

Protocol for the Closure of Wards, Departments and Premises to New Admissions due to infection

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Executive Summary

This protocol provides information on closure of bay/s and or ward/s during an outbreak or major event in order to minimize the disruption of important and essential services of the organization. It also describes processes to maximise the ability of the organisation to deliver appropriate care to patients safely and effectively.

This protocol is an appendix of the Infection Control Policy 2011.

1. Introduction

The decision to whether close a bed bay/s or a ward/s during an outbreak can be difficult. However, on occasion it may be necessary to close bays or wards and other clinical departments to new admissions. This is done to protect new patients from acquiring infection. Evidence shows that an appropriate early closure is the best decision for patient safety and service continuation. It is not possible to list all situations where this may occur but it will usually be in response to an outbreak of Healthcare Associated Infections (HCAI) – but rarely may be due to a single case of a particular infection i.e. Norovirus outbreak. This document outlines the process of temporary closure of bay(s), ward/s or department for the containment of transmissible organisms and infectious diseases. It also describes some common circumstances when closure of wards and clinical areas may be recommended and the process that must be followed to achieve this. It also outlines the guidance on re-opening and decontamination of the clinical environment prior to re-opening.

2. Rationale for closure of wards and clinical areas

In most situations a recommendation for closing a ward or clinical area to new admissions is to prevent new patients from acquiring infection. However the decision making process can be more complex as one needs to consider also the risk of not admitting patients versus a risk of acquiring infection and the potential consequences of acquiring infection. For example, closure of an intensive care unit will have more serious consequences than closure of many other clinical areas. Another situation may be that staff have been exposed and may then become infected and subsequently infect other patients. Therefore, it is noteworthy that general principles must be considered when contemplating closure of a clinical area or service that the decision making process requires multidisciplinary input.

3. Situations where closure of wards and clinical areas may be considered

For the reasons stated above it is not possible to provide a comprehensive list of situations when closure should be considered. Each event must be considered on an individual basis and an appropriate risk assessment considered. However likely situations include the following;

1. Outbreaks of HCAI e.g. *Clostridium difficile* infection, MRSA infection, *norovirus* infection, *influenza*, *highly antibiotic-resistant organisms* e.g. *Pseudomonas aeruginosa*.
2. Single cases of HCAI e.g. uncontained vomiting by a patient with norovirus infection, single cases of PVL positive strains of *Staphylococcus aureus*, glycopeptides-resistant *S. aureus*, measles and chickenpox, when it is believed that many patients have been exposed and may be incubating infection.
3. Single cases of staff exposure to infection where there is concern that staff may be incubating infection resulting in insufficient staff to safely run the ward or clinical area
4. Outbreaks of infection with unidentified organisms e.g. pneumonia or surgical site infections
5. Increased unexplained mortality with a suspected infective cause

It is not always necessary for there to be a laboratory confirmed diagnosis. Clinical suspicion of certain infections can be enough to warrant consideration of closure of a ward or clinical area to new admissions.

4. Procedure for closing wards and other clinical areas to new admissions

Once a possible outbreak has been recognised, the Infection Control Team will make immediate steps to collect information from the affected wards including laboratory reports. The ICT will undertake a risk assessment and determine whether to advise a partial restriction of admissions/transfers or complete closure of ward (no admission or discharge) is necessary. Any decision regarding closure of bays or wards will be made following advice from the Infection Control Team and Consultant Medical Microbiologist and in consultation with the following Trust representatives as appropriate.

Chief Nurse, Director of operations
Head of Nursing for the site
Clinical Director (or named deputy)
Matron and/or Ward/ Department Manager (or named Deputy)
Consultant in charge of the clinical area
Bed manager
Medical director

The ICT will be able to advise for each situation whether complete ward closure is needed or whether single bays can be closed. Usually such decisions will be made following a meeting with attendance from the above, but on occasions decisions will be made following electronic communication. In practice, any closures of single bays are

effective immediately following advice from the ICT; for example the common situation of closure during episodes of norovirus infection during the winter. During this time daily meetings with the bed managers, ICT and ward staff take place. As previously discussed, a risk assessment must be made of the consequence of closure for the patients who cannot be admitted. It is important that these details are recorded accurately.

Out of normal working hours, a Consultant Medical Microbiologist is on-call for infection control advice. If a ward or bay closures are advised, the normal practice will be for the consultant microbiologist to discuss this with the nurse-in-charge of the ward and the Trust site manager (who should communicate with the on all general manager if appropriate).

5. Communications

When a decision to close a bay/ ward is made, the decision should be communicated via email by the Infection Control Team to the following:

All staff listed above

Estates and Facilities including contractors

PCT (or successor body), HPU and SHA, if closure is due to a notifiable disease or other notifiable disease such as Norovirus and Clostridium difficile. These healthcare providers are informed and participate as stakeholders within an outbreak situation. Increased awareness through effective communication may favourably alter the dynamics of an outbreak. Availability of information and needs change rapidly during an outbreak especially in the early phase of escalation.

In addition, involvement of the communications team may be necessary at the early phase of an outbreak or major event to enable up to date and accurate press releases and other communications to be prepared should they be required for the public to be advised of necessary precautions.

6. Management Arrangements for re-directing admissions

Once an outbreak is declared following laboratory confirmation, it is likely that any closure is pending and this may result in specific consequences. These may be minor e.g. following closure of a bay on a single ward, or minor e.g. closure of an intensive care unit. The consequences must always be discussed at any outbreak meeting and alternative arrangements established to maintain patient care. This may involve opening up of new clinical areas that must be safely equipped and staffed.

7. Procedure for re-opening wards and other clinical areas

When closure had been advised, it will normally be following a common event e.g. norovirus infection and the criteria for re-opening are well understood. However, there may be uncertainty at the stage when some patients have persistent symptoms (diarrhoea) and it may be difficult to ascribe symptoms to norovirus (see Norovirus Clinical Care Protocol).In

this situation, the outbreak management team will be meeting regularly and any decision to re-open will be made at the meeting. Before a clinical area can be re-opened, patients may be moved to side room and affected bays and general ward areas must be deep cleaned. The ICT must be satisfied that appropriate environmental decontamination has taken place. The procedures required will vary depending on local circumstances and it is beyond the scope of this document to describe every situation. Further details can be found in the relevant clinical protocols and the Cleaning and Disinfection Protocol. The PCT (or successor body), SHA and HPU must be informed of the re-opening of the ward or clinical area by the ICT or designated individual.

Vigilance over environmental cleaning as well as hand hygiene should be maintained during the early period following the re-opening of bay/s or ward/s and recommencement of unrestricted activity because there is a risk of re-emergence of the outbreak at this time.

8. Infection Control Measures on bays and wards closed due to *diarrhoea and/or vomiting cases and outbreaks.*

8.1 Risk Assessment

In order to make an appropriate decision to close a bay or ward due to diarrhoea and / or vomiting, a risk assessment of the patient's symptoms must be carried out. Ward staff must provide the ICT with sufficient and accurate information using the Diarrhoea and Vomiting checklist (form can be downloaded from the Infection Control website) and bring this form with them to the D&V meeting at the agreed time in the agreed location. Information must be updated daily on a fresh sheet in advance of the meeting, a copy kept on the ward and a copy given to the ICT. If there is no meeting, staff should prepare the same information and convey this by telephone, fax or email to the ICT. See appendix 1.

8.2 Definitions

Closed Ward

A Closed Ward must have no admissions into or transfers out unless to a side-room (in selected cases on advice of the ICT) or discharge home. If transferring to another hospital, the receiving hospital must be informed in advance, that the patient has, or has been contact with (suspected) infective diarrhoea/vomiting. **Ward staff** should make sure information is conveyed to ambulance and transport crew when transferring patient/s to another hospital.

Closed Bay(s)

A Closed Bay must have no admissions into or transfers out of unless to a side-room (in selected cases on advice of the ICT) or discharge home. If transferring to another hospital, the receiving hospital must be informed in advance, that the patient has or has contact with (suspected) infective diarrhoea/vomiting. A ward may have more than one bay closed at any one time. **Ward staff** should make sure information is conveyed to ambulance and transport crew when transferring patient/s to another hospital.

Partially Closed Ward or Bay(s) – (Quarantined)

A partially closed ward or bay means that patients may be admitted but no patients may be transferred out unless to a side-room or discharge home. If transferring to another hospital, the receiving hospital must be informed, in advance; that the patient has, or has had contact with, (suspected) infective diarrhoea/vomiting. A ward may have more than one bay closed at any one time. **Ward staff** should make sure information is conveyed to ambulance and transport crew when transferring patient/s to another hospital.

8.3 Infection Control Measures

8.3.1 Patient Care

Prior to moving the patient to a side-room or commencing isolation precautions on the open ward, the reason for isolation and the isolation protocol should be explained to the patient and their relatives. A relevant information leaflets should be given to the patient, such infection for Clostridium Difficile, MRSA, Resistant Pseudomonas or Norovirus. These leaflets maybe obtained from Infection Control. Contact the ICT on xtn 2459.

8.3.2 Signage

Closed bays and ward posters must be put on doors or screens outside closed wards and bays to inform members of the multidisciplinary team, visitors and the general public visiting the affected ward of the event. Signs are available for the Infection Control Team xtn 2459. Posters must be removed once the ward or bay is re- opened.

8.3.3 Meals

Staff on **wards closed due to (suspected) Norovirus** should have meals e.g. sandwiches delivered to the ward to reduce the need to leave the ward. This may be arranged by contacting Facilities on xtn. 1833 or 0781 for SGH staff. Department budget code should be quoted when ordering; however, QMH staffs are not provided food when ward/s is closed.

8.3.4 Hand Hygiene

Hands are thought to be responsible for much of the transmission of infection between patients and within the healthcare environment. If hand hygiene practice is suboptimal, microbial colonisation is more easily established and/or direct transmission to patients or a fomite (inanimate object) in direct contact with the patient may occur. Based on the evidence and the demonstrations of the effectiveness with soap and water, or alcohol gel, optimal hand hygiene behaviour is considered the cornerstone of general HCAI prevention. It is of note that Clostridium difficile spores are not killed by alcohol; therefore using soap and water is the most effective way to remove them from hands. Moreover, the mechanical friction exerted while washing hands with soap and water may help physically remove blood, body fluids and other microbes acquired on the surface of the skin through contact with other patients, objects and contaminated surfaces or environment.

Hand washing technique is an essential component of clinical care. Hands should be washed properly (15-20 seconds) following the eight technique of hand hygiene to ensure micro-organisms are removed. Hands should be washed after removal of gloves and between

patients. Staff should dry their hands thoroughly with paper towels as drying removes further microorganisms from the hands. Furthermore, staff should observe the bare-below the elbow approach, wear no nail polish and keep fingernails short as long fingernails may interfere with the hand washing process.

8.3.5 Environmental Decontamination

When bay/s and/or ward/s are closed due to an outbreak e.g. norovirus infection, the frequency of cleaning and decontamination of patient bed space, shared equipment and frequently touched surfaces should be increased. Frequently touched surfaces include bed tables, bed rails, and arms of chairs, taps, door handles, call bells and light switches. In addition, cleaning toilet facilities should be increased, putting emphasis on toilet flush handles and toilet seats. For deep cleaning, ward staff should contact MITIE helpdesk on xtn 4000. For AMW areas, contact SGP helpdesk on xtn 4444. For QMH contact xtn 6100.

8.3.6 Entering Closed and Partially Closed Bay(s) or Wards

Staff should only enter closed or partially closed wards and bays if absolutely essential. Only minimal number of staff should enter. Preferably visit closed wards and closed or partially closed bays last.

Visiting medical teams and other staff (e.g. Therapists, Bed Management, General Management, CSSD staff, Phlebotomists, ECG technicians) must restrict visits to affected bays/wards if possible. If visit is absolutely essential, visit closed bay/s or ward last.

Students (nursing, medical and therapist) must not be permitted to visit affected areas.

Porters may deliver items to the ward but should have minimal contact with patients or staff. Leave the ward promptly and wash and dry hands on leaving. Alcohol gel may be used on entry.

8.3.7 Working on Clean Wards or Bays

Dedicated nursing staff and healthcare assistants should be assigned to closed areas for each work shift. Such **Nursing Staff, including Bank staff** who have worked in closed bays or closed wards *due to suspected and confirmed Norovirus* should not work or help in clean bays or wards until 48 hours after last contact with (potentially) infected patients. This includes bank staff returning to their regular wards.

8.3.8 Scrubs and Protective Clothing

Protective clothing must be worn and changed as outlined below.

Closed Ward

Scrubs. All clinical staff, including medical staff **based on the ward**, must wear scrubs. Scrubs may be ordered from Facilities xtn 1833 or 0781 for SGH. QMH on helpdesk ext 6100 and linen porter bleep 70 - 111 Mon – Fri. Department budget code must be quoted when ordering scrubs.

Staff should not leave the ward wearing scrubs. If this is necessary, then scrubs must be changed to leave the ward.

Ideally, **medical teams carrying out ward rounds** on closed wards should wear scrubs. However, if they are required to see patients on other wards and it becomes impracticable to keep changing, then they are permitted to wear gloves and aprons for patient contact as described below.

1. **Visiting medical teams and other staff** (e.g. Therapists, Bed Management, General Management, CSSD staff, Phlebotomists, ECG technicians) must observe bare below the elbow approach and wear gloves and aprons for patient contact.
2. **Gloves and aprons** must be worn by all staff for any patient contact, *whether or not wearing scrubs*. Gloves and aprons must be changed between patients and between dirty and clean procedures. PPE should be disposed as clinical waste as soon as the task is completed.

Staff are *not* required to don gloves and aprons as they enter the ward and must not move around the ward or at the nurses' station wearing gloves and aprons, even if clean. Dispose of gloves and apron in an orange clinical waste bag, even if unused.

Closed Bay(s)

1. **Scrubs**. Nursing staff, Health Care Assistants & Therapists (Physio and Occupational therapists during close contact) must wear scrubs. All other staff are not required to wear scrubs but must wear gloves and aprons for each patient contact.
2. **Gloves and aprons** must be worn by *all* staff for any patient contact, *whether or not wearing scrubs*. Gloves and aprons must be changed between patients and between dirty and clean procedures.

Staff must don gloves and aprons as they enter the closed bay to see a patient but must not move around the ward or at the nurses' station wearing gloves and aprons, even if clean. Dispose of gloves and apron in an orange clinical waste bag, even if unused.

Partially Closed Ward or Bay(s) - (Quarantined)

1. Scrubs are **not** necessary if the bay or ward is open to admissions but not for transfers out.
2. **Gloves and aprons** must be worn by *all* staff for any patient contact in the partially closed bay(s) or ward. Gloves and aprons must be changed between patients and between dirty and clean procedures.

Staff must not move around the ward or at the nurses' station wearing gloves and aprons, even if clean. Dispose of gloves and apron in an orange clinical waste bag, even if unused.

Phlebotomists and ECG technicians

Ward Doctors or Nurses should take bloods and ECGs, if possible. If this is not possible phlebotomists and ECG technicians should visit closed wards and closed or partially closed bays last with the exception of MAUs. Wear gloves and aprons as outlined below.

Therapists

Physio and Occupational therapists should wear scrubs in closed wards and bays for close patient contact, as outlined below. Treat patients in closed bays or wards last, if clinical need allows.

Porters

Porters transporting patients must wear aprons only and decontaminate hands with soap and water. Hands must be washed on the way out of the ward and after the patient has been delivered.

8.3.9 Laundry

During an outbreak of infection, all laundry coming from a bay or a ward which is closed due to an outbreak of infection should be considered potentially contaminated. Staff should follow standard infection control precautions, including the use of PPE, when handling used and soiled linen to minimize the risk of exposure to the virus and other micro-organisms. Linen and other items of laundry should not be held close to the chest to prevent contamination of the scrubs (an apron must be worn).

Staff should not leave bags of used linen onto the floor; proper handling and disposal is essential (white bag inside red bag) to prevent environmental contamination.

8.3.10 Staff with Diarrhoea and/or Vomiting

If a member of staff becomes symptomatic at home they should not return to work until symptom free for 48 hours.

If a member of staff becomes symptomatic while at work they should have no further patient contact, go home and not return to work until free of symptoms for 48 hours. If possible, they should provide a stool sample or rectal swab. Ward managers must inform Infection Control of any staff cases of diarrhoea and vomiting.

8.3.11 Visitors

Limit visitors to close family or friends to 2 per bed. Children should not visit unless absolutely essential. Explain to visitors that they are at risk of acquiring infection the longer they stay on the ward/bay. The importance of hand hygiene i.e. washing with soap and water should be explained and all visitors should be discouraged from visiting other wards after being in a closed bay or ward, unless the closed area is visited last. A relevant information leaflet already given to the patient should be brought to the attention of the family or friends. Information leaflets on MRSA, *Clostridium difficile*, Resistant Pseudomonas and Norovirus may be obtained from the Infection Control Team. Contact the Infection Control Team on xtn 2459.

8.3.12 Patient Visits to Other Departments

Avoid patient movement to other departments unless a clinical necessity.

Asymptomatic patients may go elsewhere for necessary investigations or treatment, but should spend as little time as possible off the ward.

Symptomatic patients should also not be denied any essential treatment/investigation but, if possible, this should happen on the ward. Appropriate precautions i.e. use of gloves and aprons and strict hand-washing should be applied in other departments if symptomatic patients have to visit.

8.3.13 Re-opening Closed Wards and Bay(s) affected by diarrhoea and/or vomiting

Although an entire ward may have been closed to admissions, as the outbreak wanes the closed ward may be reopened bay-by-bay provided:

- . The bays are free of symptomatic patients and there have been no new cases.
- . The bays have become empty of all patients, and/or
- . The bay/s has been deep cleaned and all curtains are changed.

If a ward is decanted due to an outbreak and full environmental cleaning is required, in this situation, there is a necessity to use Hydrogen Peroxide Vapour (HPV) as an additional decontamination process. This decontamination process can be ordered via Pharmacy (Quality control) on xtn.2413

During outbreaks of infection, re-opening of wards and bays will be discussed at the morning Diarrhoea and Vomiting meeting. If there is no meeting liaise with the infection control nurses. Contact the Infection Control Team on xtn 2459.
Out-of-hours contact the on-call Consultant Medical Microbiologist on SG 624 via switch.

9. Related Trust Policies and Protocols

Infection Control Policy (2011)
Hand Hygiene Policy (2011)
Protocol for the Isolation of Patients (2012)
Protocol for the Control of Outbreaks of Communicable Infections (2012)
Protocol for the Prevention and Management of Norovirus (2011)
Protocol for the Prevention and Management of *Clostridium difficile* (2012)
Protocol for Infectious Cleans (2011)

Diarrhoea and/or Vomiting Checklist

Appendix 1

This form should be used for (a) notification of suspected D&V outbreaks to Infection Control, and (b) for daily updates on wards where there is an ongoing outbreak. It is the responsibility of the nurse-in-charge on the ward to make sure it is filled out thoroughly and a copy given to the Infection Control Team. This is extremely important, as decisions regarding ward/bay closures must be based on accurate information.

WARD: ____ **Date:** ____ **Name & position of person filling out form:** _____

Name AND Hospital Number	Pt. or Staff	Date Admit.	Bed No, Bay No	D V		Frequency of D & V ?projectile Bristol stool type	Date D/V started	Date D/V stopped	Recent /current Antibiotics (last 5 days)	Laxatives NG Feed (last 5 days)	Abdu surgery	Diagnosis (reason in hospital)	Date of Stool Spec. & Result

10. References

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