Hospital Authority

Quality and Risk Management Annual Report
2012 - 2013
(Apr 2012 - Mar 2013)
ACKNOWLEDGEMENT

We would like to thank all frontline colleagues, hospital risk managers, clinicians, executives of hospitals, and colleagues of cluster quality and risk management departments for their professionalism and dedication in improving patient safety. Their continuous support and contributions in the risk mitigation strategies and programs are the pillars of the journey of further enhancing patient safety.

Patient Safety and Risk Management Department
Quality and Safety Division
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OPENING MESSAGE

Those of us working in healthcare quality and safety certainly understand that we can never achieve what we want to by ourselves alone. We must work together with everyone else within the organization, especially those serving the patients directly. What we can do is to help building systems and building culture, neither of which is easy. In addition to innovation, we must learn from others. One important consideration when we learn from others is the difference in context: a method which works beautifully in one organization may not necessarily work in another. Therefore there is a major need for us to learn amongst different hospitals within the Hospital Authority. Our similarity makes it easier to adapt workable solutions from each other. This annual report is one of those mechanisms to enable such learning and I hope we can make good use of it.

Dr Hing Yu SO
Chairperson, Central Committee on Quality and Safety, HAHO
1. Structure & Initiatives

This report covers the quality and risk management initiatives implemented in Hospital Authority Head Office (HAHO) from 1 Apr 2012 – 31 Mar 2013. During the period, both Quality and Standards Department and Patient Safety and Risk Management Department (PS&RM) have made continuous progress in key areas under the HA’s strategic direction and service priorities.

1.1 Hospital Accreditation

Please refer to “HA Report on Hospital Accreditation 2011 – 2013” for updates on hospital accreditation program in HA.

1.2 Communication and Sharing

Quality Times

Quality Times is a quarterly publication to enhance communication on quality initiatives. In collaboration with the clusters’ Quality and Safety Department, the publication provides a regular platform for sharing of good practices and experiences in HA.
1.3 Quality Initiatives

1.3.1 Sterilization Enhancement

The corporate sterilization enhancement project continued in different areas including facilities upgrade, instrument beef-up, staff training and so on. In particular, the corporate “Guidelines on Disinfection and Sterilization of Reusable Medical Devices for Operating Theatre (OT)” was updated and underwent the final stage of reality check, which was expected to release in 1Q 2014. Development of the corporate Surgical Instrument Tracking System (SITS) for reusable medical devices used in OT was completed and piloted in 3 hospitals, namely Prince of Wales Hospital (PWH), Queen Mary Hospital (QMH) and United Christian Hospital (UCH) in March 2013. System evaluation and further rollout were planned.

1.3.2 Document Control and Management

Document control and management was identified as one of the common gaps in the pilot program of hospital accreditation. Improvements focused on developing the document control policy and framework, and making use of information technology (IT) to improve management, access and search of policies and guidelines.

Clinical policies and guidelines issued by Co-ordinating Committees/Central Committees (COC/CCs) are important documents to support service provision. As an integral part of proper document management, COC/CCs have reviewed and updated their clinical policies and guidelines to ensure their currency. Through collaborative effort of COC/CCs, HA web master, eKG, IT and Q&S, the “Clinical Guidelines” page on HA website (ha.home) was revamped to provide user-friendly access for all clinical policies and guidelines.

To support the management of documents in a sizable organization like HA, an electronic document management system (eDMS) was developed and piloted in Caritas Medical Centre, QMH and some departments at HAHO. System evaluation, enhancement and roll out in more hospitals and HAHO
Committees/departments were underway to work towards an integrated document platform.

### 1.3.3 Credentialing and Defining Scope of Practice

Credentialing and defining scope of practice are measures to ensure that appropriate healthcare professionals have the right skills, qualification, and experience with the appropriate hospital setting and support for the clinical services they provided.

Realising the potential impact of credentialing on service and manpower, HA would adopt an incremental and risk based approach in this development. In formulating the strategies and framework on credentialing, there were wide consultation to clinical specialties and other key stakeholders. HA had also communicated and collaborated with the professional bodies through participating in the Working Group of the Hong Kong Academy of Medicine on its development of policy on credentialing and defining scope of practice.

To facilitate sharing of information on credential activities across cluster hospitals and clinical specialties, a central registry was being developed. COC/CCs were engaged to identify appropriate procedures and align standards/criteria for credentialing and defining scope of practice on clinical activities.

As a common issue of concern during hospital accreditation, a fact sheet on credentialing and defining scope of practice was drafted to outline the position of HA on the development on credentialing and defining scope of practice for better understanding between hospitals and accreditation surveyors.

### 1.3.4 Access Management

In 2012/13, the HA has enhanced the governance structure on specialist outpatient waiting time management with participation of key stakeholders from clusters, specialty experts, statistics, Health Informatics / IT and Cluster Services. It emphasized on a more action focused role in overseeing performance and steering improvement initiatives. To enhance transparency and accountability, posting up the waiting time of specialist service for public reference was initiated. The public reporting was targeted to start in 2013/14. To better manage the waiting time variations between clusters within the routine category, a centrally coordinated mechanism for cross-cluster referral has been piloted in the specialty of Ear, Nose and Throat since August 2012. Different statistics management tools in reviewing waiting time and identifying pressure areas were being developed and refined. In 2012/13, the charts on Specialist Outpatient Booking Patterns were made available at the website of Strategy & Workforce Planning.
In 2012/13, the electronic referral system was extended to all Family Medicine clinics and Accident & Emergency Departments (AED), except North District Hospital (NDH) and Alice Ho Miu Ling Nethersole Hospital. For which, the hospitals in New Territories East Cluster (NTEC) has prepared for the launching of cross-specialty referral in 2013/14. In addition, the revamped version of eReferral was launched in the year, which enabled the generation and capture of unique referral number, addition of a field capturing information on reasons of referrals, as well as archival of the referral letter in the electronic patient record (ePR).

For elective surgery waiting list / waiting time management, the notional (estimated average) waiting time for cataract surgery has been maintained at around 15 months throughout 2012/13. As for total joint replacement (TJR) surgery, new joint replacement centre in Tuen Mun Hospital (TMH) was being planned in Annual Plan 2014/15. To alleviate the pressure of long waiting time for Coronary Artery Bypass Graft (CABG) surgery in PWH, cross-cluster referral of suitable cases was arranged with Queen Elizabeth Hospital and Queen Mary Hospital, and resources were being bided for PWH to increase the operating sessions for CABG in Annual Plan 2014/15.

In 2012/13, efforts were continued to develop common platforms for sharing of information and monitoring of trend in HA computer systems. For instance, a Key Performance Indicator (KPI) on TJR would be launched in coming year to monitor the trend in senior management meeting. Besides, computerized electronic reports for common types of elective surgery such as Gallstone and Renal Stone will continue to be developed to capture real-time information on waiting list and waiting time. Public disclosure of waiting time for selected type of elective surgery was planned to enhance the transparency on waiting time information.

1.3.5 Clinical Measurement

In 2012/13, promulgation of development of Clinical Indicators (CI) was conducted in eight COCs/CCs, committee and groups. Two standard reports were launched in Clinical Data Analysis and Reporting System (CDARS) for CI from COCs of Anaesthesiology and Obstetrics & Gynaecology. There was development work on ten clinical measurements which had been recommended by COCs/CCs. Management Information Portal reports of four Clinical Indicators from COC (Anaesthesiology), COC (Paediatrics) and COC (Surgery) were launched in March 2013.

1.3.6 Operating Theater Utilization

In 2012/13, a consultancy report on operating theatre (OT) efficiency and utilization was issued, which identified five priority areas for further improvement. Subsequently, a pilot OT office was setup at Hong Kong West Cluster to implement the consultancy recommendations.
corporate level, a committee with representatives from seven clusters including surgeons, anaesthetists and nurses was also set up in October 2012 to monitor the progress.

1.4 Advance Incident Reporting System 3 (AIRS 3)

The nomenclature of AIRS had been standardized as “Advance Incident Reporting System” / “早期事故通報系統” in HA. The AIRS 3 is developed with features that facilitate reporting of near miss events (incident stopped before reaching the patient). The first pilot run of AIRS 3 was conducted in Hong Kong East Cluster (HKEC) and NTEC from 1 July 2012 to 12 July 2012. The system was suspended for improving the functionality in user access control and the management of electronic mail for effective communication after receiving feedbacks from the pilot clusters. The Task Force on AIRS Operations had reviewed the progress and rescheduled the plan for further implementation.

To prepare for the second pilot, the AIRS project team had conducted hospital on site briefings to reporters and filter persons. In addition, an AIRS 3 testing site was opened for access and to collect feedback. The second pilot of the AIRS 3 was commenced firstly in Haven of Hope Hospital (HHH) in November 2012 and the run was successful. Thereafter, the pilot was extended to Tseung Kwan O Hospital (TKOH) on March 2013. All hospitals and clinics of Kowloon East Cluster and Kowloon Central Cluster (KCC) had launched the system by April 2013.

With the positive and constructive feedback from the clusters, the AIRS 3 development team continued to enhance the system functions and human interfaces for full live run to all HA hospitals and clinics on 1 July 2013.

1.5 Unique Patient Identification (UPI)

Following the completion of Phase III of the UPI project for ensuring clinical specimens are collected from the correct patient, the PS&RM Department had worked collaboratively with the COC (Radiology) to commence the Phase IV of the UPI project. The Phase IV relates to the implementation of the patient identification workflow to ensure the correct patient is to receive the required mobile radiographic imaging at the bedside. The project had been successfully implemented in PWH and Queen Elizabeth Hospital (QEH). The two hospitals had successfully stopped the patient misidentification incidents and the evaluation had been reported to the COC (Radiology).

In view of the success in PWH and QEH, the Diagnostic Radiography Departments in other cluster hospitals have rolled out the Phase IV by end of 2012. It is envisaged that the project will be further enhanced to adopt the 2D barcode job sheet printing upon availability of the revamped
Radiology Information System (RIS).

The HA has also leveraged the barcode technology to implement the workflow in stillbirth baby identification and had piloted the implementation in UCH and subsequently in Princess Margaret Hospital (PMH). The pilot implementation had been reviewed with the hospitals and the HA Information Technology Services (HAITS) in April 2012. The further roll out plan was supported by the Task Force on Improvement Measures of HA Mortuary Services upon the installation of the wristband printers in the hospital labour wards.

The PS&RM had coordinated the evaluation of adopting the 2D barcode technology in patient identification in Accident & Emergency Department (AED) in PWH and NDH in Jan 2013. The result was satisfactory and hospitals had also shared their experiences in implementing the technology in an accident and emergency environment.

The HA continues to improve the safety in blood transfusion services and is preparing the system for implementing the international Information Standard for Blood and Transplantation (ISBT) 128. The standardized information structure facilitates blood product traceability and infection surveillance. Hence, the current blood transfusion workflows in the UPI devices will be updated to meet the information requirements and safety checks.

1.6 Surgical Safety

The Group Internal Audit (GIA) had conducted an audit on the Phase II and III of the Surgical Safety Policy. The PS&RM Department had coordinated the reviews on the recommendations from the GIA report in the Hospital Chief Executive Round Table Meeting and cluster service directors in meetings. The HAHO will continue to monitor reported events in surgical safety and to engage clusters to make further improvements.

1.7 Procedural Sedation Safety

To enhance the safety of procedural sedation in HA, the Task Force on Procedural Sedation Safety was established in July 2011. It advises on the collaborative planning and implementation of actions to strengthen the knowledge and provision of safe procedural sedation in the HA.

With the support from the Central Committee of Quality and Safety (CCQ&S), Institute of Clinical Simulation was appointed as the training provider of the Commissioned Training Program 2012/13 to provide training to our medical staff who frequently conducts procedural sedation. Six identical courses were organized to cater a total of 120 doctors from July 2012 to January 2013.

Nursing Services Department had also organized Commissioned Training Programs with 4
workshops in 2012/13 which catered 80 nurses in total, for practice of safe sedation.

1.8 Prevention of Inpatient Suicide

Patients who attempt suicide whilst hospitalized are not uncommon. Such incidents could lead to injury or even death. To mitigate the risks of inpatient suicide, the Task Force on Prevention of Inpatient Suicide was formed in 2008, to review data on all reported suicide incidents and to make recommendations on corporate strategies and programs which could be implemented in HA hospitals for the prevention of patient suicide. The Task Force on Prevention of Inpatient Suicide would report to the CCQ&S on the review findings and recommendations.

In 2012/13, the Task Force on Prevention of Inpatient Suicide had started reviewing guidelines on prevention and handling of suicidal behavior in non-psychiatric setting so as to guide early identification and handling of patients at risk of suicidal behavior. To further reduce the risk, the Task Force on Prevention of Inpatient Suicide was also devising a list of facility-related provisions for prevention of inpatient suicide in non-psychiatric setting, which could serve as a reference when planning and designing new wards or major renovation/refurbishment of existing wards other than psychiatric wards.

1.9 Crew Resource Management (CRM)

CRM is a risk reduction program in the HA since 2009. For the purpose of safety culture change, HKEC has piloted the CRM training program to around 2000 staff from 2009 to 2012. Based on the pilot evaluation, KCC and NTWC have introduced simulation training components to
the program and identified sub-themes within the clusters, such as speak up culture, team efficiency and conflict resolution. In order to roll out the program to the other clusters, HA has engaged an external consultancy company in 2012 to advice the development and delivery of CRM training courses. The coming plan is to deliver CRM training under a central coordination of the trainer pool, curriculum design and other relevant training materials, for example simulation scenario and trainer manual. The 4 key specialties involve in the scenario development are Operating Theatre, Intensive Care, Labour Unit and Accident and Emergency.
1. Structure

Committee Structure of Cluster Quality and Safety

2. Overview of Quality and Risk Management Issues

2.1 Hospital Accreditation

Pamela Youde Nethersole Eastern Hospital (PYNEH) passed the Australian Council on Healthcare Standards (ACHS) Periodic Review conducted on 18-22 June 2012. The ACHS Survey Team commended PYNEH for being led by a committed and capable team of executives with ample demonstration of systematic focus on quality and safety for clinical and support services, yet efficient in service provision, throughout the survey. In terms of quality and safety, the ACHS accorded the following four areas in PYNEH with Extensive Achievement (EA):
Criteria 1.1.4 - Outcomes of clinical care are evaluated by healthcare providers and where appropriate are communicated to the consumer / patient and carer.
Criteria 1.1.5 - Processes for clinical handover, transfer of care and discharge address the needs of the consumer / patient for ongoing care.
Criteria 2.1.1 - The organization’s continuous quality improvement system demonstrates its commitment to improving the outcomes of care and service delivery.
Criteria 3.2.1 - Safety management systems ensure the safety and wellbeing of consumers / patients, staff, visitors and contractors.

2.2 Simulation-based Healthcare Training

The Nethersole Clinical Simulation Training Centre (CSTC), an extension to the HKEC Training Centre for Healthcare Management & Clinical Technology, was open in December 2012. This marked another milestone in the development of Clinical Simulation Training, further to the establishment of the Minimal Access Surgery Training Centre in PYNEH.

CSTC provides modern facilities and optimal set up for the teaching and practice of simulation training to sharpen the clinical skills of the staff with the ultimate aim of enhancing patient safety. In line with the international trend, trainings have integrated individual skills training with team-based training. With the basis of the Crew Resource Management (CRM) Training which started at PYNEH in 2009 to enhance the teamwork skills with simulation-based healthcare training, CSTC is the endeavour helping healthcare professionals establish rapport among team members.
2.3 Opening of “Minimal Invasive Orthopaedic Integrated Operation Room”

A newly renovated “Minimal Invasive Orthopaedic Integrated Operation Room” was officially open on 12 November 2012. In this operation room, there is an O-arm which is the first installed in Pan-China region (China, Taiwan, Hong Kong). Together with computer navigation systems and multi-channel matrix system, surgeons can view real-time endoscopic, microscopic, radiological, computer navigation and other relevant images at ease simultaneously. This new facility not only enhances the training of young surgeons and communication among operation staff but also improves surgical safety and efficacy.

2.4 Emergency Preparedness

Ferry Collision Disaster (1 October 2012)

The ferry collision disaster on 1 October 2012 which resulted in 39 killed and 92 injured has fully testified the capability and capacity of the Cluster in responding to emergencies. PYNEH, Ruttonjee and Tang Shiu Kin Hospital (RHTSK), St. John Hospital (SJH) and North Lamma General Outpatient Clinics activated their emergency mechanism in the immediate rescue process. Colleagues worked tirelessly in the race against time to save lives and provide appropriate treatment and support to the injured and their relatives. Members of the public highly commended hospital staff for their tireless efforts during the rescue operation, and praised colleagues as being highly professional, efficient, courageous and selfless.

The smooth operation in the rescue process in HKEC can be attributed to the regular emergency response drills and exercises for ensuring the effectiveness of the communication network and emergency response plans.

Emergency preparedness is under the governance of the HKEC Emergency Preparedness Committee. The structure has been revised by establishing 4 sub-committees to specifically manage the 4 components of emergency preparedness, namely Disaster Management, Emergency Management, Emergency Communications and Fire Safety. Subject experts and department representatives in the
sub-committees review and improve the work of emergency and disaster management through risk identification, contingency planning, resources planning, training and exercise, and implementing improvement programmes with a view to enhancing the capability of the Cluster in the preparation of responding to emergencies.

2.5 Paediatric Early Warning Scoring System (PEWS)

To facilitate early identification of children with deteriorating medical conditions, a paediatric early warning system developed by PYNEH was implemented in 2010. Age specific warning ranges of vital signs are premarked with color-coded lines on the routine observation charts. Increased nursing or medical attention is called for when routine observations fall into the warning ranges. Evaluation showed that it is a simple and sensitive tool that did not require additional work in score calculation like other tools. A study comparing the PYNEH-PEWS and Brighton-PEWS was presented in the HKEC 5th Q&S Seminar in 2013. It showed that the former system was more sensitive in identifying deteriorating cases, though with inevitably a higher false alarm rate.

3. Risk Prioritization

3.1 Identified Risks for 2012-2013

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<td>2 Medication Safety</td>
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<td>3 Patient Identification</td>
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<tr>
<td>4 Infection Control</td>
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<tr>
<td>5 Pressure Ulcer Prevention &amp; Management</td>
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<tr>
<td>6 Surgical Safety / Invasive Procedure Safety</td>
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<td>7 Communication</td>
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<td>8 Suicide</td>
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<td>9 Safe Mobilization of Fragile Patients</td>
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<td>10 Staff Competence</td>
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<th>Non-clinical / Operation Risks (not in order of priority)</th>
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<td>1 Occupational Safety and Health</td>
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<td>2 Equipment Failure</td>
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<td>3 Security</td>
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<td>4 Data Security and Confidentiality</td>
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<td>5 Facilities Defects</td>
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<td>6 Medical Supplies – Product Quality</td>
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<td>7 Patient Transfer</td>
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<td>8 Fire Safety</td>
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### 3.2 Identified Risks for 2013-2014

#### Clinical Risks

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<th>Risk Area</th>
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<td>1</td>
<td>Medication Safety</td>
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<td>2</td>
<td>Infection Control</td>
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<tr>
<td>3</td>
<td>Fall</td>
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<td>4</td>
<td>Patient Identification</td>
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<td>5</td>
<td>Staff Competence</td>
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<td>6</td>
<td>Pressure Ulcer Prevention and Management</td>
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<td>7</td>
<td>Surgical Safety / Invasive Procedure Safety</td>
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<td>8</td>
<td>Suicide</td>
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<td>9</td>
<td>Clinical Handover &amp; Communication</td>
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<td>10</td>
<td>Radiation Safety</td>
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#### Non-clinical / Operation Risks (not in order of priority)

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<th>Risk Area</th>
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<td>1</td>
<td>Manpower</td>
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<td>2</td>
<td>Supplies</td>
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<td>3</td>
<td>Patient Transfer</td>
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<td>4</td>
<td>OSH</td>
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<td>5</td>
<td>Facilities Defects</td>
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<td>6</td>
<td>Data Security &amp; Confidentiality</td>
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<td>Fire Safety</td>
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<td>10</td>
<td>Financial</td>
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4. Risk Reduction and Quality Programmes

4.1 Identified Clinical Risks for 2012 -2013

<table>
<thead>
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<th>Programme</th>
<th>Action Taken / Outcome</th>
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<tbody>
<tr>
<td>I. Fall</td>
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<tr>
<td>a. Identify specialty-based Red Flag patients (i.e. with high fall risk) and institute appropriate intervention</td>
<td>• The initiative has been piloted in three specialties namely Medicine, Surgery and Oncology. Regular review is being conducted</td>
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<td>b. Revisit the cutoff point of Morse Fall Scale in acute hospital settings</td>
<td>• Literature review is being conducted and appraised using SIGN checklists. Evidence-based nursing approach will be taken to formulate a cutoff point</td>
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</table>
| c. Staff Training          | • Five cluster-wide Train-the-Trainers workshops for nurses on fall risk assessment were conducted in 3Q12  
                                 • A total of 153 nurses participated in the workshops |
| II. Medication Safety      |                                                                                         |
| a. Enhance pharmaceutical services in Specialist Outpatient services | • Increased dispensing staff in Specialist Outpatient Clinics (SOPC) by phases to meet the increasing service demand  
                                                                             • Provided drug counseling services for high-risk SOPC patients |
| b. Extend pharmacy services hours | • Pharmacy service hours in RHTSK has been extended to 11:00pm, 7 days a week since 7 Jan 13  
                                    • Reduced nursing workload and minimized possible medication incidents |
| c. Reduce ward stock items and increase Individual Patient Dispensing items for MARs to improve drug safety in RHTSK Pharmacy | • High risk medications including all NSAIDS, beta-lactam antibiotics and oral hypoglycemic drugs were removed from ward stock by 1Q13  
                                                                                • Nursing workload on ward stock management was significantly reduced |
| d. Revision of Guidelines on Drug Allergy Warning Mechanism and related measures | • Revised Drug Allergy Section on MAR with enhanced features  
                                                                                       • Medication incident related to Known Drug Allergy was zero in 1Q13 |
| e. Revise “Treatment / Investigation Form” used at SOPD | • A new section “No known allergic history to the injected drug” was added to the lower portion of “Treatment / Investigation Form” at SOPD. Prescribers were required to complete the check box before nursing staff would administer the requested order  
                                                                         • No incidents related to known drug allergy from SOPD medication orders since 4Q12 |
| f. Staff Training          | • Cluster Q&S Forum on “Medication Incidents – Lessons to Learn” conducted on 9 Aug 12 & roadshow on 29 Feb 12  
                                 • HKEC Attendance were 299 and 358 in Feb and Aug 12 respectively |
g. Medication Safety Awareness Program to increase staff awareness on medication safety

- Increased the awareness of junior nurses of known drug allergy by using cartoon poster
- Standardized MAR documentation to increase understanding between healthcare professionals
- Facilitated workflow by improving storage and labeling of medications
- Mandatory checking on any drug allergy history before drug administration in PYNEH
- Developed Cluster Standard Operating Procedures on Handling of Dangerous Drug in ward / unit

h. Promote the reporting culture of near miss medication cases among nursing staff in PYNEH to enhance patient safety, and to roll out the project to cluster hospitals

- Since the project’s inception in Sep 11 to Jan 13, there were 154 near miss cases reported by 11 clinical departments. The number of near miss cases reported was twofold post implementation of the project.
- Nursing Services Division (NSD) developed case scenarios from the near miss cases and organized educational workshops for nurses on iSBAR in Dec 12. A total of 58 nurses attended with average satisfaction score of 4.98 (6 point scale)
- The project was shared in ISQua’s 29th International Conference 2012 in Geneva, Switzerland; HA Convention 2012; and HKEC Near Miss Forum on 28 Mar 13

### III. Patient Identification

a. Implement 2D barcode scanning on blood and non-blood specimen collection in cluster hospitals

- User briefing sessions (Train-the-Trainers) were conducted:
  - 3 sessions in PYNEH (22, 29 Jan & 26 Feb 13);
  - 2 sessions in RHTSK (4 & 7 Feb 13)

- Launch of 2D Barcode Scanning System (Phase III) – Blood & Non–Blood Specimen Collection:
  - PYNEH / RHTSK / Tung Wah Eastern Hospital (TWEH) on 5 Mar 13
  - SJH / Cheshire Home (CCH) / Wong Chuk Hang Hospital (WCHH) on 12 Mar 13

b. Engage patients in the correct patient identification process

- Produced and launched “The Correct Patient Identification Patient Engagement Video” in HKEC on 1 Mar 13
- The video was broadcast in outpatient areas of HKEC to heighten patient self-awareness on the importance of correct identification

### IV. Infection Control

a. Prevent Intravascular (IV) associated infection

- Surveillance conducted in Aug 12 to evaluate the prevalence on IV catheter utilization; related infection; and to examine the current care practice
  - 40% patients had at least one IV line
  - 50% were for drug administration and 42% were for fluid replacement
  - 1.1% noted with IV associated infection
- Findings were presented in various nursing meetings and good practice was reinforced via seminar and practice workshop

b. Collaborate with Department of Surgery on 4 improvement actions were disseminated to concerned parties:
### Hong Kong East Cluster

| Implementation of SSI preventative bundle | **•** Ensure correct choice, dosage and timing of surgical prophylaxis  
**•** Promote redosing of surgical prophylaxis  
**•** Prevention of perioperative hypothermia  
**•** Use 2% Chlorehexadine-alcohol for skin preparation  
Continuous improvement observed in Colon Surgical Site Infection (SSI) rate. Compared with 2011, 21% reduction was noted in 2012 |
| --- | --- |
| Bundle approach to improve MRSA bacteraemia rate | **•** MRSA inpatient list was issued to department daily  
**•** Hand hygiene promotion  
**•** Use of 2% CHG bath agents  
**•** Dedicated non-critical equipment  
**•** Use of disposable wipes for environmental cleansing to high touch areas  
**•** Updated MDRO guideline support with training  
**•** Cluster MDRO pamphlet was developed for patient educations  
**•** Practice on line insertion and care with Renal Unit was reviewed  
**•** Compared with 2011, 14% reduction was noted in HKEC |
| Collaborate with Housekeeping Team on ways to enhance environmental hygiene | **•** Disposable items were used to minimize chance of cross infection  
**•** Environmental disinfection frequency for MDRO cases was increased |
| Promote infection control practices in cluster | Launched “Infection Control Awareness Months” with three main themes:  
**•** Hand hygiene  
**•** Control the spread of MDROs  
**•** Prevention of peripheral venous line related infection  
Total 1800 staff participated in the Awareness Month activities. Highlighted important message in HKEC ID&IC newsletter (12 Dec 12) |
| Promote hand hygiene practice among staff | **•** Hand hygiene awards were issued to good compliance areas  
**•** Hand Hygiene Week was organized to raise staff awareness  
**•** Hand Hygiene observational survey to monitor the compliance  
**•** Hand Hygiene compliance was communicated to Department individually  
**•** Hand Hygiene methodology was introduced to ICLN for department based monitoring  
**•** Continuous improvement was noted for 3 consecutive years in HKEC from 67% (2009) to 78% (2012) |
| Enhance sterilization standard in Operating Theatres | **•** Total elimination of using chemical disinfectants (Cidex) for reprocessing rigid endoscopes  
**•** Nil flash sterilization for implants and related instruments |

### V. Pressure Ulcer Prevention & Management

<p>| a. Staff Training | <strong>•</strong> Provided training to supporting staff, healthcare assistants, immediate home-carers and healthcare workers in old-aged homes |</p>
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<th>Conducted Wound Management Accredited Course - The 1st Advanced Wound Management Course (endorsed by the European Wound Management Association) was completed in Sept 12</th>
</tr>
</thead>
</table>
| b. Staff Learning & Sharing | • Issued 1st HKEC Wound Bulletin in Aug 12  
• Uploaded Wound Management Education file / package onto HKEC website once every two months |
| c. Compliance check on pressure ulcer and wound management | • Conducted 1st inter-hospital wound round in Jan 13 led by the HKEC Nurse Consultant (Wound Care)  
• Piloted weekly multi-disciplinary pressure ulcer round led by Geriatrican; Nurse Consultant (Wound Care); Wound link-nurses among Medicine; Surgery; Psychiatric and Oncology |

### VI. Surgical Safety / Invasive Procedure Safety

<table>
<thead>
<tr>
<th>a.</th>
<th>Implement the practice of briefing and debriefing in departments to enhance patient safety</th>
</tr>
</thead>
</table>
| | • Piloted the new Surgical Safety Checklist incorporating briefing and debriefing elements in all elective operations under General Anaesthesia and Spinal Anaesthesia on 8 Oct 12 in PYNEH  
• Planned full implementation in cluster hospitals |
| b. | Ensure correct patient identification and enhance patient safety at Interventional and Bedside Procedures in HKEC |
| | • Set up a working group for developing appropriate and effective initiatives  
• Implemented respective interventional and bedside procedures safety checklists and standard operating procedures. |

### VII. Communication

<table>
<thead>
<tr>
<th>a.</th>
<th>Management and communication training programmes for senior executives, managers and frontline staff</th>
</tr>
</thead>
</table>
| | • Executive Management Programme for senior management of HKEC  
• Advanced Management Programme for middle management of HKEC  
• Junior Managers Development Programme for junior managers of HKEC  
• Tailor-made Departmental Training for Department of O&T of PYNEH, Allied Health, HRD & Department of Anesthesia, Surgery, O&T, C/CICU & OT of RHTSK  
• Service Culture Training Programme for the frontline and newly recruited staff  
• HKEC Six Thinking Hats for Senior Executives  
• HKEC Six Thinking Hats for Frontline Supervisors  
• Vision-Broadening Training Series for all staff of HKEC  
• Life’s So Good Training Series for all staff of HKEC  
• Staff Communication Talk for Staff Communication Ambassadors  
• HKEC Staff Communication Workshop and Talk Series for all staff  
• Workshops on "Effective Team Communication in Workplace" |
| b. | Conduct CRM Training Program |
| | • 28 doctors, nurses and allied health members, including HCEs, attended the briefing session for Cluster management & executives  
• 30 doctors, nurses and allied health members attended the Train-the-trainer workshop, and took on-board to be CRM
trainers
• 12 courses of CRM training program were conducted. A total of 370 doctors, nurses and allied health staff in the Cluster attended

### VIII. Suicide

| a. | Evaluation on Suicide Prevention Program | • Conducted a survey to collect feedback from ward managers on the Cluster SOP of “Prevention of Patient Suicide in General Wards” and the “Suicide Risk Screening and Suicide Precaution Observation Record (General Ward)” |
| b. | Conduct Patient Safety Round | • Carried out Patient Safety Round (PSR) in cluster hospitals. Facilities with safety and security concerns were identified for further improvement. Further feedback on the Observation Record was also collected |

### IX. Safe Mobilization of Fragile Patients

| a. | Pilot a New Alert System for Safe Mobilization of Fragile Patients | • Piloted in TWEH and RHTSK the new system with signage card indicating level of assistance required at bedside and in the form of a badge carried by patients. Feedback was received • Proposed refinement option with stickers to deal with the problem of requiring frequent updating |

### X. Staff Competence

| a. | Launch programmes to heighten staff's awareness on quality & safety | • Promoted quality and safety culture in Mar 13 – the month designated as “HKEC Quality and Safety Month”. 20 activities including educational forums, drills, photo contest and initiatives for enhancing clinical practices were carried out in the month • Conducted HKEC 5th Quality & Safety Seminar. Renowned keynote speakers namely Prof E K Yeoh, Prog Gabriel Leung, Dr Ricky Szeto and Dr C C Lau attracted a full house of participants • Conducted HKEC Quality & Safety lunch forums on heated topics including Medication Safety, Blood Transfusion Safety and Near Misses |
| b. | Conduct Nursing Succession Planning and Leadership Enhancement Program with Post Workshop reinforcement activities | • 3 GM(N)s, 25 DOMs/SNOs & 83 WMs attended the program conducted by a consultancy with the aim to: (1) Engage DOMs to provide leadership and support to nurse managers (2) Enlighten the future changes in healthcare financing and strengthen the roles, functions and competencies of nurse managers |
| c. | Facilitate Nurse Leaders and Nurse Managers to attend overseas quality and leadership enhancement program | • Sponsored 66 Nurse Leaders and Nurse Managers for study trips in Singapore and Taiwan with the aim to: (1) Raise the awareness of creativity in leadership through sharing with overseas nursing experts (2) Broaden the horizon of nursing leadership and contemporary nursing practice |
d. Promote the culture of Evidence-Based Nursing (EBN)
   • 108 participants attended an opening seminar introducing the EBN concept and sharing the positive experience in May 12
   • EBN Workshop and Tutorial were conducted from Jul to Oct 12
   • 4 EBN projects were completed at the end of the tutorials and presented in the HKEC 5th Quality & Safety Seminar on 13 Mar 13

4.2 Identified Non-clinical (Operational) Risks for 2012-2013

<table>
<thead>
<tr>
<th>Programme</th>
<th>Action Taken / Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Occupational Safety and Health</td>
<td></td>
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</tbody>
</table>
| a. Staff Wellness Program | • Conducted over 10 classes of Thera-Band Exercise among all cluster hospitals for muscle power improvement
• Conducted hearing protection program and developed guidance notes for hearing protection for P&O staff |
| b. Workplace Violence Prevention Program | • Launched web-based Basic Management of Violence & Aggression (Level 1) in the new HKEC OSH Website with over 1800 attendance as at Jun 13
• Conducted Workplace Violence Drills in AED PYNEH and AED RHTSK on 31 May 12 & 17 Jul 12 respectively |
| c. Safety Awareness Program | Conducted Cluster OSH Forum on 15 Jan 2013 with a total attendance of 700. The Forum consisted of a recognition ceremony, four talks, eight workshops, and a lunch time game booth |
| d. Enhancement of OSH website & development of e-safety courses | The HKEC OSH website and the e-safety programmes were launched in Jun 2012. 4 mandatory e-safety programmes were uploaded to the website for continuous safety training purpose |
| II. Equipment Failure | |
| a. Replacement of aged minor and major equipment in 3-year and 5-year rolling plans | • 854 pieces of medical equipment have been replaced
• 66% of our medical equipment under the age of 10 achieved |
| b. Risk Assessment of minor and major equipment | • Conducted annual risk assessment
• Ensured the most suitable and appropriate level of maintenance on medical equipment through the EMSTF maintenance service |
| c. Maintenance of high risk equipment | Practised and achieved zero tolerance for preventive maintenance of high risk equipment in Schedule I hospitals |
| III. Security | |
| a. Staff Training | • 420 participants in HKEC attended the HKEC Security Forum delivered by Crime Prevention Bureau on 14 Mar 13.
• Increase of 45% on the hours of security training per 1000 hospital staff in HKEC over 11/12 F.Y. |
<p>| b. Strengthen access control | Facilitated regular change of door code(s) for access up to department level through reminders |</p>
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<tbody>
<tr>
<td>c.</td>
<td>Strengthen security installations</td>
<td>CCTV, Access Control System and Burglar Alarms were installed at various critical areas in cluster hospital to strengthen monitoring and control of security after risk assessment.</td>
</tr>
<tr>
<td>IV.</td>
<td>Data Security and Confidentiality</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Installation of Automatic Transfer Switch (ATS)</td>
<td>Enhanced power protection thus reduced the network interruption due to power failure.</td>
</tr>
<tr>
<td>b.</td>
<td>Enhance access control to patient data</td>
<td>Completed the review on HKEC CMS accounts not being used for longer than 1 year (based on the last login date) on 7 Jan 13. A total of 596 inactive CMS accounts were thus inactivated.</td>
</tr>
</tbody>
</table>
| c. | Departmental Staff Compliance Check on Information Security & Privacy every 18 months | • Conducted Department Self Compliance Check using HA checklist in Feb 13  
• 100% compliance rate after completion of improvement actions. |
| d. | Data Privacy Training to DH staff working in hospitals | All DH staff completed the Data Privacy training which being the prerequisite for granting the access right to CMS accounts. |
| V. | Facilities Defects |   |
| a. | Enhance facilities to strengthen support to healthcare professionals | • Replaced 27 pieces of aged plants e.g. AHU, exhaust and fresh ventilation fans, sea water pump valves  
• No incident report has been received. |
| VI. | Medical Supplies – Product Quality |   |
| a. | Quality Control on incoming supplies | • Tightened up sampling size for Incoming Quality Inspection according to the HAHO’s updated guidelines  
• Adopted more stringent inspection on products with safety alert / product recall issued. |
| b. | Factory inspection | Inspected the production plants of three manufacturers in Shanghai & Suzhou from 12 to 15 Mar 13 with HAHO representatives, facilitating referencing the best practice in the medical consumable industry. |
| VII. | Patient Transfer |   |
| a. | Enhance Non-Emergency Transport Services (NEATS) | • Enhanced communication with ward staff and managed to sustain zero unentertained request with additional resources and manpower made available to cope with increased demand and new service programmes  
• Achieved 40% of the crew with 3-man teams per trip  
• Provided structured training programme to all new crew staff within 6 months of appointment to assure the core competence of NEATS crew  
• Enhanced supervision for more ride checks, on-site inspections, and wide use of Global Positioning System. |
| VIII. | Fire Safety |   |
| a. | Risk Assessment and Inspection | • Conducted monthly risk assessment jointly by hospital administrators and department/unit i/c to raise awareness and seek improvement. Positive feedback from end users on the risk assessment round were received  
• Conducted weekly inspection on fire safety installation by security guards. |
b. Fire Fighting Equipment and Installations
- Upgraded fire services installations in cluster hospitals to contemporary standards
- Adopted labeling system with inspection date and next-due date for easy identification and compliance
- Conducted quarterly wellness random check on fire services installations e.g. smoke detectors, break glass alarms, etc. in PYNEH jointly by EMSD, contractor and foremen

c. Fire Evacuation Drill
Conducted fire evacuation drills with debriefing delivered by FSD in all cluster hospitals

d. Staff Training
- Provided on-line video training to enrich staff’s knowledge on fire safety
- Conducted talks and professional training for fire ambassadors and administrators by FSD

4.3 Other Quality Initiatives

4.3.1 Medication Safety

To avoid medication incidents of Known Drug Allergy, a series of initiatives have been implemented in 2012/13, eventually achieving zero medication incidents on known drug allergy in 1Q13:

a. HKEC piloted an initiative to allow access right for pharmacists to enter patient’s drug allergy history to the Clinical Management System. This fills possible time gap and ensures update of drug allergy information.

b. The HKEC Pharmacy has started 24-hour Pharmacy service, clinicians can clear any doubts on drugs instantly on the phone.

c. Eye-catching posters and bulletins on medication safety were posted up in clinical areas and electronic displays (i-Display) in the hospital compound to remind staff on the safety tips on prevention of medication incidents.

d. The St. John Hospital Drug and Therapeutic Committee organized a slogan competition with the aim to enhance staff awareness on medication safety for minimizing medication incidents during August – September 2012. A prize presentation ceremony was held on 12 October 2012.

4.3.2 Correct Patient Identification

a. 2D Barcode Scanning System for Blood and Non-Blood Specimen Collection

In preparation of the full implementation of 2D Barcode Scanning System (Phase III) for Blood & Non-Blood Specimen Collection in March 2013, the HKEC Working Group on
Implementation of 2D Barcode System organized five Train-the-Trainers sessions during January and February 2013. To ensure competency, Standard Operating Procedures and Work Instruction were made available on the HKEC website and all users were required to complete an online quiz.

b. Patient Engagement Video

“Patient identification” was ranked among the top 3 clinical risks in HKEC in 2012/13. Besides the usual campaigns involving the HKEC staff in promoting "Correct Patient Identification", in 2012/13 we also focused on engaging the patients and their relatives to increase their self-awareness to ensure correct patients receive correct medication / treatment. A short video was produced for broadcasting in outpatient areas in March 2013 as a patient engagement exercise.

c. Font Size in Laboratory Report

For better risk management in patient identification, initiatives have also been made to increase the font size of patient identifiers (HKID and name of patient) on all laboratory reports with bold face with effect from 10 October 2012.

4.3.3 Safety of Remote Blood Bank Type Refrigerators

For risk reduction, the Cluster Blood Transfusion Committee has reviewed and consolidated the number of blood bank type refrigerators from ten to seven. The Standing Operating Procedures on Maintenance and Operations of Remote Blood Bank Type refrigerators has been revised and a Briefing Session was conducted on 15 June 2012 to brief staff on the proper procedures in particular the Temperature Monitoring with alarm system, maintenance record and better utilization of blood units.

5. Learning and Sharing Information

5.1 Quality & Safety Month

With the aim to further cultivate among staff members the awareness on quality and safety and to reaffirm the
positive culture that staff has been striving for, March 2013 was designated as the HKEC Quality and Safety Month. There were altogether 20 activities including educational forums, drills and photo contest. Initiatives for enhancing clinical practices like Interventional and Bedside Procedures Safety were implemented in the Month too.

The HKEC 5th Quality and Safety Seminar being the climax of the Quality and Safety Month was held on Wednesday, 13 March 2013. Renowned keynote speakers, namely Prof EK Yeoh, Prof Gabriel Leung, Dr Ricky Szeto and Dr CC Lau, attracted a full house of participants. There were six sub-themes, namely: hospital risks mitigation; optimizing quality & efficiency; healthcare ethics; patient satisfaction & engagement; enhancing team communications; and staff wellness, safety, satisfaction & engagement. Keen competition for the best scientific-based project and the best programme-based project awards added colour to the Seminar.

Ruttonjee and Tang Shiu Kin Hospitals organized two identical sessions of seminar on Document Management on 26 February and 15 March 2013. The seminars aimed to share the good practice of quality document management and control, taking reference from the international standard. A total of 178 colleagues attended the seminars.

Tung Wah Eastern Hospital conducted its Quality Improvement and Experience Sharing Forum on 1st March 2013. Dr Cheung Wai Lun, Allen, Director (Cluster Services) of the Hospital Authority Head Office, was invited as the keynote speaker of the Forum. There were 7 oral presentations and 13 poster presentations at the Forum. The total number of attendance was 111.

5.2 Wound Care Management

HKEC continues its annual Wound Symposium inviting overseas counterparts sharing their good practices in wound management. As part of the strategy for staff to learn and grow, a series of information sharing and training were rolled out. These included Advanced Wound Certification Course (1st accredited by the European Wound Management Association [EWMA] in Hong Kong) held in September – November 2012; the first issue of HKEC Wound Bulletin; and regular issuance of web-based wound management education package.
5.3 Infection control

August and September 2012 were the “HKEC Infection Control Awareness Month” to enhance staff’s awareness and knowledge, in addition to the regular issuance of the “Infectious Disease and Infection Control Newsletter”. A series of activities have been arranged.

5.3.1 “Hand Hygiene Week” 潔手關注週 (6 – 11 Aug 2012 in PYNEH)

There were two activities. On 8 Aug 2012, Dr Joseph Tai, SNO(IC) QMH, was invited to conduct a seminar on “Hand Hygiene Compliance: Who Else Can Help?”, followed by an award presentation to departments with the best hand hygiene performance 2012. On 10 Aug 2012, game booths were held with promotional souvenirs distributed to participants.

5.3.2 Multiple-drug Resistant Organism (MDRO) Prevention Week 耐藥性細菌關注週 (13 – 19 Aug 2012)

An education pamphlet “齊認識多重抗藥性惡菌” has been designed for distribution to patients with MDRO during discharge.

A roving exhibition on “耐藥惡菌齊關注” with 5 exhibition boards on MDRA, MRPA, MRSA, VRE and CRE were displayed in all cluster hospitals according to the preset schedule.

The HKEC Infection Control Awareness Month was adjourned with a seminar conducted by Dr H L Ng, AC, TMH sharing the topic “The Potential Role of Accessories and Mobile Communication Devices in the Transmission of Nosocomial Pathogens” in the Closing Ceremony held on 3 September 2013.

5.4 Knowledge Sharing Visits

The Cluster Quality & Safety Office organised “Knowledge-sharing Visits on Quality and Safety” to high-reliability organizations. The objectives of these visits was to provide colleagues with opportunities to open up their vision beyond the HA and learn from these organizations in managing quality and safety issues. 200 staff visited organisations including Hong Kong Police
5.5 Modified Early Warning Scoring System (MEWS)

HKEC has implemented MEWS since 2008 with the aim to identify patients at risk of deterioration and urgent need for active intervention and enhance communication between healthcare professionals for safe and effective patient management with excellent outcomes. MEWS is welcome by staff with a significant drop noted in the crude hospital mortality rate in ICU.

HKEC colleagues are keen to share the encouraging results with counterparts in the healthcare sector. The first presentation was made in ISQua 2009. In 2012, a follow-up review of the Project was presented in the HA Convention and again in ISQua at Geneva. To strengthen positive image in the community and communicate with the public, HAHO arranged another media interview for 30 Nov 2012.

5.6 Near Miss Reporting

To develop strategies to enhance near miss reporting, the HKEC Working Group on Near-Miss Reporting was set up with its first meeting held in February 2013.

A Near-Miss Reporting Forum was held in March 2013 with over 350 attendance of clinical staff. Evaluation revealed over 98% of respondents agreed that the forum enhanced alertness of staff towards quality and safety issues with a view to effecting behavioural changes in daily work practices.

The Working Group had designed a new cluster-wide reporting form as an easy medium for reporting near-misses and for Quality & Safety Office to capture data for review and analysis in the meantime before AIRS 3.0 was launched.
5.7 Occupational Safety & Health (OSH)

The 2nd HKEC OSH Forum was held on 15 January 2013. The theme this year was “Stay Healthy, Work Happy”. The Forum aimed to promote OSH culture, from safety to wellness, through a series of activities which included a recognition ceremony, 4 seminars, 8 workshops, and OSH lunchtime game booths. The total attendance was over 700.

The HKEC OSH Committee continues its efforts in sharing of good practices for a safe work environment by issuing HKEC OSH Newsletters and organizing quarterly gatherings of the OSH Link Persons.

5.8 Quality Bulletin

Starting from April 2012, monthly electronic Quality Bulletin has been issued. This one-page Bulletin brings concise message on hot issues to the attention of all staff. Comic strips have been used to make it interesting and eye-catching. Excellent feedback has been received.

6. The Way Forward

2012/13 has been a busy year in which we have done a lot to enhance the quality and safety culture of our staff. In the coming year, we shall consolidate on our achievements; review our work to plan our next course in the quality and safety journey.
1. Structure

2. Overview of Quality and Risk Management Issues

2.1 Incident Notification and Management

Review of incident response and notification was conducted in 2012/13 with the aim to uphold early notification of hospital management and stakeholders and to manage family of victims to facilitate re-union. Actions included reinforced “Group Paging Codes” of ‘888’ and ‘999’ for major incident activation and disaster plan respectively. A “Major Incident Call Group” was formed to facilitate internal notification and update. Testing of major incident handling in 2012 included Lamma Island Ferry Collision, Johnston Road buses collision, and incidents relating to patient data privacy. Modifications were made following debriefing of each incident.
2.2 Document Management System (DMS)

The DMS system is an IT platform to better organize documents and streamline document approval and review process. It enables staff to perform their role and duties in a safe and effective manner through a single point of access to HA policies, guidelines, protocols, etc. Each document is auto-allocated a unique identifier which has full audit trail of author(s) and document properties. Another function of the DMS provides automatic notifications for document reviews and updates thus ensuring older documents are removed from circulation.

In collaboration with Hospital Authority Head Office and Caritas Medical Center, Queen Mary Hospital (QMH) has piloted the DMS since August 2012 and the DMS site shall start full function in 3Q 2013.

2.3 Risk Register

To proactively manage risks within the cluster, the Risk Register concept was implemented since January 2012. Briefing sessions with follow up workshops were organized for each department / division of the cluster. By 1Q 2013, 53 out of 54 departments / divisions have been briefed. Many clinical departments in QMH have formed risk management committees to address the ongoing risk in their respective departments. Cluster hospitals in line with QMH have also implemented risk register framework in most departments.

2.4 Cluster Approach to Clinical Audit

As an important tool for assuring the quality of patient care, audit is widely conducted in the year 2012/13. A total of 67 clinical audits were performed, an increase of 37% in comparison of 44 audits conducted in 2011/12. Some audits were conducted among cluster hospitals, e.g. surgical safety, case notes review, blood transfusion, etc. We shared good practices and areas for improvement.

2.5 Infection Control Achievement

HKWC’s infection control team’s steadfast effort and commitment in enhancing infection control knowledge and improving on care practices has been well supported by colleagues.
Prevention of nosocomial outbreaks is one very important goal of any infection control team thus the no. of nosocomial outbreaks is considered as one performance indicator.

Apart from the infection control team’s effort, it is the staff’s cooperation and compliance to infection control measures that matters. Between 2010 and 21 March 2013, there were a total of 160 nosocomial outbreaks in all HA hospitals. HKWC accounted for only 4 (2.5%) of the 160 outbreaks, the lowest amongst all 7 clusters. (HA Press Release “Nosocomial outbreaks reported in public hospitals”).

Another quality indicator is the number of MRSA bacteraemia per 1000 acute-patient-days. HKWC has achieved a 50% reduction from 2007 - 2012 as compared with the overall HA benchmark of 27% reduction.

In the area of hand hygiene promotion, there has been remarkable achievement with a continual increase of staff’s compliance to hand hygiene. Prior to the hand hygiene campaign in 2007/08, the compliance for each staff rank has been below 30%. With the ongoing efforts in the hand hygiene campaign, there has been over 2 and 3 fold increase in doctors and other staff ranks, and over 80% compliance in nurses and care assistants.

3. Risk Prioritization

3.1 Identified Risks for 2012-2013

<table>
<thead>
<tr>
<th>Clinical Risks</th>
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</thead>
<tbody>
<tr>
<td>1 Risk of ineffective patient care due to medication error</td>
<td></td>
</tr>
<tr>
<td>2 Risk of wrong patient identification without utilizing 2D barcode system</td>
<td></td>
</tr>
<tr>
<td>3 Potential shortcomings during resuscitation and unnoticed change in patient’s condition during inter-hospital transport (New)</td>
<td></td>
</tr>
<tr>
<td>4 Risk of patient safety hampered by bedside interventional procedures (Continue)</td>
<td></td>
</tr>
<tr>
<td>5 Infection control risk caused by substandard sterilization and disinfection (Continue)</td>
<td></td>
</tr>
<tr>
<td>6 Fragmented and inefficient care delivery model provided to patients (Continue)</td>
<td></td>
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<tr>
<td>7 Lack of robust framework to strengthen the scope of nursing practices</td>
<td></td>
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<tr>
<td>8 Hazard of failure to identify nutritional at risk patients</td>
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### Non-clinical / Operational Risks (not in order of priority)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Potential hazard of medical record loss in the clinical setting</td>
</tr>
<tr>
<td>2</td>
<td>Potential risk of disclosure of personal information from workstations facing public areas</td>
</tr>
<tr>
<td>3</td>
<td>Potential financial risk related to coding inaccuracies for ultra-major and major operations causing reduced reimbursement, increased use of Special Honorium Scheme, unmet annual leave clearance and medication expenditure rise</td>
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### 3.2 Identified Risks for 2013-2014

#### Clinical Risks

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<th>Description</th>
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<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>5</td>
<td>Hazard of failure to identify nutritional at risk patients</td>
</tr>
<tr>
<td>6</td>
<td>Abbreviation other than official abbreviation list used in health record</td>
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<tr>
<td>7</td>
<td>Lack of uniform criteria for defining and identifying high risk procedures</td>
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#### Non-clinical / Operational Risks

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</tr>
<tr>
<td>4</td>
<td>Fragmented business continuity plan for the whole hospital</td>
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<tr>
<td>5</td>
<td>Insufficient dissemination of quality and safety framework to front line staff</td>
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### 4. Risk Reduction and Quality Programmes

#### 4.1 Review of 2012 Risk Reduction Programs

<table>
<thead>
<tr>
<th>Project</th>
<th>Actions</th>
<th>Achievement</th>
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</table>
| Enhancing telephone communication system in Specialist Outpatient Department (SOPD) | • Continuous monitoring of data on feedback on SOPD  
• Data collection on time spent on answering phone calls  
• Patient communication preference survey conducted  
• Explored system improvement measures:  
  a. Administration staff’s support  
  b. Fax enquiry  
  c. Web-based reply  
  d. Call center approach | • Improved communication channels for various types of patients  
• Web-mail station established  
• Call center approach shall be implemented |
| Operation Theatre (OT) services improvement in QMH                     | • Continuous monitoring of statistics on OT first case arrival and start time  
• Revised “Guidelines on transport system for sending patients to operation theatre”  
• Rescheduled porter team’s support for OT transport  
• Rectified issues related to delay in ward | • Target of achieving more than 80% of “floor-in time” at 8:15 am attained  
• Target of achieving more than 70% of “theatre-in time” at 8:30 am attained |
| Eliminating use of abbreviations in consent form for QMH               | • A list of common procedures / operations in Chinese / English was obtained from ward managers  
• Stamps for each procedure / operation was procured for wards / clinics | • Instead of writing the full name for procedure / operation, stamps were prepared for wards / units  
• Procedural / operation stamps were implemented in Mar 13  
• For audit in May 13 |
| Review management of sharps containers throughout the cluster          | • Staffs were reminded not to overfill sharps box  
• All sharps boxes were required to be secured to prevent it from toppling  
• A section of a Quality Reminder was prepared to alert staff of the issues | • All clinical areas have compiled to securing of sharps box  
• Alternatives were explored for specific areas such as laboratories |
| Enhance the management of medical record forms in Grantham Hospital (GH) | • Stock-taking on all medical record forms which were not in the hospital’s forms inventory  
• Forms reviewed  
• Explored forms management options | • Outdated forms were abolished; duplicated forms were combined  
• Some of the forms were updated  
• A database was established for all medical records forms  
• A Policy on Medical Record Forms Management was developed and promulgated in Nov 12 |
| --- | --- | --- |
| Improve the governance on resuscitation arrangement at GH | A working group on resuscitation services was established to review emergency services in the hospital | • Flowchart for Handling of Persons in Urgent need of Medical Assistance was revised  
• Resuscitation procedures, equipment and medication were standardized  
• A designated telephone line for emergency call was set up  
• A Hospital Resuscitation Manual was developed in Mar 13 |
| Enhance patient engagement activities in GH | • Regular Patient Relations Officer (PRO) visits to inpatient areas to solicit patient feedback  
• A patient satisfaction survey (PSS) was conducted in Special Outpatient Clinic | • Comments from inpatient were actively solicited by PRO and necessary improvement made accordingly  
• An out-patient PSS was conducted in Aug 12  
• A patient’s meeting with hospital management was arranged in Sept 12 |
| Enhance medication safety in regard to the use of Medication Administration Record (MAR) at GH | • Audits on the use of MAR was performed by Pharmacy Department and Central Nursing Division (CND) in 3Q 12 & 1Q 13  
• Findings shared in various | • A Guidance on the use of MAR was issued in Oct 12  
• Design of a new set of MAR forms was completed in Mar 13; |
<table>
<thead>
<tr>
<th>Implementation</th>
<th>Description</th>
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<tbody>
<tr>
<td>Meetings and good practices reinforced.</td>
<td>A working group on MAR review was formed to re-design the MAR forms and the related dispensing logistics. The basic design was largely in line with that of other cluster hospitals.</td>
</tr>
<tr>
<td>Implementing Paediatric specific evidence based assessment tool</td>
<td>A team consisting of nurse consultants from Department of Paediatrics and Adolescent Medicine and CND was formed. Literature review was conducted prior to formulation of tool for patients below 12 years old. Wild consultation was sought. A paediatric assessment tool was developed. Pilot on using the form shall be conducted at A&amp;E department in Sept 13.</td>
</tr>
<tr>
<td>Eliminating use of abbreviations in consent form</td>
<td>A list of common procedures / operations in Chinese / English was obtained from ward managers. Stamps for each procedure / operation was procured for wards / clinics. Instead of writing the full name for procedure / operation, stamps were prepared for wards / units. Procedural / operation stamps were implemented in Mar 13. For audit in May 13.</td>
</tr>
<tr>
<td>Enhance quality of life of infirmary patients</td>
<td>A specific infirmary nursing care plan was designed to meet specific needs of patients. Sit out / prop up program was organized and conducted by a multidisciplinary team, including doctor, nurse, physiotherapist and occupational therapist. Seasonal greeting activities were organized to engage patients and carers to reality. The specific nursing care plan for infirmary patients was implemented since Mar 13. For sit out program, 17 infirmary patients were screened by the ‘seating screening test’. Only two of them were fit for “Sit out program”. Seasonal greeting activities were organized in Mid-Autumn festival and Lunar New Year.</td>
</tr>
<tr>
<td>Improve palliative care by</td>
<td>A work group was formed. Pain management flow chart and pain protocol was drafted. The specific nursing care plan and DNR follow up sheet were implemented in palliative ward in Mar 13. HKWC Pain Clinic / OP Anaesthesia Consultation referral.</td>
</tr>
<tr>
<td>- establish Pain Management system for palliative patient</td>
<td></td>
</tr>
<tr>
<td>- create specific Palliative nursing care plan</td>
<td></td>
</tr>
<tr>
<td>- develop End of Life protocol</td>
<td></td>
</tr>
</tbody>
</table>
| Enhance referencing system of medical records and improve identification of doctors’ entry in medical records | • Medical records of general medical, renal, low clearance and skin were combined to facilitate access of medical records of sub-specialties of Department of Medicine  
• Doctors were reminded that medical record entries should be signed with printed name (use of personal chop was recommended)  
• More user-friendly name chops for doctors were explored and ordered | • Medical Record Office piloted for 1-2 months of combining the medical records of Department of Medicine from 28 Feb 13  
• The user-friendly pre-inked name chop without cover for improving identification of doctor’s entries in medical records is under acquisition process |
| Implement a strategy to ensure that appropriate cold chain management systems and protocols are in place for the management of medication and vaccination fridges | • Existing cold chain management system and temperature record keeping were reviewed in all clinical areas  
• Incidents related to drug fridge, temperature recording, and cold chain management were reviewed to identify potential areas for improvement  
• Guidelines on management of drug fridges and cold chain system breakdown were drafted  
• Provide education to frontline staff on “Cold chain management” to identify potential areas for improvement | • The guideline on cold chain and medication fridge management was endorsed  
• Briefing on cold chain and medication fridge management was delivered to nursing supervisors on 4 Mar  
• A Patient Safety Alert on cold chain and medication fridge management was issued to all medical and nursing staff on 9 Mar |
4.2 Quality Initiatives, Including Accreditation

4.2.1 Periodic Review in Queen Mary Hospital

4.2.2 Gap Analysis in Tung Wah Hospital
5. Learning and Sharing Information

5.1 Cluster Activities

Transfusion tips (Just in time)

Quality Reminder (monthly)
Bi-monthly Quality Forum

GH - CQI Forum cum Presentation of the Best CQI project Award was held in Feb 2013
1. Structure

There is no significant change to the structure since the last report in 2011/12. The Kowloon Central Cluster (KCC) Quality and Safety (Q&S) Committee continued to meet 3 times a year while the KCC Q&S Officer’s meeting, in the form of an open forum, met twice a year. Matters related to incidents, risk management and quality improvement are shared to departmental representatives at the forum.
2. Overview of Quality and Risk Management Issues

2.1 Risk Registry Initiative 2013

As a continuum exercise, the annual risk identification and prioritization exercise 2013 started with the review of the progress of Risk Registry 2012 and its future direction in 2013. The Cluster Risk Registry Workshop was conducted by the Senior Manager (Quality and Standard) on 14 November 2012 prior to the formulation of the risk registry for 2013. The mechanism of keeping and signing off the entries in the Risk Registry upon regular risk evaluation was reiterated. The use of an Excel template to fill in the details of priority risk areas, current controls and action plans as a yearly record was introduced.

After the workshop, cluster hospitals and departments returned the consolidated prioritized risks and action plans. As highlighted last year, returns are action and outcome-focused. All identified risks are subjected to risk mitigation implementation plan and an anticipated risk reduction is projected based on the planned risk mitigation actions.

For Risk Registry 2013, the formulation continued echo with the direction taken by the Head Office Patient Safety and Risk Management department to foster an over-arching, up-and-down stream-connected risk identification and mitigation approach. The emphasis of this year in KCC was the formulation of a “watch-list” for risk monitoring in addition to the priority risks. The progress of risk mitigation responses were updated using calendar year scheduling in phases with “Quality Calendar” alongside with the activities of Hospital Accreditation and HA annual plan review.
3. Risk Prioritization

3.1 Identified Risks for 2012 - 2013

<table>
<thead>
<tr>
<th>Clinical Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Safe Use of High Alert Medications</td>
</tr>
<tr>
<td>2. Known Drug Allergy Alert</td>
</tr>
<tr>
<td>3. Inpatient Medication Reconciliation on Discharge</td>
</tr>
<tr>
<td>4. Safe Use of Infusion Devices</td>
</tr>
<tr>
<td>5. Safe and Appropriate Use of Physical Restraint</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-clinical / Operational Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clinical Documentation Practice in Relation to High Risk Areas</td>
</tr>
<tr>
<td>2. Renovation / Construction Site Safety</td>
</tr>
</tbody>
</table>

3.2 Identified Risks for 2013 - 2014

<table>
<thead>
<tr>
<th>Clinical Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Medication Safety –</td>
</tr>
<tr>
<td>a. Infusion Device Safety &amp;</td>
</tr>
<tr>
<td>b. Safe Use of High Alert IV Medications</td>
</tr>
<tr>
<td>2. Medication Prescription Safety</td>
</tr>
<tr>
<td>3. Congestion in Clinical Areas</td>
</tr>
<tr>
<td>4. High Staff Turnover and Competency Training of New Recruit</td>
</tr>
<tr>
<td>5. Hand Hygiene Compliance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-clinical / Operational Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clinical Documentation</td>
</tr>
<tr>
<td>2. Renovation / Construction Site Safety</td>
</tr>
<tr>
<td>3. Windows 7 Migration</td>
</tr>
</tbody>
</table>
4. Risk Reduction and Quality Programs

4.1 Review of 2012 Risk Reduction Programs

4.1.1 Medication Safety 2012

a. Standardization of Drugs & Lines Labels

A task group was formed to review the current use of labels for parental infusion lines and high alert drugs. Twenty-four Drugs and Lines labels were identified for standardization and the application has been commenced since August 2012. Central supply has been coordinated to ensure supply for sustained practice.

Examples of labels

b. Standardization of Medication Administration Record (MAR)

A task group led by the Ward Manager of Department of Surgery reviewed and revised the current Medication Administration Record (MAR) used in KCC. A set of 8 MAR were standardized for use in the KCC hospitals, with implementation started in Queen Elizabeth Hospital (QEH) and Hong Kong Buddhist Hospital (BH) in 4Q 2012, Kowloon Hospital (KH) and Hong Kong Eye Hospital (HKEH) in 1Q 2013. The “Guideline on Using the KCC MAR” was endorsed by the KCC Medication Safety Committee (MSC) to provide guidance on MAR documentation and the link to this document was put up on the CMS.

c. Safe Handling of Heparin-lock Central Venous Catheter (CVC)

A taskforce was formed to ensure safe handling of heparin-lock CVC in February 2012. Members include representatives from different departments who have the need to use or insert CVC for patient care. Extensive consultation & discussion was made during the two meetings held. Main principles agreed including CVC after loading with high concentration heparin must be labeled clearly. An educational video lasting for 2 minutes will be produced & uploaded to Intranet for frontline staff’s reference.
d. Medication Infusion Device Safety

In the fourth quarter of 2012, a few serious untoward events related to the use of infusion devices for intravenous administration of high alert medications were reported. Root cause analysis revealed opportunities for safety enhancement in education, staff support and equipment supply system fortification. Immediate remedial actions included conduction of 5 workshops on proper operation and demonstration video production for the commonly used pump models, standardization of pump display, provision of quick reference guides, and purchase of accessories that are conducive of device safety (e.g. low priming volume tubing and 50 ml syringe with leur-lock).

The safe use of infusion device has been again put up as one of the top risks in the Cluster Risk oversee the long term safety enhancement, in collaboration with the corresponding workgroup in Hospital Authority Head Office, tending to tender details in future purchases and liaison with vendors and clinical colleagues for education and training in the use of new infusion devices etc.

4.1.2 Others

a. Patient Identification

A cluster based Implementation Taskforce on 2D barcode technology for labeling blood specimen was formed as early as in 2007. However, due to technical problems of Unique Patient Identification (UPI) device, UPI phase III rolling out to KH & HKEH was delayed to the end of 2012. After then, full implementation of labeling inpatient specimens with 2D barcode was adopted in KCC. Regular trainings have been arranged for phlebotomists and new interns to enhance their awareness in patient identification and skills in using UPI devices.

Episodic reports of printing error received. The problem could only be solved after HAHO arranged upgrading of printer program. 26 events of fused CODE scanner were reported during October 2012 – June 2013. Only 1 of them was confirmed to plug in with wrong cable for charging.

b. Transport of Critically Ill Patients

The simulation-based training program on “Transfer of Critically Ill Patient” has been extended to new residents who have not attended the program during their internship, and the first session was held on 17 September 2012. The regular program for the interns and nurses would be continued. A 10-minute demonstration video has been produced for staff education. With the introduction of the new checklist “Checklist for Intra-hospital, Transport & Escort of Critically Ill Adult Patient”, an audit was conducted in QEH to review patients being transferred in January 2013. Data management is underway.
c. Safe Handling of Abnormal Investigation Results

Membership of the workgroup was reviewed with additional representatives from Department of Radiology and Imaging (DR&I), Pathology and Information Technology joining. The direction was to review individual department workflow one by one and then extended to investigation result providing units and interdepartmental workflows. To enhance safety of International Normalised Ratio (INR) monitoring, the Workgroup collaborated with Library Information System (LIS) team adding “INR (on warfarin)” for those patients under warfarinization on Generic Clinical Request (GCRS) request page. The message “INR (on warfarin)” would be shown on the laboratory reports accordingly.

d. Early Detection of Deteriorating Patient (EDDP)

The Guideline on Early Detection of Deteriorating Patients which included a set of early warning physiological parameters, a graded response system and an observation chart has been drafted. The program was piloted in one medical ward and one surgical ward since September 2012 with evaluation to review the application and staff acceptance. The seminar “An Introduction to Early Detection of Deteriorating Patients” was held on 3 May 2013. It is planned to extend the pilot to include more wards in the departments.

4.2 Quality Initiatives, Including Accreditation

4.2.1 Document Control

The Cluster Document Control initiative continued to roll out in clinical and non-clinical departments in 2012-2013. In QEH, departments are reviewing the documents in Electronic Record Management System and relocating the updated documents to respective departmental document centers on an ongoing basis. Furthermore, the document management system has been further extended to include policies, standards, guidelines, etc. developed by various task groups and committees. A summary list of controlled documents to be expired and pending for revision are generated from the controlled document centre regularly and distributed to document control officers for review, update and improvement as required.

Subsequent to the implementation of the QEH Document Center, the KH and BH Document Centers have also formally been launched into service. The SharePoint enhancement has been completed and the new platform for the KCC Document Centre is under construction.
4.2.2 ACHS Hospital Accreditation

a. Periodic Review 2012 and Self Assessment 2013 in QEH

The Australian Council on Healthcare Standards (ACHS) Periodic Review (PR) survey was conducted in QEH from 23-27 July 2012. Continued full accreditation was confirmed and three areas were rated with Extensive Achievements which include:

- Outcomes of clinical care are evaluated by healthcare providers and where appropriate are communicated to the consumer/patient and carer
- Healthcare incidents are managed to ensure improvement made to the systems of care
- Along the cyclical exercise in continuous quality improvement of EQuIP 5, QEH has undergone the Self Assessment 2013 and the scope of review covers all the recommendations given in the 2012 PR. Together with the KCC Risk Registry 2013, the report will be submitted to ACHS on 19 July 2013.

b. Quality & Excellence in Healthcare - Our Way to Success 2014

After the Periodic Review, QEH has gone through a full cycle along the ACHS EQuIP hospital accreditation framework. With an aim to review the journey of ACHS hospital accreditation in terms of improvement actions taken and the outcomes achieved, a retreat, Quality & Excellence in Healthcare - Our Way to Success 2014, was held on 3 November 2012. The key objective was to engage key stakeholders to discuss the way forward in quality improvement towards the 2014 Organization-Wide Survey (OWS) and to line up the actions to be taken. Target participants were the unit / department heads and the Q&S Coordinators. Discussion was focused on 5 key areas namely medication safety, clinical documentation, clinical handover for doctors, patient assessment and care planning, and the way forward to Hospital Accreditation. A total of 72 colleagues participated in the retreat and short and long term goals for each subject were identified.
Poster for the retreat: Quality & Excellence in Healthcare - Our Way to Success 2014

Engagement of key stakeholders in the Retreat

Presentation - Clinical Documentation & Clinical Handover

Participants engaging in warm-up game

c. BH Engagement Activities 2012 - 2013

Kick Off Ceremony on 17 Oct 2012
Visit to individual departments to introduce the ACHS hospital accreditation in Nov 2012

Department Visit on 3 Dec 2012

Experience Sharing on “Road to Accreditation”
(18 Apr 2012)

Experience Sharing on Preparation for ACHS Hospital Accreditation Project (16 Oct 2012)
Experience Sharing of Kowloon Hospital Gap Analysis in 2012 (26 Mar 2013)

Supporting staff meeting in Mar-May 2013

1st CQI Sharing Forum (18 Feb 2013): to enhance the Physiotherapy Out-patient Appointment Booking System for better new cases management

1st CQI Sharing Forum (18 Feb 2013): Multidisciplinary Input for Discharge Management in HKBH
2nd CQI Sharing Forum (13 May 2013): to enhance Patient Service in Day Ward

Hospital Safety Round was started since Jan 2013 Physiotherapy Department and Out-patient Department

d. Quality Initiatives in KH

The Quality and Safety Office in KH was formally established in September 2012. The Office co-ordinated all Q&S related activities and hospital accreditation issues.

**WISER Movement**

There were WISER projects going on in KH, e.g. 5S in action to reduce the non-value added activities in the workflow. Staff was provided opportunities to attend training, e.g. Lean Awareness training, Lean Six Sigma Green Belt training. There were display for reports of Lean projects to facilitate sharing and learning.

**Hospital Accreditation**

KH completed the Gap Analysis in Oct 2012 and developed action plans for “Priority Action Items” and “Suggested Opportunity of Improvement items”. There had been continual discussions with Mr Wayne SINGH and Hospital Accreditation Team HAHO, the “Organization
Wide Survey” was scheduled on 18 November 2013. The preparation timeline and related work was driven by the “Task Force for Improving Patient Service through Accreditation”. Staff engagement activities were carried out continuously.

**Hospital Web Page and Document Centre**
KH revamped the hospital web page and developed a Document Centre in April 2013. Document control system is in line with the KCC Document Central Policy.

**Hospital Resuscitation Committee**
KH established the Hospital Resuscitation Committee in December 2012 to align resuscitation practices, review the established standards and protocols related to resuscitation, oversee the provision of resuscitation training and to monitor the standard of practice regarding resuscitation.

5. Learning and Sharing Information

5.1 WISER Education & Development 2012/13

The ‘WISER 3-Pillar Education and Development Model’ in KCC focuses on general education / awareness for all cluster employees, WISER Six Sigma / Lean tools skill-based project learning and WISER Sharing Forums both internally and externally. Through this 3-Pillar Model, we target to enhance our services and workflows through staff training and development activities under the overarching WISER quality drive, emphasizing Teamwork, Innovation, Project initiatives for service improvement and Sustainability.

For 2012/13, the deliverables and outcome included the following three aspects:

5.1.1 WISER Awareness Building & Sharing

The first WISER Sharing Symposium was held engaging front-line professionals and clinicians with 22 quality projects with over 250 attendees. Besides, the quarterly based ‘Come & Be WISER Forums’ were rolled out to other cluster hospitals including KH and BH. The hospital-based ‘Six Sigma Sharing Session in BTS’ has incorporated 5 projects sharing their success stories. An educational tour to ‘Crown Motor Company’ in Yuen Long was arranged, focusing 5S and Kaizen(Improvement) Room. To recapture the learning on ‘5S application’, a ‘WISER Express’ was published. The ‘5S Concepts’ acquired paved the way for developing our in-house ‘5S in Action’ training program and the development of 5S projects in KCC subsequently.
5.1.2 WISER Project-based Learning

The ‘KCC Lean Facilitators Training’ was successfully conducted, training up to 30 lean facilitators across various specialties with 22 projects completed. The in-house developed ‘5S in Action’ and ‘WISER Projects Made Easy in BH’ programs also facilitated the participants to conduct xx 5S projects and 7 WISER Projects respectively. All projects pointed to workflow reviews, shortening waiting time and streamlining wards / storage procedures. The appointment of WISER Consultants with Black belt or Green belt qualifications at hospital level further strengthened the support for rolling out WISER projects in the long run.

5.1.3 WISER Corporate Brand Sharing

The ‘WISER 3-Pillar E&D Model’ was accepted by the ISQua-29th and 30th International Conferences for oral presentations sharing the education tips on quality and safety with overseas healthcare professionals. We were also invited to share the WISER stories with external organizations including Hong Kong Aircraft Engineering Company (HAECO), Hong Kong & Shanghai Banking Corporation and the mainland hospital delegates. Some of our WISER project facilitators were invited as speakers who were being valued and also took pride in sharing their project outcomes on service enhancement.
Since May 2011, the ‘CIM Learning Series’ in KCC was conducted to enhance and equip front-line staff with proper awareness and skill sets to manage adverse events in KCC. To continue this learning initiative, we have 3 focused sharing forums:

- “Disclosure skills in handling adverse events” on 15 May 2012
- “To Err is Human Brain? Cognitive errors and bias in human decisions and actions” on 30 October 2012
- “To Err is Human Brain? Workshop on Medication Safety” on 26 February 2013

Through the continuous sharing and learning initiative, we have:

- cultivated a continuous learning culture on CIM subjects in the cluster hospitals with positive employee feedbacks
- overcome the accessibility barrier for attending training sessions.
- provided a common platform for the HA and non-HA experts to address the CIM issues together. The expert speakers included university professors, private hospital clinicians, community leaders, HA CCE, HCE, CM, SM and SHM, sharing debatable topics and providing solutions and the way forward.
5.2 HAHO Crew Resource Management at QEH / KCC

Crew Resource Management (CRM) originates from the National Aeronautics and Space Administration (NASA) Air Safety Workshop (1979). It was first applied to healthcare in 1994. CRM is a flexible and systematic method for optimizing human performance and increasing safety, especially within team settings. In healthcare organizations, it focuses on the cognitive and interpersonal skills that a team requires to manage patient care within a multi-specialty hospital environment. Application of CRM in healthcare in Hong Kong was first piloted in Pamela Youde Nethersole Eastern Hospital in 2009 with positive feedback on patient safety and cultural change. A Steering Committee at HAHO has been formed to direct the roll out of CRM throughout HA. The second phase will focus on team-based training across 4 high risk areas: A&E, O&G, ICU and OT. The pilot hospitals appointed were QEH and Tuen Mun Hospital.

An external training consultant has been appointed by HAHO to facilitate the development of CRM trainers for QEH / KCC since 2012 and the following training targets were achieved at QEH:

- CRM Kick-off meetings for Senior Executive / Managers of the 4 high risk unites were held in January 2013, introducing the CRM roadmap and receiving key stakeholders’ expectations on CRM
- CRM scenario-based training materials were designed and developed by our O&G team from February onwards while other HA hospitals would develop similar training packages for other high risk areas
- 3 classes of the 2-day Train-the-trainer Workshops for 41 CRM trainers of various clinical specialties were held in March & April 2013.

With the groundwork set in 2012/13, the development of CRM learning for 41 CRM trainers would be consolidated in the coming years. Its application at the 4 high risk areas would also be further explored and extended to other clinical areas where needed.
1. Structure

2. Overview of Quality and Risk Management Issues

2.1 Preparation for Hospital Accreditation

2.1.1 United Christian Hospital (UCH)

a. Momentum Building

In paving way for preparing the hospital accreditation program and the upcoming gap analysis, the UCH Accreditation Project Steering Committee was set up in July 2012, chaired by the Hospital Chief Executive. Under the direction of the committee, the Quality & Safety (Q&S) Office had coordinated a number of capacity building, staff engagement & communication and experience sharing programs / activities. A summary of which was as follows:

- Launching of the UCH Gap Analysis Website (August 2012)
- UCH Accreditation Kick-Off Ceremony and Quality Seminars (January 2013)
- Experience Sharing Forum by Prince of Wales Hospital on preparation of Gap Analysis (January 2013)
- 5 Gap Analysis Preparation Workshops (January 2013) and 2 Gap Analysis Preparation Forums (February 2013)
- Q&S Quiz for supporting staff (December 2012 to March 2013)

b. UCH Gap Analysis (4-8 March 2013)

Being one of the members in the Hospital Authority phase II hospital accreditation program, the UCH Gap Analysis was conducted during 4 to 8 March 2013. The prime aim was to ascertain the readiness of UCH in moving ahead to hospital wide accreditation survey. The Australian Council on Healthcare Standard (ACHS) had arranged a total of 8 experienced surveyors reviewing across the 47 EQuIP5 criteria. There were 55 discussion sessions held and visit to 68 departments / units were arranged. The surveyors had identified plenty of good practices coupled with the priority action items. The findings were shared with all staff at the summation conference on 8 March. The Q&S Office would further coordinate with departmental stakeholders and criteria
coordinators in addressing recommendations of the ACHS consultancy report.

2.1.2 Tseung Kwan O Hospital (TKOH)

There were 3 staff engagement forums on 4 ACHS criteria (Infection Control, Occupational Safety & Health, Pressure Ulcer Prevention and Health Records Management) conducted on 14, 15 & 22 February 2013. A total of 309 staff had participated in these forums. A series of meetings with departmental coordinators commenced on 21 August 2012, in which areas related to departmental risk registers and supports were discussed. There were also meetings with sponsors starting from December 2012. The objectives were to report on progress of hospital accreditation, plan for preparation of the criteria and provide support in the preparation and promulgation.

2.2 KEC Quality & Safety Symposium 2013

The “KEC Quality & Safety Symposium 2013” was organized on 21 March 2013. As a caring profession, the theme “Serving with Passion, Compassion and Prudence” was chosen to reinstate the core values of the profession. We were honored to have invited Prof. K Y Yuen from the University of Hong Kong, Mr Woody W Y Chang from Mayer Brown JSM and Dr Andrew Luk from the Nethersole Institute of Continuing Holistic Health Education to deliver their keynote lectures. A sharing session by the HA outstanding staff in supporting grade was followed highlighting the endeavours they had contributed to the pursuit for service excellence.

2.3 KEC Conference of Excellence

The spirit of continuous quality improvement was the cornerstone in inculcating the quality culture. Those quality champions working in different ends were recognized through the
HA Convention and Bright Suggestion Scheme programs. The quality initiatives on patient and service enhancement were shared among the frontlines at the KEC Conference of Excellence on 16 May 2012.

2.4 Formulation of Risk Register for 2013/14

A bottom-up approach was adopted in consolidating risks at all levels. Following submission by departments on perceived risks, the Q&S Office had further analyzed them through stratification and quantification of risk levels. The hospital-based risk register in relation to clinical and operational risks for 2013/14 were further consolidated into cluster-wide risk register, based on which corresponding risk reduction programs were developed. They would be closely monitored in order to close the gap.

2.5 Learning and Sharing on Patient Safety

The monthly cluster Q&S Bulletin served as a platform to promote knowledge & experience sharing and vigilance of the frontline on potential risks. Sentinel events, serious untoward events, Q&S alerts and selected articles from the Hospital Authority Risk Alert were being shared timely. In addition, ongoing cluster Q&S seminars were organized with a view to promoting safety culture through subject stakeholders as advocate on lessons learnt from patient safety incidents.

2.6 Patient Safety Enhancement

2.6.1 Executive Safety Walkround

To demonstrate top level commitment to patient safety as well as establishing direct line of communication with frontline colleagues, ongoing hospital safety walk rounds and cross-hospital rounds were conducted. Relevant good practice and areas of recommendation were shared. Follow up improvement actions were devised with timeline for progress being defined and reported.

Summary of actions due for completion within 2012/13 for cross-hospital & UCH walk rounds

<table>
<thead>
<tr>
<th>Due for completion within 2012/13</th>
<th>Percentage of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of action items</td>
<td>No. of items completed</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Cross Hospital</td>
<td>UCH</td>
</tr>
</tbody>
</table>
2.6.2 Medication Safety – Clinical Oncology Counselling Service for Outpatients and Day Patients

The program aimed to enhance quality and safety of chemotherapy service by providing patients counselling regarding the chemotherapy, use of pre-medication and supportive medications, side effect management and drug-drug interactions with concurrent medications to all new chemotherapy patients or subsequent patients with regimen changed. It was protocol-driven and all clinical pharmacists involved had received training in clinical oncology. In 2012/13, there were 326 new oncology patients received counselling from clinical pharmacists.

2.6.3 Infection Control

The Infection Control Team organized programs and training to enhance awareness in infection control and improve compliance with infection control measures. A web-based refresher training system on infection control was also developed and further promoted in KEC to facilitate access of training materials by all staff. A summary of infection control programs conducted in 2012/13 included:

- Reduction of surgical site infection for colorectal surgeries
- Prevention of sharps injuries
- Antibiotic Stewardship Program (96.05% compliance in big gun antibiotics prescription)
- Audit on reuse of single use devices (98.97% compliance)
- Audit on reprocessing single use devices (100% compliance)
- Reduction of multi-drug resistant organisms – poster presentations on (i) control of nosocomial Methicillin Resistant Staphylococcus Aureus (MRSA) bacteremia in the International Congress of the Asia Pacific Society of Infection Control (APSIC) 2013, (ii) on-line reporting & recording system for patient placement in the International Infection Control Conference 2012
- Enhance and monitor clinical waste management
- Prevention and control of nosocomial Legionnaires’ disease via implementation/ monitoring compliance to updated guideline and development of rapid molecular diagnosis

A total of 90 infection control courses (3831 attendance) and 9 drills were performed. Other Q&S related infection control programs included hand hygiene promotion program, review and enhancement of environmental hygiene, survey on patient perception of MRSA prevention and control with poster presentation in the International Conference on Prevention & Infection Control 2013, survey and review practice on cleaning & disinfection of reusable items as well as survey on ESBL-producing enterobacteriaceae in ICU – admission & discharge screening, risk factors for acquisition.
2.7 Occupational Safety and Health (OSH)

OSH team had organized and coordinated various continuous quality improvement programs. These included management of major work injuries through promotion of 5S, manual handling operations training, road show for prevention of sharps, provision & demonstration of safety devices, establishment of restraining guidelines and organization of trans-departmental drill for restraining.

Apart from coordinating proactive OSH rounds to each unit in UCH, the OSH Team also supported the department-initiated inspection at Department of Accident & Emergency and Department of Anaesthesia & Operating Theatre Service in TKOH, and also Catering and Pulmonary and Palliative Services in Haven of Hope Hospital (HHH). To sustain the momentum in promoting OSH, the OSH Appreciation Program 2012/13 was held to recognize various types of OSH Improvement Projects and Best OSH Employees. KEC had attained the following achievements and recognition through the conjoint efforts:

a. Number of Injury-On-Duty per 100 staff was decreased by 19.8% in 2012/13 in comparison to 2011/12.

b. “Staff Competency Programme in Manual Handling Operation Management”, initiated by the OSH team, was honored the Winner Award under the category of Human Resource Development, in Hospital Management Asia 2012.

c. Winner of the 5th Best OSH Employees Award Scheme, organized by the Occupational Safety and Health Council (OSHC) and the Labour Department.

<table>
<thead>
<tr>
<th>Award</th>
<th>Name</th>
<th>Rank</th>
<th>Department</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Award (Management Category)</td>
<td>Ms SEETO Chui Chun</td>
<td>Senior Physiotherapist</td>
<td>Physiotherapy</td>
<td>UCH</td>
</tr>
<tr>
<td>Bronze Award (Management Category)</td>
<td>Ms WU Chui Ping</td>
<td>Ward Manager</td>
<td>Surgery</td>
<td>TKOH</td>
</tr>
<tr>
<td>Silver Award (Frontlines Category)</td>
<td>Ms HO Pui Yee</td>
<td>Advanced Practice Nurse</td>
<td>Medical &amp; Geriatric</td>
<td>UCH</td>
</tr>
</tbody>
</table>
Six submissions from various KEC departments and one from the OSH team were accepted by the HA Convention for poster display and oral presentation.

2.8 Cluster Privacy Walkround

The annual privacy walkround by the KEC & Corporate Information Security and Privacy Team was conducted on 12 November 2012. The Accident & Emergency Department, Medical Social Services Unit, Clinical Psychology Department and also doctors’ offices in UCH & TKOH were visited. Good practices and opportunities for improvement were shared in the debriefing session.

2.9 UCH Fall Prevention Program

Inpatient falls had ranked amongst the top risk areas in HA hospitals as it could cause unnecessary harm to patients. Being listed as one of the hospital top risks in 2011, the multidisciplinary ‘UCH Task Force on Hospital Fall Prevention’ was set up in August 2011. A highlight of measures and actions included provision of walking aids, toileting support for high risk patients and other wards as well as department specific interventions.

2.10 TKOH Body Identification Program

TKOH had rolled out Radio-frequency Identification (RFID) to its mortuary in 4Q2012. The aim was to provide additional safeguard on accurate body identification and prevent inadvertent moving out of bodies from the mortuary area.
3. Risk Prioritization

3.1 Identified Risks for 2012 – 2013 (KEC)

### Clinical Risks (in order of priority)

<table>
<thead>
<tr>
<th></th>
<th>Risk Description</th>
</tr>
</thead>
</table>
| 1 | Medication Management - Giving wrong volume in bolus injection
- Prescribing wrong set of medications on admission
- Dispensing error |
| 2 | Patient Fall - Injurious falls |
| 3 | Surgical Safety - Retained instrument / materials during operation |
| 4 | MRSA Infections - MRSA bacteraemia |

### Non-clinical / Operational Risks (not in order of priority)

<table>
<thead>
<tr>
<th></th>
<th>Risk Description</th>
</tr>
</thead>
</table>
| 1 | Manual Handling Operation
(e.g. enhance safety practice of manual handling operations of minor staff) |
| 2 | Needle Stick Injury |
| 3 | Staff Injury during Restraining Process |
| 4 | Workplace Violence |
| 5 | Information Security & Privacy |
| 6 | Drainage Problem – bursting of pipes |

3.2 Identified Risks for 2013 – 2014 (KEC)

### Clinical Risks (in order of priority)

<table>
<thead>
<tr>
<th></th>
<th>Risk Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Escort of critically-ill patients during transfer</td>
</tr>
<tr>
<td>2</td>
<td>Surgical safety for operative, interventional and bedside procedures</td>
</tr>
</tbody>
</table>

### Non-clinical / Operational Risk

Fire hazard
3.3 Identified Risks for 2012 – 2013 (UCH)

<table>
<thead>
<tr>
<th>Clinical Risks (in order of priority)</th>
<th>Non-clinical / Operational Risks (not in order of priority)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Medication administration at right dose for injection (preparing exact volume for injection)</td>
<td>Staff injury during restraining process</td>
</tr>
<tr>
<td>2 Medication safety (for improving prescription accuracy on admission)</td>
<td>Drainage problem – bursting of pipes</td>
</tr>
<tr>
<td>3 Medication safety (for improving dispensing accuracy)</td>
<td></td>
</tr>
<tr>
<td>4 Patient fall associated with physical needs</td>
<td></td>
</tr>
<tr>
<td>5 Surgical safety in prevention of retained instrument or material during operation</td>
<td></td>
</tr>
</tbody>
</table>

3.4 Identified Risks for 2013 – 2014 (UCH)

<table>
<thead>
<tr>
<th>Clinical Risks (in order of priority)</th>
<th>Non-clinical / Operational Risks (not in order of priority)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Medication errors</td>
<td>Risk of staff injury from manual handling or fall</td>
</tr>
<tr>
<td>- Administration errors involving intravenous medications or wrong infusion rate</td>
<td></td>
</tr>
<tr>
<td>- Dispensing errors related to wrong drugs</td>
<td></td>
</tr>
<tr>
<td>2 Winter surge has large admission number of emergency patients to medical wards. Uncontrolled workload can cause staff fatigue.</td>
<td>Risk of staff having percutaneous injuries by sharps from procedures</td>
</tr>
<tr>
<td>3 Injurious patient fall as a result of clinical condition or over-estimation of ability by patients</td>
<td>Risk of near miss or real fire</td>
</tr>
<tr>
<td>4 Risk of surgical site infection (SSI) in patients undergoing colorectal surgery</td>
<td>Retention risk of supporting staff</td>
</tr>
</tbody>
</table>

3.5 Identified Risks for 2012 – 2013 (TKOH)

<table>
<thead>
<tr>
<th>Clinical Risk</th>
<th>Non-clinical / Operational Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling of specimen for type &amp; screen at bedside</td>
<td>Fire safety</td>
</tr>
</tbody>
</table>
3.6 Identified Risks for 2013 – 2014 (TKOH)

<table>
<thead>
<tr>
<th>Clinical Risk</th>
<th>Non-clinical / Operational Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing patients</td>
<td>Disposal of medical records</td>
</tr>
</tbody>
</table>

3.7 Identified Risks for 2012 – 2013 (HHH)

<table>
<thead>
<tr>
<th>Clinical Risk</th>
<th>Non-clinical / Operational Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication administration at right dose for injection (preparing exact volume for injection)</td>
<td>Enhance safety practice of manual handling operations of minor staff</td>
</tr>
</tbody>
</table>

3.8 Identified Risks for 2013 – 2014 (HHH)

<table>
<thead>
<tr>
<th>Clinical Risks (in order of priority)</th>
<th>Non-clinical / Operational Risks (not in order of priority)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Risk of decontamination of respiratory devices</td>
<td>Theft or unauthorized access to roof top area</td>
</tr>
<tr>
<td>2 Risk of suboptimal nursing service due to high proportion of new nursing graduates</td>
<td>Tree falling risk</td>
</tr>
<tr>
<td>3</td>
<td>Access and safety risk of contractor workers’ activities</td>
</tr>
</tbody>
</table>

4. Risk Reduction and Quality Programs

In line with the development of 2012 / 13 KEC Risk Register for both clinical and operational risks, the corresponding risk reduction / quality programs were identified and monitored. The results are summarized below:

4.1 KEC

<table>
<thead>
<tr>
<th>Item</th>
<th>Programs</th>
<th>Actions and Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medication Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Giving wrong volume in bolus injection</td>
<td>• Guideline was issued and implemented in Dec 2012</td>
</tr>
<tr>
<td></td>
<td>• Formulate hospital guideline on intravenous medication preparations (UCH)</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Programs</td>
<td>Actions and Results</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Study the feasibility through pilot the practice in one ward (UCH)</td>
<td>• Review of existing practice was completed via multidisciplinary meeting in 2Q 2012</td>
</tr>
<tr>
<td></td>
<td>• Review existing practice (TKOH)</td>
<td>• Administration errors due to mis-communication had been reduced</td>
</tr>
<tr>
<td></td>
<td>• Reinforce effective communication through education (TKOH)</td>
<td>• A guideline for Parenteral Drug Administration was formulated and endorsed by the Medication Safety Committee on 19 Nov 2012. The guideline was implemented on 1 Dec 2012</td>
</tr>
<tr>
<td></td>
<td>• Formulate hospital guideline on preparing exact dose for iv injection (HHH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hospital wide implementation (HHH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Prescribing wrong set of medications on admission</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Protocol of the Medication Reconciliation Service was finalized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Briefing was conducted with pilot wards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Service had commenced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• KEC Risk Seminar was held on 1 Aug 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The knowledge on taking medication history was improved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Education on Medication Reconciliation was provided to relevant parties, including physicians, nurses and pharmacy staff</td>
</tr>
<tr>
<td></td>
<td>• Provide Medication Reconciliation Service upon admission (UCH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conduct KEC Risk Seminar on improving prescription accuracy on admission (UCH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conduct Education Seminar on Medication Reconciliation for doctors, nurses and pharmacy staff (TKOH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Dispensing error</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A training manual on prescription vetting skills was compiled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Training was conducted for dispensing staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The existing SOP of outpatient dispensing was reviewed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Checklist of Steps in Dispensing Process in Outpatient was completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Training was conducted for dispensing staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dispensing errors of outpatient prescriptions were reduced by 50% when comparing 2011/12 with 2012/13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enhanced staff training on new drug</td>
</tr>
<tr>
<td></td>
<td>• Reinforce staff training on prescription vetting skills at the Out-patient Section (UCH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Redefine the roles and responsibilities of each staff involved in the dispensing process (UCH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Standardize staff training and</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Programs</td>
<td>Actions and Results</td>
</tr>
<tr>
<td>------</td>
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<td>---------------------</td>
</tr>
</tbody>
</table>
| 1 | competency assessment on prescription handling (TKOH) | preparations via regular new drug sharing  
- Lunchtime seminar on brought-in medication was held in 1Q 2013  
- Enhanced adherence to good dispensing practice |

2 **Patient Fall**

**Injurious falls (UCH)**

a. Risk identification
- Nursing Assessment Form should integrate the identified risk factors of high risk fallers from the previous AIRS study
- Any above factor should trigger off a proper toilet plan during hospitalization

b. Reduction of environmental risk
- Provision of fall prevention devices, e.g. walking aids, fall alarm pads
- Handrails and grasp bars in all toilets and bathrooms
- Redesign toilet call bells
- Safety measures in public areas of toilet especially around basins

c. Staff education
- Staff training for fall prevention strategy
- Fall management program in wards
- Education on toileting needs and regular toileting assistance to high fall risk patients

- Fall Risk Assessment and Nursing Care Plan was developed and used
- The guidelines were drafted and the practice would be piloted in a medical ward and surgical ward
- The guidelines and nursing care plan for high fall risk patients with toileting needs would be implemented in 3Q 2013
- Fall prevention devices, e.g. walking aids, fall alarm pads were provided to wards
- Stocktaking of uneven lighting condition in toilets and bathrooms was carried out for improvement of the environment to safeguard patient safety
- Patient Fall Prevention Staff Forum was conducted in Jul 2012
- Fall Prevention Ward Coordinators were appointed to (i) coordinate and evaluate the fall prevention and management program; (ii) assist in monitoring the fall incident trend and identify improvement measures; (iii) orientate new staff on fall prevention and management program; (iv) coordinate patient / staff education and share good practices and improvement measures
<table>
<thead>
<tr>
<th>Item</th>
<th>Programs</th>
<th>Actions and Results</th>
</tr>
</thead>
</table>
| d. | Patient education  
   - Education to high risk patients on their risk of falls especially on toilet needs  
   - Education to relatives on fall prevention  
   - Posters in all toilets to encourage patients to seek help during toileting and highlight the importance of fall prevention | Fall Prevention Posters were posted in wards |
| **Injurious falls (TKOH)** | | |
| a. | Data collection and analysis  
   - Data collection and analysis of fall incidents with severity > 3 for 2010/11 and 2011/12  
   - Reinforce the evaluation process for fall > 3 | Data analysis with reports was completed for reference  
Evaluation process was reinforced |
| b. | Risk identification and intervention  
   - Pilot program in O&T wards - offer hip protector for post-operative patients with fracture hip  
   - Identify factors that proper toilet plan should be triggered during hospitalization  
   - Conduct Safety Walk Round on fall risk and prevention with multi-disciplinary participation once in 2012/13 | Pilot program was completed  
Offered hip protectors for post-operative patients with fracture hip  
Factors to trigger proper toilet plan were identified for inpatients  
Safety Walk Round with the participation of administrative, nursing, medical and allied health staff was conducted in Jul 2012 with recommendations made |
| c. | Reduction of environmental risk  
   - Provision of fall prevention devices e.g. fall alarm pads, safety belts, walking aids etc.  
   - Improvement works to enhance safety in toilets, basin areas and shower room in inpatient wards (adding grasp bars, hand rails and prevention of slippery floors) | Fall alarm mats were provided  
Introduction and training were done  
Improvement works were done for 5 wards |
| d. | Strengthen staff competency, training  
   - Training for nursing and supporting | Training programs for nursing and supporting |
<table>
<thead>
<tr>
<th>Item</th>
<th>Programs</th>
<th>Actions and Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Orientation and assessment for preceptees</td>
<td>supporting staff were held</td>
</tr>
<tr>
<td></td>
<td>• Sharing and learning of incidents, statistics and good practices in TKOH Nursing Quality &amp; Safety Subcommittee (NQSS) meetings</td>
<td>• Training for fresh graduates of registered and enrolled nurses was done. Competency on using Morse Fall Scale and Fall Risk Assessment form were assessed for all 1st year preceptees and new enrolled nurses</td>
</tr>
<tr>
<td></td>
<td>• Annual sharing in TKOH Q&amp;S Forum</td>
<td>• Incorporated sharing and learning of fall trends and analysis as regular agenda in TKOH NQSS meetings</td>
</tr>
<tr>
<td></td>
<td>• Focus training for Fall Ambassadors</td>
<td>• Sharing in TKOH Nursing and Quality Forum was held in Oct 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Training workshop was held for Fall Ambassadors and coordinators</td>
</tr>
<tr>
<td>3</td>
<td>Surgical Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retained instrument / materials during operation (UCH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop intraoperative swab count record</td>
<td>• Swab count sheet was developed to comply with the ACHS standard</td>
</tr>
<tr>
<td></td>
<td>• Replace the swab count rack with swab count container</td>
<td>• Rolled out to all specialties in OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 100% compliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implementing the swab count container to facilitate swab count tracking and address infection control issue</td>
</tr>
<tr>
<td>4</td>
<td>MRSA Infection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MRSA bacteraemia (TKOH)</td>
<td>The Infection Control Team (ICT) reviewed data for MRSA bacteraemia and identified the common reasons contributed for MRSA bacteraemia were skin hygiene and contamination</td>
</tr>
<tr>
<td></td>
<td>• Promote patients’ skin hygiene</td>
<td>• In 2012, ICT recommended bathing patient with 2% chlorhexidine gluconate (CHG) to reduce skin colonization with potential microbial pathogens and prevent hospital acquired infection</td>
</tr>
<tr>
<td></td>
<td>• Prevent blood culture contamination</td>
<td>• Referenced from overseas and local guidelines, current procedure for blood culture taking in May 2012 was reviewed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Infection Control Nurses (ICNs) arranged refresher training for blood culture taking to phlebotomists and</td>
</tr>
</tbody>
</table>
### Item Programs

- Feedback and disseminate the data to staff

### Actions and Results

- Educated them to use 2% CHG in 70% alcohol swab stick for site preparation before blood culture taking in 2Q 2012
- ICNs had liaised with NSD to supervise and monitor phlebotomists’ blood culture collection technique and perform regular audit on blood collection technique in 2012/13
- Rate of hospital acquired infection and the contamination rate of blood culture taking was monitored
- Monthly feedback on the rate of MRSA bacteraemia to stakeholders
- Reported the data in Infection Control Committee (ICC) in each quarter

### Operational Risks

<table>
<thead>
<tr>
<th>1</th>
<th>Manual Handling Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Programs</strong></td>
</tr>
<tr>
<td></td>
<td>• Safety awareness talk on MHO in Nov 2012 (activity of Monthly Safety Theme on MHO) (TKOH)</td>
</tr>
<tr>
<td></td>
<td>• 5 MHO Refresher Training for Care Related and Non-care Related Supporting Staff in 2012/13 (TKOH)</td>
</tr>
<tr>
<td></td>
<td>• Develop task-specific training video and corresponding checklist (HHH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Actions and Results</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 54 staff attended the Safety Awareness Talk on MHO in Nov 2012</td>
</tr>
<tr>
<td></td>
<td>• 5 MHO refresher training courses were organized in 2012/13</td>
</tr>
<tr>
<td></td>
<td>• A training video for porter was prepared</td>
</tr>
<tr>
<td></td>
<td>• Structured and timely training was provided to all new supporting staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Needle Stick Injury (NSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Programs</strong></td>
</tr>
<tr>
<td></td>
<td>• Review previous data of sharps injury occurred in 2009 – 2011 (TKOH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Actions and Results</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• ICNs examined causes for sharp injury and identified workplace with high prevalence of sharp incidents in May 2012</td>
</tr>
<tr>
<td></td>
<td>• Staff injured by sharp objects during procedure, during &amp; after injection, and disposal of sharp objects in sharp container were the common causes for sharps incidents</td>
</tr>
<tr>
<td></td>
<td>• Departments with high prevalence of sharps incidents were identified</td>
</tr>
<tr>
<td></td>
<td>• Newly recruited medical and nursing staff were required to attend the mandatory induction program for sharps injury since July 2012</td>
</tr>
<tr>
<td>Item</td>
<td>Programs</td>
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<tr>
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</tbody>
</table>
| 3    | **Staff Injury during Restraining Process** | • For workplace with high prevalence of sharp injuries, safety training resources kit / package was set up in their departments and refresher training was arranged to Health Care Workers (HCWs) on prevention of sharps injury  
• ICNs introduced safety devices and safe practices through road show in high risk areas and launched case scenarios sharing session in Sharp Injury Prevention Week in July 2012  
• Monthly feedback on the incident to HCWs on sharps injury was made  
• Data were reported in Infection Control Committee in each quarter and also the cluster OSH committee  
**Results:**  
• The number of sharps injury was reduced by 47% from 2011 to 2012, |
|      | **Seminar on management on violence (UCH)** | • Seminars were conducted on 4 Jul 2012 and 8 Jan 2013. 250 participants had attended the seminar  
• 16 participants for each of the one-day workshop held on 17 & 18 Jul 2012, 15 & 16 Jan 2013 |
|      | **Breakaway and restrain technique Workshop (UCH)** | |
| 4    | **Workplace Violence (WV)** | • Patient restraining guideline was reviewed  
• One drill was conducted in May 2012  
• One talk on Segufix restrainer and one on self-protection technique were held in Aug 2012 |
|      | **Conduct Risk Reduction Program in Accident & Emergency Department by 3Q 2012 including risk identification; revision of patient restraining guidelines and violence handling drill (TKOH)** | |
|      | **Safety awareness talk on Workplace Violence in Aug 2012 (activity of Monthly Safety Theme on WV) (TKOH)** | |
| 5    | **Information Security & Privacy (ISP)** | • Printing of labels was completed  
• TKOH Information Technology Department visited wards / departments to fix the label on printers |
|      | **Prepare labels to remind frontlines to dispose used printer ribbon as “confidential waste” (TKOH)** | |
### Kowloon East Cluster

#### Item | Programs | Actions and Results
---|---|---

- Cluster programs organized by the KEC ISP Officer (ISPO):
  - i. Conduct ISP Annual Audit
  - ii. Organize ISP Walkround
  - iii. Conduct ISP Seminar

- Frontline staff were alerted to dispose used printer ribbon as confidential waste

- ISP Audit was coordinated by KEC ISPO on 7 Aug 2012
- Report was published by KEC ISPO (Result: 99.28% compliance for clinical departments and 99.35% compliance for non-clinical departments)

- ISP Walkround was arranged on 12 Nov 2012
- Debriefing was held on the same day
- ISP Seminar was organized by KEC ISPO on 7 Nov 2012
- Sharing of incidents and updates on personal data privacy ordinance were done

#### 6 Drainage Problem – Bursting of Pipes

- Add external downpipe for toilets along external wall of Block P (UCH)
- Replace existing internal pipe works of Block P (UCH)

The project was suspended due to termination of work contract by HAHO. Advice was being sought from HAHO on further proceeding with the project and consultant had been advised to finalize the project account

#### 4.2 Other Risk Reduction Programs in TKOH

<table>
<thead>
<tr>
<th>Program</th>
<th>Actions and Results</th>
</tr>
</thead>
</table>
| **Fire Safety** | - Additional fire extinguishers were installed in different floors of Hospital Main Block where there were construction sites to enhance fire protection  
- Fire evacuation plans were posted outside every construction site  
- Two fire talks were held on 14 Jun 2012 and 18 Dec 2012  
- Preparation of web-based fire safety training kit |

| **Handling of Specimen for Type & Screen (T&S) at Bedside** | - Designated EDTA bottles for T&S were implemented in Nov 2012  
- CD on blood transfusion procedure and blood transfusion guideline were distributed to all new residents  
- Placement of alert signage about T&S in all wards  
- Special compartment was set up for placing T&S specimen bottles in all wards  
- Sent reminders and souvenirs to all doctors in Nov 2012 |
Kowloon East Cluster

<table>
<thead>
<tr>
<th>Program</th>
<th>Actions and Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Follow-up: The number of transfusion incidents before and after the program were collected and analyzed</td>
</tr>
</tbody>
</table>

5. Learning and Sharing Information

5.1 Risk Management / Patient Safety
- Seminar on “Medication Reconciliation - What is it and how can it help you?” (1 Aug 2012)
- Seminar on “Use of Guardianship” (20 Sep 2012)
- ISP walkthrough and debriefing (12 Nov 2012)
- Sharing Forum on Safety Culture (20 Dec 2012)
- Consultative Forum: Do-Not-Attempt Cardiopulmonary Resuscitation (DNACPR) (1 Feb 2013)
- KEC Quality & Safety Alerts
- Monthly Q&S Sharing by Pharmacy Department in KEC Q&S Bulletin
- Staff Forum for Clinical Waste Handling (TKOH: 4 May 2012)
- CPR Drill & Automated External Defibrillation (AED) for ICU Nurses (TKOH: 28 Aug 2012)
- Hand Hygiene Campaign Education Session (TKOH: 28 Aug & 4 Sept 2012)
- Briefing on Novel Coronavirus (TKOH: 4 Oct 2012)
- PPE Proficiency Training for Assessor (TKOH: 30 Oct 2012)
- Fall Prevention Management Seminar for supporting staff (TKOH: 23 Nov 2012)
- Seminar on “Information for Non-Cantonese speaking clients” (6 Feb 2013)
- Collaborative workshop with Medical Protection Society (MPS) – “Mastering Your Risk” (21 Feb 2013)
- Seminars for Prevention of Pressure Ulcer for HCAs (TKOH: 11 & 18 Mar 2013)

5.2 Incident Management
- Information Security and Privacy (ISP) Seminar (7 Nov 2012)
- Sharing of SE / SUE through KEC Quality & Safety Bulletin
- Quarterly Sharing of Incident Trends through KEC QSO web
- Fundamental Workshop on Mediation in Complaint Management held on (TKOH: 26 May 2012)
- Q&S Forum on KEC Incident Sharing (TKOH: 8 Aug 2012)
• Seminar on Patient Relations Team - Reality Show (3 Oct 2012)

5.3 Hospital Accreditation

• UCH Gap Analysis Website as a communication and resources platform
• Ongoing hospital accreditation update in the KEC Quality & Safety Bulletin
• Briefing Session on ACHS Criterion 1.1.8: Health Record and Care Delivery (TKOH: 22 Nov 2012)
• Three staff engagement forums on 4 ACHS criteria (Infection Control, Occupational Safety & Health, Pressure Ulcer Prevention and Health Records Management) (TKOH: 14, 15 & 22 Feb 2013)

5.4 CQI

• KEC Quality & Safety Symposium (21 Mar 2013)
• KEC Conference of Excellence (16 May 2012)
• Sharing of CQI Practice by Departments in KEC Quality & Safety Bulletin
• Quality and Safety Forum on “Nursing Quality & Safety” was conducted jointly with the Nursing Services Division (TKOH: 19 Oct 2012)

5.5 Infection Control

• The Infection Control Team conducted a total of 90 courses with 3,831 staff attendance
• Infection Control Refresher Training (TKOH: 18 Apr 2012 and 18, 21 & 30 May 2012)
• Infection Control on Construction & Renovation Work in Hospital (TKOH: 30 Aug 2012)

5.6 Occupational Safety & Health

• The KEC OSH Team conducted a total of 25 education and training programs with 4,117 staff attendance
• Seminar on Incidents and Accidents Investigation and The Future Direction of OSH at Departmental Level (11 Apr 2012)
• A Poster Design Competition on “Prevention of Needle Stick Injury” was held with presentation ceremony organized at a Sharing Forum (TKOH: 23 Jul 2012)
• Workplace Safety – Manual Handling Operation for supporting staff in O&T department (TKOH: 13 Aug 2012)
1. Structure
2. Overview of Quality and Risk Management Issues

2.1 In-Patient Medication Order Entry (IPMOE) (PMH)

IPMOE is an inpatient computerized medication system encompasses prescription, dispensing and administration. It is a close loop and paperless system which bears safety features, clinical intelligence and workflow support.

Following the preparatory phase of the development team planning, setting up of IPMOE office, selection and procurement of hardware, the office started the promulgation and engagement activities such as conducting briefing sessions, developing IPMOE website and training manuals, organizing staff training courses and on-site practice. System development, testing and User Acceptance Test were also performed.

IPMOE would be first piloted at Ward R4NA of Lai King Block of Prince Margret Hospital (PMH) on 15 April 2013.

2.2 Management of Hospital Acquired Pressure Ulcer (HAPU) Management (PMH)

Comprehensive program on prevention of pressure ulcer management was launched with the aims to lower the hospital acquired pressure ulcer rate. It included conducting the yearly pressure ulcer prevalence study, individual investigation and report of every case with ulcer classified as unstage and issuing of the hospital acquired pressure ulcer alert for sharing. To raise staff alertness, a poster on care of pressure ulcer was designed and distributed to all wards. Training for Pressure Care Liaison Nurses to update their knowledge was taken. Besides, the pressure ulcer round to wards on a monthly basis was implemented for monitoring and sharing. The Pressure Ulcer and Wound Management Subcommittee was also formally established in December 2012.
An enhancement program on prevention and management of pressure ulcer was also piloted in Medicine & Geriatrics department, PMH. The program standardized all ward policies, communication flowcharts with compliance record formulated. All wards were also equipped with bladder scanner and public address system. Moreover, there was provision of lifting team with 4 supporting staff in designated wards to assist patient turning and sit out. The result of the program was encouraging with HAPU decreased by 28.6% and increased staff satisfaction rate.

2.3 Clinical Governance

In collaboration with Hospital Authority Head Office (HAHO) on the promulgation of clinical governance, 2 identical educational sessions on clinical governance for managers were organized on 31 October & 1 November 2012 in Yan Chai Hospital (YCH) and PMH respectively. The course aimed at identifying the components of clinical governance and its principles so as to explore strategies and barrier to the implementation of clinical governance. The total participants were 67.

2.4 IT Contingency Plan (PMH)

To prepare for the sudden breakdown of the IT system and minimize its negative damages, the PMH IT contingency plan was drafted and an IT contingency drill exercise named “Massacro” was conducted on 11 April 2013. An IT contingency kit was also designed and distributed to all wards / units. The PMH IT contingency plan would be adopted by other KWC hospitals.
3. Risk Prioritization

3.1 Identified Risks for 2012-2013

<table>
<thead>
<tr>
<th>Clinical Risks</th>
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<tbody>
<tr>
<td>1 Medication</td>
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<tr>
<td>2 Patient Fall</td>
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<tr>
<td>3 Infection Control</td>
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<tr>
<td>4 OSH - Injured whilst Lifting or Carrying</td>
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<tr>
<td>5 Patient Identification</td>
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<td>6 IT Breakdown</td>
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<tr>
<th>Non-clinical / Operation Risks</th>
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<tbody>
<tr>
<td>1 IT Breakdown</td>
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<tr>
<td>2 OSH - Injured whilst Lifting or Carrying</td>
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<tr>
<td>3 Fire Safety</td>
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<td>4 Workplace Violence</td>
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3.2 Identified Risks for 2013-2014

<table>
<thead>
<tr>
<th>Clinical Risks</th>
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<tbody>
<tr>
<td>1 Medication (Administration, Discharge Medication, Dispensing, Handling &amp; Storage)</td>
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<tr>
<td>2 Infection control (Non-compliance, Surveillance, Environmental Cleansing &amp; Disinfection)</td>
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<tr>
<td>3 Patient Fall</td>
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<td>4 OSH (MHO)</td>
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<th>Non-clinical / Operation Risk</th>
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<td>Fire Safety</td>
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4. Risk Reduction and Quality Programs

4.1 Review of 2012 Risk Reduction Programs

4.1.1 Medication Safety

Individual hospitals conducted various projects on standardization of drug allergy practices, ward storage and drug labeling to improve medication safety. Audits on administration of dangerous drugs, intravenous infusion and Medication Administration Record documentations were also conducted and recommendations were observed and followed up accordingly.

For reduction of human error, Kwong Wah Hospital (KWH) had developed an “E-calculator of emergency drugs” for Paediatrics / Neonatal Intensive Care Unit cases. Dosage of emergency drugs would be calculated automatically after input of patient’s body weight.

To raise the staff awareness on medication safety, medication safety talks and forums were organized. Medication incidents were shared during departmental and individual General Out-patient Clinics (GOPC) meetings. Medication safety had also been added as a regular and key topic in the orientation program for all new nurses and residents in KWH.

A total of 37 drug fridges equipped with temperature recording and alarm system were purchased for clinical units to improve the drug storage condition in PMH.

To comply with the requirement to document the leftover / unused dangerous drug, chops were designed with modification of the existing record format to facilitate documentation of unused dangerous drug in dangerous drug ledger. The practice was effective in February 2013 in PMH.

All KWC hospitals had reviewed medication incidents and followed up with preventive strategies. The incidents were also shared with staff regularly.

4.1.2 Patient Identification

In Caritas Medical Centre (CMC), checking of correct patient identification was included in audits on Type & Screen sampling, Safe Surgery Practice on Interventional and bedside
procedures, and Blood Transfusion. Follow up on audit of “Safety Policy on Bedside Procedure” was conducted in Wong Tai Sin Hospital (WTSH) resulted an increase in compliance rate as compared with the previous years.

In KWH, the Radiofrequency Identification system was installed in the mortuary and autopsy area to enhance correct identification of corpses.

An audit on patient identification involving all clinical staff, patient care assistants and staff of shroff was conducted at 19 KWC GOPCs in July and August 2012. The compliance rate on the audit criteria was 99%.

4.1.3 Fall

Fall prevention seminars and sharing of fall incidents were organized at individual hospitals for nurses and supporting staff. Apart from staff education, patients in rehabilitation wards of WTSH were also provided with education on fall prevention. Video on patient falls prevention was broadcasted in CMC for patients as well.

Fall inspection round and audits on patient fall assessment were conducted. A pilot program on fall prevention on the use of wireless bed and chair exit alarm systems in Our Lady of Maryknoll Hospital (OLMH) was implemented in November 2012.

4.1.4 Pilot Program of Modified Early Warning System (MEWS) for Detection of Change of Patient Condition

Pilot program on the use of MEWS in Emergency (EM) ward by phases was implemented after a workgroup studied the feasibility of applying MEWS on the detection of change of patient condition in clinical units. The pilot program showed good compliance with the MEWS parameters. The application of MEWS in other clinical units would further be studied.

4.1.5 Infection Control

To raise staff awareness on hand hygiene, a KWC-World Health Organization Hand Hygiene Day Ceremony was performed in May 2012. In the ceremony, outstanding awards on Hand Hygiene Compliance Audit were presented to the best 3 wards of each KWC hospitals. A newly designed KWC hand hygiene logo was also used as screensaver to remind staff. It was also posted at the hand hygiene stations at KWC hospitals to remind staff and patients on the importance of hand hygiene.
To increase the rate of seasonal flu vaccination for staff, PMH had implemented promotion strategies including road shows, pamphlets distribution, and email notification. To facilitate staff to have flu injection at workplaces, mobile vaccination cart was used to visit clinical sites. There was an increase of 9% in the number of flu shot given to staff as compared with last year.

Inspections on clinical waste segregation and collection, as well as audits on Infection Control & Isolation precautions, environment cleaning and Hand Hygiene were conducted. A drill on clinical waste spillage management was also conducted in OLMH.

Designated Fever Clinic Drill, Drug Refill Clinic Drill and Cohort Fever Drill were conducted at GOPCs. The ventilation testing document and facility inside each fever cohort room of all clinics were reviewed. Besides, frontline staff was refreshed on the practice of activating the ventilation system in the clinics’ cohort room.

4.1.6 Occupational Safety and Health (OSH)

To widely promote and share the OSH information to hospital staff, promotional activities including OSH Fun Day, Healthy Menu Competition, OSH Open Day, Workplace Violence Workshop and Fire Prevention Talk were organized in KWC hospitals. Monthly drills on enhancing the skills of nurses and ward supporting staff in handling workplace violence were held at Kwai Chung Hospital (KCH).

To monitor the compliance of related guidelines and ordinances, audits on workplace safety and fire safety inspections were conducted regularly in all KWC hospitals.
a. Manual Handling Operations (MHO)

To minimize staff injury during transfer of patients, the “Red Dots Mobility System” (RDMS) was piloted at KWH and fully implemented at OLMH.

Trainings on RDMS and other MHO trainings were provided for nurses and supporting staff.

b. Chemical Safety

Chemical Safety Talk and Medical Gas & Safety Talk were conducted in KWC hospitals to raise staff awareness on OSH risks and reduce the occurrence of incidents. Chemical Safety Workshop was also conducted for supporting staff of Family Medicine Department.

Safety inspection on chemical spillage kits at high risks units and chemical exposure monitoring of Formalin in Pathology Department and Operation Theatre was conducted at YCH.

To reinforce staff on chemical safety, chemical stocks and housekeeping were reviewed and assessed in 19 GOPCs, and the minimum chemical stock list of each clinic was endorsed by the OSH Committee.

c. Display, Screen, Equipment (DSE)

Based on the DSE assessment done at the consultation rooms in all GOPCs, improvement program on lighting and noise was done. DSE assessor refresher training was conducted by the KWC DSE Working Group & KWC Ergonomics Consultation Service with a total attendance of 38 trainers.

4.1.7 Physical Restraint

Prevalence survey on the use of physical restraint was carried out at all KWC hospitals. Audits of staff compliance on the use of restrainer were also conducted with satisfactory results.

4.1.8 Resuscitation

To enhance the quality of resuscitation, each emergency trolley in PMH was equipped with an Advanced Cardiovascular Life Support (ACLS) Manual. 40 sets of End-tidal CO₂ monitors were procured and distributed to clinical units to uplift the required standard. Two briefing sessions on use of End-tidal CO₂ monitors were conducted to clinical staff.
4.1.9 Emergency Contingency

To align the practices of GOPCs, department protocol on emergency trolley & out-reach bags and emergency response to immediate patient care was revised in July 2012. The Family Medicine & Primary Healthcare Department guideline on IT Contingency Plan for OPAS / CMS breakdown in GOPCs was reviewed and endorsed in May 2013.

4.1.10 Other Audits

In addition to the audits conducted with other mentioned improvement programs above, audits and surveys such as administration of intravenous infusion, naso-gastric tube feeding, whole blood / packed cells transfusion, single use device, radiation safety, Point-of-care Testing (POCT) - BGA and UPT and venepuncture were also conducted to ensure compliance with related policies / guidelines and standard of operations. Recommendations were followed up accordingly.

4.1.11 Health Information and Record Management Services

Review on filing practices was done in KWC hospitals to reduce the risk of misidentification of patients and lower the volume of medical records folders. Cluster workflow and standard were promulgated to ensure compliance of requirement of medical report to the Coroner.

4.1.12 Business Support Services

a. Domestic & Portering Services

Review on the specimen transportation and body transfer logistics was conducted in KWC hospitals to prevent the occurrence of loss of specimen and body transfer incidents.

Risk reduction initiatives, such as the minimization of needle stick injury arising from waste collection, implementation of color coding system in cleansing practices and fall prevention against slippery floor during cleansing were implemented in all ward areas.

b. Linen and Laundry Service

To ensure sufficient linen supply in case of a sudden surge in demand, KWC hospitals had formulated a plan for achieving the target levels of 3-day emergency linen stock. By the end of 2012 / 13, 59% of the 3-day emergency linen stock had been built up.
Kowloon West Cluster

c. Non-emergency Ambulance Transfer Service (NEATS)

A ride-check system was established to ensure staff compliance on safety measures. Training in a form of role play was arranged for staff to enhance their understanding and empathy to patients. Trainings on the use of stair climbers, site assessment and vehicle maintenance were also conducted to reduce staff injury on duty and enhance patient safety.

d. Utility Supplies

The contingency plans for interruption of utility supplies (e.g. electricity, gas) were reviewed. Briefings were provided to concerned staff on the contingency measures.

e. Telecommunication

Contingency plans on Private Automatic Branch Exchange (PABX) system failure were reviewed. An annual telecommunication drill was conducted at PMH, YCH and OLMH.

4.2 Quality Initiatives, Including Accreditation

4.2.1 Hospital Accreditation

CMC and OLMH had completed the Periodic Review and Organization Wide Survey respectively. Follow up and improvement works in response to surveyors’ recommendations were in progress.

PMH and YCH would conduct the Gap Analysis in 2013 and 2014 respectively. All the preparation work was underway.

4.2.2 Other Quality Initiatives

a. Hospital Safety Rounds

KWC Hospital Management conducted Hospital Safety Rounds regularly in their hospital and GOPC focusing on environmental scanning, safe practices and staff concerns. Improvement plans and risk reduction strategies would be followed for all identified loopholes by respective hospitals.
b. Quality & Safety Publications

To nourish safety culture in KWC hospitals, each hospital would publish newsletter, bulletins and safety gist to raise staff awareness on patient safety regularly. It also serves as a means to share the good practices among staff.

c. Business Support Services

i. Domestic & Portering Services

In ensuring the stability and adequacy of manpower for domestic & portering services in high risk clinical areas under emergency situations, the ratio of in-house and contract staff was continuously monitored by cluster benchmarking and contract reviewing.

ii. Patient Food Service

In support of carbon reduction, low carbon dish in the cycle menu was introduced since December 2012.
5. Learning and Sharing Information

5.1 Orientation & Induction Program for New Residents

The KWC Orientation & Induction Program for KWC new residents was held on 23 and 25 July 2012. 97% of the new residents had attended the 2 identical half-day training sessions. The scope of the program was to raise the awareness of residents to common pitfalls and risks in hospital practices, and to strengthen their skills in managing incidents at the beginning of their career. Evaluation from participants reflected that the overall program was useful to their daily practices in wards.

5.2 KWC Q&S Forum on Mental Competency Evaluation & Consent

The KWC Q&S Forum on Mental Competency Evaluation & Consent was organized in PMH and video conference to cluster hospitals on 21 September 2012. The aim was to update healthcare professionals on the concepts and legal framework in the management of consent for Mentally Incapacitated Person. The total attendance for the forum was 438. The overall comments of the participants on the forum were encouraging.

5.3 Incident Management Training

Four sessions of incident management training were organized in October and November 2012. Three for nurses, allied health staff and administrators with a total attendance of 126, and one mainly for medical staff with 19 attending the training. The overall feedback on the
contents and topics was positive and applicable to their work.

5.4 End of Life Care

In order to enhance the provision of good end-of-life care in daily clinical practice, a seminar on end-of-life care in acute setting was organized on 16 January 2013 with 251 participants attended. Renowned speakers and wife of a deceased, who was given end-of-life care, were invited to share their expertise and feeling. Course evaluation was positive.

5.5 Mastering of Adverse Outcome

A risk management training course on Mastering Adverse Outcome was organized by KWC on 10 January 2013. The program aimed to help doctors to response effectively to adverse patient outcomes to improve patient safety and reduce the risk of complaint or claim.

5.6 KWC Q&S Forum

The KWC Q&S Forum was organized on 28 March 2013. The theme was “Failing to plan is planning to fail”. The key speaker was Mr LAU, superintendent of Shamshuipo district
from the HK Police, who gave an overall picture of how the Police plan ahead for major incidents and their strategies of timely management on unanticipated changes. Dr T Y Chui, Dep CM of PS&RM of HAHO was also invited to share with us on the concepts on risk assessment and management. The total attendance of the forum was 123. The overall feedbacks from the audience on the talks were useful and could broaden their mind on risk management.

5.7 Drug Talks for KWC Nursing Staff

Five training sessions on drug management on the following topics were conducted for nursing staff to enhance medication safety,

- Use of drugs in two common emergency situations (Anaphylaxis and Cardiopulmonary Resuscitation)
- Warfarin management
- Drugs commonly used in neonates
- Parenteral nutrition at a glance
- Pharmacological management for diabetes mellitus

5.8 LEAN Roving Exhibition

A LEAN Roving Exhibition coordinated by HAHO was rolled out in KWC hospitals from May to June 2012. The aim of the exhibition was to show an overview of the “We Innovate, Service Excels Regularly” (WISER) projects. The WISER movement is a patient-focused approach to improving services and optimizing quality at minimal cost. Foam Boards of the lean projects were shown in all KWC hospitals by rotation.

5.9 Hospital Management Asia Poster Roving Exhibition

In order to promote learning and sharing of good practices among KWC staff, a roving poster exhibition was held from October to December 2012 at KWC hospitals displaying 7 awarded projects from the Hospital Management Asia 2012.
1. Structure

During the period of reporting, the governance structure of NTEC Quality and Safety (Q&S) has been reviewed and revised. The accountability of Q&S subcommittees, cluster working groups, hospital projects team and function groups were further defined. There were seven sub-committees reporting to cluster Q&S Committee: Nursing Q&S, Consent, Nutritional, Medication Safety, Q&S Research, Q&S Training and Procedure Safety.
To prepare for Hospital Accreditation of Prince of Wales Hospital (PWH), Alice Ho Miu Ling Nethersole Hospital (AHNH), Tai Po Hospital (TPH) and North District Hospital (NDH), a Registered Nurse (RN) grade Quality Officer (QO) trainee and an Executive Officer II joined in the existing cluster Q&S Team.

2. Overview of Quality and Risk Management Issues

2.1 Risk Management

Risk registry is a core and guiding element in risk management for patient care delivery. It is conducted in June every year. In 1Q 2013, a cluster task force chaired by Dr Jonas Yeung has been formed in multi-disciplinary approach to facilitate a structured risk registry process and enhance the quality elements in risk registry.

2.2 Incident Management

Over 2000 incidents were reported through Advance Incident Reporting System (AIRS) in 2012/13 in NTEC. In comparison with data in last year, an increase of 14% was noted. Among the incidents, patient injury / fall was the major reportable incident (36.4%), following by medication incidents (8.6%) and missing patient (4.7%), then the investigation related incident (2.9%).

2.2.1 Pilot of AIRS Version 3

AIRS Version 3 had been piloted in NTEC in July 2012 but some technical problems were found. After meeting with HAHO, the trial was ceased and reverted back to AIRS version 2.
2.2.2 Policy on “Management of Serious Complaint / Patient Safety Incident”

A policy on “Management of Serious Complaint / Patient Safety Incident” was endorsed and implemented in October 2012 in order to ensure a timely and effective manner in handling of serious incident or complaint.

2.3 Safety Culture

To promote safety culture and nurture our future leaders, the cluster Q&S Training Subcommittee was formed to plan and organize education and training programs for the NTEC staff on incident management. Since September 2012, series workshops, named “Essentials in Quality and Safety for Healthcare (EQUALSafe)” which consists of three different workshops: Incident Management I, Incident Management II and Teamwork Communication training, was re-launched and organized monthly. Staff feedback was very encouraging.

2.4 Safety Design and Practice

2.4.1 Medication Safety

Medication safety is still the top priority in NTEC. Since 2010, a series of activities were organized following the Cluster Chief Executive (CCE) Forum “Medication Safety – Yes We Can”. In 2011, the theme for medication safety is “Medication Safety – Be Safe, Be Smart, Yes We Have!” In 2012, the theme for medication safety is “Medication Safety – Our Next Step, Yes, We Must”.

The main focus was high risk medication. Nine groups of high risk medications were identified, a policy and a series of safety measures were promoted. The trend of incident involving high risk medication was followed. Staff participation in medication safety was good and positive.

The Annual Quality and Safety Forum themed “Medication Safety: Our Next Step” was held on 10 October 2012. Prof. David Bates from Harvard Medical School in US was invited to be the keynote speaker. Hospital Authority Chief Executive Dr PY Leung was invited to
officiate the Forum. Pre-forum workshop titled “Challenges in implementation of new initiatives to improve medication safety” was conducted on 9 October 2012. Prof. David Bates, Ms Vivian Hsueh from Union Hospital, and Dr CB Law from Kowloon West Cluster (KWC) shared the new technology on enhancing medication safety.

Six cluster policies, procedures and workflow on medication safety were endorsed and implemented:

- Policy and Procedures to Prevent Inadvertent Prescription & Administration of “Known Drug Allergy”
- Procedures for Verbal Medication Orders
- Safe Administration of Drugs by Anaesthesiologists
- Workflow of “Warfarin Management”
- Safety Procedures for Use of High Risk Medications
- Procedures for the Use of Standardized NTEC Medication Administration Records (MARs)

Infusion drug safety and transcription error were identified as two top risks of medication error in NTEC. A taskforce on drug infusion safety, chaired by Dr KK Wong and another taskforce on transcription error chaired by Dr Wency Ho were formed to look into the issues and to look for possible safe solutions.

With effort of NTEC colleagues, there was no reported incident of known drug allergy in 4Q 2012. However, incidents on high risk medication still need continuous effort to achieve zero incidents.
2.4.2 Surgical Safety

Safe surgery and retained surgical item was another top patient safety concern in NTEC and PWH. The Bedside Procedure Safety checklists A & B were revised and implemented in 3Q 2012 in NTEC. In 2012, a safe, cost-effective and user-friendly gauze container to replace the traditional gauze rack was developed in NTEC. The new design aims at accurate and rapid swab counting, complying with standards of infection control, allowing easy visualization of soiled gauze and facilitating gauze weighting for blood loss estimation. Three types of disposable gauze container were designed: short gauze, long gauze, and abdominal swab containers. The full set of disposable gauze containers and holding trolleys had totally replaced the use of traditional gauze racks in operation theatres and delivery suite in PWH in 2012, and in AHNH and NDH in 2013. Staff feedback was good and positive.

2.4.3 Clinical Handover and Early Detection of Deteriorating Patient

Clinical handover and early detection of deteriorating patient were identified as two new patient risks in NTEC. A cluster taskforce chaired by Dr David Sun was formed to explore the mechanism and tool in enhancing clinical handover and team communication.

2.5 Staff Engagement

2.5.1 Quality and Safety Strategic Retreat

On 1 December 2012, an annual Quality & Safety Retreat was organized with 60 participants attended. Three issues: Clinical handover, handling of deteriorating patient and Risk Registry, were identified and formulated as the cluster annual plan in NTEC. The gaps identified in the Gap Analysis were also shared with in-depth discussion.

2.5.2 Quality and Safety Walkround

The Quality and Safety Walkround extended from local hospital to cluster wide hospital round. Quality and Safety Walkround was led by Q&S coordinators, together with Hospital Administrators, Occupational Safety and Health (OSH) coordinators, Infection Control Nurse
(ICN), and local surveyors. For PWH, a total of 30 Quality and Safety Walkrounds involving 19 clinical and 12 non-clinical areas were visited during the report period.

2.5.3 Hospital Accreditation – Gap Analysis by The Australian Council of Healthcare Standards (ACHS)

The Gap Analysis was conducted smoothly at PWH on 5-9 November 2012, and NDH on 12-15 November 2012. During the 2 weeks, 131 sessions were arranged in PWH, whereas 75 sessions arranged at NDH. A total of 92 priority action items were recommended by surveyors. Follow up actions on those identified gaps were planned and commenced. As Organizational Wide Survey (OWS) was confirmed to be conducted in September 2013, preparatory works was kept moving in improving the quality service and in attaining better achievements in NTEC.
# Risk Prioritization

## 3.1 Identified Risks for 2012-2013

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<thead>
<tr>
<th>Clinical Risks</th>
<th>Non-clinical / Operation Risks</th>
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<tbody>
<tr>
<td>1 Medication - High risk Medication</td>
<td>1 People (HR &amp; OSH)</td>
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<tr>
<td>2 Medication - Known Drug Allergy</td>
<td>2</td>
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<tr>
<td>3 Medication - Transcription Error</td>
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<tr>
<td>4 Wrong Site/Patient/Type</td>
<td>4</td>
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<tr>
<td>5 Retained Instrument</td>
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<tr>
<td>6 Fall resulting in Hip Fracture</td>
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<tr>
<td>7 Infection Control - Multi-resistant Organisms</td>
<td>7</td>
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<tr>
<td>8 Clinical Handover</td>
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<td>9 Early Detection of Deteriorating Patients</td>
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3.2 Identified Risks for 2013-2014

<table>
<thead>
<tr>
<th>Clinical Risks</th>
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<tbody>
<tr>
<td>1. Medication - Transcription</td>
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<td>2. Medication - High Risk Medicine</td>
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<td>3. Procedural Safety</td>
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<td>4. Fall with Severe Injury</td>
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<td>5. Clinical Handover</td>
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<td>6. Handling of Deteriorating Patients</td>
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<td>7. Infection Control</td>
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<td>8. Identification</td>
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<td>9. Medication - Known Drug Allergy</td>
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<td>10. Suicide</td>
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<tr>
<th>Non-clinical / Operation Risks</th>
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<tr>
<td>1. Manpower Shortage of Doctor</td>
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<td>2. Workplace Violence</td>
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<td>3. Manpower Shortage of Supporting Staff</td>
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<td>4. Poor Staff Morale</td>
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<tr>
<td>5. Handling of Serious Complaints and Incidents</td>
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<td>6. Injury from Manual Handling</td>
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<td>7. Fire Hazard</td>
</tr>
<tr>
<td>8. Succession for Senior Staff at Retirement Peak</td>
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<td>9. Network Power Failure</td>
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<td>10. Injury from Handling Chemical Substance</td>
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</table>

4. Risk Reduction and Quality Programs

4.1 Review of 2012 risk reduction programs

4.1.1 Medication Safety

a. Medication safety policies, procedures and guidelines

Medication safety is still the main focus in NTEC in 2012/13. Several cluster policies,
procedures and workflow on medication safety were piloted, evaluated, endorsed and implemented:

- Policy and Procedures to Prevent Inadvertent Prescription & Administration of “Known Drug Allergy” (KDA)
- Procedures for Verbal Medication Orders
- Safe Administration of Drugs by Anaesthesiologists
- Workflow of “Warfarin Management”
- Safety Procedures for Use of High Risk Medications
- Procedures for the Use of Standardized NTEC Medication Administration Records (MARs)

A one-day slap-shot evaluation audit on implementation of safe medication policies and procedures for use of new standardized MARs, KDA, and verbal order was conducted on 25 March 2013 in NTEC. For PWH, 125 samples were recruited in the audit and total 600 MARs were reviewed. The overall compliance rates of the three medication policies were 93.7%, 90.7% and 91.4% respectively. Follow up action would be taken by the corresponding object officers.

The NTEC Nursing Medication Subcommittee was revising the existing Policy on Dangerous Drugs Handling. A guideline on handling of patient’s private drugs in wards was also under discussion and drafting.

b. Infusion Drug Safety

The existing NTEC Standardized Drug Dilution Tables had been used since 2006. A taskforce was formed to review the tables as well as to look into the infusion drug safety. NDH Dr KK Wong was appointed as the chairman of the cluster taskforce. The revised dilution tables and a new guideline on general principles for safe infusion were developed and endorsed. Briefing road shows had been held in March 2013 and would be fully implemented in May 2013 in NTEC.
c. Transcription Error

Transcription error was identified as another medication risk in NTEC. A taskforce, chaired by PWH Dr Wency Ho, was formed to look into the issues and to look for possible safe solutions.

d. Annual Quality and Safety Forum

The Annual Quality and Safety Forum themed “Medication Safety: Our Next Step” was held on 10 October 2012. Prof. David Bates from Harvard Medical School shared two topics: “Computerized Physician Order Entry and Medication Safety” and “the Future of Improvement in Medication Safety” in the forum. 5 NTEC outstanding CQI projects on medication safety were also presented. Staff engagement activity “Talent Competition on Medication Safety” was carried out and the winners gained 17997 hits from on-line voting.

Pre-forum workshop titled “Challenges in Implementation of New Initiatives to Improve Medication Safety” was conducted on 9 October 2012. Prof. David Bates, Ms Vivian Hsueh from Union Hospital, and Dr CB Law from KWC shared their experiences and intelligences on using new technology on enhancing medication safety. The feedback of audience was very positive. There were 500 attendants and 190 student participants in both pre-forum workshop and annual Q&S forum.

e. iSMART

A series of cluster flyer, iSMART, themed on 9 high alert medications were published monthly to enhance staff knowledge and to provide smart tips in handling of high alert drugs.
4.1.2 Surgical Safety

a. Safety Checklist

Upon to the post-implementation audit on 1Q 2012, two bedside procedure checklists were refined in order to facilitate the time-out process, post-procedure counting and documentation. The new checklists were commenced in September 2012 and another 6-month evaluation audit was conducted in 2Q 2013.

b. 2nd TIME-OUT for Ureterorenoscopic Procedure in Operation Theatre

A 2nd-time process which was conducted by urology surgeon, scrub nurse and circulating nurse for all ureterorenoscopic procedure was introduced in PWH Operation Theatre on 1 January 2013. A reminder tag was placed in every ureterorenoscope set. A chop was tailor-made to facilitate documentation. The 2nd time-out for ureterorenoscope would be rolled out in operation theatres in AHNH and NDH in 2Q 2013.

c. Disposal Gauze Container and Holding Trolley

During the pilot in 2011 / 12, the gauze containers were welcomed by the staff. Based on several prototypes and staff feedback, three types of disposable gauze container were designed. The full set of disposable gauze containers and holding trolleys had totally replaced the use of traditional gauze racks in operation theatres and delivery suite. The implementation was taken by phases: PWH operation theater and delivery suite were implemented in 4Q 2012, and rolled out in AHNH and NDH in 3Q 2013.

4.1.3 Patient Fall

Patient fall was the most frequent incident in NTEC and PWH. The multi-disciplinary taskforce kept on monitoring the fall incident. The main focus in 2012/13 was fall resulting in
hip fracture. Use of hip protector had been piloted.

4.1.4 Tourniquet String

Unintended retained tourniquet after venesection might cause severe patient injury. A 3cm long initiative, tourniquet string, was developed and piloted in PWH in 2012. The feedback from interns was positive and encouraged. Evaluation would be further conducted.

4.2 Quality Initiatives, including Accreditation

Gap Analysis performed by ACHS members was conducted in PWH from 5 to 9 November 2012. The Organizational Wide Survey (OWS) was confirmed to be conducted from 9 to 13 September 2013. To keep moving the momentum of quality improvement in various areas and to prepare for the Gap Analysis as well as the OWS, those quality initiatives commenced last year were reinforced.

4.2.1 Infrastructure and Foundation Consolidation

Further to the successful launch of the cluster search engine (iGateway) to facilitate efficient searching of HAHO and NTEC Policies / Protocols / Guidelines (PPGs), a newly developed electronic platform “iCQI” was officially launched on 18 February 2013. This platform aims at providing all departments with an interface to systematically manage their continuous quality improvement projects (CQI) as well as to register the projects into iGateway at the same time. As such, CQI projects saved / submitted are transparent to all colleagues for easy sharing of other departments’ good works. On the other hand, the submitted projects were categorized against ACHS Criteria by QO as one of the preparatory works for hospital accreditation.
4.2.2 Enhancement of Webpages Information

The iHOSP websites, iAccreditation@NTEC, PWH Hospital Steering@iCommittee and PWH Clinical Standard and Audit@iCommittee were updated promptly in order to share updated issues related to quality improvement and hospital accreditation. Under the hospital Steering@iCommittee webpage, a “Standard & Criteria” webpage was developed as the one-go evidence folder of all the related information under each ACHS criterion. This facilitated surveyors’ easy access to all the required information. Updated information during and after the Gap Analysis including the report was posted up timely for colleagues’ instant reference.

On the other hand, in order to facilitate subject officers to write Electronic Assessment Tool (EAT) essay, a designated website (Document for OWS) was devised.

4.2.3 Staff Engagement / Coaching on Hospital Accreditation and Quality Improvement

a. A Strategic Planning Workshop

A cluster strategic workshop themed on “From Service Gaps to Hospital Accreditation” was organized in May 2012 to engage the chief of services and nursing managers of the clinical departments.

b. A CCE Forum themed on “Accreditation – Looking into our Gaps” was held in May 2012 as well.

c. A Hospital Accreditation meeting between ACHS representatives and HGC members was held in July 2012 so as to enhance mutual understanding and communication on various accreditation-related issues.
d. Department and Committee Visits

To provide individual department / committee with more in-depth and specific information in the preparation of Gap Analysis, the Project Team visited eight departments / units prior to the Gap Analysis. For PWH, department visit was modified since February 2013 into quality and safety sharing sessions that was incorporated into their department meetings. Nine individual clinical departments / units had been visited.

e. Q&A Game Booth

To enhance the general Q&S knowledge and alertness among staff and to engage them in Q&S issues via awarded game, two rounds of game booth were conducted in September 2012 and February 2013 respectively. Each round had its individual session for professional and supporting staff (including doctors, nurses, allied health, administrative, clerical and supporting colleagues). There were totally 652 professional and 1108 supporting staff participated.

f. Briefing and de-briefing on Gap Analysis

In preparation of Gap Analysis, two hospital-wide briefings were conducted in October 2012 and there were 243 and 285 staff attendances respectively. Following the Gap Analysis, a debriefing and CCE Forum were conducted on 16 and 21 November 2012 respectively.

g. Quality Publication

A quality flyer, iQuality, as a mean to share quality improvement tips to frontline staff, made its debut in July 2012 and became a monthly publication accompanied with a knowledge quiz since February 2013. Two more issues were published as in March 2013 with themes on environmental maintenance and clinical waste management respectively.
4.2.4 Quality Assessment and Audit

a. In 2Q 2012, the Accreditation Project team conducted a survey on risk assessment & preventive measures for internal emergencies at PWH. Gaps are identified and suggestions were made to the related subject officers for improvement.

b. Two PWH-based audits are in progress in 1Q 2013. They are “Medical Record Content Audit” and Audit on “Patient’s Understanding and Completeness of Consent Content” respectively.

c. Since April 2012, Quality & Safety Walkround led by local surveyors, Q&S team, ICN, OSH coordinator and administrator was conducted regularly to assist departments / units in self-assessment. Areas for improvement were suggested to the related departments / units for follow up. A total of 19 clinical areas and 12 non-clinical areas were visited during the report period.

d. A cluster-wide audit on the compliance with the “NTEC Document Control Policy” was conducted in December 2012 to January 2013. A total of 843 Policies / Protocols / Guidelines audited. Conclusion, common pitfalls and recommendations were made for subsequent follow-up actions.
5. Learning and Sharing Information

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation and Document Control Workshop</td>
<td>One session of Documentation and Document Control Workshop was conducted in the report period with 55 NTEC staff attending.</td>
</tr>
<tr>
<td>Evaluation Workshop</td>
<td>2 sessions of evaluation workshops to enhance staff knowledge in evaluating healthcare setting were conducted in the report period. About 100 NTEC staff attended.</td>
</tr>
<tr>
<td>Quality Workshop</td>
<td>A series of facilitation sessions to share the CQI projects in relation to standard criteria were commenced since Jan 2012. Total 15 workshops in PWH with video-conferencing to other cluster were conducted in 2012 / 13. Around 3700 attendants had participated in the workshops.</td>
</tr>
<tr>
<td>Forum on Care of the Dying</td>
<td>A cluster forum “Care of the Dying” was held on 24th July 2012. There were 165 staff attending.</td>
</tr>
<tr>
<td>Road show and technical briefing on NTEC iCQI System</td>
<td>Four briefing sessions for staff and three sessions for webmaster on new electronic iCQI platform were conducted in Jan - Feb 2013. Total 136 staff and 99 webmasters had joined in the briefings.</td>
</tr>
<tr>
<td>EQUALsafe Course</td>
<td>EQUALsafe course was re-launched into 3 training workshops: Incident Management I &amp; II, and Team communication (speak-up) at monthly-basis respectively. Total 332 participants had attended the workshop in the reporting period.</td>
</tr>
<tr>
<td>Incident sharing sessions for new interns</td>
<td>Incident sharing sessions were held quarterly when new interns were rotated. The feedback and response from interns were good.</td>
</tr>
<tr>
<td>Cluster</td>
<td>Orientation of newly graduated nurses and nurses on patient safety</td>
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<tr>
<td>Cluster</td>
<td>iSMART (safety alert flyer)</td>
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<tr>
<td>PWH</td>
<td>Risk Watch</td>
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<tr>
<td>PWH</td>
<td>Hospital Grand Round</td>
</tr>
</tbody>
</table>
1. Structure

2. Overview of Quality and Risk Management Issues

2.1 Enhancement of Clinical Governance in NTWC

In January 2013, the Cluster Clinical Governance Committee (CCGC) had strengthened its membership from 16 to 20. Frontline colleagues, including associate consultants and a pharmacist, were invited to join as members to provide more precious feedback. The CCGC also enhanced its governance by introducing the review of clinical indicators, e.g. clinical indicator in monitoring of serious deterioration in general wards. On the other hand, Tuen Mun Hospital (TMH) and Castle Peak Hospital (CPH) had participated in the HA review of clinical governance in May 2012 which the framework of the CCGC was commended in the consultancy report.
2.2 Surgical Quality and Safety Circle (SQSC)

The SQSC continued its work in reviewing complex surgical cases to ensure efficient and effective collaborative efforts and communication among relevant parties. In 2012/13, possible gaps in care pathways were identified and related improvement works had been suggested and implemented. 4 problem areas, namely communication, policy-making, education and feedback, were identified. Improvement actions included the formulation of guideline on pre-operative liaison for emergency operation, and workflow on emergency interventional radiology procedure, and the review of logistics management of patients with acute surgical problem in Pok Oi Hospital (POH). All recommendations and learning points identified were disseminated to frontline staff through bi-monthly combined academic meetings and the discussion summaries were uploaded to the departments’ websites.

2.3 Kaizen Suggestion Competition 2012 on Tourniquet Retention Problem

In a CCGC meeting, it was noted that there were some incidents related to retention of tourniquet at patient’s arm. The CCGC believed that tourniquet retention would have caused potential harms to patients and therefore initiated a Kaizen Suggestion Competition in November 2012 to invite frontline departments to provide innovative ideas to prevent the retention of tourniquet at patient’s arm.

Eight project teams had participated in the competition. The projects were being judged in two stages by the CCGC in February 2013 and Cluster Management Committee in March 2013 respectively. The winning team from the Medicine and Geriatrics (M&G) Department, which proposed the use of an automatic alarming device to remind staff about the retained tourniquet, would be invited to present its project in the Continuous Quality Improvement (CQI) Forum in May 2013. The quality initiative would also be trialed in M&G Department.

2.4 Strengthening of NTWC Risk Register Development

In 2012/13, the NTWC adopted a more structured approach in establishing the risk register in cluster, hospital and departmental levels. The risks were identified in a bottom-up approach which individual department provided their departmental risk register. The risks were consolidated and divided into clinical and non-clinical risks, which were rated, prioritized and endorsed by responsible committees, e.g. Cluster Management Committee, CCGC or Hospital Management Committee, to compile the cluster / hospital level clinical and risk registers. Risk custodians, i.e. subject officers or committees, of the top risks were then
identified for risk mitigation action planning. In order to let departments understand the
development of departmental risk register, two workshops were held in December 2012 with
active participation by managers and frontline staff.

2.5 Crew Resource Management (CRM) Training Programme

Ineffective communication among healthcare workers is the commonest cause of
medical errors. As an effective tool for team communication, CRM was firstly introduced in
the aviation industry and was recommended to implement in the healthcare industry. CRM is an interdisciplinary team training and
process improvement programme that utilizes high reliability science to
embed and hardwire fundamental patient safety and quality concepts in
healthcare settings.

In view of its benefits, the NTWC had been working with
HA Head Office and an external training agent to organize a series
of training courses in the cluster. A committee was formed to
develop a training programme as well as training materials with
the agent. In early 2013, two introductory sessions on CRM
concept for senior staff were conducted. Then, a kick-off ceremony
on CRM with over three hundred attendees was held in end of March 2013. To facilitate the
implementation of CRM training programme in the cluster, a pool of CRM trainers would be
trained in April 2013 and CRM simulation based training workshops would be organized from
2Q 2013 onwards.

2.6 Difficult Airway Management

With the aim to ensure safe and effective management of
patients with anticipated and unexpected difficult airway in the
hospital, a working group was established in 2012 with
members from the Departments of Anaesthesia and Intensive
Care, Ear, Nose and Throat, Neurosurgery, Orthopaedics and
Traumatology and Surgery. A guideline on unanticipated
difficult airway management in operation theatre was developed
and launched in 2012. Further, the first in-situ simulation
resuscitation drill was conducted in operation theatre in May
2012 with 34 medical and nursing staff participated in this drill.
2.7 Fall and Physical Restraint

2.7.1 Use of Morse Fall Scale (MFS)

In fall prevention and management, the MFS was adopted as the unified fall screening tool in NTWC. An audit on the accurate use of the scale was performed.

2.7.2 Use of Fall Prevention Tools for Patients with High Fall Risk

The use of conspicuous “yellow vests” on ambulatory patients with high fall risk was continued and had been extended to 12 wards in TMH. Continuous evaluation of the programme would be performed. Also, a trial of non-slippery footwear for elderly patients was piloted in September 2012.

2.7.3 Environmental Visits

In CPH, an environmental visit would be performed by the hospital fall coordinator to review fall incidents and offer necessary advices.

2.7.4 Educational on Fall Prevention and Physical Restraint

In addition, a staff educational seminar jointly organized by the Fall Prevention and Management Committee and Patient Pacification Committee named ‘Fall and Physical Restraint – Can we avoid both?’ was held in Aug 2012 with 276 participants attended.

Further, with the assistance of volunteers of a secondary school, a patient education video was developed and was broadcasted in wards to educate patients on the correct attitude towards fall prevention. In CPH, four educational talks on fall prevention for supporting staff were delivered in 4Q 2012. A DVD of ‘Talk on Fall Prevention for Supporting Staff’ was also delivered to each ward / unit in March 2013.

In the promotion of safe physical restraint, an educational website on physical restraint for general adult inpatients was produced in February 2013. A task force on pilot of new physical restraint decision tool was also formed in March 2013 to trial improvement measures on physical restraint in several general wards in TMH.
3. Risk Prioritization

3.1 Identified Risks for 2012-2013

**Clinical Risks**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Medication – Prescription (Allergy, Dosage)</td>
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<tr>
<td>2</td>
<td>Medication – Administration</td>
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<tr>
<td>3</td>
<td>Care of Patient with Acute Deterioration of Condition</td>
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<td>4</td>
<td>Wrong Drug Dispensing</td>
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<td>5</td>
<td>Handling of Specimen</td>
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<td>6</td>
<td>Patient Identification - Consultation</td>
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<tr>
<td>7</td>
<td>Care of Critically Ill Patient – Transfer and Interdepartmental Consultation</td>
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<td>8</td>
<td>Team Communication for Caring of Patient</td>
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<td>9</td>
<td>Patient Fall</td>
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<td>10</td>
<td>Retention of Medical Items Inside Patient Bodies</td>
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**Non-clinical / Operational Risks**

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<tbody>
<tr>
<td>1</td>
<td>Human Resource Risk</td>
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<td>2</td>
<td>Physical Resource Risk</td>
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<tr>
<td>3</td>
<td>Physical Resource Risk</td>
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<tr>
<td>4</td>
<td>Human Resource Risk</td>
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<tr>
<td>5</td>
<td>Physical Resource Risk</td>
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<tr>
<td>6</td>
<td>Reputation Risk</td>
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<td>7</td>
<td>Empowerment Risk</td>
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<td>8</td>
<td>Financial Risk</td>
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<td>9</td>
<td>IT Risk</td>
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<td>IT Risk</td>
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<tbody>
<tr>
<td>1</td>
<td>Maintaining a Quality Workforce (Recruitment and Retention of Professional Staff)</td>
</tr>
<tr>
<td>2</td>
<td>Congestion in Ward (Patient Overcrowded)</td>
</tr>
<tr>
<td>3</td>
<td>Capacity of Facilities (Insufficient Space and Equipment)</td>
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<tr>
<td>4</td>
<td>Performance (Staff Morale / Absence)</td>
</tr>
<tr>
<td>5</td>
<td>Equipment Breakdown (Electricity Failure)</td>
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<tr>
<td>6</td>
<td>Unfavorable Media Reporting (Hospital Image)</td>
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<tr>
<td>7</td>
<td>Resource Allocation (Insufficient Fund for Rising Demand)</td>
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<td>8</td>
<td>Budget Control</td>
</tr>
<tr>
<td>9</td>
<td>IT System Failure / not Able to Support Changing Needs in Timely Manner</td>
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<tr>
<td>10</td>
<td>IT Security / Unauthorized Access / Use</td>
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3.2 Identified Risks for 2013-2014

**Clinical Risks**

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<table>
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<tbody>
<tr>
<td>1</td>
<td>Patient Misidentification</td>
</tr>
<tr>
<td>2</td>
<td>Medication Error (Administration)</td>
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<tr>
<td>3</td>
<td>Fall</td>
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<tr>
<td>4</td>
<td>Acute Deterioration (including Difficult Airway)</td>
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<tr>
<td>5</td>
<td>Medication Error (Dispensing)</td>
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<tr>
<td>6</td>
<td>Unanticipated Surgical Outcomes</td>
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<td>7</td>
<td>Nosocomial Infection</td>
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<td>8</td>
<td>Choking and Aspiration</td>
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<td>9</td>
<td>Patient Transfer</td>
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<td>10</td>
<td>Communication</td>
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</tbody>
</table>
Non-clinical / Operational Risks

1. Staff Turnover
2. Ward Congestion
3. OSH (Exclude Workplace Violence & Hospital Acquired Infection of Staff)
4. Long Waiting Time / Delay in Service
5. Equipment Breakdown
6. Workplace Violence
7. Alleged Indecent Assault
8. Unfavourable Media Reporting
9. Building Services Failure
10a. Security
10b. Insufficient Training & Supervision

4. Risk Reduction and Quality Programmes

4.1 Review of 2012 Risk Reduction Programmes

4.1.1 Risk Reduction Strategies by Clinical Risk-related Committees

<table>
<thead>
<tr>
<th>Committees</th>
<th>Risk Reduction Programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Audit Committee</td>
<td>• Conducted clinical audit workshop and lectures</td>
</tr>
<tr>
<td></td>
<td>• Conducted a range of cluster-wide clinical audits, including informed consent, initial patient assessment, post-operational pain management and interdepartmental overflow</td>
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<tr>
<td></td>
<td>• Organised clinical audit sharing meetings on a bi-monthly basis to present audit programmes conducted by departments</td>
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<tr>
<td></td>
<td>• Conducted Modified Early Warning Signs (MEWS) sharing forum for healthcare professionals in NTWC</td>
</tr>
<tr>
<td>Correct Patient Identification Committee</td>
<td>• Organised sharing sessions to share good practices in preventing patient misidentification</td>
</tr>
<tr>
<td></td>
<td>• Performed walk rounds in areas with high risk of patient misidentification by committee members</td>
</tr>
<tr>
<td></td>
<td>• Presented certificates of achievement to wards/units achieving ‘Zero Incident Rate’ or ‘Significant Improvement’</td>
</tr>
<tr>
<td>Credentialing Committee</td>
<td>Formed the Cluster Credentialing Committee</td>
</tr>
<tr>
<td>Decontamination Safety Committee</td>
<td>• Promoted safe use of Cidex and Cidex-OPA</td>
</tr>
<tr>
<td></td>
<td>• Provided training for relevant staff on using Cidex-OPA</td>
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<td></td>
<td>• Conducted audit on the quality and completion rate of the scheduled PM and / or functional test of various sterilization and disinfection equipment</td>
</tr>
<tr>
<td>Drug Administration Safety Committee</td>
<td>• Produced high risk medication label for top-up cupboard</td>
</tr>
<tr>
<td></td>
<td>• Used ‘Additive’ for drugs added to intravenous bags when it has been added by affixing auxiliary labels</td>
</tr>
<tr>
<td></td>
<td>• Introduced heparinised syringes for arterial blood gas (ABG)</td>
</tr>
<tr>
<td>Committees</td>
<td>Risk Reduction Programmes</td>
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<tr>
<td>Committees</td>
<td>samplings and reduced storage of heparin solution in clinical areas</td>
</tr>
<tr>
<td></td>
<td>• Piloted a MAR administration ruler in paediatric wards and orthopaedics and traumatology wards</td>
</tr>
<tr>
<td></td>
<td>• Distributed medication reference books to clinical areas with medication-related duties</td>
</tr>
<tr>
<td>Chemotherapy Advisory Committee</td>
<td>• Revised the cluster policy on intravenous (IV)/intrathecal (IT) chemotherapy</td>
</tr>
<tr>
<td></td>
<td>• Performed audit on IT chemotherapeutic drug administration</td>
</tr>
<tr>
<td></td>
<td>• Promoted preprinted chemotherapy medication administration chart in the Medicine and Geriatrics Department</td>
</tr>
<tr>
<td>Fall Prevention and Management Committee</td>
<td>• Organised a seminar to enhance knowledge and awareness of staff on fall prevention and management</td>
</tr>
<tr>
<td></td>
<td>• Promoted the use of yellow vests to raise awareness of patients with high risk of fall</td>
</tr>
<tr>
<td></td>
<td>• Conducted an audit programme to evaluate the usage of MFS in all wards</td>
</tr>
<tr>
<td>Infection Control Committee</td>
<td>• Replaced scalp vein set with new safety device and provided training sessions to all users for the use of new devices by the supplier</td>
</tr>
<tr>
<td></td>
<td>• Promoted using disposable medicine cups and cleansing drinking cups by Dutch Kitchen (DK) and external contractor to minimize items to be disinfected in general wards</td>
</tr>
<tr>
<td></td>
<td>• Provided on-site influenza vaccination service by Infection Control Nurses in designated wards / units</td>
</tr>
<tr>
<td></td>
<td>• Conducted wristwatch study on the colonization of hospital bacteria on watches and stethoscope</td>
</tr>
<tr>
<td>Informed Consent Committee</td>
<td>Conducted audit of informed consent process in clinical departments</td>
</tr>
<tr>
<td>Nutrition Management Committee</td>
<td>Formed the Nutrition Management Committee</td>
</tr>
<tr>
<td>Pain Management Committee</td>
<td>• Implemented e-learning system for nurses</td>
</tr>
<tr>
<td></td>
<td>• Conducted an interventional pain management workshop</td>
</tr>
<tr>
<td></td>
<td>• Consolidated the pain assessment and pain protocols</td>
</tr>
<tr>
<td></td>
<td>• Reviewed the pain assessment tools for ward staff</td>
</tr>
<tr>
<td>Committees</td>
<td>Risk Reduction Programmes</td>
</tr>
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<tr>
<td></td>
<td>• Reviewed the post-operational pain assessment and management in the Departments of Obstetrics and Gynaecology, Orthopaedics and Traumatology and Surgery in TMH and POH</td>
</tr>
<tr>
<td></td>
<td>• Revised the guideline on use of opioid</td>
</tr>
</tbody>
</table>
| Patient Pacification Committee | • Conducted survey on staff’s attitudes and practice towards the use of physical restraints  
• Briefed Chief of Service, Department Operations Manager and Allied Health staff on the concept and practice of physical restraint and developed interactive e-learning in NTWC intranet  
• Formed a workgroup to explore the possibility to introduce a new physical restraint decision making tool  
• Organised a staff forum on physical restraint and fall prevention  
• Reviewed the physical restraint guidelines in Accident & Emergency (A&E) and Paediatrics & Adolescent Medicine (PAED&AM) departments  
• Performed an audit on physical restraint in the A&E Department  
• Piloted a study on nurses’ attitude on physical restraint in Intensive Care Unit (ICU)  
• Conducted trial on several types of new mittens for upper limb restraint in ICU  
• Revised the NTWC physical restraint policy and guideline |
| Point of Care Testing (POCT) Coordinating Committee | • Coordinated the HA-wide POCT Stocktaking Exercise under HA POCT Committee  
• Reviewed the quality control system of POCT blood gas and HemoCue systems  
• Participated HA Bulk Tender for Blood Glucose Analyzer (BGA) and coordinated the implementation of the awarded BGA in NTWC  
• Provided refresher training of POCT trainers and induction training for new POCT trainers |
| Pressure Ulcer Prevention and Management Committee | • Distributed education leaflets and pressure ulcer staging assessment cue cards to wards and nursing in the cluster respectively  
• Conducted certificate courses on pressure ulcer care for healthcare professionals and supporting staff  
• Conducted multi-disciplinary pressure ulcer rounds to enhance quality of care on pressure ulcer  
• Organised a half-day symposium with an exhibition on pressure ulcer management  
• Established a Central Inventory on Pressure Ulcer Preventive Devices Management System  
• Launched the electronic Pressure Ulcer Reporting System in TMH and POH  
• Developed and distributed the pressure ulcer resource kits to wards  
• Distributed pressure ulcer management posters to clinical areas |
| Procedural Sedation Safety Committee | • Conducted procedural sedation workshops  
• Developed an electronic staff learning platform on procedural sedation  
• Established a committee website for staff information  
• Revisited the procedural sedation safety policy and guidelines regarding discharge criteria |
### Committees & Risk Reduction Programmes

<table>
<thead>
<tr>
<th>Committees</th>
<th>Risk Reduction Programmes</th>
</tr>
</thead>
</table>
| Resuscitation Committee                 | - Compiled the credentialing list of doctors on procedural sedation  
- Reviewed the checklist for procedural sedation in Endoscopic Medical-Diagnostic Unit  
- Conducted staff training on the latest cardiopulmonary-cerebral resuscitation  
- Purchased End-Tidal CO₂ monitors for Advance Cardiac Life Support                                                                                                                      |
| Single Use Devices (SUDs) Risk Management Committee | - Reviewed the registry of SUDs and identified high risk item  
- Allocated the required budget to various specialties based on the fade out items  
- Conducted an annual audit on class II critical reused SUDs. Compliance, risk factors and tracking system were identified                                                   |
| Transfusion Committee                    | - Implemented the massive transfusion protocol  
- Coordinated with Hong Kong Red Cross to provide leuco-depleted red cells to all Haematology and Paediatric patients and methylene-blue treated fresh frozen plasma to all Paediatric patients  
- Established the nurse led transfusion service for thalassemia patient, including Saturdays transfusion  
- Conducted orientation to new interns and residents  
- Revised NTWC transfusion guidelines  
- Introduced newly structured alert in Clinical Management System (CMS) under ‘Clinical Condition’ to facilitate prior and timely arrangement of appropriate blood products                                         |
| Trauma Advisory Committee                | - Organised trauma management courses and trauma rounds  
- Performed audit on trauma mortality                                                                                                                                                    |

### 4.1.2 Clinical Audit

In 2012, 8 audit sharing meetings were delivered in 2012, 14 presentations were conducted and 140 participants joined the meetings with positive feedback. Also, a number of audits were conducted including:

a. An audit on patient record documentation and care effectiveness on interdepartmental overflow patients was completed in 2Q 2012. The results were shared in the Cluster Clinical Governance Committee meeting. Revision/standardization of the transfer forms at cluster level would be considered while medical staff was encouraged to use electronic transfer summary.

b. An audit on initial patient assessment was completed in 3Q 2012. The compliance rate of patient identification, physical status on arrival and nutrition and discharge planning were between 87.5 and 94.6%. Revision of initial assessment record would be conducted in 3Q 2013. A follow-up audit would be conducted to look at factors leading to non-compliance and formulate appropriate remedial actions.

c. Audits on post-operative pain management across Departments of Surgery, Obstetrics and Gynecology, Orthopaedics and Traumatology in TMH and Mixed Surgical Wards in POH were conducted in 3Q 2012. The results would be presented in HA Convention 2013.
d. A nursing audit on intravenous infusion, nasogastric tube feeding and whole blood / packed cell transfusion was completed in 4Q 2012.

e. An audit on Modified Early Warning Signs (NEWS) in emergency medical ward, rehabilitation wards and surgical wards in TMH were completed in 3Q 2012.

f. Audits on cardiopulmonary resuscitation were continued and the reports were disseminated to the responsible departments quarterly.

4.1.3 Correct Patient Identification (CPI)

The CPI Committee continued to review incidents related to patient misidentification. On-site visits to locations which had potential environmental risks in patient misidentification were conducted by committee members. Also, a sharing session for staff was organised in May 2012. In addition, certificates of ‘Zero Incident Rate’ or ‘Significant Improvement’ were given to units to recognize their efforts in ensuring correct patient identification.

Further, the phase 3 Unique Patient Identification (UPI) project in using 2D-barcode technology for all specimens including blood, urine, sputum for laboratory investigation (except for histology tests) was rolled out in CPH in 2012.

4.1.4 Medication Safety & Chemotherapy Safety

The Drug Administration Safety Committee continued to review medication incidents and worked closely with clinical departments in the minimization of medication risks. Risk reduction strategies regarding medication safety were initiated. They included the production of magnifying glasses for frontline nurses to read small prints in medication vials and the purchase of medication reference books (British National Formulary) for each clinical unit with medication-related duties.

To promote chemotherapy safety, preprinted chemotherapy prescription form was introduced in the Departments of Clinical Oncology, Medicine and Geriatrics and Paediatrics and Adolescent Medicine in TMH. Furthermore, intravenous and intrathecal chemotherapy audits were conducted with high compliance rate. Also, a video on safe chemotherapy handling was produced by the Clinical Oncology and Pharmacy Departments in December 2012.
4.1.5 Informed Consent

In 2012, the Policy on Informed Consent was updated and the Guiding Principles of Obtaining Informed Consent for Procedures Not Performed by Parent/Caring team was endorsed. A list of low risk procedures was also formulated for reference during inter-departmental consultations. Further, all clinical departments were invited to update their fact sheets and list of procedures that do not require written consent. The HAHO Guideline on Collecting Audio, Visual or Still Image Recordings from Patients was also circulated for members’ comments during the consultation period. The Informed Consent Committee also discussed on measures in eliminating the use of abbreviation in consent forms. A trial of using stamp chop would be piloted at POH and the use of pre-printed consent form would be implemented in TMH by phases.

4.1.6 Laser Safety and Radiation Safety

To enhance the laser safety management, the Cluster Laser Safety Committee had initiated a new mechanism for approving the purchasing request of medical laser equipment (class 3b or above). Laser Safety Officers would visit and assess the area where equipment would be located before approving the request. Recommendations would be made by officers if in need. Improvement actions should be made before using the equipment in the site. Further, an experienced laser safety adviser was invited to conduct a talk in the ‘Working Safety with Medical Lasers Seminar’ in 1Q 2013 with over a hundred of attendees.

In promoting radiation safety, a Radiation Safety Talk was held in September 2012 to enhance the knowledge and awareness on Radiation Safety. Also, radiation safety local rules for areas performing radiation control procedures were drafted in coordination with the Cluster Radiation Protection Advisor (RPA). These rules would uphold radiation surveillance and protection measures.

4.1.7 Pain Management

The Pain Assessment Tool was modified and the second version was re-printed in 4Q 2012, the assessment tools for assessment of pain intensity were recommended in the following order of priority:

a. Numerical rating scale (NRS)
b. Verbal descriptor scale (VDS)
c. Wong-Baker faces scale (WBFS)
d. Behavioral scales, e.g. FLACC (Face, Legs, Activity, Cry, Consolability)
e. In general, one assessment tool should be used at one time and for each patient if possible.

Further, the use of sedation score during the use of strong opioid was introduced in 3Q 2012 while standardization of pain assessment on the use of strong opioid was completed in 4Q 2012 in respective departments. Educational poster for clinical staff to distinguish between the modified Pasero Opioid-induced Sedation Scale (POSS) and modified Ramsay Sedation Scale used in NTWC was distributed to wards in 1Q 2013. Also, a staff forum on pain assessment and management was held in January 2013. Talks on the Application of Sedation Score in NTWC were also held. Further, certificate courses on pain management and practical tips for clinical staff were conducted with over 220 applicants attended. Positive feedback was received.

4.1.8 Pressure Ulcer Prevention and Management

The Pressure Ulcer Prevention and Management Committee had organized an ‘Advanced Pressure Ulcer Prevention and Management Symposium 2012’ with over 300 attendees in June 2012. An exhibition was set up concurrently with ten booths displaying advanced pressure relieving devices, pressure ulcer management materials and nutritional supplements in enhancing pressure ulcer care.

Besides, a series of poster was produced and posted in clinical areas to arise staff, patients and their carers’ awareness on pressure ulcer management. Furthermore, the cue card on pressure ulcer assessment was revised.

Donation was also received from the S K YEE Medical Foundation Donations. Pressure ulcer preventive devices were purchased and applied to high risk patients. To better manage the devices, a Central Pressure Ulcer Preventive Devices Management System was established and managed by occupational therapists.
With the aim to enhance staff’s knowledge and skill on managing pressure ulcer, two Level 2 classes of advanced certificate courses for professional staff and two Level 1 classes for supporting staff were held.

In CPH, e-reporting system of pressure ulcer was launched in all CPH and SLH wards in February 2013 and all pressure ulcer data of previous month would be reported online to the Nursing Services Division within the first seven days at the beginning of each month.

4.1.9 Procedural Sedation Safety Practice

E-learning programme on procedural sedation for nurses was continued for knowledge update with total 940 nurses passing the programme (nurses achieved 72-93% of scores in the targeted departments) in 4Q 2012.

A revision of checklist for procedural sedation in Endoscopic Medical-Diagnostic Unit was completed in 2Q 2012. The Procedural Sedation Checklist was combined with the item of NTWC Surgical Safety Checklist. Any complication would be reported to Advance Incident Reporting System (AIRS) for monitoring. The integrity of equipment would be checked before signing out of patient. An audit on procedural sedation checklist would be carried out in 2Q 2013.

In collaboration with Clinical Skill Training Centre and Human Resource staff, the credentialing list of procedural sedation was updated regularly. It was used for staff’s reference and to ensure staff can achieve a credential rate of 80% in the targeted department. A training workshop for medical staff was also conducted in January 2013.

4.1.10 Nutritional Management

A committee and a workgroup on nutrition management were set up in TMH and POH in 1Q 2013 and March 2012 respectively to address the nutritional needs of patients during hospitalization. A pilot on nutrition management plan was conducted in two POH wards in May 2012. Also, a Malnutrition Universal Screening Tool (MUST) form was adopted and put on trial for initial assessment and onward monitoring of patients’ nutritional status. Four training workshops on feeding skills for 100 supporting staff would be conducted in 2Q 2013.
4.2 Quality Initiatives, including Accreditation

4.2.1 Hospital Accreditation Scheme

Tuen Mun Hospital (TMH)

To get well prepared for the Periodic Review (PR), a ‘TMH Hospital Accreditation Taskforce’ with representatives from clinical and non-clinical departments was set up to enhance two-way communication between hospital management and frontline colleagues. Taskforce members paid friendly visits to departments to show their support to frontline colleagues. Before undergoing the PR, eleven weekly sharing forums were held with experts from different disciplines to share topics in their related areas. Furthermore, the TMH Accreditation website was revamped and TMH Hospital Accreditation Newsletters were published to facilitate staff to access accreditation related information via various channels. Ultimately, TMH underwent the PR in September 2012 and all recommendations from previous Organizational-Wide Survey (OWS) were closed.

Pok Oi Hospital (POH)

In August 2012, the gap analysis for hospital accreditation in POH was conducted. Improvement plans were initiated with respect to most ‘Priority Action Items’ put forward in the consultancy report. These included the development of Nursing Care Plan and paediatric assessment tool and implementing a ‘children’s corner’ at the Accident and Emergency Department. With the collaboration of POH Accreditation Taskforce and Quality and Safety Office, preparatory work for the POH’s first OWS in June 2013 was commenced with 10 staff communication forums and 12 department visits being organised.

Castle Peak Hospital (CPH)

CPH started the preparation for its first hospital accreditation cycle. Besides education on the standards and criteria in the accreditation exercise, the hospital accreditation team focused on the engagement among frontline colleagues. A series of engagement events were conducted. In February 2013, more than 200 colleagues joined the gap analysis sharing forum, in which colleagues from the Department of Psychiatry of Kowloon Hospital share the experience of their gap analysis exercise. Newsletters were published regularly to update colleagues on the latest development of the CPH accreditation programme. CPH would undergo the gap analysis in May 2013.
4.2.2 Patient Safety Walk Rounds (PSW)

In TMH, weekly PSWs were conducted to discuss with frontline staff on patient safety issues and identify risky areas. In 2012/13, a total of 35 walk rounds in 75 clinical and non-clinical areas were carried out. In POH, PSW was also started since January 2013 and in CPH, over 40 patient safety rounds were conducted in 2012/13. All patient safety issues identified would be followed up and the improvement actions were implemented accordingly. To disseminate the good practices observed during PSWs, two sharing sessions were conducted in TMH and POH in February and March 2013 respectively with more than 140 colleagues attended.

4.2.3 Inter-departmental Consultation

A Group Internal Audit (GIA) on Waiting Time Management for Referrals for Inter-departmental Consultations was conducted in 4Q 2012. Representatives from the Departments of Medicine and Geriatrics, Clinical Oncology, Surgery, Anaesthesia and Intensive Care, Ear, Nose and Throat, and Orthopaedic and Traumatology were invited to discuss with the GIA team. The report was received in 1Q 2013. Improvement actions would be formulated.

4.2.4 Intra-hospital Transport of Critically Ill Adult Patients

In 2012/13, five Intra-hospital Transport of Critically Ill Adult Patients workshops were organised for NTWC staff and over 60 staff had completed the training. In POH, in alignment with the Cluster Policy on Intra-hospital Transport of Critically Ill Adult Patients, a meeting of POH local workgroup was held in May 2012. The forms used for communication and patient monitoring were reviewed, also, the POH Checklist for Intra-hospital Transport and Escort of Critically Ill Adult Patient was updated and applied for official hospital record.

4.2.5 Monitoring of Clinical Deterioration

Following the recommendations made in the TMH hospital accreditation report in 2012, substantial efforts had been put in establishing a measuring system on clinical deterioration, formulating the definition of measuring systems and benchmarking. The establishment on the measuring systems was still in the pilot phase.

4.2.6 Integrated Patient Care Plan (IPCP)

In 2012/13, the IPCPs of management for patients with brain metastasis and timely initiation of renal replacement therapy in patients approaching end-stage renal failure had
presented their latest update to the CCGC. Other programme team leaders of cardiac rehabilitation, paediatric asthma and colorectal cancer, stroke care management and total joint replacement had submitted their progress report and the programmes were reviewed thoroughly.

4.2.7 Research Activities

To assist in conducting quality research study, the research team served as a contact point to liaise with both internal and external parties and provide statistical support to different departments and committees. Enquiries received included survey planning, statistical analysis and collaboration request. In 2012, a study on staff attitude and practice in physical restraint was carried out with a total of 145 nurses and healthcare assistants being interviewed. The preliminary results were presented in the HA Convention and ISQua Conference 2012. A follow-up study would be commenced in 2013/14.

4.2.8 Patient Focus Group

Patient focus groups for colorectal patients and relatives in TMH, Orthopaedics and Traumatology and Intensive Care Unit patients in POH and out-patients in CPH were organized. A health talk on common illness with mini health check for ethnic minority patients was also held. Through a face-to-face meeting between department management and participants, patient needs and service concerns were identified. Feedbacks which included the provision of patient charter and health information in different languages were followed up.

4.2.9 Quality Improvement Programmes in Psychiatric Services

a. Choking Prevention in CPH

Two briefing sessions on ‘Prevention of Choking’ were conducted to supporting staffs of CPH and SLH with 74 attendants. The numbers of choking incident, collected from AIRS, were on decreasing trend from five in 2010 to one in 2012. An audit on management of choking was performed in January 2013.

b. Management of Excessive Water Drinking Behaviour in CPH

An observation form of ‘Nursing Intervention for Patients with Excessive Water Drinking Behaviour’ was designed and was finalised in November 2012. Also, the ‘Guidelines on Nursing Management for Patients with Excessive Water Drinking Behaviour’ was drafted in December 2012 and was commented in the Nursing Committee meeting in January 2013.
c. Missing Patient in CPH

Hospital Guideline on ‘Management of Missing Patient’ was drafted for staff consultation in March 2013. Incidents for missing patient had been reviewed by the Key Performance Indicator group.

d. Patient Suicide in CPH

Nursing representatives of the KPI group have joined the CPH Hospital Management Committee on Suicide and Neglect. Incidents on suicide (both attempted and committed) were reviewed.

e. Management of Patient Violence

A research study in collaboration with the Open University on ‘An evaluation of the outcomes of the implementation of the guidelines on nursing management on patient violence in Hong Kong’ approved by NTWC Clinical and Research Ethics Committee was completed in November 2012. All respondents agreed that the guidelines are beneficial to staff and patient care. Statistics in CPH showed the total number of patient restraint was reduced from 3573 in 2012 to 4257 in 2011 (decreased by 16%); the total number of workplace violence incident was 31 in 2012 compared with 49 in 2011 (decreased by 36.7%); and the total number of staff sick leave days related to patient violence was 43 days in 2012 compared with 146 days in 2011 (decreased by 70.5%).

f. Psychiatric Nursing Discharge Summary (PNDS)

The PNDS utilization rates were well maintained at 100%. Figures on PNDS utilization rate for CPH, SLH and TMH were collected from HAHO IT and disseminated to wards regularly. Revamp version for PNDS had been implemented to all workstations in CPH, TMH and SLH in March 2013.

5. Learning and Sharing Information

5.1 NTWC Quality Journey

5.1.1 Quality Sharing Forum

Nine Continuous Quality Improvement (CQI) forums were held in 2012 / 13. Twenty-three departments presented their CQI projects in these monthly sharing forums. An audience of 600 staff attended the forums in TMH and POH. Kaizen coordinators and alumni were invited to join the forums.
and provide feedback on the projects presented. The forums served as a platform for colleagues from different departments to share their suggestions and ideas in order to further improve their projects.

5.1.2 Staff Training on Quality Journey

An ‘Induction of NTWC Quality Journey’ was included in the Orientation and Induction Programme to all newly joined staff. Five 2-day trainings on Process Improvement were provided to clinical and administrative staff. Identification of values and application of quality tools in healthcare were illustrated with hands-on exercises. More than 80 candidates had participated in the training over the year.

5.2 Safe Clinical Practice Bulletin

The Editorial Board of the Safe Clinical Practice Bulletin was formed in August 2012 so as to promote safe clinical practice and arouse awareness of various clinical risks among junior doctors. Chiefs of Service and Chairpersons of clinical risk-related committees were invited to submit practical cases, expert opinions and take home messages for sharing in NTWC. A total of 8 issues of the 2-page bulletin were published and uploaded to NTWC intranet in 2012 / 13.

5.3 Breakfast Gathering with Interns

Four breakfast gatherings were conducted for TMH interns in 2012 / 13 to build up friendship and a sense of belongings in the NTWC. During the gatherings, intern supervisors provided a brief introduction to their respective department while the Quality and Safety Division shared safety concerns in clinical practices in the gathering.

5.4 Annual Quality Conference

The Cluster has organized a two-day Annual Quality Conference successfully in December 2012. With the theme of ‘Stick-together, stick-to-it-iveness’, three local keynote speakers and four pre-conference workshops organized by Dialogue in the Dark Hong Kong. There had enlightened more than 600 staff in team cohesiveness. Besides, over 40 abstracts received for the NTWC Best Quality Improvement Project Competition demonstrated the quality commitment by staff in improving the service in NTWC.

5.5 Clinical Skills Training Centre (CSTC)

The CSTC was found in 2009 and was providing different scope of trainings such as Resuscitation workshop, Chest Drain workshop, Lumbar Puncture workshop, Suture workshop,
Endoscopy workshop and Breaking Bad News workshop. In 2012/13, CSTC had organized 156 workshops, including 56 types of courses. Over 2000 colleagues had attended these courses.

5.6 Training on Basic Life Support (BLS)

BLS in-house training collaborating with the Clinical Skills Training Centre was organised for NTWC healthcare providers (Doctors, Nurses and Allied Health Workers). In 2012/13, 5 BLS train-the-trainer workshops were organized with around 165 BLS instructors trained. Also, 71 BLS training workshops were organized and 1366 colleagues had completed the BLS training. All BLS training record would be saved in the e-Learning Centre.

5.7 Complaint and Incident Sharing Sessions

Complaint and Incident Sharing Sessions were held at TMH, POH and CPH regularly. Doctors, nurses, allied health professionals and frontline supporting staff from various departments were our target audience. The sharing session was a treasurable opportunity for Patient Relations Officers (PRO) and patient safety and quality improvement team staff to meet the frontline clinical and supporting staff. This sharing session served as a chance to build up rapport for PRO and Patient Safety Officer (PSO) with staff of different departments. Seven sharing sessions were held in NTWC from April 2012 to March 2013.

5.8 Q&S Promotion Visits to Clinical Departments

The Q&S Division paid visits to clinical departments since January 2012 and there were 14 visits were held in 2012/2013. During the visits, the scope of Q&S PRO services is promoted to both the clinicians, nursing staff, allied health staff and frontline staff. On the other hand, the needs and concerns from the colleagues can be better communicated through the sharing and face to face discussion. The feedbacks of the visits were well-received and the colleagues most appreciated the cases sharing session and the exchange of views on Q&S issues in department or hospital.

5.9 Complaint Management Workshop: Managing Difficult & Vexatious Complainants

With the aim to support the development of frontline staff who were required to handle dissatisfied patients and relatives on behalf of the departments / units in demonstrating competencies and effectiveness in complaint handling, a complaint management workshop on
managing difficult and vexatious complainants was organized on 14 July 2012. Forty staff, including department heads, team leaders and supervisors of departments and Department Liaison Officers had joined the workshop.

5.10 Workshop of ‘Mastering Professional Interactions’ by Medical Protection Society

For the sake to support the development of clinicians to demonstrate competencies and effectiveness in professional interactions and inter-communications, a collaborative workshop of ‘Mastering Professional Interactions’ which organized by Medical Protection Society (MPS) was held on 24 January 2013. Twenty-one doctors had attended the workshop.

5.11 Workshop on ‘How to be a Clinical Communication Champion’

According to the result of HA-wide Patient Satisfaction Survey (PSS) 2010, it reflected that the communication skills and competencies in responding to patient’s enquiries should be reviewed and improved. In view of this, NTWC has designed an intensive simulation training workshop for the junior doctors who are equal or less than 2 years of clinical experience. The workshop would be held quarterly and 8 junior doctors would be nominated in each session.

The objectives of the workshop are to highlight the importance and benefits of effective doctor-patient communication; to improve the communication skills of the doctors and to help cultivate a caring culture in the NTWC hospitals. The half-day workshop included lectures provided by guest speakers, role-plays and group discussions. The workshops were commenced from November 2012 and there were 17 residents completed the workshop in 2012 / 2013. Most of the participants felt the workshop very useful and appreciated the realistic role-plays.
5.12 Experience Sharing on Q&S Division’s Services

5.12.1 Visit by United Christian Hospital (UCH)

Patient Relations Team of United Christian Hospital (UCH) has visited the Patient Relations Centre of Tuen Mun Hospital (TMH) on 5 February 2013. It was an opportunity for Patient Relations Officers among different cluster and hospital sharing their experiences on handling complaint management and sharing of views of accreditation in an interactive way.

5.12.2 Visit by Union Hospital

The staff of Emergency Medicine Centre, Quality Assurance Centre and the Customer Services Centre of Union Hospital visited the Quality and Safety Division on 4 June 2012. Services in the Q&S Division especially the handling, processing and follow-up on incidents and complaints were shared. They also visited the Patient Relations Centre of TMH.

5.12.3 HA Seminar on ‘Complaint and Risk Management’

An HA seminar on ‘Complaint and Risk Management’ was jointly held by the Central Committee (Complaints Management and Patient Engagement) and Central Committee (Quality & Safety) on 15 and 16 November 2012 at Hospital Authority Building to promote a positive complaint culture and enhance staff competencies and effectiveness in complaint and incident handling. The target participants are the clinicians, PRO and the frontline managers. To share the medication skills and experience, SM(PR&E), NTWC and PRO of POH were the representatives of NTWC to share a hot scene in the Reframing Carnival.