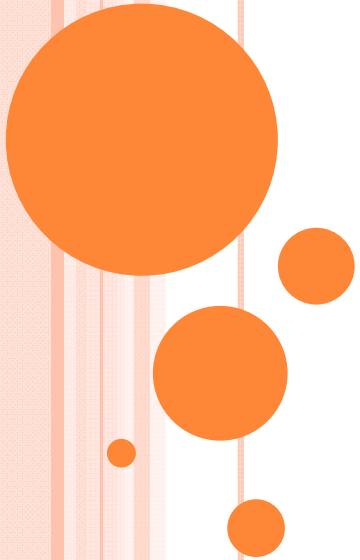
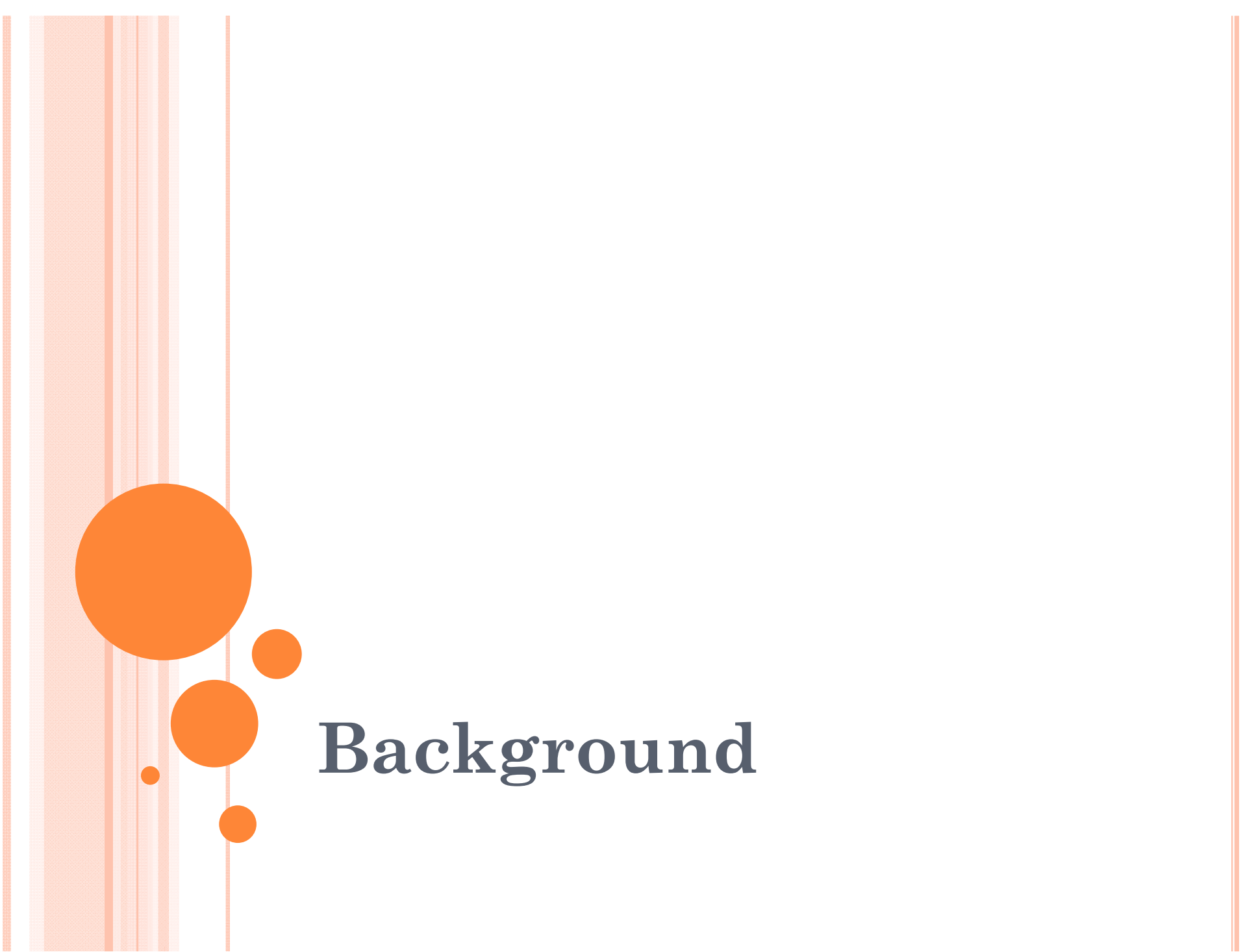
Quality Improvement Program - Practical Aspects



CONTENT

- Background
- How to identify the MRSA, MDROs patients
- 2 % CHG bathing
- Environmental hygiene
  - Training
  - Assessment (**Fluorescent marker for real time assessment and feedback)**



Background

Background

- 2011 1Q, MRSA containment pathway study in QEH
- Objectives:
  - To minimize skin shedding of MRSA and bacterial load through 2% CHG bath
  - To minimize soiling of inanimate environments and to prevent cross transmission of MRSA through dedicated use of non-critical equipment and enhancing environmental cleaning of high touched areas.
    - Involved 8 wards
    - medical admission wards, isolation wards, ICU and surgical
- 2011 4Q, QIP MDROs containment pathway in QEH

衞生防護中心
Centre for Health Protection

醫院管理局
HOSPITAL AUTHORITY

1

2

Quality Improvement Programme

5

3

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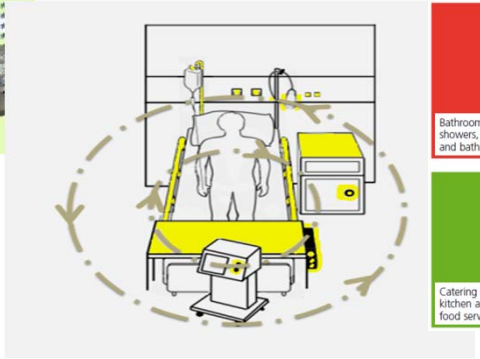


How to identify the MRSA, MDROs patients

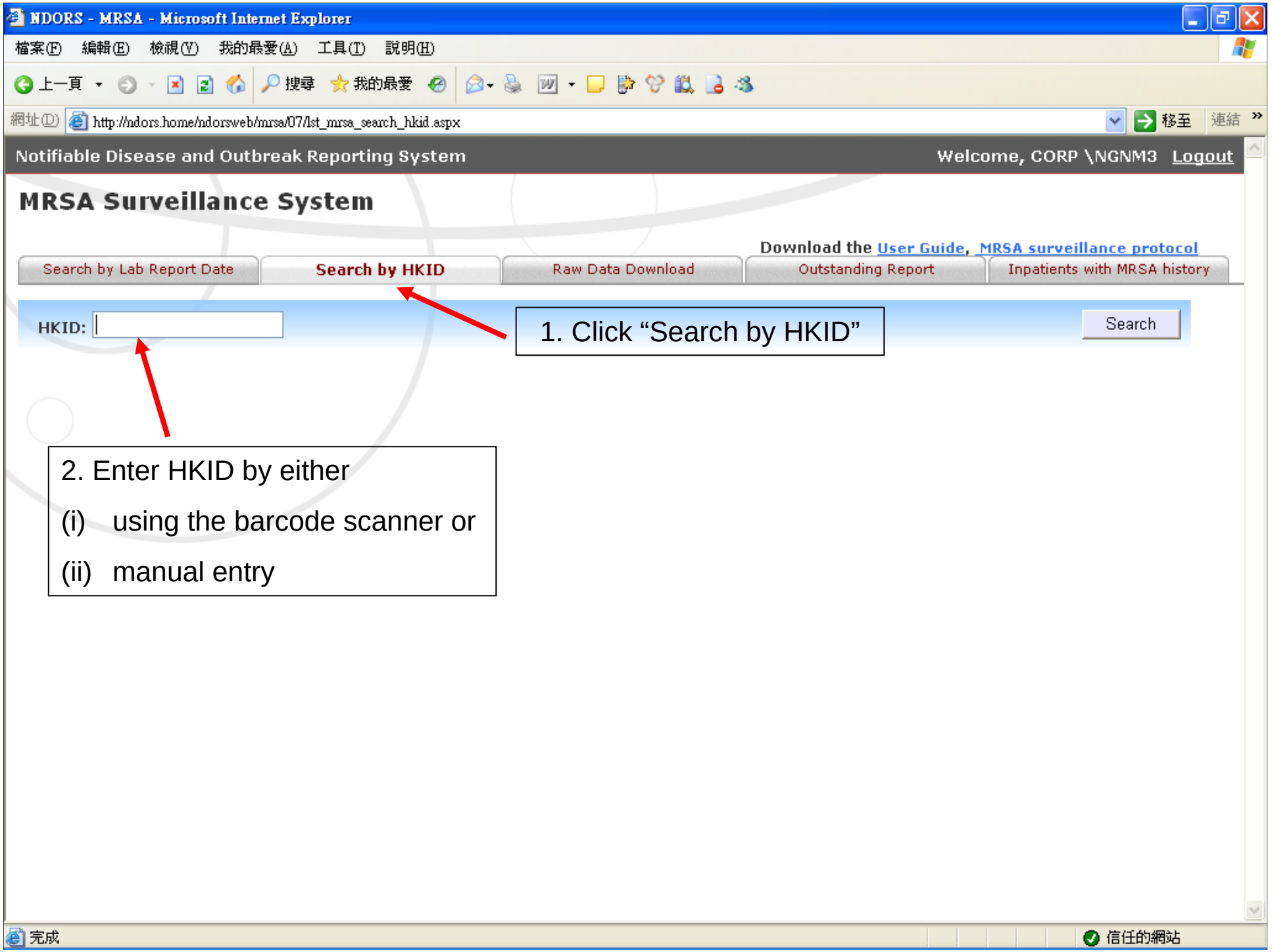
MDROs patients

- Refer from Alert message in CMS, MDRO tagging or new microbiology laboratory results in the current hospitalization

MRSA PATIENTS

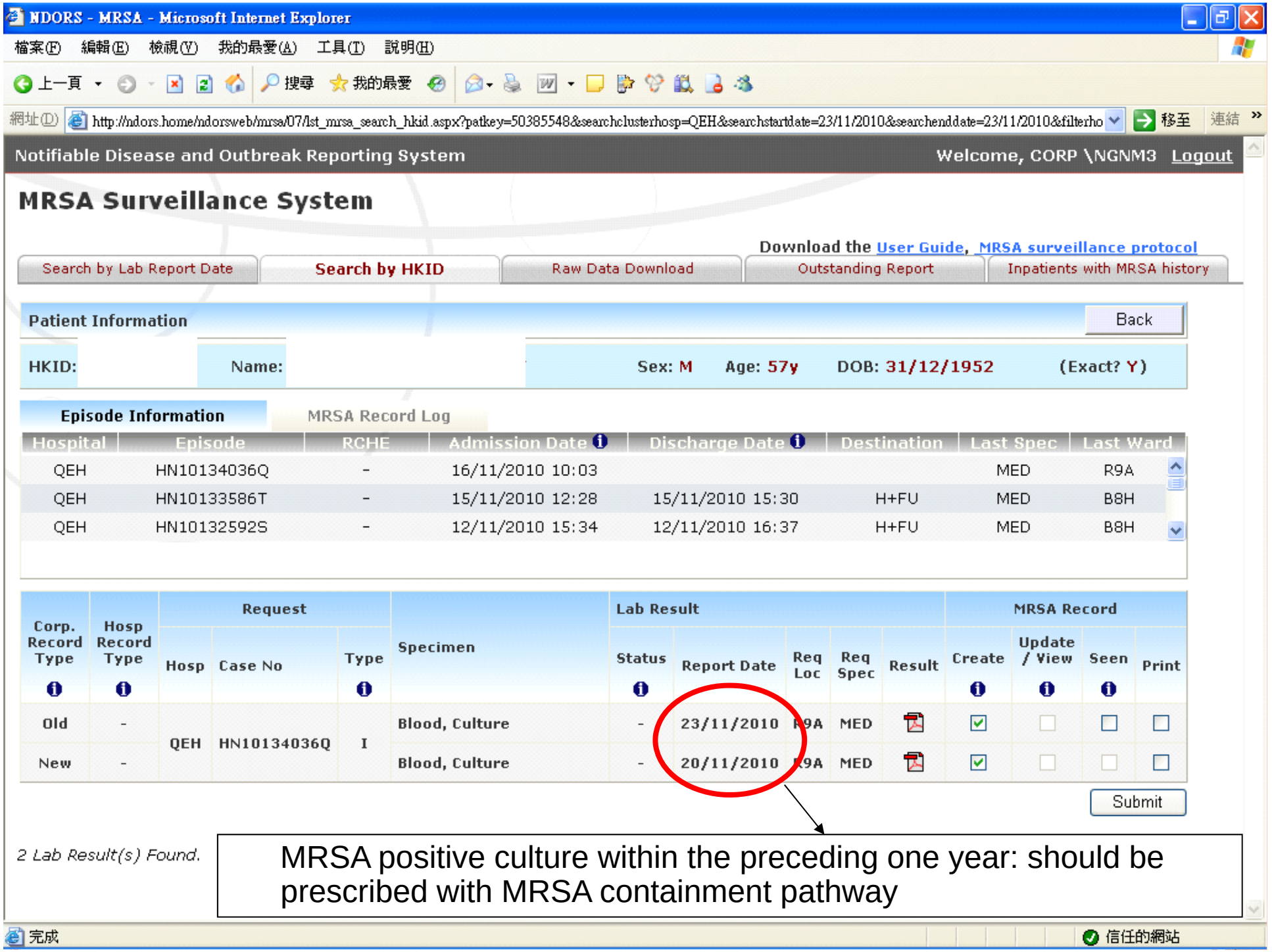
- The ward steward checks patient's MRSA status upon admission through MRSA surveillance program

- Nurses are encouraged to check the MRSA status of patients to avoid delay in identification situation when ward steward is not present, e.g. when patient is admitted during night shift


NDORS - MRSA - Microsoft Internet Explorer
檔案(F) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)
上一頁 搜尋 我的最愛
網址(D) http://ndors.home/ndorsweb/mrsa/07/lst_mrsa_search_hkid.aspx
移至 連結
Notifiable Disease and Outbreak Reporting System
Welcome, CORP \NGNM3 Logout
MRSA Surveillance System
Download the User Guide, MRSA surveillance protocol
Search by Lab Report Date
Search by HKID
Raw Data Download
Outstanding Report
Inpatients with MRSA history
HKID:
Search
1. Click “Search by HKID”
2. Enter HKID by either
(i) using the barcode scanner or
(ii) manual entry
完成
信任的網站

Intervention target

- Any patient with MRSA positive culture within the preceding one year or newly identified as carriers within the current hospitalization should be prescribed with MDROs Containment Pathway


NDORS - MRSA - Microsoft Internet Explorer
Notifiable Disease and Outbreak Reporting System
Welcome, CORP \NGNM3 Logout
MRSA Surveillance System
Download the User Guide, MRSA surveillance protocol
Search by Lab Report Date
Search by HKID
Raw Data Download
Outstanding Report
Inpatients with MRSA history
Patient Information
Back
HKID:
Name:
Sex: M Age: 57y DOB: 31/12/1952 (Exact? Y)
Episode Information
MRSA Record Log
Hospital Episode RCHE Admission Date Discharge Date Destination Last Spec Last Ward
QEH HN10134036Q - 16/11/2010 10:03 MED R9A
QEH HN10133586T - 15/11/2010 12:28 15/11/2010 15:30 H+FU MED B8H
QEH HN10132592S - 12/11/2010 15:34 12/11/2010 16:37 H+FU MED B8H
Corp. Record Type
Hosp Record Type
Request
Hosp
Case No
Type
Specimen
Lab Result
Status
Report Date
Req Loc
Req Spec
Result
MRSA Record
Create
Update / View
Seen
Print
Old - QEH HN10134036Q I Blood, Culture - 23/11/2010 R9A MED
New - Blood, Culture - 20/11/2010 R9A MED
Submit
2 Lab Result(s) Found.
MRSA positive culture within the preceding one year: should be prescribed with MRSA containment pathway
完成
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MRSA CONTAINMENT PACKAGE

Assembly graph with racks hanged on bedside tables

Rack for glove boxes

Color coded non-critical items

CHG bathing

2% CHLORHEXIDINE GLUCONATE (CHG) BODY WIPE

- Aims at reducing MDROs skin colonization and skin shedding to the immediate inanimate environments, & health care workers' hands
- Thus decreasing cross transmission and subsequent risk of invasive complication

潔身抗菌劑(Microshield 2)使用指引 (2%葡萄糖酸氯己定)

中文版教育單張

2%葡萄糖酸氯己定是一種水溶性抗菌劑，能有效地對抗細菌。使用這抗菌劑能有效減低因耐藥性細菌而引致的感染

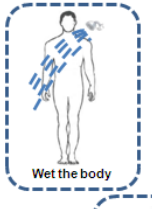
使用方法
1.用水沖身
2.用抗菌劑清潔身體，清潔●部位時要格外留神
3.用水將抗菌劑沖走
4.用清潔及乾的毛巾抹身

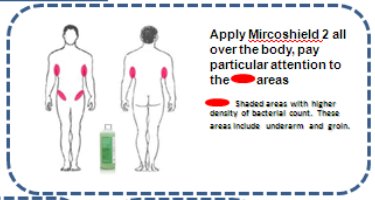
User guide to patient for using Microshield 2 (2% Chlorhexidine Gluconate)

What is 2% Chlorhexidine Gluconate (CHG)?
- CHG is a water soluble antiseptic preparation with broad activity against bacteria.

What is the benefit of using 2% CHG?
- Effective against healthcare-associated infections with multidrug resistance bacteria.

How to use?
1. Wet the body
2. Apply Microshield 2 all over body, pay particular attention to the ● areas
3. Rinse it off
4. Dry with a clean and dry towel


Wet the body


Apply Mircoshield 2 all over the body, pay particular attention to the ● areas

● Shaded areas with higher density of bacterial count. These areas include underarm and groin.

Rinse it off

Dry with a clean and dry towel

Cautions
- Keep out of children
- Do not apply CHG above neck areas, including eyes, ears, month, nose, face and hair
- Report immediately to doctor/ nurse if the below situation occurs
  - Any discomfort or allergic reactions found e.g. rash, itchiness
  - Accidentally splash to eye(s), (immediately rinse with water)
  - Ingestion of the agent

用水沖身

使用抗菌劑清潔身體，清潔●部位時要格外留神

●著色部份是含菌量較高的部位，包括腋下及腹股溝

用水將抗菌劑沖走

用清潔及乾的毛巾抹身

Information Sheet on the Use of 2% Chlorhexidine Gluconate (CHG) Solution for Bed Bathing

(Prepared by CICO office, 7 May 2012)

Disclaimer: The information provided in this information sheet is for reference only. Please follow nursing standards for patient care.

Equipment required for a bed bath

- 2% Chlorhexidine Gluconate antiseptic solution (rinse free)
- Disposable cloths/ wipes
- Disposable gowns and gloves
- Clean clothes
- Waste bag

Procedures for bed bathing a patient

1. Prepare the environment and equipment.
2. Follow the manufacturer's instructions of use. Prepare appropriate volume of 2% CHG antiseptic solution. The solution can be used at room temperature. Warming is allowed but the temperature should not exceed 40°C*.
3. Perform hand hygiene and wear disposable gloves and gown/ apron.
4. Assist the patient to remove clothing. Cover the body e.g. a bath towel or sheet to sustain body temperature when necessary.
5. Soak the disposable clothes/ wipes fully with antiseptic solution.
6. Rub the areas of the body according to the sequences#^ shown in Figure 1. No rinsing is required.
7. Care should be taken not to wet drains, dressings, and/or intravenous devices.
8. Change the disposable clothes/ wipes when visibly soiled, after cleaning armpits, buttock and groin area.
9. Remove gloves and perform hand hygiene.
10. Wear clean disposable gloves.
11. Assist patient to put on clean clothes.
12. Remove gloves and gown/ apron, and perform hand hygiene after procedures.

*The antiseptic agent may denature into other chemical components when excessive heat is applied (> 40°C).

#The sequences could be modified according to the posture or condition of patient.

^Avoid contact with the eyes and any mucosal membranes.

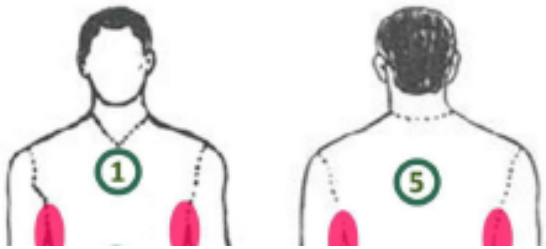
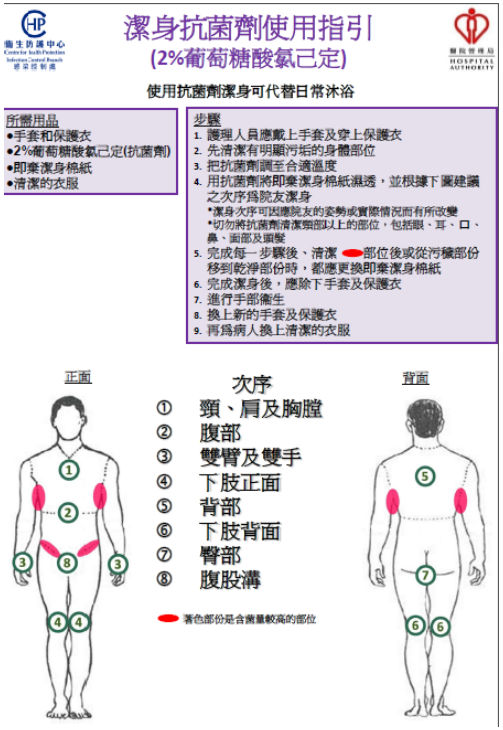


Figure 1. Sequences of cleaning



醫院管理局九龍中聯網

阻截多重抗藥性細菌之傳播途徑

加護病房

住院病人，請貼上附有 HN 號碼之

姓名:

香港身份證號碼:

HN/ OP 號碼.:

性別/出生日期.:

部門:

醫院: * QEH/ KH/ HKBH/ HKEH

阻截多重抗藥性細菌之傳播途徑－簽署記錄表

事項	時間	日期	簽署	日期	簽署	日期	簽署	日期	簽署	日期	簽
使用 2%葡萄糖酸氯己定潔身 每天一次											
塗抹潤膚霜 每天一次											
更換病人衣服 每天一次											
進行環境清潔 每天三次											
更換枕袋及床單 每天一次											

Hospital Authority

Kowloon Central Cluster

Quality Improvement Program
Intensive care unit

For hospital admitted patient, ple

Name:

HKID:

HN/ OP No.:

Sex/ D.O.B.:

Department:

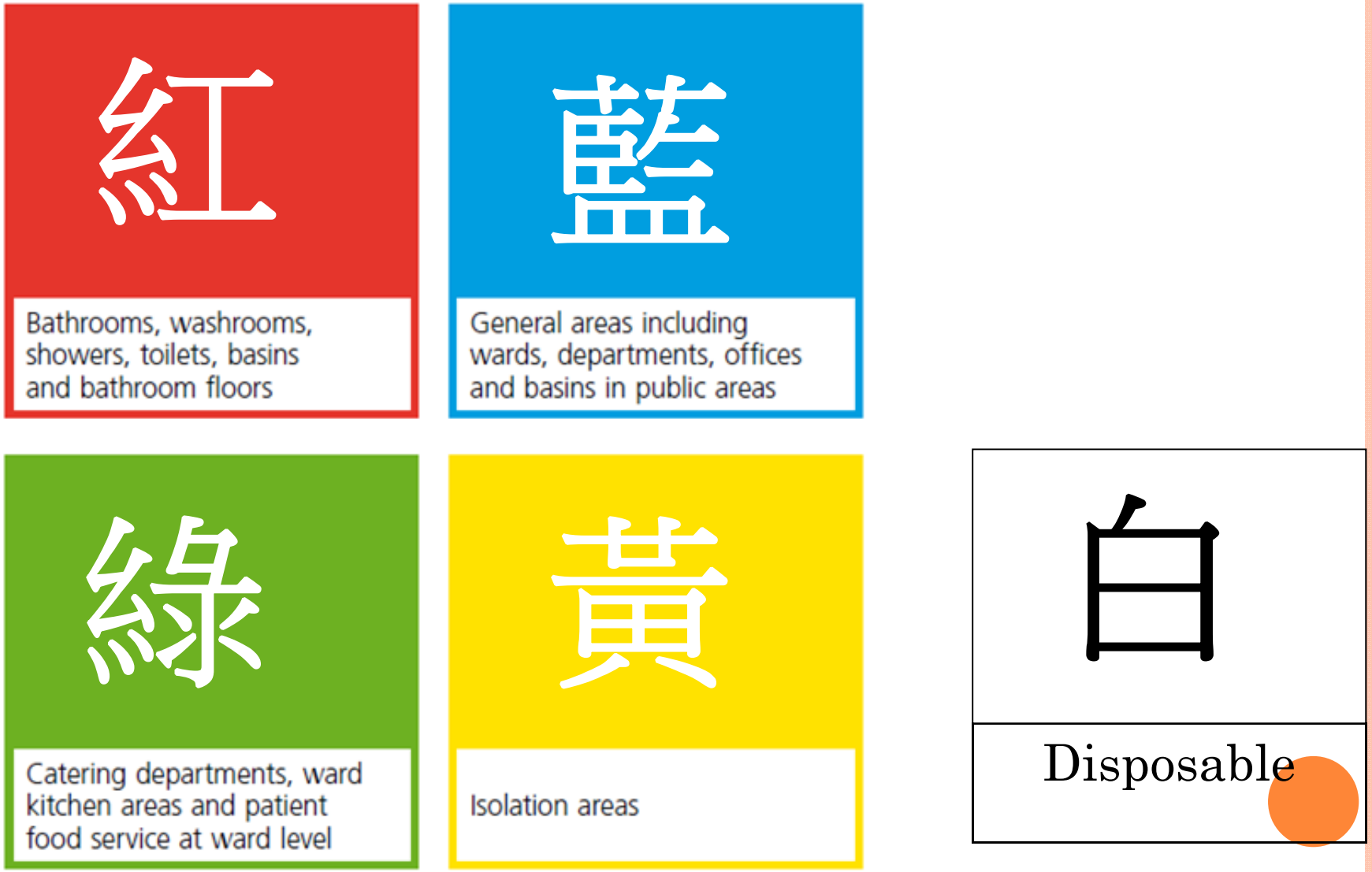
Hospital: * QEH/ KH/ HKBH/ HKE

Quality improvement program - action record with signa

Action	Time	Date	Sign.	Date	Sign.	Date	Sign.	Date	Sign.	Date
2% CHG bath Daily										
Apply aqueous cream Daily										
Change pajama Daily										
Environmental cleansing 3 times a day										
Change bed linen Daily										
Action	**Time**	**Date**	**Sign.**	**Date**	**Sign.**	**Date**	**Sign.**	**Date**	**Sign.**	**Date**
2% CHG bath Daily										

Environmental Hygiene

HA standardized Color Coding Scheme & Scope



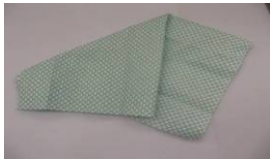
Color coded cleansing equipment

gloves

Mop handle

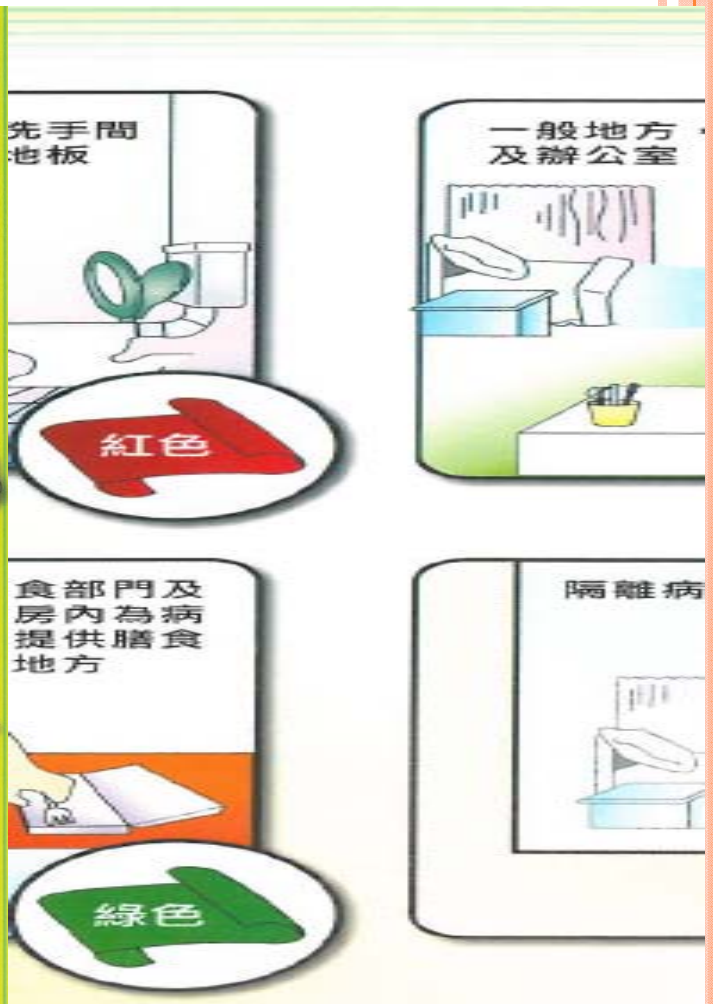
Flat mop trial

Wipe-rinse bucket / basin



Cleansing wipes

COLOR CODE SCHEME



Safe Clean Program

- Adopt universal colour coding scheme for cleaning materials and equipment
- Observe common rules of cleansing principles
- Training in cleaning, combined with auditing and monitoring

WHAT IS THE ENVIRONMENT IN HEALTHCARE CONTEXT

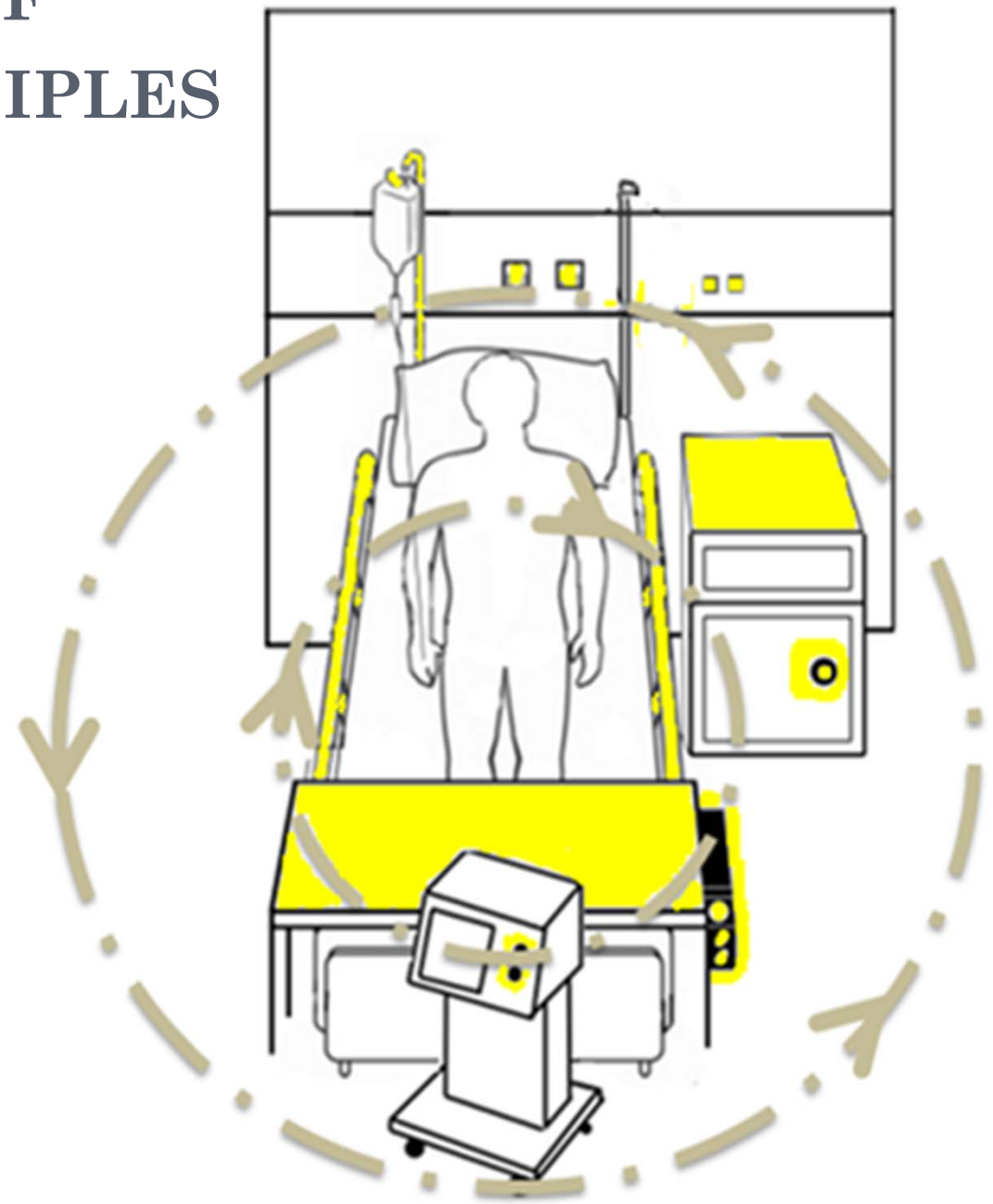
1. General environment: floor, wall, ceilings
2. Items that have staff / patient hand contacts
3. Item that have prolonged patient contact: mattress, pajamas & pillow cover
4. Medical devices contact with patient skin (non critical equipment), as such BP cuff

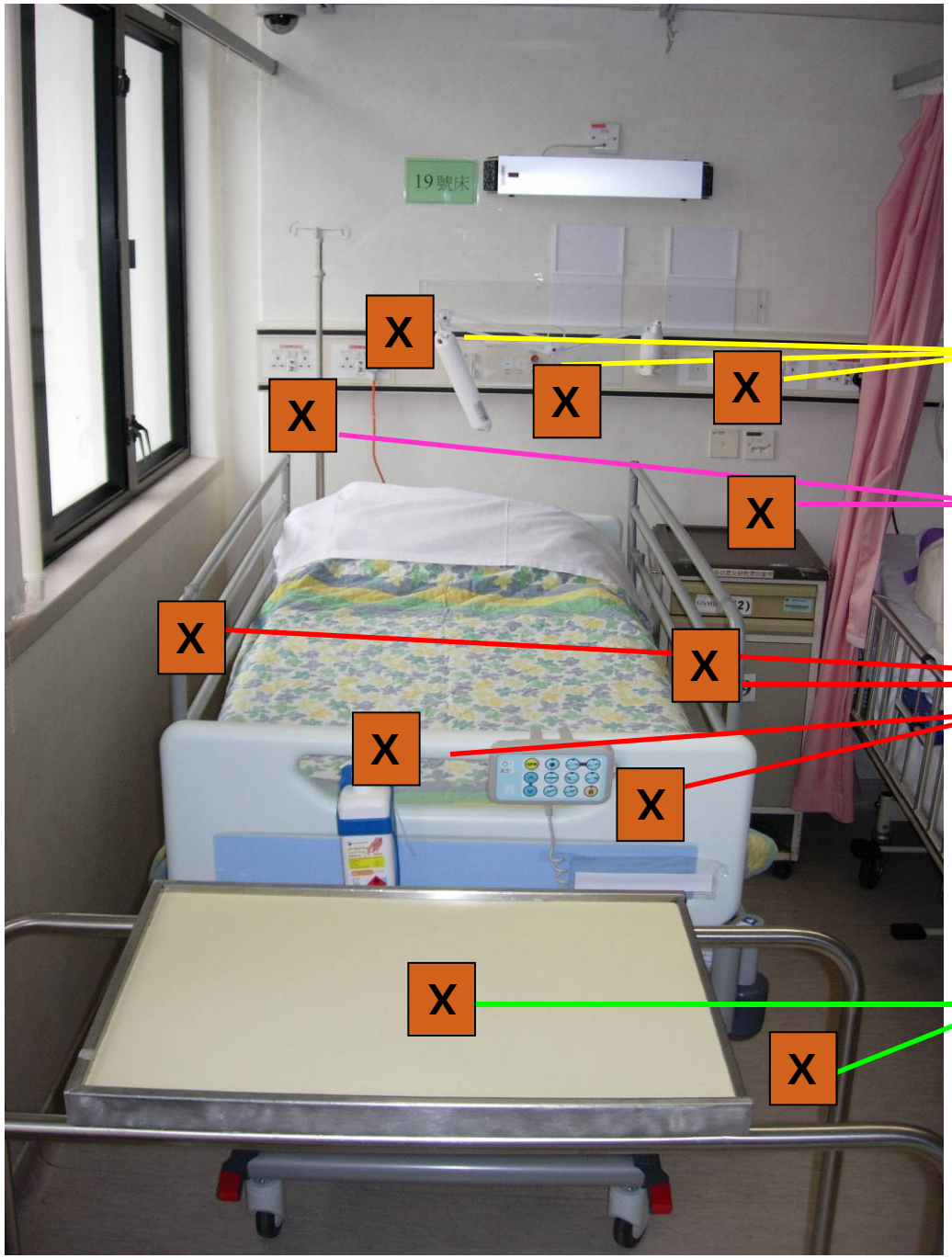
Most importantly, the **frequent touch areas** / pt use non-critical items demand the most attention and frequent cleaning

COMMON RULES OF CLEANSING PRINCIPLES

- Clean to dirty
  - High to low
  - Outer to inner
  - Non reverse in directions
- High touch areas
- Figure of Eight

- Terminal decontamination
- Cleansing schedule:
  - Once for general environment
  - Twice for MDRO cases




19號床
X
X
X
X
X
X
X
X
X
X
1st cleansing wipe
2nd cleansing wipe
4th cleansing wipe
3rd cleansing wipe

Special attention to “High Touch” areas	Locations
	General environment
	Nurse working station
	Patient use equipment
	Patient immediate environments

護士站

病人周邊環境

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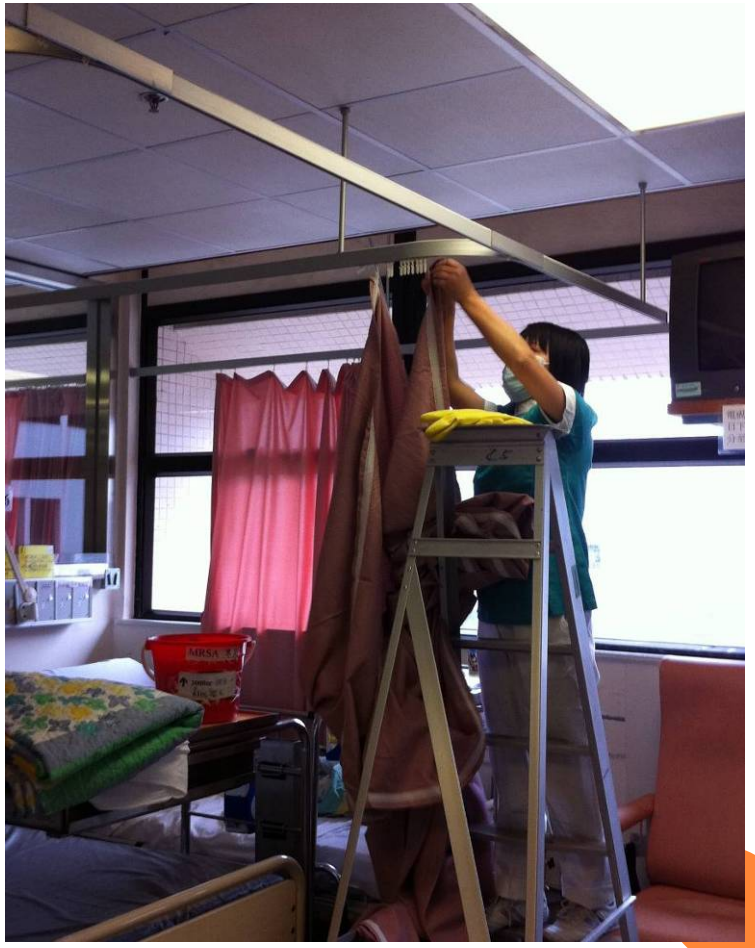
Change bed linen Daily										
Action	**Time**	**Date**	**Sign.**	**Date**	**Sign.**	**Date**	**Sign.**	**Date**	**Sign.**	**Date**
2% CHG bath Daily										

Terminal Cleansing after Patient Discharge

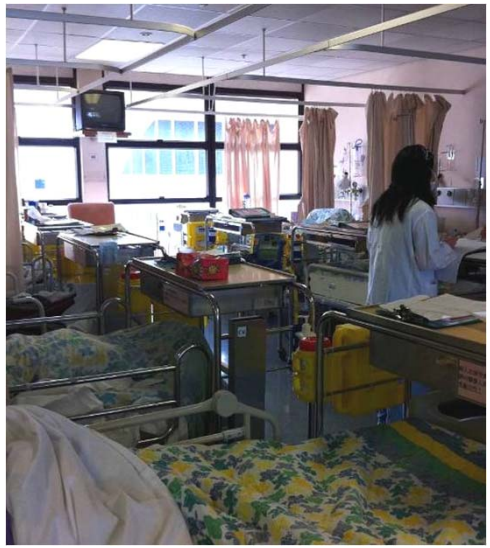


STAFF TRAINING & EDUCATION

QUALITY ASSURANCE FOR CLEANSING PROCEDURES

- "visibly clean" is NOT adequate as a measure of proper cleaning
- Audit tools for housekeeping quality valuable
- Provide feedback to ensure housekeeping performance

A CLEAN ENVIRONMENT FOR PATIENT SAFETY, QUALITY SERVICES AND GOOD HOSPITAL IMAGE



衞生防護中心
Centre for Health Protection

醫院管理局
HOSPITAL AUTHORITY

TRAIN THE TRAINER FOR EH MONITORING

Environmental Hygiene

2011 Jan to Dec: MRSA containment pathway

- briefing sessions
- one to one demonstration and return demonstration sessions to train the supporting staff

2012 1Q: workshops to Ortho and Surgical department

Due to time constraints, high turnover rate of supporting staff, in order for environmental hygiene compliance to be sustainable in long run

From 2012 2Q onwards: Train the trainer sessions are provided

Train the trainer for Environmental Hygiene

Contents:

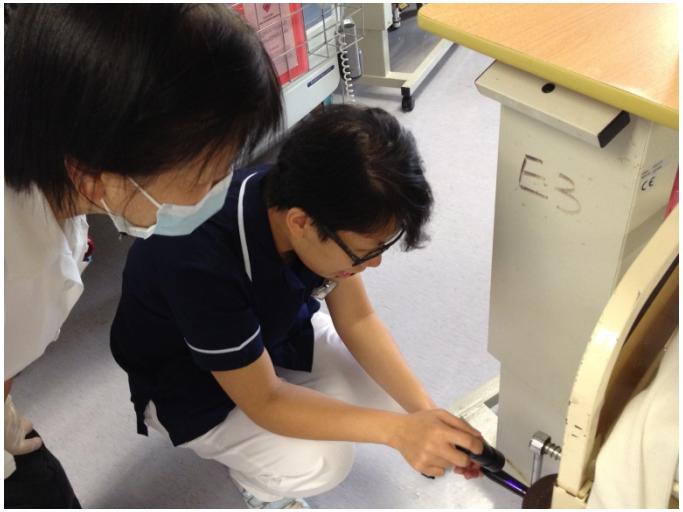
- Color coded scheme
- Environmental hygiene assessment techniques
- 2% CHG bathing

Responsibility of trainer:

- Provide environmental cleaning training to supporting staff
- Perform Environmental hygiene assessment
- Monitor compliance regularly

Return demonstration of Environmental hygiene assessment by trainer

Train the trainer



Problems encountered

- Manpower
  - Use 2 in 1 disinfectants for environmental disinfection
  - Reorganized work by management staff
  - Supply extra manpower for environmental hygiene
- High cleaning staff turnover → frequent training
- Resources limited
- Sustainable for QIP
  - Nominate staff (trainer) to monitor the compliance regularly
  - Empower ward staff to participate
  - Show the data and current feedback for improvement
  - Encourage and appreciate staff

阻截 MRSA 傳播 試行計劃
使用抗菌劑潔身指引
(2%葡萄糖酸氯己定)
使用抗菌劑潔身可代替日常沐浴
次序
① 頸、肩及胸膛
② 腹部
③ 雙臂及雙手
④ 下肢正面
使用 Microshield 沐浴指引
-歡迎 MRSA 病人/家屬取閱
潔身抗菌劑(Microshield 2)使用指引
(2%葡萄糖酸氯己定溶液)
使用抗菌劑(Microshield 2)潔身指引
(2%葡萄糖酸氯己定)
清潔病人的環境，由(外圍)清潔至(內圍)的環境
1. 病人的四周 (外圍)
➢床頭按鈕
➢床頭支架
➢病人儲物櫃
➢床尾櫃及床尾掛架
2. 病人的中心 (內圍)
➢床欄
➢喚人鈴
MRSA 工作記錄表
MRSA 資料小冊子
耐藥性金黃葡萄球菌
資料小冊子

阻截耐藥性金黃葡萄球菌之傳播途徑
Clean hands, safe hands.
基座時候應潔手?
1
2
3
4
5

THANK YOU