Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

CUH
Ospidéal Ollscoile Chorcaí
Cork University Hospital

Cork University Hospital
Influenza Pandemic Preparedness Plan 2016

Ref: Number: PPG-CUH-CUH-191		**Revision No:** 2	**Review Cycle:** 2 years
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1.0 INTRODUCTION

Unlike influenza epidemics, pandemics are very severe outbreaks that rapidly spread to involve all parts of the world.

Most experts agree that another pandemic is likely to occur, although the exact timing or severity cannot be predicted. Increases in global travel and in the world population during the 1900s will probably accelerate the rapid spread of the virus. The average time between each of the last four pandemics was 25 years; the last pandemic started in 2009, with a new H1N1 virus which is still circulating.

During a pandemic, disease often occurs outside of the usual influenza season, including summer months, and multiple waves of disease occur before and after the main outbreak. Mortality during a pandemic is very high and is not confined to the usual risk groups outlined below, for which the **seasonal influenza vaccine is strongly recommended** (source: www.hpsc.ie):

- Persons aged 65 and over
- Adults and children aged 6 months and older with a long-term health condition such as Chronic heart disease including acute coronary syndrome, Chronic liver disease, Chronic renal failure, Chronic respiratory disease, including chronic obstructive pulmonary disease, cystic fibrosis, moderate or severe asthma or bronchopulmonary dysplasia, Chronic neurological disease including multiple sclerosis, hereditary and degenerative disorders of the central nervous system, Diabetes mellitus, Down syndrome, Haemoglobinopathies, Morbid obesity i.e. body mass index over 40, Immunosuppression due to disease or treatment, including asplenia or splenic dysfunction
- Children aged 6 months and older with any condition (e.g. cognitive dysfunction, spinal cord injury, seizure disorder, or other neuromuscular disorder) that can compromise respiratory function especially those attending special schools/day centres with moderate to severe neurodevelopmental disorders such as cerebral palsy and intellectual disability on long-term aspirin therapy (because of the risk of Reyes syndrome)
- Pregnant women (vaccine can be given at any stage of pregnancy)
- Healthcare workers
- Residents of nursing homes and other long stay institutions
- Carers
- People with regular contact with pigs, poultry or water fowl

This plan will be revised if required as health structures change and/or in the event of further recommendations of the National Influenza Pandemic Committee.

Your co-operation is required and you are requested to read this document carefully and, where appropriate, instigate and implement the actions identified.

It is the responsibility of the line manager to prepare a local influenza folder containing information sheets. Please communicate this to your staff and inform them of their individual responsibility to keep up to date on influenza information.

Tony McNamara
Chief Executive Officer (CEO)
Date: Feb 2016
Source www.hpsc.ie (2012)

2.0 SCOPE

The unpredictability of influenza and the serious consequences that can occur when a pandemic strain appears provides ample justification for constant vigilance and good planning.

This plan outlines the response of CUH in the event of an influenza pandemic being declared.

The World Health Organisation (WHO) suggests that plans should be in place to deal with an influenza pandemic causing illness to 25% of the population. In the worst-case scenario, there will be insufficient time to develop, acquire, distribute and administer the pandemic strain vaccine to the population. This could therefore lead to an attack rate that may approach 100%.

Even if the vaccine against the new strain is available, two doses may be required in order to provide an effective response, which may not be achieved until 6 weeks after the first dose.

The optimal use of beds through reduced delayed discharge of patients, combined with an increased use of day surgery, may not be enough to alleviate the demand for beds in the event of an influenza pandemic.

To enable CUH to respond appropriately and effectively, this plan addresses a range of issues, in a number of chapters, such as

- General preparedness including stages of preparedness
- Role(s) of staff during a pandemic
- Special requirements such as equipment needs
- Activation of the plan when a pandemic is declared
- Operation of CUH during a pandemic

The efficient and effective use of resources that must be employed to address the impact- and to reduce the extent of the disease is essential to the operation of the plan.

Useful web sites for updates of national and international information are:

www.hpsc.ie
www.doh.ie
www.who.int
www.ndsc.ie

3.0 GENERAL PREPAREDNESS

The World Health Organisation has formulated a series of escalating levels of preparedness and alertness for assessment and appropriate response to an influenza pandemic. The National Public Health Crisis Management Team has adopted this system of escalating levels for Ireland.

3.1 Levels of alert

The levels of alert run from Phase 1 (Inter-pandemic phase) to Phase 6 (end of pandemic phase), followed by a post-pandemic phase.

The following is a brief description of the phases:

Inter-pandemic Period

- **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 of human infection or disease is considered to be low.

- **Phase 2:** No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza subtype poses a substantial risk of human disease.

Pandemic Alert Period

- **Phase 3:** Human infection(s) with a new subtype, but no human to human spread, or at most rare instances of spread to a close contact.
  The Health Service Executive (HSE) will ensure that educational material is distributed to other health professionals, public and media. The HSE will ensure that Hospital Networks, Primary and Continuing Community Care (PCCC), and other health professionals /agencies are informed of the possibility of an impending pandemic.

- **Phase 4:** Small cluster(s) with limited human to human transmission but spread is highly localised, suggesting that the virus is not well adapted to humans.
  The Department of Health & Children will warn the HSE of the possibility of a pandemic, reminding them that a plan should be in place. The HSE will liaise with central purchasing on behalf of all, to ensure supplies of antibiotics and other essential drugs.

- **Phase 5:** Larger cluster(s) but human to human transmission still localised, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk)
  The HSE will request hospitals and PCCCs to activate their influenza pandemic plan (including restriction of hospital admissions).

Pandemic Period

- **Phase 6:** Pandemic: increased and sustained transmission in general population.
  Based on experience at least a second wave of severe outbreaks would be expected to occur 3-9 months after the initial outbreak. It would be expected that, following an announcement by the World Health Organisation, within Ireland the National Sentinel Surveillance Scheme would identify that start of a second wave of outbreak(s). The National Public Health Emergency Crisis Team will coordinate surveillance activities, estimate remaining needs for vaccines etc. and determine whether the composition of the priority groups had altered.
  Hospitals to continue with their influenza pandemic plan, considering bed and staffing availability.

Post-pandemic Period

Return to inter-pandemic period.
The National Public Health Crisis Management Team will undertake a full evaluation following the declaration of the end of the pandemic. Recommendations may issue from this evaluation.

Irish Alert Levels in WHO Phase 6

Irish alert levels	Description
Irish Alert Level 1	Cases only outside Ireland (in a country or countries with or without extensive travel/trade links
Irish Alert Level 2	New virus isolated in Ireland
Irish Alert Level 3	Outbreak(s) in Ireland
Irish Alert Level 4	Widespread activity in Ireland

Each phase requires and addresses a different and escalating level of preparedness.

The World Health Organisation informs the Health Service Executive and the Health Protection Surveillance Centre at the onset of each new phase.

Cork University Hospital (CUH) will be advised accordingly and will implement their Influenza Pandemic Plan of the HSE – South.

The level of activation of the CUH Influenza Pandemic Preparedness Plan will vary in accordance with the 'phase' of the National Influenza Pandemic Plan.

Each level of the plan requires a different type of response and accordingly different requirements in terms of staffing, equipment and other resources.

Section 3.2 describes the different levels of CUH's Influenza Preparedness Plan/Public Health Emergency Plan.

3.2 Levels within the CUH Influenza Preparedness Plan

Phase 1 of CUH Influenza pandemic preparedness:

The influenza pandemic preparedness plan addresses the overall preparedness within CUH should an influenza pandemic be declared.

Phase 6 Irish Alert Level 1 of CUH Influenza Pandemic Preparedness Plan:

The Health Service Executive will ensure that educational material is distributed to other health professional, public and media. The Health Service Executive will ensure that health professionals and local authorities are informed of the possibility of an impending pandemic.

When CUH is advised that an influenza pandemic is declared, the Hospital Pandemic Planning Committee will be convened under the chairmanship of the CEO or Operations Manager of HSE – South.

A fuller description of the Hospital Pandemic Planning Committee can be found in **Chapter 4.**

Please note: This team will be convened when 'Phase 6' of the pandemic is declared.

A Public Health Emergency control centre (located in the Hospital Control Centre, CUH or Aras Sláinte) may be set up. The decision to set up a pandemic control centre rests with the Pandemic Control Committee.

The committee will decide on the appropriate response of CUH in accordance with the following Irish Alert Levels for Phase 6 within the Hospital Influenza Pandemic Preparedness Plan and, in cooperation with the Regional/ National Pandemic Control Committee.

When a pandemic has been declared, CUH Influenza Pandemic Preparedness Plan addresses the issuing of information to staff. Educational material, provided by the National and/or Regional Pandemic Control Committee, will be distributed internally via the committee to the clinicians, nursing administration and heads of departments. Education or information briefing sessions may be held and will be organised by the Pandemic Control Committee. Contact will be established with other agencies such as PCCC and Local Authorities.

A fuller description of this level including roles and duties of staff will be in **Chapter 4, Section 4.1.**

Phase 6 Irish Alert Level 2 of CUH Influenza Pandemic Preparedness Plan:

The Department of Health & Children will warn the Health Service Executive of the possibility of a pandemic, reminding them that a plan should be in place. The Health Service Executive will liaise with central purchasing to ensure supplies of antivirals, antibiotics and other essential drugs will be available.

Continue with the information and education of staff as under Irish Alert Level 1 and establish local requirements for vaccine, antivirals and other drugs. Clinicians, nursing and other categories of staff, as appropriate, but especially those staff who work directly with patients, will be kept fully informed. A fuller description of this level including roles and duties of staff will be in **Chapter 4, Section 4.2.**

Phase 6 Irish Alert Level 3 of CUH Influenza Pandemic Preparedness Plan:

The Department of Health & Children will request the Health Service Executive to activate their influenza pandemic plan (including restriction of hospital admissions).

The hospital plan will be activated. Restriction of admission to the hospital may be considered. Depending on the numbers of influenza cases, outpatient clinics may be cancelled, preparation to cancel non-urgent electives proceeds, preparation to discharge patients proceeds, preparation to implement the segregation of ED patients proceeds (i.e. patients with influenza-type illness go to the Outpatients Department –AwbegSuite while other patients will be assessed in the Emergency Departmentand/or isolated in the old Soft Tissue). The segregation of patients with influenza from other patients will require cohorting of influenza patients. A fuller description of this level including roles and duties of staff will be in **Chapter 4, Section 4.3.**

Phase 6 Irish Alert Level 4 of CUH Influenza Pandemic Preparedness Plan:

Hospitals to continue with their influenza pandemic plan (including considering bed and staffing availability.

Depending on the number of cases, a full-scale cancellation and discharge of patients may be necessary, segregation of patients with influenza from other patients through the isolation of wards from each other. A fuller description of this level including roles and duties of staff will be in **Chapter 4, Section 4.4.**

Post Pandemic Period of CUH Influenza Pandemic Preparedness Plan:

Hospitals will undertake a full evaluation of the influenza pandemic plan.

Standing down of the plan and evaluation of the hospital's response to the pandemic. A fuller description of this level including roles and duties of staff will be in **Chapter 4, Section 4.5**

4.0 ROLES AND RESPONSIBILITIES OF STAFF DURING AN INFLUENZA PANDEMIC

When CUH is advised that an influenza pandemic is declared, the Hospital Pandemic Planning Committee (CUH) will be convened under the chairmanship of the CEO orOperations Manager. In the absence of a Consultant Physician in Respiratory Medicine, the Consultant on Acute Unselected Medical take will act as the lead physician.

In addition to the Chairperson CEO or Operations Manager the membership of this team will include:

- Clinical Care Director: Dr. Rob Plant, Consultant Anaesthetist
- Clinical Director: Dr Michael O'Connor, Consultant Geriatrician
- Director of Nursing: Critical Care Senior Nurse Management: Betty Hickey, ADON
- Infection Control Lead: Dr. Bartley Cryan, Consultant Microbiologist
- Infectious Diseases: Professor Mary Horgan and/or Dr Arthur Jackson, Infectious Diseases Consultants
- Emergency Department Lead

Please note: This team will be convened when Phase 6 of the pandemic is declared.

Functions of the Hospital Pandemic Planning Committee

- To ensure that personnel and equipment are mobilised as per each agency plan
- To monitor the response to the emergency
- To advise on, assist in and arrange for the mobilisation of additional resources as required, including relief staff and to arrange, as necessary, back up facilities
- Through the representatives of the departments on the group, to give direction and make policy decisions where necessary
- To establish effective communication
- To facilitate the distribution of information to the news media and general public

A Pandemic Control Centre Major Emergency dedicated phone number 021 4234195, and Major Emergency dedicated fax number 021 4234194 may be setup. The decision to set up a Pandemic Control Centre rests with the Hospital Pandemic Committee.

The committee will decide on the appropriate response of CUH in accordance with the 'levels' within this Influenza Pandemic Preparedness Plan (Chapter 3.0, Section 3.2) and in cooperation with the Regional/ National Public Health Emergency Control Team.

The committee will advise the CEO in relation to e.g. cancellation of elective surgery; creating emergency hospital capacity, if required, by using outside facilities; temporarily rationalising acute specialist services between hospitals in the region; utilising emergency ventilation facilities etc.

4.1 Role and responsibilities of staff during Phase 6 Irish Alert Level 1 of an influenza pandemic

This level of the CUH Influenza Pandemic Preparedness Plan addresses the issuing of information to staff.

Educational material, provided by the National and/or Regional Public Health Emergency Control Committee, will be distributed internally via the Hospital Pandemic Planning committee to the clinicians, nursing administration, Service Managers and Heads of Departments. Education or information briefing sessions may be held and will be organised by the Hospital Pandemic Committee.

The education sessions will take place in the main auditorium.***Responsible persons: CEO or Operations Manager andClinical Director or Infection Control Dept.***

4.2 Role and responsibilities of staff during Phase 6 Irish Alert Level 2 of an influenza pandemic

This level of the CUH Influenza Pandemic Preparedness Plan continues with providing information and education of staff and establishing the local vaccine, antiviral and other drug requirements. Information that will be received will be distributed to staff throughout the hospital. ***Responsible person: CEO.***

Educational material that will be received will be distributed and education sessions will be organised as outlined in **Section 4.1** so that medical, clinical and nursing staff are updated and trained in dealing with the patients who have contracted influenza. ***Responsible persons: CEO or Operations Manager and Director of Nursing (with assistance from Infection Control Dept. and Occupational Health Dept)***

The Hospital Pandemic Planning Committee will make contact with agencies such as PCCC and Local Authorities.

4.3 Role and responsibilities of staff during Phase 6 Irish Alert Level 3 of an influenza pandemic
This level of the CUH Influenza Pandemic Preparedness Plan addresses the issues as in Irish Alert Level 1 and Irish Alert Level 2. ***Responsible persons: CEO and Director of Nursing.***

In addition, admission to the Hospital may be restricted, depending on numbers of cases and in which area, out patient clinics may be cancelled (see Appendix 9), preparation to cancel non urgent electives procedures, preparation to discharge patients from CUH (see appendices 2 and 3), preparation to implement the segregation of ED patients (i.e. patients with influenza type illness to go to the Awbeg Suite in the Outpatients Departments). The segregation of patients with influenza from other patients will require a separate section of the Hospital. ***Responsibility for these actions rests with the Hospital Pandemic Planning Committee.***

Please see **Chapter 5.0** for details regarding the segregation of patients with influenza from other patients

4.4 Role and responsibilities of staff during Phase 6 Irish Alert Level 4 of an influenza pandemic

This level of the CUH Influenza Pandemic Preparedness Plan addresses the issues as in Irish Alert Levels 1, 2 and 3. This level addresses full-scale cancellations and discharge of patients, segregation of patients with influenza from other patients through the isolation of wards from each other or in the worst case scenario full isolation of this hospital ***Responsibility for these actions rests with the Hospital Pandemic Planning Committee in cooperation with the Regional/ National Public Health Emergency Control Team.***

4.5 Role and responsibilities of staff during Post Pandemic Period of an influenza pandemic

This level of the CUH Influenza Pandemic Preparedness Plan addresses, upon standing down of the plan, the evaluation of the Hospital's response to the pandemic. ***Responsibility for these actions rests with the Hospital Pandemic Planning Committee.*** The committee may require detailed reports from various sections or departments within the Hospital to enable a full and complete evaluation taking place.

5.0 ADMISSION AND SEGREGATION OF PATIENTS WITH INFLUENZA

To obtain segregation of in-patients with influenza from those in-patients who do not have influenza, 3D and 1B wards will be used in the early stages of a pandemic being declared. In the event of more beds

being required for influenza admissions, other areas of the hospital will be considered.For patients who require ventilation see Appendix 2b. For further details regarding bed occupancy by influenza patients see 1 and 2.

5.1 Segregation of patients in the Emergency Department in the initial stages of flu pandemic involving CUH

This deals with the **initial** few presentations to the Emergency Department of patients with suspected swine influenza, as per flow chart in Appendix 4.

The segregation of patients with influenza-like symptoms from those patients who do not have influenza-like symptoms is of paramount importance.

Important: In the cases of suspected Influenza all staff working with the patient/s should use and wear the appropriate personal protective equipment (PPE)including disposable facemasks, eye goggles, disposable gloves, disposable aprons/gowns. There should be no cross-over of staff. Change PPE between patient/s and carry out hand hygiene. Hand hygiene must also be carried out between all patient contact. Wash hands after removing gloves or apron and between patients.

***Standard precautions must be used at all times. This includes hand hygiene, and general hygiene precautions, the appropriate use of personal protective equipment such as face masks, eye goggles, disposable gloves, disposable aprons/gowns etc., waste management, and decontamination of spills etc*. In cases where influenza is suspected Droplet and Contact precautions are required.**

5.1.1 Initial Patients who present to the Emergency Department Reception Desk with Suspected H1N1Influenza – see Appendix 5Aand 5B.

Administrative staff -

Contact Triage Nurse and ask the patient to wait by reception while they inform the triage nurse.

Triage nurse –
Give the patient an FFP3 mask to wear
Wear FFP3 mask and PPE as per 5.
Accompanythe patient into the triage room and assess patient – Airway, Breathing, Circulation, oxygen saturations and temperature.
Refer to appropriate algorithm in triage room – version 1.1 as per Appendix 7A.
Inform shift leader.

If patient is stable –
Notify medical registrar on call
Notify Nurse Service Manager Siobhan Scanlon or Assistant Director of Nursing on call for the hospital who will arrange for the old Soft Tissue Clinic area to be prepared.
Accompany the patient to the Soft Tissue Clinic area where they will be further assessed by the medical registrar.

If patient is unstable –
Transfer to the resuscitation room if category 1 and 2
Transfer to the eye roomor the old Soft Tissue Clinic if category 3.

5.1.2 Initial Patients who present to the Emergency Department with Suspected Swine Influenza by Ambulance

Ensure FFP3 mask is on the patient
Transfer to the resuscitation room if category 1 and 2

Transfer to eye room if category 3
If the patient is category 4 or 5 the patient waits in the ambulance until the Soft Tissue Clinic area is prepared. This will be arranged by Nurse Service Manager Siobhan Scanlon or Assistant Director of Nursing on call for the hospital

If the patient has a positive swab and is to be admitted – **admit to Room 6 - 7 in 3D CRC**(negative pressure ventilated room) Further beds are occupied as per appendix 2b and 3.

If the patient has a positive swab and is fit for discharge, the medical registrar must contact public health to ensure the patient receives follow up antiviral treatment if indicated (see Appendix 6a and Appendix 6b)

5.2 Segregation of patients with influenza-like symptomsat the peak of the pandemic – from week 3 when the Awbeg Suite opens as assessment area – as per flow chart Appendix 8A and Appendix 8B

The segregation of patients with influenza-like symptoms from those patients who do not have influenza-like symptoms is of paramount importance.

In order to segregate patients **before** they proceed to the Emergency Department, a '**triage nurse',** located at the Emergency Department entrance, will ascertain whether the patient should proceed as a non-influenza patient to the Emergency Department or as a possible influenza patient to the influenza assessment/admission area in Awbeg Suite. The 'triage nurse' will ascertain this through simple questions as per document Appendix 9.

If the patient is assessed by the 'triage nurse' at ED entrance as a **non-influenza** patient, the patient proceeds to the **Emergency Department** Registration desk for the usual registration, followed by Emergency Department triage and treatment. (All within the Emergency Department)

If the patient is assessed by the 'triage nurse' at ED entrance as a **possiblepatient with influenza**, the patient proceeds to the Awbeg Suite via normal route wearing a maskin the Outpatients Department. If the 'Triage' Nurse is of the opinion that the patient is a Triage Category 1 or 2, then the patient is transferred, wearing an FFP3 face mask if appropriate, directly to the resuscitation room in the Emergency Department. See Appendix 5A.

Important: All staff working with the patients should use and wear appropriate personal protective equipment such as masks, goggles, gloves, aprons etc. There should be no cross-over of staff. Change gloves between patients. Wash hands after removing gloves or apron and between patients
Isolation precautions must be used which include hand washing, and general hygiene precautions, including the use of personal protective equipment such as masks, goggles, gloves, aprons etc., must be adhered to when disposing of waste, cleaning up of spills etc. Wash hands after removing gloves or apron.

The patient will register in the Awbeg suite and be assessed by the medical and nursing staff. (For maps see Appendix 13).

To aid rapid diagnosis at the peak of the pandemic analysis of the swabs taken may be performed in the Awbeg Suite.

DURING CONTAINMENT:

- **Infected-clinically confirmed:** Either by viral detection from a nasopharyngeal aspirate or swab using:

- Polymerase chain reaction (PCR) testing

- Direct antigen testing, including immunofluorescence (IF)
- Culture positiveor detection of a diagnostic rise in antibodies on serology

The patient is assessed and a decision is made on whether admission is required.
If admission is warranted the doctor admits the patient following consultation with bed management, and the patient is then transferred to the designated ward.
If the patient is fit for discharge then direct contact is made with public health to ensure the patient receives follow up antiviral treatment if indicated (Appendix 7A and 7B).

Infected-clinically suspected:
A swab is taken and thepatient is assessed.

POSITIVE SWAB RESULT:
If admission is warranted the doctor admits the patient following consultation with bed management, and the patient is then transferred to the designated ward.
If the patient is fit for discharge then direct contact is made with public health to ensure the patient receives follow up antiviral treatment if indicated (Appendix 7A and 7B).

NEGATIVE SWAB RESULT:
If admission is warranted because of another medical or surgical problem, the patient is admitted.
If the patient is fit for discharge then the patient is discharged.

Exposed-potentially infected:
A swab is taken and thepatient is assessed.
POSITIVE SWAB RESULT:
If admission is warranted the doctor admits the patient following consultation with bed management, and the patient is then transferred to the designated ward.
If the patient is fit for discharge then direct contact is made with public health to ensure the patient receives follow up antiviral treatment if indicated (Appendix 7A and 7B).

NEGATIVE SWAB RESULT:
If admission is warranted because of another medical or surgical problem the patient is admitted.
If the patient is fit for discharge then the patient is discharged.

DURING MITIGATION:

The patient is assessed in the Awbeg Suite as per stage 2 Algorithm(See Appendix 7A) and the appropriatetreatment decision is made.

If the patient becomes unstable in the Awbeg Suite notify Emergency Department and transfer to Emergency Department.

The Emergency Department Flu Assessment Triage form as per Appendix 9 and the Emergency Department Registration chart should be used and completed for each patient triaged and/or admitted with influenza. Documentation and other relevant stationary and equipment should be stored in the designated registration and triage rooms. *Responsible person: Clinical Nurse Manager Out Patients Department*

Specimen collection from this area for transport to the laboratory will be via a specially assigned member of the Portering staff who shall not cross over with any other member of the Portering staff and not take up other duties.

Important: All staff handling specimen should use and wear appropriate personal protective equipment such as masks, gloves, goggles, aprons etc.

6.0 PREPARING CUH FOR AN INFLUENZA PANDEMIC

In order for CUH to respond appropriately to the declaration of an influenza pandemic, a number of issues will need to be addressed and prepared for such as:

- Oxygen supply
- Medical air supply for ventilators
- Availability of negative pressure ventilated rooms within the Hospital
- Staffing requirements
- Equipment needs
- Consumables
- Infection control issues
- Parenteral therapy
- Radiology services
- Pathology (Microbiology) services
- Pharmacy services
- Support services
- Educational needs

The following sections address each of the listed issues.

6.1 Oxygen supply

The following issues are to be considered and appropriate action instigated:

- Oxygen supply to be available at bedsides in the relevant Wards and the medical gas store,

6.2 Suction Equipment

The following issues should be considered and appropriate action instigated:

- The Hospital Supplies Department is to ensure that appropriate suction accessories are in stock or can be obtained at very short notice from supplies.
- The stock of emergency electrical mobile suction equipment is accessible via the Biomedical Engineering department

6.3 Medical air supply for ventilators

The following issues should be considered and appropriate action instigated:

- The number of ventilators that can be simultaneously supported by the current medical air supplies
- Augmenting the air supply so that a greater number of ventilators can be used simultaneously

Training needs of relevant staff should be determined, and if necessary, upskilling should be provided in consultation with the relevant Nurse Service Manager.

6.4Staffing requirements

In the event of an influenza pandemic, the following appropriate action should be instigated: (***Responsible persons: Human Resources Manager and Asst. Director of Nursing***)

- CUH will have to provide staffing for an increased number of medical patients and for an increased ventilatory capacity

- The redeployment of current staff, the use of retired and semi-retired staff, volunteers and auxiliaries may be consideredas per HSE Policy on re-deployment of staff during a Pandemic. This policy is available via your Line Manager.

- **Staffs contact details to be updated, including special skills, so that in the case of an emergency a quick and adequate response is possible.**

- The opening of a separate assessment area in the AwbegSuite in the Outpatient Department to segregate patients with influenza type symptoms from those patients without influenza type symptoms will require 4. Medical teams consisting of doctor and nurse on a 24/7 basis. In additional a 'triage nurse' and 'influenza triage nurse' on a 24/7 basis will be required. The registration desk for patients with influenza type symptoms will require secretarial support on a 24/7 basis.

- Staffing levels on the wards where patients with influenza are admitted (1B and 1A and others in the event of escalation) may be increased to cope with demand.

- Specialised nursing staff with ventilation skills will be required.

- Additional support staff such as portering staff and/or health care assistants may be required.

- **Training for relevant staff, if not already done so, should be instigated with the assistance of the Infection Control Department and Occupational Health Department.**

- Health Care staff in all categories who have direct patient contact should receive on an annual basis influenza vaccination. (As recommended by the National Immunisation Committee of the Royal College of Physicians of Ireland) This vaccination is available to the relevant staff via the Occupational Health Department.

6.5 Educational needs

As referred to in **Section 4.1 and 4.2**, educational requirements and other information needs will be supplied depending on the Irish Alert Level of influenza pandemic that is being declared.

Education and information sessions by staff from the Public Health Department, HSE South / South Eastern Area for all categories of staff will take place in the education centre. ***Responsible persons: Operations Manager and Deputy Director of Nursing, Infection Control Dept. and Occupational Health Dept)***

6.6 Equipment and consumables

The availability of appropriate type and numbers(s) of equipment including consumables should be ensured. ***Responsible person: Area Supplies Manager***.

Equipment and consumables relate to the following:

Oxygen delivery:

- Oxygen tubing
- FaceFFP3 masks
- Nebulizers
- Nasal prongs
- Oxygen humidification and warming
- Oxygen cylinders
- Oxygen flow metre/regulators
- Oximeter
- Arterial blood gas syringes
- Bulk liquid oxygen

Equipment required for Infection Prevention and Control

- **Disposable**Gloves
- **DisposableEye**Goggles
- **Disposable**FFP2/FFP3**face**masks (or N 95)
- **Disposable Long sleeved gowns/ plastic gowns**
- Alcohol based hand rub
- Antiseptic hand wash
- Long sleeved gowns/ Plastic aprons

Parenteral therapy:

- Intravenous cannulae
- Central lines
- Peripherally inserted central catheters
- Intravenous tubing
- Needles and syringes
- Water for injection
- Saline for injection
- 5% dextrose for injection
- Method of securing intravenous cannulae
- Three way taps
- Bungs
- Skin preparation
- Intravenous fluids (normal saline, 5% dextrose, Hartmann's) in 1000 mls, 500 mls, 100 ml

Equipment required for the Emergency Department:

- Ventilators x 6
- Syringe Driver x 6
- Infusion Pumps x 6

In the event of activation of the Major Emergency Plan / Influenza Pandemic the available number of each device listed above may vary. This will be monitored by the Biomedical Engineering Department on a regular basis.

The equipment will be set up in the Red Treatment Areas (10 treatment areas) as indentified in the Major Emergency Plan / Influenza Pandemic Plan (Action Card No.5) as follows:

- Resuscitation Room (4)
- Plaster Room (1)
- Procedure Room (1)
- Cubicle 5 (1)
- Cubicle 6 (1)
- Cubicle 11 (1)
- Cubicle 12 (1)

Once all available equipment has been set up, in the Emergency Department, the Biomedical Engineering Department will inform the CNM3 of the equipment that has been set up.

Provide assistance with the provision of equipment to other areas of the hospital during the emergency as requested.

6.7 Infection Control Information
See Appendix 5B

6.8 Allied health and general support services

Radiology Services:
A review of workflow patterns should be undertaken to minimise contact between infected people and others. Ensure adequate supply of films, solutions and monitoring tags for extra staff. ***Responsible person: Radiology Services Manager***

Pathology Laboratory (Microbiology Department) Services
Ensure the adequate availability of laboratory consumables including viral transport media. Out of hours rostering of staff may be necessary to respond to the demand. ***Responsible person: Laboratory Manager.***

Pharmacy
Consider dispensing antibiotics and antivirals to the wards, fully labelled with all instructions. Review security arrangements for storage within pharmacy and on the wards. ***Responsible person: Chief 1 Pharmacist.***

Other Support services
There are a number of departments/ services that are essential to the running of a hospital. Due to the increase in hospital capacity during a pandemic, there will be a marked increase in demand on services such as,

The Estates Dept. (essential for dealing with breakdowns, maintenance, checking airflow) including utilities such as:

- Sewerage
- Water supply
- Medical gasses (essential for provision of oxygen, medical air, suction, nitrous oxide)
- Natural gas supply
- Electricity
- Air-conditioning/airflow (Preventing spread of influenza)

- Security (antivirals and vaccine will be in short supply, adequate security is essential)
- Vehicles and transport including motor vehicles fuels.
- Central sterilisation
- Infection control
- Information technology
- Central supplies
- Linen services
- Catering services
- Cleaning services
- Mortuary services

It is the responsibility of the line manager to prepare a local influenza folder containing information sheets. Please communicate this to your staff and inform them of their individual responsibility to keep up to date on influenza information. The line managers of the above listed departments are responsible for preparing a local flu plan and ensuring that their departments action card is fulfilled (where applicable). It is the responsibility of the line manager to prepare a local influenza folder containing information sheets. Please communicate this to your staff and inform them of their individual responsibility to keep up to date on influenza information.

ACTION CARD NO. 1

Role of Hospital Pandemic Planning Committee (CUH)

When CUH is advised that an influenza pandemic is declared, the Hospital Pandemic Planning Committee (CUH) will be convened under the chairmanship of the CEO. In the absence of a Consultant Physician in Respiratory Medicine, the Consultant on Acute unselected medical take will act as the lead physician.

A fuller description of the Hospital Pandemic Planning Committee (CUH) can be found in chapter 4.0 of the CUH Influenza Pandemic Preparedness Plan.

Please note: This committee will be convened when Phase 6 of the pandemic is declared.

A Pandemic Control Centre located in the Board Roommay be set up, depending the 'phase' of the pandemic that is declared. The decision to set up a Pandemic Control Centre rests with the Hospital Pandemic Planning Committee.

The committee will decide on the appropriate response of CUH in accordance with the 'levels' within the Influenza Pandemic Preparedness Plan and, in co-operation with the Regional/ National Pandemic Control Committee.

A fuller description of all 'levels' can be found in chapter 3.0 of the CUH Influenza Pandemic Preparedness Plan.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 2

Role of CEO

- The CEOchairs the Hospital Pandemic Planning Committee (CUH) when Phase 6 Irish Alert Level 1 is declared (Cases only outside Ireland (in a country or countries with or without extensive Irish travel/ trade links)
- Implement actions as advised by the Hospital Pandemic Planning Committee (CUH)
- Maintain records and/or files on all actions undertaken
- Maintain a Log book of all significant messages or requests for assistance
- Liaise with General Manager PCCC
- Liaise with media (via Communications Department) and public representatives in designated accommodation (accommodation may change from time to time). Agree with Communications Department designated appropriate media spokespeople.
- Arrange for the setting up of an information / help line
- Depending on level of alert arrange for delegation of staff to relevant areas.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 3

Role of Operations Manager

- In the absence of theCEO, take over the role of chairman of the Hospital Pandemic Planning Committee (CUH) and carry out the duties as listed in Action Cards 1 and 2
- In addition the following duties are carried out by the Operations Manager depending on the level of pandemic that is declared:

  Phase 6 Irish Alert Level 1: The distribution of educational material provided by the National and/or Regional Public Health Emergency Control Committee and the organisation of information sessions in the education centre

  Phase 6 Irish Alert Level 2: The distribution of educational material provided by the Regional/ National Pandemic Control Committee and the organisation of information sessions in the education centre. Establish the local vaccine, antiviral and other drug requirements. Contact agencies such as PCCC and Local Authorities as instructed by the Regional Influenza Pandemic Committee.

  Phase 6 Irish Alert Level 3: As Level 2 above and, if advised by the Hospital Pandemic Committee (CUH), ensure that:
    - Admission to the CUH will be restricted
    - Cancel out patient clinics
    - Prepare to cancel non urgent electives
    - Prepare to discharge patients (from CUH and/or other wards.
    - Prepare to implement the segregation and triage of allED patients (i.e. patients with influenza type illness to go to the Awbeg Suite in the Outpatients Department.

  Phase 6 Irish Alert Level 4: As Level 3 above. If advised by the Hospital Pandemic Planning Committee (CUH):
    - Implement full-scale cancellations and discharge of patients
    - Segregate patients with influenza from other patients through the isolation of wards from each other or in the worst case scenario full isolation of this Hospital (i.e. only patients with influenza being resident in the Hospital)
- Depending on level and requirements, organise clerical assistance where required
- Depending on level and requirements, liaise with Maintenance Department re installing of special signage and/or barriers
- Co-ordinate security arrangements to direct relatives / media to relevant areas and to stop visitors from entering the Hospital
- Co-ordinate separate locations of media and relatives and liaise with staff for provisions for these groups.
- INFORMATION ROOM: Located in the room directly opposite the Boardroom in the Cardiac Renal Centre, it will be used to collect all information relevant to the major emergency.
- MEDIA ROOM: Located in the Main Auditorium as a Press Information Centre.
- A Pandemic Control Centre Major Emergency dedicated phone number 021 4234195, and Major Emergency dedicated fax number 021 4234194 may be setup. The decision to set up a Pandemic Control Centre rests with the Hospital Pandemic Committee.

ACTION CARD NO. 4

Role of the Director of Nursing or Administration Nurse Manager

- Notify EDstaff that the CUH Influenza Pandemic Preparedness Plan is to be implemented in accordance with relevant level

- Notify each Assistant Director of Nursing and Clinical Nurse Manager II and III that the CUH Influenza Pandemic Preparedness Plan is to be implemented in accordance with relevant level

- Depending the Irish Alert Level of the CUH influenza Pandemic Preparedness Plan and following the advice from the Hospital Pandemic Planning Committee (CUH) ensure that the following actions are implemented:
    - A triage nurse is in place in theAwbeg Suite in the Outpatients Department.
    - Call in nursing/support staff if required to 1B Ward.
    - Ensure 'influenza' triage and registration facilities are in place
    - Ensure facilities including nursing staff are available in 1A ward also.
    - Co-ordinate bed availability with Bed Manager
    - Co-ordinate support staff to support wards, emergency area in bringing in extra trolleys, IV stands, patient's transfers and visitors etc.

- Liaise with CEO and other members of the Hospital Pandemic Committee (CUH)

- If the Director of Nursing is off-duty and the site manager is responsible for the implementation of these actions, contact and advise the Director of Nursing.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 5

Role of Assistant Director of Nursing

- Depending the level of pandemic that is declared the following duties should be undertaken :
  - **Phase 6 Irish Alert Level 1:** The distribution of educational material provided by the National and/or Regional Pandemic Committees and the organisation of information sessions in the education centre.
  - **Phase 6 Irish Alert Level 2:** The distribution of educational material provided by the National and/or Regional Pandemic Committee and the organisation of information sessions in the education centre. Establish the local vaccine, antiviral and other drug requirements. Contact agencies such as PCCC and Local Authorities as instructed by the Regional Pandemic Committee.
  - **Phase 6 Irish Alert Level 3:** As Level 2 above and, if advised by the Hospital Pandemic Committee (CUH), ensure that:
    - Admission to the Hospital will be restricted,
    - Cancel out patient clinics,
    - Prepare to cancel non urgent electives,
    - Prepare to discharge patients as per Appendix 2A in liaison with the Bed Manager.
  - Prepare to implement the segregation of Emergency Department patients (i.e. patients with influenza type illness to go to theAwbeg Suite in the Outpatients Department.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 6

Role of Telephonist on Duty

- When advised by the CEO/ Deputy CEO contact the following and advise them that the CUH Influenza Pandemic Preparedness Plan is in operation:

  - CEO, Chairman of the Executive Management Board.
  - Clinical Director
  - Consultant in Infectious Diseases
  - Consultant Lead inEmergency Medicine
  - Consultant Physician in Respiratory Medicine or during absence the Consultant on Acute unselected medical take.
  - Consultant Anaesthetist
  - Consultant Chairman Division of Internal Medicine
  - Director of Nursing and Administration Nurse Manager
  - Occupational Health Representative
  - Bed Manager
  - Public Health Staff such as Specialist in Public Health Medicine (or Senior Medical Officer)
  - Environmental Health Officer
  - Operations – Operations Manager, Services Manager, Human Resources Manager, Portering Services Manager, Housekeeping Services Manager, Head of Catering, Mortician, Chair of SSB, Area Supplies Manager, Pharmacist, Laboratory Manager, Radiology Services Manager, Chief Engineer, Head of Security, Chaplain, EAP Director
  - Manager of Local Health office (PCCC)
  - Contact regional ambulance centre
  - Contact local ambulance centre
  - Consultant Pediatrician on call
  - Consultant Radiographer on call
  - Business Manager for Laboratory

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 7

Role of Bed Manager

- As member of the Hospital Pandemic Planning Committee (CUH), implement the recommendations or instructions of the committee.
- Implement process of bed occupancy for CUH as per Appendices 2A, 2B and 3.
- Co-ordinate bed availability at ward levels and recommended clear out.
- Liaise with other hospitals in the region to have necessary transfers arranged
- Maintain liaison with infection control.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza PandemicPreparedness Plan.

ACTION CARD NO. 8

Role of Consultant Physician in Respiratory Medicine/ Consultant in Infectious Diseases or Acute Unselected Medical Take

- As member of the Hospital Pandemic Planning Committee (CUH), advise the CEOand other members of the team on the actions to be undertaken
- Arrange for additional medical cover as required
- Liaise with other hospitals in HSE South/South West Hospital Group regarding transfer of patients.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 9

Role of the Infection Control Team

- As member of the Hospital Pandemic Planning Committee (CUH), advise the CEOand other members on actions to be undertaken
- Participate during Phase 6 Irish Alert Levels 1, 2 and 3 of the CUH Influenza Pandemic Preparedness Plan in the distribution of information received from either the National/ Regional Pandemic Committee(s) and participate in information sessions to be arranged in the Education Centre
- Liaise with the Bed Manager regarding patients admitted and discharged
- Liaise with staff working in all the designated patient care areas such as CUH/CUMH
- Maintain data on numbers of patients affected including new patients
- Educate staff in relation to infection control precautions to be taken.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 10

Role of the Occupational Health Team

- As member of the Public Health Crisis Team (CUH) advise the CEO and other members on actions to be undertaken
- Participate during Phase 6 Irish Alert Levels 1, 2 and 3 of the CUH Influenza Pandemic Preparedness Plan in the distribution of information received from either the National/ Regional Pandemic Committee(s) and participate in information sessions to be arranged in the Education Centre
- Influenza Pandemic Preparedness plan in the distribution of information received from either the National or Regional Public Health Crisis Team(s) and participate in information sessions to be arranged in the Education Centre
- Liaise with staff working in the all designated patient care areas such as Emergency Department, Intensive Care, Physiotherapy, Influenza Designated Treatment Areas and the Ambulance Service.
- Maintains data on numbers of staff affected including newly affected staff
- Educate staff in relation to precautions to be taken.
- Management and co-ordination of the health care staff H5N1 vaccination programme.
- Maintain vaccination records.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 11

Role of Senior Respiratory Technician

- Implement the recommendations of the Consultant Physician in Respiratory Medicine or the Lead Consultant Physician in Infectious Diseases and on Acute Unselected Medical Take

- Liaise with the Bed Manager.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 12

Role of the Ward Manager or Deputy in CUH

- Depending upon the level of activation of the CUH Influenza Pandemic Preparedness Plan that is activated and/or upon the advice of the Hospital Pandemic Planning Committee (CUH) ensure that the following is in place or adhered to:
  - Isolation rooms are free (liaise with Bed Manager)
  - Ensure complete segregation of staff and patients from the patients who have influenza. This is especially important when only one or a few cases are in-patient in 1B ward.
  - Ensure that all staff use Personal Protective Equipment such as gloves, aprons, FFP3 masks etc.
  - Request additional staffing if required

- Liaise with the Household/Portering Department when required in order to re-locate patients

- The role of the Ward Manager or deputy will cascade to other wards as needed.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 13

Role of Shift Leader or Deputy in Emergency Department

- Liaise with Director of Nursing or Site Manager and ensure that
  (a) A triage nurse is located at entrance to ED dept.
  (b) A nurse is located in the Awbeg Suite in the Outpatients Department.

- Ensure all staff are wearing PPE as per Appendix 6.

- Liaise with Director of Nursing or Site Manager and ensure that appropriate number of staff is in place in CUH. This depends on the Irish Alert Level of the CUH Influenza Pandemic Plan that is activated

- Maintain liaison with Incident Control Room, depending on Irish Alert Level of the CUH Influenza Pandemic Preparedness Plan that is activated.

- Delegate nurse to prepare ventilator resuscitation equipment that may be needed to provide efficient quality patient care. Predict what may be needed so as to provide efficient quality care.

Please Note:
Action Cards should be used in conjunction with the CUH Hospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 14

Role of the Human Resources Manager

- In the event of an influenza pandemic, the following appropriate action should be instigated:
  - The redeployment of current staff, the use of retired and semi-retired staff, volunteers and auxiliaries may be consideredas per HSE policy.
  - **Staff contact details to be updated, including special skills, so that in the case of an emergency a quick and adequate response is possible**
  - A 'triage nurse' at the Emergency Department entrance on a 24/7 basis will be required. A team consisting of a nurse and doctor for assessing patients in the Awbeg Suite will also be required on a 24/7 basis.The registration desk in the Outpatients Department Awbeg Suite for patients with influenza type symptoms will require secretarial support on a 24/7 basis
  - Additional support staff such as portering staff and/or health care assistants may be required.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 15

Role of the Area Supplies Manager

- The availability of appropriate type and numbers(s) of equipment including consumables should be ensured

- Equipment and consumables relate to the following (for a fuller list see page 17 of the CUH Influenza Pandemic Preparedness Plan):

    - Oxygen delivery
    - Infection control consumables
    - Parenteral therapy equipment and/or consumables

Please Note:
Action Cards should be used in conjunction with the CUH Hospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 16

Role of the Radiologist/Radiographer

- The radiology services manager, as member of the Hospital Pandemic Committee (CUH) will advise the team on actions to be undertaken
- A review of work patterns should be undertaken to minimize contact between infected people and others. Ensure adequate supply of films, solutions and monitoring tags for extra staff
- Designate x-ray room(s) for influenza patients
- Re-organise duty rota if required, depending on 'Level' of alert.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 17

Role of Laboratory Manager

- Ensure the adequate availability of laboratory consumables including viral transport media
- Out of hours rostering of staff may be necessary to respond to the demand, depending on the 'Level' of alert
- Notify the Consultant Microbiologist
- Contact National Virus Reference Laboratory and ensure suitable testing facilities are available
- For prolonged events, review frequently to determine the need for on-site testing, seeking resources for same if needed

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 18

Role of the Pharmacist

- Ensure availability of antibiotics and antivirals for primary and secondary infections
- Assess appropriateness of prescriptions: antimicrobial stewardship role
- Out of hours rostering of staff may be necessary to respond to the demand, depending the 'Level' of alert.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 19

Role of Housekeeping Services Manager

There may be an increased demand for services that are essential to the running of the Hospital during an influenza pandemic. Depending on the Irish Alert Level of the CUH Influenza Pandemic Preparedness Plan that is activated, carry out the duties of your department as is usual, until advice is received from the Hospital Pandemic Planning Committee (CUH)

- Liaise with CEO, Operations Manager and Director of Nursing
- If necessary, contact off duty staff to report for duty
- In liaison with the Head Porter designate an additional member, or more if required, of the portering and/or household staff to work within the Accident & Emergency Department 1B, and other locations as required
- Organize staff to help in the preparation of rooms in CUH.
- Liaise with Linen Services. Manage linen service personnel.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 20

Role of the Head of Security

There may be an increased demand for security services during an influenza pandemic. Depending on the Irish Alert Level of the CUH Influenza Pandemic Preparedness Plan that is activated, carry out the duties of your Department as is usual, until advice is received from the Hospital Pandemic Planning Committee (CUH)

- Liaise with CEO, Operations Manager and Director of Nursing
- If necessary, contact the company who has the contract to supply security staff for additional staff
- Designate an additional member, or more if required, of the security staff to work within the Accident & Emergency Department and other locations.
- Advise security staff on duty that the CUH Influenza Pandemic Preparedness Plan has been activated
- When advised, ensure that one member of security staff remains at the main entrance, Emergency Department entrance,Awbeg Suite entrance,stores entrance, Radiotherapy and Lab entrances to ensure no person enters the Hospital unless by special permission granted by the CEO or Operations Manager
- Where appropriate, direct members of media to the allocated room for media briefings in the School of Nursing. The location for media briefings may change and you will be advised accordingly
- Together with Maintenance Department staff erect signage as appropriate
- Security staff may also be required to ensure safe storage and/or transport of antivirals and vaccine.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 21

Role of the EstatesManager

There will be an increased demand for the Estates Department, depending the Irish Alert Level of the CUH Influenza Pandemic Preparedness Plan that is activated.

- As a member of the Hospital Pandemic Planning Committee (CUH), advise the CEOand other members of the team on technical action(s) to be undertaken

- Implement any recommendations or actions issuing from the Hospital Pandemic Planning Committee (CUH)

- The following are essential to be maintained thoroughly:
    - Sewerage
    - Water supply
    - Medical gasses (essential for provision of oxygen, medical air, suction, nitrous oxide)
    - Natural gas supply
    - Electricity
    - Air-conditioning/airflow (Preventing spread of influenza)
    - Vehicles and transport including motor vehicles fuels.
    - Negative Pressure Ventilated Room in 3D rooms 6 - 7.

- Other departments may require assistance such as:
    - Central sterilisation.
    - Infection control
    - Information technology
    - Central supplies
    - Linen services
    - Catering services
    - Cleaning services

- Depending the Irish Alert Level of activation, signs will need to be erected such as direction signs, prohibited access signs etc. The Maintenance Department is to liaise with the Head of Security

- Screening-off corridors may also be required.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 22

Role of Consultant Anaesthetist

- As member of the Hospital Pandemic Committee (CUH), advise the CEO and other members on the team on actions to be undertaken
- Assess ventilator capacity.
- If required, contact the other hospitals in the region for additional equipment.
- Implement CUH Surge Capacity document as per Appendix 2B.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 23

Role of Theatre Superintendent or Deputy

- When advised by the Hospital Pandemic Planning Committee (CUH), cancel non-urgent elective procedures liaising with the Bed Manager and relevant Consultant Surgeon

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 24

Role of the Triage Nurse at the Emergency Department Entrance

When the Hospital Pandemic Planning Committee (CUH) so decides, a 'Triage' Nurse will be positioned at the Emergency Department entrance whose duties include:

- Determine via flu assessment triage form, (see Appendix9), whether a patient has influenza symptoms.

If the 'Triage' nurse is of the opinion that influenza symptoms may be present, or that the patient has travelled from an area where influenza is present, or that the patient is likely to have been in contact with other people who may have influenza, the 'Triage' nurse gives the patient an FFP3 mask and refers them to the separate influenza assessment and/or admission area in the Awbeg Suite in the Outpatients Department. This suite is accessed via its own external entrance - the fire door beside phlebotomy. This route will be signposted and taped for pedestrians. Once the main OPD clinics finish patients may be guided to the Awbeg Suite via the internal corridor.

- If the 'Triage' Nurse is of the opinion that no influenza symptoms are present, or the answer to various questions are all negative, then the patient may be directed to the Emergency Department registration desk.

- If the 'Triage' Nurse is of the opinion that the patient is a Triage Category 1 or 2, then the patient is transferred, wearing an FFP3 face mask if appropriate, directly to the resuscitation room.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 25

Role of the Portering Services Manager

There may be an increased demand for services that are essential to the running of the Hospital during an influenza pandemic. Depending on the Irish Alert Level of the CUH Influenza Pandemic Preparedness Plan that is activated, carry out the duties of your department as is usual, until advice is received from the Hospital Pandemic Planning Committee (CUH)

- Liaise with CEO, Operations Manager and Director of Nursing
- If necessary, contact off duty staff to report for duty
- In liaison with the Housekeeping Services Manager, designate an additional member, or more if required, of the portering and/or household staff to work within the Emergency Department,1B, and other locations as required
- Specimen collection from these areas for transport to the laboratory will be via the specially designated member of the portering staff who shall not cross over with any other member of the portering staff and not take up any other duties
- Advise portering and household staff on duty that the CUH Influenza Pandemic Preparedness Plan has been activated. Such portering staff to follow instructions and carry out tasks as issued by the CNMII or deputy on duty
- Organize staff to help in the preparation of rooms in CUH.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 26

Role of the Medical and Nursing staff at the Awbeg Suite

When the Hospital Pandemic Committee (CUH) so decides, the Awbeg Suite in the Outpatient's Department will be designated the assessment area for patients potentially infected with swine influenza. The patient will register in the Awbeg suite and be assessed by the medical and nursing staff.

The Emergency Flu Assessment triage form and Emergency Department registration chart should be used and completed for each patient triaged and/or admitted with influenza.

DURING CONTAINMENT:
Infected-clinically confirmed:
The patient is assessed and a decision is made on whether admission is required.
If admission is warranted the doctor admits the patient following consultation with bed management, and the patient is then transferred to the designated ward.
If the patient is fit for discharge then direct contact is made with public health to ensure the patient receives follow up antiviral treatment if indicated (Appendix 7A and 7B).

Infected-clinically suspected:
A swab is taken and thepatient is assessed.
POSITIVE SWAB RESULT:
If admission is warranted the doctor admits the patient following consultation with bed management, and the patient is then transferred to the designated ward.
If the patient is fit for discharge then direct contact is made with public health to ensure the patient receives follow up antiviral treatment if indicated (Appendix 7A and 7B).

NEGATIVE SWAB RESULT:
If admission is warranted because of another medical or surgical problem, the patient is admitted.
If the patient is fit for discharge then he is discharged.

Exposed-potentially infected:
A swab is taken and thepatient is assessed.
POSITIVE SWAB RESULT:
If admission is warranted the doctor admits the patient, and the patient is then transferred to the designated ward.
If the patient is fit for discharge then direct contact is made with public health to ensure the patient receives follow up antiviral treatment if indicated (Appendix 7A and 7B).

NEGATIVE SWAB RESULT:
If admission is warranted because of another medical or surgical problem, the patient is admitted.
If the patient is fit for discharge then he is discharged.

DURING MITIGATION:
The patient is assessed in the Awbeg Suite as per stage 2 Algorithm and the appropriate treatment decision is made.

Specimen collection from these areas for transport to the laboratory will be via a specially designated member of the portering staff who shall not cross over with any other member of the portering staff and not take up any other duties.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

ACTION CARD NO. 27

Role of General Manager, Local Health Office (PCCC)

When CUH is advised that an influenza pandemic is declared, the Hospital Pandemic Planning Committee will be convened under the chairmanship of the CEO or Operations Manager.

- The General Manager, Local Health Office (PCCC) is a member of the Hospital Pandemic Committee (CUH) and will advise the CEO and other members of the team of the actions that need to be undertaken

- Likewise, the General Manager, Local Health Office (PCCC) will undertake any actions recommended by the Hospital Pandemic Committee (CUH)

- When required, notify general practitioners, requesting them to attend the hospital.

Please Note:
Action Cards should be used in conjunction with the CUHHospital Influenza Pandemic Preparedness Plan.

APPENDIX 1 Recommended Information Sheets for Influenza folder

APPENDIX 2ABed occupancy by patients in the Cork University Hospital (CUH) during an Influenza Pandemic.

APPENDIX 2B CUH ICU Surge Capacity - Ventilation Plan

APPENDIX 3Essential ServicesCUH - PATIENT ACCOMMODATION PLAN /Flu Wards July 2012

APPENDIX 4Flowchart for the Segregation of patients in the Emergency Department in the initial stages of the flu pandemic

APPENDIX 5AEmergency Department guidelines

APPENDIX 5BCUMH guidelines Infection Prevention and Control Bulletin, April 2012

APPENDIX 6 Personal Protective Equipment (PPE)

APPENDIX 7AStage 2: Algorithm for the Management of Persons with Acute Febrile Respiratory Illness who may have influenza A(H1N1)v

APPENDIX 7B Management of Influenza A (H1N1)v during the treatment phase

APPENDIX 8A Flow chart for the arrival of patients to the Emergency Department Entrance during the flu pandemic during a policy of containment

APPENDIX 8B Flow chart for the arrival of patients to the Emergency Department Entrance during the flu pandemic following change in policy to mitigation

APPENDIX 9Flu Assessment Triage Form

APPENDIX 10 OPD Schedule during the influenza pandemic

APPENDIX 11NHO Business Continuity Plan

APPENDIX 12Patient care checklist for CUH Influenza A (H1N1)

APPENDIX 13 Maps of OPD area

APPENDIX 14Chapter 10 Supplement 10 Pandemic Influenza Expert Group

APPENDIX 15Paediatric Unit Planfor Influenza A (H1N1)

APPENDIX 16 Template to report to Hospital Control Centre CUHMEP@hse.ie

Appendix 1 Recommended Information Sheets for Influenza folder

See HPSC website,http://www.hpsc.ie/
See WHO website, http://www.who.int/

Advice for Infection Control:
Infection prevention and control for patients with suspected or confirmed influenza virus in healthcare settings 04/12/2011 v 1.2. Publication date: December 2011.http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/File,3628,en.pdf

Infection Prevention and Control Guidance for the Ambulance Service for suspected or confirmed cases of Influenza. Publication date: 6 December 2011.http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/File,3601,en.pdf

Respiratory Hygiene and Cough Etiquette Poster. Publication date: 15 December 2010.http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/File,3599,en.pdf

Standard Precautions. Publication date: 28 April 2009.http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/File,3600,en.pdf

Aerosol Generating Procedures. Publication Date: 11 February 2010.http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/File,3625,en.pdf

Donning and Removing Personal Protective Equipment (PPE). Publication Date 4 December 2011.
http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/File,3627,en.pdf

APPENDIX 2A : Bed occupancy by patients in the CorkUniversityHospital (CUH) during an Influenza Pandemic.

The following document is the bed occupancy by patients in the CorkUniversityHospital during an Influenza Pandemic. The figures are based on the current population for Cork city and county. The population for Cork city (119,230) and county (399,802) is 519,032 people (based on 2011 population census).

Based on current emergency activity, the percentage of admissions to Cork University Hospital from the above mentioned group is 78%.

The current Cork University Hospital WTE = 3265 (December 2011).

Using the capacity of care settings and care supports during an influenza pandemic the clinical attack rate was quantified on a week by week basis.

From week 4 to week 12 priority services 3 and 4 will be cancelled.
Staff will be redeployed as per the HSE policy on re-deployment during an Influenza Pandemic. During this period training and education will cease.

Ventilated patients will be dealt with as per the CUH ICU Surge Capacity document in appendix 2b.
Those patients requiring non-invasive ventilation will be cohorted and dealt with as a high-risk group.

Week 1

3 patients positive for H1N1 flu.

2 patients to the negative pressure rooms in 3D rooms 6 - 7
1 patient to a single room in3D rooms 6 - 7

Priority Services to be maintained 1-4

Week 2

6 patients positive for H1N1 flu

2 patients admitted to single rooms in 3D rooms 6 - 7
4 patients admitted to single rooms in 1B

At the end of week 2 commence transfer of patients out of 1B in preparation for receiving swine flu patients on week 3.

Priority Services to be maintained 1-4

Week 3

24 patients positive for H1N1 flu.

These will be admitted to 1B.

Expected number of ventilated patients – 3

Flu triage desk at the Emergency Department. This will be staffed on a 24 hours basis.

Awbeg suite will be opened for assessment of all patients

At the end of week 3 commence transfer of patients out of 2A and 2B.
Cancel electives for week 4 in preparation for receiving swine flu patients on week 4.

Cancel all electives for Day Procedure Unit (DPU) for week 4 in preparation for receiving ventilated swine flu patients on week 4.

Priority Services to be maintained 1 - 4

Week 4

93 patients positive for swine flu.

These patients will be admitted to 1B, 2A and 2B.

Expected number of ventilated patients – 10
Human resources expect to re-deploy approximately 80 staff from priority 3 services.
Priority 3 services will cease from week 4 to week 11.

Priority Services to be maintained 1-2

Week 5

320 patients positive for swine flu

At this stage the whole hospital is in full use to manage patients with swine flu.

Expected number of Ventilated patients in Week 5 is 35.

Keep GA ward as swine flu free ward. This will be used for acute surgical emergencies.

Priority Services to be maintained 1 - 2

Week 6

651 patients positive for swine flu.

The whole hospital continues in full use to manage patients with swine flu.

Expected number of Ventilated patients in week 6 is 71.

Continue to keep GA ward as a swine flu free ward.

Priority service no 1 will be maintained

Priority no 2 services will be cancelled.

Week number 6 is the peak week of the flu pandemic.

Week 7

639 patients positive for swine flu.

Expected number of ventilated patients in week 7 is 70

Attempt to recommence priority service no 2.

Week 8

431 patients positive for swine flu.

Expected number of ventilated patients in 8 is 47

Priority services 1 and 2 will be maintained.

Week 9

292 patients positive for Swine Flu.

Expected number of ventilated patient in week 9 is 32

Priority services 1 and 2 will be maintained.

Week 10

226 patients positive for swine flu

Expected number of ventilated patients in week 10 is 24

Priority services 1 and 2 will be maintained

Week 11

156 patients positive for swine flu

Expected number of ventilated patients in week 11 is 17

Priority services 1 and 2 will be maintained

Week 12

78 patient positive for swine flu

Expected Number of ventilated patients in week 12 is 8
Priority services 1 – 4 will be maintained

Week 13

48 patients positive for swine flu

Expected Number of Ventilated patients in week 13 is 5

Priority services 1-4 will be maintained

Week 14

27 patients positive for swine flu.

Expected number of ventilated patients in week 14 is 3

Priority services 1 – 4 will be maintained

Week 15

20 patients positive for swine flu

Expected number of ventilated patients in week 15 is 2

Priority services 1 – 4 will be maintained.

APPENDIX 2B CUH ICU Surge Capacity - Ventilation Plan

CUH ICU H1N1 Surge Capacity (October 2011)

Introduction
Given the experience of 2009/2010 and the increased H1N1critical care demand between these two years it remains imperative to have a surge plan allowing stepwise expansion of capacity. This must reflect an aim to provide in the initial stages the highest level of intensive care as presently delivered, with isolation of suspected patients, then later cohorting of infected patients and if necessary use of non-ICU settings, staff and staffing ratios, through to the hopefully avoidable scenario of rationing of care and attempting to do the best we can, despite exhaustion of preceding measures.

This document outlines the best stepwise expansion options and the modifications to current care inherent therein, along with the necessary decisions and resources at each surge level.
This document also makes the assumption that all proposed critical care capacity will become operational. This would mean completion of all equipment procurement and works for GICU expansion and the recruitment of the full proposed 28 additional critical care nurses. These additional resources would allow for the equivalent of 4 extra ICU beds above current baseline, i.e. 13 beds staffed to ICU level (out of 16 equipped bedspaces) in GICU.

The advent of the CRC CTICU and the expansion of GICU into the original cardiac ICU allows for a potential 26 equipped (but not all staffed) ICU bedspaces.
Initial isolation capacity will exist for 3 patients in GICU, then a total of 6 cohorted patients within larger GICU (original CTICU). Should further isolation beds be required (i.e. >6) then individual isolation cubicles within GICU could be re-used (up to 9 total) and subsequently CTICU isolation cubicles could be utilised (giving 13 in total)

The capacity-limiting step this time around will not likely be bedspaces within an ICU (i.e. we are unlikely to need to care for patients outside an ICU environment), but will be availability of staff, as previously. Should the requirement for ICU capacity exceed the combined staff availability of GICU and CTICU, the option to bring staff into either unit from outside will be available. This would permit a more supervised supported environment for nursing staff unaccustomed to ICU compared to the recommendations of mpared with treating patients in a non-ICU environment.

This document has been revised to take account of the new geography of the critical care landscape in CUH, and to align as closely as possible with recommendations of the National Critical Care Services Major Surge Planning document of July 2011.

Pre-Surge
Current critical care capacity staffed and open
CTICU 6 beds generally available
GICU anticipated capacity, recruitment permitting 9 ICU beds
TOTAL VENTILATED BEDS : 15

Surge 1
Opening of all staffed GICU beds would increase capacity by approx 4 from baseline levels but is dependent on recruitment of full complement of staff for expanded beds. (Recruitment to date would allow for almost 2 extra GICU beds)
Full complement of CTICU beds available: 6 (out of 10 spaces)

Absolute prioritisation of GICU/CTICU ward discharges will be required to ensure maximal and immediately available ICU capacity
Daily calculation of total (GICU/CTICU) ICU bed capacity and distribution across units in order to maintain capacity to admit at least 1 (emergency) GICU and 1 H1N1 patient.
4 GICU isolation cubicles would be available and current level of ICU care available to all
Needed: Additional 28 ICU nursing staff for expansion of GICU
Reduction/Cancellation of all planned GICU admissions
Reduction/Cancellation in CTICU planned admissions to allow use of CTICU, when GICU capacity exceeded
Priority of access to ward beds for ICU discharges
TOTAL VENTILATED BEDS POSSIBLE: 9 + 6 = 15
(Including up to 3-4 isolated H1N1 patients)

Surge 2
Acceptance that isolation no longer an option and cohorting the next best option, for up to 6 H1N1 patients. Trigger occurs when a 4th isolation bed is required.

2A
Management of all ICU patients within an ICU by ICU staff
Movement of all H1N1 patients to old 6-bedded CICU part of GICU (henceforth "H1N1 ICU") and movement of all non-H1N1 to 10 bedded section of GICU. Cancellation of all non-emergency surgery requiring GICU bed. Absolute prioritisation of GICU/CTICU ward discharges to ensure maximal and immediately available ICU capacity.

Daily calculation of total (GICU/CTICU) ICU bed capacity and distribution across units in order to maintain capacity to admit at least 1 (emergency) GICU and 1 H1N1 patient.
Agreement with other city ICUs to take transfers from BGH,MUH,TGH that do not require CUH admission (Although 10+6 physical spaces available to general and H1N1 patients, total that can be accommodated without use of cardiac ICU resources dependent upon staffing levels.)

Current level of ICU care for all patients continue to be maintained.
Needed: Same additional ICU nursing staff as above.
Cancellation of planned GICU activity.
Redistribution of anaesthesia/critical care resources to create two ICU teams (with implied impact on theatre activity).
Additional critical care consultant weekend cover.
TOTAL VENTILATED BEDS POSSIBLE: 9 + 6 = 15.
(Up to 6 cohorted H1N1 patients).

2B
Management of ICU patients within ICU but supplemented by non-ICU staff
In the event that total number of patients (GICU + H1N1 ICU + CTICU) exceeds the number of ICU nurses then nursing staff from theatre/theatre recovery can be transferred into an ICU, with inherent impact upon planned theatre activity.
Reduced ratio of fulltime ICU staff for ICU patients, but all patients managed within an ICU.
Needed: Prior upskilling of non-ICU nursing staff (as per HSE/ONSD Guidelines).
Mobilisation of staff from theatre with implied reduced capacity.
Redistribution of anaesthesia/critical care resources to create three ICU teams (with implied impact on theatre activity).

Additional critical care consultant weekend cover
TOTAL VENTILATED BEDS POSSIBLE: 10 + 6 +10 = 26

Surge 3
Acceptance that neither isolation nor in-ICU care an option
Theatre Recovery becomes additional ICU
Needed: Use of 5 spare ventilators
Use of 5 anaesthetic machines as ventilators
Mixture of ICU and non-ICU staff
Decrease Nurse-Patient ratios
4 ICU medical teams
TOTAL VENTILATED SPACES POSSIBLE: 26 + 10 = 36

Surge 4
Further expansion having exhausted all ICU and theatre recovery capacity
Use of theatres and theatre induction rooms
Potential further 10 ventilated spaces
(5 theatres and their respective induction rooms)
Needed: All theatres except 4
All anaesthetic machines except 4
Non-ICU staff managing patients
5x ICU medical teams
TOTAL VENTILATED BEDS POSSIBLE: 36 + 10 = 46

Referral/Admission Guidelines:
1. From Surge 2 onwards ALL ICU referrals would have to be following primary consultant review on ward, and on a consultant-to-consultant basis with intensive care consultant.

2. Pre-referral documentation of referral criteria, severity of illness score, background chronic organ failure and potential exclusion criteria should take place (see below)

3. When demand exceeds resources inclusion/exclusion criteria will be required to determine access to critical care

4. Such criteria may need modification as pandemic progresses

5. Once expanded capacity unable to support increased referral rates, overriding principle should be of level 3 care only for those with good chance of survival and reasonable life expectancy

Once regular ICU capacity is exceeded there will likely be a protracted time when the potential requirement for ICU care may be high relative to ability to meet that need. In order to facilitate triage and review of any patients for whom ICU care may be indicated during such time, a standardised proforma of the necessary clinical details should be available at the time of ICU consult. This will ensure that the most relevant information is available at the time of discussion between referring consultant and the ICU consultant.
The details outlined below are based upon published proposals for triage during pandemic overload of ICU capacity.

See Influenza management in the Critical Care Areas 2011/ 2012,http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/IntensiveCare/File,13098,en.pdf

ICU Referral Details
The details below should be documented *before* ICU referral, and available at the time of review. Even in the event that a patient is rapidly deteriorating and emergency assistance is sought from the ICU team, a member of the referring team should gather the relevant details whilst others attend to the urgent care of the patient.

Table 2: Assess:

Sequential Organ Failure Assessment (SOFA) scoring system Organ System	**0**	**1**	**2**	**3**	**4**	**SCORE:**
Respiratory PaO2 (kPa)/ FiO2	>53	≤ 53	≤40	≤27	≤13	
Renal Creatinine (µmol/l)	<106	106 – 168	169 – 300	301 – 433 urine output <500ml/day	>433 Urine output <200ml/day	
Hepatic Bilirubin (µmol/l)	<20	20 – 32	33 – 100	101 – 203	>203	
Cardiovascular Hypotension Doses in mcg/kg/min	No hypotension	Mean arterial BP <70mmHg	Dopamine ≤5	Dopamine >5 or Epinephrine ≤0.1 or Noradrenaline ≤0.1	Dopamine >15 or Epinephrine >0.1 or Noradrenaline >0.1	
Haematology Platelets (1000/mm^3)	>150	≤150	≤100	≤50	≤20	
Neurological GCS	15	13 – 14	10 -12	6 -9	<6	
TOTAL:						

Referral Criteria	**Y /N**
SaO2 < 90 on Fi O2 >0.85	
Resp Acidosis PH <7.2	
Impending respiratory failure	
Inability to protect airway	
SOFA score = 7 or greater - or single organ failure	
Other non-respiratory…Please specify:	

In the event that patient does not answer Yes to any of the above, it should be re-considered whether this patient does indeed require ICU referral at his point.

Potential Exclusion Criteria1	Y / N
Severe Trauma2	
Severe Burns any two of the following age >60 >40% surface area inhalation injury	
Cardiac arrest not responsive to electrical therapy recurrent cardiac arrest	
Severe progressive cognitive impairment	
Advanced untreatable neuromuscular disease	
Advanced metastatic malignant disease	
Advanced irreversible immunocompromise	
Severe irreversible neurological event / condition	
SOFA score >11	
End stage organ failure meeting the following	
NYHA class III or IV	
COPD FEV1 <25% predicted baseline PaO^2 <7.33kP secondary pulmonary hypertension	
Cystic Fibrosis post bronchodilator FEV1 <30% or baseline PaO^2 <7.33kP	
Pulmonary Fibrosis VC of TLC <60% predicted baseline PaO^2 <7.33Kp	
Primary pulmonary hypertension + NYHA class III or IV right atrial pressure >10mmHg or mean PAP >50 mmHg	

In the event that the answer is yes to any of the above then it may be that intensive care support will not offer the patient a reasonable prospect of recovery. Such patients must be discussed as early as feasible between the primary consultant and the consultant intensivist.

With increasing demand for ICU level care it is likely that normal expectations of care will not be met. Do not raise expectations of higher levels of care

If physiological deterioration continues despite support, the degree or duration of support may be limited

Advanced level support, complex ventilatory strategies or renal support may be limited in availability

Continued review of the appropriateness of continued critical care will be essential, and reverse triage may be necessary

1 Exclusion criteria is subject to review and may change
2 Clinical judgement is used to determine severity

Table 3:

Organ System	**0**	**1**	**2**	**3**	**4**	**SCORE:**
Respiratory PaO2 (kPa)/ FiO2	>53	≤ 53	≤40	≤27	≤13	
Renal Creatinine (µmol/l)	<106	106 – 168	169 – 300	301 – 433 urine output <500ml/day	>433 Urine output <200ml/day	
Hepatic Bilirubin (µmol/l)	<20	20 – 32	33 – 100	101 – 203	>203	
Cardiovascular Hypotension Doses in mcg/kg/min	No hypotension	Mean arterial BP <70mmHg	Dopamine ≤5	Dopamine >5 or Epinephrine ≤0.1 or Noradrenaline ≤0.1	Dopamine >15 or Epinephrine >0.1 or Noradrenaline >0.1	
Haematology Platelets (1000/mm ³)	>150	≤150	≤100	≤50	≤20	
Neurological GCS	15	13 – 14	10 -12	6 -9	<6	
TOTAL:						

APPENDIX 3Essential Services CUH - PATIENT ACCOMMODATION PLAN /Flu Wards December 2015

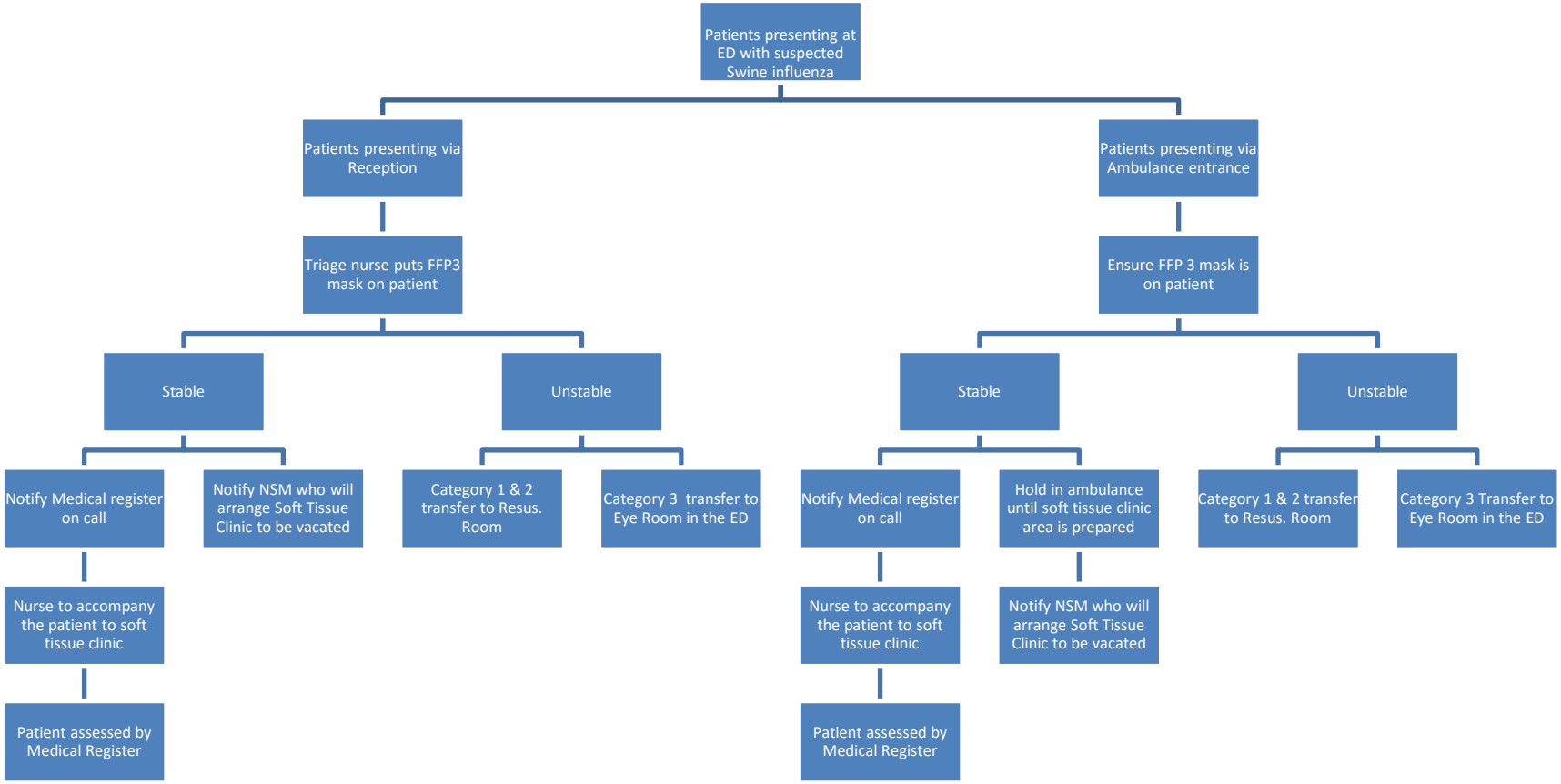
FLOOR 5	**5A Puffin – 30 Beds** (27 public, 3 private)	**5A5 - closed**	**5B - 20 Beds (Public)** 8 CF (2 beds ring fenced & remain empty) 12 Respiratory **(opened 25/10/15)**	**2 Operating theatres** 6 CITU Beds (6 non designated) **12 HDU Beds- not yet open**
FLOOR 4	**4A 35 beds** 29 in-patient beds (20 public, 9 private) 6 day beds (public) **6 assessment trolleys (public) - closed due to staffing (effective 19/06/15)**	**4B 35 beds** 33 in-patient beds (31 public, 2 private) 2 day beds (private)	**4C 29 beds** 19 Renal medicine 10 Infectious Disease (23 public, 6 private – non designated)	**4D 24 beds opened** 18 Cardiothoracic 6 Urology (14 public, 10 private – non designated) **10 beds not commissioned** **Discharge Unit moved to GB Rm 4**
FLOOR 3	**3A -28 beds** 12 stroke (12 public) 12 neurology (12 public) 4 epilepsy (4 public) (Opened 05/01/15)	**3B - 34 beds** 23 orthopaedics 11 Plastics (27 public, 7 private – non designated)	**Cardiology stepdown** 19 Specialist Monitoring Beds (15 public, 4 private)	**CCU 6 Beds** 6 beds (non designated) **2 CCU beds closed due to staffing (effective 25/01/15)** **3D 25 beds** 17 Cardiology 4 Haematology (17 public, 4 private – non designated) 4 day beds (3 public, 1 private) 4 Cardiac Assessment trolleys (4 public)
FLOOR 2	**2A – 30 Beds** Transitional Care Unit (public- non designated) **Opened on 16/11/15**	**2B- 31 Beds -** private surgical and medical ward (31 private)	**2D-10 Beds** 5 Burns Beds 5 Haematology (7 public, 3 private – non designated)	**35 Haemodialysis Stations (29 commissioned) / Peritoneal Dialysis Unit.**
FLOOR 1	**1A-35 Beds** 19 Care of Elderly 16 Acute Medical (33 public, 2 private – non designated)	**1B - 35 Beds** 12 Endocrine 11 G.I (7) + Prof unit (4) 8 Rheumatology	**Chemo day unit.** 10 day couches (6 public, 4 private)	**Cardiac Rehabilitation Unit / Conference Facilities / Admin area.** **1C Ladybird – 24 Beds** (20 public, 4 private)

		4 General Medical (33 public, 2 private – non designated)		**1C Seahorse – 6 day beds** (5 public, 1 private) **1C Paeds Assessment Unit –** 4 trolleys (public)
Ground Floor	**GA - 25 Beds** 25 neurosurgery(20 public, 5 private)	**GB** 10 Radiotherapy (8 public, 2 private) 10 Oncology (7 public, 3 private) 6 Acute Medical (6 public non designated) **Discharge Unit Room 4**	**9 GITU BEDS** (9 non designated) **1 GITU Bed closed due to staffing (effective 01/06/15)**	**Old CITU 6 Beds Closed** / **Paediatrics Service relocated to 5A & 1C 08/06/15**
Ground Floor	**2 CathLabs - 3 closed** 10 Bay Recovery Area (public)	**X-RAY Holding** 4 Trolleys (public)	**CLINICAL DECISION UNIT** 12 TROLLEYS (non designated)	**Medical short stay ward -** 23 beds (public) **AMAU –** 8 trolleys + 5 couches (public) **New Endoscopy Unit (opened 28/07/15)** 6 recovery trolleys (3 public, 3 private)
Ground Floor	**Brachytherapy /Surgical Oncology** 4 day couches (3 public, 1 private)	**Infusion Centre** 6 day couches (4 public, 2 private)	**Old Endoscopy Unit** Closed	**Haematology** 2 day couches (public) / **G.U** 1 day couch (public)

- Medical beds 290 beds (2 beds in Ward 5B are ring fenced for CF patients & remain empty at all times)
- Surgical beds 137 beds
- Intensive care beds 15 open
- Paediatric beds 54
- Private ward 31
- Day beds/Ambulatory Care 61
- Assessments Units 33

TOTAL BEDS = 621 BEDS (G.F have 46 beds not been included.)

APPENDIX 4 Flow chart for the Segregation of patients in the Emergency Department in the initial stages of flu pandemic



APPENDIX 5AEmergency Department Guidelines

Patients presenting with suspected Swine Influenza A (H1N1)

1. PATIENTS WHO PRESENT TO RECEPTION DESK

Administrative staff-
Contact Triage Nurse and ask the patient to wait by reception while they inform the triage nurse.

Triage nurse –
Give the patient an FFP3 mask to wear
Wear FFP3 mask and barrier precautions
Bring patient into triage room and assess patient – A, B, C, O2 saturations and temperature.
Refer to appropriate algorithm in triage room.
Inform shift leader.

If patient is stable –
Notify medical registrar on call
Notify Nurse Service Manager Siobhan Scanlon or Assistant Director of Nursing on call for the hospital who will arrange for Soft Tissue Clinic area to be vacated.
Accompany the patient to Soft Tissue Clinic room where they will be further assessed by the medical registrar.

If patient is unstable –
Transfer to resus if category 1 and 2
Transfer to eye room if category 3

2. PATIENTS WHO PRESENT TO EMERGENCY DEPARTMENT BY AMBULANCE

Put FFP3 mask on patient
Transfer to resus if category 1 and 2
Transfer to eye room if category 3
If category 4 or 5 hold in ambulance until Soft Tissue Clinic area is prepared
If patient is discharged medical registrar must inform G.P.
If the patient is to be admitted – admit to Room 2 in 3D rooms 6 - 7 Ward
Further admissions to go to the DPU once 3D rooms 6 - 7 beds occupied

APPENDIX 5B CUMH Guidelines Infection Prevention and Control Bulletin, April 2012

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

CorkUniversityMaternityHospital
Health Service Executive
Wilton
Cork

INFECTION Prevention and CONTROL BULLETINNo25(Updated)

April 2012

Swine INFLUENZA

Swine flu is a highly contagious respiratory disease of pigs caused by one of several type A influenza viruses. Swine viruses do not normally infect humans. However sporadic human infections have occurred and this is called a "variant influenza virus". Human infections usually occur in people with exposure to infected pigs. Cases of limited person to person spread of variant viruses have occurred.

Symptoms

Range from typical influenza-like symptoms i.e.

- fever or history of fever,
- cough,
- sore throat
- muscle aches
- rhinorrhoea
- vomiting/diarrhoea

OR

- Other severe/life threatening illnesses such as pneumonia and acute respiratory distress.

AND

- Recent travel to an area where there are confirmed cases
- Contact with a person who has a confirmed case of swine influenza
- Contact with an animal with confirmed or suspected swine influenza

Remember *: **Frequent HAND HYGIENE** is an effective means of preventing transmission*

It can be difficult at times to distinguish between the common cold and influenza. The main difference is that the symptoms of influenza come on rapidly and are typically accompanied by rapid onset of muscle aches and a fever. The common cold has a more insidious onset and is associated with a runny nose, sneezing, and blocked nasal passages. An important additional symptom of swine flu is that diarrhoea and vomiting have been quite prominent symptoms among cases. For a full list of differences between swine influenza and the common cold, please see table below, from Health Protection Surveillance Centre(HPSC)

Symptoms	SWINE FLU	COLD
Onset	**Suddenly**	Slowly
Fever	**Characteristically High (102-104°F)**	Rare
Headache	**Prominent**	Rare
General aches and pain	**Usual, often severe**	
Fatigue, weakness	**Can be prolonged for a number of weeks**	Quite mild
Extreme exhaustion	**Early and prominent**	Never
Stuffy nose	**Sometimes**	Common
Sneezing	**Sometimes**	Usual
Sore throat	**Sometimes**	Common
Chest discomfort, cough	**Common, can be severe**	Mild to moderate, hacking cough
Diarrhoea, vomiting	**Unknown but probably quite common**	Not associated with the common cold in adults

Incubation Period
7 days, CAN BE LONGER

Infectious Period
1 day before onset to 7 days afteronset of illness

Transmission

- The virus is spread among pigs by aerosols, direct and indirect contact and asymptomatic pigs.
- People usually get swine influenza from infected pigs, however some human cases lack contact history with pigs or environments where pig have been located.
- **Human to human transmission has occurred.**

Precautions **CONTACTandDROPLET Precautions**

***Remember : Frequent HAND HYGIENE** is an effective means of preventing transmission*

A. Symptomatic Patients presenting in ER

- A high filtration **FACEMASK** N95 or FFP2/3(3M mask) is placed onto the patient. If the partner is symptomatic then he/she will also require a facemask
- This facemask must be fitted correctly to ensure that the nose and mouth are covered
- STAFF to wear high filtration single use face mask, disposable single –use goggles and disposable single use gown.
- Patients should be placed into a **DESIGNATED** single room.
- **Contact Midwifery Manager**
- **Contact the on call Obstetric team**
- Wearing PPE obtain **a NASO-PHARYNGEAL swab. Contact Microbiology**
- Obstetric team to contact the medical registrar on call CUH if there are questions/queries in relation to the case

B. SYMPTOMATIC PATIENT for ADMSSION

Patient **NOT IN LABOUR** → Admit to designated **NEGATIVE AIRPRESSURE** room, **2 SOUTH room 38** with **CONTACT** and **DROPLET** precautions

Patient **IN LABOUR** → Admit to **delivery suite room 1** **CONTACT** and **DROPLET** precautions

In patient "contacts"
Patients who are in the same room as the symptomatic patient are considered ¯contact ¯patients. They must be carefully observed, managed and investigated if they develop symptoms.

Advice is always available from the Infection Prevention and Control Team

Cleaning and Precautions

- **Damp dusting** rather than dry dusting to prevent generating dust particles Vacuum cleaners should be avoided wherever possible
- When necessary a well maintained vacuum with **HEPA filters** to be used
- Filters to be changed on a regular basis
- Housekeeping staff to be allocated to specific areas and not moved between influenza and non- influenza areas

- In areas where there are suspected cases use **10000ppm of a chlorine** releasing agent **Frequently touched areas** such as door/toilet handles, stair rails should be **cleaned at least twice daily**

Remember

If you are sick with flu, stay at home to avoid spreading infection to others.

- **Cover your nose and mouth with disposable single-use tissues when sneezing, coughing, wiping and blowing your nose.**
- **Dispose of used tissues in the nearest waste bin.**
- **Decontaminate your hands every time with alcohol gel after coughing, sneezing, using tissues, or contact with respiratory secretions and contaminated objects**
- **Keep your hands away from the mucous membranes of the eyes, nose and mouth**
- **Make sure your children follow this advice**

Contact Numbers

Name	In hours Extension	Out of hours
Dr Dan Corcoran	20120	Via switchboard
Dr Bartley Cryan	22500	Via switchboard
Ros Cashman CUMH	VPN 62171	----------
Helen Jolly CUH Bridget O Sullivan CUH Jo O Hora CUH	Bleep 432/433/434	----------

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Personal Protective Equipment (PPE)

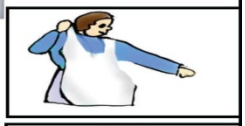
Adapted for influenza A(H1N1)v

hpsc

Correct sequence for putting on and removing PPE to prevent contamination of the face, mucous membranes and clothing.

Putting on PPE

1. Decontaminate hands
2. Put on disposable apron/gown
3. Put on mask (Surgical or FFP2 or FFP3)

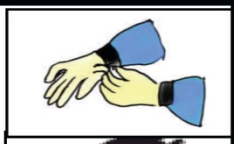


For FFP2 or FFP3 masks:

A. Place mask over nose, mouth and chin
B. Fit flexible nose piece over nose bridge
C. Secure on head with elastic
D. Adjust to fit
E. Inhale – mask should collapse
F. Exhale – check for leakage around face

4. Put on goggles if required
5. Put on gloves

Removing PPE



1. Remove gloves
   (avoid touching the outside of the gloves)
2. Decontaminate hands

3. Remove goggles

4. Remove gown or apron
   (avoid touching the front of the gown/apron)

5. Remove mask by breaking the ties.
   If ties are elastic grasp and lift ties from behind your head and pull off mask away from your face . Avoid touching the front of the mask & use ties to discard

6. Discard all PPE into healthcare risk waste
7. Decontaminate your hands

APPENDIX 7A Stage 2: Algorithm for the Management of Persons with Acute Febrile Respiratory Illness who may have influenza A(H1N1)v

Version 1.0
17/7/09

CUH
Cork University Hospital
Ospidéal Ollscoil Chorcaí

Stage 2: Algorithm for the Management of Persons with Acute Febrile Respiratory Illness who may have influenza A(H1N1)v

1

Patient with sudden onset (developing in <6 hours) influenza-like illness:
Fever [pyrexia =38°C] or a history of fever,
AND
TWO OR MORE of the following: cough; sore throat; rhinorrhoea; limb or joint pain; headache; vomiting or diarrhoea
OR
Severe/ life-threatening illness likely to have a infectious cause

2

Patient is in a Defined Risk Group[1]

YES

NO

Patient has a close household contact who is on treatment for asthma, is pregnant or is severely obese (BMI >40)

YES

NO

Patient has severe symptoms

YES

NO

3

Test: Take nasal/ throat swab.
Treat: Begin anti-virals as soon as possible[2]

Test: Take nasal/ throat swab.
Treat: Begin anti-virals as soon as possible[2]

Do Not Test or Treat with Anti-virals. Treat as clinically indicated

Chemoprophylaxis for close household contacts who are on treatment for asthma, is pregnant or is severely obese (BMI >40), **where the index case is lab confirmed**[3]

Infection Control Precautions

Avoid crowding patients together
- Strict hand hygiene
- Standard, droplet and contact precautions

GP: see patient in patient's home if possible. If in surgery, separate from other patients or patient to wear FFP3 mask

Hospital: Single room, preferably with anteroom and ensuite. Patient to wear FFP3 mask if outside room

Staff (GP or hospital) Routine care: FFP3 mask, gloves, plastic apron.
Aerosol generating procedures: FFP2 or FFP3 mask (correctly fitted), long-sleeved disposable gown, gloves and goggles

If patient needs to go to hospital:
If travelling by ambulance, inform ambulance control centre of patient's infectious status (See Ambulance guidance document)
Inform hospital infection prevention and control and occupational health teams
Use infection control precautions as in panel on right
Keep number of staff caring for patient to minimum

Notify the Director of Public Health of cases under the ID Regulations and unusual clusters or changing patterns of ILI that may be of public health concern especially in residential settings

[1] **Defined** risk groups are: Chronic respiratory, heart, kidney, liver, neurological disease; immunosuppression (whether caused by disease or treatment);
diabetes mellitus; people aged 65 years and older; children <5 (children <2 are at particular risk of influenza); people on medication for asthma, severely obese people (BMI =40) and
pregnant women

[2] Treatment should be started as early as possible, while awaiting laboratory confirmation. Antiviral treatment may be started at any time if the patient
is symptomatic – not just within 48 hours of onset of symptoms
If result is negative for influenza A, discontinue antiviral treatment
If result is positive for influenza A(H1N1)v or seasonal influenza A, antiviral treatment should be continued for 5 days

[3] Contacts who become symptomatic should be managed as a case, i.e. tested and treated as above

However please note the CUH infection control precautions requires staff to use FFP3 masks for all contact with potential flu patients.

NOTE:
If patient becomes unstable in Awbeg Suite notify Emergency Department and transfer to Emergency Department

If patient is discharged responsible doctor to notify patient's General Practitioner

NOTE:
If patient becomes unstable in Awbeg Suite notify Emergency Department and transfer to Emergency Department

If patient is discharged responsible doctor to notify patient's General Practitioner

Appendix 7B - Management of Influenza A(H1N1)v during the treatmentphase.

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

National Office Health Protection
Health Service Executive
31/33 Catherine Street
Limerick
Tel: (061) 483347 Fax: (061) 464205

29th July 2009

To :
All Medical Practitioners
CC- All health care professionals
All health managers
Re: Management of Influenza A(H1N1)v during the treatment phase

Dear Doctor,
The purpose of this letter is to provide further information on the **management of cases of A(H1N1)v in Ireland during the treatment phase**. This letter provides information on changes to the testing policy, to the policy for whom to treat, and to the policy for chemoprophylaxis of contacts. It also provides clarification regarding the use of antivirals in pregnancy and in children aged less than one year of age.
Background
On 16th July 2009, Dr Tony Holohan, Chief Medical Officer (DoHC), and Dr Patrick Doorley, National Director, Population Health (HSE), announced that management of influenza A(H1N1)v should move to the treatment phase on the advice of the Pandemic Influenza Expert Group (PIEG).
As the pandemic has progressed, the PIEG has advised further necessary changes in the management of this illness and these are outlined below.
Testing policy
The current swabbing policy is amended so that testing is only necessary in the following circumstances:
• Cases hospitalised for influenza.
• Cases identified via the GP sentinel surveillance scheme.
• Other situations, following discussion with local public health – for example:
o Cases of influenza like illness (ILI) in an institution.
o Unusual clusters of serious illness.
o Influenza like illness (ILI) or unexplained illness occurring in a hospitalised patient.
o Development of influenza like illness (ILI) in a person on chemoprophylaxis.

Treatment
For clinical cases of influenza like illness (ILI), clinical judgment should be used in making a decision about whether to prescribe antiviral treatment for individual patients. It is recommended that only the following groups receive antiviral treatment:
Patients who have severe symptoms, Patients in defined risk groups.

These include patients in the following categories:
Chronic respiratory, heart, kidney, liver, neurological disease; immunosuppression (whether caused by disease or treatment); diabetes mellitus; haemoglobinopathies; people aged 65 years and older; children <5 (children <2 are at particular risk of influenza); people on medication for asthma, severely obese people (BMI ≥40) and pregnant women.
Anecdotal comments from GPs and Pharmacists would suggest that there is a pressure from the public to obtain antiviral drugs for those going on holidays or for those with minor illness. This is inappropriate and needs to be resisted. Antiviral drugs are a valuable resource and need to be used judiciously so as to avoid the development of resistance and to ensure that those who need them can avail of them.

Chemoprophylaxis
Chemoprophylaxis is no longer generally recommended for contacts. However, doctors may exercise clinical judgment in individual cases in exceptional circumstances where they may consider it appropriate to prescribe chemoprophylaxis. In addition, it may be appropriate to consider chemoprophylaxis in some settings such as nursing homes or special education residential centres – following discussion with local public health.

Treatment of children aged < 1 year
The Pandemic Influenza Expert Group has advised that hospitalisation of children below 1 year of age, including children below 3 months of age, should be based on an assessment of the clinical condition and any particular circumstances of the individual children. On the basis of the current knowledge of the safety profile of oseltamivir (Tamiflu), there are no specific, identified risks that warrant automatic hospitalisation for all infants less than 3 months of age, bearing in mind that experience of use in this population is very limited to date.

Treatment with antivirals in pregnancy
The Pandemic Influenza Expert Group advice is that:
Chemoprophylaxis is no longer routinely recommended in pregnancy.
Pregnant women with severe symptoms in the first trimester should receive oseltamivir (Tamiflu).
Oseltamivir (Tamiflu) should be considered for pregnant women with mild symptoms in the first trimester if they have other co-morbidities.

Pregnant women with mild symptoms of influenza like illness and no co-morbidities in the first trimester should be observed and oseltamivir (Tamiflu) withheld unless clinically indicated.
Pregnant women with influenza like illness in the second and third trimesters should receive oseltamivir (Tamiflu).

Algorithms
Separate algorithms for primary care and for adult and paediatric Emergency Departments have been developed. These are included for your information.
Please discard the algorithm, dated 16th July, as it is no longer current.
More detailed information and guidance will continue to be available through the following websites:
Health Protection Surveillance Centre www.hpsc.ie
Health Service Executive www.hse.ie

Department of Health and Children www.dohc.ie

Yours sincerely,

Dr. Kevin Kelleher

Assistant National Director for Population Health – Health Protection.

Medical registration number 19719

Interim algorithm for the PRIMARY CARE Management
of Persons who may have Influenza A(H1N1)v
These recommendations are based on current information and are subject to change based on ongoing surveillance and continuous risk assessment

Infection control precautions
•Should be implemented for at least 7 days or until clinician deems otherwise

•Avoid crowding patients together

•Keep patient separate from other patients or patient to wear surgical mask

•Strict hand hygiene

•Standard, Droplet
and Contact precautions

•Staff: Routine care: Surgical mask, gloves, plastic apron
Aerosol generating procedures: FFP2 or FFP3 mask (correctly fitted), long-sleeved disposable gown, gloves and goggles

•If patient needs to go to hospital: If travelling by ambulance, inform ambulance control centre of patient's infectious status (See Ambulance guidance document)

Clinical diagnosis in most cases.
Presentations of Influenza A (H1N1)v seen to date may be of assistance in diagnosis:
Influenza A (H1N1)v usually presents with sudden onset of fever (pyrexia≥38oC) or recent history of fever, and cough or sore throat. Other symptoms can include rhinorrhoea, limb or joint pain, headache, vomiting or diarrhoea.
Remember: These signs and symptoms are also common in other illnesses. Children may present with atypical symptoms.
Testing: Consider testing only in limited situations and following discussion with local public health.

Version 1.0
29 July 2009

1.
Patient presents
with clinically
suspected influenza

Algorithm approved by the Pandemic Influenza Expert Group (PIEG)

Chemoprophylaxis for close contacts is not generally recommended. Exercise clinical judgement in individual cases. Chemoprophylaxis may be considered appropriate in some residential settings, such as nursing homes, special education residential centres (discuss with local public health).
If a high risk contact becomes symptomatic, ensure early commencement of treatment.

3.
Contacts

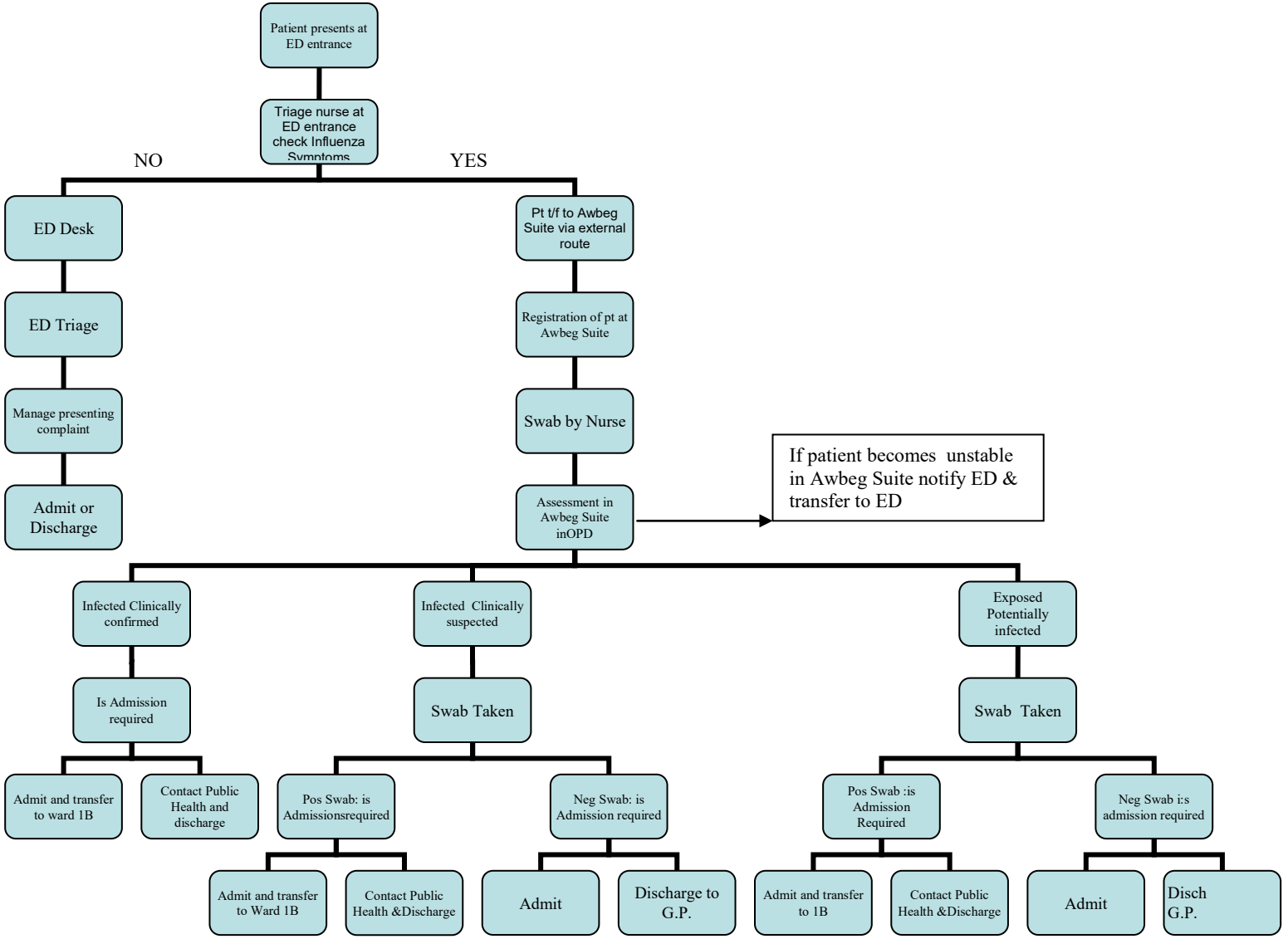
Treatment with antivirals is advised for patients who are particularly ill and for people in a defined risk group (see below). Use clinical judgement. Treatment should be started as early as possible (preferably within 48 hours of onset) but may be started at any time if clinically indicated. Some of these patients may require hospitalisation.

Advise patient to return if symptoms deteriorate

2.
Who to treat?
Defined risk groups:
• Chronic respiratory, heart, kidney, liver or neurological disease
• Immunosuppression (whether caused by disease or treatment)
• Diabetes mellitus
• People aged 65 years and older
• Children <5 years (children <2 years are at higher risk for severe complications)
• People on medication for asthma
• Severely obese people (BMI ≥40)
• Pregnant women

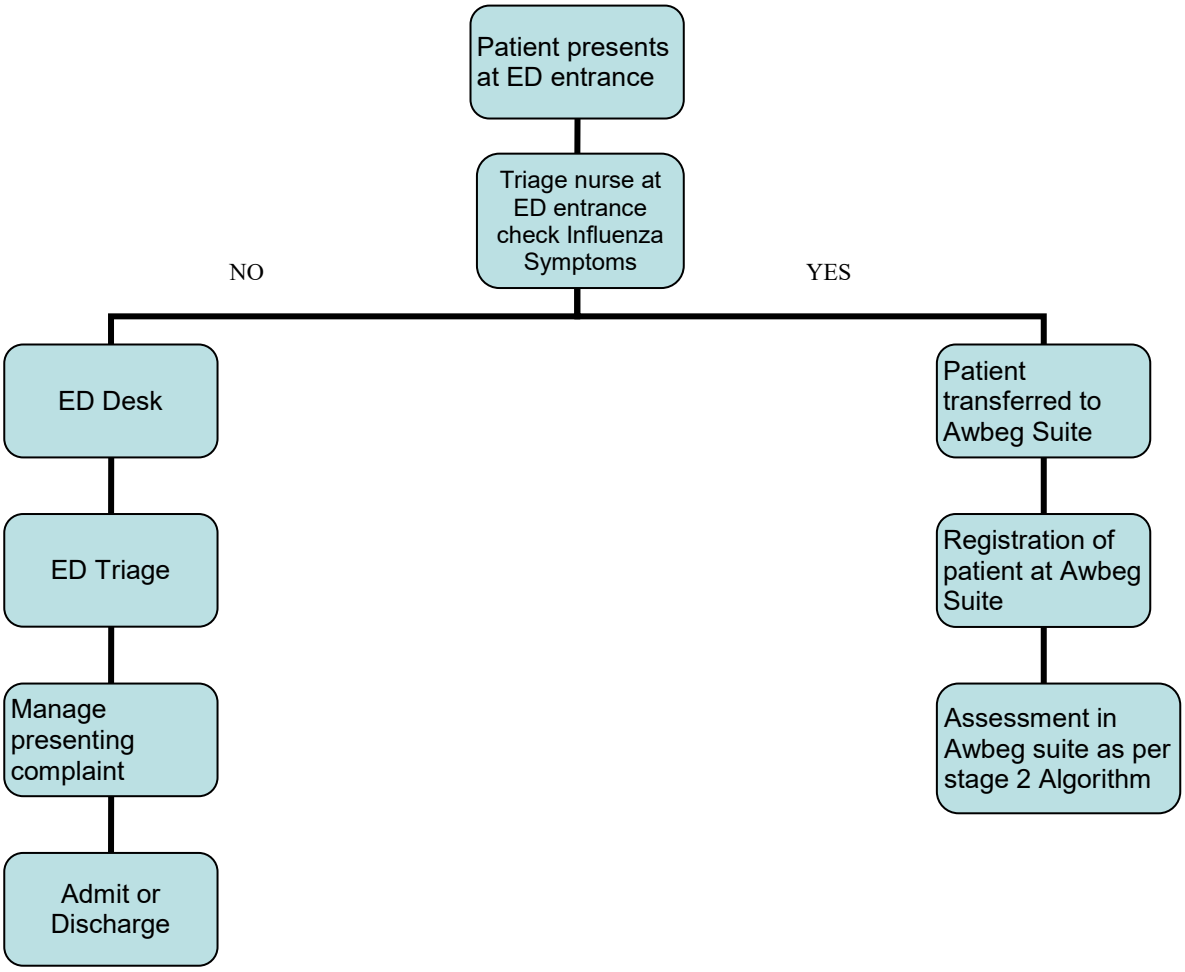
Haemoglobinopathies Institute Infection Control Precautions If CHILD, refer to HPSC algorithm for the ED Management of CHILDREN Clinician judgement should determine the need for hospital admission on an individual patient basis.
Indicators for admission may include*:
Respiratory distress
Severe dehydration or shock
Altered level or consciousness or other neurological symptoms
Significant co-morbidity
Other clinical concerns indicating need for admission*: - Rapidly progressive or unusually prolonged illness, - CXR findings - Immunocompromise - Social issues - Other clinical risks
Contact Medical Microbiologist, Infectious Diseases, other Specialist Teams as per local protocols
Can patient be safely discharged?
** not an exclusive list - clinical judgement required*

APPENDIX 8AFlow chart for the arrival of patients to the Emergency Department Entrance during the flu pandemic during a policy of containment



APPENDIX 8B

Flow chart for the arrival of patients to the Emergency Department Entrance during the flu pandemic following change in policy to mitigation



Note:
If patient becomes unstable in Awbeg Suite notify Emergency Department and transfer to Emergency Department.
If patient is discharged responsible doctor to notify patient's General Practitioner

APPENDIX 9 : FLU ASSESSSMENT TRIAGE FORM

To be completed for all ED attendances during Phase 6 of the Flu Pandemic

Patient name:_____ **Date of Birth**:_____

Clinical:

Have you had an acute onset of fever (temperature >38 degrees) **OR** history of fever □
AND
Have you had **two or more** of the following symptoms: cough, sore throat, limb or joint pain, headache, rhinorrhea, vomiting or diarrhoea) □

Have you had any other severe/life-threatening illness likely to have an infectious cause□

Epidemiological Information:

Has the patient had at least one of the following exposures **within 7 days** prior to the onset of symptoms □

Have you travelled to an area where there are confirmed cases of influenza □

Have you had close contact to a confirmed case of swine influenza virus infection while the case was ill □

Have you had a recent history of contact with an animal with confirmed or suspected influenza virus infection □

Nurse name – please print: _____

Nurse signature: _____

Date: _____

APPENDIX 10 OPD Schedule During the Influenza Pandemic

Out Patient Department. Office No. 22432. CNM2 Bleep 707

O.P.D. Clinics

Updated 01/03/2012

Monday 8.30 a.m. to 1.00 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurse.
Lee Ext. 22449	Fracture	Mr. D. Reidy	4	
Bandon Ext. 22450	Plastic ENT	Mr. S.T. O'Sullivan (*4th Mon. E O Brion Plastics-1 room) Mr. P. O'Sullivan Cleft Lip & Palate 3rd Monday	3 1 4th Monday 3 2 (3rd Monday)	2 Rooms 1st, 2nd 5th + 1 Room on 4th
Dressing Clinic 8.30am-3.00pm		Mr. S.T. O'Sullivan and Daily Dressings		
Soft Tissue Clinic		Plastic Surgeon On Call		.
Blackwater Ext. 22451	Paediatric Endocrinology Respiratory (New 1,3,4,5. 2nd free ????	Dr. Steve O'Riordan Dr. D. Murphy Dr. B. Plant DR. M. Henry	4 4	
Awbeg Ext. 22463	Neurology	Dr. Aisling Ryan Dr Michelle Murphy	4 2	.

Monday 1.30 p.m. to 5.30 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other
Lee Ext. 22449	Fracture	Mr.Rehan Gul.	4	
Bandon Ext. 22450	Urology	Mr. Kiely	4	
	Rheumatology	Dr. J. Ryan	4	
	Sports Clinic		1	
Blackwater Ext. 22451	Paediatrics Asthma	Dr D Mullane (1st,2nd,3rd(Asthma),4th) (5th? CF)	4	
	Dr. D. Murray	Paediatrics	2	
	Dr. B. Fraser	Paediatrics	2	
Awbeg Ext. 22463	Geriatric	Dr. M. O'Connor	2	
	Neurology Liaison Psych Dystonia	Dr. Sweeney Dr. Cassidy Dr. Helena Moore	3 1 1 3rd	
STC	Maxilla-facial	Dr Chris Cotter		

Tuesday 8.30 a.m. to 1.00 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Fracture	Mr. J Harty,	4	
Bandon Ext. 22450	Haematology and Oncology Rheumatology	Dr. O. Gilligan/ DR S O'Shea Dr. S. Harney	4 4	
Dressing Clinic 8.30am -2.00pm Ext. 22440				
Soft Tissue Clinic Ext. 22125		Plastic Surgeon On Call		
Blackwater Ext. 22451	Paediatric Diabetes Paediatric Allergy	Dr Stephen O Riordan. Prof. Hourihane	4 4	With effect from Monday, 12th December, 2011
Awbeg Ext. 22463	Neurology	Dr. A. Ryan	4 2	

Tuesday1.30 p.m. to 5.30 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses,
Lee Ext. 22449	Fracture Clinic (news only) Geriatric.	Mr F. Khan. Dr Paul Gallagher.	1 3	
Bandon Ext. 22450	Fibrocystic (1st, 2nd and 4t h, 5th Own nurse 5 patients. Child Psychiatry (4th) Surgery (3rd) Adult Gen Medicine/Endocrine	Dr D. Mullane/Dr. M. Ni. Chroinin Dr. F. O'Leary Ms L. Kelly Dr. O'Halloran	4 1 2 4	
Blackwater Ext. 22451	Paediatrics Geriatrics	Dr. L. Gibson Dr Harndey	2 3	
Awbeg Ext. 22463	Neurosurgery Rehab Spina Bifida 4th	Mr. Marks Dr. A. Hanrahan Dr. O. O'Mahony	4 2/3	
Soft Tissue	ENT (no clinic 3rd Tues every month)	Dr P Sheehan.	2	

Wednesday 8.30 a.m. to 1.00 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Fracture Clinic	Mr Hamid Khan.	4	.
Bandon Ext. 22450	General Surgery Vascular Surgery	Prof. P. Redmond Mr. G. Fulton	4 4	
Dressing Clinic 8.30am-4.00pm Ext. 22440	Vascular and daily dressing Surgical	Mr. G. Fulton Prof. P. Redmond		
Soft Tissue Clinic Ext. 22125		Plastic Surgeon On Call		
Blackwater Ext. 22451	Paediatric Adult Endocrine	Dr Olivia O' Mahony 3rd Wed news only 1st,2nd,4th returns Dr. Tuthill	4 4	
Awbeg Ext. 22463	Paeds Neurology Neurology Neuro-Ophthalmology	New Consultant Dr. D. Costello	2 4	

Wednesday 1.30 p.m. to 5.30 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Fracture Clinic.	Mr. P. Fleming	4	
Bandon Ext. 22450	Infectious Diseases Respiratory 1st,2ndh,5th 4th free SLE-Lupus (3rd)	Dr. Arthur Jackson. Dr. D. Murphy Dr. B. Plant Dr. M. Henry Dr.S Harney	4 4 4	
Blackwater Ext. 22451	Paediatric Rheumatology (1st) Geriatrics Child Psych (2nd and 3rd) Young Diabetic (4th) Gen Paediatrics Gen. Paediatrics	Dr. B. Fraser, Pediatrician/ Dr. S Harney. Mr D.O. Mahony Dr. F. O'Leary Dr. D. O'Halloran 4TH Wed Soft Tissue + 1 Room Dr. N. Ahmad/Dr. S. O'Riordan Alt. Weeks (Used every week) Same for Dr. Mullane/Dr. NiChroinin	4 3 2 ??? 4 2 2 2	. 2nd&3rd
Awbeg Ext. 22463	Neurosurgery	Mr. Karr/MGJ. O'Sullivan	6 rooms	

Thursday 8.30 a.m. to 1.00 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Fracture Clinic	Mr. H Khan	4	.
Bandon Ext. 22450	General Surgery Infectious Diseases.	Mr Emmet Andrews Prof .M Horgan.	4 4	
Dressing Clinic Ext. 22440		Mr Emeet Andrews Mr. S.T. O'Sullivan		
Soft Tissue Clinic Ext. 22125		Plastic Surgeon On Call		.
Blackwater Ext. 22451	Plastic Surgery Plastic Dressing Clinic Urology 1st, 3rd& 5th DMard Clinic 2nd 4th	Mr. O'Shaughnessy MrBrady Dr. S. Harney/Ryan	4 4 4	
Awbeg Ext. 22463	Orthopaedics (Upper Limb Clinic) Neurology	Mr. P Fleming. Dr. D. Costello	2 4	

Thursday 1.30 p.m. to 5.30 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Orthopaedic	Mr.Fahim Khan.	4	
 Bandon Ext. 22450	Surgery Vascular/ General Dressings Mr Mc Courts STC MrManning Dressing Clinic.	 Mr. Mc Court. Mr B Manning	 4 4	
 Blackwater Ext. 22451	Adult Diabetes Adult Diabetes	Dr. Tuthill. Dr. D. O'Halloran	4 4	
Awbeg Ext. 22463	New Neuro Catheterization	New Consultant Mr. E. Kiely	4 2	
SoftTissue Clinic	Sclerotheraphy Dressings.	Mr Fulton 4th or 5th Thursday Mr Mc Court.		

Friday 8.30 a.m. to 1.00 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Fracture Clinic	Mr. M. Dolan	4	
Bandon Ext. 22450 (**Agreed Dates)**	Plastic Surgery Adult Respiratory Paeds Cardiology (Monthly)	Mr. Eoin O'Broin Dr. D. Murphy Dr. P. Plant Dr. M. Henry Dr. M. McMahon	3 4 1/2	 Check-in Bandon, ECG in ECG room Consultation in Bandon 4th room on left.
Dressing Clinic 8.30am-5.00pm Ext. 22440	Plastic and Daily Dressings	Mr Eoin O Brion.		
Soft Tissue Clinic Ext. 22125		Plastic Surgeon on Call.		.
 Blackwater Ext. 22451	Psychiatry Psychiatry Depot	Dr. A. Duane Dr. Costello	4 4	
 Awbeg Ext. 22463	Cystoscopy Neurology Migrane Clinic	Mr. E. Kiely/ Mr Brady. Dr. B. Sweeney Dr. E. O'Sullivan	2 3 1	

Friday 1.30 p.m. to 5.30 p.m.

Suite	Clinic	Consultant	No. of Rooms	Other Staff Nurses.
Lee Ext. 22449	Plastics Fracture. (news only)	Mr. Jason Kelly OPD 1st& 3rd only Mr F. Khan	2 2	
Bandon Ext. 22450	Haematology Urology 2nd& 4th. , Paediatric Neurology	Dr. D. O'Shea. Mr Frank O Brien Dr Olivia O Mahony.	4 3 4	(Pre booked clinics only- approx 8 per year)
Blackwater Ext. 22451	Psychiatry Old age psychiatry and depo clinic	Dr. Duane	4 4	Until 3.00 p.m.
Awbeg Ext. 22463				
Dressing Clinic	Plastics	Mr Jason Kelly.		

CRC OPD Rooms level 3

Day	AM/PM	Consultant	No of rooms	Other
Monday	AM	Dr Kearney	4	
Monday	AM	Mr Hinchon	1	
Monday	PM	Dr Fahy	4 on right	
Monday	PM	Prof Eustace/ Mr Plant	4 on left	
Tuesday	AM	Mr McFadden	3 left	
Tuesday	AM	Dr Curtain	1 right	
Tuesday	AM	Prof Caplice	1 right	
Tuesday	AM	Mr Ahern	1 left	
Wednesday	AM	Dr Clarkson/Mr Plant	4 left	
Wednesday	AM	Mr Rameesh	1	
Thursday	AM	Mr P. Kelly	2 rooms	
Thursday	PM	Mr .G. Fahy	3 on the left	
Thursday	PM	Prof Eustace/Mr Mazuer	4 on the right	
Friday	AM	Mr P. Kelly	3on the left	
Friday	PM	Mr Ahern/Hinchon/ Rameesh	Depending on number of doctors	

APPENDIX 11 -NHO-BusinessContinuity Plan

Version Control:

Draft	Hospital:	Date:	Date Modified:	Signed:	Title:	Tel:	Mobile:	Email:
1.0	**CUH**	**01/07/09**						

Essential Services (Defined)

Essential Service is defined as follows:

- A service and/or function that when not delivered creates an impact on the health and safety of individuals or results in undue hardship and/ or has a negative impact on the quality of life of the individual.
- A service and/or function that must be performed to satisfy legislative requirements. Also, depending on the nature of the service and/or function, the impact may be immediate or may occur over a certain time period (e.g. immunisation).

For the purpose of NHO business continuity, the four levels of services provided by each NHO include, Priority 1: Critical/Must Do services, Priority 2: Vital/High priority services, Priority 3: Necessary services, Priority 4: Desired services.

ESSENTIAL SERVICES

(CATEGORISED)

Priority 1 Must Do/ Critical Services	Priority 2: High Priority/ Vital Services	Priority 3: Medium Priority/ Necessary Services	Priority 4: Lower Priority/ Desired Services
No interruption to service acceptable OR where this description could apply to elements within the service being considered.	A short term interruption is not likely to be critical, but within 3 to 5 days the failing must be corrected, put right, replaced etc; 3-5 days is the time within which normal levels of activity must be resumed, OR where this description could apply to elements within the service being considered. P2a Services that must resume within 72 hrs of the disruption P2b Services that must resume within 5 days of the disruption	Delays or gaps in service of between 1 to 3 weeks before normal levels of functioning or activity levels must be resumed, or where this description could apply to elements within the service being considered. P3a Services that can be suspended for the peak week (Week 6) of the pandemic P3b Services that can be suspended for peak weeks (Weeks 6-8) of the pandemic	Services that can be suspended for the duration of the pandemic (15 weeks) before normal levels of functioning or activity levels must be resumed, or where this description could apply to elements within the service being considered.

Priority 1 Services

MUST DO/Critical: *No interruption to service acceptable*
Reserved for services that must be provided immediately or will result in the loss of life, constitute negligence, result in loss of confidence in the HSE, result in undue hardship to clients/ patients, etc. These services require continuity for the duration of the pandemic.

P1	Emergency Services	Women's and Children health	Operating Theatres	Diagnostics	Specialist Services	General Support Services	OPD Services	Substantiation
1.	Medicine	Obstetric, antenatal, intranatal and postnatal care	Emergency surgery	Emergency Radiology	Haemodialysis	Pharmacy	Ortho trauma clinic	
2.	Surgery	Neo-natal care	Emergency obstetrics	Emergency Laboratory	Oncology and haematology	Supplies/Sterile Supplies	Antenatal Clinics	
3.	Ortho trauma		Emergency ortho, neuro, vascular	Emergency Cardiac Diagnostics	Orthopaedic trauma	Catering	Oncology Clinics	
4.	Neuro trauma				Infection Control	Laundry		
5.	Eye/ENT/Plastics				ICU	Housekeeping		
6.	Paediatrics				CCU	Maintenance Department		
7.	EMT Services				Palliative Care	Portering Waste Mgt.		
8.	Acute Psychiatry				Occupational Health	Mortuary		
9.						Switchboard		
10.						Medical records		
11						Emergency Management Information		
12						Biomedical		

Priority 2 Services

P2: High Priority/Vital: *A short term interruption is not likely to be critical, but within 3 to 5 days the failing must be corrected, put right, replaced etc; 3-5 days is the time within which normal levels of activity must be resumed, OR where this description could apply to elements within the service being considered.* **P2a:**within 72 hours the failing must be corrected, put right, replaced etc.**P2b:** within 5 days the failing must be corrected, put right, replaced etc

P 2	Emergency Services	Women's and Children health	Operating Theatres	Diagnostics	Specialist Services (in patient/daycase)	General Support Services	OPD Services	Substantiation
1.	Follow-UP emergencies	Urgent gynaecology	Daycase theatre/diagnostic	Non urgent and high priority GP referrals	Diabetic	ICT	Diabetic	
2.			Elective urgent Theatre	Non emergency pathology	Dermatology	Human Resources	Dermatology	
3.					Rheumatology	Payroll	Rheumatology	
4.					Elective ENT		ENT	
5.					Elective Ophthalmology		Ophthalmology	
6.					Medical Daycases		Gynaecology	
7.					Nephrology (excluding dialysis)		Nephrology (excluding dialysis)	
8.					Non urgent general Medicine		General Medicine	
9.					Non Urgent General Surgery		General Surgery	
10.								
11.								
12.								

Priority 3 Services

P3/Necessary: *Delays or gaps in service of between 1 to 3 weeks before normal levels of functioning or activity levels must be resumed, or where this description could apply to elements within the service being considered.* **P3a:** can be suspended for the peak week of pandemic activity. **P3b:** can be suspended for the peak weeks (3) of pandemic activity

P3	Emergency Services	Women's and Children health	Operating Theatres	Diagnostics	Specialist Services	General Support Services	OPD Services	Substantiation
1.		Some Elective Gynaecology		Non Urgent requests		Education and Training		
2.				Dexascanning		Routine Management Reports/ Information		
3.						Risk Management		
4.						Health and Safety		
5.						Tissue Viability		
6.						Creditors /Finance		
7.						FOI/Complaints		
8.						Legal		
9.								
10.								
11.								
12.								

Priority 4 Services

P4/Desired: ***Services that can be suspended for the duration of the pandemic (15 weeks) before normal levels of functioning or activity levels must be resumed, or where this description could apply to elements within the service being considered.****. Please note that there are no acute hospital services that can be suspended for 15 weeks.*

P4	Emergency Services	Women's and Children health	Operating Theatres	Diagnostics	Specialist Services	General Support Services	OPD Services	Substantiation

All Group Services

Aspects of the following support and administrative services that cross all areas need to be maintained

- Consultants and NCHDS
- Nursing and Specialist Services
- Med Laboratory Scientists
- Radiography
- Cardiac Diagnostic
- AHP services (Dietetic, Physio, OT, SLT)
- Management and Administration. Clerical/Secretarial at Ward /unit level
- General Support Services (Catering, Laundry, Housekeeping, Portering, Security, Maintenance, Bio medical, Waste Mgt, Switchboard)
- Chaplaincy and Pastoral Care
- Infection Control Infectious disease management
- Quality and Risk, Complaints, FOI, Legal,

CUH Essential Services Redeployment Numbers

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Week + Pt numbers(based on current ED activity)	Priority Services to be maintained e.g. 1-4	Patients requiring *ventilation* *	Absenteeism (on grounds of sickness)	WTE available	WTE and Requirements for priority service maintenance	Balance Two (Column 5 minus Column 6) Available for redeployment
1- 3	1-4	0.3*	1	3336	3337	-1
2- 6	1-4	0.7*	3	3334	3337	-3
3- 24	1-4	2.6*	10	3327	3337	-10
4- 93	1-2	10.3*	39	3298	3337	-39
5- 320	1-2	35.1*	133	3204	3337	-133
6 - 651	1	71.4*	270	3067	3337	- 270
7- 639	1- 2	70.1*	265	3072	3337	-265
8- 431	1- 2	47.3*	179	3158	3337	-179
9- 292	1-2	32.1*	121	3216	3337	-121
10- 226	1- 2	24.8*	94	3243	3337	-94
11- 156	1-2	17.2*	65	3272	3337	-65
12- 78	1-4	8.6*	33	3304	3337	-33
13- 48	1-4	5,3*	20	3317	3337	-20
14- 27	1-4	3.0*	11	3326	3337	-11
15- 20	1-4	2.3*	9	3328	3337	-9

ALOS 7 days- 13

"Ventilation" - Projections based on 78% of 474,161 population for Cork City and County reflecting sub specialist catchment group - which may be overestimated.*

Notes:

- **Column 1:** Refers to the week of the pandemic. See chapter 3 of "Pandemic Influenza Preparedness for Ireland: Advice of the Pandemic Influenza Expert Group" and table below for further details of the estimated impact of each pandemic week.
- **Column 2:** Refers to the priority levels of essential services which the hospital plans to maintain based on estimated impact for each pandemic week. In the early and late weeks a hospital might aim to maintain all 4 priority levels; at the peak it might aim to maintain priority level 1 only and in other weeks it might consider other priority levels.
- **Column 3:** Refers to the hospitals current WTE ceiling. This is a constant value through each week of the pandemic.
- **Column 4:** Refers to an estimate of absenteeism among staff during each week of the pandemic. Consider both absenteeism due to illness and due to caring requirements.
- **Column 5:** Refers to estimated staff available for attendance at work for each pandemic week, once absenteeism has been taken into account.
- **Column 6:** Refers to an estimate of staff numbers which would be required to maintain the priority services for each pandemic week identified in column 2.
- **Column 7:** Refers to an estimate of the balance of staff available for attendance at work for each pandemic week less staff required for maintenance of priority services. This staff would be available for reallocation in line with HR policies developed for the event of a pandemic.

Week	% Total cases	Cases per week	Cases per 100,000 pop	Hospitalisations per week	* Deaths per week
1	0.1%	3,042	72	113	76
2	0.2%	4,327	102	160	108
3	0.8%	17,351	410	642	434
4	3.1%	66,082	1,560	2,445	1,652
5	10.6%	223,410	5,275	8,266	5,585
6	21.6%	456,377	10,777	16,886	11,409
7	21.2%	448,072	10,580	16,579	11,202
8	14.3%	302,178	7,135	11,181	7,554
9	9.7%	205,686	4,857	7,610	5,142
10	7.5%	159,725	3,772	5,910	3,993
11	5.2%	110,772	2,616	4,099	2,769
12	2.6%	55,147	1,302	2,040	1,379
13	1.6%	33,160	783	1,227	829
14	0.9%	18,255	431	675	456
15	0.7%	13,879	328	514	347
Total	100%	2,117,463	50,000	78,346	52,937

*(It is assumed that 0.37% of all clinical cases will die but not all of these deaths will occur among hospitalised cases.)

APPENDIX 12 Patient care checklist for CUH Influenza A (H1N1)

CUH
Ospidéal Ollscoile Chorcaí
Cork University Hospital

Patient Care Checklist for CUH

Influenza A(H1N1)

See HPSC website (www.hpsc.ie) for detailed and up to date guidance.
13th June 2009, Version 1.0

UPON ARRIVAL TO CLINICAL SETTING/TRIAGE

- Follow instructions as listed in centre panel: ' 'BEFORE EVERY PATIENT CONTACT'
- Direct patient with flu-like symptoms to designated waiting area (fever, cough, headache, muscle pain, sore throat, runny nose, sometimes vomiting and diarrhoea)
- Provide instruction and materials to patient on respiratory hygiene/cough etiquette and hand hygiene
- Put FFP3 mask on patient if tolerable to patient

UPON INITIAL ASSESSMENT

- Record respiratory rate over one full minute and oxygen saturation if possible
- If respiratory rate is high or oxygen saturation is below 90%, alert senior care staff for action
- Record history, including flu-like symptoms, date of onset, travel, contact with people who have flu-like symptoms, co-morbidities or conditions associated with high risk of complications3
- Use FFP3 mask, plastic apron/gown, gloves (and goggles if risk of splashing or spraying) when taking respiratory samples4.
- Take nose and throat viral swabs, and sputum for culture if indicated
- Label specimen correctly and send to laboratory with biohazard precautions
- Consider alternative or additional diagnoses
- Report suspected case to Director of Public Health5

INITIAL AND ONGOING PATIENT MANAGEMENT

- Supportive therapy for influenza A(H1N1) patient as for any
- influenza patient including:
- Give oxygen to maintain oxygen saturation above 90% or if respiratory rate is elevated (when oxygen saturation
- monitor not available)
- Administer antipyretics if required. If patient <16 years, paracetamol is drug of choice
- Ensure adequate fluid intake
- Give appropriate antibiotic if evidence of secondary
- bacterial infection (e.g. pneumonia)
- Consider alternative or additional diagnoses
- Decide on need for antivirals (oseltamivir or zanamivir), considering contra-indications and drug interactions

BEFORE PATIENT TRANSPORT/TRANSFER

- Put FFP3 mask on patient if tolerable to patient6
- Inform transferring staff of patient's infectious status

BEFORE EVERY PATIENT CONTACT

- Clean hands (wash with soap and water for at least 15 seconds or use alcohol gel/rub containing at least 60% alcohol)2
- Put on plastic apron/gown, FFP3 mask, gloves (and goggles if there is risk of exposure to splashes)7,8
- Change gloves and clean hands between patients and between care procedures
- Clean and disinfect dedicated patient equipment between patients

IF USING AEROSOL-GENERATING PROCEDURES

(e.g. intubation, bronchoscopy, CPR, suction)9

- Perform planned procedure in an adequately ventilated room
- Allow entry of essential staff only
- Clean hands
- Put on long sleeved disposable gown
- Put on particulate respirator mask (e.g. FFP2 or FFP3 –
- fit check to ensure a good seal)
- Put on eye protection, and then put on gloves

BEFORE PATIENT ENTRY TO DESIGNATED AREA

(isolation room or a cohorted area for confirmed cases)
Post restricted entry and infection control signs

- Provide dedicated patient equipment if available
- Ensure at least 1 metre (3.3 feet) between patients in cohort area
- Patient charts/records should not be taken into the single room
- Patient to wear FFP3 mask if outside isolation room or cohort area
- Ensure protocol for frequent linen change and surface cleaning in place
- Patient to leave designated area only when essential

VISITORS ENTERING DESIGNATED AREA

(isolation room or a cohorted area for confirmed cases)

- Visitors should be restricted to a minimum
- Clean hands
- Put on FFP3 mask
- On leaving designated area, remove mask outside room
- Clean hands

STAFF - BEFORE LEAVING DESIGNATED AREA

(isolation room or a cohorted area for confirmed cases)

- Remove gloves, clean hands, then remove goggles, gown/apron and dispose of as health care risk waste in
- room. Exit room, close door
- Remove mask8 and dispose of as health care risk waste
- Clean hands
- Clean and disinfect dedicated patient equipment that
- has been in contact with patient
- Dispose of viral-contaminated waste as health care risk Waste

BEFORE DISCHARGE OF CONFIRMED OR SUSPECTED CASE

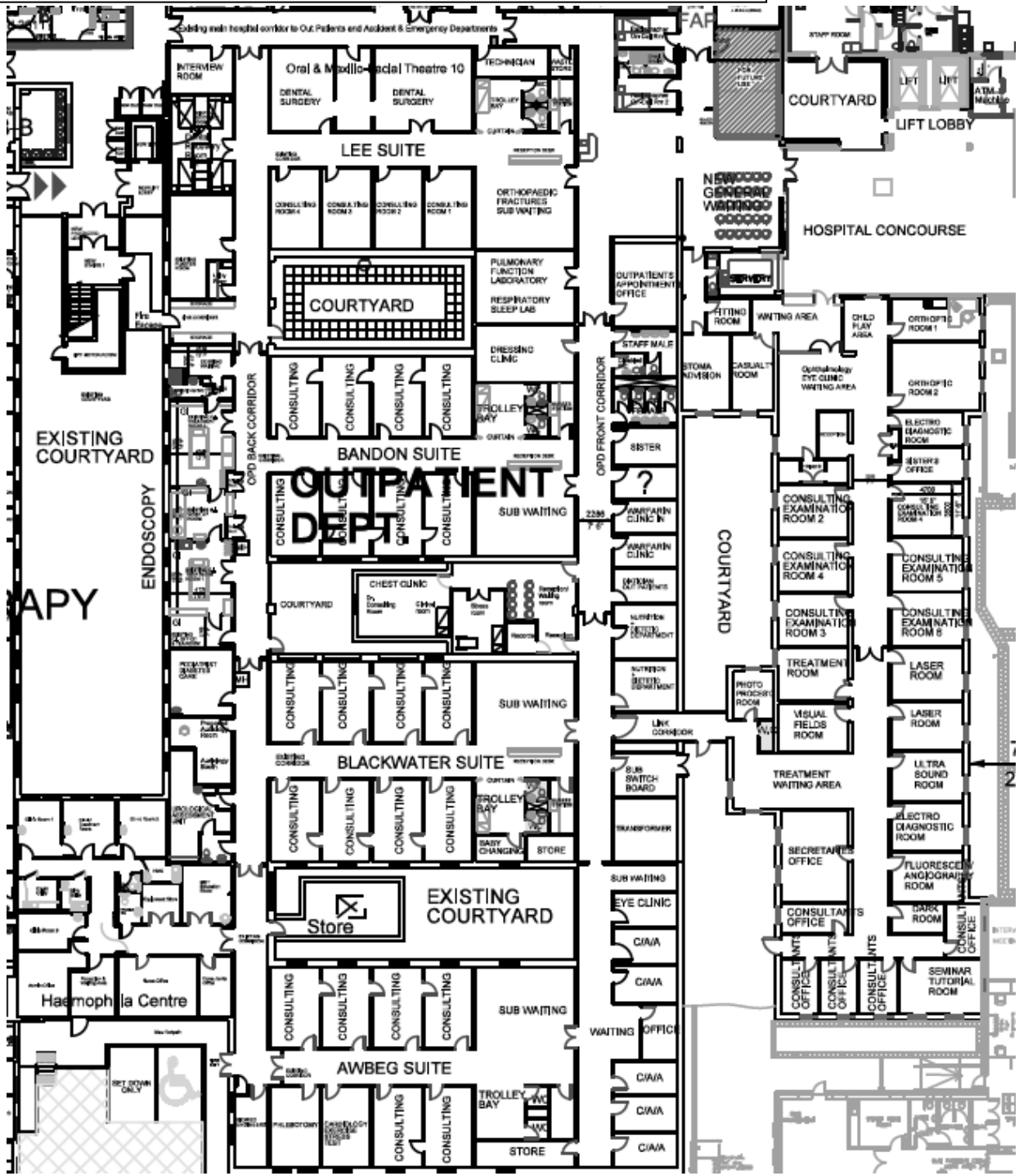
- Provide instruction and materials to patient/caregiver on respiratory hygiene/cough etiquette and hand hygiene1,2
- Provide advice on home isolation, infection control and avoiding social contact10
- Provide information about illness11, follow up arrangements and take home medications
- Provide advice to re-consult if deterioration in condition
- Notify Director of Public Health about patient's discharge

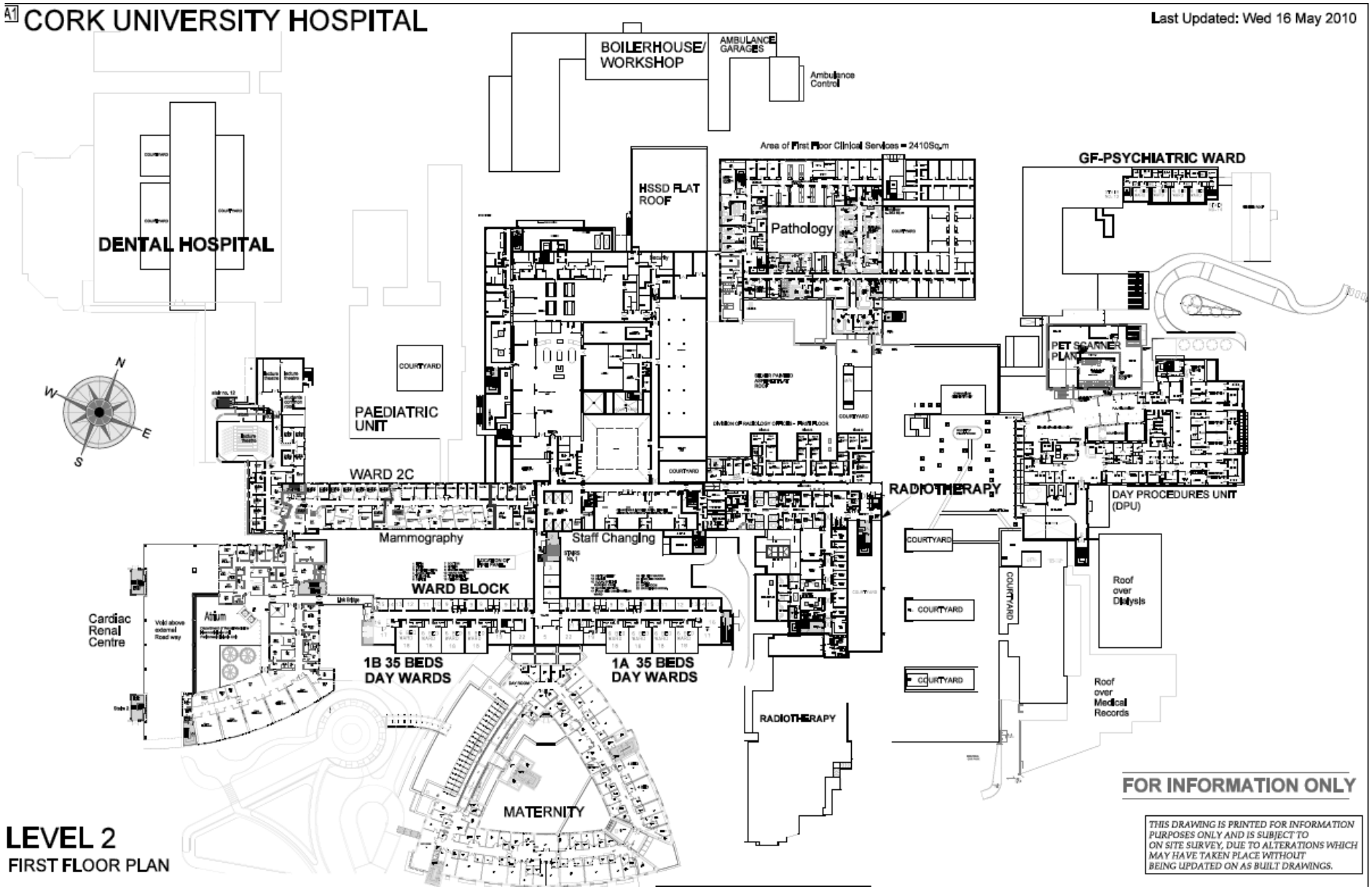
AFTER DISCHARGE

- Dispose of or clean and disinfect dedicated patient equipment as per manufacturer's instructions
- Change and place laundry in an alginate bag and into a colour coded bag
- Clean surfaces with detergent and disinfect using a hypochlorite solution 1000ppm
- Dispose of viral-contaminated waste as health care risk waste

Adapted from Patient Care Checklist prepared by the World Health Organization (www.who.int)

Appendix 13 – Maps of OPD area




A1
CORK UNIVERSITY HOSPITAL
Last Updated: Wed 16 May 2010
BOILERHOUSE/ WORKSHOP
AMBULANCE GARAGES
Ambulance Control
DENTAL HOSPITAL
HSSD FLAT ROOF
Area of First Floor Clinical Services = 2410Sq.m
Pathology
GF-PSYCHIATRIC WARD
PET SCANNER PLANT
COURTYARD
PAEDIATRIC UNIT
WARD 2C
RADIOTHERAPY
DAY PROCEDURES UNIT (DPU)
Mammography
Staff Changing
WARD BLOCK
Cardiac Renal Centre
Atrium
1B 35 BEDS DAY WARDS
1A 35 BEDS DAY WARDS
Roof over Dialysis
Roof over Medical Records
RADIOTHERAPY
MATERNITY
FOR INFORMATION ONLY
THIS DRAWING IS PRINTED FOR INFORMATION PURPOSES ONLY AND IS SUBJECT TO ON SITE SURVEY, DUE TO ALTERATIONS WHICH MAY HAVE TAKEN PLACE WITHOUT BEING UPDATED ON AS BUILT DRAWINGS.
LEVEL 2
FIRST FLOOR PLAN

APPENDIX 14 – Chapter 10 Supplement 10 Pandemic Influenza Expert Group

http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/PandemicInfluenza/Guidance/PandemicInfluenzaPreparednessforIreland/Supplement10toChapter10/File,3303,en.pdf– chapter 10 supplement 10 Pandemic Influenza Expert Group

APPENDIX 15 Paediatric Unit Plan for Influenza A (H1N1)

- Paediatric secretaries to move to Assessment Room or alternative location for foreseeable future.
- Turtle Ward will be the designated location for any patients that need to be admitted with H1N1.
- Initially Rooms 27 & 28 will be used.
- If more than 2 patients require admission surgical patients should be transferred to Dolphin Ward and room 5 & 6 used and progress over to the remainder of rooms as required. If Turtle Ward fills the option of using the DPU as an admission area for older children will be examined.
- The main door of Turtle Ward will be closed and a sign should be mounted indicating that access to the remainder of Turtle Ward will be via Dolphin Ward.
- Isolation sign for droplet & contact precautions to be mounted on door.
- All patients are to have viral swabs of their nose and throat performed. In infants or patients expectorating, a nasopharyngeal aspirate should also be sent. Specimens should be sent for Influenza A (H1N1) as well as the usual virology, RSV & adenovirus.
- Tamiflu should be commenced prior to getting confirmed result for all patients under 5 years and high risk patients in the above 5 year age group.
- Staff are to wear the appropriate protective equipment (long sleeved disposable gown, disposable gloves, FFP3 mask, disposable shoe covers & goggles if required) before entering the room and after exiting the room.
- Parents need not wear the mask in the room with their child but must apply the mask before exiting the room and remove after entering and closing the door.
- Patients should wear a surgical mask on transfer to the ward and also on discharge until they reach their transport.
- The cubicle door must be kept closed at all times.
- Alcohol handgel must be outside the cubicle, hand hygiene is of paramount importance.
- Patients to use commode in the cubicle. Parents may use the ward toilets with mask in place.
- Only 1 parent allowed to visit at a time. Meals to be provided to parents in the room.
- Trays and crockery to be used and returned to the kitchen as usual.
- All equipment to be cleaned with alcohol wipes after use.
- Patients to be discharged as soon as is medically possible.
- Room to be fumigated by household staff wearing the protective equipment until the room is cleaned. Curtains to be taken down, walls do not need to be washed.
- All patients with the symptoms are to be triaged in ED and assessed in the Soft Tissue Clinic as per the hospital plan for all patients presenting with suspected influenza A (H1N1).
- A section of the Awbeg Suite may be used if the Soft Tissue Clinic has exceeded its capacity. A paediatric nurse and doctor should be reallocated to the paediatric section of the Awbeg Suite if numbers require it.
- Infants under 18 months that are suspected H1N1 influenza virus will also be nursed on Turtle Ward.
- Equipment and stores will be stored in the vacant secretaries' office. The Ohio may need to be brought down to Turtle if a sick infant requires it.
- A stock of Tamiflu will need to be stored on Turtle Ward (5 boxes of 30mg; 45mg & 75mg capsules are stored in bottom of oral drug cupboard in Turtle Ward treatment room along with recording sheet for who they have been dispensed to and an info sheet on the medication).
- Staff will be redeployed from Tir na nOg to nurse the infants on Turtle Ward. There will be staff rotation amongst the wards so that the same staff isn't continuously caring for these specific patients.
- Decisions on elective surgery will need to take place on a daily/weekly basis.
- Seahorse Day unit may need to close and staff will be redeployed to areas that require it.
- Household contacts that are high risk need to be treated (refer to algorithm for criteria identifying who is high risk).
- Fortnightly meetings will take place on the paediatric unit to monitor the situation.

See Interim Algorithm for the Emergency Department management of Children who may have influenza for use when flu is circulating in the community. http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Guidance/ClinicalManagementAlgorithms/File,13158,en.pdf.

APPENDIX 16 Template to report to Hospital Control Centre -CUHMEP@hse.ie

CUH Major Emergency Plan

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Feedback Template to Hospital Emergency Control Centre – CUH Board Room

Ext: 4920847, 4234195, Fax: 4234194, Email cuhmep@hse.ie

CUH
Ospidéal Ollscoile Chorcaí
Cork University Hospital

Dept: _____ Dept Extension: _____ Mobile: _____
Date: _____Time: _____

1. Line Manager Name: _____

2. Action Card no: _____

3. Function/ Role Complete: Yes _____ No _____

4. Activation Procedure Complete: Yes _____ No _____

5. Issues Arising: _____

_____

6. Actions Taken: _____

_____

7. Hospital Control Centre, Approval Required for / Provide Details:_____