Critical Care Services
Major Surge Planning
2013

Chairman: Dr Brian Marsh
**Major Surge Capacity Planning**

**Definition of Critical Care Major Surge**

An unusually high increase in demand that overwhels the critical care resources of an individual hospital and/or region for an extended period of time.

**Preparedness**

1. **Leadership**

Surge planning committee

Suggest core group be small enough and large enough to establish key mechanisms for the hospital, with co-options as needed as process develops.

Critical Care Director
CEO
Clinical Director
Director of Nursing
Critical Care Senior Nurse Management
Infection Control

consider need for co-option or subgroup meetings with

Pharmacy
Procurement
Clinical leads within Medicine and Surgery
Operating theatre management and Theatre Users Committee.

2. **Review Critical Care Major Surge Plan H1N1 2009 - 2011**

All critical care units submitted major surge plans for the H1N1 Pandemic 2009. These were adopted as the template for 2010/2011/2012

It is proposed that all hospitals with critical care services have again a format valid for that centre operational and updated annually. This may or may not have required modification based on experience to date.
Such plan should identify:

a. Level 3 Critical Care Capacity (ability to provide for mechanical ventilation)
b. Isolation capacity
c. Identify that all Critical Care facility is operational. Where this is not operational, the HSE Critical Care Programme Director should be informed of such. Expansion of critical care to any non-critical care environment should not be considered unless all critical care capacity is "open" and utilized. Such practice exposes patients to increased risk.
d. Ability to expand critical care capacity into non-ICU areas such as HDU, theatre recovery, other Units within the hospital.
e. Ability to decant patients from ICU to lower dependency environment within the hospital.
f. Compliance with requirement for non-ICU nurse training and education as per Guidelines Framework (Section 4 / Manpower below).

3. Definition of Surge levels

Pre-Surge:
Current critical care facility staffed and open capacity

**Surge 1**
Opening of all critical care beds irrespective of reasons for current closure.

**Surge 2**
If transmissible disease, critical care beds accessible but isolation no longer an option due to patient numbers and cohorting the next option

**Surge 3**
Acceptance that neither isolation nor in-ICU care an option. Define potential to provide critical care outside walls of ICU, but in areas of high dependency - eg. High Dependency Units, Special Care Units, theatre recovery / PACU

**Surge 4**
Further Critical Care expansion into non-ICU areas having exhausted above potential. May include theatres if deemed appropriate, specific wards, etc
4. Manpower

In the event of a major surge, medical and nursing manpower will be under considerable pressure. Should the critical care environment need to extend beyond the critical care walls it becomes increasingly difficult to provide safe patient care at this level. Provision of such care will require

a. reallocation of medical staff or appropriate skill-mix.
b. reallocation of nursing staff of appropriate skill mix.

There is a requirement to identify such reallocation of medical staffing in an appropriate doctor:patient ratio (1:6 daytime / 1:12 out-of-hours). Such reallocation will inevitably impact on staffing to other areas of activity, particularly anaesthesia services.

There is a requirement to identify such reallocation of nursing manpower to support the heightened ICU activity, but also to identify the maintenance of the competencies defined in the nurse up-skilling programme and the numbers of such nursing staff up-skilled in that institution to date.

See:

**Guidance Framework:** For Health Service Providers on the education and training requirements for non ICU Nurses to support the provision of intensive care in the event of a major surge in Intensive Care activity

ref. Michael Shannon Nursing and Midwifery Services Director 28th May 2012


5. Elective services

Identify how elective surgical and medical activities may be cancelled in the event of a major surge. Identify the threshold for such a decision. This is likely to be different for each hospital but might be premised on known flow-mapping within the current environment. For example, most tertiary ICUs are operational at 100% or greater occupancy. Decisions are made on a daily basis to allow discharge of patients and admission of new major elective surgeries or new acute referrals. In such a scenario of routine excess occupancies, it is likely that decisions to cease elective surgery may of necessity be only arrived at upon cessation of critical care flow, or perhaps upon exhaustion of critical care isolation facility.

Each hospital needs an agreed governance arrangement to mandate such cessation of elective activity. It is suggested that the CEO, Clinical Director, and Critical Care Director are essential leaders in such decisions supported by clinical leads of medicine, surgery and anaesthesia,
Such decisions must be within an ethical framework of equality of access to critical care services.

6. Critical Care Networks

The activation of a HSE Region Critical Care Network from 2009 H1N1 surge with routine teleconferencing allowed for rapid dissemination of both clinical updates and identification of pressure points for the critical care service - capacity, manpower, inter-hospital and inter-regional transfer.

The Critical Care network and current inter-hospital referral pathways remain unchanged by the configuration of the new Hospital Groups in keeping with the HSE Directive that established clinical pathways be sustained in the interest of patient care. Major Surge Planning for Critical Care will be informed by the new Critical Care Governance arrangements once these are established.