Procedure

Multi Resistant Organism (MRO) Procedure

1. Purpose

This clinical procedure outlines the requirement for the management of Multi Resistant Organisms (MROs) at the Women's.

This procedure relates to the Infection Prevention and Control Policy.

2. Definitions

Multi-resistant Organisms (MRO): Organisms that are resistant to one or more antimicrobial drugs to which they are normally susceptible.

MROs include, but are not limited to:

- C.difficile - *Clostridium difficile* Clostridium difficile Consumer factsheet
- CRE - Carbenpenem Resistant Enterobacteriaceae CRE Consumer factsheet
- ESBL - Extended Spectrum Beta Lactamases
- MRGN - Multi Resistant Gram Negative Organisms
- MBL - Metallo-beta Lactamase
- MRSA - Methicillin resistant Staphylococcus aureus MRSA Consumer factsheet
- VRE - Vancomycin Resistant Enterococcus faecalis VRE Consumer factsheet

Colonisation: Presence of bacteria in/on a patient which shows no sign of invasive infection.

Cohort: Physically locating patients with the same infectious organism or clinical syndrome together.

Infection: Invasion by a pathogenic organism which, under favourable conditions, multiplies and produces an inflammatory response.

Transmission based precautions:

Contact Precautions: Contact Precautions are intended to prevent transmission of infectious agents which are spread by direct or indirect contact with the patient or the patient's environment.

- **Direct Contact:** i.e. direct physical transfer between a susceptible host and an infected or colonised person.
- **Indirect Contact:** i.e. exposure of the susceptible host to a contaminated object.

PPE - **Personal Protective Equipment** Items that provide a barrier, includes gowns, gloves, masks, goggles.
Precautions - Recommended infection control measures to minimise the risk of nosocomial infections.

3. Responsibilities

It is the responsibility of Infection Prevention and Control, Department Heads and Unit Managers to ensure that the appropriate guidelines for the management of patients infected or colonised with a MRO are in place and adhered to.

4. Procedure

4.1 Multi-Resistant Organisms

The management of patients infected or colonised with these MROs should be discussed with Infection Prevention. Screening of contacts and cohorting of positive patients may be required.

Admissions

Patients who have a MRO identified are flagged on the hospital patient management system (IPM).

Notify Infection Prevention and Control on Ext.2791 (After Hours leave a message for follow up).

Room Allocation

Any patient who is known to be:

- **colonised with any MRO <u>should</u>** be admitted into a single room with single bathroom or cohorted with a patient with the same MRO after consultation with Infection Prevention and Control.
- **clinical infection, which cannot be contained** eg, exfoliating skin disease, diarrhoea or pneumonia due to a MRO**, <u>must</u>** be admitted into a single room with single bathroom.
- **clinical infection can be contained,** e.g. under a waterproof dressing or in a closed drainage system, the patient **<u>should</u>** be admitted into a single room with single bathroom.

At the discretion of the Nurse/Midwife in Charge patients with MROs may ambulate around shared care areas providing:

- they perform appropriate hand hygiene on exiting their room and before touching communal surfaces
- they are continent of faeces/urine or are wearing incontinence aids
- they do not visit other patient rooms or use communal facilities.

Signage

- A Contact Precautions Poster must be displayed at the entrance to the patient's room. The door may remain open.

Equipment

Management of room equipment should comply with the policy for Cleaning, Disinfection, Sterilisation of Reusable Medical Equipment.

- Minimal stock of non-critical items should be stored in the room
- Non-disposable equipment should remain in the room for the duration of the patient's hospitalisation. eg. stethoscopes, thermometers. This equipment should be cleaned on a daily basis and when visibly soiled.
- Common use equipment which is to be removed for use on another patient must be decontaminated and allowed to dry before re-use. Equipment which is to be decontaminated outside the room must be placed in a plastic bag (or similarly contained) prior to removal. This will assist in preventing widespread environmental contamination that may occur during transfer of equipment between the isolation room and the clean-up area.
- Decontamination of equipment is to be performed by the PSA with warm water and detergent, followed by a disinfectant (Divercleanse™). Alternatively a detergent and disinfectant wipe (Tuffie 5™) may be used. .

Standard and Transmission Based Precautions

Refer to Infection Prevention and Control Procedures:

- Standard Precautions
- Transmission Based Precautions

Where the patient has a MRO, gowns or plastic aprons should be worn for contact with the patient, patient environment or infectious matter. Plastic aprons must be worn if soiling is likely. Gowns/ plastic aprons should be removed and discarded on leaving the patient's room.

Unsterile gloves are worn for contact with body fluids and changed between procedures or if heavily soiled. Gloves should be removed and discarded immediately upon completion of activity. Sterile gloves are worn for aseptic procedures.

Gloves are not a substitute for hand hygiene. Appropriate hand hygiene must be performed before and after donning PPE.

<u>Contact Precautions Signage</u> must be displayed at the entrance to the patient's room. The door may remain open.

Hand Hygiene

- Hands are to be washed with 2% chlorhexidine handwash or disinfected with alcohol based hand rub in accordance with the Hand Hygiene Guideline and the WHO 5 moments for Hand Hygiene.
- Hands should be decontaminated **before** and **after** leaving the room to minimise contamination of hands from environmental surfaces.

Clinical Waste

Contaminated disposable items must be treated in accordance with the Waste Management Guideline

- Disposable items that are contaminated with infectious matter should be placed into a clinical (yellow) waste bag (denoting the biological hazard symbol and the wording "Infectious Waste").
- Other disposable items e.g. paper towels may be placed in a black plastic waste bag.
- If the outer surface of a waste bag is contaminated with infectious matter, it should be placed in a second bag (double bagged) and thereafter handled in the normal manner.

Linen

- The management of linen should comply with the Linen Management Procedure.
- The linen skip should be taken to the bedside so linen can be discarded at the point of use. Used linen should never be carried to a skip.
- If the outer surface of a linen bag is contaminated, it should be placed in a second bag (double bagged) and thereafter handled in the normal manner.

Patient Charts

- Patient charts are to be left outside the room.

Meals, Crockery, Cutlery, Infant Feeding Equipment and Toys

- Hospital trays may be taken into the patient room. The tray will be collected by food services and placed directly into the transport trolley.
- Non-Reusable bottles/breast expression equipment to be disposed of as per normal procedure. Breast pumps must be decontaminated with a Tuffie 5™ before and after use.
- Toys should be kept to a minimum and made of suitable material to enable efficient cleaning (no shared soft toys and not water-retaining toys). Toys should stay in the isolation room until the patient is discharged and decontaminated as per the procedure 'Cleaning and Disinfection of Patient Care Non-Medical Equipment'. Patient's own toys should be decontaminated prior to discharge or contained in a bag for discharge home.

Visitors

The nurse/midwife/doctor shall explain to the family:

- Purpose of the patient isolation or cohort.
- Method and importance of hand hygiene.
- Use of protective apparel. Visitors and parents are not required to wear gowns or gloves unless they are involved in patient care, or unless they are visiting multiple patients (eg. twins admitted to NISC and only one infant has a MRO detected).
- Correct disposal of linen and waste.

Room Cleaning

- The PSA should wear a gown and disposable gloves for room cleaning which are to be disposed of before leaving the room.
- **Daily room cleaning** for all MROs is to be performed by the PSA using warm water and detergent, paying particular attention to horizontal surfaces, bed rails, door handles, basins, and taps. The bucket and mop must be changed after cleaning an isolation room.

- Frequently touched patient items, e.g. bed rails, patient table etc, may be wiped with tuffie 5 wipes, in accordance with manufacturers guidelines, during daily room cleaning.
- Refer to ISS for details of cleaning procedures.

Discharge/Terminal cleaning for all MROs:

- The room should have a routine clean followed by a disinfection with Divercleanse™ 10,000ppm.
- Blinds should be cleaned and curtains laundered
- Carpeted areas should be steam cleaned
- All single use equipment in the room must be discarded
- All re-usable equipment (eg.Breastpump) require decontamination with warm water and detergent. Alternatively Tuffie 5™ wipes may be used

Contact Infection Prevention and Control for specific cleaning recommendations.

Inter/ Intra Hospital Transfers

Limiting transfer of a patient on contact precautions reduces the risk of environmental contamination. If transfer within or between facilities is necessary, it is important to ensure that infected or colonised areas of the patient's body are contained and covered. Contaminated PPE should be removed and disposed of and hand hygiene performed before the patient is moved. Clean PPE should be put on before the patient is handled at the destination.

The receiving departments, hospitals and where applicable ambulance service, must be notified prior to transfer that a patient is colonised or infected with a MRO. Appropriate documentation should be completed.

Cessation of precautions - MRO clearance and readmission

- Access to communal areas and/or cessation of precautions is determined by a patient centred risk assessment on an individual basis.
- Clearance screening is not routinely undertaken. Gut colonisation of MROs (e.g ESBL and VRE) can persist for long periods. As such transmission based precautions are continued for the duration of the admission and subsequent admissions for all known infected and colonised MRO patients.

5. Evaluation, monitoring and reporting of compliance to this procedure

- Monitoring of incident reporting
- Auditing of compliance to MRO procedure.

6. References

1. Department of health (2011) Patient-centred risk management strategy for multi-resistant organisms http://docs.health.vic.gov.au/docs/doc/3171D8DCA0AD98EDCA2579AA0002E80F/$FILE/MRO%20guideline%202011.pdf
2. Grayson L, Russo P, Ryan K et al (2013) Hand Hygiene Australia Manual. Australian Commission for Safety and Quality in Healthcare and World Health Organization, p33 http://www.hha.org.au/UserFiles/file/Manual/HHAManual_2010-11-23.pdf
3. NHMRC (2010) Australian Guidelines for the Prevention and Control of Infection in Healthcare. Commonwealth of Australia. http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cd33_infection_control_healthcare_0.pdf

7. Legislation/Regulations related to this procedure

Not applicable.

8. Appendices

Not applicable.

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