
Hand hygiene	√	√	√
Gloves	x ^d	√ ^e	√
Plastic apron	x ^d	√	x
Gown	x	x ^{f,g}	√ ^g
Surgical mask	√	√	x
FFP 3 respirator	x	x	√
Eye protection	x	Risk Assessment	√

- a Standard IPC Principles apply at all times
- b Examples of aerosol-generating procedures – please see section 9.3 above
- c. Wherever possible, aerosol-generating procedures should be performed in side rooms or other closed single-patient areas with minimal staff present
- d. Gloves and apron should be worn during certain cleaning procedures; consult section 6
- e Gloves should be worn in accordance with Standard IPC Principles. If glove supplies become limited or pressurised, this recommendation may need to be relaxed. Glove use should be prioritized always for contact with blood and body fluids, invasive procedures, and contact with sterile sites
- f Consider in place of apron if extensive soiling of clothing or contact of skin with blood and other body fluids is anticipated (e.g., during intubation or caring for babies)
- g If non-fluid repellent gowns are used a plastic apron should be worn underneath.

12.5. Environmental Infection Control

Clinical and non-clinical waste

No special handling procedures beyond those for Standard IPC Principles are recommended for clinical and non-clinical waste that may be contaminated with influenza virus. Waste generated within the clinical setting should be managed safely and effectively, with attention paid to disposal of items that have been contaminated with secretions/sputum (e.g., paper tissues). This must be treated as Clinical Waste. (Refer to Trust waste management Policy)

Liquid waste such as urine and faeces can be safely disposed of into the sewerage system.

All waste collection bags should be tied and sealed before removal from the patient area. Gloves should be worn when handling **ALL** waste and hand hygiene performed after removal of gloves.

12.6 Linen and laundry

Linen used during the patient's care should be managed safely as per Standard IPC principles.

Linen should be categorised as “Used” or “Infected” per the NHS Executive Guidance (1995) on Hospital Laundry Arrangements for Used and Infected Linen. Both “Used” and “Infected” linen must be handled, transported and processed in a manner that prevents skin and mucous membrane exposures to staff, contamination of their clothing and the environment, and infection of other patients.

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

Hospitals: Bed curtains should be changed following patient discharge.

12.7. Staff uniforms (Refer to Trust dress code and care of uniform guidelines).

The appropriate use of PPE will protect uniforms from contamination in most circumstances. During a pandemic, staff should avoid travelling to and from work or between hospital residences and place of duty in uniform.

Uniforms should be laundered in a domestic washing machine at the maximum temperature as recommended by the manufacturer, then ironed or tumbled-dried. Uniforms should be transported home in a sealed plastic bag, washed separately from other linen, in a load not more than half the machine capacity, in order to ensure adequate rinsing and dilution.

12.8. Crockery and utensils

No special precautions, beyond those for Standard IPC Principles, are recommended for dishes and eating utensils used by a patient with pandemic influenza. Wash dishes and eating utensils in a dishwasher with a hot rinse. Do not hand wash these items. There is no need to use disposable plates and cutlery.

12.9. Environmental cleaning and disinfection

Patient cohorted areas and clinical rooms should be cleaned daily at a minimum. Cleaning schedules may vary by setting.

- Side rooms and cohort bays at a minimum, daily and after patient discharge
- Clinical rooms as a minimum, daily (preferably at the end or the beginning of the day) and in-between influenza and non-influenza sessions if the same clinical room is used
- Frequently touched surfaces (e.g., medical equipment, door knobs): at least twice daily and when known to be contaminated with secretions, excretions or body fluids.
- In outpatient or other clinic environments where suspected cases are examined all frequently touched surfaces and equipment is to be cleaned between each case

Either detergent/disinfectant propriety wipes (currently Clinell wipes (Green packet)) or freshly prepared general purpose detergent and hot water should be used. Damp rather than dry dusting should be performed to avoid generating dust particles. During wet cleaning a routine should be adopted that does not redistribute micro-organisms. This may be accomplished by cleaning less heavily contaminated areas first and by changing cleaning solutions and cloths frequently. The use of vacuum cleaners should be avoided.

Dedicated or single-use/disposable equipment should be used. Non-disposable equipment, including mop heads, should be laundered after use.

Any spillage or contamination of the environment with secretions, excretions or body fluids should be treated in line with the Trust IPC Spillage Policy

Domestic staff should be allocated to specific areas and not moved between influenza and non-influenza areas. They must be trained in the correct methods of wearing PPE and the precautions to be taken when cleaning cohorted areas. Domestic staff should wear gloves

and aprons; in addition a mask should be worn when cleaning in the immediate patient environment in cohorted areas or side rooms.

Terminal cleaning

Hypochlorite solution or Clinell peracetic acid wipes (Red Packet) are the recommended disinfectant for environmental decontamination of areas where the influenza patient has been in the hospital.

12.10. Patient care equipment

Effective cleaning of patient care equipment is an essential prerequisite to both disinfection and sterilisation. Standard practices for handling and reprocessing used and soiled patient-care equipment, including re-usable medical devices, should be followed for both influenza and non-influenza areas of hospital and primary care settings:

- Prevent exposure of the skin and mucous membranes and contamination of clothing and the environment. Gloves should be worn when handling and transporting used patient-care equipment
- Clean heavily soiled equipment with general purpose detergent and hot water before removing from the patient's room or consulting room
- Reusable equipment (e.g., stethoscopes, patient couch in treatment and consulting rooms) must be scrupulously decontaminated between each patient; equipment that is visibly soiled should be cleaned promptly.
- Wipe external surfaces of portable equipment for performing x-rays and other procedures in the patient's room with general purpose detergent and hot water upon removal from the patient's room or consulting room.

Whenever possible, non-critical patient equipment should be dedicated for use by pandemic influenza patients only.

Use of equipment that re-circulates air (e.g. fans,) should be avoided.

12.11. Furnishings

Remove all non-essential furniture, especially soft furnishings from reception and any other areas. The remaining furniture should be easy to clean and should not conceal or retain dirt and moisture. Toys, books, newspapers, and magazines should be removed from the waiting area. Keep all clinical areas free from clutter and unnecessary items.

12.12 Special Settings: IPC measures for waiting rooms

Patients, staff, and visitors should be encouraged to minimise potential transmission of influenza through good hygienic measures as follows:

- Cover nose and mouth with disposable one-use tissues when sneezing, coughing, wiping and blowing noses.
- Dispose of used tissues in nearest waste bin
- Wash hands after coughing, sneezing using tissues or contact with respiratory secretions and contaminated objects
- Keep hands away from the mucous membranes of the eyes and nose
- Certain patients (e.g., the elderly, children) may need assistance with containment of respiratory secretions; those who are immobile will need a receptacle (e.g., a plastic bag) readily at hand for immediate disposal of tissues and a supply of hand wipes and tissues

Patient masking: As waiting rooms can become crowded, it is preferable that symptomatic persons wear surgical masks. This will assist with the containment of respiratory secretions and minimise environmental contamination.

Where possible single rooms/cubicles should have been identified as part of the department's plans in which suspected cases identified at a clinic can be isolated until medically reviewed. During this period the patient is to be requested to wear a surgical mask.

Infection control procedures in rooms/cubicles

Room layout: all non-essential equipment from the examination room/cubicle should be removed. Stocks of consumables should be stored near to the examination rooms and not inside them. Patients should be confined to their rooms/cubicles and only moved outside for essential procedures and on discussion with the IPC team.

Cleaning: Hand contact surfaces must be cleaned daily and after each patient while room is in use.

12.13 Ministers of religion

Ministers of religion should be instructed to wear PPE as per Standard IPC Principles and Droplet Precautions.

Last offices

When performing last offices for deceased patients, staff must follow Standard IPC Principles; a masks/visor should be worn if there is a risk of splashes of blood and body fluids, secretions (including respiratory secretions), and excretions onto the facial mucosa. The body should be fully wrapped in a sheet. Transfer to the mortuary should occur as soon as possible after death. If the family wishes to view the body, they may be allowed to do so and instructed to wear PPE as per Standard IPC Principles.

Post mortem examinations

During a pandemic, questions may arise about the need for post-mortems examinations. Where clinically indicated, such exams will yield vital clinico-pathological information which may be of vital importance in refining recommendations related to prevention and treatment of infection. The post-mortem should be conducted in a high-risk post-mortem room and a powered respirator and full PPE should be worn.

Mortuary and funeral staff

The mortuary staff or funeral director should be informed that the deceased had pandemic influenza. Standard IPC Principles should be followed; there is no further risk of droplet spread.

12.14. Special settings: visitors (Refer to Trust Visitors Policy)

Family visitors

During a pandemic, visitors to all areas of the hospital should be kept to a minimum. On arrival to influenza segregated wards all visitors should report to the ward reception. Signage should be displayed informing visitors of the ward's current segregated status and procedures that need to be undertaken prior to entering the ward. Visitors entering a cohorted area must be asked to clean their hands before entering and on leaving the clinical area.

Others

Works department technicians should not be allowed entry into influenza segregated areas unless undertaking essential maintenance work. If this is necessary, PPE must be worn as detailed for healthcare workers.

12.15 Special settings: Emergency Surgery

In the event of an influenza outbreak those patients requiring emergency surgery, the following measures must be taken:

- Theatres must be informed in advance.
- The patient should be transported directly to the operating theatre and should wear a surgical mask.
- The patient should be anaesthetised and recovered in the theatre.
- Staff should wear protective clothing, including Trust designated mask, visor, gown/apron and gloves.
- Disposable anaesthetic equipment should be used wherever possible.
- Re-usable anaesthetic equipment should be decontaminated in line with manufacturers' instructions.
- The anaesthetic machine must be protected by a filter with viral efficiency to 99.99%
- Instruments and devices should be decontaminated in the normal manner.
- The theatre should be cleaned using a 1000ppm available chlorine solution.
- Theatres should not be used after the patient leaves for 15 minutes if conventionally ventilation or 5 minutes if ultra clean ventilation.

12.16 Outpatients

During pandemic influenza, out patient services may have to be limited. There will be posters around the hospital to advise patients and visitors not to come into hospital if they are suffering from influenza like illness. Patients who have influenza like illness at the time of their appointment will be advised to postpone their appointment until they are better.

Reception staff in outpatient department will be instructed to ask patients turning up for appointment whether they have influenza like symptoms. Those with symptoms and who do not require immediate medical care will be advised to go home and re-book when they are better. Those with symptoms requiring medical attention will be advised to see their GP if the symptoms are mild, or to attend Accident and Emergency if medical attention is urgently required.

12.17 Segregated areas for isolating/cohorting patients

To achieve the desired goal of separating patients with pandemic influenza from those without, a designated self-contained area/ward within the hospital will be used for the treatment and care of patients with pandemic influenza. (Refer to [section 11](#) Pandemic Admission and Discharge Policy)

To control entry, signage should be displayed warning of the segregated pandemic influenza area. Doors must be kept closed at all times.

Patients with possible pandemic influenza should be admitted and isolated in negative pressure rooms on Hillyers Ward/ William Gull Ward/Albert Ward.

If a patient needs to be admitted to ICU, the negative pressure room should be used. On William Gull ward, each pair of negative pressure rooms shares an antechamber with toilet facilities. If these rooms have to be used, both rooms of a pair should be occupied by confirmed influenza patients or patients with a high likelihood of having influenza, otherwise one should be occupied and the other left empty.

Patients should not leave the isolation room unless this is essential for management or investigation. Entry to the isolation room should be strictly limited to essential staff only. Staff who enter the isolation room (or attend the patient outside the room) must wear a special filter mask, gloves, apron (long sleeve fluid repellent gowns for procedures) and eye protection.

When the isolation facility is fully utilised during the peak of the pandemic, patients that fulfil the diagnostic criteria for pandemic influenza should be cohorted in a single ward (see section 11. Pandemic Admission and discharge policy). This will be co-ordinated by the IPC team together with site nurse practitioners.

Ward level

Cohorting of patients in segregated areas of the hospital should be carried out from the outset of the pandemic to help contain influenza within one part of the hospital and reduce the risk to other patients.

Side rooms in non-influenza areas should be reserved for patients requiring isolation for other (non-influenza) reasons. However, due to the demand on side rooms for confirmed or suspected influenza cases it may be necessary to use these facilities for symptomatic cases.

Side rooms in influenza segregated areas should be reserved for performing aerosol-generating procedures whenever possible.

Consideration should be given to cohorting separately patients infected with pandemic influenza and another pathogen (e.g., MRSA/CDT) to minimise hospital transmission of other infectious pathogens.

Consideration will need to be given to cohorting patients with the same infectious condition, e.g. MRSA to maximise single room availability. These patients **MUST NOT** be isolated with patients with other infectious conditions.

This will be dependent on availability of rooms and staff and the number of patients who are infected with both influenza and another pathogen requiring isolation. The ICT and SNP's will assist in undertaking a risk assessment and will advise on the appropriate placement of patients.

Patients should remain in the designated segregated area until discharged to the community and not allowed to be transferred to other areas purely for bed management purposes.

However, if there is extreme pressure for beds in the segregated area of the hospital, convalescing patients with residual, non-respiratory problems (i.e., who are unlikely to be secreting virus in large quantities), but who require hospitalisation for other reasons (e.g. poor mobility, non-respiratory complications) may need to be moved to another area of the hospital, an intermediate care facility, or a nursing/residential home. (Refer to Section 11 Pandemic Admission and Discharge Policy)

Entry procedures: The number of personnel should be limited to those necessary for patient care and support. Place a sign at the entrance alerting all to the precautions to be adopted.

Infection prevention and control precautions: Standard IPC Principles must be strictly applied in conjunction with Droplet Precautions. Droplet Precautions for all patients should be maintained in the segregated area.

Ward furnishings: For 4 – 6 bedded bays, set up an equipment station outside the entrance to hold PPE. For Nightingale-style ward areas, identify strategic points for equipment stations to facilitate access and encourage use. Remove all non-essential furniture, especially soft furnishings. Remaining furniture should be easy to clean and should not conceal or retain dirt and moisture.

Patient area: In accordance with Droplet Precautions, the distance between beds should be more than 1 metre. Keep the patients' personal belongings to a minimum. Provide water jug and glass, tissue wipes and suitable disposable containers (e.g., plastic bags), and all other items necessary for personal hygiene within the patients reach.

Patient equipment: Where feasible allocate each patient their own non-critical items of patient equipment (e.g., stethoscope, thermometer) or use disposable items. Clean re-usable equipment between patients.

Day rooms/lounges: Consider closing day rooms/lounges if there is a risk that these might be used by both influenza and non-influenza patients or if the location of these rooms presents a problem for limiting patient movements.

Cleaning: Areas should be scrupulously cleaned as a minimum at least once a day. Close liaison with housekeeping/domestic services will be required.

12.18. Patient transfer/transport/hospital day care procedures/Hospital transfers

Patients must not be automatically admitted to hospital if they have pandemic influenza. However, it can be anticipated that some patients who are initially managed in the community will require hospital admission.

Patients must not be transferred from one hospital to another for routine care related to pandemic influenza, including mechanical ventilation. However, some patients may require transfer for specialist care arising out of complications or concurrent medical events (e.g., cardiac angioplasty, renal dialysis).

If transfer is essential, the IPC Team and Site Nurse Practitioner at the receiving hospital and the ambulance staff must be advised in advance. Patients with influenza should not be admitted or transferred to specialist units for vulnerable patients (e.g., transplant units) where if influenza is introduced; mortality is likely to be very high.

Intra-hospital transfers

Where possible allocate dedicated equipment such as X-ray equipment and ECG recorders to the segregated area so that all procedures and investigations can be carried out in the area.

Patients with pandemic influenza should leave the segregated care area for only urgent and essential procedures. If a patient requires transfer to another department the following procedures must be followed:

- The department must be informed in advance
- The patient must be taken straight to and return from the department and must not wait in a communal area
- Patients should be placed at the end of a list to allow appropriate decontamination after any procedure.
- In some settings (e.g., radiology departments) a separate room should be set aside for patients with influenza segregated areas of the hospital and this room should be cleaned regularly
- Influenza patients should wear a surgical mask while in transit to help prevent large droplets being expelled in to the environment. If a surgical mask cannot be tolerated

(e.g., due to the patient's age or deteriorating respiratory status) apply the most practical measures (e.g., tissues) to contain respiratory secretions. Where possible the patient should also perform hand hygiene before leaving their room or cohorted area.

12.19 Radiology

X-rays should be taken using a portable machine in a negative pressure room or cohorting ward. Where it is not possible, impractical or clinically inappropriate to use mobile facilities the patient should be transferred to the department at an agreed time. The patient should wear a surgical mask during transit and attendance at the department. Equipment should be decontaminated as previously described.

12.20 Discharge

Patients should remain isolated while they are symptomatic or until an alternative diagnosis is made. Patients with possible, probable or confirmed influenza should be discharged once their symptoms and chest x-ray change have resolved and they have been afebrile for 48hrs. Once home, patients should keep contact with others to a minimum for 7 days from onset of symptoms.

12.21 Staff Deployment

- Prompt recognition of healthcare workers with influenza is essential to limit the spread of the pandemic.
- Healthcare workers with pandemic influenza should be excluded from work;
- As a general principle, healthcare workers who care for pandemic influenza patient areas should not care for other patients;
- Healthcare workers at high-risk for complications from pandemic influenza (see appendix 16.1) should not provide direct patient care
- Bank and agency staff should follow the same deployment advice as permanent staff.

12.22 Incident Meetings

During the alert phase, before a Pandemic is declared an incident meeting should be called when a possible case is admitted to hospital or when a cluster of HCW with symptoms has been identified. The principle and practice of incident meeting is outlined in the Trust Outbreak Plan (See PROTOCOL FOR THE MANAGEMENT OF MAJOR INFECTION PREVENTION AND CONTROL OUTBREAK OR INCIDENT). The management arrangement should be set at Level 3, i.e. major or catastrophic. If a Pandemic has been declared management of this issue will be via the Trust Operational Management Group which meets daily throughout the pandemic to review the situation, see section 4 of the Plan.

Ref: Guidance for Pandemic Influenza: Infection Control in Hospitals and Primary Care Settings. Department of Health, England and Health Protection Agency. October 2005, revised 2007.

Section 13 Prophylaxis and Treatment

This section includes the following subsections

- Seasonal / Non-pandemic Flu Vaccination
- Pre-pandemic Vaccine
- Pandemic Vaccine
- Pandemic Vaccine policy, strategy and delivery
- Priority Groups for Pandemic Vaccination
- Antiviral agents for influenza
- Oseltamivir suspension
- Strategies for the optimal use of antiviral drugs
- Availability, storage and distribution of oseltamivir and pandemic vaccine
- Availability of antibiotic drugs
- Unknowns
- Information sources
- Appendix 13.1: Patients at high-risk of influenza-related respiratory complications

Seasonal / Non-pandemic Flu vaccination

Vaccination remains the DoH front line strategy to protect the public against influenza. At Guy's and St Thomas' Foundation Trust, patients and staff in at-risk groups are encouraged to be vaccinated against pneumococcus and to have annual seasonal influenza vaccination. Influenza vaccination is also offered to other Trust staff via Occupational Health. Staff that are eligible for vaccination under the DoH programme are encouraged to seek vaccination via their GP.

Pre-pandemic Vaccine

The DoH has stockpiled around 3.3 million doses of A/H5N1 vaccine primarily to protect healthcare workers. This may offer limited protection pre-pandemic, prior to cases in the UK. Effectiveness will depend on the degree of match to pandemic virus. Stocks are limited. Vaccination would be initiated based on national and international expert advice and would be co-ordinated by occupational health (Pandemic Flu – National Framework Nov 07).

Pandemic Vaccine

During the 2009 pandemic, virus was identified and vaccines developed. The timescale from identification to development and availability for clinical use appears to be around 6 months. In other future pandemics it is anticipated that once virus is identified, there will be similar worldwide efforts (co-ordinated by the WHO) to develop monovalent vaccines, with a similar timeline to that seen in the 2009 pandemic (Pandemic Flu – National Framework Nov 07).

Pandemic vaccine policy, strategy and delivery

Government policy for the 2009 pandemic has been to create advance supply contracts for a pandemic vaccine, although, as expected, such a vaccine was unavailable during the first wave. It is anticipated that this policy would be continued for future pandemics.

Once available, the pandemic vaccine is likely to be in high demand across the UK and worldwide. Vaccine will be administered as it becomes available to predetermined priority groups.

Pre-determined priority groups (see Table 1) are based on a number of factors including:

- Maintaining essential community infrastructure required to carry out pandemic plans
- Limiting mortality among high-risk groups
- Minimising social disruption and economic loss
- Reducing morbidity in the general population

The priority groups have been set by the DoH and will be subject to review, depending on the epidemiology and clinical features of the new pandemic virus and depending on availability of

vaccine. It is likely that advice will be given by WHO about priority groups for immunisation, as soon as epidemiological data from the emerging pandemic becomes available.

For the 2009 pandemic vaccination program the priority groups are listed in Table 2 . It is likely that arrangements similar to those for oseltamivir will be put in place for pandemic vaccine once it becomes available. The vaccine will require refrigeration and cold chain transport but storage difficulties for large volumes of stock are not anticipated as demand will be high and the time delay between manufacture and vaccination will be short.

Priority Groups for Pandemic Vaccination

Table 1 – priority groups for future pandemic vaccination

(UK Health Departments' Influenza pandemic contingency plan (October 2005 edition))

Priority	Group for vaccination	Advantage
1 = highest	Healthcare staff with patient contact (including ambulance staff) and staff in residential care homes for the elderly.	Disruption of vital health care delivery is minimized.
2	Providers of essential services e.g. fire, police, security, communications, utilities, undertakers, armed forces.	Vital community functions which would be affected by mass absenteeism would be minimized.
3	Those with high medical risk (see Appendix 17.1)	Consistent with normal influenza immunisation policy. Demand for health care will be minimised.
4	All over 65 years of age	Consistent with normal influenza immunisation policy. Demand for health care will be minimised.
5	Selected industries	Maintenance of essential supplies of e.g. pharmaceuticals. Minimise disruption to the economy.
6	Selected age groups, depending on advice from WHO e.g. children	Minimise spread by those most likely to transmit virus and the impact in population groups showing highest impact
7	Offer to all	Prevent illness and minimise the impact of pandemic in the UK

Table 2 – priority groups for 2009 pandemic vaccine [figures for England only]
(DoH guidance 13th August 2009)

Priority	Group for vaccination	Advantage
1 = highest	People aged over 6 months and under 65 years in current seasonal flu vaccine clinical at-risk groups (see Appendix 17.1) [about 5 million people].	Consistent with normal influenza immunization policy. Demand for health care will be minimized.
2	All pregnant women, subject to licensing conditions on trimesters [about 0.5 million people].	Pregnant women have been shown to be at higher risk of severe disease in the 2009 pandemic.
3	Household contacts of people with compromised immune systems, e.g. people in regular close contact with patients on treatment for cancer [about 0.5 million people].	Prevent transmission of infection to most vulnerable patient groups.
4	People aged 65 and over in the current seasonal flu vaccine clinical at-risk groups [about 3.5 million people].	This does not include otherwise healthy over-65s, since they appear to have natural immunity to the virus.
	Vaccination of frontline health and social care workers [approximately 2 million people] will begin at the same time as the first at-risk group, and will continue for as long as necessary.	This group is at increased risk of infection and of transmitting that infection to susceptible patients. Protecting these people will help the NHS workforce to remain resilient and able to treat sick patients

Preparations continue to be made to extend the 2009 pandemic program beyond these initial priority groups, and the Joint Committee on Vaccination and Immunisation will consider this matter further and report back in due course.

Antiviral agents for influenza

Further product and prescribing information can be obtained from the summary of product characteristics (SPC) (www.medicines.org.uk), or on the Trust Intranet (<http://gti/>). National protocols have been set up to allow easy access during pandemic (Operational framework for antivirals).

Drug	Class	Activity	Route	Treatment	Post-exposure prophylaxis	Renal Impairment
Amantadine ^{1,2}	M ₂ proton pump antagonist	Influenza A	Oral	>10yrs 100mg once a day, within 48hrs, for 4-5 days	Not specifically mentioned	Reduce dose
Zanamivir ^{3, 4, 5}	Neuraminidase inhibitor	Influenza A & B	Inhaled	≥5yrs 10mg twice a day, ideally within 36hrs (child) or 48hrs (adult) of symptoms for 5 days	≥5yrs 10mg once a day, ideally within 36hrs of symptoms for 10 days	No dose reduction needed
Oseltamivir ^{3,4, 5}	Neuraminidase inhibitor	Influenza A & B	Oral	Doses currently recommended by DoH* <6 months <ul style="list-style-type: none"> • 2mg/kg twice a day for 5 days – use suspension or solution 6 months-1y <ul style="list-style-type: none"> • 3mg/kg twice a day for 5 days - use suspension or solution >1y to <3y (≤15kg) <ul style="list-style-type: none"> • 30mg twice a day for 5 days >3y to <7y (15-23kg) <ul style="list-style-type: none"> • 45mg twice a day for 5 days >7y to <13y (23-40kg) <ul style="list-style-type: none"> • 60mg twice a day for 5 days >13y (>40kg) <ul style="list-style-type: none"> • 75mg twice a day for 5 days 	Doses currently recommended by DoH* <1y <ul style="list-style-type: none"> • Not recommended >1y to <3y (≤15kg) <ul style="list-style-type: none"> • 30mg once a day for 10 days >3y to <7y (15-23kg) <ul style="list-style-type: none"> • 45mg once a day for 10 days >7y to <13y (23-40kg) <ul style="list-style-type: none"> • 60mg once a day for 10 days >13y (>40kg) <ul style="list-style-type: none"> • 75mg once a day for 10 days 	Reduce dose

Use of oseltamivir & zanamivir in pregnancy - in the current circumstances the balance of benefit to risk supports their use and they should be provided for pregnant women. Indeed appropriate treatment of pregnant women with oseltamivir or zanamivir will help to reduce symptoms such as fever and this may benefit the developing fetus. Zanamivir is the recommended medicine, as it is inhaled and reaches low concentrations in the blood. However, if a pregnant woman has a contraindication to zanamivir, or requires a medicine which is systemically active oseltamivir should be used.

Use of oseltamivir & zanamivir in breastfeeding - Women who are breastfeeding who have symptoms of influenza should be treated with an antiviral medicine. The preferred medicine is oseltamivir, as for other adults. However if a woman's baby is born and breastfeeding is started while the woman is taking zanamivir, she should complete the course of zanamivir, it is not necessary to switch to oseltamivir.

* differs from the dosing stated in the SPC

Points to note:

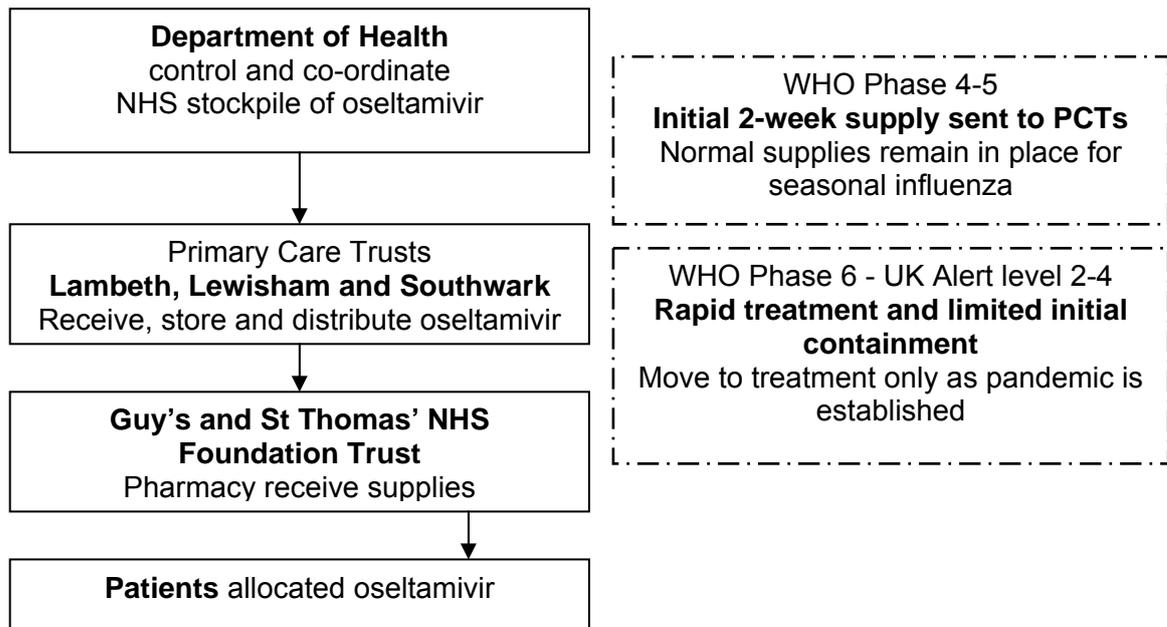
1. In the current NICE guidance for seasonal influenza amantadine is not recommended for use in treatment or prophylaxis of influenza A
2. Some strains of avian influenza are known to be resistant to amantadine (Moscona A, NEJM 2005).
3. Antivirals should ideally be given within 48h of exposure but this threshold may be extended depending on circumstances..
4. Patients for whom treatment is contraindicated according to the product licensing will be assessed on a case by case basis including children under one. Clinicians will need to consider treatment for such individual patients in a pandemic scenario if the patient is so ill as to alter the risk-benefit argument in favour of treatment.
5. As a black triangle drug all suspected adverse drug reactions should be reported via the Yellow Card Scheme as usual.

Availability, storage and distribution of oseltamivir and zanamivir

A national stockpile of 50 million courses of oseltamivir and zanamivir has been built up. Monitoring of stockpile consumption and clinical prioritisation are expected (and has taken place in the 2009 pandemic). All treatment courses of oseltamivir will be supplied as capsules, except for children under 1 year of age where either proprietary (Tamiflu) suspension or the NHS-manufactured solution should be used. DoH plans state that PCTs will receive an allocation of their antiviral supply as oseltamivir phosphate powder based on 4.5% of their total resident population.

As mentioned above, the DoH has developed a plan to ensure effective manufacture of oseltamivir suspension from bulk powder in a pandemic situation. GSTFT pharmacy manufacturing unit is one of the nationally allocated units for the manufacture of oseltamivir suspension. The suspension requires refrigeration and has a short shelf life compared to the capsule formulation and the proprietary (Tamiflu) suspension. Local PCT plans must include arrangements for producing suspension for children to meet prescribed demand (UK operational framework for Sept 05). Secure and appropriate storage has been arranged for GSTFT stocks of oseltamivir. These stocks will be distributed by pharmacy

Distribution of national stockpile of oseltamivir



Strategies for the optimal use of antiviral drugs

(Source: Pandemic Flu – National Framework Nov 07)

The National Institute for Clinical Excellence (NICE) guidance for the use of antivirals for seasonal influenza **does not apply in an influenza pandemic, nor do the Trust guidelines for the prescription of oseltamivir for treatment and prophylaxis of influenza.**

In the pandemic situation oseltamivir treatment courses allocated to GSTFT via the PCTs will be used for inpatients in accordance with DoH strategy. GSTFT supplies may also need to be used for A&E attenders and other patients in whom there are difficulties in accessing medication. Supplies will be allocated on the basis of clinical need. Trust

policy will be updated as the DoH issues more detailed clinical guidance and will be reviewed as necessary.

In addition to the priority groups below, the DoH may also recommend limited use of antiviral drugs, if supplies allow, as prophylaxis to limit the spread in certain defined situations such as, for example, in a closed institution suffering an outbreak.

PCTs will allocate and deliver stock to GSTFT for use within the Trust.

DoH provisional strategies for antivirals use:

Pandemic Phase	Risk	Antiviral Use
Phase 2	Potential prevention of a pandemic virus emerging	In the event of outbreaks of highly pathogenic influenza strains in poultry, swine, or other animals, antiviral agents will be offered to occupational groups exposed to dead or diseased animals. Given for personal protection and to protect against establishment and evolution of influenza viruses in people (Defra)
Phase 3 and 4	Prevention of evolution of a new virus causing human infection	Antivirals will be used to treat cases
Phase 5 and possibly very early in Phase 6	Possible 'abortion' of a potential pandemic or delay in its establishment and spread	Treatment of a symptomatic case(s) and short term prophylaxis (taken for 10 days) to prevent infection developing in those of their close contacts (including health care workers) potentially exposed. Done on a case by case basis. Likely short-term strategy
Phase 6	Treatment of cases	Until stockpile completion or if clinical attack rate is >25%, treatment will be offered in provisional order of priority (see below)
	1	Health care workers , if and when they develop fever or other influenza-like symptoms (regardless of whether vaccinated)
	2	Unimmunised people in high risk groups (see appx 16.1) or Emerging special risk groups , to ameliorate illness and reduce complications and death
	3	Other unimmunised people
	4	Immunised people , using the same criteria as above, if emerging information suggests the vaccine being used is not effective at reducing serious illness, complications or deaths

Availability of antibiotic drugs

The government are reviewing available antibiotic drugs, stock levels and options for enhancing levels. Antibiotics will be used for secondary infection complications as outlined in the British Infection Society, British Thoracic Society and Health Protection Agency guideline.

Unknowns

1. DoH operational plans for delivery of a pandemic immunisation programme

Information sources

- UK Health Departments' influenza pandemic contingency plan (UKIPCP) March 2005 (revised October 2005). Annex G and H. Document superseded by National Framework Nov 07
- UK Operational framework for stockpiling, distributing and using antiviral medicines in the event of pandemic influenza September 2005.
- Green Book, Influenza chapter July 2009 and amendments August 2009
- Defra's overview of emergency preparedness for exotic animal diseases Dec 2007 <http://www.defra.gov.uk/animalh/diseases/control/contingency/exotic.htm> (accessed 28.02.08)
- Guidelines for the prescription of oseltamivir for treatment and prophylaxis of influenza, Guy's and St Thomas' NHS Foundation Trust. August 2009.
- Moscona A. Neuraminidase Inhibitors for Influenzae. NEJM 2005;353:1363-73
- Department of Health. Pandemic Flu: A national framework for responding to an influenzae pandemic November 2007

Appendix 13.1

Patients at high-risk of influenza-related respiratory complications (from clinical risk groups who should receive influenza immunization)

(adapted from Green Book 2006, Influenza chapter)

Patient Group	Including some examples	Further information
Chronic respiratory disease, including asthma	<ul style="list-style-type: none"> • chronic obstructive pulmonary disease (COPD) • chronic bronchitis • emphysema • bronchiectasis • cystic fibrosis • interstitial lung fibrosis • pneumoconiosis • bronchopulmonary dysplasia (BPD) • Asthma (requiring continuous or repeated use of inhaled or systemic steroids or with previous exacerbations requiring hospital admission) • Children with previous admission to hospital for lower respiratory tract disease 	
Chronic heart disease	<ul style="list-style-type: none"> • congenital heart disease • hypertension with cardiac complications • chronic heart failure • individuals requiring regular medication and/or follow-up for ischaemic heart disease 	
Chronic renal disease	<ul style="list-style-type: none"> • nephrotic syndrome • chronic renal failure • renal transplantation 	
Chronic liver disease	<ul style="list-style-type: none"> • cirrhosis • biliary atresia • chronic hepatitis 	
Diabetes	<ul style="list-style-type: none"> • Type 1 and Type 2 diabetes requiring oral hypoglycaemic drugs 	
Immunosuppression (due to disease or treatment)	<ul style="list-style-type: none"> • Asplenia • Splenic dysfunction • Sickle cell • HIV infection (all stages) • Patients undergoing chemotherapy leading to immunosuppression • Individuals (any age) on or likely to be on systemic steroids ($\geq 20\text{mg/day}$ prednisolone) for $>1/12$ • Children $<20\text{kg}$ on a dose of $\geq 1\text{mg/kg/day}$ prednisolone • Patients on other immunosuppressant drugs 	Some immunocompromised patients may have a suboptimal immunological response to the vaccine

Section 14 Ethics

The following is the ethical framework document from Department of Health dated 11 September 2006.

THE ETHICAL FRAMEWORK

Introduction

Planning for a pandemic, and responding to one while it is happening, involves many difficult decisions. Such decisions can be personal – *How should I behave?* – or wider, for example, affecting the organisation of health or social services. This ethical framework is designed to help people think about the ethical aspects of such decisions, and about how to put their decisions into practice. Although some of the implications of each principle are illustrated in the bullet points, these illustrations are not exhaustive.

The fundamental principle that should inform our response is that of:

Equal concern and respect

This means that:

- everyone matters;
- everyone matters equally;
- the interests of each person are the concern of all of us, and of society;
- the harm that might be suffered by every person matters, and so minimising the harm that a pandemic might cause is a central concern.

Using the framework

The principle of equal concern and respect draws together a number of different ethical principles that are separated out below. The individual principles are numbered for convenience, but are not ranked in order of importance – they all matter.

When a particular decision has to be made, using the principles systematically can act as a check list to ensure that the full range of ethical issues are considered. Sometimes, there will be tension between the principles – in trying to both minimise harm and to be fair, for example. It will then be necessary to find an answer that is the best “balance” in the circumstances.

The individual principles

1. Treating people with concern and respect

This principle means that:

- everyone matters;
- people should have the chance to express their views on matters that affect them;
- people’s personal choices about their treatment and care should be respected as much as possible;
- when people are not able to decide, those who have to decide for them should take decisions based on the best interests of the person as a whole rather than just based on their health needs.

This principle means that there should be the widest possible involvement of people in planning for a pandemic. During a pandemic, the urgency of the situation may mean that

it is not possible to consult so widely, but treating people with respect means keeping them informed of the situation, what is happening and what is going to happen, as much as possible. Communication will be needed on many different levels, from the media keeping the public informed as a whole, to a doctor discussing with one person how to treat that person's health problem.

People's choices about their treatment and care are very important. However, in a pandemic as in normal times, people will not be able to have treatment that those caring for them consider would not work or is not suitable for them. It may also not be possible to provide all the treatment that people would like and that might benefit them.

2. Minimising the harm that a pandemic could cause

This principle means that there is a need to:

- Help other countries to fight a pandemic if it starts abroad, to stop it developing further and reaching this country;
- Try and minimise the spread of a pandemic if it reaches this country. Everyone has a role to play, for example by covering the face when sneezing, or staying at home when ill;
- Minimise the risk of complications if someone is ill, for example by using antiviral treatment;
- Learn from experience both at home and abroad about the best way to fight the pandemic and to treat people who are ill.

"Harm" is a broad concept and this principle is intended to cover the physical, psychological and social harm that a pandemic might cause. Thus, actions that save lives, that support the health service in achieving that goal, and that are designed to ensure that society copes with and recovers from the pandemic are all relevant to minimising harm.

3. Fairness

The principle of fairness means that:

- Everyone's interests matter;
- People with an equal chance of benefiting from health or social care resources should have an equal chance of receiving them; however, if the same benefit can be achieved at a later date, it will not be unfair to ask people who can wait to do so.

The principles of minimising harm and fairness are equally important. So, in considering a particular decision a first question might be: *How could harm be minimised?* Then it is necessary to ask: *Would it be fair to do this? Could the same outcome be achieved in a fairer way?* This involves thinking about the interests of everyone who may be affected by the decision. If we are going to treat some of them differently from others, we need to have good reasons for this and be prepared to explain them. It is also important that decision-making is fair; this is considered as part of good decision-making below.

4. Working together

This principle means:

- Working together to plan for, and respond to, a pandemic;
- Helping one another;
- Taking responsibility for our own behaviour, for example by not exposing others to risk and staying at home when ill;
- Learning from experience and being prepared to share information (for example on the effects of treatment) that will help others.

Everyone will have a role in responding to the pandemic. This may include helping family and friends who become ill, helping if possible in the local community, and helping the UK to keep going by going to work and carrying out normal day-to-day activities unless there is a particular reason not to do so (for example, when ill).

Health and social care staff will have a particular role to play in helping us cope with the pandemic; this may involve using their skills where they are most needed, rather than (for example) following their normal routine.

5. Reciprocity

The principle of reciprocity means:

- If people are asked to take increased risks, or face increased burdens, during a pandemic, they should be supported in doing so and the risks and burdens minimised as far as possible.

Some people, particularly health and social care staff, may face very heavy burdens in trying to help us through a pandemic; it is important to think about how to minimise those burdens.

6. Keeping things in proportion

This means that:

- Those responsible for providing information will neither exaggerate or minimise the situation and will give people the most accurate information that they can;
- Decisions on actions that may affect people's daily life, which are taken to protect the public from harm, will be proportionate to the relevant risk and to the benefits that can be gained from the proposed action.

At the start of a pandemic, much will remain unknown about how it is going to affect people and the country as a whole. However, things need to be kept in proportion – all the evidence is that the UK will come through this, as it did with the pandemics in the last century. The media and other people responsible for communications will have an important role to play in ensuring that people know what the real situation is and what they need to do, without exaggerating or minimising the situation.

7. Flexibility

This principle means that:

- plans will be adapted to new information and to changing circumstances;
- people have as much chance as possible to express concerns about or disagreement with decisions that affect them, taking into account the circumstances.

8. Good decision-making

Good decision-making involves respecting a number of different principles:

i. Openness and transparency

This means that those making decisions will:

- Consult those concerned as much as possible in the time available;
- Be open about what decisions need to be made and who is responsible for making them;
- Be as open as possible about what decisions have been made and why they were made.

ii. Inclusiveness

This means that those making decisions will:

- Involve people to the greatest extent possible in aspects of planning for a pandemic that affect them;
- Take into account all views expressed;
- Recognise that some people may find it harder to access communications or services than others, and think about how to ensure that they can express their views and have a fair opportunity to get their needs for treatment or care met.

iii. Accountability

This means that those making decisions:

- can be held to account for the decisions they do or don't take for which they are responsible.

This means that appropriate records should be kept of decisions taken and the justification for them.

iv. Reasonableness

This means that decisions are:

- Rational;
- Not arbitrary;
- Based on appropriate evidence;
- The result of an appropriate process, taking into account how quickly a decision has to be made and the circumstances in which a decision is made;
- Practical; what is decided should have a reasonable chance of working.

Specific guidance has just been received from NHS London who have taken advice from Dr John Coakley at Hammersmith who chairs the London wide network. The following Critical Care escalation criteria have been agreed across London.

In the event of a pandemic, the normal clinical protocols will apply when there is a small to moderate increase in demand for ICU. This means that a decision will be made based on the potential benefit to the patient. There is capacity to expand critical care to cope with this across London, but it may be necessary to cancel some elective work to free up some of this capacity.

As demand rises, and starts to exceed supply, the approach to assessing patients is that the consultant, along with another consultant from within the hospital and the nurse in charge of the ICU will have the authority to assess patients already on the ICU to judge whether treatment should continue and also assess the potential benefit to patients referred to the ICU. The normal rules will still apply for those patients who would not normally meet the criteria for the ICU.

When all ICU capacity has been filled, this approach will continue, but it will be assisted by the Canadian triage rules. The approach outlined here does not replace senior clinical decision making."

An internal trust working group is reviewing detailed arrangements on how we will incorporate some form of the Canadian critical care approach.

Ref: Christian MD *et al.* Development of a triage protocol for critical care during an influenza pandemic. CMAJ 2006;175 (11) 1377-1381.

Part 3

Clinical Plans

Section 15 Accident and Emergency

In the Accident and Emergency department, the triage nurses should be fully aware of the diagnostic criteria for the specific strain of influenza during the pandemic alert period and the criteria for pandemic influenza during the pandemic period (see [section 9](#) Diagnostic criteria and Investigations). Reception and triage nurses should be aware of diagnostic criteria. Masks should be put onto the patient as soon as they are identified and they should be instructed how to wear it.

During the pandemic alert period, patients meeting both clinical and epidemiological criteria should be assessed in the Urgent Care Centre with staff wearing appropriate PPE. Once there are significant numbers of patients those who are ambulatory and unlikely to be admitted will be seen in the flu assessment unit by a General Practitioner and staff nurse from the Emergency Department. If these patients subsequently require further assessment or admission they will be returned to the main department following a discussion between the flu unit nurse and the nurse in charge of the main department.

If waiting areas are required for suspected influenza patients before the flu assessment unit is established then the relative rooms can be used.

Suspected cases should wear surgical mask until influenza is excluded.

Staff attending such patients should wear Protective Clothing according to the pandemic infection control policy (see [section 12](#) Infection Control Policy).

If the patient is unable to wear a mask, carers should wear a mask when in close contact. Patients should be advised to cough/sneeze into a paper tissue and dispose of this safely into the toilet/or a plastic bag tied off at the top, prior to placing it in a bin. Hands of cases should be frequently washed particularly after contact with body fluids (e.g. respiratory secretions, urine or faeces). Hands of close contacts should be thoroughly washed before and after contact with a patient and after activities that are likely to cause contamination.

During the pandemic alert period, the Department of Infection Virology section (STH ext 83140, Bleep 0348) needs to be informed of any compatible cases being assessed in Accident and Emergency so that thorough investigations can be conducted. During out-of hours, the Infection on-call SpR should be informed through switchboard. This policy will be reviewed at the arrival of the pandemic phase when clinical diagnosis will have a high positive predictive value.

Resus

This area can accommodate 6 patients including one paediatric bay. All bays open and staff will be required to wear the appropriate protective clothing during resuscitation.

Flu Assessment Centre

When the numbers of pandemic flu patients impede the ability of the Emergency Department to function normally a Flu Assessment Centre may be opened in the Pre-operative Assessment Centre in Lambeth Wing.

The patients will follow signs to this area, register with a receptionist in the centre (allocated from the trust administration pool) and be seen by a GP (allocated from the Emergency Department). In addition there will be nurse(s) allocated to the centre and one of the senior nurses from the Emergency Department will ensure it is running smoothly and will coordinate the return of any patients who require admission or further assessment.

As the patients arrive they will be provided with a mask.

Ideally this area will have a computer where patients can complete the national online pandemic flu self assessment questionnaire and receive a unique number to arrange collection of antivirals if indicated.

The decision to open this area will be made by the Clinical Lead for the Emergency Department, the Clinical Director of Acute Patient Services and Divisional Director of Acute Patient Services in conjunction with the Senior Site Practitioners.

Paediatric Emergency Department

Children requiring A&E assessment will be seen in the paediatric cubicles with appropriate use of protective clothing

During the alert phase children meeting the influenza criteria will be assessed in either room 6 or 7 with the door closed

These rooms are appropriate for older children who do not require observation and monitoring. A risk assessment will have to be undertaken on admission

Where children require cardiac monitoring and close observation these will be seen in either cubicle 1, 2, 3 or 4.

Risk assessment will be undertaken by the medical and nursing staff

Once the flu assessment unit has opened, children may be seen there **after triage** in the Paediatric Emergency Department using the following procedure:

- 1) Stream and triage child as per department protocol
- 2) Ascertain if child meets the following H1N1 criteria:
 - Fever of >38C or history of fever **AND**
 - Two or more of the following: cough/coryza, sore throat, headache, myalgia, arthralgia, vomiting or diarrhoea
- 3) Establish **NONE** of the following exclusion criteria met:
 - Signs of respiratory distress
 - Evidence of dehydration or shock
 - Altered conscious level
 - Petechiae
 - Safeguarding concerns
 - <1 year of age
 - Underlying chronic condition (e.g. sickle cell, asthma, diabetes)
 - Immunocompromised
 - Febrile Convulsion
- 4) All patients meeting H1N1 Clinic criteria must be discussed with the nurse in charge prior to the family leaving the Paediatric A&E department.
- 5) Ensure child and symptomatic family members wear masks. Give A&E cascard to parent/carer. Direct family straight to H1N1 Clinic.

Section 16 Intensive Care Unit (ICU)

Inpatient admission to ICU

Admissions to the critical care department are assessed on an individual patient basis by the Consultant in charge of the unit. During a pandemic it is expected that the number of admissions to ICU would increase. In circumstances where elective surgery was cancelled admission rate to the ICU would fall by only 10-15%. Adult ICU may need to be prepared to take paediatric admissions (age 12-16), if the virus has higher complication rate in children and paediatric capacity is overwhelmed.

The total bed capacity of adult critical care within the Trust is listed below:

- East Wing 1 – 15 level 3 beds (3 side rooms – 1 with -ve pressure ventilation)
- East Wing 2 – 15 Level 3 beds (1 side room)
- Guy's Critical Care Unit (GCCU) – 13 level 3 beds (3 side rooms – 1 with -ve pressure)
- Recovery at STH (OIR) – capacity for 20 level 3 beds
- Recovery at Guy's – capacity for 12 level 3 beds
- Lane Fox – Spaces 14 level 2/3 beds
- VHDU – 6 level 2/3 beds
- Doulton HDU - 10 level 2/3 beds
- CCU – 6 level 2/3 beds (Acute Coronary Syndrome pts to Evan Jones 19 beds available – 8 monitored)

Critical Care could supply at least 125 various ability ventilators (potentially another 100+ if theatre and transport ventilators were utilised from around the Trust)

Total: up to 111 Critical Care beds will be potentially available

Patient identification and patient flow

- On identification of a case requiring ICU, patient will be transferred to EW1 and nursed in side room 1
- Should side room 1 be occupied with a patient requiring the -ve pressure facility, side room 13 will be the next option
- As the numbers increase, side room 4 will used next
- Additional patients will then be cohorted in bed space 11-15. There is a dividing door between these beds and the rest of the unit
- In the event of further escalation, the whole of EW1 is utilised for pandemic patients
- When this capacity has been utilised one side of EW2 should be used, followed by the other side of EW2, and to other critical care facilities within the Trust
- Provisions will be put in place to decant patients to available beds on EW2 and other critical care facilities outlined above
- Following this should further beds be required, stable patients can be transferred to GCCU
- Repatriation of ECR patients is almost never possible
- In the event that there are pandemic patients requiring ICU in Guy's Hospital (e.g. chronic renal failure). The 3 side rooms on GCCU will be used initially for pandemic patients
- The aim would be to use the available -ve pressure side room first, following this the two additional side rooms should then be used to safely manage pandemic patients

- The Critical Care capacity will be reviewed daily by the consultants on for EW1/EW2, along with Dr A McLuckie (Lead for ICU), or Dr Richard Beale (SDU head for Critical Care), or Dr Duncan Wyncoll (Infection Control Lead in Critical Care)

There are a further 12 Critical Care beds (8 level 3, 4 level 2) available at the London Bridge should further beds be required.

Consideration should be given to moving uninfected patients to other clinical areas outlined above, provided that there are enough trained staff to look after them.

Management of Possible pandemic influenza cases in Intensive Care

Many procedures in Intensive Care Unit e.g. intubation, bronchoscopy, generate aerosols. It is therefore essential that staff are fully protected. Good infection control procedures, the use of FFP3 masks together with visors and or FFP3 re-usable respirators, gowns and gloves are sufficient for respiratory protection. In addition, staff in contact with confirmed cases would be offered antiviral or vaccine prophylaxis if these are available.

FFP3 mask training

The training of senior members of the nursing team in fit checking and the identification of the most appropriate size FFP3 respirator is ongoing. This will then be cascaded to all (ICU) staff as appropriate in the early phase of the pandemic.

The use of assisted ventilation

- To reduce the risk of difficult intubation in an emergency situation without adequate infection control, influenza patients should be transferred early to intensive care if their condition is deteriorating and consideration given to early planned intubation by an experienced operator.
- All respiratory equipment must be protected with a filter that has viral efficiency to 99.99%.
- Disposable respiratory equipment should be used wherever possible. At the peak of a pandemic, if the supply of equipment becomes uncertain, then the life of the equipment may be prolonged. Re-usable equipment must at a minimum be disinfected in accordance with manufacturers' instructions.
- The ventilatory circuit should not be broken unless absolutely necessary.
- In-line filters and nebulisers should be used with special reference to the expiratory circuit.
- Ventilators must be placed on standby when carrying out bagging.
- Protective clothing as detailed above to be worn
- The use of **non-invasive positive pressure ventilation** should be limited (i.e. consultant decision) to those patients where the evidence is strong that it is effective (e.g. hypercapnic respiratory failure Type 2). It should probably be avoided in those patients with hypoxic respiratory failure (Type 1) or post extubation etc.
- Only essential staff should be in the patient's room or cohorted bay when airway management, cough inducing activities or nebulisation of drugs is being carried out.

Tyvek Suit

Special personal protective equipments are available in the ICU. These were purchased previously in the preparation for possible SARS patients. They are difficult to use and impractical when a large number of patients need to be cared for. It is not envisaged that they will be required for influenza.

Workforce planning

As the numbers of patients requiring critical care in a pandemic increase, it is estimated that there may be large shortages of critical care trained staff for various reasons (e.g. Childcare, sickness & transport difficulties). Therefore, to provide the same staffing levels that are normally expected (i.e. 1:1 nursing) will be unrealistic. It is therefore expected that staffing ratios will need to alter to accommodate staffing shortages and the expected increase in patients.

For example:

Currently:

5% sickness = 1.875 hrs

Shift overlap= 1 hour

37.5hrs-2.875 hrs= 34.62 hrs

168÷34.62=4.85 WTE per week (required for one nurse per patient)

Therefore for 43 beds (43×4.85)=208.55 WTE per week for the beds + nurse in-charge of 3 areas=223.1 WTE per week to run the 43 beds 1:1.

Therefore we could run 86 beds currently 1:2 ratio.

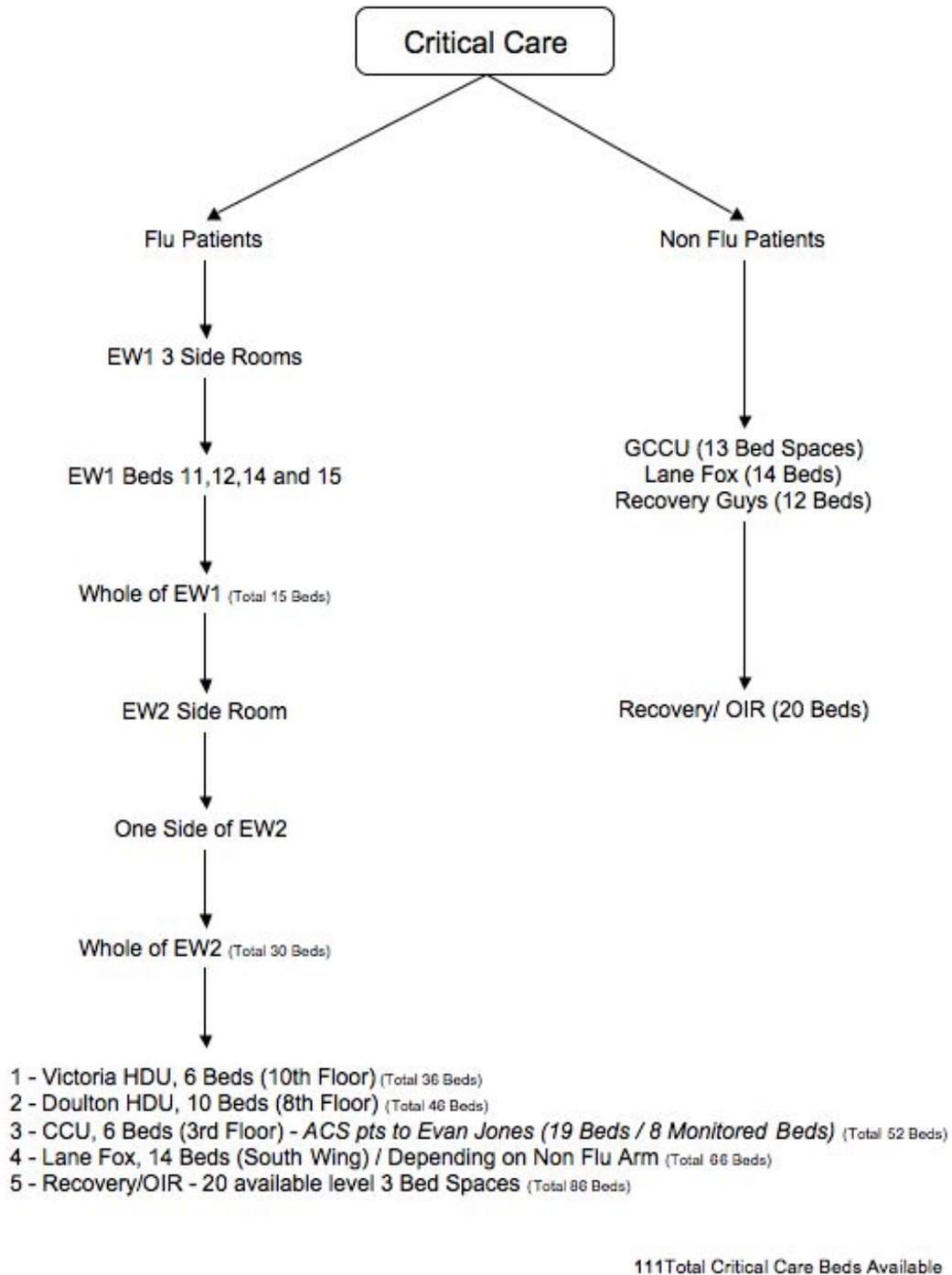
In a worst case scenario our WTE will increase 3 fold to 11.5WTE to nurse one patient 24 hrs a day this equates to an estimated 61% loss of capacity due to not being able to staff the beds in a 1:1 ratio.

To staff 111 critical care beds we would have to assign 1 critical care nurse 6 patients (1:6 ratio). It would mean the need for untrained critical care staff being available to nurse the patients with one critical care nurse coordinating the care. Nursing competencies for critical and non-critical care staff in a pandemic are being reviewed so as to support the possibility of having limited critical care staff to care for the increase amount of patients.

Equipment

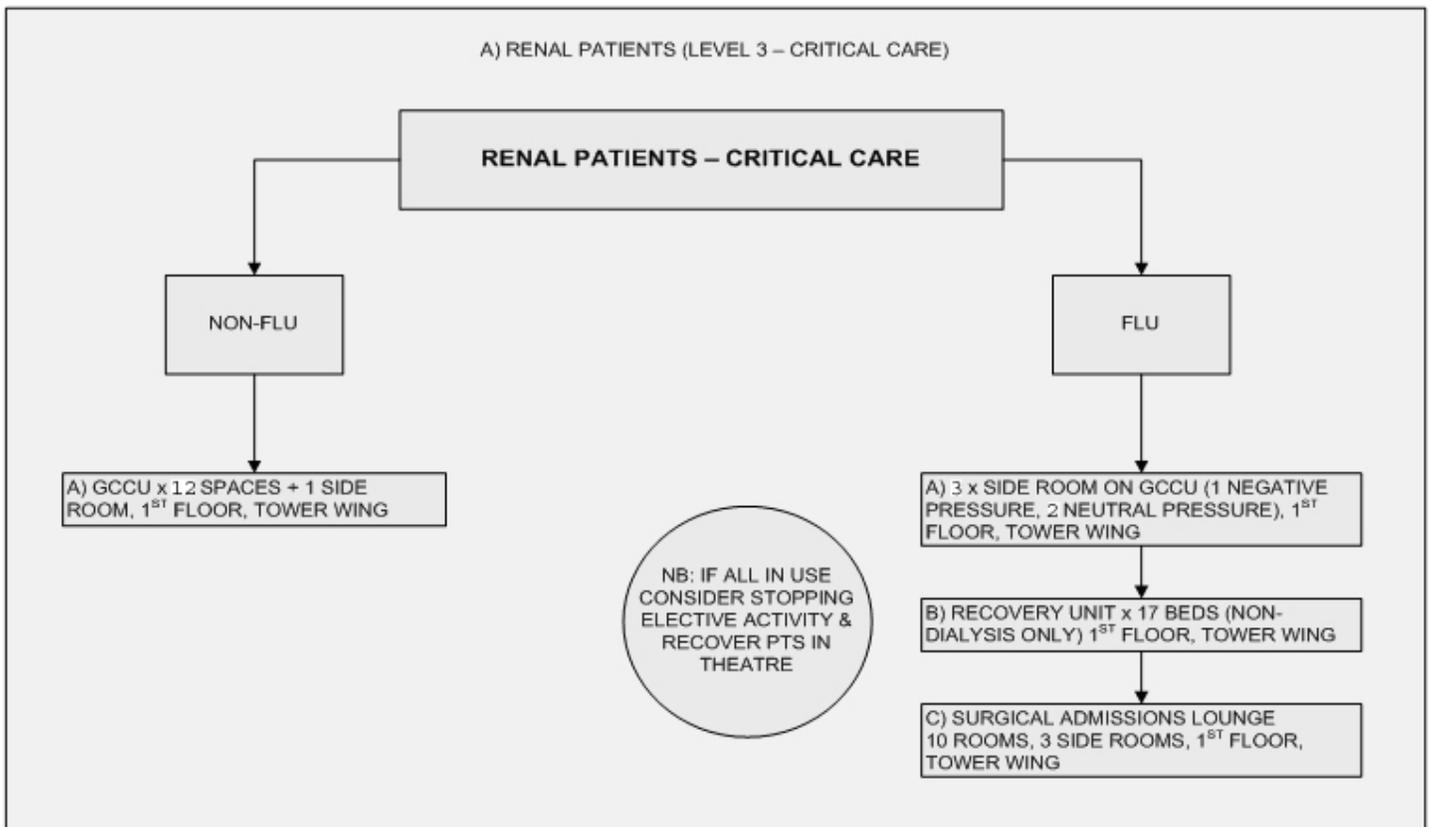
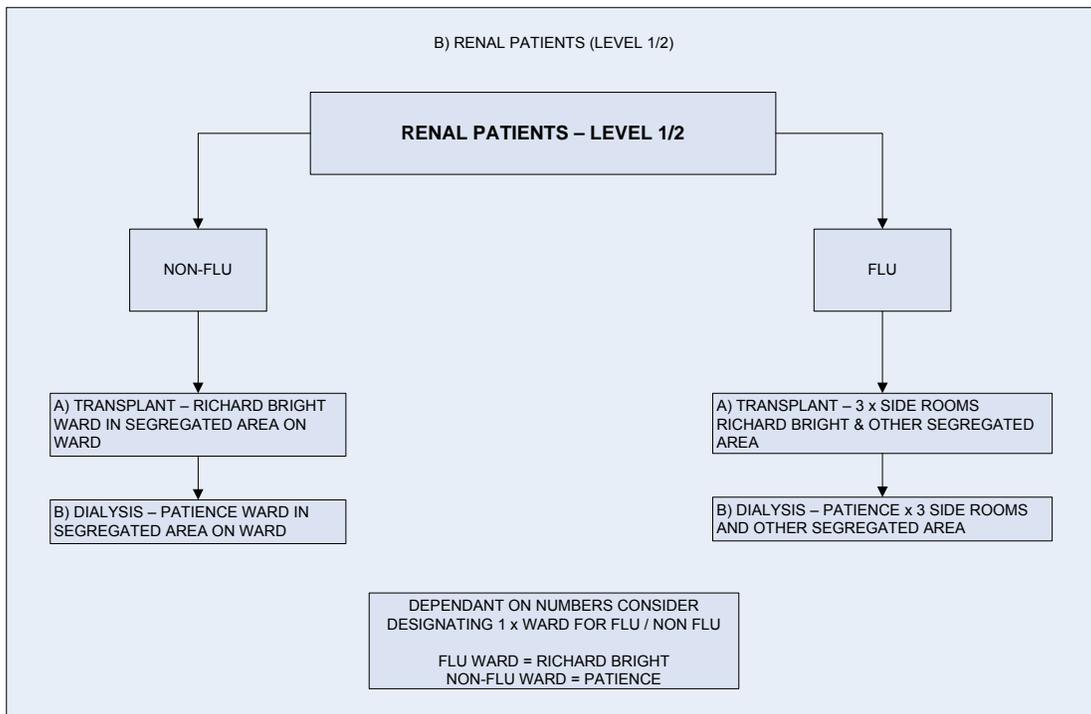
Critical care will continue to frequently review the availability of all equipment needed to nurse level 3 patients and the expected increase in demand in the pandemic. The use of disposable equipment and the need for additional stock in a pandemic is being reviewed as well as the current critical care practice regarding the possibility of using disposables for a longer period than currently used, due to the expected shortages in a pandemic.

Figure 16.1 Critical care Pathway



Section 17 In-patients Management on Guy's Site

The following flow diagrams are the cohorting plans for flu and non-flu patients on Guy's site during pandemic influenza.



c) **Cardiothoracic / Breast Cancer – Dorcas Ward**

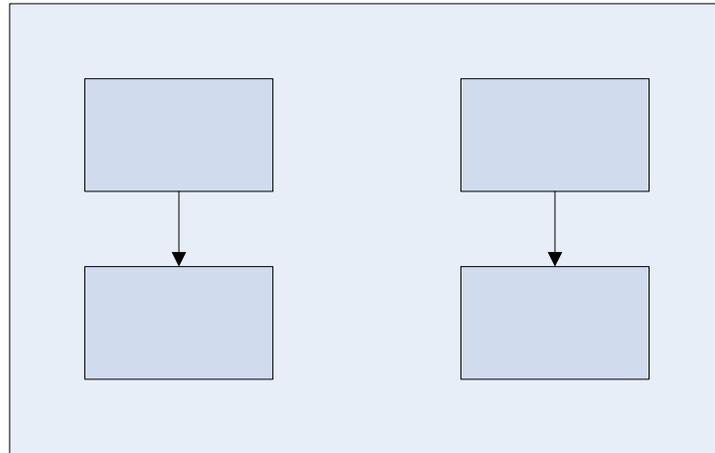
Segregate as for renal

d) **Haematology / Oncology – HAU/Samaritan**

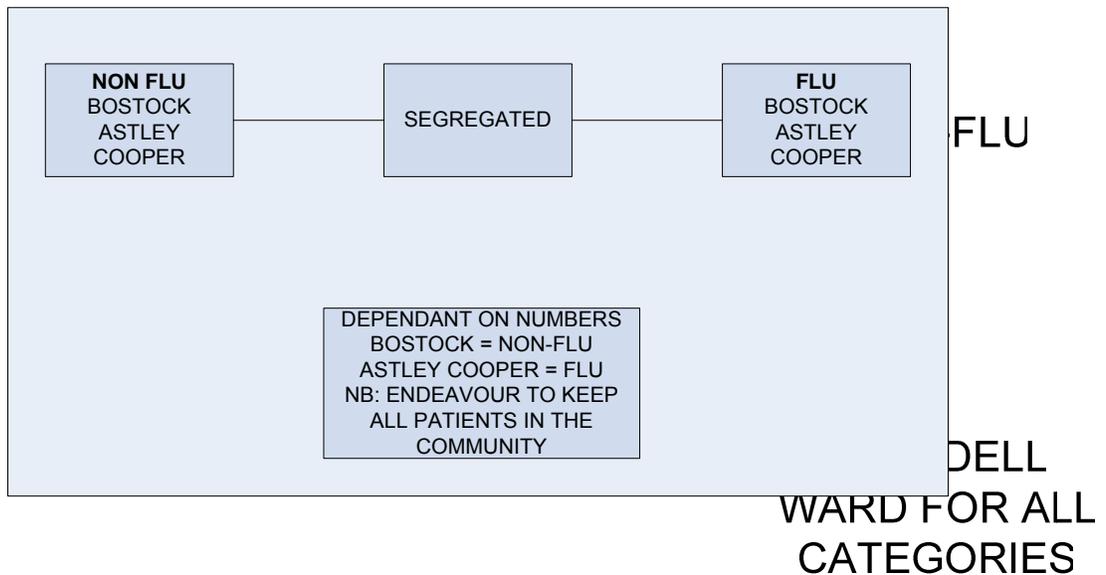
Segregate on ward but if numbers increase consider making Hedley Atkins – flu ward

e) **Head & Neck cancer pts (i.e. essential surgery), Urology cancer pts (i.e. essential surgery), & some elective renal transplant.**

(Total beds open would be reduced)



f) **Outpatient renal dialysis**



Section 18 Evelina Children's Hospital

It is not certain how children are affected by pandemic influenza. However, it is likely that they could shed virus for a longer period than adults – up to 6 days prior to onset of symptom and 14 days afterward.

Isolation on general wards

At the alert phase and on identification of one or two cases meeting the case definition these will be isolated in cubicles on Mountain (5th Floor).

The next step would be to use the other cubicles across Mountain (total number 8).

Once the cubicle capacity is exceeded the next step would be to begin to cohort influenza patients on mountain floor beginning at the "River" end of the ward.

The initial cohort area would be the first two bays (total 13 beds). Patients would be moved from the cubicles into this cohort area. Within this area, one bay is for positive cases and one for suspected cases.

Once this area is full the remaining cubicles on mountain floor would be utilised. When the cubicles are at capacity the bay 14-17 would become a cohort area and cohort bays will continue across the floor from the "River end" as demand requires. Please note that within the cohort areas, any patient requiring aerosol generating procedures should be nursed in the cubicles.

Only when all the capacity on Mountain is exceeded would the plan be to send flu-patients to Savannah floor.

As the number of patients increase, further cohort bays will be created on Savannah Floor. Creating cohort bays will follow a similar pattern as Mountain by moving from one bay to the next but going from Lambeth Palace Road end, bay 35 – 40, across the floor.

Apart from parents and immediate family, visitors should be discouraged and children are not allowed. If the consultant in charge agrees that visitors may enter the patient room, the visitors must adhere to the Trust influenza infection control procedures (2 visitors per bed).

Escalation plan

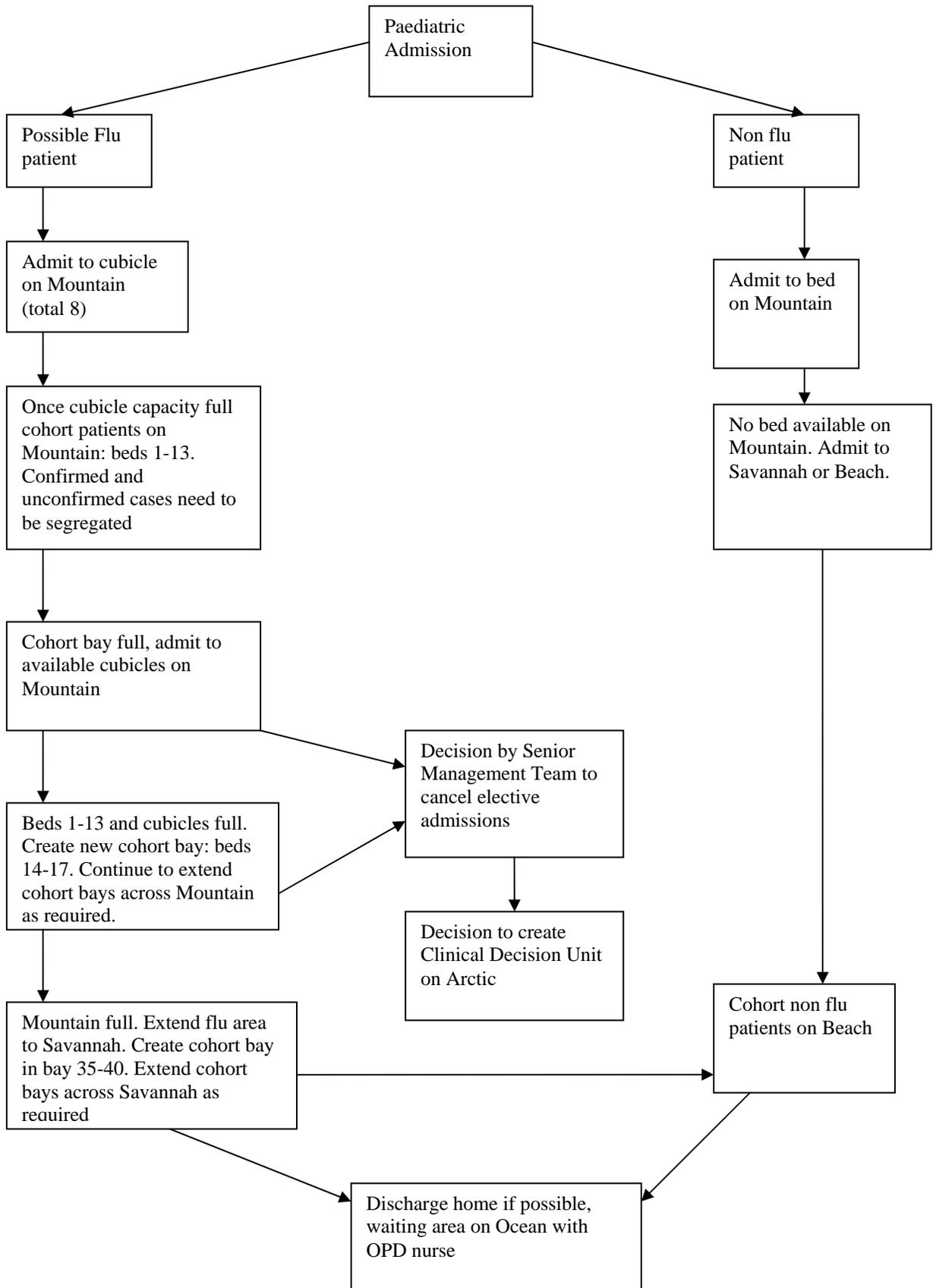
Decisions will be made by the Directorate Management Team when to reduce and stop any Elective/planned surgery in discussion with the relevant Consultants and other Directorates as required.

A decision will also be made by the Directorate Management Team in conjunction with the Paediatric A&E Management Team to create a Clinical Decision Unit in Arctic. This unit will relieve pressure on cubicles in Paed A&E, reduce wait times and reduce admissions to inpatient beds. Initially the unit will be open 8am – 8pm. The medical/nursing management of this unit will be a shared responsibility between ECH and Paed A&E. There is further potential for this unit to be open 24 hrs if the need arises.

Re-deployment of staff will be undertaken as the pandemic escalates, with non-ward nursing staff being drafted in to work as required. If PICU spills over into ECH Recovery area, where the cardiac cases would be managed then following discussion with the HoN for PCCP paediatric recovery nursing staff will be re-deployed to the paediatric areas as required.

Discharge plan

Patients who are ready for discharge but awaiting parents or medication should be held in a waiting area on Ocean Floor. This is separate to the use of Shepherd Hall for adults and will require a member of the Ocean nursing staff to continue to look after the patients until they have been collected by a responsible caregiver.



Paediatric ICU

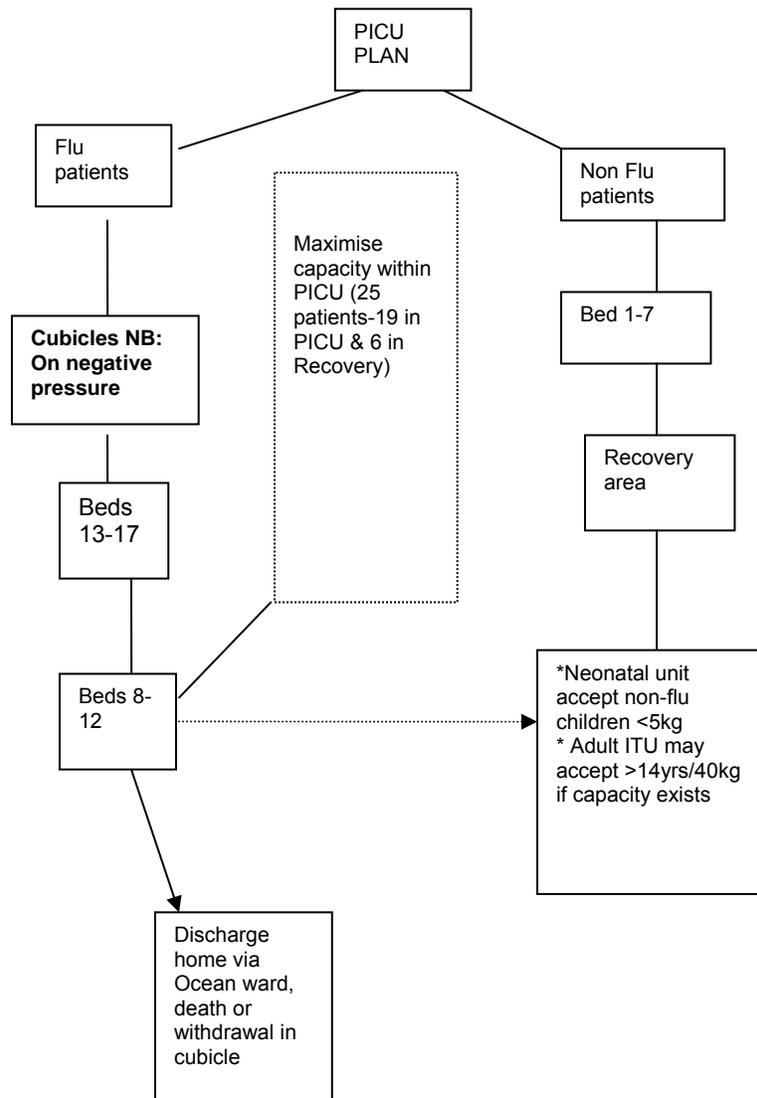
Patients requiring intensive care should be admitted to the negative pressure rooms in PICU on 2nd floor (Forest).

Ensure that rooms are converted to negative pressure

There are three negative pressure rooms available in PICU. When this capacity is exceeded, the strategy will be changed to use a cohorting. Once this capacity is exceeded the plan would be to begin to fill PICU from the theatre end of the PICU. Close to recovery and furthest from the cardiac bay. This would allow us to cohort non-flu patients in the cardiac end. Ongoing care of emergency cardiac cases may have to take place in NICU. Once capacity is reached PICU would continue into Recovery and utilise the 6 beds, for cardiac/non-infectious cases requiring PICU care, leaving the remaining beds on PICU for Pandemic cases.

The South Thames (STRS) retrieval and North Thames (CATS) retrieval service to provide bed-finding service for PICU patients in Thames region (including triage). If possible the retrieval services to continue to provide advice, bed-finding service and transfer patients to PICU.

The National PICU Pandemic group have agreed a process for the allocation of PICU beds as the pandemic escalates and bed availability across the UK becomes very limited. The STRS Consultants will liaise with the CATS Consultants on a daily basis and allocation of PICU beds will be undertaken following a discussion between these 2 teams and a PICU Consultant from either Kings College Hospital or St Georges Hospital.



Infection control procedures in PICU are no different from adult ICU (see [section 16](#). Intensive care unit) and other parts of the hospital.

Appendix 18.1

Evelina Children's Hospital PICU Pan Flu Plans

	Location	Staff	Support Services	Theatre	Miscellaneous
Scenario 1 Baseline	Children cared for in cubicles (x3) and cohorted in respiratory bay	Staffing as normal Ratios 1 nurse : 1 child 1 doctor: 5 children STRS fully operational	Portering Laboratories Radiology Technical Physiotherapy Dietician Sub Specialities Pharmacy Portable oxygen for STRS CSSD Cleaners & rubbish disposal	As normal	Need to consider swift discharge plans for PICU patients
Scenario 2 Early Pandemic	Children cared for in cubicles (x3) and cohorted in respiratory bay	Consider cancelling study days Consider re assigning office staff Ratios 1 nurse : 1 child 1 doctor: 5 children STRS fully operational	As above	As normal	Stock piling of disposable supplies
Scenario 3 Escalated pandemic	Children with H1N1 to be cared for in the open bays. Children with other infections to be moved into cubicles. Recovery to be used as a clean area for non infective patients	Study Days cancelled Office based staff called in to work clinically. (11 extra PICU nurses) Utilise appropriate staff from other areas in hospital Ratios 1 nurse : 2 children 1 doctor: 7 children STRS fully operational	As Above plus: Catering for staff	Emergency surgery only: estimated 5 surgical cases per month	1 nurse to remain in office for administration and staff co-ordination. Will attend 9am and 4pm meetings Extra telephone lines for STRS support for DGH. St John Ambulance will initiate emergency petrol acquisition as required Action cards being developed for seconded staff who do not know unit.
Scenario 4 Peak of pandemic	Children cared for in cubicles (x3) and in other bays on unit as well as recovery	As before Ratios 1 nurse : 3 children 1 doctor: 8 children STRS may be suspended. Clinical outreach may be offered to DGH AICU.	As Above plus: Security for unit/staff involved with difficult situations Accommodation for staff Psychological and spiritual support for staff	Emergency surgery only: estimated 5 surgical cases per month	As above

Appendix 18.1

Evelina Children's Hospital ECH Pan Flu Plans

	Location	Staff	Support Services	Theatre	Miscellaneous
Scenario 1 Baseline	Children cared for in cubicles on Mountain	Staffing as normal Ratios 1 nurse : 3/4 child	Portering Laboratories Radiology Technical Physiotherapy Dietician Sub Specialities Pharmacy Portable oxygen for STRS CSSD Cleaners & rubbish disposal	As normal	Need to consider swift discharge plans
Scenario 2 Early Pandemic	Children cared for in cohort area beds 1-13 Mountain ward	Consider cancelling study days Consider re assigning office staff and CNSs Ratios 1 nurse : 3/4 child	As above	As normal	Stock piling of disposable supplies
Scenario 3 Escalated pandemic	Cohort bays full start using further cubicle capacity on Mountain ward	Study Days cancelled Office based staff called in to work clinically. All CNSs to work clinically Utilise appropriate staff from other areas in hospital Ratios 1 nurse : 4/6children	As Above plus:	Cancel non essential surgery. All list prioritised Estimated 8/10 per week	HON and bed manager to coordinate appropriate staff placement Extra telephone line for A&C staff to coordinate staff phone calls and log of sickness. Action cards being developed for seconded staff who do not know unit.
Scenario 4 Peak of pandemic	Cohort areas extended across Mountain floor as required. Non H1N1 emergency admitted to Savannah/Beach as appropriate.	Most appropriate use of nursing staff Non Clinical staff deployed to wards to support non clinical duties.	As Above plus: Security for unit/staff involved with difficult situations Accommodation for staff Psychological and spiritual support for staff Catering for staff	All elective surgery cancelled Emergency surgery only: estimated 5/6 surgical cases per week	As above

Section 19 Outpatients

Outpatient plans have been incorporated into the three Clinical Divisional Plans.

Section 20 Acute Patient Services

Section 21 Ambulatory Patient care

Section 22 Managed Networks.

Section 20 Acute Patient Services

Introduction

The purpose of this plan is to identify key groups of staff who are critical to the delivery of urgent and emergency clinical services.

The plan would be reviewed daily by the Divisional and directorate management teams during a flu epidemic.

The Acute Patient Directorate is responsible for the delivery of the majority of front line emergency services and would need to maintain all but elective surgery.

Response by Directorate:

Acute Medicine and GI Surgery

Working on the assumption that Medicine will bear the brunt of any admissions associated with influenza, the directorate will need to operate at full capacity and will require a full complement of clinical staff. There are approximately 10,000 elective admissions within GI, many of the non-cancer related admissions which could be suspended, depending on clinical need.

When it becomes necessary to designate a flu ward, the preference is for Hillyers initially, however, the immuno-compromised patients based there, would need to be relocated.

Acute Medicine

Front Line Staff

A&E is an essential service and is also an area where staffs are likely to be exposed to patients with influenza.

A&E – total staff 232

Doctors – 67

Nurses – 150

Reception – 25

This includes adult and paediatric staff and the Clinical Decision Unit but does not include the Minor Injuries Unit, which could be closed if necessary. In the event of a serious epidemic, the Trust may need to consider closing MIU to maintain essential services and to protect the Guy's site from "walk in" flu victims.

Admissions Ward

The two admissions wards take all emergency admissions directly from A&E and are essential to the functioning of A&E. They are also likely to receive patients who are incubating flu.

Total nursing staff - 64

In reality all general medicine and elderly care wards should be treated as priority areas to take emergency admissions and flu victims. These areas will take the double hit of being exposed to flu victims and being required to maintain a full emergency service. During the winter season, the impact of norovirus will impact on the admission and elderly care wards as well.

Elderly Care Wards

Nursing Staff - 100

Medical Staff - 50

As with the admission wards, the Elderly Care Unit would need to continue working at full capacity where possible throughout as the impact is likely to be great on the Elderly population during the winter. There are 6 flex beds available within the ECU bed pool.

General Medicine -77

All staff will be critical for the continued running of the Acute Medicine bed pool.

Nursing Staff - 150 Medical Staff - 52

GI Services

Scenario 1. We continue to provide a near normal range of elective and emergency work.

Impact on staffing levels: we would require: 100% nursing staff, 100% Medical staff, 80% Managerial/Admin staff.

Impact on service: Inevitably activity would decrease as we lose staff either to illness, or their need to care for dependents. This winter, this could well critically affect our ability to deliver on access targets.

Scenario 2. We continue to provide an emergency service and treat only the most clinically urgent elective cases. We would attempt to cover our commitments as an emergency vascular tertiary referral centre (emergency life threatening aneurysms etc.); these would be housed on Luke Ward. Page Ward and Page HDU would be the front line acute surgical ward in the hospital.

Impact on staffing levels: we would require: 100% nursing staff, 50% Medical staff, 50% Managerial/Admin staff.

Impact on service: The majority of elective activity would cease. Access targets would be unachievable, and indeed waiting times would take some time to recover to their position prior to the pandemic.

Scenario 3. We continue to provide an emergency service and treat only the most clinically urgent elective cases. Our elective wards are closed completely; emergency tertiary referral obligations are reviewed by the Divisional team. Impact on staffing levels: we would require: 50% nursing staff, 50% Medical staff, 50% Managerial/Admin staff.

Impact on Service: The majority of elective activity would cease. Access targets would be unachievable, and indeed waiting times would take some time to recover to their position prior to the pandemic.

The three GI wards take a mixture of elective and acute admissions patients. A variety of surgical patients are cared for including a number requiring high dependency care and management.

First priority for prophylaxis

Page Ward/Page HDU has four high dependency beds that receive patients from ITU, theatres and from the surgical wards when a patient deteriorates. The ward has a high patient acuity level.

Total Nursing Staff: 42

Northumberland Ward

Northumberland is a fifteen bedded ward with the capacity to open up to 24 patients. At present one of the closed bays is utilised as flexi beds when the Trust is on amber alert. The ward receives both elective and acute admissions and has a high patient acuity level. If required extra beds could be opened up on the ward but this would require additional resources.

Total Nursing Staff: 25

Nightingale Ward

The five and a half day ward admits approximately 50-60 elective admissions per week plus some acute admissions. The ward is closed Saturday afternoon and all day Sunday. If required the ward could be kept open 24/7 but this would require additional resources. Nightingale is also an identified receiving ward in the event of a major incident.

Total Nursing Staff: 17

Depending on the demand for surgical beds patient activity may have to be reviewed and prophylaxis provided to all nursing staff.

Surgery Directorate

The surgery directorate delivers elective, urgent and emergency services and has considered three possible scenarios depending on the severity of the outbreak:

Scenario 1. We continue to provide a near normal range of elective and trauma work. Impact on staffing levels: we would require: 100% nursing staff, 100% Medical Staff, 80% Managerial/Admin staff.

Impact on service: Inevitably activity would decrease as we lose staff either to illness, or their need to care for dependents. This winter, this could well critically affect our ability to deliver on access targets.

Scenario 2. We continue to provide a trauma service and treat only the most clinically urgent elective cases. Impact on staffing levels: we would require: 100% nursing staff, 50% Medical Staff, 50% Managerial/Admin staff.

Impact on service: The majority of elective activity would cease. Access targets would be unachievable, and indeed waiting times would take some time to recover to their position prior to the pandemic.

Scenario 3. We continue to provide a trauma service and treat only the most clinically urgent elective cases. Our elective wards are closed completely. Impact on staffing levels: we would require: 50% nursing staff, 50% Medical Staff, 50% Managerial/Admin staff.

Impact on service: The majority of elective activity would cease. Access targets would be unachievable, and indeed waiting times would take some time to recover to their position prior to the pandemic.

Staff Group	Directorate Totals (Approximate numbers of actual staff in post not WTE)		Scenario 1		Scenario 2	Scenario 3	
Nursing	190	100%	190	100%	190	50%	85
Medical	90	100%	90	50%	45	50%	45
A&C	70	80%	56	50%	35	50%	35
Staffing Totals	350		336		270	165	
Total Bed Numbers	145		145		145	56	
Elective	89		89		89	0	
Trauma	56		56		56	56	

Priority would be given to more senior nursing staff, who could be expected to have better risk assessment and prioritisation skills, are able to take charge of clinical areas and able to maintain a service with reduced staffing levels.

PCCP – Preoperative, critical care and pain service

Intensive Care Unit	345 staff
Nursing/ secretaries/ward receptionists	205
SHOs	14

Specialist registrars	9
Consultants inc rotation Guys	11
Technologists	15
Victoria HDU	
Nursing staff/ward clerk	21
SHOs	7
Consultants	2
Lane Fox	
Nursing	50
Consultants	3
Clerical	4
Technologists	4
Theatre staff	273
Admin	27
Anaesthetic staff	125
OIR and recovery	116
POAC and SAL	36
Day surgery/endoscopy	100
Total	1367

It is estimated that the level of service provision would mirror the current priority table utilisation and that we would provide 3 priority tables across both sites throughout the pandemic time frame

Anaesthetic staff would be re-directed and redeployed to support priority activity and respiratory management throughout the trust

If all elective operating were stopped then theatre and recovery staff, day surgery staff and CPOAC and SAL staff could be re-deployed to support the rest of the trust providing large numbers of staff remained unaffected by flu.

We continue to support the concept of CPOAC at STH would be the flu centre for the trust

Critical Care can provide 66 L3 beds and 22 L2 beds. We could not provide extra CC beds in the CC areas. In recovery we could provide 11 spaces at STH and 21 at Guys, there would still be some emergency operating, so 25 would be realistic, plus possibly some of the pseudo-HDUs (CCU, Luke) but they would still have some activity in those services, especially Obstetrics and CCU.

It's worth noting that approximately 16 L3 and 16 L2 beds are currently assigned to elective surgery, so these would become available immediately (with staff and kit, and in critical care areas) if we stopped elective surgery. There is also a further burden of major surgery that has not progressed as well as hoped in the non-elective critical care beds, and this too would diminish if elective work was minimised.

Section 21 Ambulatory Patient Care

Introduction:

This document has been prepared in response to the Trust contingency planning and as part of the Guy's and St Thomas Foundation Trust Pandemic Preparation Plan.

This plan will cover the following areas:

1. Summary of Services within the Division of Ambulatory Care
2. Emergency Services within the Division
3. Elective Services
4. Non-elective Services
5. Outpatient Services and Patient Support Services
6. Factors likely to impact essential services
7. Essential Support and Core Services
8. Key essential workforce and re-deployment of staff
9. Local service plans
10. Therapies, Pharmacy, Pathology and Chaplaincy

1. Summary of Services:

Ambulatory Care Directorates

Dental	DASH	Medical Specialties	Outpatients/Patient Support
Periodontology Prosthetics Implantology	Dermatology – Adult & Paediatrics	Ophthalmology Adult & Paediatrics	Medical Outpatients
Orthodontics Paediatrics Oral Medicine	Allergy – Adult & Paediatrics	Rheumatology	Patient Support Services Health Records
Acute Dental Care Oral Surgery Dental Day Case Theatres	Genito-urinary Medicine	Lupus	Appointment Centre
Conservation	HIV	Diabetes	Language Support Services
Restorative	Medical Photography	Endocrinology	
Special Care & Sedation		Neurology	
Polyclinic		Neurophysiology	
		Twins Research	

2. Accident & Emergency Services within the Division:

Dental Emergency Services	Ophthalmology Services
Monday – Friday 09.00hrs – 17.00hrs	Monday – Friday 09.00hrs- 17.00hrs

3. & 4. Elective & Non-elective In-patient Services

ELECTIVE SERVICES	NON-ELECTIVE SERVICES
Dental – Oral Surgery & Dental Day Case	Oral Surgery
Medical Specialties – Ophthalmology Neurology Rheumatology Lupus Diabetes Endocrinology	Ophthalmology Neurology Rheumatology Lupus Diabetes Endocrinology
Dermatology – Dermatology	Dermatology (In-patients cared for in Acute Patient Services)
Allergy – Allergy	N/A
Genito-urinary Medicine -	Covered by HIV in-patient team (infrequent admissions)
HIV – N/A – HIV in-patient activity usually non-elective emergency admissions	HIV
	HIV emergency clinic (OPD) - daily

5. Outpatient & Patient Support Services

DEPARTMENT	NORMAL HOURS OF SERVICE
Outpatients	Monday – Friday 09.00hrs-17.00hrs
Central Clinic Preparation Unit	Monday – Friday 09.00hrs – 17.00hrs
Ward Clerks	Monday – Friday 09.00hrs – 17.00hrs
Appointment Centre	Monday – Friday 08.00hrs-18.00hrs
Central Admissions	Monday – Friday 09.00hrs – 17.00hrs
PIMS Operational Team	Monday – Friday 09.00hrs – 17.00hrs
Health Records Dept	24hr a day
Dental Records Dept (Guy's)	Monday – Friday 08.30 – 17.00hrs

6. Factors likely to impact on Essential & Core Services

- Attack rate 50%, up to 1361 admissions/week during peak week (week 6), up to 539 deaths/week during the peak period (week 6) with an average of 166 per week. These figures may be reduced if an appropriate % of deaths occur in the community.
- 50% of workforce 5-8 days off sick over 3-month period
- Closure of schools, crèche facilities, disruption of travel network
- South East London Sector surge capacity
- PCT, Community capacity for intermediate care
- Guidance on suspension of non-emergency activity

7. Essential and Core Services

Within the Division of Ambulatory Patient Care the following are considered to be essential and core services.

The extent to which these services will operate will largely depend on other factors listed above, guidance (waiting lists/targets) and capacity produced by external agencies and local GSTT Trust capacity and contingency planning, as well as the stages of the alerts of the pandemic.

For the purposes of this plan all staff who are employed by KCL but work on the premises have NOT been included within the essential services plan.

It is assumed that Dental Services will not be required to provide a service unless otherwise indicated or required to support community dental services.

Essential & Core Services:

Service	Reason
Divisional Management Team	
Laboratory Services (St John's Dermatology)	Histopathology, Molecular diagnostics, immunofluorescence, mycology
Health Records Department,	Ward Clerks/Out Patient Receptionist Staff
Dermatology Outpatients/Day Centre	Cancer referrals and treatments for skin cancer; patients with severe inflammatory skin disease; patients on systemic immunosuppressants and other potentially toxic drugs requiring monitoring; patients with other severe life-threatening or potentially dangerous dermatoses
Dermatology inpatients	Acutely unwell
Ophthalmology Outpatients/Theatres	For urgent ophthalmology treatment and acutely unwell patients
Dental (Oral Surgery)	Cancer referrals & treatments for cancers
Lupus/Rheumatology	Acutely unwell and patients requiring drug monitoring
Diabetic Community Service	High Risk Group
HIV Outpatients	High Risk Group
HIV antiretroviral (ART) provision	Risk of treatment failure with new drug resistance + rapidly falling CD4 off ART
HIV Inpatients	Acutely unwell
Diabetes & Endocrine	Acutely unwell
Symptomatic GUM cases	Acutely unwell/in-pain
HIV PEPSE	Risk of HIV infection
Neurology	Acutely unwell

8. Key Essential Workforce & Redeployment of staff

The following plan of key essential staff is based on the Divisional Pandemic plan outlined above and for planning purposes it is assumed that non-emergency outpatient clinics, surgery, and tertiary referrals will be suspended.

Further guidance from Emergency Planning Officer on waiting lists and targets is required to enable a comprehensive and robust workforce redeployment strategy to be developed.

The plan for key essential staff, also assumes collaborative working across the Trust and community settings.

Divisional Management Team:

The Divisional Management Team including Service General Managers, Delivery Managers, Matrons, Heads of Nursing and Clinical Directors will be responsible for the co-ordination of all Divisional activity during the alert/pandemic phase.

As part of the escalation process during the alert/pandemic phase the Divisional Management Team will also be responsible for ensuring that there are Consultant or Senior Medical reviews of all Divisional in-patients at least daily.

Laboratory Services St John's Institute of Dermatology: All technical staff are now part of the joint venture.

Services required will depend upon Dermatology activity within the Trust and the guidance set on cancellation of non-emergency activity.

Laboratory Services available:

- Histopathology
- Molecular Diagnostics (EB lab)
- Mycology
- Immunofluorescence screening (tissue & Serum)

It is assumed that cancer activity will continue and therefore, histopathology services will be required to continue this service.

Private activity within the laboratory will be suspended during pandemic period.

Redeployment of laboratory staff may be required to the main pathology laboratories across the Trust to assist in the event of non availability of staff.

Grade of Staff	Number of Staff
Band 8	2
Band 7	10
MLSO Grade 3	2

Health Record and Patient Support Services (Ward Clerks):

The Health Records department and Patient Support Services will be required to continue to provide a service for all wards and departments during the pandemic period.

It is assumed that the volume of activity will be increased in line with increased A&E attendees, ward admissions and likely deaths. Therefore to ensure maximum cover and support, these staffs are considered essential to maintain services.

Depending upon what decision is made re: elective activity, it will also be essential to maintain a service within the Appointments centre.

Local plans for the management, prioritisation and redeployment of staff will be developed.

Health Records Department (24hr Service):

Supervisory Staff	Health Records Staff	Medical Shift Cover
Health Records Manager x 1	Total = 30 Band 2	X 19 day staff X 3 weekend staff X 5 evening staff X 3 night staff
Health Records Operations Manager x 2	Band 5	
Health Records Supervisors x 7	Band 3 x 5 Band 4 x 1	
Deceased Records Clerk x 1	Band 3	

Ward Clerks:

Total Based at STH = 39	Total Based at Guy's = 22	Supervisors cross-site = 3
Grade A&C 4 x 2	Grade A&C 4 x 2	
Grade A&C 3 x 37	Grade A&C 3 x 20	

Appointment Centre:

Grade of Staff	Number
Appointment Unit Manager (SMP)	1 X band 7
Appointment Centre Manager	2 X band 5
Supervisor	1 X band 4
Appointment Centre Co-ordinators	16 X band 3

Clinical Services & Departments:

As outlined above the extent to which these services will operate will largely depend on guidance set out by Department of Health, PCT and GSST plans.

However, for the purpose of workforce planning it is assumed that cancer activity and services will continue, although this may be at a reduced level.

Within the local plan for clinical services, it may be necessary to review patient lists and develop priority listing of patients.

Key essential clinical staff:

- Dermatology Medical Staff - required for non-elective in-patients, EB in-patients, day-case cancer treatment

Grade	Number
Consultant	15
Post CCST Fellow	5
SpR	9
SHO	2

- Dermatology Nursing Staff - required for day-case cancer treatment

Total Number : 8

- Photography staff to support skin cancer day cases, Cleft Services, ENT and Plastic surgery cases if maintained as an emergency service.

Grade	Number
Band 8	1
Band 6	2
Band 5	1

- Dermatology A&C Staff required to service clinics/consultant support for day-case cancer treatment

Grade	Number
Band 2 reception staff	7
Band 4 Medical secretaries	8
Band 2 Admin assistants	2

- HIV Medical staff – required for in-patients and high risk groups

Grade	Number
Consultant	2
SpR	4
SHO	2

- HIV nursing staff required for in-patients and high risk groups

Total number	4
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- HIV A&C Staff - required to service clinics / consultant support for day-case cancer treatment

Grade	Number
Band 2	1
Band 4	1

Nursing care for acutely ill dermatology and HIV inpatients is provided by Acute Patient Services. Surplus DASH nursing staff would be redeployed to inpatient areas to assist in caring for these patients

- GUM Medical Staff (reduced activity on 1 site only)

Grade	Number
Consultant	2
SpR	2
SHO or CNS	2

- GUM Nursing Staff

Grade	Number
Band 2	4
Band 6	4

- GUM A/C Staff

Grade	Number
Band 2	2
Band 4	2

- Ophthalmology Medical Staff - for urgent ophthalmology treatment and acutely unwell patients

Grade	Number
Consultant	8
SpR	6
SHO	6

- Ophthalmology Nursing Staff - required for management of day-case post operative surgery

Total Number: 2-3

- Lupus Medical Staff - required for non-elective in-patients, review of chemotherapy patients

Grade	Number
Consultant	2
SpR	0
SHO	

- Lupus nursing staff - required for delivering service to Lupus chemotherapy patients (could be operated within Lupus unit and not in-patient area)

Total Number: 2

- Neurology Medical Staff - required for non-elective Neuro in-patients

Grade	Number
Consultant	1 Neurophysiology consultant and 2 neurology consultants
SpR	1
SHO	0

- Diabetic Medical Team - required for non-elective Diabetic patients

(High Risk group for Pandemic Flu)

Grade	Number
Consultant	5
SpR	5
SHO	2

Diabetic Community Liaison Nurse – required for community liaison and triage services

Total Number: 1

Diabetes Specialist Nurse – required for in-patients and emergency care

Total Number: 5

9. Local Service Plans

To ensure preparedness of all clinical and departmental areas, local service plans will be developed in accordance with the GSTT Pandemic Plan.

Local Service Plan:

- All service areas will prepare and maintain an up to date register of health care and support staff who live locally
- Develop emergency rota planning (consider on-call/standby arrangements) for essential clinical and core services (develop process/system for identifying staff who have recovered from influenza – acquired immunity) and using these staff for essential services
- Plan for geographical capacity for isolation facilities will be developed – current facilities include: (old refurbished Robert Willan Ward) 3 side rooms, effective bathing facilities
- In collaboration with DoH, SHA, PCT and GSTT plans, development of local admission guidelines, particularly for high risk groups (Diabetic patients, immunocompromised cancer and chemo patients)
- For services that continue to operate during Pandemic – develop protocols for assessing patients for signs and symptoms of influenza and implementing pathways for those who display symptoms (in accordance with GSTT preparedness plan)
- Develop robust reporting system for staff that experience signs and symptoms of influenza and follow agreed protocol the management of these staff.

The contents of the above Divisional Plan will be amended in accordance with the latest guidance from the Trust Pandemic Policy Working Group.

10. Therapies, Pharmacy, Pathology and Chaplaincy

As a result of re-structuring of Clinical Divisions, these Directorates were transferred from the Core Clinical service Division to Ambulatory Care from March 2007.

Pharmacy 160 staff

In the event of an influenza pandemic pharmacy would centralise services as listed below.

Supply of medicines

- The supply of medicines would be centralized in the event of a flu pandemic.
- Satellite pharmacy units: Oncology, Harrison wing and ECH would be closed.
- The main dispensaries at Guy's and St. Thomas' would continue to dispense medicines for new patients, new medicines for existing patients and medicines for discharge. They would also need to continue to issue medicines only available from pharmacy departments in hospitals
- Mental health patients in the community receiving supplies of medicines from GSTFT would need to continue to be supplied medicines if there are no staff to issue FP10s
- Stores departments at Guy's and St. Thomas' would supply drugs according to the ward stock list
- The potential for direct delivery of intravenous medicines is being investigated. contingency planning arrangements for suppliers will be requested
- DoH consultation currently underway on potential changes to the Medicines Act in order to help maintain continuity of medicine supply. This may add pressure on hospital pharmacy services

Services to inpatients

- Pharmacists will prioritise the clinical services to wards A+E, admissions wards and ICU areas will be visited for both adult and paediatric patients.
- Renal and oncology patients will also be seen. Pharmacists will provide a clinical service to acute wards.

Preparation of medicines

- The preparation of medicines from the production, oncology and aseptic preparative areas would also be centralised onto one site.
- Products could be prepared under the supervision of a pharmacist under Section 10 without the need for the Quality Assurance department if staffing was limited
- The products made would be prioritized, TPN, cytotoxics then batch infusions. We may also be requested to make other products as requested by the DOH.
- As a designated production unit, oral oseltamivir suspension for paediatric patients will be manufactured for regional/national use as requested by the DOH.

The following pharmacy departments would be closed

- **All satellite units both preparative and supply**
- **Medicines information both regional services to primary/secondary care and local services to secondary care. Medicines information queries will be answered by pharmacists working on wards/dispensaries.**
- **Quality assurance both regional services and local services. Products could be made under section 10.**

Physiotherapy - 170 staff (150 qualified staff)

The current numbers of trained respiratory physiotherapists necessary to support inpatient respiratory patients and provide a weekend and on- call service for emergency respiratory conditions across the adult and paediatric service on both the Guy's and St Thomas's sites on a 24/7 basis is as follows.

- Adult 80
- Paediatrics 20

A reduction/cancellation of outpatient services would allow redeployment of the remaining staff that do not provide respiratory on call services to facilitate discharge of patients from the wards.

Chaplaincy 23 staff

This reflects the 4 full-time and 7 part-time posts that make up hospital based chaplaincy service and the 12 multi-faith chaplains who are employed on an "as and when necessary" basis in order to support the trust multi-faith chaplaincy service provision on a 24/7 basis.

Pathology

Laboratory Services (excluding St John's Institute of Dermatology):

Breakdown as follows:

- Department of Infection 104
- Chemical Pathology (incl. Immunology) 91
- Histopathology 59
- Mortuary 6
- Haematology 42
- Phlebotomy 23
- Medical Toxicology 55
- CSR 29
- Informatics 4
- Cytology 30
- SPOT 2

Please refer to section 24 for the laboratory plan.

Section 22 Managed Networks

1. Introduction

This paper aims to develop an influenza plan for Managed networks Division. The main purpose of this piece of work is around identifying which groups of staff are key workers. This document and the plan are likely to change as the planning assumptions may differ from the actual situation and specific guidance may replace provisional guidance as the pandemic evolves.

2. Services Provided in Managed Networks Division by SDU

Renal, transplant & urology	Oncology and haematology	Cardio-thoracic services	Children's services	Womens' services	<u>Clinical Imaging and Medical Physics (CLIMP)</u>
Kidney dialysis	Oncology	Cardiac surgery	Paediatric Intensive care	Midwifery – community, antenatal, birth centre, post natal	Medical Physics
Kidney transplants (both cadaveric and live related donors) & kidney and pancreatic	Breast Unit	Thoracic surgery	Neonatal intensive care	Emergency gynae Unit	Nuclear Medicine
Nephrology	Haematology	Interventional Cardiology	General and specialist surgery including cleft and palate	Gynae surgery	Radiology
Acute kidney failure	Palliative care	Cardiac care	Cardiology and cardiac surgery for babies and children		
Lithotripsy and endo-urology	Haemostasis and thrombosis	Childrens cardiac surgery	Fetal cardiology		
Specialist Uro-oncology service	Radiotherapy		Renal services		
			Neurology services		
			Genetics service		

3. Assumptions

The following assumptions have been made within the context of the levels and type of services that the trust will provide in the event of an influenza pandemic situation.

- Attack rate of 25%, up to 72 admissions /week, up to 48 deaths/week
- 25% of workforce 5- 8 days off sick over 3 month period
- Closure of schools, crèche facilities, disruption of travel network
- South east London surge capacity
- PCT, community capacity for intermediate care
- Guidance on suspension of non-emergency capacity
- Non elective work will continue
- Outpatient services will cease
- Elective Services will cease
- GSTT will close to tertiary referrals

Within this framework we anticipate that the following priorities will prevail:

- 2 week cancer wait
- Accident and Emergency 4 hour wait

4. Essential and core services

Within managed networks division, there will be components within each service delivery unit for some services to cease. However, this will largely depend on the factors outlined above. It will be assumed that non-emergency clinic activity, surgery and tertiary referrals will be suspended. The divisional management team will co-ordinate and liaise with each SDU during the alert/pandemic phase.

5. Key essential workforce and redeployment of staff

a) Renal, transplant & Urology SDU Essential

Assumed that transplants/urology would be suspended over this period of pandemic unless an emergency or oncology related.

Kidney Dialysis Service	Staff required
All transplant areas: Renal unit 5 th flr, Bostock, Guernsey sat unit, Pembury Sat unit, Camberwell sat unit	Nursing staff: 60 (Band 5 and above) Medical staff: 20
Acute kidney failure	
Astley Cooper ward, Richard Bright ward	Nursing staff: 60 Medical Staff: 20
Specialist Uro-oncology/transplant	
Assume one urology ward is left open to cater for emergency transplant/oncology related problems	Nursing staff: 25 Medical Staff: 8

Total staff required: Nursing = 145 Medical = 48 Admin & clerical = 10

b) Paediatrics SDU

Essential

Paediatric intensive care	Nursing staff : 105 Medical staff: 25
Neonatal intensive care	Nursing staff: 92 Medical Staff : 20
Renal dialysis – 6 beds	Nursing staff: 6 Medical staff: 2
Cardiac surgery - Rothschild	Nursing staff: 24 Medical staff : 8
General emergency – One ward to cater for a range of admissions that may be needed eg metabolic, neurological etc	Nursing staff: 28 Medical staff:8

**Total staff required: Nursing = 255
Medical = 63
A&C = 10**

c) Oncology and Haematology SDU

Essential

Chemotherapy day units (one each site)	Nursing staff: 17 Medical: 5
Samaritan ward – Oncology and Haematology (assume can shut one ward ie Stanley)	Nursing staff: 28 Medical : 8
Hedley Atkins breast unit (Medical oncology and emergency surgery)	Nursing staff: 22 Medical:7
Radiotherapy (Urgent treatment only)	Radiography staff: 4 Medical staff: 4
Haematology day units (urgent treatment for haem/onc pts)	Nursing staff : 11 Medical staff: 4

**Total staff required: Nursing = 78
Medical = 28
Radiography = 4
A&C = 10**

d) Cardiothoracic SDU

Essential

Coronary care unit	Nursing staff: 17 Medical: 4
Emergency cardiology ward	Nursing staff: 28 Medical : 8
Emergency Cardiac surgery ward	Nursing staff: 28 Medical:8
High dependency cardiac surgery unit	Nursing: 18 Medical: 4
Emergency thoracic surgery (Assume half a ward)	Nursing staff : 12 Medical staff: 3

**Total staff required: Nursing = 103
Medical = 27
A&C = 10**

e) Womens Services

Essential

Hospital Birth centre	Midwives 103 Medical: 30
Emergency Gynae unit	Nursing staff: 14 Medical : 4
Antenatal ward (emergencies)	Midwives: 18 Medical: 4
Post natal ward (complex cases only)	Midwives: 35 Medical: 8
Community (emergencies only)	Midwives: 20
Gynae in-patients (assume half a ward)	Nursing staff: 14 Medical: 3

Total staff required: Midwives = 176
Medical = 47
Nurses = 28
A&C = 10

6. Local Service plans

To ensure all clinical departments are prepared, local service plans will need to be developed in accordance with the GSTT pandemic plan.

- All service areas should prepare and maintain a register of staff who live locally
- Develop an emergency rota plan for essential and core services.
- Consider use of closed areas for influenza patients to provide isolation and staff required.
- Develop protocols for dealing with staff /patients who contract influenza.
- Have clear lines of reporting.

Appendix 22.1

Cardiovascular Directorate 4 Scenario Response

<u>Issues</u>	<u>Staff required</u>	<u>Services outside Directorate Control influencing plan</u>	<u>External Suppliers/supplies required.</u>	Core Critical Functions
<p><u>Scenario 1: Baseline (current situation) – Infection Outbreak Action Plan</u></p> <p>< 10 suspected case per week admitted for investigation Patient admitted to negative pressure rooms in Hillyers or William Gull No excess death Estimated staff absenteeism: 4% to 6% (baseline)</p>	<p>Normal activity – 4 theatres, 5 Cath Labs</p> <p><u>Normal Nursing Staffing Levels</u></p> <p>Wards (28-34 beds)- 5-6 WTE trained staff during the day 3 WTE at night, with cardiovascular skills</p> <p>Doulton HDU (10 beds) - 4-5 cardiovascular trained staff night & day</p> <p>CCU (6 beds) – 3 WTE cardiac skilled nurses skilled day & night</p> <p>Radiographers X 8 competent cardiac</p> <p>Cardiac Physiology(CP)- Normal staffing levels</p> <p>Perfusion: No impact on staffing & activity (providing ECMO not</p>	<p>4 Theatres for cardiac surgery, 1 for vascular surgery.</p> <p>NB 1 Theatre for Paediatric Cardiac Surgery (discuss with Children's Services)</p>	<p>IT Utilities, etc</p> <p>What discussions have taken place with Squadron. All disposables supplied through them.</p> <p>Are we considering stockpiling of consumables or is this something Squadron will do?</p>	<p>Might be worth just listing your key core functions. In your instance delivery of cardiac service:</p> <p>Weekly Cath Lab activity is 120 cases Weekly cardiac surgical activity is 29 cases Weekly paediatric activity is 10 cases Weekly vascular activity is 8-10 cases Weekly Endovascular cases 4</p>

	required)			
<p><u>Scenario 2: Early pandemic (Week 2-3 of pandemic) – Normal Winter Pressures Plan - Stop non clinically urgent elective activity, move to core activity only.</u></p> <p>15 – 50 suspected cases per week admitted for investigation Negative pressure rooms started to fill up – Use Albert Ward Up to 15 flu patients requiring critical care Increase in excess deaths Estimated staff absenteeism: 8% to 10%</p>	<p>Normal activity 4 theatres, 5 Cath Labs (may need to reduce to 4)</p> <p><u>Normal Nursing Staffing Levels</u> May need to move staff around Directorate. Wards (28-34 beds)- 5-6 WTE trained staff during the day 3 WTE at night, with cardiovascular skills</p> <p>Doulton HDU (10 beds) - 4-5 cardiovascular trained staff night & day</p> <p>CCU (6 beds) – 3 WTE cardiac skilled nurses skilled day & night</p> <p>Radiographers X 6 competent cardiac radiographers</p> <p>CP- 25WTE Perfusion: Assuming 10% absenteeism Reduction in theatres by 1. (Again dependant on number requiring ECMO)</p>	<p>4 Theatres for cardiac surgery, 1 for vascular surgery. NB 1 Theatre for Paediatric Cardiac Surgery (discuss with Children’s Services) May need to reduce to 3 theatres for cardiac surgery</p> <p>CP-Consumables stock for labs is based around 3 days delivery plan. Any problems with suppliers staffing could impact upon plan (same for all plans) plan (same for all plans)</p>	Same as above.	
<p><u>Scenario 3: Escalated pandemic (Week 4-5 of</u></p>	<p>Reduced activity, 2 Cath Labs</p>	<p>2 Theatres for cardiac & surgery, 1 for vascular</p>	As above	

<p><u>pandemic) – Activate cohorting wards.</u> Between 200 & 600 patients admitted with influenza per week Negative pressure rooms overwhelmed Patients cohorted in influenza wards – starting on Hillyers Ward, then cohorting in NW Floors – William Gull Ward, Albert Ward & Victoria Ward, Sarah Swift & Doulton Wards and Stephen Ward and Beckett Ward 50 - 150 flu patients requiring critical care Up to 160 excess deaths over the two week period Estimated staff absenteeism: 14% to 20%</p>	<p><u>Nursing Staffing Levels</u> May need to move staff around Directorate. Wards (28-34 beds)- 3-4 WTE trained staff during the day 3 WTE at night, with cardiovascular skills</p> <p>Doulton HDU (10 beds) -3-4 cardiovascular trained staff night & day</p> <p>CCU (6 beds) – 2 WTE cardiac skilled nurses skilled day & night</p> <p>NB May need to consider combining CCU & HDU on 3rd Floor (CCU), there 2-4 for all 6 beds</p> <p>Radiographers (need to consider impact of on-call commitments)</p> <p>CP- 20WTE</p> <p>Perfusion: Assuming 20% absenteeism. Reduction in theatres by 1. (Again dependant on number requiring ECMO)</p>	<p>surgery. NB 1 Theatre for Paediatric Cardiac Surgery (discuss with Children’s Services) May need to use 2 theatres for cardiac & vascular work</p> <p>Limiting factor</p> <ul style="list-style-type: none"> • CSS D supplies • Pharmacy supplies • Lab results for bloods etc 		
<p><u>Scenario 4: Peak of</u></p>	<p>Reduced activity, 1 Cath</p>	<p>1 Theatres for cardiac &</p>		

<p><u>pandemic (Week 6-7) – Activate critical core activity only plan</u></p> <p>In excess of 800 patients admitted with influenza per week (weeks 6 & 7) Cohorting influenza wards required across whole trust Whole of NW used for flu patients, other facilities may also be used 300 + excess deaths over a two week period Estimated staff absenteeism: Between 20% to 40%</p>	<p>Lab</p> <p><u>Nursing Staffing Levels</u> May need to move staff around Directorate.</p> <p>Wards (28-34 beds) - 2 WTE trained staff during the day 3 WTE at night, with cardiovascular skills</p> <p>Doulton HDU (10 beds) 2-3cardiovascular trained staff night & day</p> <p>CCU (6 beds) – 2 WTE cardiac skilled nurses skilled day & night</p> <p>NB May need to consider combining CCU & HDU on 3rd Floor (CCU), there 2-4 for all 6 beds</p> <p>Radiographers (to include on-call cover) need x3</p> <p>CP-20WTE Perfusion: Assuming up to 40% absenteeism a reduction of 1 theatre. (Again dependant on ECMO need)</p>	<p>vascular surgery. This may have to include Paediatric Cardiac Surgery (discuss with Children’s Services)</p>		
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Nuclear Medicine 4 Scenario Response

This guideline has been developed as part of reviewing the Nuclear Medicine Pandemic Influenza Contingency Plan, with the assistance of Nicola Ede, Site Superintendent Radiographer and the Nuclear Medicine Senior Management Team.

Four Scenario Response	Staffing Levels (using max % off plus annual leave)	Impact on Service
<p>Scenario 1: Baseline (current situation) – Infection Outbreak Action Plan</p> <p>Estimated staff absenteeism: 4% - 6%</p>	<p>Medical Staff: 7 Technologists: 12 DEXA Technologists: 2 Physicists: 4 Nurses: 1 HCA: 2 A&C: 14</p>	<ul style="list-style-type: none"> ▪ Nuclear Medicine will continue to provide a normal service.
<p>Scenario 2 : Early Pandemic (week 2 – 3 of pandemic) – Normal Winter Pressures Plan</p> <p>Trust to stop non-clinically urgent elective activity, move to core activity only.</p> <p>Estimated staff absenteeism: 8% - 10%</p>	<p>Medical Staff: 6 Technologists: 11 DEXA Technologists: 2 Physicists: 3 Nurses: 1 HCA: 2 A&C: 12</p>	<ul style="list-style-type: none"> ▪ Nuclear Medicine will continue to provide a normal service. ▪ MDM's would be reviewed depending on availability.
<p>Scenario 3: Escalated Pandemic (week 4 – 5 of pandemic).</p> <p>Estimated staff absenteeism: 14% - 20%</p>	<p>Medical Staff: 5 Technologists: 9 DEXA Technologists: 1 Physicists: 2 Nurses: 0 HCA: 1 A&C: 9</p>	<ul style="list-style-type: none"> ▪ The Consultants, the nursing team and the secretaries would be in a very vulnerable position at this point. ▪ Would look for nursing function support from Technologist team. ▪ Would look for secretarial support. ▪ Depending on availability of Consultants / Medical Staff will depend on what services can be provided. ▪ At this stage targets / waiting times will start to be affected. ▪ Annual leave / study leave will be reviewed. ▪ MDM would be reviewed depending on availability. ▪ Non-urgent external imaging will not be reported on. ▪ Technologists will be diverted to DEXA to maintain capacity, reducing NM activity.

<p>Scenario 4: Peak of Pandemic (week 6 – 7) – Activate critical core activity only plan.</p> <p>Estimated staff absenteeism: 20% - 40%</p>	<p>Medical Staff: 3 Technologists: 6 DEXA Technologists: 1 Physicists: 1 Nurses: 0 HCA: 1 A&C: 5</p>	<ul style="list-style-type: none"> ▪ Emergency only service would be provided. ▪ Annual Leave / study leave will be cancelled. ▪ Targets / waiting times will be severely affected.
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External Services that could affect Nuclear Medicine

- Portering – HCA’s, Nurses and Technologists could support this service.
- External stock –2 week extra supply of stock for emergencies.

Radiology Department 4 Scenario Response

Four Scenario Response	Staffing Levels (using max % off plus annual leave)	Impact on Service
<p>Scenario 1: Baseline (current situation) – Infection Outbreak Action Plan</p> <p>Estimated staff absenteeism: 4% - 6%</p>	<p>Radiologists: 28 Radiographers: 48 MRI Radiographers: 11 Sonographers: 8 RDA’s: 9 Nurses: 11 A&C: 23 Secretaries: 6 PACS Team: 4</p>	<p>Radiology will continue to provide a normal service.</p>
<p>Scenario 2 : Early Pandemic (week 2 – 3 of pandemic) – Normal Winter Pressures Plan</p> <p>Trust to stop non-clinically urgent elective activity, move to core activity only.</p> <p>Estimated staff absenteeism: 8% - 10%</p>	<p>Radiologists: 27 Radiographers: 46 MRI Radiographers: 9 Sonographers: 7 RDA’s: 8 Nurses: 10 A&C: 22 Secretaries: 5 PACS Team: 3</p>	<p>Radiology will continue to provide a normal service.</p> <p>MDM’s would be reviewed depending on availability.</p> <p>Specialist lists e.g msk, one stop clinics would be reviewed.</p> <p>PACS team would not be able to make personal CDs for patients coming via Access to Health Records. They would not be able to attend to PACS / CRIS problems outside the department if it cannot be resolved remotely. Only Urgent CD’s will be uploaded.</p>
<p>Recommendation to the Operational Assessment Group the cancellation of all elective and OP activity.</p>		
<p>Scenario 3: Escalated Pandemic (week 4 – 5 of pandemic).</p>	<p>Radiologists: 24 Radiographers: 41</p>	<p>The Radiologists, the nursing team and the secretaries would be in a</p>

<p>Estimated staff absenteeism: 14% - 20%</p>	<p>MRI Radiographers: 8 Sonographers: 6 RDA's: 7 Nurses: 9 A&C: 20 Secretaries: 4 PACS Team: 2</p>	<p>very vulnerable position at this point.</p> <p>Depending on availability of Radiologists will depend on what services can be provided.</p> <p>At this stage targets / waiting times will start to be affected.</p> <p>Would look for nursing support from Peri-Op / Critical Care.</p> <p>PACS team would only be able to provide a skeletal support service and would need to be supported by radiographers.</p> <p>Would look for secretarial support.</p> <p>Annual leave / study leave will be reviewed.</p> <p>MDM would be reviewed depending on availability.</p> <p>Specialist lists e.g msk, one stop clinics would be reviewed.</p> <p>Non-urgent outside films will not be reported on.</p>
<p>Scenario 4: Peak of Pandemic (week 6 – 7) – Activate critical core activity only plan.</p> <p>Estimated staff absenteeism: 20% - 40%</p>	<p>Radiologists: 18 Radiographers: 31 MRI Radiographers: 6 Sonographers: 5 RDA's: 6 Nurses: 7 A&C: 15 Secretaries: 3 PACS Team: 1</p>	<p>Emergency only service would be provided.</p> <p>Annual Leave / study leave will be cancelled.</p> <p>Targets / waiting times will be severely affected.</p>

External Services that could affect Radiology

- Portering – RDA'S and radiographers could support this service.
- External stock – Intervention has a 2 week extra supply of stock for emergencies.

Local Pandemic plans - supporting section 22

Cardiovascular

Nuclear

Radiology

Renal & Urology

Section 23 Mortuary Plan

The following is an updated extract from the Mortuary Escalation Plan (GST-SOP-MOR-010, edition 4.0, issued July 2006, written by James Lowell and authorised by Dr Guiseppe Culora). Please contact the mortuary office for the full version.

Aim: To provide management and safe storage of a large number of deceased patients.

General information:

The Anatomical Pathology Technologists (APT) are on 24-hour call. If problems occur that require either the advice or attendance of an APT please air-call 868342. The mortuary pager is also linked to the major incident cascade.

This plan is based on St Thomas' mortuary being the primary site.

Capacity:

- *Guy's mortuary:* can accommodate 60+ patients. Guy's mortuary routinely accommodates no more than 10 deceased patients per week.
- *St Thomas' mortuary:* can accommodate;
 - 75 deceased adult patients, of which 10 spaces are dedicated solely for High-Risk patients.
 - 10+ Non-viable babies.
 - 18+ Babies.

St Thomas' Mortuary.

Note: The Infection control policy must be followed at all times, patients carrying certain infections (See trust Infection control policy) must be placed into a zipped body bag, labelled as '**Risk Of Infection**' and handled only by suitably qualified APTs

- All non-viable babies are to be placed in fridge bank **Q**
- All babies are to be placed in fridge bank **R**

Stage	Escalation Trigger	Planned Action	Action Lead	Reporting Line	Supplementary information
Stage 1. Normal	Patients stored as planned (Fill fridge banks B-P, omit the use of tray spaces 1 & 6 in this instance)	None.	1. APT 2. Portering staff.	1. Portering supervisor / manager to report to mortuary manager or Duty APT	See: ➤ GST-SOP-MOR-011 <i>Deceased patients received into the mortuary by portering staff or funeral directors.</i> ➤ GST-SOP-MOR-012 <i>Using the hydraulic trolleys.</i>
Stage 2.1	➤ 52 patients stored as planned.	<ul style="list-style-type: none"> ➤ Use fridge space 1 in all fridge banks B-P ➤ Arrange transfer of 10 suitable patients to Guy's mortuary & inform bereavement office ASAP. ➤ Expedite release of patients to funeral directors for burial or cremation. 	<ul style="list-style-type: none"> 1. Mortuary Operations Manager or most senior APT 2. Out of hours Duty APT on-call 	<ul style="list-style-type: none"> 1. Portering supervisor / manager to report to mortuary Operations manager or Duty APT. 2. Mortuary Operations Manager etc to Lead Clinician & SDU Manager 	<ul style="list-style-type: none"> ➤ APTs will attend the mortuary in case of an emergency. ➤ Local Funeral Director F.A Albins & Sons run an out of hour's service that is accessible by the Trust for patient transport.

Stage	Escalation Trigger	Planned Action	Action Lead	Reporting Line	Supplementary information
<u>Stage 2.2</u> High Risk	<ul style="list-style-type: none"> ➤ 65 patients stored as planned. ➤ 10 patients transferred to Guy's mortuary. 	<ul style="list-style-type: none"> ➤ Proceed with patient transfer from St Thomas' to Guy's in batches of 10. ➤ Start to use the mortuaries major incident store of body bags if required & order more ASAP. ➤ Arrange APT accommodation if required to be on site out of hours e.g. Major incident ➤ Establish contact with Borough coordinator regarding temporary mortuary facilities if required for Pandemic or MI etc 	<ol style="list-style-type: none"> 1. Mortuary Operations manager or Duty APT. 	<ol style="list-style-type: none"> 1. Mortuary Operations Manager etc to Lead Clinician SDU Manager, Divisional Director and Deputy Divisional Director. 	<ul style="list-style-type: none"> ➤ All transferred patients details should be listed & signed out of the mortuary register @ St Thomas' See GST-SOP-MOR-015 & re-entered in to the register @ Guy's See GST-SOP-MOR-014. This will keep all records of patient's property complete. ➤ A full list of patient's details should also be given to the bereavement officers on both sites so they can redirect family, undertakers & outside agencies as required. ➤ Security issue need to be considered.

Stage	Escalation Trigger	Planned Action	Action Lead	Reporting Line	Supplementary information
Stage 3. Contingency plan	<ul style="list-style-type: none"> ➤ 125 patients stored as planned. 	<ul style="list-style-type: none"> ➤ Place deceased patients in body bags & store on floor of refrigerated room @ Guy's, Likely to be able to store another 15-25+ patients, not ideal but only practical solution. ➤ Consider embalming. ➤ Explore transfer of patients to other facilities e.g. undertakers, other Trust's or private sector. ➤ Consider refrigerated unit. 	<ul style="list-style-type: none"> ➤ Mortuary Operations Manager ➤ SDU manager ➤ Lead Clinician ➤ Divisional Director ➤ Deputy Divisional Director ➤ CEO 	<ul style="list-style-type: none"> ➤ Mortuary Operations Manager ➤ SDU manager ➤ Lead Clinician ➤ Divisional Director ➤ Deputy Divisional Director ➤ CEO. 	<ul style="list-style-type: none"> ➤ F.A Albins & Sons can also store up to 50 Patients and arrange embalming. (Consent would need to be given by next of kin) ➤ This amount of patients in the mortuary department would likely point to a mass disaster, it would be expected that a temporary mortuary would have been established by the Home Office contact should be made with Borough co coordinator
Stage 4.	<ul style="list-style-type: none"> ➤ 150 patients stored as planned. Storage capacity on both sites is now full! ➤ Store embalmed deceased patients in Pm Room and secure. 	<ul style="list-style-type: none"> ➤ Transfer patients to other facilities ➤ Use refrigerated unit. 	As Above	As Above	

Section 24 Laboratory Preparedness

In addition to the routine normal diagnostic services, the main demand on the laboratory during a pandemic is the rapid diagnosis of influenza in suspected cases and the investigation of its complications. A reduction in routine and elective activities in the Trust may lead to a decrease in some laboratory investigations. However, absenteeism is inevitable and this may reduce the work force in Pathology as a whole to a point where services need to be scaled back. . A flexible deployment of staff within and between departments is therefore necessary during a pandemic.

Initially all admissions and inpatients will be tested for influenza. As the pandemic develops a point may be reached where patients are triaged and managed on the basis of symptoms. The Trust will take that decision based on guidance from the Department of Health and local pressures.

Only respiratory secretions are recognised as infectious and therefore require special precaution for processing, therefore there is no change to normal practice. Blood sample for chemistry, haematology and other body fluid are not considered as infectious materials and should be handled using standard procedure.

Provision of Routine Laboratory Services

In the event of an influenza pandemic, laboratories will need to accommodate the increase in demand for testing for respiratory and other infectious diseases and changes in patient acuity, while working to maintain normal levels of other testing capacity, as both available staff and resources are affected during an approximately 12 week period.

The following are identified risks related to laboratory services during a pandemic:

- Inadequate support of essential infrastructure (power, water, ventilation systems , information technology etc) to maintain laboratory services.
- Inadequate numbers of laboratory staff to maintain the full spectrum of services.
- Inadequate supply of blood and blood products from the National Blood Services.
- Increased demand on laboratory services
- Interruption of inventory supplies, portering, courier and equipment support services

The Issues:

- Maintenance of laboratory-testing services, blood and blood products, reagents and consumables at appropriate levels.
- Prioritisation of work to match laboratory capacity to clinical demand and priorities

Laboratory areas have contingency plans, and specific pandemic influenza contingency plans, the intention of which are to minimise disruption of the diagnostic services provided and as far as possible maintain test turnaround times .

These plans take into consideration:

Operational readiness and service delivery

Health and Safety

Supplies

Staff management

Co-ordination and Co-operation between laboratories both internal and external.

Communication between laboratories and between laboratories and their service users.

In general during a Trust Activation Alert level One laboratory services are likely to suffer only minimal or no disruption. At Alert level 2 services will start to contract reducing to essential service provision at Alert level 3. However, it is possible that individual laboratories may be at a higher level of internal alert if areas are disproportionately affected. (See Appendix)

GSTS pathology operational arrangements during periods of alert higher than Alert level 1 envisage the activation of senior operational cover replicating a Gold/Silver/Bronze Command structure which will interface with the Trust.

APPENDIX – A Priority Listing of Laboratory Services

This is a recommended list only, it is subject to review.

Department	Alert Level 1: all other work (Priority 3)	Alert Level 2: Core Services (Priority 2)	Alert Level 3: Essential Services (Priority 1)
Automated Chemistry ICU	No Change in service	<p>Blood gases Liver Profile Calcium Magnesium Carbamazepine MetHb CKMB Osmolality COHb Paracetamol Creatinine Phenobarbitone CRP Phenytoin CSF Glucose Phosphate CSF Protein Salicylate Electrolytes Theophylline Digoxin Troponin T Glucose TSH HCG fT3 Ionized-calcium fT4T Lactate Urea Lithium Urinalysis Valporate</p>	<p>Blood gases Salicylate Calcium Troponin T CKMB Urea COHb Vancomycin Creatinine CRP CSF Glucose CSF Protein Electrolytes Gentamicin Glucose HCG Lactate Liver Profile Magnesium MetHb Osmolality Paracetamol Phosphate</p>
General Haematology	No Change in service	All other Haematology testing as on call but rolled out 24/7	FBC Malaria Parasites
Blood Transfusion	No Change in service	<ul style="list-style-type: none"> All other Blood Transfusion testing as on call but rolled out 24/7 	<p>Maintain all testing (based on clinical need):</p> <ul style="list-style-type: none"> Group and Screen Antibody investigation Blood and Blood product preparation Other miscellaneous testing <p>Priority of testing based on:</p> <ul style="list-style-type: none"> Urgency (Trauma, bleeding patient) Non-elective surgery patients Oncology as adjunct to treatment <p>WCACC NICU as per needs</p>
Special Haematology	No Change in service	All other Special Haematology testing as on call but rolled out 24/7	Sickle Cell Screen
Phlebotomy	No Change in service	Inpatient Collection – One daily ward round	Inpatient Collection – One daily ward round
CSR	No Change in service	Sorting and processing of urgent core testing only. All other work to be booked in, pre-analysis and stored.	Sorting and processing of urgent essential testing only. All other work to be booked in, pre-analysis and stored

Haemostasis	Alert Level 1: all other work	Alert Level 2: Core Services (Priority2)	Alert Level 3: Essential Services (Priority 1)
Diagnostic Haemostasis	No Change in service	All other Diagnostic Haemostasis testing as for out of hour's service. Guy's laboratory service ceased.	Guy's service ceased. Coagulation screen D-dimer Haemophilia Centre critically urgent testing.
Molecular Genetics Laboratory	No Change in service	Services of critical importance to Haemophilia Centre. All other testing ceased.	Services of critical importance to Haemophilia Centre. All other testing ceased.
Nutristasis Unit	No Change in service	Services of critical importance to Haemophilia Centre. All other testing ceased.	Services of critical importance to Haemophilia Centre. All other testing ceased.

St John's	All other work (priority 3)	Core – priority 2	Essential and urgent – priority 1
Dermatopathology	All other specimens and referral work	Biopsies for cancer,	Frozen sections, Moh's surgery, slow Moh's,
EB Laboratory	All other specimens	Specimens likely to degrade quickly should be processed sufficiently to preserve them	Prenatal specimens (blood or biopsy),
Immunodermatology	All other specimens	Specimens marked urgent	Frozen sections,
Mycology	All other specimens	Specimens marked urgent	Patients see in person, or requests to attend to patients on wards . clinics, Biopsies
Skin Tumour Diagnostic Unit	FFPE, and all other specimens	Specimens likely to degrade quickly should be processed sufficiently to preserve them	

Clinical Transplantation Laboratory	Other – priority 3	Core – priority 2	Essential and urgent – priority 1
Serology	Antibody/CD3 counts	Cross-matching	Deceased donor Cross-matching
DNA	HLA typing	Transplants	Deceased donor pretyping
Advanced DNA	Donor high resolution typing	Patient SBT	Chimerism Analysis

Cellular Pathology	Other – priority 3	Core – priority 2	Essential and urgent – priority 1
Histology service	All other specimens and referral work	Biopsies for cancer diagnosis	Frozen sections Renal biopsies
Cytology	All other specimens	Gynae cytology Specimens marked urgent	Non Gynae Sputum Bronchial samples FNA service

Oral Pathology	Other – priority 3	Core – priority 2	Essential and urgent – priority 1
Oral Pathology Laboratory	All other specimens and referral work	Biopsies for cancer, other less urgent cases & Immunocytochemistry	Frozen sections Service, Diagnostic biopsies for cancer cases

Infection and Immunology	Other – priority 3	Core – priority 2	Essential and urgent – priority 1
Microbiology	All other specimens for culture.	Urgent Auramines MRSA Culture C.difficile	CSF Blood Cultures
Virology	1.LBCs for HPV 2.Bloods/urines BKVL 3. Bloods for other serology e.g measles, mumps	1. Bloods for serology: HIV, HBV and HCV and other Architect markers Parvo M, crypto 2. Bloods for HIVVL, HBVVL and HCVVL	1. Respiratory specimens: NTS, NPA, BAL 2. CSFs 3. Bloods for CMVVL
Molecular	As above 1 and 2	Bloods for HIVVL, HBVVL and HCVVL	All above in virology
Immunology	1.HANA (screen DC on HANA & test only positives), 2.RF, 3.FCOEL, 4. ENA, 5.DT, 6.THYR. 7.OLI to be sent away, 8.Total and Specific IgE	Test and report ANCA and GBM	Book in and separate all serum from clots and store at 4 or -20 C as appropriate

Specialised Laboratory Medicine	Priority Level 3: all other work	Priority Level 2: Core Services	Priority Level 1: Essential and Urgent Services
Metabolic Biochemistry	All other specimens	Specimens marked urgent	Tyrosine, PKU/ MCADD Monitoring Pre arranged urgent work
Newborn screening	All other specimens	All, this area must be staffed	All, this area must be staffed
Purine Research Laboratory	All other specimens	TPMTs & samples marked urgent	Pre arranged urgent work
Medical Toxicology Laboratories	All other specimens	Specimens marked urgent	Pre arranged urgent work
Specialised Chemistry Laboratory		Samples not marked urgent	Immunosuppressants, this area must be staffed, urgent samples first.

Section 25 Maternity Operational Policy

This policy is based on the following assumptions

- All medical and midwifery staff will receive vaccination against pandemic influenza if this is available (priority group 1), thus reducing the rate of sickness absence and providing staff able to give care to pregnant women with pandemic flu.
- Pregnant women will be offered vaccination against pandemic influenza (if available and considered to be safe to do so by the Department of Health). Women in the third trimester of pregnancy (priority group 3) should have priority access due to more significant complications of flu during advanced pregnancy.
- Pandemic flu vaccine is unlikely to be available during the first phase of the pandemic. Operational plan should therefore be based on the **assumption that it is not available**.
- All pregnant women with symptoms of influenza requiring hospitalisation will be managed by the Trust medical staff within the designated cohorting wards planned with input regarding any obstetric issues in their care provided by designated senior obstetric and midwifery staff.
 - Obstetric and midwifery staff do not have appropriate expertise to manage pregnant women with significant respiratory complication of pandemic flu.
 - All women >24 weeks gestation will be seen daily by a designated obstetric outreach team. A CTG machine will be kept on one of the cohorting wards and all maternity patients will (if possible) be admitted to the same ward.
 - Maternity capacity runs at very high levels and therefore facilities for extra admissions to the maternity unit will only be available if routine antenatal and postnatal stays can be reduced. All women should be discharged within 24 hours of delivery unless there is a medical indication to keep them in hospital.
 - Management of women with pandemic flu on a ward with women requiring antenatal or postnatal admission for non-influenza related reasons would increase the risk of infection to mothers and babies
 - Consideration should be given for a single midwife in daily control of coordinating staffing and resources.

Pandemic Flu Rooms

Antenatal Patients

3 Side rooms on the antenatal ward will be designated for antenatal women with mild symptoms of Pandemic Flu requiring hospitalisation for obstetric indications. However, as the pandemic escalates, more areas would have to be identified to segregate flu from non-flu patients.

Intrapartum Care

Room 27 and 28 on the Home from Home Birth Centre will be the designated area for the assessment of women with possible Pandemic Flu (both have ensuite facilities). These rooms will be used for labour and delivery if necessary for infected women.

All women will be encouraged to leave go home when deemed clinically safe after the delivery to avoid transfer to the postnatal ward.

Postnatal Care

Room 29 on the Home from Home birth Centre is large enough to accommodate 2 postnatal patients with Pandemic Flu symptoms by using a screen divide.

The postnatal ward has 6 side rooms. These rooms will be designated for postnatal women with pandemic flu symptoms who cannot be transferred to the community from the birth centre.

As the pandemic escalates, general postnatal ward areas have to be used for cohorting.

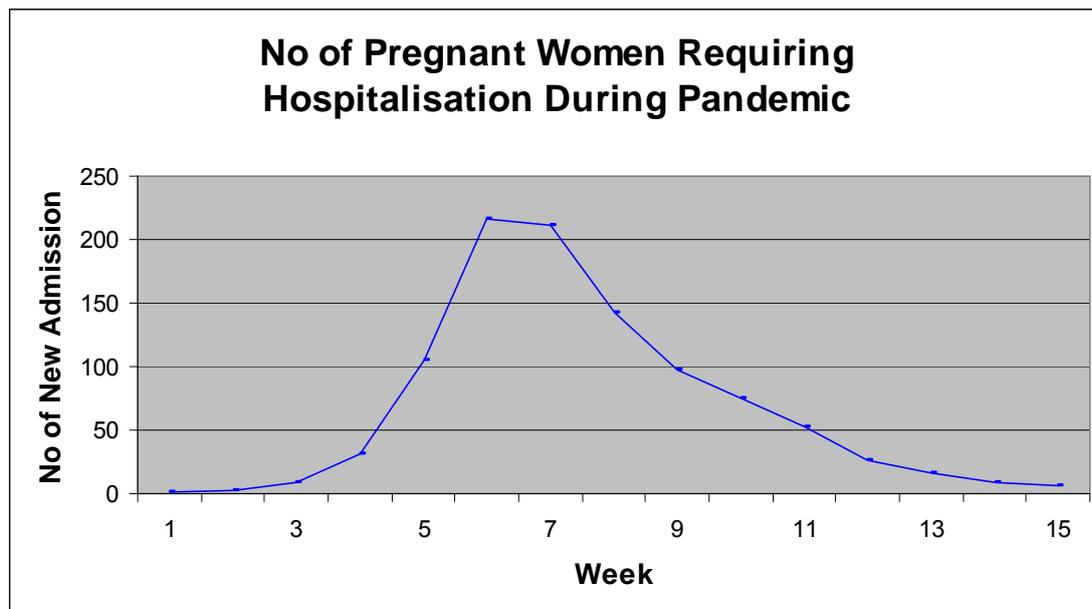
Antenatal/postnatal women will be discharged to community care as quickly as possible.

Clinical caseload estimates

The following is based on DH mathematical model adapting to number of antenatal bookings in GSTT over a 15 week period:

	No	No of Clinical cases (assume 50% attack rate)	Admission rate	Total no of admission during pandemic
AN booked not delivered during pandemic	3,125	1,563	4.00%	63
Delivery during pandemic	1,875	938	100.00%	938
Total	5,000	2,500		1,000

Week	Percentage of pandemic (From DH document)	No of pregnant women requiring hospitalisation	No of women in labour requiring admission	No not in labour
1	0.14%	1	1	0
2	0.20%	2	2	0
3	0.82%	8	8	1
4	3.12%	31	29	2
5	10.54%	105	99	7
6	21.65%	216	203	14
7	21.15%	211	198	13
8	14.21%	142	133	9
9	9.71%	97	91	6
10	7.54%	75	71	5
11	5.23%	52	49	3
12	2.60%	26	24	2
13	1.57%	16	15	1
14	0.86%	9	8	1
15	0.66%	7	6	0
Total	100.00%	1000	938	63



- It is assumed that case distribution is likely to be equal across all gestations.
- The above figures were based on the worst scenario, due to relative immuno-compromise nature of normal pregnancy, attack rates and mortality rates may well be on the high side.
- The above model assumes that admission rate for pregnant women not in labour is 4%, but 100% of those with flu who are also in labour need admission. As the model assumes that 50% of women in labour will develop flu, this is likely to over-estimate the number.
- If mortality is higher in pregnancy hospitalisation rates will be higher.
- The natural anxiety of women in pregnancy may increase the number of influenza related.
- Increase in premature labour will have a knock on effect on the neonatal service and this may affect decisions in the resuscitation of very premature babies dependent on available resources during pandemic.

Patient Journey and Core Service provision

- All midwifery staff services (hospital and community) will be pooled to maintain all essential service provision within the hospital
- Core antenatal and ultrasound services will be maintained as long as staffing levels allow. Non-essential care will be discontinued (parent education, labour ward tours)
- Non-essential study leave and educational time will be suspended for the duration of the outbreak. All leave should be cancelled including annual leave during the 15 weeks national emergency.
- In the event of an Pandemic flu outbreak an information leaflet will be provided encouraging pregnant women not to attend the hospital without first obtaining telephone advice regarding the need to attend.
- Telephone advice will be available via the triage midwife, to offer advice and to triage women requiring antenatal, labour and postnatal services.

Routine antenatal care and ultrasound services

Routine antenatal care will be reduced to the minimum required to provide safe antenatal care.

- Hospital antenatal clinics to see only “high-risk” women who need obstetric or other specialist service input e.g. diabetic women.
- Routine ultrasound facilities will be maintained as far as staffing levels allow

- Antenatal clinics will continue in community clinics at which low-risk women will be seen
- Antenatal bookings will continue in the community
- Special consideration will be given to women with influenza or symptoms suggestive of influenza with routine antenatal clinic visits only if essential. The option of home visits will be considered.
- Specialist services to “high-risk” groups will be maintained as a priority (including to women with mental health problems, substance misuse issues and teenagers pregnancy).

Acute contact with maternity services including admission in labour

1. Initial contact by telephone will be triaged as follows:
 - Where concerned about contact with/symptoms of influenza but no obstetric problem then woman advised to contact GP.
 - As above but has additional “non-urgent” obstetric problem woman advised to contact GP and community midwifery team alerted to review at home or GP’s surgery.
 - Obstetric problem with no symptoms of influenza will be advised to attend labour ward as normal.
 - Urgent obstetric problem (usually onset of labour or serious complication) with symptoms of influenza will be advised to attend labour ward to be seen in designated room on labour ward. The option of home confinement should be considered in low-risk women if labour occurs.
 - Symptoms suggestive of severe pandemic flu will be reviewed in designated area in Accident and Emergency unit (midwife receiving call on labour ward to inform A/E of expected attendance).
2. Women attending as “walk in” problems to labour ward and maternal assessment unit will be triaged as follows:
 - With influenza contact or mild symptoms of influenza woman will be advised to return home and contact GP.
 - With significant symptoms of influenza and no obstetric problem women will be referred to A&E.
 - Significant symptoms of influenza and obstetric problem will be seen in designated rooms see above
 - Multiparous women who have a normal delivery will be encouraged to go straight home from the birth centres once deemed clinically well.

Elective caesarean sections and planned induction of labour

- Elective caesarean sections and labour inductions will continue during an outbreak of pandemic flu and will be planned according to clinical requirements. Where possible elective delivery will be avoided in women who have symptoms of pandemic flu but this is unlikely to be possible in all cases. Women with severe symptoms requiring hospitalisation for the symptoms will be managed in the designated cohorting wards, being transferred to the labour ward for delivery only. Women with mild symptoms will be managed in labour ward and designated isolation rooms detailed above.

Maternal assessment unit

- Only women who are non-symptomatic and have no history of contact with influenza will be seen for the usual obstetric indications. Women attending will be triaged as soon as they arrive and any woman with symptoms will be referred to the designated room on the Home from Home Birth Centre.

- Women who have symptoms of pandemic flu will not be allowed to wait with other attending women, but will be asked to wait in the designated trust flu triage centre.

Homebirths

- Homebirths will continue if midwifery-staffing levels allow this but in the event of staff shortages the homebirth service may be withdrawn and a hospital birth advised for all women to allow better utilisation of available midwives.
- Hospital birth will be recommended for all women with symptoms of pandemic flu regardless of severity

Antenatal Ward

- Women with an Obstetric problem but no influenza symptoms will be admitted to the antenatal ward as necessary. Consultant review to confirm the length of hospital stay will take place within 24hours in all cases.
- *Inter hospital transfers (e.g. in-utero transfers and fetal surgical referrals) will be accepted according to the usual criteria. Women will be assessed for symptoms of influenza on admission and hospitalised accordingly. Sick influenza women to be transferred to Trust cohorting wards.*

Postnatal ward

- Uncomplicated postnatal women will be discharged home from the birth centre. The same policy will operate for women with uncomplicated symptoms of influenza. Women with postnatal obstetric complications and no symptoms of influenza will be admitted to the postnatal ward. Women with mild symptoms of influenza requiring admission for obstetric indications will be managed in a single room on the postnatal ward or remain on the birth centre until discharge home is appropriate. Those with significant symptoms will be managed on the trust cohorting wards with the baby kept with the mother if possible and twice daily visits from a designated midwife.

Neonatal infection

- Please see paediatric/neonatal operational policy (section 13 of Trust policy)

Visitors

- The visitor policy will be enforced with women advised that the only visitor allowed will be their birthing partner

Appendix B

Agenda for incident management group:

1. Introduction – ensure adequate representation
2. Communicate nature of incident its likely severity and duration
3. To agree nature of incident – red amber green plus green
4. To receive updates regarding staffing and bed availability
5. To review current and planned elective activity
6. To record agreed actions and rationale for each patient (as recorded in appendix A) this will depend upon the nature of the incident
7. Agreement of mode and nature of communications to patients and staff
8. Agreement of communication to Trust incident control
9. Agree time of next meeting

Minutes to be taken and distributed by GM/Deputy GM

Appendix C

PANDEMIC FLU PLAN: WOMEN'S SERVICES

PLAN STRUCTURE

The plan has been structured to provide a framework for the directorate to respond to the challenges of managing our services in response to Pandemic Flu which can be simply graded as follows:

Green	Normal circumstances
Green plus	Some reduction in availability of resources (particularly staff)
Amber	Moderate reduction in availability of resources (e.g. 10% of workforce)
Red	Significant reduction e.g. >10% of workforce unavailable

MANAGEMENT PROCESSES

In response to pandemic flu the directorate senior management team will have an immediate discussion regarding the implications for the directorate and may convene a meeting of the directorate incident management group.

The senior management team will comprise:
Clinical director or deputy (i.e. most senior available staff)
General Manager or deputy
Director of Midwifery and/or Midwifery Manager on call

If the incident is likely to be Amber or Red then the directorate senior management team will communicate to the directorate teams and convene a wider incident management group to make operational decisions. This incident management group will comprise:

*Incident management team**

- Clinical director or deputy
- General Manager or deputy
- Director of Midwifery or deputy
- Clinical leads or deputies (for all directorate services)
- Service managers
- Lead nurses/midwives
- On call Supervisor of Midwives

* out of hours these roles will be represented by the on-call staff however lead clinicians and service management staff should be contacted where appropriate and possible.

This group will meet in the 7th floor meeting room, North Wing to discuss the directorate's operational response to the incident.

It is likely that ongoing meetings will be organised (e.g. once or twice daily).

Responsibilities

In preparation for this meeting the following information will be available:

Clinical leads or deputies (for all directorate services) + service managers: Are required to gather high level information regarding clinical and clerical staffing and currently active patients. Patient information will be provided in the format in appendix A.

Lead nurse/Midwifery Manager on call: Will provide detail with regard to staffing and bed availability.

RESPONSIBILITY OF INCIDENT MANAGEMENT GROUP

The incident management group has the following responsibilities:

- ♦ To obtain and maintain adequate information regarding staffing and resources
- ♦ To communicate to staff and patients decisions made regarding provision and care for the duration of the incident and during the recovery phase. With regard to communication the following options need to be considered:
 - Video conferencing
 - Teleconferencing
 - Telephone calls
 - Email (confidentiality should be maintained)
 - Fax
- ♦ To agree what treatment can safely and appropriately be provided and to record the rationale for the decisions made and to retain records of those decisions

A summary of the likely provision of services according to the classification of the incident are as follows:

Green	Normal service
Green plus	Likely to continue normal service but requires review
Amber	May need to reduce elective activity and consider interrupting treatment as detailed below for red
Red	May require the following actions: <ol style="list-style-type: none">1. Cessation of elective activity with exception of cases agreed on an individual basis by Lead Clinician (e.g. oncology).2. Outpatient activity to be managed in line with Trust decision. ACU: <ol style="list-style-type: none">1. Cessation of elective activity with exception of cases agreed on an individual basis by Lead Clinician.2. Outpatient activity to be managed in line with Trust decision.

COMMUNICATION PROCESS

During Amber and Red phases and under some circumstances Green plus phases it will be important to establish a mechanism for communicating in a bidirectional manner to directorate staff what the directorate response is and for the directorate management to be able to gather adequate information regarding active patients precise details about their case and also details regarding the availability of resources. This will be managed by the directorate incident group.

It is vital that adequate records are kept of the names and emergency contact details of all staff including journey time and transport mode in event of an incident it is the responsibility of the directorate management team to ensure these details are up to date, accurate and kept in an accessible manner.

Appendix D

Pandemic Flu: Midwifery Staffing

	20%		40%		60%	
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
ANW	no change	no change	a	a	a	a
ANC	no change	N/A	no comm.	N/A	no comm.	N/A
FMU	no change	N/A	nuchals only	N/A	nuchals only	N/A
HBC	no change	no change	re-allocate rooms as per plan	as day	as 40%	as 40%
HFH	no change	no change	merge with HBC	merge with HBC	merge with HBC	merge with HBC
PNW	no change	no change	include Lansdell patients / staff	as day	as 40%	as 40%
COMM	no change	no change	e	? suspend caseload cover	e	as 40%
TRIAGE	close	close	close	close	close	close
ADU	no change	no change	d open 08.00 – 22.00	d open 08.00 – 22.00	d open 08.00 – 22.00	d open 08.00 – 22.00
CC						
EGU	no change	no change	c	c	c	c
LANSDSELL	no change	no change	b	b	b	b
PHONE LINE	no change	no change	2 lines	2 lines	2 lines	2 lines
GYNAE WARD	no change	no change	f	f	f	f
McNAIR	no change	no change	g	g	g	g

- a - Close ANW 1-13 / 14-19 = part of HBC.
Only need 1 midwife and can move HCA.
- b - Close Lansdell: Staff → PNW / BC.
Roster caseload midwives onto shifts.
- c - Close EGU: Staff → ADU.
- d - ADU to open 08.00 – 22.00 7/7. Dr to be allocated.
- e - Community: antenatal clinics to be reduced to Bookings, 28, 36, 41 week checks.
- f - Gynae ward: if >40% reduction in staff, consider closing gynae ward and moving patients → ANW beds 1-13.
- g - Reduce the number of clinics

Directorate: Women's

Contact numbers

Office
89133/86865/83685

Mobile 07921 543 494

Departmental options for moving medical staff (eg. take from theatre before OPD, from ward to acute take) Priority activity listed in order of importance. Staff moved from non-priority activities and lower priorities sequentially to preserve HBC cover.

Specialty: Gynaecology

Name of lead: Dr Kunde

Priority activity	Cover required	No. required to deliver priority activity (only)	Hours of work
Emergency Gynae Unit	Consultant	1	0830-1700
Emergency Gynae Unit	ST3-5	1	0830-2100
Emergency Gynae Unit	ST1-2	1	0830-2100
Gynae Main Theatre	Consultant or ST6/7	1	0830-1700
Gynae Day Surgery Theatre	Consultant or ST6/7	1	0830-1700
Assisting in Theatre	ST3-5	2	0830-1700
Gynaecology Clinic	Consultant or ST6/7	1	0900-1700
Gynaecology Clinic	ST 3-5	1	0900-1700
Gynaecology Clinic	ST 1-2	1	0900-1700
	Level for action		Action to be taken
Activity affected	No of Drs down	Grade	Reduction , Cancellation
Gynaecology Clinic	If no consultant or ST6/7	Consultant & ST6/7	Cancel clinic and redirect urgent cases to EGU
Gynaecology Theatres	If no consultant or ST6/7	Consultant & ST6/7	Reduce elective surgery. Priority given to Gynaecology Oncology and emergency benign cases
Priority Theatre	If no consultant or ST6/7	Consultant & ST6/7	ST3-5 could perform ERPCs or other minor procedures such as Bartholin's abscess with indirect consultant supervision

Specialties that could cross cover

No other specialty has ability to provide gynaecology cover

Impact on other services – General Surgery – A & E

Section 26 Dental

Introduction

This plan outlines the actions that will be taken in the Dental Directorate to support the provision of and access to NHS dental services in the event of an influenza pandemic. The plan takes into account national guidance on dentistry and influenza pandemics and The Guy's and St. Thomas' NHS Foundation Trust Pandemic Influenza Plan. The Dental Directorate will liaise with its KCL Dental Institute and Kings College Hospital NHS Foundation Trust partners when initiating the plan. The KCL Dental Institute will make the decision when to cease dental Undergraduate and Postgraduate student clinical activity. The General Dental Council state that students are only permitted to undertake dental work under supervision as part of their training and therefore they can not be used to supplement NHS services in the event of an influenza pandemic. Kings College Hospital NHS Foundation Trust will make the decision regarding trainee dental nurses and hygiene and therapy students. The Ambulatory Patient Care Divisional Team in consultation with the Dental Directorate Management Team will take the decision to cease 'business as usual' within the Dental Directorate.

Provision of Routine Dental Care during Pandemic

The principle of 'business as usual' will operate until this is no longer feasible. The provision of routine dental care will be provided in the community by the relevant primary care trust and will be restricted to people who are not symptomatic with the pandemic influenza virus. Care of infected patients will be avoided or delayed until they are asymptomatic.

Provision of Urgent Dental Care during Pandemic

Patients who are non-symptomatic and who require urgent care for trauma and/or 'fat face' with pyrexia will be treated in the Dental Polyclinic at St. Thomas' Hospital. To provide this care the dental team may require access to emergency adult and paediatric theatre lists. The influenza reception centre will be required to screen people for symptoms of influenza prior to entry to the Dental Polyclinic waiting room or clinical area.

Symptomatic people will only be able to access urgent care provided by the relevant primary care trust in the community. Treatment of infected patients will be limited to relief of pain, avoiding when possible aerosol generating procedures. The Dental Polyclinic will be fitted out with additional personal and protective equipment, including FFP3 respirators for the staff.

The Dental Polyclinic will be staffed through a rota of dental healthcare workers who have recovered from the pandemic influenza virus or who have been vaccinated against the virus. Those recovered from the pandemic strain of influenza should be prioritised for the care of patients with influenza. Vaccinated workers will have a significant degree of protection but not to the same level as those who have recovered from pandemic influenza. The number of chairs available will depend on the establishment of staff available.

Dental healthcare workers at high risk of complications from influenza i.e. pregnant women and immunocompromised workers should not provide direct care for infected patients.

The Dental Polyclinic has dedicated x-ray facilities which can be accessed in the event of the clinic being used during an influenza pandemic.

Dental Staff Personal Protective Equipment

Personal protective equipment is used to prevent the patient's body fluids contacting the hands, eyes and mouth. It should be worn by anyone directly involved with a clinical procedure. This may include the treating clinician, assistant (nurse, dentist or student), supervisor and any parent or carer that assists the patient during the procedure. Some items of normal clothing are inherently protective. Shoes that cover the toes and upper foot are protective to dropped instruments. Open shoes and sandals should never be worn in clinical areas.

The Dental Directorate and KCL Dental Institute require clinical staff to wear various items of personal protective equipment dependent on the procedure being performed and the circumstances surrounding the patient.

For all clinical contacts without special considerations (simple consultation and operative procedures) where no aerosol or splatter is involved wear:

- Single use, disposable gloves
- Eye protection (clinical protective glasses or face visor)
- Single use face mask
- FFP3 respirator (operating and assisting clinicians)

Splatter, spray, aerosol, debris, or dust may be generated during the following procedures:

- Administration of a local anaesthetic
- Use of the 3-in-1 syringe
- Use of the hand piece in the clinic or the laboratory
- Any surgical operations, including the extraction of teeth
- Endodontic therapy
- Periodontal treatment especially scaling with hand instruments and ultrasonic equipment
- Routine phlebotomy
- During tooth brushing
- When the patient coughs or sneezes

Part 4

Support Functions

Section 27 Staff Contingency

A pandemic influenza may affect the workforce in numerous ways and the organisation and individual departments will need to ensure they have considered the potential impact on staff and services. The Department of Health has provided guidance to support with workforce consideration and staffing implications in the event of a pandemic influenza.

Each service is expected to have a pandemic flu preparedness plan in place which will include what services will continue during a pandemic and also the impact on staff. The plan will need to incorporate considerations such as communication with staff, increased levels of absence, the potential for redeploying staff to carry out different duties and any training requirements. It would also be advised to understand workforce details such as staff that have caring responsibilities for dependents and travel arrangements as these may impact on attendance at work during a pandemic. Management would also need to maintain an essential staff list to identify key staff that are key to delivering services during a pandemic where activity is reduced and services may be temporarily suspended.

Absence from work

Over the course of a pandemic, staff are likely to be absent from work for a combination of reasons including personal illness, the need to look after family members who are ill, bereavement, the impact of public health measures such as school closures and other factors such as possible transport difficulties.

The following key assumptions, based on a uniform clinical attack rate across all age groups, should assist in carrying out impact assessments and developing contingency plans. As the attack rate may not be uniform across all age groups, organisations need to remain flexible and make adaptations as information emerges.

Up to 50% of the workforce may require time off at some stage over the entire period of the pandemic, with individuals absent for a period of 7 - 10 working days. It is predicted that during the peak of the pandemic between 10 – 15% of staff may be absent from work compared with the expected absence rate of 3% in line with Trust policy. Advice will be made available to staff regarding influenza symptoms and/or contact with flu. Reporting procedures for staff who are absent will remain in line with Trust policy unless a decision is taken locally via the Pandemic Policy Group to review this process.

Managers are encouraged to record levels of absence locally and to take note of staff who have been absent due to influenza so that these can be monitored both locally and Trust wide as absence levels will impact on service provision and contingency plans.

Absence may also be due to over concerns such as caring for dependents either due to illness or closure of schools etc. Where this occurs, normal provisions for special leave or annual leave will apply.

The Trust has sickness absence and special leave policies which will apply as normal. Absence, whether sick leave, special leave or annual leave, must be recorded as usual.

Impact on staff

Managers will need to consider the impact that contingency and preparedness plans may have on staff. Staff should be engaged with the plans and the potential changes to their roles during a pandemic to ensure that any risks are minimised. This may include a temporary change of role where services are temporarily suspended (e.g. elective surgery and outpatient appointments) and any potential training requirements.

Departments will also need to consider the effect of a pandemic on any contractors on whom they rely to ensure they also have preparedness plans in place and to include these in local contingency plans.

Management will need to ensure they communicate with staff throughout the pandemic to keep them informed of changes and new guidance for staff.

In a pandemic setting, employers still have a duty to provide a safe place of work for their workers (Health and Safety at Work Act 1974 as amended) and are required to maintain safe working systems and to implement protective measures based on local risk assessments.

This includes making temporary changes to working practices, such as:

- control the exposure at the source with stringent control of infectious measures (Infection Control Policy of the Local Pandemic Influenza Preparedness Plan (Section 12)
- providing physical barriers to transmission;
- enhancing cleaning regimes;
- ensuring that the appropriate protective equipment is available according to Personal Protective Equipment at Work 1992;
- having hand washing, waste disposal and other hygiene facilities in place

Actively promoting these and other similar measures can help encourage and maintain attendance at work during the response phase.

Some staff will be more at risk of complications than others due to underlying health conditions or pregnancy.

Managers should work with staff to conduct risk assessments to consider whether an employee's work activities increases the risk of exposure beyond that in the community and what control, containment and protection measures may be necessary. If there are underlying health conditions to be taken into account, the Occupational Health Service will provide advice on the risks and suitable measures including redeployment.

Aside from their obligations under Health and Safety legislation, employers can help to minimise the spread of the virus and support good infection control practice by:

- encouraging any employees who report feeling unwell with influenza like symptoms to stay at home until their symptoms resolve
- sending people home who develop an influenza-like illness at work ensuring that stocks of appropriate personal protective equipment are available in the workplace

Existing HR policies and management reassurance should support these aims. Follow up contact with absent employees, the provision of occupational health advice and other

similar measures set out in the Trust's sickness procedure can help minimise absences and encourage return to work as soon as possible.

Essential Staff List

It is essential that each Trust division and corporate department keeps a staff contingency plan under review with the purpose of identifying key groups of staff who are critical to the delivery of urgent and emergency clinical services. These plans are currently being developed and should be reviewed daily by the divisional and SDU management teams during an influenza pandemic and adjusted according to patient numbers. During the planning period, consideration should be given to the fact that the skill mix required for some areas (specialties) may limit the extent to which other staff can be re-deployed.

Departments will also need to consider the effect of a pandemic on any contractors on whom they rely.

Healthcare staff with patient contact have been identified by the Department of Health as the number one priority for receiving vaccination in order to minimize disruption of vital health care delivery. However, vaccine may not be available in the early part of a pandemic and when available, may be in short supply. The essential staff list produced by each division could help in the decision on prioritizing staff for prophylaxis when this is available.

The use of antivirals will be to minimise serious illness and deaths, to maintain essential services and to minimise societal disruption. During a pandemic all classes of antiviral drugs to which the pandemic strain is susceptible will be used in the most effective way.

The guiding principle during the alert period, until widespread outbreaks occur, is to treat cases if they present within 48 hours and to give short-term prophylaxis to close contacts. Therefore, health care workers directly responsible for caring for these patients would be offered antiviral prophylaxis if this is available. The use of antiviral prophylaxis will cease once pandemic has become wide spread.

Checklist for departments / line manager responsibility during the pre pandemic stage

- Ensure all sickness absence is always recorded and reported (including medical staff)
- Assess the potential impact of the pandemic flu on the department by ascertaining information pertaining to staff member personal circumstance i.e. carrying out an audit of travel arrangements, being aware of caring responsibilities, encouraging staff to make contingency plans for caring responsibilities, consider options for home working and keeping this information under review
- Identify key groups of staff critical to the delivery of essential services and keep this under review
- Identify skills which are likely to be in short supply and plan for additional training to ensure resilience
- Conduct risk assessments in relation to working practices
- Understand and evaluate the impact on contractors and their ensuing ability to supply adequate staffing during a pandemic
- Consider cancellation of all annual leave/study leave and external training courses at Scenario level 2.

PANDEMIC INFLUENZA

WORKFORCE PREPAREDNESS/BUSINESS CONTINUITY PLAN

- The Trust has a 'Local Pandemic Influenza Preparedness Plan V.4.1' in place in order to prepare for a pandemic influenza and ensure the Trust is able to respond effectively to the changing requirements from service users and also ensure normal services continue.
- During the peak of a pandemic the workforce directorate may be affected by:
 - A decrease in the availability of staff to deliver a normal level of service due to increase staff absence through illness, caring responsibilities or travel disruption (e.g. school closures; unwell dependents)
 - Increased requirements from the business for specific 'HR' activities (e.g. increase requirement for sourcing temporary staff, issuing of honorary contracts for staff redeployed from other Trusts)
 - Responding to service needs in line with command and control requirements (e.g. redeployment of non-clinical staff into areas such as portering, switchboard, facilities) to ensure overall Trust business continuity and patient care
 - Responding to a redesign in clinical services and suspension of some normal activity (e.g. elective surgery, outpatient clinics)
- The plan below demonstrates the key departments within the workforce directorate and the critical functions which will continue during the peak of a pandemic and which services will be suspended in order to temporarily redesign service delivery and support the Trust with its pandemic influenza plan.

Department	Critical services	Services which would cease	Head count	Min staff req. for critical services	Critical skills/ experience	Redeployment options
Temporary staffing	<ul style="list-style-type: none"> • All temporary staffing requests in essential frontline posts • Increasing and registering new staff onto bank to increase pool of staff 	<ul style="list-style-type: none"> • Non urgent pay queries • Nurses and HCA induction 	30	26	<ul style="list-style-type: none"> • IT skills & database experience 	<ul style="list-style-type: none"> • Internal cover within the dept • As this is a key function – staff to be sourced from recruitment or wider HR dept
Nursery	<ul style="list-style-type: none"> • Normal service on one site (STH) 	<ul style="list-style-type: none"> • Guy's Nursery closed 	44	28	<ul style="list-style-type: none"> • NVQ3 in childcare/ nursing • Basic 1st aid • Enhanced CRB 	<ul style="list-style-type: none"> • Key Trust wide function – staff to be sourced from ECH or wider organisation

Resourcing Function: Recruitment	<ul style="list-style-type: none"> • Successful candidates in the pipeline – offer to start date • Pre-employment checking • ID checking appointments inc CRB • Recruitment for critical services and shortage occupations 	<ul style="list-style-type: none"> • Advertising • Shortlisting • Interviews • Induction booking (induction would be handled retrospectively) 	27	15	<ul style="list-style-type: none"> • IT skills • Knowledge of recruitment databases and ESR 	<ul style="list-style-type: none"> • Key functions to be completed internally from within the recruitment department • Surplus staff to be redeployed to staff bank initially then HR or wider organisation
Resourcing Function: Local employment	<ul style="list-style-type: none"> • Potential pool for deployment during pandemic • SBEG links/Waterloo Job Shop 	<ul style="list-style-type: none"> • “At risk” register management • Careers advice • Interview and application skills support • Work experience 	2	0.5		<ul style="list-style-type: none"> • Surplus staff to be redeployed within HR or wider organisation
Operational HR	<ul style="list-style-type: none"> • Honorary contracts • Contracts of employment for legal purposes • Complex and crucial employee relation cases • Responses to ET claims 	<ul style="list-style-type: none"> • ER activity (new cases/investigations) • Formal meetings 	24	8	<ul style="list-style-type: none"> • Employment law • ESR • T&C’s 	<ul style="list-style-type: none"> • Surplus staff to be redeployed to employee services team (Band 4-6) • Surplus staff to be redeployed within HR or wider organisation
Medical HR	<ul style="list-style-type: none"> • New doctor in training recruitment and induction • Contracts of employment for legal purposes • Responses to ET claims 	<ul style="list-style-type: none"> • ER casework 	10	6	<ul style="list-style-type: none"> • IT skills • Knowledge of ESR • T&C’s 	<ul style="list-style-type: none"> • Staff to be sourced from Ops HR/Recruitment • Surplus staff to be redeployed within HR or wider organisation
Training & Development	<ul style="list-style-type: none"> • Basic Corporate Induction including all essential mandatory training (e.g. infection control) • Basic Nurse & Midwifery Induction including essential mandatory training 	<ul style="list-style-type: none"> • Full Corporate induction • Full N&MW Induction • A&C Induction • Development courses • Non-essentially mandatory training 	14	3	<ul style="list-style-type: none"> • IT skills • Knowledge of OLM 	<ul style="list-style-type: none"> • Surplus staff to be redeployed within HR or wider organisation

HR Systems & Information Team	<ul style="list-style-type: none"> Urgent reports Urgent Work structure changes System support (which may increase during such a scenario due users working in unfamiliar parts of sys) 	<ul style="list-style-type: none"> Standard reporting Self service implementation support Various projects 	4	2	<ul style="list-style-type: none"> Advanced IT skills ESR and other systems expertise Organisational workforce knowledge 	<ul style="list-style-type: none"> Surplus staff to be redeployed within HR or wider organisation
Pay & Reward	<ul style="list-style-type: none"> Evaluation of roles prior to advert dealing with urgent ad-hoc pay arrangements in response to immediate service need 	<ul style="list-style-type: none"> Job evaluations which could delay recruitment Failure to deploy staff to providing ad-hoc cover in emergencies 	3	1	<ul style="list-style-type: none"> Job evaluation experience National and local pay expertise 	<ul style="list-style-type: none"> Surplus staff to be redeployed within HR or wider organisation If staff required then to be sourced from HR Ops
Employee Services Team [Finance Directorate]	<p><i>Part of finance pandemic flu preparedness plan but incorporated with workforce planning</i></p> <ul style="list-style-type: none"> <i>Process changes that could lead to overpayments</i> <i>Inputting new starters</i> 	<ul style="list-style-type: none"> <i>Changes not effecting pay</i> <i>Non-urgent pay queries</i> 	6	6	<ul style="list-style-type: none"> <i>ESR</i> <i>A4C terms and conditions</i> 	<ul style="list-style-type: none"> <i>Staff to be sourced from HR Ops team or Payroll</i>
Flu Response Team	<ul style="list-style-type: none"> Responding to staffing questions in relation to flu Recording absences on ESR Supporting co-ordination of redeploying staff within the workforce directorate and across the Trust 					<ul style="list-style-type: none"> Surplus workforce staff

Section 28 Capital, Estates & Facilities

Introduction

The purpose of this plan is to identify key groups of staff who are critical to the delivery of non clinical services and should therefore be prioritised for pandemic flu vaccination if available.

The plan would be reviewed daily by the Operations Director in association with the Head of Environmental Services, Head of Facilities and Head of Estates to ensure that all essential services are maintained.

Most non clinical services are essential to the delivery of healthcare and will all need to be maintained at or near normal operating levels.

Response by CEF

Housekeeping – Total staff 450

The main priority will be to keep all wards and public areas to the highest standards of cleanliness. All housekeeping staff working in those areas should be offered pandemic influenza vaccine for scenarios 3 & 4 if available. **350 staff**

Waste and pest control, grounds and garden maintenance – Contracted out – Total staff 30

All of these services are contracted out and the contractor would be expected to provide the appropriate levels of staff. The main requirement would be for the removal and disposal of waste and a full team of staff will be required for this task. Consideration must be given to providing appropriate immunisation to contractor's staff providing essential services to the Trust and therefore it is recommended that all waste personnel receive pandemic flu vaccination if this is available. **30 staff**

Maintenance – Total staff 20

While some maintenance will be non essential, e.g. repainting of a ward, much of this service will have to be maintained to resolve. We therefore need to have a core staff available for emergencies. **10 staff**

Receptionists – Total staff 15

They play an important role in keeping the general public informed. Would require at least one receptionist on each shift and in each hospital. **8 staff**

Catering – Total staff 270

Food is an essential part of the recovery process. All patient meal services will have to be retained as will some catering for staff. Restaurants for staff and visitor meals would be kept to a minimum, i.e. Toms & The Great Maze. The rest would be closed. **220staff**

Works staff – Total staff - 140

The continuous supply of gas, electricity, water, sewage, emergency power, lifts and medical gases is essential to the effective running of the hospital sites. It will be necessary to provide qualified staff to maintain these services at all times. **70 staff**

Portering – Total staff 100

This is an essential service. It is likely that the number of removals would increase and place a burden on the service. Emergency specimen collections would increase and the reduction in elective surgery would only have a small impact on the overall service volumes. If outpatient activity reduces as indicated then the existing team should be able to cope with the additional demands. **100 staff**

Patient Transport –Total staff 52 Staff + Contractors

Also an essential service. As outpatient activity reduces demand will fall but this could allow us to offer a service to transport staff to and from work if necessary or make some reduction in service. **25 staff**

Shuttle Bus (3 contractor staff)

Non essential service and could be cancelled

All general medicine and elderly care wards should be treated as priority areas to take emergency admissions and flu victims. These areas will take the double hit of being exposed to flu victims and being required to maintain a full emergency service.

Sterile Services – Total staff 70

Once again, essential service. However service requirements would be reduced significantly if elective surgery postponed. **40 staff**

Linen Services – Total staff 10

Essential Service. Reduction in outpatients would have little impact on the service nor would the postponement of elective surgery. More linen may be required as a result of increased number of patients into the Trust. **10 staff**

Materials Management – Total staff 39

Includes the receiving and receipting of goods and the distribution of those goods to all areas within the Trust and elsewhere. Includes ‘top up’ MM service to most wards and some departments. May have to increase stock holdings at store room and ward level to reduce the number of journeys and ordering time. **39 staff**

Reprographics – Total staff 5

Non essential service. All routine photocopying would cease. Only issue of essential printed forms to continue. **2 staff**

Post Rooms – Total staff 11

With a reduction in elective surgery and a closure of non essential outpatients activity would decrease but there could be additional workload from communications. **8 staff**

Residential accommodation (including Simon Hotel) Total staff – 18

The transfer of patients from wards into Simon Hotel and the provision of temporary accommodation may become essential in scenarios 3 and 4. This will require full staffing in Simon Hotel and a skeleton staff of to clean on call rooms and issue keys etc. **7 staff**

Security – Total staff 3 Trust employees + 30 contractors

Security and perhaps even enhanced security will be required for all scenarios but particularly three and four. It will be impossible to reduce the level of service without potentially jeopardising the safety of the Trust, its patients and its’ staff. All security staff, including contractor staff. **33 staff**

Summary of staff requirements by scenario

Department	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Housekeeping	450	450	350	350
Waste	28	28	28	28
Maintenance	20	20	10	10
Receptionists	15	15	8	8
Catering	270	270	220	220
Works	120	120	70	70
Portering	100	100	100	100
Patient Transport	52	52	25	25
Shuttle Bus	3	3	0	0
Sterile Services	70	70	40	40
Materials Management	40	40	29	29
Laundry & Linen	10	10	10	10
Reprographics	5	5	2	2
Post Room	11	11	8	8
Res. Accom.	18	18	7	7
Security	33	33	33	33
TOTAL STAFF	1245	1245	941	941

Section 29 Procurement – Materials Management

Aim: To maintain supply of essential medical surgical consumables for - 1. Pandemic use and - 2. Ongoing clinical activity.

1) Pandemic Security of Supply

Identified risk – shortage/ unavailability of essential medical surgical consumables.

Identified key products (refer to appendix X) have been stockpiled in two off-site warehouses. The consumables are normally supplied by NHS Supply Chain. Intend to build additional stockpile for critical care. In the event that NHS Supply Chain/ other suppliers are unable to supply against required demand the stockpiled products will be moved on-site. The Materials Management team will then arrange on-ward distribution.

Other key products (e.g. intersurgical respiratory consumables) are in part consolidated via the Squadron Medical off-site consolidation service. The consolidation service should provide additional resilience with ring-fenced stock in the event of wider supply chain break downs and planned down time of suppliers over Christmas and New Year bank holidays.

2) Ongoing clinical activity

Identified risk – increased staff absenteeism affecting the ability of the materials management team to deliver into clinical departments and replenish Smart Store systems.

In the event of high staff absenteeism in the materials management team resource would first be drawn from other DHL sites (note: the DHL materials management service includes provision of an off-site receipt and cross dock facility). Additional resource would be provided by reallocating resource from the procurement sourcing team.

Under scenario 3 and 4 a command and control centre would be set up in the St Thomas loading bay. The Director of Procurement, NHS Supply Chain implant, Squadron implant, Smart Store Systems Management team would relocate to ensure close co-ordination with the DHL materials management team and North Wing clinical teams. An additional overnight shift (note: the DHL materials management service includes an overnight shift for Guy's Main Theatre) would be created to focus on the replenishment of North Wing. An overnight shift would enable more productive use of resource with easy access to lifts and reduced user interruption during replenishment of priority Smart Store systems.

APPENDIX A – KEY PRODUCTS LIST FOR FLU PANDEMIC STOCKPILING

NPC	Desc	Brand	MPC	LATEST (18/8/09) Price	Unit	Unit of Issue	Quantity Required	Sub-Total
BTB048	Apron Poly Disp white 686 X 1170mm (Roll 100) #	Visqueen BPI	None	£2.81	Roll	100	9,045	£254.16
FTE720	Gloves examination latex powder free non sterile singles Large	Shermond premier	6603	£3.83	Box	100	8,826	£338.04
FTE721	Gloves examination latex powder free non sterile singles Medium	Shermond premier	6602	£3.83	Box	100	23,919	£916.10
FTE160	Gloves examination latex powder free non sterile singles Small	Shermond Premier	6601	£3.83	Box	100	7,283	£278.94
FTG127	Gloves exam nitrile non sterile powder free singles Large purple	Kimberly Clark purple nitrile	52003M	£4.06	Box	100	1,570	£63.74
FTG126	Gloves exam nitrile non sterile powder free singles Medium purple	Kimberly Clark purple nitrile	52002M	£4.06	Box	100	5,181	£210.35
FTG125	Gloves exam nitrile non sterile powder free singles Small purple	Kimberly Clark purple nitrile	52001M	£4.06	Box	100	1,097	£44.54

BWM020	Pleated 4 ties with noseband EN14683 type IIR	BARRIER	4234	£5.10	Box	50	96,815	£9,875.13
BTP075	Pre-assembled single pack (lens & frame) individually wrapped	McKinnon	SM20-5	£24.00	Pack	20	30,378	£36,453.60
MRB057	Cleanser alcohol hand rub 500ml bottle with integral pump dispenser bedside / wall mountable	Softalind Pure	19039	£2.67	Each	1	36,178	£96,595.26
MRB377	Soap liquid handwashing 750ML CUG36X #	Deb Cutan Gentlewash	CUG36X	£18.55	Each	6	38,131	£117,888.34
VJT128	Clinell Universal Sanitising Wipes Maceratable	Clinell	CUSWM140	£3.78	Pack	140	92,584	£2,499.77
VMS003	Body bag PEVA Child size 122 x 71cm white with 3 sided zip	None stated	SL44	£5.48	Each	1	300	£1,644.00
VMS002	Body bag PEVA Adult size 220 x 107cm white with 3 sided zip	None stated	SL45	£7.26	Each	1	750	£5,445.00
Total								£272,506.97

Note:

1. Unit cost based on NHS SC cost. Actual cost lower from direct purchase. Costs include VAT.
2. Service Charge for Storage £7.50 per pallet per week

NPC	Desc	Brand	MPC	LATEST (18/8/09) Price	Unit	Unit of Issue	Quantity Required	Sub-Total
BTP006	Class FFP3 unvalved	3M	1863	£225.60	Pack	120	50,040	£94,075.20
	Reusable Filters (Supplied in pairs)	3M	6035	£152.00	Pack	80	20,000	£38,000.00
VAT								£19,811.28
Total								£151,886.48

Note:

1. Unit cost based on 3M quotation.
2. Service Charge for Storage £7.50 per pallet per week

Total General Supplies and FFP3 Supplies	£424,393.45
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Section 30 Communication Plan

Pandemic communications needs

1. Key Communications Activities

- The Communications department will ensure that all public messages are consistent with the HPA, PCTs and NHS London
- Up to date media statements will be produced for use with local and national media
- Staff will be informed of key messages and how to advise the public
- Notices will be produced for public areas of both hospitals, with advice on visiting protocols, symptoms to look out for and what to do if someone is very unwell
- Information will be available on the Trust website and with links to relevant organisations
- Requests from the general public for information on the outbreak should be referred to NHS Direct or to another number tbc. All reception and switchboard staff must be made aware of this.

2. Communications within the working group/Trust Pandemic Operations Group

- The pandemic working group meets regularly during the planning phase. If an outbreak occurs, management of that outbreak will fall to the Trust Pandemic Operations Group which will be convened for that purpose if deemed necessary. Communications to be represented at all meetings of the Operations Group.
- All working group members should provide the committee with appropriate out-of-hours contact details.

3. Communication with staff

- Communication with staff is vital to ensure they are able to reassure patients and visitors and give correct advice, as well as follow correct protocol if they, their household members or colleagues fall ill.
- Staff to be advised on managing their own health including being given information about who will receive vaccines and prophylactic drug treatment once this has been agreed.
- A dedicated page should be set up on **GTi**, the Trust's intranet, directly accessible from the home page. Regular updates to be issued as necessary and communicated to staff who do not have regular e-mail access

4. Communication with the media

- The Trust communications team will handle all media enquiries connected with a pandemic. The team will also ensure, through internal communications, that all staff are reminded of the importance of not speaking to the media during a pandemic but to refer all calls to the communications team.
- The team will liaise as necessary with media teams in other relevant NHS organisations the HPA and the Department of Health.
- The team will provide out-of-hours communications cover as normal throughout a pandemic.

Part 5 – Recovery

Section 31 - POST PANDEMIC PHASE AND RECOVERY

30.1 Recovery Activities

The post pandemic recovery phase may well affect the Trust for a period of time as long as the pandemic itself. Staff will take a period of time to recover both physically and emotionally from the efforts made during the pandemic. Structurally the organisation may have lost staff directly from the pandemic. Others may choose not to return to a healthcare setting. Additionally staff annual leave and sickness absence is likely to increase immediately post pandemic. This will have a notable impact upon the speed with which the organisation recovers.

The organisations recovery can be broken down into the following activities:

Facility

- Demobilize/re-evaluate security arrangements for site protection, visitor restrictions, etc.
- Assess costs associated with the pandemic
- Project when the facility will be able to resume pre-pandemic services
- Review/revise clinical management guidelines
- Review/revise Infection Prevention and Control guidelines
- Evaluated the reporting structure and decision making process that took place during the pandemic
- Review the response plan and draft a lessons learned report

Develop a plan and timeline for implementation of activities as per updated guidelines:

- Reinstate services that were postponed
- Reintroduce targets, both Trust and Government, methodically to the facility so as not to overwork an already depleted and fatigued workforce. This should include triggers for re-introduction and should take into account the potential varying circumstances of organisations, needs of public and staff concerns
- Cancel or extend services that were initiated during the pandemic
- Determine if clients needs services re-evaluated as a result of the event
- Determine if new services are required long term as a result of the event

Human Resource Management

- Demobilization of staff and volunteers
- Formally recognize the efforts of all staff and volunteers
- Ensure any salary/pay anomalies caused by the pandemic are resolved as quickly as possible.
- Managers to conduct and assessment and evaluate immediate emotional needs to staff. Stress risk assessments may need to be conducted in those areas of high activity and pressure.
- Managers and OH teams evaluated long term emotional needs of staff
- Evaluated use of psychological and social service for staff
- Ensure that critical incident and stress management/support is available for staff and patients

- Ensure physical needs of staff are met, identify a structured programme for staff leave
- Identify areas for recruitment where staff have been permanently lost

Paperwork

- Staff payroll documentation
- Activity log records
- Financial processing and documentation
- Detail Trust and Government targets regarding finance and long term financial impacts and implications from the pandemic
- Seek financial redress
- After-action reports

Communication:

- Update education/communications materials: provide up to date information to the public, patients and staff
- Communicate the concept of “New normal” i.e. daily activity will not return to baseline until the pandemic is truly declared over
- Possibility and uncertainty of a second wave: identify which staff contracted the virus from the first wave so they can be placed in the most vulnerable positions but are essentially “immune” to the virus
- Acknowledge contributions of staff
- Communicate the recovery strategy, what to expect, announcements and notifications of the gradual restoration of services
- Continued promotion of Infection Prevention and Control and key health messages
- Risk communication: focus on emotional needs of staff, being sensitive to physical and emotional impact of the pandemic

Inventory Assessment:

- Drugs
- Assess usage of supplies including patients care and laboratory supplies
- Beds
- Ventilators
- Develop projections for the future requirements

Equipment:

- Determine items which have been rented, leased, purchased or borrowed that need to be returned
- Determine equipment which has been lent out that will need to be returned, especially equipment which has left the boundaries of the Trust
- Repair or replace damaged equipment
- Replace “lost” equipment
- Extensively clean and disinfect equipment

Antivirals:

- Evaluate the effectiveness of the antiviral strategy
- Summarize resistance data
- Summarize adverse event data
- Perform an inventory assessment

Vaccine:

- Evaluate and summarize the vaccine delivery strategy
- Summarize adverse event date
- Perform an inventory assessment

Surveillance:

- Estimate burden of disease
- Revise case definition if necessary
- Evaluate surveillance system and determine ongoing surveillance needs

30.2 Debrief Strategy

The debriefing strategy should follow that outlined within the Trust Major Incident Plan Version 1.5:

A Hot Debrief, in large or small groups, should take place as soon as possible after the event and written comments should be encouraged. The purpose is to capture lessons learned for subsequent analysis. A debriefing session after a major incident or exercise (if possible with other agencies) will help to inform future plans and training. The trust should participate in the Joint Lambeth PCT and Southwark PCT IPC hot debrief to ensure that all lessons learnt are shared.

Following the hot debrief a cold debrief of representative personnel from the Trust may be required to attend a debrief involving other organisations. Organisations would have an opportunity to review events in chronological order and identify lessons learned. The Operational Management Team should conduct a detailed debrief on the effectiveness of the strategy adopted by the trust and identify ways to improve the plan. A detailed action plan should be produced which should be monitored by the Pandemic Policy Group.

The purpose of both hot and cold debriefs are to:

- Comment on the organisational response
- Identify things that could have been done better
- Make constructive criticism (not to apportion blame)
- Congratulate individuals
- Disseminate good practice

30.3 Psychological Support

During a Major Incident psychological support for staff and patients should be made available as soon as is possible. Mirroring the Major Incident this should be organised by the Support Team Leader and include:

- Multi faith chaplaincy team
- RGNs / RMNs
- Social Worker
- Duty Psychiatrist
- Bereavement Officer

Information is available to all staff on the psychological support available on the trust intranet under Major Incident Plan.