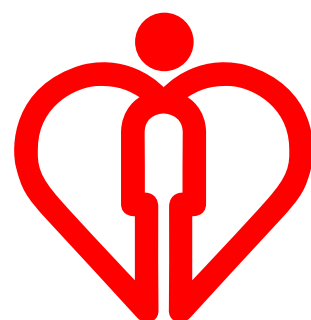
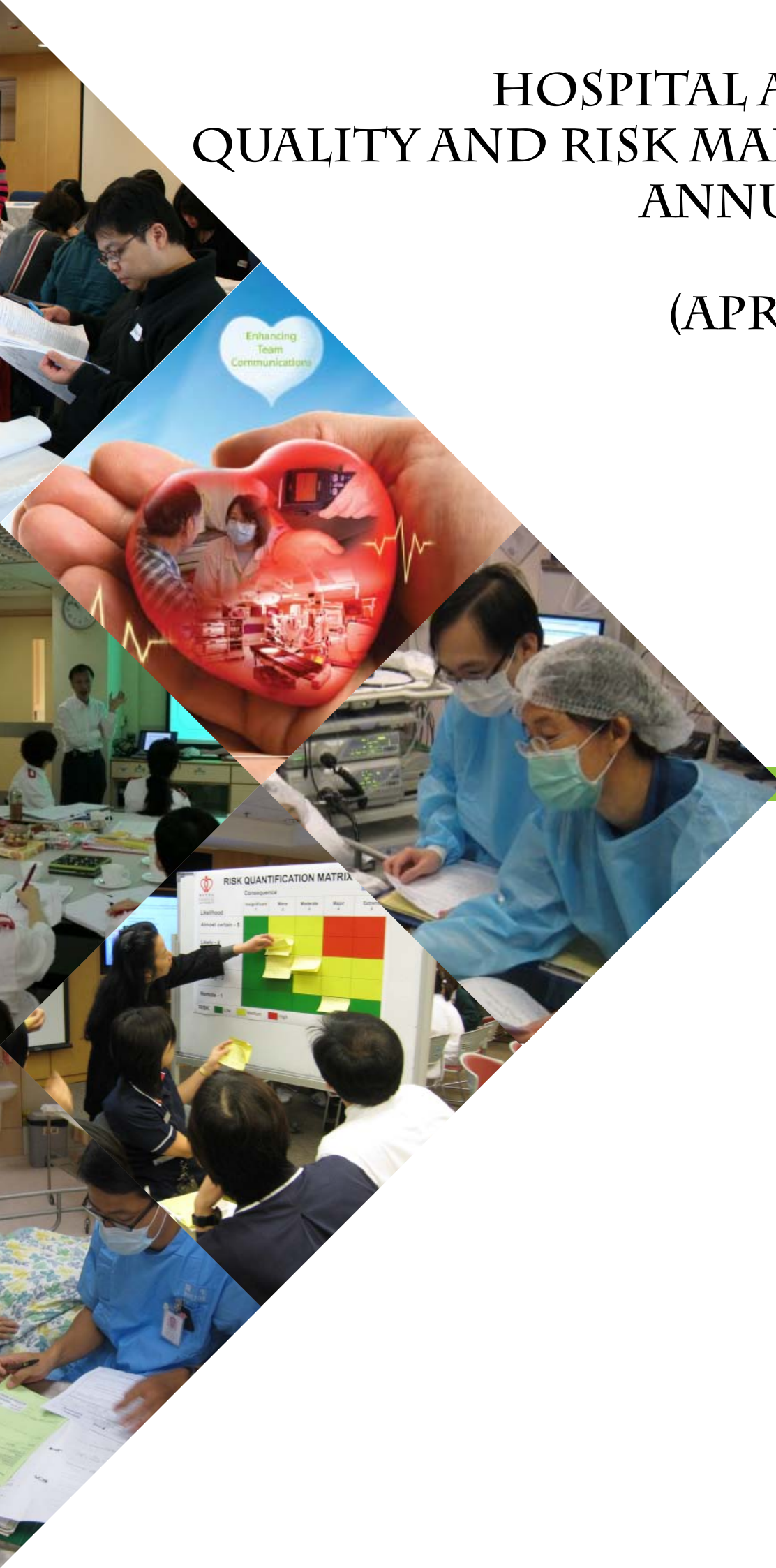


# HOSPITAL AUTHORITY QUALITY AND RISK MANAGEMENT ANNUAL REPORT 2011 -2012 (APR 11 - MAR 12)



## **ACKNOWLEDGEMENT**

We would like to acknowledge the unfailing support and commitment from all frontline colleagues, hospital risk managers, clinicians, executives of hospitals, and colleagues of cluster quality and risk management departments to walking with us altogether in the patient safety journey. We would also like to take this opportunity to thank them for their invaluable contributions in the risk mitigation strategies and programs.

Patient Safety and Risk Management Department  
Quality and Safety Division

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## **Opening Message**

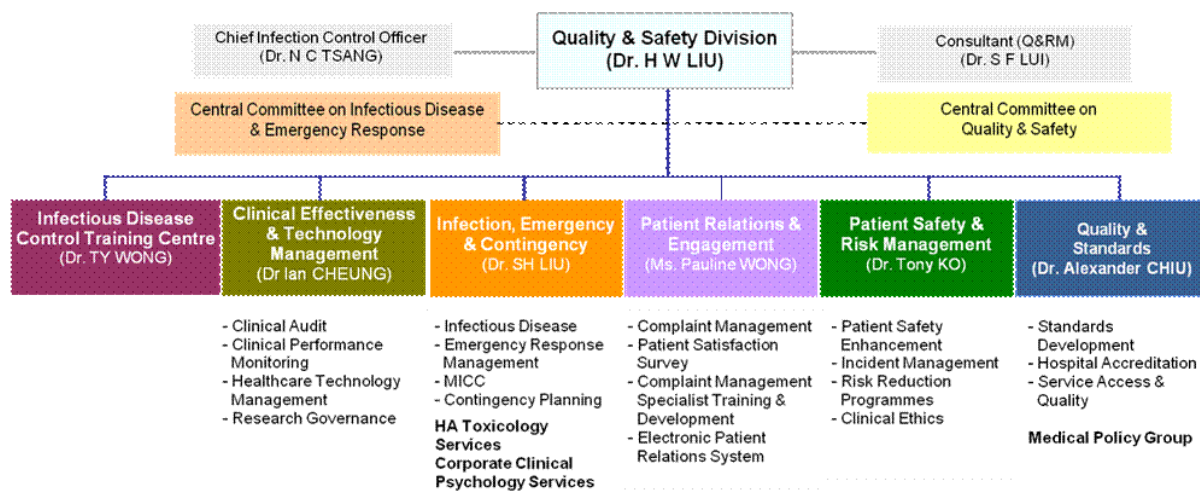
Patient safety is an important target for any healthcare service. From the organization perspective, we need policies, systems, governance, audits. For individual clinical encounters, we might consider the following tips:

Putting yourself in other's shoes	將心比己
Do not assume	不作假設
Stop and think	停一停、想一想
Speak up	說出來

Let us all work smart, work safe.

Dr. Tak Yi CHUI, Dep CM(PS&RM), HAHO  
for Q&S Division, HAHO

## 1. Structure & Initiatives



This report covers the quality and risk management initiatives implemented in Hospital Authority Head Office (HAHO) from 1 Apr 2011 – 31 Mar 2012. During the period, both Quality and Standards Department and Patient Safety and Risk Management Department have made continuous progress in key areas under the HA's strategic direction and service priorities.

### 1.1 Hospital Accreditation

#### 1.1.1 Phase II Hospital Accreditation Program

Year 2011/12 marked the official completion of the Pilot Scheme of Hospital Accreditation. The Steering Committee at Government level had concluded the Pilot Scheme a success, particularly in fostering a patient safety culture and establishing a quality improvement framework in participating hospitals. In line with the Government's strategic direction, HA had decided to extend the accreditation scheme to 15 additional hospitals to cover all seven clusters and different hospital types. After due consideration of the evaluation findings and feedback from staff and stakeholders, HA had decided to extend the Phase II accreditation program over a period of five to seven years and strengthen support and sharing to reduce duplicated efforts.

**檢討醫院認證先導計劃**

**醫家請知**

食物及衛生局、衛生署、醫管局及香港私家醫院聯合，於2009年組成醫院認證籌備委員會，致力在本港推動並建立一套適用於公營及私營醫院的醫院認證標準，以評估醫院的表現，從而推動醫院持續提高服務質素、效率和安全性，加強市民對醫療服務的信心。

醫管局在先導計劃下，已有五間醫院成功取得「澳洲醫療服務標準委員會」認證，而各醫院在管理、運作及多項病人服務上均獲評審團嘉許，肯定了醫院同事的專業及服務的質素。

**接納前線建議**

認證籌備委員會總結先導計劃，自推行以來，已成功地提出多項改善臨床服務、後勤支援及機構管理系統等計劃，證明認證的成效。在總結中，醫管局亦接納前線同事的建議，會調整推行醫院認證的策略。為了讓參與醫院有足夠時間進行有關改善和溝通工作，下一階段認證計劃的籌備時間將延長至五年，並會暫緩在醫院進行實地差距分析(consultancy gap analysis)至明年(2012)4月。

**建立支援團隊**

醫管局會統籌支援團隊，提供平台作資源共用和經驗分享，協助醫院做好認證準備。總辦事處會建立常用政策及指引的資料庫，及提供先導醫院的經驗作為其他醫院參考，減省有關的準備工作，亦可緩解員工的焦慮與疑惑。同時，會加強電腦系統及技術支援，及探討增加文職工作人員，以協助前線醫護的文書工作，讓他們可更專注於臨床服務。

此外，醫管局會加強與醫院員工溝通和支援，使前線員工更清楚有關進程，亦會撥發資源以支援醫院及員工推行認證計劃，及協調四年工作計劃與資源改善措施的規劃。總辦事處、醫院及評審機構會成立協調小組，去跟進評審建議的改善進度與困難。

醫管局期望透過溝通及支援，以確保逐步推行醫院認證，可持續改善醫院的服務，確保病人、醫護、醫管局及社會均會受惠於計劃。 廣文、醫管局



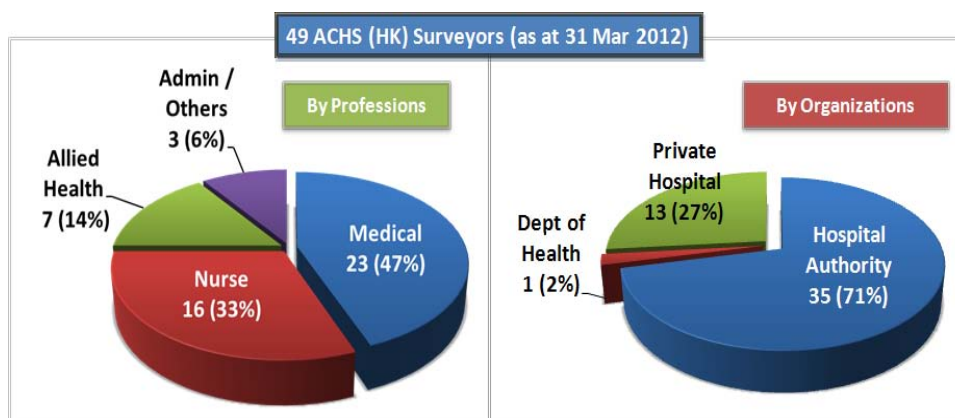
The Phase II program was kicked off in Oct 2011 in collaboration with the Australian Council on Healthcare Standards (ACHS) as the partnering accrediting agent.

## 1.1.2 Local Adaptation of the Latest ACHS Accreditation Standards

Under its cyclical Standards review, ACHS has launched the 5th version of “ACHS Evaluation and Quality Improvement Program (EQuIP) Guide” in Jul 2011. In HK, the Committee on Standards comprising representatives from Department of Health, public and private hospitals had reviewed and adapted the latest Standards for local use. The newly developed “ACHS EQuIP 5 Hong Kong Guide” was sent to the ACHS and the International Society for Quality in Health Care (ISQua) for endorsement and recognition as the accreditation standards in HK.

## 1.1.3 Sustaining the Hong Kong Surveyor System

A cadre of well trained and qualified surveyors was central to the development of a credible and sustainable accreditation program in HK. To cater for the need of expanded accreditation program, training of new batch of surveyors was underway. As of March 2012, 49 ACHS (HK) Surveyors were appointed who have continued to conduct cross-sector surveys between public and private hospitals in HK and overseas, as well as to contribute to the development of a local accreditation scheme.



## 1.2 Enhancing Communication and Sharing

### 1.2.1 Alignment of Accreditation as Continuous Quality Improvement (CQI)

To ensure better alignment of hospitals in adopting accreditation as a CQI tool, focus of the first year was put on staff communication and engagement. Representatives from pilot hospitals and local surveyors were invited to join the series of hospital visits and sharing forums.

As at March 2012, more than 3,000 quality improvement projects were registered in “Continuous Quality Improvement Initiatives System” (CQIs), the HA-wide database which links with the accreditation program. The CQIs was enhanced to link the accreditation standards with relevant quality initiatives and reference, like survey recommendations, policies, clinical indications and so on to facilitate knowledge transfer and peer review among hospitals.

## 1.2.2 Quality Times

Three issues of Quality Times were published in 2011/12. Clusters’ sharing were introduced in Quality Times so as to enhance communication on good practices, quality improvement experience and quality initiatives.



## 1.3 Quality Initiatives

### 1.3.1 Access Management

In 2011/12, the HA has further enhanced its access management on specialist outpatient services. The waiting time statistics of the “extreme outliers” and at the tail-end of waiting list were reviewed and monitored. The electronic referral system was extended to all Family Medicine clinics and most of the Accident & Emergency Departments. A preliminary analysis on reasons for referral was conducted, which helped providing the information for the further development of electronic templates, as well as to identify the pressure areas. In 2011/12, four additional templates, related to urology and orthopaedics, were developed. It also paved the way for the subsequent development of a generic template, containing the essential fields to meet the needs of different referrals.

For elective surgery waiting list / waiting time management, it is noted that the waiting time for cataract surgery has reduced significantly from 44 months in Mar 2009 to 16 months in Mar 2012 due to additional resources injected to increase the throughput. As for

total joint replacement surgery, joint replacement centre in Yan Chai Hospital (YCH) was commissioned in Oct 2011 to provide additional 400 surgeries a year.

In 2011/12, efforts were continued to develop common platforms for sharing of information and monitoring of trend in HA computer systems. For instance, cataract waiting time was being launched in Management Information Portal (MIPo) in Sep 2011. Besides, standard reports on waiting time for common types of elective surgery such as hernia and varicose vein are being agreed for development in the coming financial year.

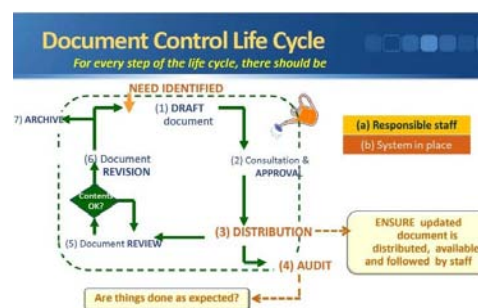
## 1.3.2 Clinical Measurement

Promulgation of development of Clinical Indicators (CI) was conducted in 14 COCs/CCs and committee. COC (Surgery), COC (Anesthesiology), COC (Pediatrics) recommended in total 4 Clinical Indicators and standard reports were developed in CDARS for easy retrieval and sharing. 10 recommendations on clinical measurements were under exploration on data availability.

## 1.3.3 Survey Recommendations Follow Up at Head Office Level

In addition to survey recommendations follow-up at hospital level, there are some improvement initiatives with corporate-wide implications being coordinated at HAHO.

- (a) The “Guideline on Patient Care Documentation” was developed to promulgate and align the document control principles. An electronic document management system was piloted in two hospitals (Queen Mary Hospital and Caritas Medical Centre) and some departments in HAHO to facilitate the document control and management processes.



- (b) To improve sterilization and disinfection of surgical instruments in Operating Theatres (OT), an external consultancy was conducted to review and recommend the enhancement of disinfection and sterilization standards and practices in HA. Accordingly, the “Guideline on Disinfection and Sterilization of Reusable Medical Devices for Operating Theatre” was undergoing revision on some



recommendations made. Moreover, the corporate Surgical Instrument Tracking System for reusable medical devices used in OT was being developed to enhance patient safety.

- (c) To ensure staff competence and improve patient safety, a Task Force on Credentialing was formed to share experience across clusters and deliberate the future development. A “Framework on Credentialing and Defining Scope of Clinical Practice for Healthcare Professionals in HA” had been drafted for consultation among stakeholders. There was plan to stocktake the credentialing activities in clusters and clinical specialties with a view to develop a central register for reference.

## 1.4 Unique Patient Identification (UPI)

Following the findings on the verification of the quality of the 2D barcode on the specimen label, the UPI device program had been updated and piloted in Princess Margaret Hospital (PMH), staff of the wards and hospital laboratory were satisfied with the improvement in the overall printed font color and decoding of the 2D barcode by scanner. Hence, the Phase 3 was continued to implement in Kowloon West Cluster for review.

The UPI device was further used at the bedside to ensure the correct patient is to receive the radiographic imaging. The Patient Safety & Risk Management (PS&RM) Department had jointly worked with colleagues from Subcommittee on Diagnostic Radiography to formulate the workflows based on the 1D barcoded request forms. The Prince of Wales Hospital (PWH) and Queen Elizabeth Hospital (QEH) were volunteered to pilot the solution for rolling out to all hospitals. The application will be further enhanced with workflows using the 2D symbology and will be implemented with the Radiology Information System is revamped to print the job sheets with the 2D symbology codes.

The technology was also implemented in correct identification of still birth baby. The Mortuary Information System (MORIS) was update to enable registration of the body and printing of the Last Office Form and labels for dead body identification. The United Christian Hospital (UCH) had piloted the workflow using the UPI device with wristbands labeled “Stillbirth” vertically. The Princess Margaret Hospital (PMH) had expressed her interest in piloting the new solution in Mar 2012. Both hospitals had jointly developed a central protocol for further roll out to hospitals with obstetric services.

Since the successful adoption of the 2D barcode technology in North District

Hospital (NDH) for correct patient identification in Accident & Emergency Department (AED) on 1 Dec 2009, the PWH had implemented the technology to all patients attending AED for management on 16 Jun 2011. The PS&RM Department had coordinated a meeting with the hospitals' representatives to formulate the framework for an evaluation study on the implementation and share the findings and experiences to other hospitals with accident and emergency services for learning.

## **1.5 Surgical Safety**

The Phase III of Surgical Safety Policy, "Bedside Procedure Surgical Safety", was effective since 1 Mar 2011. The Policy required all HA hospitals to develop solutions for implementing the surgical safety principle by 31 Aug 2011. It emphasized on the implementation of safety checks for the two bedside procedures "Chest Tapping and insertion of drains, and "Insertion of intravascular catheter with the use of guide wire" to improving patient safety during bedside procedures by 31 Aug 2011.

The PS&RM Department will coordinate the reviews on the Phase I, II, & III of the Surgical Safety Policy and will make changes accordingly.

## **1.6 Advanced Incident Reporting System 3 (AIRS 3)**

The AIRS 3 third prototype for testing was conducted from 3 November 2011 to 15 December 2011. A total of 405 colleagues from 7 clusters and HAHO were participated in the trial, and 107 feedbacks were received. With the recommendations collected from the trial, the AIRS Technical Team had meet representative and mangers from functional groups, such as Nursing Quality & Safety (NQS) Subcommittee, Chief Pharmacy Office (CPO), Blood Transfusion Service (BTS), and Radiation Safety. The timeline of the implementation of AIRS 3 had been revised. A User Acceptant Test will be performed in Apr 2012 and the first pilot is scheduled in Jul 2012.

## **1.7 Crew Resource Management (CRM)**

Since the successful pilot of the CRM general framework in Pamela Youde Nethersole Eastern Hospital (PYNEH), the PS&RM Department had organized a Task Force for the second pilot of the CRM from the specialty-based model. The QEH and Tuen Mun Hospital (TMH) had committed to implement the model in areas of Operating Theatre, Intensive Care, Accident & Emergency and Labour Units. The "train-the-trainer" approach will be adopted and an external consultant will be engaged in the coming training.

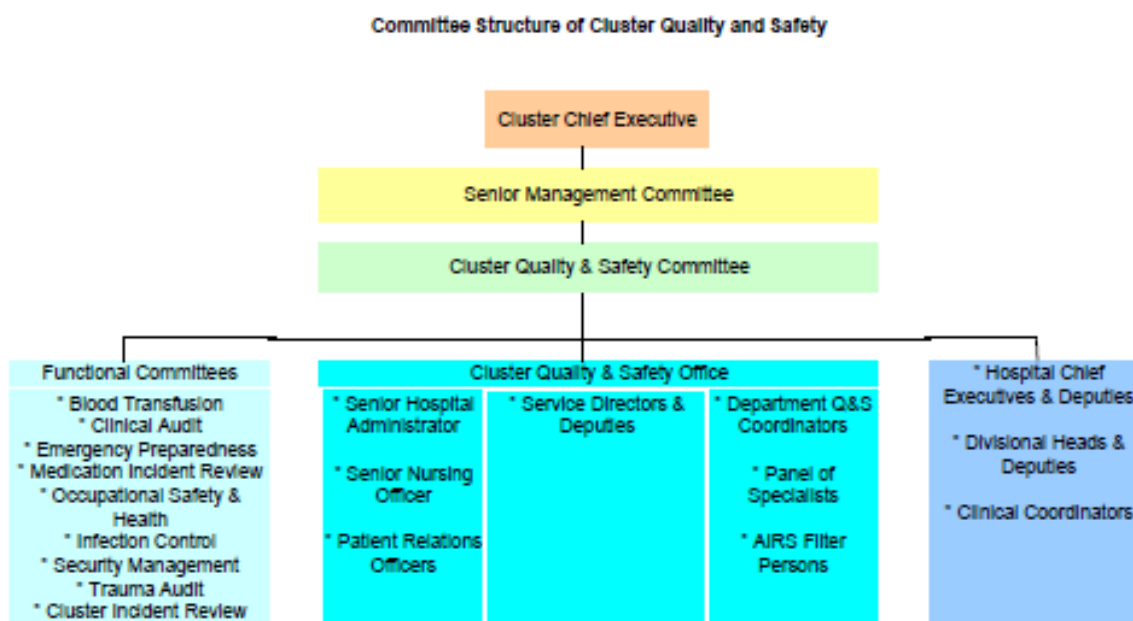
## 1.8 Procedural Sedation Safety

In view of the several sedation related incidents / mishaps reported, and the service gap in the monitoring of procedural sedation identified during accreditation survey of HA hospitals, the Procedural Sedation Safety Taskforce (the Task Force) was formed in Jul 2011 to enhance the safety of procedural sedation in HA. The Task force will advise on the collaborative planning and implementation of action to strengthen the knowledge and provision of safe procedural sedation in HA. The general approach with risk stratification has been adopted. In addition, the PS&RM department will further work with Clinical Co-ordinating Committees (COC), making reference to the guidelines of Hong Kong Academy of Medicine, to better align the practices and standards among different clinical specialties across HA.

Regarding training for procedural sedation, Institute of Clinical Simulation (ICS) was appointed as the training provider of the Commissioned Training Program 2012/13 to provide training to medical staff who frequently conducts procedural sedation to patient. Nursing Services Department will also organize Commissioned Training Programs for practice of safe sedation.

## 1. Structure

### Committee Structure of Cluster Quality and Safety



### 1.1 New Quality and Structure at Hospital Level

In 2011/12, Quality and Safety (Q&S) Offices were established in RHTSK and TWEH to mirror the structure of the Cluster Q&S Office at hospital level in order to build internal capacity and create ownership for cultural change in quality and safety management.

Dr. W T CHAN, Clinical Coordinator (Q&S) in RHTSK and Dr. K H YUEN, CONS (Q&S) in TWEH have been appointed to head the new structures and drive quality and safety in these hospitals.

### 1.2 Clinical Leadership

To foster the strategic direction of “Building Clinical Leadership and Knowledge to Sustain Quality and Safety Improvement”, four consultants from different specialties were appointed as Clinical Coordinator of PYNEH in October 2011. This facilitates clinical governance and succession planning in managing patient feedback and incident. Moreover, a new Panel of Specialists was appointed with effect from 1 January 2012 for a two-year term.

## 2. Overview of Quality and Risk Management Issues

### 2.1 Risk Management Integrated with Cluster Planning

All departments are encouraged to involve all staff in developing the departmental risk register with reference to incidence and complaint data, relevant benchmarks and audit reports. User-friendly template has been developed and implemented to facilitate the risk identification process.

Risk reduction strategies formulated as a result of risk identification have formed the backbone of quality improvement programs in cluster planning. In the cluster strategic and annual planning exercise, resources are provided for various programs to improve service quality and safety.

## 2.2 Crew Resource Management (CRM)

PYNEH was commissioned by the HAHO to plan and organize CRM training program commencing 2009/10 as a pilot project. Over 2,000 clinical staff attended CRM conceptual training in the last 3 years.

"CRM-in-Action" was kicked off in Dec 2010 to harness staff awareness and promulgate using CRM tools in the workplace. The Department of Surgery has successfully implemented briefing and debriefing as a mandatory practice for all major and ultra-major elective operations at the Operating Theatre since Dec 2011. Evaluation conducted in February 2012 revealed an overall compliance of 91.3%. Besides, iSBAR was promoted for clinical handover in clinical wards.



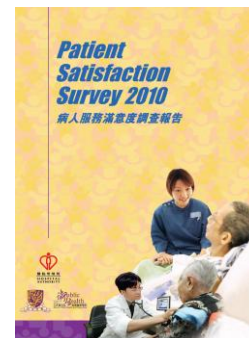
A number of advanced training workshops were conducted in PYNEH, e.g.

- i. Clinical Handover Workshops on iSBAR, Assertion and Use of Briefing and Debriefing, with particular focus on preventing medication incidents in Dec 2011.
- ii. Forum on Sharing of Good CRM practices in March 2012.

Riding on the successful implementation at the Operating Theatre, a working group comprising a medical and a nursing representative from each clinical department in PYNEH was formed to roll out Briefing and Debriefing for critical procedures in individual department.

## 2.3 HA-wide Patient Satisfaction Survey (PSS)

HKEC participated in the HA-wide Patient Satisfaction Survey (PSS) in 2010. The



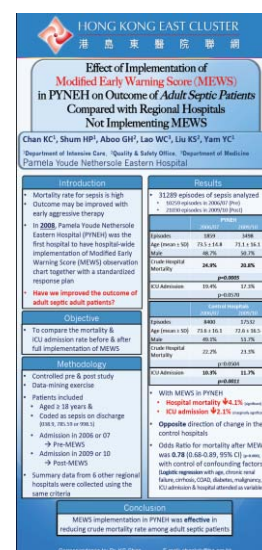
total response from HKEC was 581 which accounted for a response rate of 53.5%, being the 3rd highest in HA. Results published in 2011 showed that HKEC ranked the highest among all clusters in a number of aspects e.g. the waiting time on admission, respondents' confidence and trust in doctors and nurses, the information and help from hospital staff, the privacy, respect and dignity they enjoyed, and etc.

A multidisciplinary task group has been set up in the HKEC to explore opportunities for improvement to issues identified in the PSS.

## 2.4 Modified Early Warning Score (MEWS)

HKEC implemented MEWS in 2008. As a post-implementation review, an audit on changes in crude hospital mortality of acute adult patients in ICU before and after implementation of MEWS was conducted in Apr 2011.

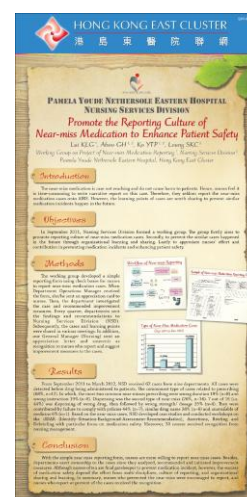
In the review, a significant drop in the crude hospital mortality rate was noted in septic shock patients. Such improvement was not noted in other acute hospitals where MEWS was not implemented. The correlation indicated a positive impact of MEWS implementation in PYNEH.



## 2.5 Near Miss Reporting

As a means to raise risk awareness and nurture a reporting culture, staff are encouraged to identify and report near-misses. Spot Awards are presented in department meetings as motivation and celebration of success.

In terms of medication safety, staff education session was conducted in Feb 2012 where near-miss reporting was emphasized. There is evidence that a reporting culture of near misses is taking place. The number of spot awards given for near misses of medication incidents increased from 22 in 2010 to 58 in 2011.



Nurses have also been encouraged to report near-miss medication cases since 3Q11. The number of near-misses reported between 3Q11 and 1Q12 has increased to 62 (16 in

2009/10 & 4 in 2010/11). The figures show that nurses are more aware of picking up near-misses and thus stopping incidents from occurring. This project was also accepted for poster presentation in ISQua 2012.

## **2.6 Care Management**

PYNEH participated in a HA-wide audit on ICU performance (2007-2010) conducted by the Intensive Care National Audit and Research Centre (ICNARC). The report "National and International Benchmarked Analyses of Hong Kong Hospital Authority Intensive Care Unit Data" showed that PYNEH achieved a very low Standardized Mortality Ratio (SMR) under both the APACHE III and ICNARC systems in Hong Kong.

Integrated Home Care Service (IHCS) has been a collaboration program between Community Nursing Services (CNS) PYNEH and 2 non-government organizations (NGOs) since Oct 2009 to reduce admission of aged clients into hospital. The outcome comparison of 40 patients six months before and after the intervention conducted in Jan 2012 showed reduction in the number of the AED attendance, hospital admission and in the length of stay.

## **2.7 Discharge Planning**

The HKEC Discharge Support Team has been established to advocate early planning for discharge and placement of patients to the appropriate care setting. The Team supports the frontline staff in areas of identifying options of appropriate care setting and liaising with relevant authorities through a multidisciplinary approach.

## **2.8 Advanced Incident Reporting System (AIRS) Revamping**

HKEC was one of the two clusters involved in the first pilot run of AIRS 3.0 in July 2012. This is an upgrade of AIRS 2.0. Before the pilot implementation, HKEC staff have been engaged in providing input on users' requirements, prototype development and testing and user acceptance test. The new system is being further tested in other clusters before full implementation.

## **2.9 Quality Achievements**

### **2.9.1 Wound Care Management**

The Wound Care Management Team in HKEC has been very active in developing

innovative and creative practices on wound management, leading to efficiency and outstanding efficacy in wound care. The Team Leader, Mr. Chi-wai HO, Nurse Consultant in Wound Care was awarded a Certificate of Merit in the HA Outstanding Staff and Teams Award 2011, in recognition of his valuable contribution to the Hospital Authority.



## 2.9.2 Occupational Safety and Health (OS&H)

Two OS&H programs with significant outcomes have won awards granted by the local authority. They are “The Occupational Health Service cum Occupational Rehabilitation Program” that has won the Federation of Insurers Award for Excellence in OSH (2011) and “Comprehensive Heat Stress Reduction Program” that has obtained the Safety Enhancement Program Award (Merit) in the 10th HKOSH Award 2011.

HKE Cluster OSH Team was awarded as one of the HA Outstanding Teams of 2012. The Team has been successful in achieving reductions in workplace violence by 38.2% and injury on duty (IOD) cases and IOD sick leave days by 29.3% and 65.3% respectively.



## 2.9.3 Key Quality Performance Indicators (KQPI)

The KQPI were under regular review in Medical Committee and Senior Management Committee. Significant improvement has resulted in the colorectal cancer patients 93.3% of whom having their diagnosis and first definitive treatment within 55 days whereby the HA overall was 84.5%, and 91.4% of breast cancer patients had their diagnosis and first definitive treatment within 55 days while the HA overall was 88.9%. There was also marked reduction in cataract surgery notional waiting time.

## 3. Risk Prioritization

### 3.1 Identified Risks for 2011-2012

	<b>Clinical risks (in order of priority)</b>
1	Communication
2	Medication Safety
3	Patient Identification
4	Staff Competence
5	Clinical Handover and Communication
6	Surgical Safety
7	Infection Control
8	Fall
9	Pressure Ulcer
10	Suicide

	<b>Non-clinical / operational risk (not in order of priority)</b>
1	Fire Safety
2	Equipment Failure
3	Data Security and Confidentiality
4	Occupational Safety and Health
5	Security
6	Patient Transfer (external and internal)
7	Facility Defects
8	Medical Supplies – Product Quality

### 3.2 Identified Risks for 2012-2013

	<b>Clinical risks (in order of priority)</b>
1	Fall
2	Medication Safety
3	Patient Identification
4	Infection Control
5	Pressure Ulcer Prevention & Management
6	Surgical Safety / Invasive Procedure Safety
7	Communication
8	Suicide
9	Safe Mobilization of Fragile Patients

10	Staff Competence
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	Non-clinical / operational risk (not in order of priority)
1	Occupational Safety and Health
2	Equipment Failure
3	Security
4	Data Security and Confidentiality
5	Facilities Defect
6	Medical Supplies – Product Quality
7	Patient Transfer
8	Fire Safety

## 4. Risk Reduction and Quality Programs

### 4.1 Identified Clinical Risks for 2011/12

No.	Program	Action Taken / Outcome
I.	<b>Communication</b>	
I.a	Management and communication training programs for various grades of staff and designated departments	<ul style="list-style-type: none"> <li>● Advanced Management Program for middle management of HKEC (Feb &amp; Mar 2012).</li> <li>● Executive Management Program for senior management of HKEC (Dec 2011 – Mar 2012).</li> <li>● People Management Training Series for all HKEC staff (Sept, Nov, Dec 2011).</li> <li>● Vision-Broadening Training Series for all HKEC staff (Jul, Sept, Nov 2011, Feb &amp; Mar 2012).</li> <li>● “Life-So-Good” Training Series for all HKEC staff (Mar 2012).</li> <li>● Service Culture Training for supporting and junior professional staff of HKEC (throughout 2011).</li> <li>● Central Program Reserved Fund Training Programs for middle management of PYNEH (Sept, Oct 2011 &amp; Mar 2012).</li> <li>● Team Building for designated departments (Dec 2011 – Mar 2012).</li> </ul>
I.b	Extend CRM Training Program to	<ul style="list-style-type: none"> <li>● Conducted 10 programs since Aug 2010.</li> <li>● Conducted an executive briefing for HKEC Management.</li> </ul>

	AH staff of PYNEH and clinical staff of HKEC	<ul style="list-style-type: none"> <li>● Conducted a Train-the-trainer workshop.</li> <li>● Trained over 300 clinical staff of HKEC.</li> <li>● Recruited 30 trainers who are doctors and nurses of HKEC.</li> <li>● Positive post workshop feedback from participants.</li> <li>● A Good Practices CRM-in-Action Sharing Forum conducted in Mar 2012 to demonstrate the practicality and benefits in CRM skills application, further building a patient safety culture.</li> </ul>
<b>II</b>	<b>Medication Safety</b>	
II.a	Encourage staff participation in medication safety	<ul style="list-style-type: none"> <li>● Frontline nurses have been appointed as Medication Safety Ambassadors in all wards and CNS since 2009 so as to improve medication safety through participation of the frontline staff in the safety awareness, learning and sharing enhancement.</li> <li>● Medication Safety Ambassadors are invited as observers of the CMIRC.</li> <li>● Lessons learnt from incidents can be effectively disseminated to frontline staff.</li> </ul>
II.b	Promote reporting culture of near-miss	<ul style="list-style-type: none"> <li>● Nurses have also been encouraged to report near-miss medication cases since 3Q11.</li> <li>● The number of near-misses between 3Q11 and 1Q12 has increased to 62 (16 in 09/10 &amp; 4 in 10/11), this shows that nurses are more conscious in picking up near-misses and thus stopping incidents from occurring.</li> <li>● Spot Award Scheme has been introduced to encourage near-miss reporting as a means to raise awareness in patient safety.</li> <li>● The number of spot awards given in 2010 and 2011 was 22 and 58 respectively, representing a 164% increase; this demonstrates an open culture whereby everyone shares and contributes in a responsible manner to creating a safer environment.</li> </ul>
II.c	Staff training	Medication Safety Forum conducted on 29 Feb 2012 with HKEC attendance being 299 and positive staff feedback with the aim to raise awareness and for lessons sharing.
II.d	Revision of HKEC dilution guidelines	<ul style="list-style-type: none"> <li>● The dilution guidelines was revised and with new drug included in Oct 2012.</li> <li>● A4-sized and pocket-sized "Common Dilutions of IV Drugs</li> </ul>

		for Adults" distributed to wards and staff respectively.
II.e	Enforcement of the use of MOE prescriptions for post-discharge patients	Mandatory MOE prescriptions in June 2011 ensures system checking on every post-discharge case
II.f	Standard dispensing of Warfarin tablets	<ul style="list-style-type: none"> <li>● Standardized Warfarin dispensing instruction developed for HKEC clinical staff in Oct 2011.</li> <li>● Notices of the standardization were also distributed to patients.</li> <li>● No incident reported since implementation.</li> </ul>
III.	<b>Patient Identification</b>	
III.a	Extend the application of 2D Barcode Scanning System in blood and non-blood sampling	<ul style="list-style-type: none"> <li>● Briefing session on 2D barcode scanning system (Phase III) conducted on 5 Aug 2011.</li> <li>● Train-the-Trainers training sessions conducted in Aug and early Sept 2011 to prepare for the implementation as scheduled by HAHO.</li> <li>● In Pathology, laboratory staff will alert clinical departments if lab result greatly deviates from the previous one and when wrong blood sampling is suspected.</li> <li>● Pathology 2D barcode system is employed in Histology Lab to ensure the correct specimen identification.</li> </ul>
IV.	<b>Staff Competence</b>	
IV.a	Regular review of clinical competency registers of medical, nursing and allied health staff in each department	<ul style="list-style-type: none"> <li>● Hospital Committee on Credentialing &amp; Introduction of New Interventions was set up to formulate policies, ensure compliance to regulatory requirements and develop strategic plans for continuous improvement in issues related to credentialing and safe introduction of new interventions.</li> <li>● All disciplines (Medical, Nursing &amp; Allied Health) have reviewed &amp; updated their competence tables with focus on high cost, high risk &amp; high volume procedures.</li> <li>● Scope of Hospital Services posted up on hospital's visitor internet webpage for public access &amp; reference.</li> <li>● Competency tables kept in individual department for reference and also those of the surgical streams kept by OT nurses for reference.</li> </ul>

IV.b	Peer review meetings for continuous sharing of lessons learnt	Review was conducted in Mar 2012 on clinical peer review meetings which showed that all clinical departments have active & regular inter- and intra-hospital review meetings for sharing of lessons learnt & identifying opportunities for improvement.
IV.c	Preceptorship program	138 new graduate nurses joined the program from 1 Apr 2011 for 24 months.
IV.d	Simulator skill based training workshops for general Surgery, O&G and Urology	<ul style="list-style-type: none"> <li>● In 2011/12, Basic &amp; Advanced Laparoscopic Surgery Courses, Introductory &amp; Intermediate O&amp;G courses, and Basic Laparoscopic &amp; Endoscopic Urology course were conducted.</li> <li>● 95 trainees attended the workshops, including 39 O&amp;G trainees, 51 General Surgery trainees &amp; 5 Urology trainees.</li> </ul>
IV.e	Lean Management Training to senior nurses for workflow improvement to enhance patient safety	<ul style="list-style-type: none"> <li>● Lean Six Sigma Green Belt Training Program with 4 theoretical sessions and 6 project coaching sessions for 30 experienced nurses from HKEC hospitals was conducted from Mar to Oct 2011.</li> <li>● Workflow Improvement Sharing Forum to promote awareness and sharing of good practices conducted in Apr 2012.</li> <li>● 6 workflow improvement projects in different clinical departments completed with significant outcomes.</li> </ul>
<b>V.</b>	<b>Clinical Handover and Communication</b>	
V.a	Audit on the Impact of Modified Early Warning Score (MEWS) on Hospital Mortality of Infection	<ul style="list-style-type: none"> <li>● Mortality and ICU admission rates before-and-after implementation were compared.</li> <li>● Compared with regional hospitals not implementing MEWS, MEWS implementation in PYNEH was effective in reducing hospital mortality rates among adult patients with sepsis and UTI, with relative lowering of the corresponding ICU admission rates.</li> </ul>
<b>VI.</b>	<b>Surgical Safety</b>	
VI.a	Further promulgation of surgical safety	Working Group on the initiative has been set up to facilitate and oversee the promulgation and implementation review on surgical safety.
<b>VII.</b>	<b>Infection Control</b>	
VIIa	Actions on controlling of MRSA Bacteremia	<p>Hand Hygiene:</p> <ul style="list-style-type: none"> <li>● Booth games held on 5 May 2011.</li> <li>● Department based hand hygiene training sessions conducted</li> </ul>

		<p>in Aug and Oct 2011.</p> <ul style="list-style-type: none"> <li>● The overall cluster hand hygiene compliance rate increased to 78.6% in 2012, the highest compliance rate since 2008.</li> </ul> <p>Blood Culture:</p> <ul style="list-style-type: none"> <li>● 5 refresher trainings for all phlebotomists based on the use of 2% Chlorhexidine in 70% Alcohol swab sticks conducted.</li> <li>● A lunch symposium on blood culture collection technique for doctors organized.</li> <li>● Tracing system set up to track down responsible blood culture collectors.</li> <li>● Phlebotomists and doctors interviewed once possible contamination identified.</li> <li>● Work instruction and training material on blood culture collection made available for staff.</li> <li>● Full roll-out of 2% Chlorhexidine in 70% alcohol swab stick as skin disinfectant for blood culture in HKEC since Nov 2011.</li> <li>● Disposable tourniquets were available for MRSA cases &amp; disposed after every blood taking.</li> <li>● Continuous decrease noted in hospital-acquired MRSA bacteremia rate since 3Q11 in HKEC after the implementation of MRSA bundles.</li> </ul>
VIIb	Enhance surveillance of surgical site infection (SSI) in LSCS in PYNEH	<ul style="list-style-type: none"> <li>● A surveillance protocol set up and surveillance commenced since April 2011.</li> <li>● Designated ward staff as wound liaison nurse.</li> <li>● A system to collect wound information from discharged patients established.</li> <li>● Regular reports on SSI trending issued to department heads.</li> <li>● Surgeon specific infection rate reported to respective surgeon for improvement.</li> <li>● Reports in ICT posted up in homepage.</li> <li>● SSI rate of LSCS continuously decreased in 1Q12.</li> </ul>
VIIc	Set up MRSA control program in PYNEH	<ul style="list-style-type: none"> <li>● Working Group with representatives from Department of MED &amp; ICT formed on 27 May 2011 to work out MRSA Control Bundle in information, equipment and knowledge enhancement.</li> <li>● A MRSA Admission Study conducted in Department of MED in July 2011.</li> </ul>

		<ul style="list-style-type: none"> <li>● "Daily Alert List on In-patient with MRSA History" posted up in ICT homepage.</li> <li>● Yellow colored dedicated equipment for MRSA patients provided in Department of Medicine since Dec 2011.</li> <li>● 6 identical lectures with emphasis on "Clean Hands, Clean Patient and Clean Environment" conducted for nurses.</li> <li>● Care of MRSA patient included as a standing topic in the enhancement program for care-related supporting staff.</li> <li>● Reinforced staff on proper specimen collection to avoid contamination.</li> <li>● 5 refresher trainings for all phlebotomists conducted and 2 lunch symposiums for doctors on the appropriate blood culture collection techniques organized.</li> <li>● 50% reduction in the overall hospital acquired MRSA rate.</li> <li>● 61% reduction in the hospital acquired MRSA bacteremia rate in Department of MED.</li> </ul>
VIII.d	Expand antibiotic stewardship program in PYNEH	<ul style="list-style-type: none"> <li>● Revised antibiotic guidelines / fact sheet, and reports available in ICT homepage.</li> <li>● Audit on doctor's prescription in the Departments of MED, ORT &amp; SUR since April 2011.</li> <li>● Immediate concurrent feedback issued to case doctor if patient fitted for oral quinolones.</li> <li>● Regular reports issued to department heads on the compliance and utilization trend.</li> <li>● Improvement shown on self-initiated injection to oral quinolones switch within 3 days by case doctor in 1Q12</li> <li>● 79% (19 in 2Q11 to 4 in 1Q12) reduction noted in the no. of case required issue of immediate concurrent feedback to case doctors.</li> </ul>
<b>VIII.</b>	<b>Fall</b>	
VIII.a	Standardize assessment tool	<p>Communication tool:</p> <p>A new Alert Mobility System developed to facilitate both clinical and non-clinical staff in managing safe mobility of patients and was piloted in O&amp;T, RHTSK and O&amp;T / MED, TWEH in 3Q11.</p>
VIII.b	Education, Assessment and Inspection	<ul style="list-style-type: none"> <li>● Aligned the use of Morse Fall Scale in HKEC hospitals.</li> <li>● Patient Safety Round and ward rounds to review the adequacy and safe use of physical restraint continued.</li> </ul>

		<ul style="list-style-type: none"> <li>Two Q&amp;S Forums conducted in 1Q11 and 3Q11 to enhance safe mobilization of patient to reduce fall, and minimize and safe use of physical restraint.</li> </ul>
<b>IX.</b>	<b>Pressure Ulcer</b>	
IX.a	Compliance audit	Clinical audit on prevention and care of pressure ulcer conducted in 1Q11 and 2Q12
IX.b	Provision of universal seat cushion to prevent pressure ulcer in PYNEH	<ul style="list-style-type: none"> <li>156 coccyx free seat cushions procured and distributed to wards in different specialties.</li> <li>95.2% patients felt the cushions were comfortable and 71.4% patients reported their pain was alleviated. 94.7% nurses claimed the cushion contributed to pressure ulcer prevention. More than 70% nurses and assistants reflected the cushion application did not interrupt their routine</li> </ul>
IX.c	Cluster-based clinical protocols on pressure ulcer prevention and management	<ul style="list-style-type: none"> <li>The protocols developed with the adoption of the definition of pressure ulcer and pressure ulcer stages according to the National Pressure Ulcer Advisory Panel (2007) were implemented in July 2011.</li> <li>“Train-the-Trainers” workshops to HKEC pressure ulcer link person conducted in June and July 2011.</li> </ul>
<b>X.</b>	<b>Suicide</b>	
X.a	Systematic review and assessment with ongoing training	<ul style="list-style-type: none"> <li>Training provided to newly-recruited nursing staff.</li> <li>Additional resources and manpower available for RHTSK AED &amp; wards for timely and effective management of patients with suicidal risk.</li> <li>The Cluster Working Group has been renewed with relevant representatives across disciplines.</li> </ul>
X.b	Elimination of environment risks	<ul style="list-style-type: none"> <li>Close off the void between ceiling and toilet partition to eliminate supporting points for patient hanging in PYNEH psychiatric wards.</li> <li>Building a glass panel over the existing fencing of staircase from LG1 to 1/F in the Main Block of RHTSK.</li> <li>Installation of window latch at high risk ward in CCH.</li> <li>Shortening and securing the power cords near bedheads in SJH wards.</li> </ul>

## 4.2 Identified non-clinical (operational) risks for 2011/12

No.	Program	Action Taken / Outcome
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<b>I.</b>	<b>Security</b>	
I.a	Formulate security response plans	Reviewed work instructions with the participation of front line staff in dealing with such contingencies as discovering dead, group gambling, drugs, theft, disturbing public order and etc.
I.b	Upgrade Security Control Room in PYNEH	<ul style="list-style-type: none"> <li>● Renovated the central security control room in Facilities Management Office with advanced console and workstations to facilitate central monitoring and command of hospital security and safety in PYNEH.</li> <li>● Centralized the signals of burglar alarms and door contacts in the Central Control Room.</li> <li>● 20 CCTV cameras added at various locations to enhance live monitoring.</li> </ul>
<b>II</b>	<b>Data security and confidentiality</b>	
II.a	Compliance check / audit	<ul style="list-style-type: none"> <li>● Departmental self-compliance check conducted in Jun 2011 with HA Checklist at an interval of every 18 months.</li> <li>● All follow-up / improvement actions completed in Sept 2011 and shared in the 10th Cluster Information Security and Data Privacy meeting.</li> </ul>
<b>III</b>	<b>Occupational Safety and Health (OSH)</b>	
III.a	Implement integrated OSH awareness & improvement program	<ul style="list-style-type: none"> <li>● E-safety courses ware &amp; training kits (HKEC) developed and uploaded on HKEC OSH website in Jun 2012.</li> <li>● 145 CSSD trolleys replaced with 100% satisfaction from staff review completed in Feb 2012.</li> <li>● 200 MRO transfer trolleys in PYNEH replaced and one mobile hoist bought in Mar 2012. IOD cases arisen from using MRO trolleys dropped by 83.3% since 2009</li> <li>● Non-standard ductless fume hoods &amp; ineffective exhaust ventilation facilities for handling Cidex OPA (PYNEH &amp; RHTSK) replaced in Jan 2012.</li> <li>● Ductless fume hood for handling resin products in P&amp;O Workshop (PYNEH) installed in Dec 2011.</li> <li>● A cryostat machine for decontamination under cold conditions purchased in Sept 2012.</li> </ul>
<b>IV</b>	<b>Patient Transfer</b>	
IV.a	Enhancement of communication and resources	Patient safety in NEATS enhanced through provision of more 3-man team, the team ratio increased from 24.6% (Apr 10) to 55.3% (May 12).

## 4.3 Other Quality initiatives

### 4.3.1 Senior Executive Walkround (SEW)

The Senior Executive Walkaround is improved by adopting the "Classic Walkaround" approach in order to build capacity and positive culture in the staff for risk management since Jan 2011.

The new "Classic Walkaround" approach emphasizes the importance of shared sense of psychological safety of speaking up with ideas, questions, concerns, and mistakes, which are critical to an effective learning system.



The new approach also enhances the effectiveness and efficiency in identifying risks and possible solutions. Inter-departmental efforts were secured to address safety issues, such as to ease the bottleneck in patient flow, identify measures for avoidance of wrong drug prescriptions, and control fall risks by installing electrical fans to avoid slippery toilet floor during rainy days in hospital compound.

In addition, there are various tiers of safety rounds conducted by frontline and middle managers, clinical and non-clinical, to ensure safe practices.

### 4.3.2 Good practice on preventing of retained tourniquet in patient

In view of an increasing trend on keeping the tourniquet or disposable glove on patient's limb after blood taking in some clusters as announced by HAHO, the following measures have been taken:

- a. A rubber band chain of about 36" long is tied to the tourniquet at one end and to the side of the blood taking trolley at the other end.
- b. If tourniquet is not removed after blood taking, the trolley will be rebounded by rubber band chain.
- c. HCA would check if all tourniquets are present on the blood taking trolley prior to cleaning of the trolley.

## 5. Learning and Sharing Information

### 5.1 HKEC Workflow Improvement Sharing Forum

The HKEC Workflow Improvement Sharing Forum was held on 27 Apr 2012 which

aimed at promoting Workflow Improvement in order to enhance both patient care quality and staff workflow environment. The theme of the forum is “Better Process, Better Outcome”. Dr. Benjamin NG of Tan Tock Seng Hospital in Singapore, an expert in Clinical Standards and Improvement, was invited as the forum keynote speaker. Colleagues from PMH of KWC were also invited to share with us their valuable experience in Quality Improvement.

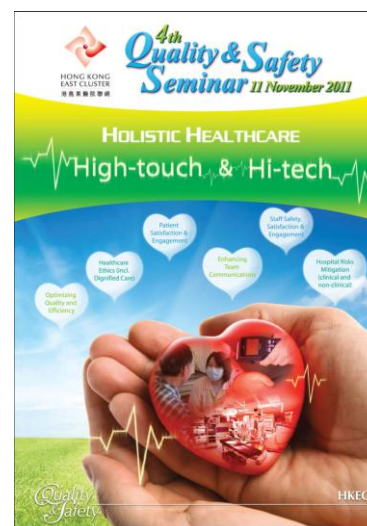


## 5.2 Learning and Sharing with Officials and Counterparts from the Mainland and Overseas

HKEC has received more than ten study tours from the South East Asia and Mainland China in year 2011/12 on sharing the topic of quality and risk management. The delegates were senior managers and clinicians.

## 5.3 Quality & Safety Seminar

The full-day HKEC 4th Quality and Safety Seminar – “Holistic Healthcare – High-touch & Hi-tech” was held on 11 November 2011 with a total attendance of over 200. Prof. Samantha PANG, Professor and Head of the School of Nursing of the Hong Kong Polytechnic University; Dr. Chun-yan TSE, Ex-CCE (KEC) / HCE of UCH; Prof. Tin-wai LEUNG, Professor and Head of the Department of Journalism & Communication of the HK Shue Yan University, and Dr. Rico LIU, Assistant SD (Q&S), HKWC, were invited to deliver keynote speeches.



There were 12 projects presented in the Seminar. “The Roles of Partner in Childbirth: A Pilot Study on Chinese Women in Hong Kong” by the Department of Obstetrics & Gynaecology, PYNEH and The Nethersole School of Nursing, the Chinese University of Hong Kong won the the Best Scientific-based Project Award. The Best Program-based Project Award went to “The Implementation of Orthopaedic Departmental I-based Incidence Reporting & Review System” of the Department of O&T, PYNEH.

## 5.4 Occupational Safety & Health (OSH)

The 1st HKEC OSH Forum – “Healthy Workplace, Healthy Staff” cum Good Practices Sharing



Kick-off Ceremony was held on 10 December 2011. The Forum aimed to establish a platform for recognizing and promoting good OSH practice as well as enhancing healthy workplace culture in the cluster.

There were quarterly gatherings of the OSH Link Persons. The regular meetings with OSH Link Persons aimed to maintain a communication for sharing of good practices to enhance staff safety and wellness. OSH Link Persons have also been empowered to undertake audit functions for strengthening of OSH compliance.

The first HKEC OSH Newsletter was published in August 2011 and the new Cluster OSH website was launched in June 2012 to serve as a platform for dissemination of OSH information to all cluster staff. An Occupational Health Centre providing a one-stop integrated occupational health service for IOD/OD (Occupational Disease) staff was set up on 10 Oct 2011.



## 5.5 Quality and Safety Forums

There is on average one education forum in each month on safe practices, e.g. medication safety, pain management, physical restraints, etc. to enhance quality and safety awareness of the staff. Implementation of improvement strategies, e.g. Crew Resource Management are promoted through a CRM-in-Action Program. Promotion counter was set up and sharing forum was organized to encourage application of the CRM skills after training.

Communication forums are provided to the staff as necessary when serious incidents take place. To refresh the knowledge of staff in incident management and to assure them support in the event of adverse incidents, a Staff Forum was hosted by the Cluster Chief Executive in Jan 2012.

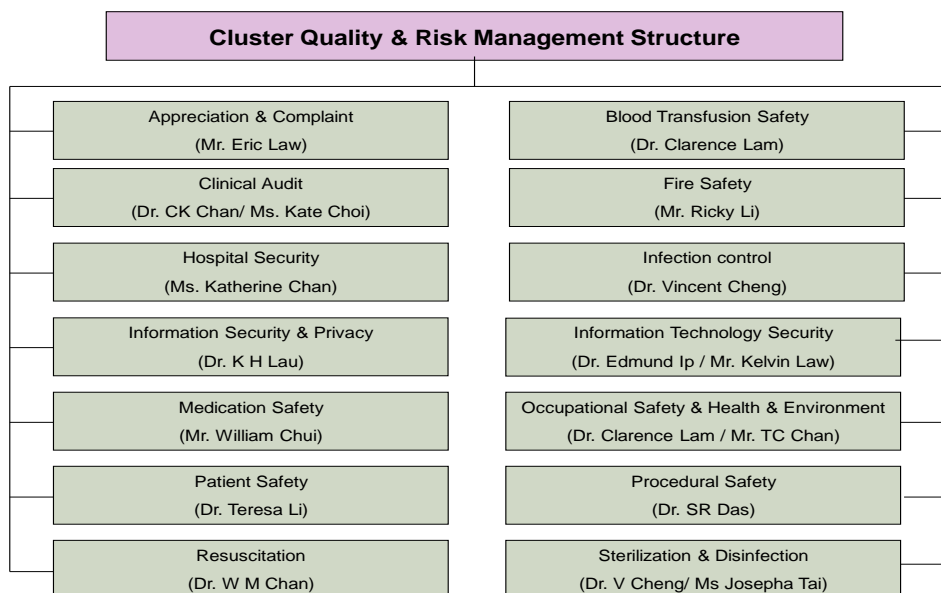
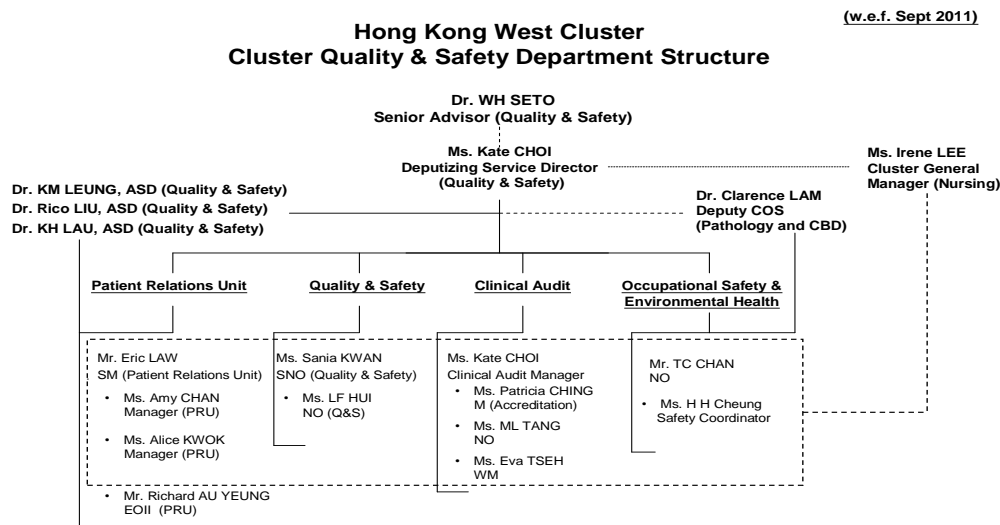
## 5.6 Communication of Lessons Learnt

Lessons learnt from incidents were summarized by the Cluster Incident Review Panel and disseminated to individual staff through various channels like Cluster Medical Committee, Cluster Quality and Safety Committee, Clinical Quality and Safety Committee, department meetings and the Q&S Coordinators. Hot issues and updates are communicated to the staff through a Quality Bulletin issued on a monthly basis.

## **6. The Way Forward**

The Year 2011-2012 has been a fruitful year in terms of the Cluster's achievement in various programs and initiatives that drive and promote quality and safety. Ahead of us is our goal to achieve excellence that demands our unreserved efforts in learning new practices and maintaining heightened awareness of safety.

## 1. Structure



Committees reporting to CQRM

As of 1 September 2011 (arranged in alphabetical order)



## **2. Overview of Quality and Risk Management Issues**

### **2.1 Cluster Approach to Quality and Safety**

A cluster approach to Quality and Safety (Q&S) has been adopted with the establishment/ revamp of Quality and Safety Committees in Grantham Hospital (GH), The Duchess of Kent Children's Hospital at Sandy Bay (DKCH) and Tung Wah Hospital (TWH). The Q&S structural alignment aims at promoting cluster stakeholders' involvement and engagement in policy implementation, practice and audit.

#### **2.1.1 Accreditation**

Queen Mary Hospital (QMH) underwent the on-line self-assessment to the Australian Council on Healthcare Standards (ACHS) scheme in Oct 2011 and accreditation status has been attained.

The preparation for TWH's accreditation commenced in Jan 2011 and working group meetings are expected to be completed by August 2012 with the upcoming consultancy survey scheduled from 4-7 Sept 2012.

#### **2.1.2 Integrated Walk Rounds**

Cluster integrated quality and safety rounds commenced in Jan 2011 and all areas of HKWC would be covered by June 2012. A core cluster quality and safety team was formed to conduct quality and safety rounds and to transfer knowledge on methodology to other colleagues within the cluster.

#### **2.1.3 Risk Register Implementation**

Starting from January 2012, risk register has been instituted in QMH, GH and TWH. Risk register at TWH was initiated since Feb 2012 and by 31 Mar 2012, all allied health departments have been briefed and the implementation plan for TWH to roll out to all departments by the end of Jun 2012. By 31 Mar 2012, Seven departments of QMH have been briefed on the framework with three departments completed their workshop. The plan for QMH was to promulgate to all departments by the end of 2012.

## 2.2 Quality Improvement Initiatives

Through the various avenues of risk identification and gap analysis, quality improvement projects were instituted with a monthly progress update that is uploaded onto HKWC Q&S website accessible to all intranet users.

<http://hkwc.home/QnS/Doc/HKWC%20Quality%20Initiatives%20Progress%20Report.doc>

## 2.3 HKWC Q&S Annual Plan 2011/12

The HKWC Q&S annual plan with strategies was developed based on a risk identification framework:

### **8 Priority Clinical Risks for 2012/2013 in HKWC**

#### 2.3.1 Risk of Ineffective Patient Care Due to Medication Error (Continue)

*Risk Reduction Strategies:*

- a. Prepare for implementation of Inpatient Medication Order Entry (IPMOE).
- b. Formulate and implement action plans to reduce drug omission by nurses.
- c. Enhance pharmacological knowledge for nurses.

#### 2.3.2 Risk of Wrong Patient Identification without Utilizing 2D Barcode System (Continue)

*Risk reduction strategy:*

Implement Unique Patient Identification (UPI) for mobile radiological examinations.

#### 2.3.3 Potential Shortcomings during Resuscitation and Unnoticed Change In Patient's Condition During Inter-Hospital Transport (New)

*Risk Reduction strategies:*

- a. Enhance standardization of the essential items in all e-trolleys of HKWC.
- b. Streamline the process of patient transport.
- c. Enhance professional staff's knowledge and skills for inter- and intra-hospital patient transport.

## **2.3.4 Risk of Patient Safety Hampered by Bedside Interventional Procedures (Continue)**

*Risk reduction strategies:*

- a. Enforce using of standardized checklists for high risk procedures conducted over bedside.
- b. Conduct regular audits to ascertain compliance.
- c. Formulate and implement action plans to enhance previous low compliance areas.

## **2.3.5 Infection Control Risk Caused by Substandard Sterilization and Disinfection (Continue)**

*Risk reduction strategies: (for DKCH)*

- a. Streamline Central Sterile Supply Department (CSSD) services.
- b. Eliminate satellite disinfection practices.
- c. Regulate and control flash sterilization.
- d. Maintain the establishing of Theatre Supply Service Unit (TSSU).

## **2.3.6 Fragmented and Inefficient Care Delivery Model Provided to Patients (Continue)**

*Risk reduction strategy:*

Implement clinical pathways including: osteoporotic vertebral fracture.

## **2.3.7 Lack of Robust Framework to Strengthen the Scope of Nursing Practices (Continue)**

*Risk Reduction strategies:*

- a. Continue generic nursing competency assurance program.
- b. Develop and implement ward/unit specific competencies.
- c. Monitor and evaluate the set ward/unit specific nursing competencies.

## **2.3.8 Hazard of Failure to Identify Nutritional at Risk Patients (Continue)**

*Risk reduction strategies:*

- a. Apply nutritional assessment tool for geriatric patients.
- b. Educate staff the importance of nutritional screening.

- c. Conduct audit.

## 3 Priority Non-clinical Risks for 2012/2013 in HKWC

### **2.3.9 Potential Hazard of Medical Record Loss in the Clinical Setting**

#### *Risk reduction strategies:*

- a. Enforce safe custody of medical records following ward rounds /medical consultation.
- b. Explore using labels without significant identifiers on patients' bedside charts.
- c. Explore procuring of bed table with drawer for storing patients' bedside charts.

### **2.3.10 Potential Risk of Disclosure of Personal Information from Workstation Facing Public Area**

#### *Risk reduction strategies:*

- a. Establish procedural evaluation for workstation.
- b. Provide Privacy Filter for in-scope workstation in high risk area.
- c. Educate relevant staff.

### **2.3.11 Potential Financial Risk Related to Annual Leave Accumulation, Increasing Use of Special Honorium Scheme (SHS), Rising of Medication Expenditure and Coding Inaccuracies**

#### *Risk reduction strategies:*

- a. Encourage department and staff to manage leave.
- b. Close monitoring of financial statement by each department in terms of SHS, annual leave accumulation, and reduction of part time employment.
- c. Educate Medical Officer on diagnostic and procedural coding.
- d. Explore using of generic or cheaper medication alternatives.

## 3. Risk Prioritization

### 3.1 Identified Risks for 2011-2012

	<b>Clinical risks (in order of priority)</b>
1	Risk of medication incident occurrence due to over reliance on manual confirmation and bypassing of pharmacists' verification process.
2	Hazard of inadequate supervision and monitoring of clinical staff in administering procedural sedation.
3	Risk of Patient safety hampered by bedside interventional procedures
4	Risk of failure to identify nutritional at risk patients
5	Infection control risk caused by substandard sterilization and disinfection
6	Risk of substandard care due to lack of robust framework to regulate scope of practice of clinicians
7	Risk of fragmented and inefficient care delivery model provided to patients
8	Potential shortcomings in incident management leading to staff and client discontent

	<b>Non-clinical / operational risk (not in order of priority)</b>
1	Hazard of patients in mixed gender wards being offended by those of opposite sex
2	Risk of security or access lapse due to inadequate structure to oversee access control and hospital security
3	Liability related to inconsistent time documented in medical record due to unsynchronized clocks in different parts of the hospital
4	Risk of delayed treatment or getting lost in the hospital due to unclear and uncoordinated signage within the cluster
5	Risk associated with access to and use of out-dated documents due to inadequate document management system
6	Risk related to sudden mechanical failure due to outdated medical equipment

## 3.2 Identified Risks for 2012-2013

	<b>Clinical risks (in order of priority)</b>
1	Risk of ineffective patient care due to medication error (Continue)
2	Risk of wrong patient identification without utilizing 2D barcode system (Continue)
3	Potential shortcomings during resuscitation and unnoticed change in patient's condition during inter-hospital transport (New)
4	Risk of patient safety hampered by bedside interventional procedures (Continue)
5	Infection control risk caused by substandard sterilization and disinfection (Continue)
6	Fragmented and inefficient care delivery model provided to patients (Continue)
7	Lack of robust framework to strengthen the scope of nursing practices (Continue)
8	Hazard of failure to identify nutritional at risk patients (Continue)

	<b>Non-clinical / operational risk (not in order of priority)</b>
1	Potential hazard of medical record loss in the clinical setting
2	Potential risk of disclosure of Personal Information from Workstation facing Public Area
3	Potential financial risk related to annual leave accumulation, increasing use of Special Honorium Scheme (SHS), rising of medication expenditure and coding inaccuracies

## 4. Risk Reduction and Quality Programs

### 4.1 Quality Initiatives, Including Accreditation

	Quality initiatives	Action and progress
1	Implement WHO second challenge for safe surgery	Implemented checklist for intravascular access using a guide wire in Aug 2011
2	Enhance correct patient identification of laboratory specimen using 2D barcode system	<ul style="list-style-type: none"> <li>- Implemented 2D barcode for patient identification of laboratory specimens in 2011 at QMH.</li> <li>- Rolled out to cluster hospitals in 2011/2012</li> </ul>
3	Implement integrated quality and safety walk round	Expand cluster based integrated walk-round to all cluster hospitals throughout 2011/12.
4	Integrate clinical documentation for all clinical specialties	Instituted integrated management and progress sheet for all disciplines to all cluster hospitals.
5	Instituting clinical pathways	Started to train 7 teams of colleagues for preparation of implementing 7 clinical pathways – urology, neonatal nutrition, cardiothoracic surgery, gynae-oncology, acute stroke, scoliosis surgery, and A&E services.
6	Document management system	QMH as a pilot site to provide feedback and try to implement document management system
7	Enhancing Specialist Outpatient Department (SOPD) telephone services	<ul style="list-style-type: none"> <li>- Instituted fax and e-mail service for appointment change.</li> <li>- Standardized clinic blood taking hours and enhanced administration staff's information in streamlining telephone answering service.</li> </ul>
8	Incident management and reporting protocol review	- Developed a 3 level incident management protocol delineating each staff level's response and management.
9	Risk register implementation	<ul style="list-style-type: none"> <li>- Initiated departmental / unit based risk register since January 2012.</li> <li>- 7 departments had been briefed at 31 Mar 2012.</li> </ul>
10.	Preventive maintenance in TWH	- Instituted preventive maintenance for critical equipment at TWH.
11.	Enhancing resuscitation management at TWH	<ul style="list-style-type: none"> <li>- Standardized emergency trolley.</li> <li>- Enhanced workflow.</li> </ul>
12.	Implementing nursing care plan at TWH	- Enhanced care delivery through the introduction of nursing care plan.
13.	Cluster approach to patient fall	<ul style="list-style-type: none"> <li>- Formulated cluster patient safety committee.</li> <li>- Streamlined cluster based fall risk assessment and plan.</li> </ul>
14.	Cluster approach to credentialing and privileging	Cluster representative invited to join credentialing committee.

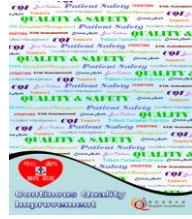
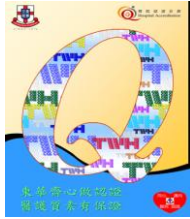
## 4.2 Accreditation

### 4.2.1 TWH's Preparation for Gap Analysis from 4-7 September 2012

#### Hospital Accreditation Forums



## Fun Fair Activity Jul 2012

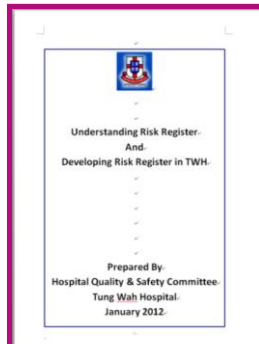


Memo Pad



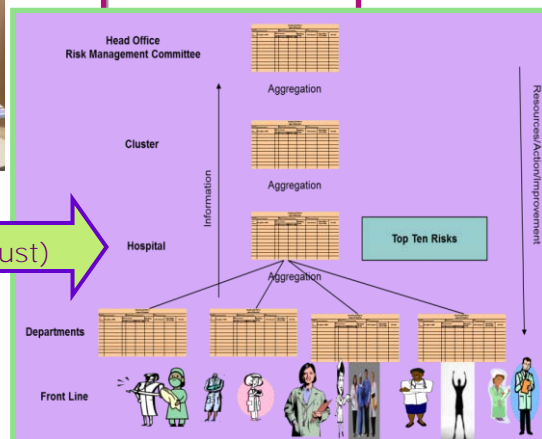
## Risk Register

Risk ID	Risk Description	Risk Level	Responsible Person	Status
1	...	High	...	Open
2	...	Medium	...	In Progress
3	...	Low	...	Closed



Pending (August)

Completed



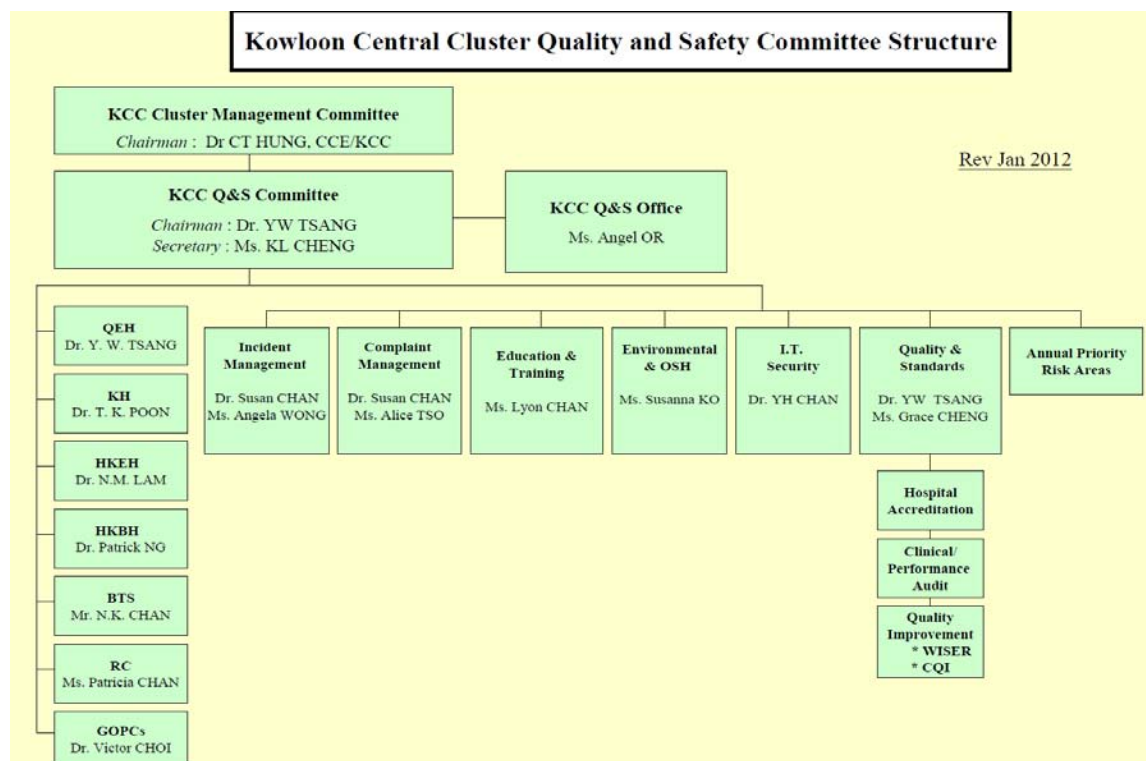
## 5. Learning and Sharing Information

	Highlights of Staff Education Activities/ Topics:	Sessions
	<b>Blood Transfusion related</b>	
1	OTBTS & summary of incidents	4
	Safety in blood transfusion for care related workers/workman/drivers	4
2	<b>Medication related</b>	
	Annual Medication Safety Forum	1
	<b>Fire Safety Talk</b>	
3	QMH	4
	GH	12
	TWH	2
	DKCH	3
	<b>Infection Control Training</b>	
4	QMH	10
	TWH	12
	GH	4
	<b>Quality and Safety and Accreditation</b>	
5	Incident management and sharing in HKWC	1
	Briefing and preparation for hospital accreditation in TWH	2
	Patient safety forum in QMH	8
	<b>Occupational Safety &amp; Health &amp; Environment</b>	
6	Induction	3
	Refresher	3
	Work at height	1
	Handling irradiating apparatus	1
	Manual handling	6
	Breakaway restraints	3
	Ionizing and Non-Ionizing Radiation Safety	1
	Chemical waste handling	1

## 1. Structure

### 1.1 Update of Quality and Safety (Q&S) Structure

In line with the Hospital Authority Head Office (HAHO) initiative to streamline Cluster Management Structure, the Cluster Service Director (Q&S) was appointed in Sep 2011. The Cluster Q&S Committee structure had been revised and updated.



### 1.2 Cluster Q&S Committees and meetings

The Cluster & Hospital Q&S framework is fortified with a number of consultative and decision-making Committees, supported by an executive arm – the KCC Q&S Offices.

The KCC Q&S Committee meeting is held every four months, in succession to the respective preceding Central Committee, Q&S meetings. Sharing of Corporate updates and discussions on various Cluster Q&S matters are made.

The KCC Quality and Clinical Audit Committee (QCAC), which started in 2009 as the Queen Elizabeth Hospital (QEH) QCAC and has since 2010 ‘clusterized’ to include representatives from all Cluster Institutes, is a platform for clinical governance. Key performance indicators, quality improvement initiatives, and clinical audits are shared,

discussed and reported to the Cluster Chief Executive (CCE) through the annual Governance Report.

Q&S Officer's Meetings, gathering all Q&S Officers from clinical and non-clinical departments, are held twice yearly. Much material related to incidents and risk management, and quality improvements are shared in the meetings.

## 2. Overview of Quality and Risk Management issues

### 2.1 Risk Registry Initiative 2012-2013

Building on the strength of the renewed risk registry formulation exercise in 2010/11, the annual risk identification and prioritization exercise continued to evolve, with a detailed education, promulgation and roll-out plan. Reference was also made to the Australian Council on Healthcare Standards (ACHS) Hospital Accreditation EQuIP5 standards. This year's risk registry formulation also echoed with the direction taken by the HAHO Patient Safety and Risk Management Department to minimize "silo" risk identification by individual departments, but to foster an over-arching, up-stream and down-stream connected risk identification and mitigation approach.

The Cluster Risk Registry Workshop was conducted by the Senior Manager of Quality and Standard Department (Q&St) in Dec 2011 prior to the formulation of departmental risk registries for 2012/13. The conceptual framework of risk registry and ways to maximize its utility in risk mitigation was reiterated.



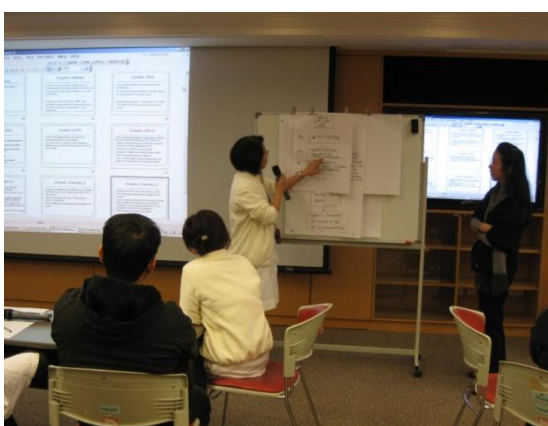
Following the workshop, cluster hospitals and departments returned the consolidated annual top risks returns. The emphasis of this year's returns is action-driven and

outcome-focused, that is all identified risks are subjected to a risk mitigation implementation plan and an anticipated risk reduction is projected based on the planned actions. Such planning and risk mitigation projection are then coupled with a dynamic, continuous assessment and evaluation process at designated points of time (e.g. at time of mid-year accreditation self-assessment report submission) for tracking of progress and refinement of strategies if necessary. Furthermore, the dynamic approach allows new and emerging risks discovered or emerged during the year to be added to the current registry, and subjected to the same risk assessment, mitigation planning, and projected risk rating outcome assessment. Also, the risk registry “exercise” is supplemented with implementation of a set of new criteria to guide the “retirement” of previously identified risk entries. This action allows a finite evaluation of risk reduction actions for previously identified risks and provides objective criteria for closing of risk registry entries.

## 2.2 Incident Management Initiatives

### 2.2.1 Root Cause Analysis (RCA) Workshop

A 4-hour advanced training workshop (30 participants from Cluster institutes) on RCA was conducted by the Senior Manager (Q&St) on 18 Jan 2012 to enhance understanding of RCA in relation to risk management and quality improvement; and to consolidate skills in conduction of RCA investigation and report writing.



### 2.2.2 Patient Safety Program / Early Executive Briefing for Incidents

Since 2004, the KCC Patient Safety Program has served as the backbone for quality and safety initiatives in the Cluster, and to this day continued to stand as the manifesto of the Cluster’s continual commitment to patient safety. One of the new features built into the updated program is the establishment of the “early executive briefing”. For all incidents that

have actual or potential serious patient and staff consequences, a round table briefing will be held usually within 24 hours of incident notification by the CCE with the relevant key stakeholders including senior clinical leaders of the Department(s) involved in the incident, the Hospital executives (Hospital Chief Executive, Q&S, Public Affairs) and experts in the relevant field (e.g. Pharmacists for medication incidents). During the Executive Briefing, a standardized agenda will be discussed which includes fact-finding, immediate actions for patient and staff protection, open disclosure, and media line-to-take if necessary. The early executive briefing ensures that the immediate and long term aftermath of the incident, including considerations for prevention of recurrence, is handled appropriately.

## 2.3 WISER (We Innovate, Service Excels Regularly) Movement

In KCC, the WISER movement has firmly established herself as the icon for quality improvement through effective management of workflow and innovative thinking. With the collaborative efforts between training professionals and clinicians, over 91 WISER projects have been performed by both clinical and non-clinical departments with outstanding improvement. More than 1,500 participants have attended WISER Awareness Workshops. Through the WISER platform, KCC has improved services and patient satisfaction by reducing waiting time, engaged staff in continuous workflow improvement, and cultivated a continuous learning and innovative culture in KCC.



KCC WISER Team is a big and dedicated family

## 2.4 Legacy of the 2008-2011 Years of Safety

The 3-year rolling program of KCC “Years of Safety” was officially completed in 2011, landmarked by the Quality Convention held in Nov 2011 (see below). During the three years, annual thematic initiatives in patient safety, staff safety and quality were progressively rolled out. Highlighted awareness and renewed enthusiasms in these quality and safety areas were widely evident throughout the Cluster. The improvement on teamwork and safety climate is evident in the follow up survey conducted in 2011.

### 2.4.1 Teamwork and Safety Climate – Staff Survey 2011

Subsequent to the 2007 survey to review the Teamwork and Safety Climate in clinical areas of three hospitals (QEH, Hong Kong Buddhist Hospital (BH) and Kowloon Hospital (KH)), a follow-up survey was conducted in Nov 2011 to evaluate the effectiveness of the improvement strategies throughout the 3-year safety program.

The survey, using the questionnaire adapted from University of Texas “Teamwork and Safety Climate Questionnaire”, targeted at all medical, nursing and allied health staff. Eight statements were added totaling 35 factors for rating with a 5-point Likert scale from Strongly Disagree (1) to Strongly Agree (5). Implied consent was assumed upon return of questionnaire. Data analysis involved descriptive and inferential statistics, revealing issues with safety and teamwork climate.

Compared to 2007, improvement was observed in 30 factors out of 35 and more were found in the QEH which had attained full ACHS accreditation. In the teamwork climate, increased score was found for the statement on doctors and nurses working as coordinated team, and for the two negative statements – difficulty in speaking up of a problem with patient care and inability to express disagreement with doctor. Decline in scores were observed in the two highly rated factors in 2007 – staff knowing names of workmates and briefing before start of shift for patient safety. In the safety climate, improvement was noted for perceived level of staffing and observed non-compliance to full checking procedures. Other improvements included discussion of errors, new staff orientation on teamwork and safety, feeling safe to have parents treated in this hospital, and spontaneous reporting of medical incident. Less favorable ratings were given on staff disregarding rules and regulation and hospital management not compromising patient safety. Similar to previous findings, seniority of staff, discipline, age-group, years of professional experience and type of care-setting had varying significant effects on the scores for climate factors.

In conclusion, cultivating teamwork and safety climate in clinical settings takes time and requires determination of management and engagement of all staff. While each hospital has a prevailing teamwork and safety climate, the pace of staff engagement and application of strategies varies such that effect might not be fully observed after 3 years. The survey findings showed positive changes in safety and teamwork climate and signified the effectiveness of organizational strategies in improving the organizational culture in teamwork and safety.

## 2.4.2 Quality Convention 2011

In continuing the rolling “Years of Safety” program in KCC, the KCC Quality Convention “Quality·OUR WAY 質素·一心一意” was conducted on 11 Nov 2011 in the Chinese University of Hong Kong – Tung Wah Group of Hospitals Community College. Since quality improvement is an on-going process, this convention would not be a conclusion of the “Years of Safety”. Rather, the aim was to highlight the continuous momentum of Plan-Do-Check-Act cycle in quality improvement and safety through collaborative team work and commitment of everyone. The message has been clearly shown in the design of the logo for the convention.



The convention focused on 3 main themes and they were:

- i. Quality infrastructure / team – strategies on quality improvement.
- ii. Quality sustainability – building quality culture.
- iii. Critical success factors in quality improvement – constraint management.

Renowned speakers from the community were invited to deliver thematic speeches which included:

- i. “Quality Life Span via Social Innovation” by Mr. Raymond YIM, Chairman, Hong Kong Social Enterprise Incubation Centre;
- ii. “You Can Feel Our Smile” by Ir. James KWAN, JP, Executive Director and Chief Operating Officer, Hong Kong and China Gas Company; and
- iii. “Voluntary Organization Roles in Pursuing a Caring Mission in a Changing Society” by Mr. Anthony WONG, JP, Member of Hospital Authority Public Complaints Committee and Member of Caritas Medical Centre Hospital Governing Committee.

The program also included presentations by Dr. Theresa LI, Chief Manager (Strategy, Planning & Service Transformation) KCC on “When KCC Becomes WISER”, and Dr. Stanley TAM, Associate Consultant (MED) QEH and Mr. Jonathan WONG, Manager, Rehabaid Centre on “Enhancing Quality of Life of Post-discharged through Community Partnership Programs”. A session to share “The Stories behind Quality Improvement” and poster presentations of WISER projects were also arranged.



Keynote Speech: “To Get Accredited or Not... Is Not the Question” by Dr. Hing-wing LIU, D(Q& S), HA



“Quality Life Span via Social Innovation” by Mr. Raymond YIM



“You Can Feel Our Smile” by Ir. James KWAN, JP



“Voluntary Organization Roles in Pursuing a Caring Mission in a Changing Society” by Mr. Anthony WONG



Special Feature: “Enhancing Quality of Life of Post-discharged through Community Partnership Programs” by Dr. Stanley TAM, Associate Consultant (Med) QEH, and Mr. Jonathan WONG, Manager, Rehabaid Centre





“When KCC Becomes WISER”  
by Dr. Theresa LI, Chief Manager  
(Strategy, Planning & Service Transformation), KCC



“The Stories behind Quality Improvement” –  
Sharing by KCC colleagues



Team Members of WISER project in KH



WISER Posters



Interactive sharing and discussion



Group Photo

## 3. Risk Prioritization

### 3.1 Identified Risks for 2011-2012

	Clinical risks (in order of priority)
1	Medication Reconciliation & Administration
2	Medication Dispensing
3	Procedural Safety (surgical, interventional and bedside procedure safety)
4	Patient Identification
5	Safe Handling of Abnormal Investigation Reports
6	Transfer of Critically Ill

	Non-clinical / operational risk (not in order of priority)
1	Fire Safety
2	Staff Injury
3	Workplace Violence
4	Data Security

### 3.2 Identified Risks for 2012-2013

	Clinical risks (in order of priority)
1	Safe Use of High Risk Medications
2	Allergy Alert
3	In-patient Medication Reconciliation
4	Safe Use of Infusion Devices
5	Safe and Appropriate Use of Physical Restraint

	Non-clinical / operational risk (not in order of priority)
1	Clinical Documentation Practice in Relation to High Risk Areas
2	Construction / Renovation Site Safety
3	Electrical Power Supply to Mission-critical and Ultra-high Demand Equipments

## **4. Risk Reduction and Quality Programs**

### **4.1 Risk Reduction Programs**

A number of risk reduction programs are underway in the Cluster, feeding on from diverse source of initiations on clinical and non-clinical risks. Some of the more important information sources for risk reduction programs are Group Internal Audit (GIA) reports, Hospital Accreditation Surveys, incidents and near misses or a combination thereof.

The followings are highlights of some of the risk reduction programs from 2010 to 2012.

#### **4.1.1 Safe and Appropriate Use of Physical Restraint**

Following recommendations made in the corporate GIA in 2009 and the ACHS Hospital Accreditation reports in 2010, considerable work had been done to streamline and promote the safe and appropriate use of patient physical restraint. A multidisciplinary specialists work group comprising members from the nursing, medical, allied health, supporting services and Q&S streams was convened to explore the way forward in implementing the recommendations as well as updating the physical restraint practice through review and update of Cluster guidelines, education and promulgation activities, and audit of outcomes.

Incidents and patient complaints related to the use of physical restraint were reviewed, and wide consultations were performed on the related controlled documents. The corporate standard operating procedures and the documentation forms for the application and patient assessment had been updated in 2012. Spot audits and analysis of the use of physical restraint were conducted, and areas for improvement had been identified.

#### **4.1.2 Medication Safety – Standard Dilution Tables and Drug and Line Labeling**

The recommended dilution of commonly used intravenous (IV) drugs has been standardized in the Cluster since 2006. In 2012, revisions of the Standardized Drug Dilution Tables were implemented for adult care, thanks to the collaborative effort of a special workgroup comprising representatives from different disciplines and departments led by a specialist in Anesthesiology. The new dilution tables provided guidelines to the prescription and preparation of selected drugs, with delineation of two repertoires of IV drugs (for special areas and general areas) according to needs. Furthermore, a group of six drugs were specified

as suitable for IV delivery by infusion pumps only (with an implementation “grace period” of 2 years). The guidelines have been put into effect in Apr 2012. Training for medical and nursing staff was conducted. Train-the-trainer programs for nurses would be coordinated jointly with the Simulation Center. Number of additional syringe pumps required has been compiled while the demand for volumetric infusion pumps would be reviewed.

### **4.1.3 Document Control**

The Cluster Document Control initiative continued to roll out in clinical and non-clinical departments in 2011/12, under the auspices of the Cluster Document Control Committee. The Cluster Document Control Policy was reviewed and updated in 2012, further consolidating the format of controlled document codes, and the organization of documents in corporate and departmental “document centers” according to the more direct and frequent needs for interdepartmental access in the former. The QEH Document Control Center has formally launched into service, and progressive uploading is in progress. Plan is also in place to fade out use of Electrical Mechanical Services Department (EMSD) for document deposition.

### **4.1.4 Fire Safety**

The KCC Working Group on Fire Safety was set up to review the existing policy /practices in cluster hospitals/institutions and to agree on action plan which would contribute to enhancement of fire safety. Seminar by EMSD was held on 17 Oct & 7 Nov 2011. E-learning package “KCC Basic Fire Safety Training” has been rolled out in Feb 2012. Training course on fire safety has been specifically provided to QEH security, repair and maintenance staff and fire coordinators.

### **4.1.5 Transfer of Critically-ill Patients**

The Guideline for Intra-hospital Transport of Critically ill Patient which included a checklist has been developed and was endorsed in both KCC and QEH Q&S Committee. Older models of Oxylog (portable ventilator) with “I/O” displayed as main switch on the panel were clearly labeled “ON” beside “I” to avoid staff misinterpretation.

Simulation-based training was arranged for each new batch of House Officers every 3 months, and it was planned to extend similar training to all new Medical Officers in QEH every year. Workshop for nurses for use of Oxylog and the checklist was held on regular basis with excellent attendance rate.

## **4.1.6 Medication Safety – Mandatory “MO” Codes**

The policy of “Mandatory Entry of the Doctor’s Identification Code on all Medication Administration Record (MAR)” has been commenced on 1 Jun 2011. Under the policy, MAR prescriptions that are not accompanied by valid doctor’s identification codes (“MO CODE”) would not be dispensed by the pharmacy or administered by nursing staff. Baseline audits conducted on 27 May, 24 Jun and 22 Jul showed marked improvement in compliance with the Policy. The policy was fully implemented in QEH on 1 Aug 2011 as scheduled.

## **4.1.7 Patient Identification**

Phase III (2D barcode scanning for inpatient blood and non-blood specimens) roll out in KH and Hong Kong Eye Hospital (HKEH) was delayed due to technical problems of Unique Patient Identification device. A survey for the new wristband has been conducted in KCC. Result was reviewed by the workgroup and shared to KCC Q&S Committee as well as Head Office for reference.

2D barcode system for mobile radiography has been implemented on 1 Aug 2011 smoothly. All heavy duty wristband printers in QEH have been upgraded to minimize the risks of printing errors. Current practice of transporting specimen within different hospitals in KCC has been reviewed in response to the Group Internal Audit report on "Patient Identification - Specimen Handling".

## **4.2 ACHS Hospital Accreditation**

### **4.2.1 Self-Assessment 2011 and Periodic Review 2012 in QEH**

Along the EQuIP hospital accreditation cycle, Organization Wide Survey (OWS) is not the destination. The completion of the OWS denotes the commencement of another phase of this cyclical exercise in continuous quality improvement. It conveys expectations and new challenges to the organization every year. QEH has undergone the Self Assessment 2011 and the scope of review covers all criteria of the Clinical Function of EQuIP, all the mandatory criteria, and recommendations given in the OWS 2010. The Self Assessment report has been compiled and submitted to ACHS on 19 Jul 2011. The ACHS has returned feedbacks and comments as reviewed by the surveyor in Aug 2011 for QEH reference in preparing for the Periodic Review in Jul 2012.

In response to the recommendations from the OWS in QEH and to prepare for phase II implementation in cluster hospitals, cluster based working groups / committees on specific EQuIP criteria have been continuing review to streamline and strengthen practices on respective aspects which include: assessment and care planning; physical restraint, discharge and clinical handover; medication safety and credentialing etc.

## 4.2.2 Second Phase Implementation of Hospital Accreditation – Gap Analysis in KH

The 2<sup>nd</sup> phase hospital accreditation involving 15 HA hospitals has been rolled out in 2011. In KCC, KH and BH will be participating the 2<sup>nd</sup> phase program and KH will be engaging in the Gap Analysis in 3Q 2012.

KH commenced the journey to ACHS accreditation by conduction of a Staff Communication Forum on 14 Nov 2011 and the ACHS visit on 22 Nov 2011. An organization structure for hospital accreditation has been set up which include the Accreditation Project Team and Department / Unit Accreditation Working Groups. Quality Champions for Hospital Accreditation have been identified to facilitate communication. Training on EQuIP standards has been provided to staff, and staff engagement sessions have been conducted including the Kick-off Ceremony on 17 Feb 2012 and the “Towards Hospital Accreditation 2013” conducted by CND for nurses on 21 Feb 2012. Visits to individual department to introduce the ACHS hospital accreditation have been conducted by the APT and will be continued.



ACHS Team visit to KH on 22 Nov 2011



Kick Off Ceremony on 17 Feb 2012



“Towards Hospital Accreditation 2013” conducted by CND for nurses on 21 Feb 2012



Visit to Dietetic Department on 22 Nov 2011

## 5. Learning and Sharing Information

### 5.1 WISER Training & Development (T&D) Award

The commitment to cultivate an open, innovative and learning culture through the WISER movement has earned KCC a Bronze Prize and the Recruit Most Innovative Award in the 2011 Hong Kong Management Association Award for Excellence in Training and Development. The award is not only a showcase of the successful WISER training and project learning activities, it also serves to encourage KCC to further extend staff training and development effort towards better service enhancement, innovation and staff engagement for cluster as a whole.

The WISER vision continues to roll out in the Cluster through project coaching, skill building (5s, Lean thinking), and success story sharing. Departments were invited to join WISER Projects coached by facilitators. LEAN methodology and tools were briefed and utilized to allow participants to design and execute their new workflows. The success stories were celebrated and shared with other departments in cluster forums. In-house awareness and tools training sessions were organized to improve understanding.



‘WISER Movement in KCC’ was awarded ‘Bronze Award’ & ‘Most Innovative Award’ on 15 Jun 2011 by the HKMA.



The T&D Award presentation dinner was held on 3 Oct 2011



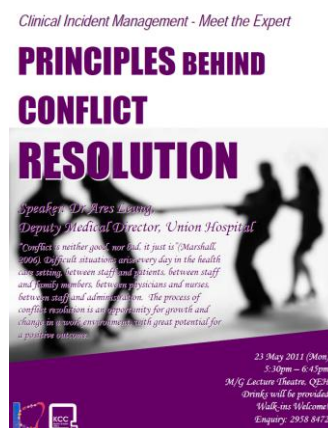
Dr Hung, CCE celebrated and recognized the T&D Award team on 7 Oct 2011



The award-winning T&D model was based on ‘Three pillars’: awareness building, project coaching and sharing of success stories.

## 5.2 Clinical Incident Management Learning Series and Q&S Forums

Forum and seminars on incident management are continued to be held during lunch hours for all colleagues in the Cluster to attend.



## 1. Structure



## 2. Overview of Quality and Risk Management Issues

### 2.1 KEC Quality & Safety Symposium 2012

To gravitate and synergize endeavours of KEC staff in their pursuit for quality and safety service, the KEC Quality & Safety Symposium was organized on 2 Mar 2012. The theme defined for this year was “Improving Safety in Healthcare: Harnessing the Human Mind”. Two keynote speakers namely Mr. Norman MACLEOD from Cathay Pacific Airlines and Prof. Agnes CHAN from the Chinese University of Hong Kong were invited to dissect on the various dimensions that ‘human factors’ could be at play in relation to ‘errors’ & patient safety. There were also oral presentations and concurrent poster display of quality & risk

management (Q&RM) programs for sharing the good work of colleagues in their Continuous Quality Improvement (CQI) journey.



Our cluster had also launched various new initiatives in organizing the event:

- We were the pioneer cluster in utilizing the HA CQI system as one of the channels for submitting Q&RM programs. The arrangement could not only streamline the submission process through an automated system but also familiarize staff in using this corporate documentation system as a means for archiving their quality improvement programs.
- We had introduced the concept of e-program book for staff sharing of the full symposium content, including keynote lectures, submitted abstracts, oral presentations and posters. This mode of communication had facilitated knowledge dissemination and experience sharing in width and depth. The overall satisfaction on this symposium as rated by staff had also increased from 4 point in last year to 4.4 point this year under a 5-point scale.



## 2.2 ISQua 28th International Conference



The 28th International Conference of the “International Society for Quality in Health Care” (ISQua) was held in HK during 14 to 17 Sept 2011. This was a major international quality event that attracted colleagues from all over the world. KEC had over 80 staff attended the conference and pre-conference workshops. A total of 24 CQI programs were also selected for poster presentation. The conference had facilitated sharing of innovations, new ideas and interaction with leaders in the field of health care safety and quality which were of huge gain to our colleagues.

## 2.3 KEC Convention

To refresh the good quality endeavours exemplified in the HA Convention, the KEC Convention was held in Jun 2011. Staff selected for oral presentation in the HA Convention and the outstanding team shared their initiatives on patient safety and service enhancement.

## 2.4 Formulation of Risk Register for 2012/13

A bottom-up approach was adopted in consolidating risks at all levels. Following submission by departments on perceived risks, the Quality and Safety (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 2012/13 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 Document Management System

To ensure an effective document management system was in place to safeguard the availability, distribution and up-datedness of documents, the KEC Document Control Subcommittee, reportable to the KEC Q&S Committee, had endorsed and issued the Document Control Policy in KEC in Oct 2011. At hospital level, United Christian Hospital (UCH) and Tseung Kwan O Hospital (TKOH) had established corresponding structure & collaboration channels with document control officer at departmental and committee levels to ensure robustness and efficacy of the system.

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Approved by	Subcommittee Control
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**Document Control Procedure for Kowloon East Cluster Committees**

Version	Effective Date
01	25-10-2011

Document Number	KEC-QCS-PC-002-001
Author	Dr. Cindy Ma Hing
Custodian	KEC Document Control Subcommittee
Approved by	KEC Document Control Subcommittee
Approval Date	24-10-2011

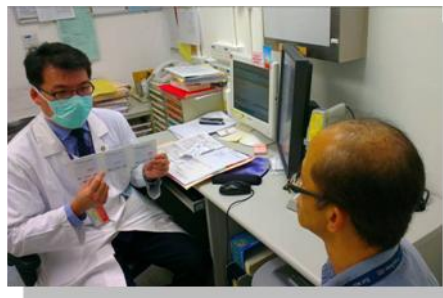
## 2.6 Patient Safety Enhancement

### 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, regular hospital safety walkround and cross-hospital round were conducted. Relevant good practice and areas of recommendation were shared. Follow up improvement actions were devised with progress being timely monitored.

## 2.6.2 Medication safety – Pharmacist-led Anticoagulation Service for Outpatients

The program was to integrate care provided by physicians and pharmacists to manage patient's anticoagulation therapy with warfarin to optimise its efficacy, safety and cost-effectiveness. It was protocol-driven and all clinical pharmacists involved received training in anticoagulation care. Until June 2012,



there were 93 consultations and 16 patients under the shared-care with physicians. The overall anticoagulation control was 68%, which was comparable to cited literature.

## 2.6.3 Infection Control (IC)

The IC Team organized programs and training to promote safe practice and prevent the transmission of infections in healthcare environment.

### Programs:

<b>KEC</b>	<ul style="list-style-type: none"> <li>● Audit for reprocessing of single use device, compliance was 99.75%.</li> <li>● Compliance in prescription practice for big gun antibiotics was 95%.</li> <li>● MRSA reduction program.</li> </ul>
<b>UCH</b>	<ul style="list-style-type: none"> <li>● Survey on infection control - 2260 responses (55% of all staff) received. It aimed to explore staff perceptions on guidelines, acceptance of vaccination and identify areas for improvement. The results were presented in the HA convention 2012.</li> <li>● Reduction of blood culture contamination (started in 4Q 11) - review of technique and skin anti-sepsis, staff training, adoption of single-use holder. The contamination rate for 1Q 12 was 0.57% (range for 1Q of 2004 to 2011 was 0.8% - 2.7%).</li> </ul>
<b>TKOH</b>	<ul style="list-style-type: none"> <li>● Prevention of nosocomial infection (started in Dec 11) - routine chlorhexidine bath for at risk patients, a total of 800 staff received training.</li> <li>● Reduction of blood culture contamination (started in 1Q 12) – 2% chlorhexidine in 70% alcohol swab stick for site preparation.</li> </ul>
<b>Haven of Hope Hospital (HHH)</b>	<ul style="list-style-type: none"> <li>● Reduction of diarrheal cases due to enteral feeding – Use of disposable enteral feeding set &amp; rinse feeding set at bedside after each meal ; and daily disposal of the set to decrease manipulation &amp; contamination.</li> </ul>

## Staff education & training;

	IC courses (attendance)	IC drills	Other Q&S related IC programs
<b>UCH</b>	70 (4837)	7	<ol style="list-style-type: none"> <li>1. Survey on using of eye &amp; face protection devices by Operating Room (OR) doctors.</li> <li>2. Review blood culture taken workflow.</li> <li>3. MRSA reduction program.</li> <li>4. IC compliance audit.</li> <li>5. NSI road show promotion.</li> <li>6. Hard hygiene audit in Department of M&amp;G and O&amp;T.</li> <li>7. Survey on needle-stick injuries and influenza vaccination.</li> <li>8. Pre-operative preparation in Department of O&amp;T.</li> <li>9. Respiratory protection program</li> </ol>
<b>TKOH</b>	45 (1309)	3	<ol style="list-style-type: none"> <li>1. Prevention of nosocomial infection via chlorhexidine bath for at risk groups.</li> <li>2. MRSA reduction program.</li> <li>3. Prevention of blood culture contamination.</li> <li>4. Central disinfection of laryngoscope blade.</li> <li>5. Safety devices for blood collection.</li> <li>6. Infection control week.</li> </ol>
<b>HHH</b>	15 (485 )	1	<ol style="list-style-type: none"> <li>1. MRSA reduction program.</li> <li>2. Central disinfection of the resuscitation devices &amp; provision of extra set for replacement.</li> <li>3. Hand hygiene promotion program.</li> <li>4. Promotion of single use respiratory devices.</li> <li>5. Review of sputum collection procedure.</li> </ol>
<b>Total</b>	130 (6631)	11	20 related programs

## 2.7 Occupational Safety and Health (OSH)

OSH team had organized and coordinated various CQI programs with implementation of safety management system at department level. These included management of major work injuries through promotion of 5S, manual handling operations training, seminar and road show for prevention of sharps, provision & demonstration of safety devices and launch of staff wellness programs.



Morning Exercise

Apart from coordinating the monthly OSH friendly visit to various departments, OSH Team also supported the department-initiated inspection at Department of M&G in UCH and Department of Surgery in TKOH. To sustain the momentum in promoting OSH, the OSH Appreciation Program 2011/12 was held to recognize various types of OSH Improvement Projects and Best OSH Employees.

Through the above initiatives, KEC had attained the following achievement and recognition:

- Number of Injury On Duty (IOD) and IOD sick leave day was decreased in 2011/12.
- Ms. KM YEUNG, Registered Nurse of Specialist Out-patient Department (SOPD) and Mr. YH WONG, Nursing Officer of OR were honored Gold Award of the Frontline Category and Silver Award of the Management Category of the 3rd Best OSH Employees Award Scheme, organized by the Occupational Safety and Health Council (OSHC).
- Two OSH improvement projects had received the Bronze and Merit Awards in various recognition schemes organized by the OSHC.
- Three submissions and one submission from OSH team were accepted by the HA Convention and the 28th ISQua International Conference respectively for poster display.



Best OSH Employees



OSH Award Ceremony



Performance on OSH improvement project

## 2.8 Information Security and Privacy (ISP)

Outreaching service is undeniably a valuable and crucial service to our community. Since the Old Age Homes (OAH) are located outside hospital premises, the medical record office has to transport tremendous amount of paper medical records to and from OAHs. Paper-based information imposes not only administrative and financial burdens, but also increases the risk of losing sensitive information of our patients.



Cluster ISP Office had collaborated with CGAT doctors and nurses, IT department to work towards paperless in 18 private OAHs. Electronic means of remote access to patient information via clinical management system and electronic patient record was introduced. It had preserved security of medical records data and also enhanced efficiency and accuracy in accessing patient information.

This project reduced the administrative and financial cost related to transportation and handling of 600 paper medical records and 3000 loose sheets every month. Wireless access to medical information and X-ray images had also improved clinical practices with increased accuracy, efficiency and availability of patient information to our CGAT staff.

### 3. Risk Prioritization

#### 3.1 Identified Risks for 2011-2012

	Clinical risks (in order of priority)
1.	Medication management <ul style="list-style-type: none"> <li>● <i>improvement of dispensing accuracy</i></li> <li>● <i>medication safety in relation to drug administration</i></li> <li>● <i>medication safety and storage of drugs in wards (ward stock) including dangerous and controlled drugs</i></li> <li>● <i>Look-Alike Sound-Alike medications</i></li> <li>● <i>medication safety (Verbal / Phone order of medications)</i></li> </ul>
2.	Patient falls (with special reference to): <ul style="list-style-type: none"> <li>● <i>prevention through standardization of the assessment process</i></li> <li>● <i>streamlining of the process of evaluation</i></li> <li>● <i>inpatient fall assessment and intervention program</i></li> </ul>
3.	Infection control <ul style="list-style-type: none"> <li>● <i>enteral feeding decontamination</i></li> <li>● <i>sluice room environment management</i></li> </ul>
4.	Retained instruments or other material
5.	Blood specimen collection in right container
6.	Correct patient identification for Radiology Service

	Non-clinical / operational risk (not in order of priority)
1.	Workplace violence: <i>workplace violence in out-patient setting</i>
2	Information technology <ul style="list-style-type: none"> <li>● <i>hospital data centre breakdown</i></li> <li>● <i>web server failure</i></li> <li>● <i>loss of data due to desk top computer failure</i></li> </ul>
3	Injury on duty <ul style="list-style-type: none"> <li>● <i>staff slip, trip and fall</i></li> <li>● <i>sharps injury</i></li> </ul>
4	Telecommunication system failure (PABX, mobile and internal paging service)
5	Loss of records containing personal identifiable information
6	Drainage problem
7	Theft or damage of hospital property
8	Unsettled bills

## 3.2 Identified Risks for 2012-2013

	Clinical risks (in order of priority)
1	Medication management <ul style="list-style-type: none"> <li>● <i>giving wrong volume in bolus injection</i></li> <li>● <i>prescribing wrong set of medications on admission</i></li> <li>● <i>dispensing error</i></li> </ul>
2	Patient falls - <i>injurious falls</i>
3	Surgical safety - <i>retained instrument / materials during operation</i>
4	MRSA infections: <i>MRSA bacteraemia</i>

	Non-clinical / operational risk (not in order of priority)
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

## 4. Risk Reduction and Quality Programs

In line with the development 2011/12 KEC Risk Register for clinical and operational risks, the corresponding risk reduction / quality programs were identified and monitored. The results are summarized below:

### 4.1 KEC

Item	Program name	Result / Evaluation on Effectiveness
<b>Clinical Risks</b>		
1.	<b>Medication Management</b>	
	a. Improvement of dispensing accuracy: review the handling and storage of Dangerous Drugs (DD).	<ul style="list-style-type: none"> <li>Reduced medication incidents related to DD.</li> <li>Standard label of DDs and the storage boxes had been distributed to ward nurses in UCH and TKOH.</li> <li>A seminar regarding the safe handling and storage of DD was held in Aug 2011.</li> </ul>
	b. Medication safety in relation to drug administration in TKOH: <ul style="list-style-type: none"> <li>Minimize distraction during medication round</li> <li>Formulate guideline on assigning expiry dates to multi-dose item</li> </ul>	<ul style="list-style-type: none"> <li>Draft of signage designed to alert patients / visitors in order to prevent distraction and piloted in 5 wards in 2Q11.</li> <li>Standardized signage rolled out to all inpatient wards in 3Q11.</li> <li>"Guidelines on discard dating of opened injectable items" had been effective on 15 Jan 2011.</li> <li>Promulgation to nursing staff done through DAPP members and ward in-charge.</li> </ul>
	c. Medication safety and storage of drugs in wards (ward stock) including dangerous and controlled drugs in TKOH <ul style="list-style-type: none"> <li>Review the storage</li> </ul>	<ul style="list-style-type: none"> <li>Review of statutory requirement of DD custody had been done.</li> <li>A surprise check was conducted on DD Box and its environment in 5 areas by a team with GM(N), DOM, SNO, Pharmacist, SHA and administrative staff. Recommendation was</li> </ul>

Item	Program name	Result / Evaluation on Effectiveness
	<p>and keeping of DD</p> <ul style="list-style-type: none"> <li>Improvement works of DD cupboard to be done to enhance safe storage of DD</li> <li>Reinforce strict compliance of the use of DD cupboard for DD only</li> <li>Conduct another surprise check in 1Q12</li> </ul>	<p>made after the safety round.</p> <ul style="list-style-type: none"> <li>Removed indoor of DD cupboard to increase its size for better segregation of different DD.</li> <li>Changed to auto-lock of the outer door.</li> <li>Improved the shelving &amp; partitions for surrogating and clear labeling of the injection and oral DD.</li> <li>Added a down light over the DD checking area.</li> <li>Improvement works done and piloted in one medical ward and one surgical ward in 2Q11.</li> <li>Improvement works done for all inpatient wards in 3Q11.</li> <li>Promulgated the safe practice of DD storage and keeping to nursing staff through Nursing Committee and Nursing Consultative Committee in 2Q11.</li> <li>Conducted the 2nd surprise check in Nov 11 with debriefing.</li> </ul>
d.	<p>Look-Alike Sound-Alike (LASA) medications in HHH</p> <ul style="list-style-type: none"> <li>Drug dispensing by location in addition to drug name at inpatient &amp; outpatient section</li> <li>Change the relevant LASA drug labels to Tall-man letter on the bin shelves</li> <li>Update HHH commonly confused LASA Drug Table</li> </ul>	<ul style="list-style-type: none"> <li>Provided one more identifier in order to avoid dispensing error.</li> <li>All dispensing bin shelves were given individual location code; added bin shelf location code on dispensing label.</li> <li>All relevant LASA drug labels on the bin shelves in working store of inpatient &amp; outpatient section, E-room and Ward top-up cupboard were changed to Tall-man letter in early of Jun 2011.</li> <li>HHH/HA LASA Drug Names List was revised, distributed to all wards and uploaded to pharmacy web page in Apr 2011.</li> </ul>

Item	Program name	Result / Evaluation on Effectiveness
	e. Medication safety (Verbal / Phone order of medications) in HHH.	<ul style="list-style-type: none"> <li>● Enhanced standard practice on handling of verbal / phone order.</li> <li>● Developed standard practice on handling of leftover drugs.</li> <li>● Briefing on guideline for handling phone/verbal order was conducted on 30 Jan 2012.</li> <li>● Standard practice on handling of leftover drugs was announced on 21 Jun 2011.</li> <li>● Audit on standard practice of handling drugs was conducted in Jul 2011.</li> </ul>
2	<p><b><i>Patient Falls (with special reference to):</i></b></p> <p>a. Prevention through standardization of the assessment process in TKOH.</p> <p>b. Streamlining the process of evaluation in TKOH.</p> <p>c. Inpatient fall assessment and intervention programme in UCH.</p>	<ul style="list-style-type: none"> <li>● Fall prevention guideline was revised and implemented in Jun 2011.</li> <li>● Morse Fall Scale was adopted as the assessment tool in TKOH in 2Q11.</li> <li>● The revised 'Fall Assessment and Management Record' was implemented in TKOH in 2Q11.</li> <li>● Briefing session for promotion was held on 27 May 2011.</li> <li>● An evaluation form was designed and streamlined to facilitate the process of fall incidents with severity 3 or above in 2Q11.</li> <li>● A workshop for Fall Ambassadors was held on 15 Jan 2012.</li> <li>● Shared the fall prevention &amp; management programs in the Q&amp;S Forum in TKOH in Oct 2011.</li> </ul> <p>A multidisciplinary taskforce on hospital fall prevention was formed. Environment assessment was conducted followed by formulation of an action plan based on risk areas identified. The project would be continued in 2012/13.</p>
3	<p><b><i>Infection Control</i></b></p> <p>a. Enteral feeding</p>	

Item	Program name	Result / Evaluation on Effectiveness
	<p>decontamination in HHH: Use of disposable feeding set in wards.</p> <p>b. Sluice room environment management.</p>	<ul style="list-style-type: none"> <li>● Pre-meeting with related department (Catering, Supplies, CSSD, Nursing and IC team) was held to explore the process.</li> <li>● Deduced ward based disinfection practice and contamination by comparing the budget between current and revised practice.</li> <li>● Working group was organized to update and revise the procedure of enteral feeding and live run arrangement.</li> <li>● The nursing care procedure of enteral feeding was updated &amp; implemented.</li> <li>● Two briefing sessions to ward staff were provided.</li> <li>● The disposable feeding sets had been used in all wards.</li> <li>● The system was continuously monitored and reviewed.</li> <li>● Principles of environmental management for sluice room were standardized and accepted.</li> <li>● List of storage for sluice room was standardized.</li> <li>● Visual management for sluice room was standardized.</li> </ul>
4	<p><b><i>Retained instruments or other Materials in UCH</i></b></p> <p>a. Devise disposable gauze counting bag.</p> <p>b. Develop electronic swab counting program.</p>	<ul style="list-style-type: none"> <li>● Pilot had been implemented in 2 theatres on 25 Jul 2011.</li> <li>● Feedback was collected with design to be modified.</li> </ul> <p>The program was in development phase.</p>
5	<p><b><i>Wrong Specimen Container</i></b></p> <p>Blood specimen collection in right container in UCH: Establish search function for</p>	<p>The system was successfully launched onto UCH website with effect from 18 Jan 2012 to facilitate users in search function.</p>

Item	Program name	Result / Evaluation on Effectiveness
	information of specimen containers for various tests	
6	<b>Patient Misidentification</b> Correct patient identification for Radiology Service in UCH: Compliance on identification procedure by Radiology	The degree of understanding on the standard operating procedure for patient identification by radiology staff was evaluated successfully. The exercise had helped to strengthen staff awareness on the importance of patient identification.

Item	Program name	Action & Result
<b>Operational Risks</b>		
1	<b>Workplace Violence (WV)</b> Workplace violence in out-patient setting in UCH a. Annual security seminar  b. Advanced level training  c. Drills with high risk departments  d. Risk assessment with department	<ul style="list-style-type: none"> <li>● Seminar on “Hospital security and workplace violence” was conducted on 16 Mar 2012.</li> <li>● Enhanced staff awareness.</li> <li>● Staff attended the advanced level training for WV and patient restraint in Oct 2011.</li> <li>● WV drill at Accident and Emergency Department (AED) was conducted in collaboration with OSH team in 1Q11. Joint visit to SOPD with OSH team in 3Q11 and risk areas were identified with improvements made.</li> <li>● Improved awareness and better prepared for handling of workplace violence. Produced video on patient restraint and shared with TKOH AED as good practice.</li> <li>● Joint risk assessment conducted by Security, involved departments, and OSH Team at SOPD on 24 May 2011 and Ngau Tau Kok &amp; Kwun Tong General Out-patient Clinics (GOPCs) on 30 May 2011.</li> <li>● Implemented improvement plans.</li> </ul>
2	<b>Information Technology</b> a. Hospital data centre (HDC) breakdown in	A HDC equipment breakdown alert system to send alert signal of critical equipment breakdown in

Item	Program name	Action & Result
	<p>UCH: Improvement of environmental facilities in HDC and new HDC equipment breakdown alert system</p> <p>b. Web server failure in HHH: Develop disaster recovery plan for web server</p> <p>c. Loss of data due to desktop computer failure in HHH</p>	<p>HDC to the responsible parties was under development.</p> <p>A backup web server to maintain the up time of HHH Intranet not less than 99.9% had been setup.</p> <p>Setup of automatic backup mechanism on PC for critical users was in progress.</p>
3	<p><b><i>Injury On Duty</i></b></p> <p>a. Staff slip, trip and fall: Fall prevention awareness and promotion exercise</p> <p>b. Sharps injury</p> <ul style="list-style-type: none"> <li>Joint meeting with involved departments for proposed improvement plans</li> </ul>	<ul style="list-style-type: none"> <li>Arranged fall prevention promotion booth, exhibition and exercise class in Aug and Sept 2011.</li> <li>Issued Safety Alert to all staff.</li> <li>Affixed alert marking and warning notice to high risk areas.</li> <li>Approved OSH budget for procurement of safety devices, which had been sent out starting from July 2011.</li> <li>3 joint meetings conducted with NSD and DOMs colleagues for safety devices and improvement strategies. A series of needle stick injury prevention program, including seminars, road shows &amp; demonstration on safety devices, had been conducted in Aug and Sept 2011.</li> <li>Safety Guidelines on Handling Sharps would be proposed for endorsement by KEC OSH Steering Committee in Oct 2011.</li> <li>The highlights were shared starting from Jul 2011.</li> </ul>

Item	Program name	Action & Result
4	<b>Telecommunication System Failure</b> Private Automatic Branch Exchange (PABX), mobile and internal paging service in HHH	Reviewed and updated the contingency plan of PABX & mobile system, issued to related parties in 4Q 2011.
5	<b>Information Security</b> Loss of records containing Personal Identifiable Information (PII) a. Enhance information security – towards paperless in M&G Outreaching team in UCH b. Enhancing information security requirements in photocopiers in KEC	<ul style="list-style-type: none"> <li>● Pilot to one private OAH had been started in Oct 2011 and to all 18 private OAH before 4Q 2011.</li> <li>● The project reduced the administrative and financial cost related to the transportation and handling of paper medical records and loose sheets every month.</li> <li>● Minimized risk of losing medical records outside HA premises. Wireless access to medical information as well as X-ray images had improved clinical practices, with increase accuracy, availability and enhances patient care.</li> <li>● No photocopiers with PII stored in shared folder were opened up for unauthorized access within the HA internal network.</li> <li>● All 219 sets of photocopier in KEC hospitals were checked. Workflow and practice on the newly purchased, existing and condemnation of the photocopiers were standardized.</li> </ul>
6	<b>Facility Breakdown</b> Drainage Problem in UCH	<ul style="list-style-type: none"> <li>● Design principle for replacing internal pipe works of Block P was finalized and accepted by users.</li> <li>● Frequency of pipe burst would be reduced.</li> </ul>
7	<b>Security</b> Theft or Damage of Hospital Property	<ul style="list-style-type: none"> <li>● Cluster Crime Prevention Seminar on “Hospital security and Workplace violence” was conducted on 16 Mar 12 to arouse staff</li> </ul>

Item	Program name	Action & Result
		<p>alertness.</p> <ul style="list-style-type: none"> <li>• 150 KEC staff attended the seminar.</li> <li>• Post up “beware of belongings” signage and notice in patient area to alert patient and public to beware of personal belongings.</li> </ul>
8	<p><b>Unsettled Bills</b></p> <p>Follow the guidelines set by HO on administrative charges and debt recovery procedures and enhanced measures.</p>	<p>Fulfilled the HA guidelines for the debt recovery measures and actions.</p>

## 4.2 Other Risk Reduction Strategies in TKOH

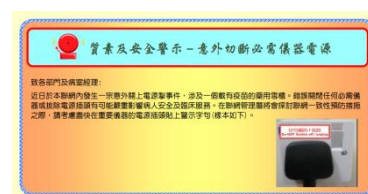
- a. Prevention of Patient Fall
  - Conducted incident reviews at Nursing Q&S Subcommittee
  - Disseminated monthly statistics to Ward Managers / Nurse in charge for trending & benchmarking
  - Conducted safety walkround to identify areas for improvement
  - Conducted audit on fall prevention
  - Enhanced patient education on fall prevention by education pamphlet & videos.
- b. Prevention of Medication Incidents
  - Enhanced standard practice on handling of verbal / phone order
  - Developed standard practice on handling of leftover drugs
  - Conducted audits on these medication safety practice
- c. Prevention of Pressure Ulcer Formation
  - Provided training to nurses & support workers in TKOH & OAHs for learning & sharing of good practices on prevention and management of pressure ulcers in TKOH & community
  - Provided education pamphlet of pressure ulcer ( English version ) to patients and carers in need
  - Evaluated the effectiveness of pressure ulcer management in TKOH
  - Monitored and analyzed TKOH statistics on pressure ulcer and benchmark the data with other HA Hospitals
  - Improved the quality & increase the stock of pressure ulcer preventive devices in TKOH

- d. Prevention of Wrong Patient / Wrong Site Surgery
  - Developed 2 Surgical Safety Checklists which were to be adopted by all units within the hospital: (1) Surgical Safety Checklist, (2) Surgical Safety Checklist for Bedside Procedure
  - Conducted training sessions on “surgical safety” to nurses
  - Conducted audit on staff compliance

## 5. Learning and Sharing Information

### 5.1 Risk Management / Patient Safety

- a. Seminar for update on Advanced Cardiac Life Support (ACLS) on 7 Sept 2011.
- b. Meeting with Document Control Officers (24 & 27 Oct 2011, 6 & 14 Mar 2012).
- c. Seminar on Drivers of Work Engagement on 7 Dec 2011.
- d. Workshop for Fall Ambassadors on 15 Jan 2012.
- e. Seminar on Prevention of Patient Suicide on 1 Feb 2012.
- f. Seminar on Hospital Security and Workplace Violence on 16 Mar 2012.
- g. KEC Quality & Safety Alerts.
- h. Monthly Q&S Sharing by Pharmacy Department in KEC Q&S Bulletin.
- i. Practical Radiation Protection in Clinical Areas in TKOH on 18 Aug 2011.
- j. Debriefing on 1st Internal Audit on Dangerous Drug in TKOH on 29 Nov 2011.
- k. MRI Safety in TKOH on 8 Feb 2012.
- l. Debriefing on 2nd Internal Audit on Dangerous Drug in TKOH on 29 Mar 2012.



### 5.2 Incident Management

- a. Seminar on Complaint Management on 4 May 2011.
- b. Information Security and Privacy Seminar on 6 Jul 2011.
- c. Learning from Patient Safety Incidents on 12 Oct 2011 & 7 Mar 2012.
- d. Sharing of SE / SUE through KEC Q&S Bulletin.
- e. Quarterly Sharing of Incident Trends through KEC QSO web.



## 5.3 Hospital Accreditation

- a. Monthly Hospital Accreditation Tips in KEC Q&S Bulletin
- b. Meeting with Document Control Officers on Document Management / IT System Development in UCH on 6 & 14 Mar 2012.
- c. IT training on SharePoint Development and Maintenance of Department Webpage in TKOH on 6 Apr 2011.
- d. Communication and Engagement Forum on Extension of Hospital Accreditation in TKOH on 5 Dec 2011.
- e. Staff Engagement Forum on Hospital Accreditation in TKOH for sponsors and department coordinators on 1 Feb 2012 and 2 forums for all staff on 13 & 20 Feb 2012.

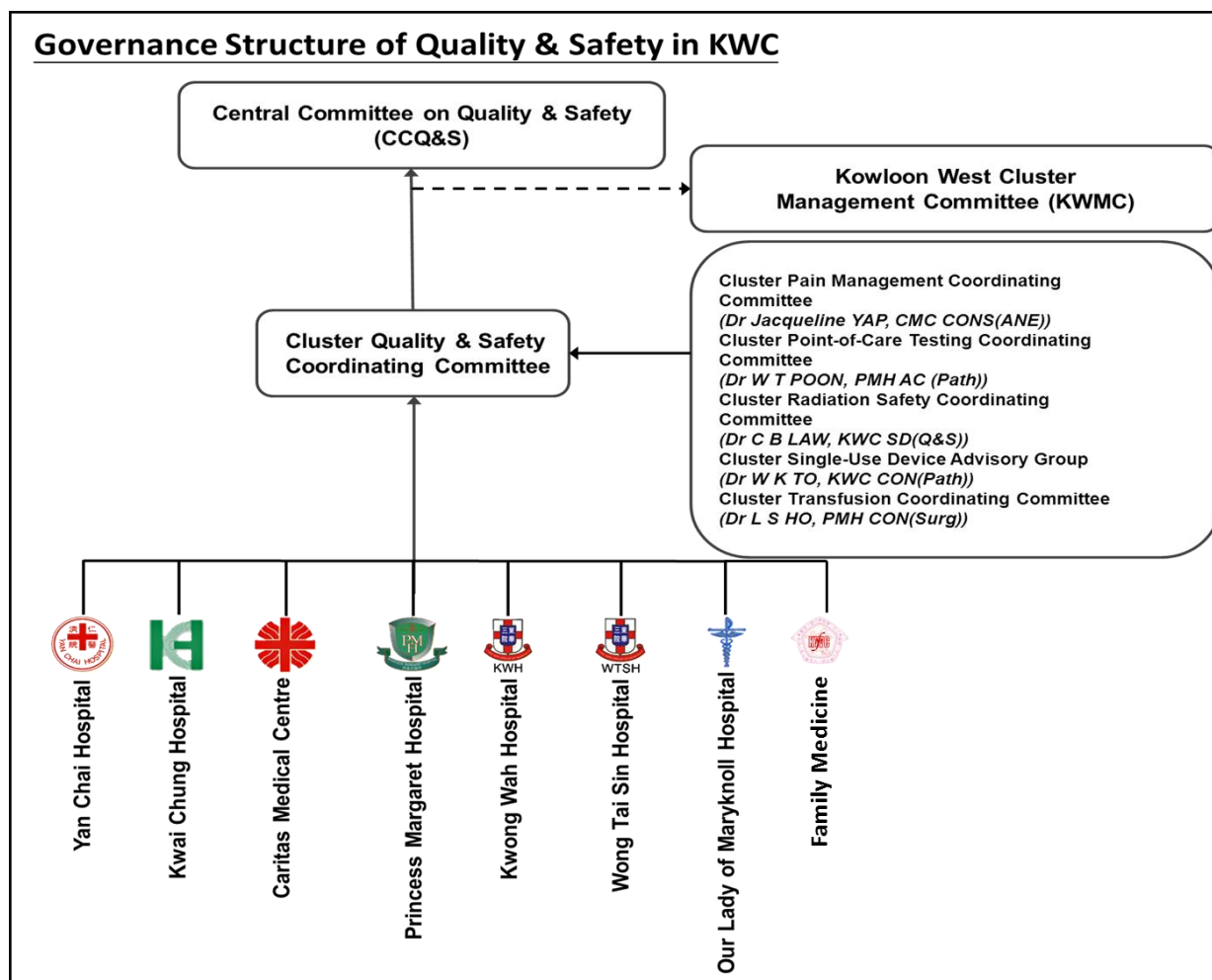
## 5.4 CQI

- a. KEC Q&S Symposium on 2 Mar 2012.
- b. KEC Convention on 15 Jun 2011.
- c. Sharing of CQI Practice by Departments in KEC Q&S Bulletin.
- d. Sharing on Nursing Q&S Programs in TKOH on 7 Oct 2011.

## 5.5 Occupational Safety & Health

- a. CQI programs in managing major nature of injuries including Slips, Trips & Falls, Percutaneous Injuries, Manual Handling Operations and Workplace Violence.
- b. 48 OSH training sessions/seminars.
- c. Internal safety round at M&G Department in UCH and at Surgery Department in TKOH.
- d. Multi-departmental risk assessment and improvement plans of workplace violence at 2 GOPCs and SOPDs.
- e. Multi-departmental drills in workplace violence in Accident and Emergency Departments and Security Departments of UCH and TKOH.
- f. 46 OSH Visits/Consultations.

## 1. Structure



## 2. Overview of Quality and Risk Management Issues

### 2.1 KWC Quality and Safety Strategy Planning Workshop

A KWC Quality and Safety (Q&S) Strategic Planning workshop was held on 1 Mar 2012. The objective of the workshop was to discuss the direction and vision of Q&S work in the next few years. A draft follow-up plan was formulated to give insight to the staff of KWC Q&S team on the future direction.



## 2.2 Focus Group Interviews on Patient Safety Culture

As a follow up on the “Patient Safety Culture Survey” conducted in HA hospitals in 2010, a work group was formed to collect opinions from selected staff groups on two of the twelve composites of patient safety culture, “Communication openness” and “Non-punitive response to error” to understand better why the scores of these 2 areas in the HA Head Office survey were comparatively lower than the benchmark. The interviews were conducted from Nov to Dec 2011 and the result of the survey would be ready in 1Q 2013.

## 2.3 Surgical Safety Policy – Phase II & III Audit

To monitor the performance of the Phase III HA Safety Policy on Bedside Procedure in KWC hospitals since Aug 2011, post implementation hospital wide audit for Phase II and III were conducted. The key recommendations after the audit were that all staff involved in the procedure should be educated to adhere to the policy at all times, and the checklist should be completed before patients’ departure from wards to interventional suites.

## 2.4 Review on Mortuary Services Related to Body Handling

A KWC mortuary operation audit was conducted in KWC mortuaries in May 2011. The audit objective was to evaluate the compliance on the improvement measures, such as transportation arrangements, the checking procedures of collecting deceased body, given by Bureau after the incident on improper place of baby corpse in mortuary.

Taking into account the individual operations and settings of KWC mortuaries, the audit report had made some recommendations for individual hospital. One of the mutual recommendations for individual hospital to follow up was to establish a checking mechanism at the mortuary to ensure staff to place dead body in designated areas.

In fact, all the mortuaries had already had proper standards of practice on the handling of deceased body, and the audit result showed good compliance on the implementation of the improvement measures.

## 3. Risk Prioritization

### 3.1 Identified Risks for 2011-2012

	Clinical risks
1	Patient Fall
2	Infection Control
3	Medication / Dispensing
4	Clinical Documentation
5	MHO
6	Safe surgery
7	Discharge planning

	Non-clinical / operational risk (not in order of priority)
1	MHO
2	Fire Safety

### 3.2 Identified Risks for 2012-2013

	Clinical risks (in order of priority)
1	Medication
2	Patient falls
3	Infection control
4	OSH - Injured whilst lifting or carrying
5	Patient identification
6	IT breakdown

	Non-clinical / operational risk (not in order of priority)
1	IT breakdown
2	OSH - Injured whilst lifting or carrying
3	Fire safety
4	Workplace violence

## 4. Risk Reduction and Quality Programs

### 4.1 Review of 2011 Risk Reduction Programs

#### 4.1.1 Medication Safety

Medication safety round conducted by HAHO Medication Safety Committee was taken in KWC hospitals. Sharing forums on medication incidents and medication safety talk were organized. Medication incidents were also reviewed and followed up with preventive strategies. All KWC hospitals had reviewed their medication incidents for mitigation actions.

In Princess Margaret Hospital (PMH), The In-patient Medication Order Entry (IPMOE) Demo Ward was set up on 1 Dec 2011 and the test started on 19 Mar 2012. The IPMOE program was establish to computerize the drug ordering system in wards.

Kwai Chung Hospital (KCH) had also implemented a “Reduce distraction / interruption program” by erecting signage of “派藥中 勿打擾 (Giving Drugs Don't Disturb)” during medication round.

All hospitals had enhanced the monitoring on the temperature of medication fridge by adding reliable thermometer with battery back-up alarm system.

#### 4.1.2 Patient Identification

The Mortuary Information System (MORIS) still birth module had been piloted in PMH. The baby is registered in MORIS for the generation of the 2D wristband and Last Office Form (LOF) in the Labour Ward. The software of the existing Unique Patient Identification (UPI) devices was also updated to enhance the accuracy of label print-outs.

## 4.1.3 Falls

Fall prevention training and introduction of Morse Fall Scale were organized for nurses and supporting staff. Fall prevention guideline and fall risk assessment form were also introduced. Patrol rounds in high risks wards were intensified to reduce the fall rate.

## 4.1.4 Infection Control

Infection control program such as hand hygiene, management of Methicillin Resistant Staphylococcus Aureus (MRSA), revised the guideline on 處理醫療廢物-標準操作程序及醫療廢物管理計劃 were undertaken. Drills on Avian Flu and Fever Cohort were held in some KWC hospitals. A multi-drug resistant organism (MDRO) reduction program was pilot in PMH medical wards to enhance disinfection for patients on contact isolation.



### a. Manual Handling Operations (MHO)

In order to reduce staff injury during transferring of patients, the “Red Dot Mobility System” was introduced in KWC. It was first launched in Lai King Building, followed by Kwong Wah Hospital (KWH), Our Lady of Maryknoll Hospital (OLMH) and O&T & Neurosurgery Department of PMH with regular follow up and evaluation. Trainings and briefing sessions were also provided to clinical staff.

To reduce MHO related injuries, “Exercise Prescription” was organized by Cluster Physiotherapy to strengthen the physical status of staff. 280 colleagues had submitted applications for this program. 252 participants had finished the baseline assessment. 170 participants had finished the post 4 months Re-assessment.

With the ultimate aim to optimize overall system performance and improve

worker's health at work, Cluster Occupational Therapy continues to serve the cluster by organizing the "Ergonomic Consultation Services". 18 units/departments requests were entertained in the last year, which involved over 600 staff.

To facilitate learning by staff, MHO e-course which covers basic and refresh training in clinical and non-clinical areas was launched and promulgated to KWC hospitals.

## **b. Display Screen Equipment (DSE)**

The Cluster DSE Working Group conducted a comprehensive DSE assessment in GOPCs. Relevant training was given and improvement plan was formulated.

## **c. Chemical Safety**

The Cluster Chemical Safety Working Group conducted heat stress, Cidex, Formalin exposure monitoring to cluster hospitals with the funding support by the Cluster.

## **d. Safety Culture Promotion**

KWC OSH Day was held to further promote safety culture among KWC hospitals. Staff were awarded with two Gold awards from OSHC 第八屆職安健員工參與計劃 and 全港傑出職安健員工嘉許計劃 2012 on 27 April 2011.

The "International Safe Workplace Programme" (ISWP) was awarded for a Merit Award in HA Outstanding Team competition 2012.



## **4.1.6 Physical Restraint**

Prevalence survey on the use of physical restraint was conducted in all clinical areas.

## **4.1.7 Audits**

Individual hospital and Group Internal Audit had conducted audits and survey on various risk reduction programs, such as Specimen Handling, OSH, Patient Identification, Safe Surgery, Fall Prevention, Physical Restraint, Infection Control, Informed Consents, Mortuary Operations, Radiation Work Procedures, etc. to ensure compliance with policies/ guidelines and standard of operations.

## **4.1.8 Others**

Other minor risk reduction and improvement programs, such as standardization of staff chop for clinical documentation, safe patient transportation program, radiation drill and clinical handover system were also intensified by the KWC hospitals.

## **4.2 Quality Initiatives, Including Accreditation**

### **4.2.1 Hospital accreditation**

OLMH, PMH and Yan Chai Hospital (YCH) would participate in the Phase II Hospital Accreditation Organization Wide Survey in 2013, 2014 and 2015 respectively. For the past year, the 3 participating hospitals had started to establish steering committees, working groups and engagement teams to promulgate the program and get staff involved in all the training activities, such as Topic forum, visit to pilot accreditation hospitals, meeting The Australian Council on Healthcare Standards (ACHS) consultants, etc. The KWC Accreditation Office was also open in Jan 2012 to provide one-stop support to all clinical and non-clinical departments. 3 staff from KWC hospitals were selected to join the ACHS surveyor training program to become ACHS (HK) surveyors.

### **4.2.2 Other quality initiatives**

#### **a. Hospital Safety Rounds**

Hospital Safety Rounds were conducted in all KWC hospitals. Follow-up action based on the recommendations made after the rounds were taken by

respective hospitals with written reports. Improvement areas had covered environment safety and hygiene, renewal of facilities, sterilization of equipment, revamp of SOPD booking system, admission flow, etc. YCH also conducted Patient Rounds with reference to ACHS standards.



## b. Quality & Safety Publications

To promote a safety culture, KWC hospitals had issued their own publications, e.g. newsletters, bulletins, Safety Gist to raise staff awareness on patient safety and privacy. The publications also serve as a mean to educate staff on safety culture.





## 5.3 Root Cause Analysis (RCA) and Incident Management Workshops

A total of 4 Incident Management and RCA Workshops were conducted for staff of all disciplines. The total attendance was 167 including 16 doctors from KWC hospitals. The workshops were to enhance the knowledge of staff on incident management and showed them the skills on how to conduct a RCA after an incident was reported.



## 5.4 KWC Medical Incident Forum

A KWC Incident forum was organized in PMH and live broadcasted to other KWC hospitals on 14 Dec 2011. The aim was to let staff addressing the outcomes of these adverse incidents. The overall comments from the participants on the forum were encouraging, as staff members were eager to share their views on the feelings of adverse incidents.

## 5.5 Resuscitation Trainings

Basic Life Support Trainings were conducted based on the updated American Heart Association (AHA) guideline. Resuscitation drills were also conducted at all KWC clinics from June to July 2011.

## 5.6 Lean Roving Exhibition

A LEAN Roving Exhibition coordinated by HAHO had taken places in KWC hospitals from Jul to Aug 2011. 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.

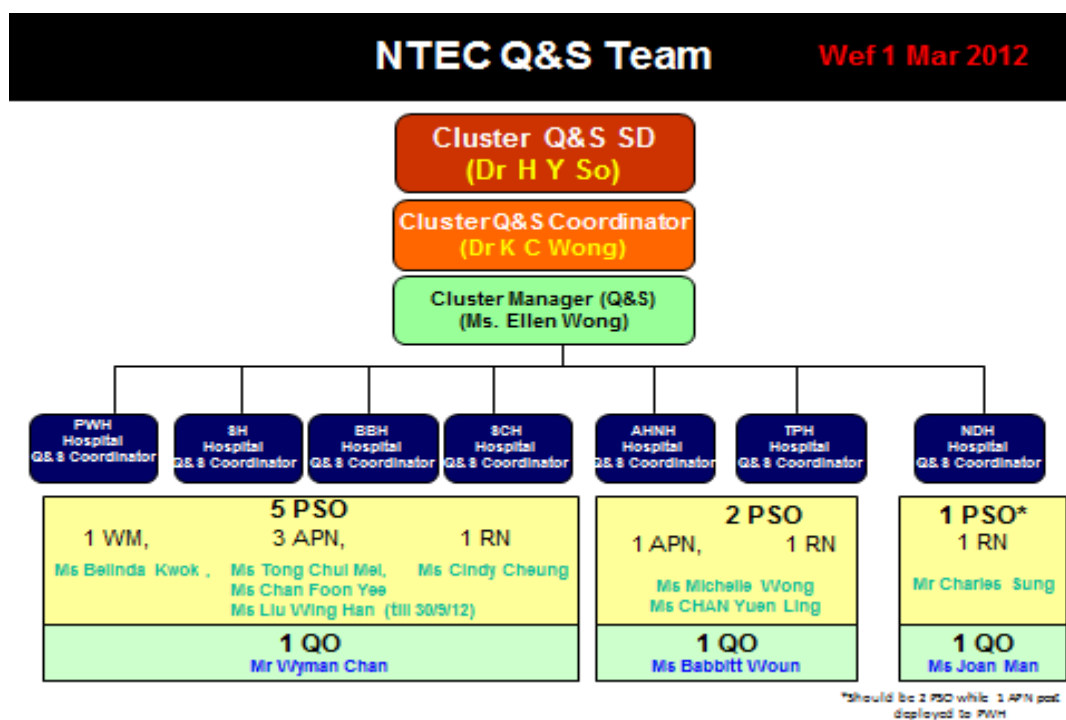


## 5.7 Others

Other trainings were conducted to promote quality care and raise staff awareness on safety issues, which include training on nurse e-care plan, infectious diseases, pain management, management of suicidal patient, proactive communication with patients' family, Diabetes Mellitus counseling and Social and Professional Reality Integration for Nurse Graduates (SPRING) program for new nursing staff.

Training on basic Continuous Quality Improvement (CQI) tools and document control were also introduced to enlighten staff on continuous quality improvement.

## 1. Structure



During the period, Dr. Siu Fai LUI retired in Feb 2012. Dr. Hing Yu SO succeeded to be the Service Director for the Cluster Quality and Safety (Q&S) Division and Dr. Kong Chiu WONG was appointed as the Cluster Coordinator (Q&S) in lieu of the Prince of Wales Hospital (PWH) Hospital Coordinator which was taken up by Dr. Wing Yee SO. In Alice Ho Miu Ling Nethersole Hospital (AHNH), Dr. Nancy LEUNG, Hospital Coordinator (Q&S), retired in 2011 and Dr. Jonas YEUNG was appointed to succeed the position. Two Registered Nurses joined the cluster team as trainees in Aug 2011 for 2 years.



## 2. Overview of Quality and Risk Management Issues

### 2.1 Risk Management

Risk Registry was conducted as usual in Jun. The top 10 clinical risks and non-clinical risks were identified, assessed and prioritized. The risks were tried to be mitigated through enhancing safety culture, design and practice, staff engagement, and sharing and learning. Incidents and practices were evaluated by periodical reviews and audits. The Risk Management Policy was developed to establish the scope, procedure for risk registry and follow-up mechanism, aiming to build an ownership in quality and safety by departments.

### 2.2 Incident Management

More than two thousand incidents were reported through Advanced Incident Reporting System (AIRS) in 2011/12, representing a decrease of 1.3% as compared with the data in 2010/11. With reference to the reported incidents, the incidence of patient fall remained the highest (37.5%), followed by staff injuries (24.3%), medication incidents (8.42%), missing patients (4.8%), and investigation (3.1%). 61.8% of reported incidents was insignificant in actual outcome, 34.8% were of minor to moderate risk, whereas 3.4% resulted in major or extreme outcome. As compared to 2010/11, the incidence of major incidents decreased by 0.2%.

### 2.3 Safety Culture

The slogan “Check, Check, Check” for safety culture was reinforced and promoted in NTEC through various ways. Staff were encouraged to check and clarify patient’s identity before performing any treatment / prescription / procedure, etc.









Throughout the year, it was encouraging that incidents related to patient identification were decreased 26.3% (57 in 2010/11, 42 in 2011/12).

### 2.4 Safety Design and Practice


#### 2.4.1 Medication Safety

Medication safety was one of the top priorities in patient safety in NTEC.


NTEC Top Clinical Risk areas 2010 – Action for 2011 – Medication Safety		
	Senior Staff / Management	Frontline staff
Doctor (Prescribing)	 SMART prescription	 Clear prescription (Hand writing)
Pharmacist (Dispensing)	 Smart Workflow (layout / system)	 Beware of Sound alike, Look alike drugs
Nurse (Administration)	 Smart Workflow (condition / environment)	 accurate 3C5R on every occasion for every drug

6 Medication Administration Records (MARs) in use since 2006 were reviewed to strengthen medication safety and its user-friendliness. To increase staff alertness in using

# New MARs in NTEC



# NTEC Drug Book



[Search by Dept Directory](#)
[Search by Drug Name Alphabetic Order](#)
[Ad-Hoc Search by Drug](#)

Taskforces were formed to review the management of known drug allergy, procedures for verbal medication orders, procedures for the use of high risk medications and workflow of Warfarin management. The exercise to help departments refine their special MARs for medication safety was also commenced.

### 2.4.2 Surgical Safety

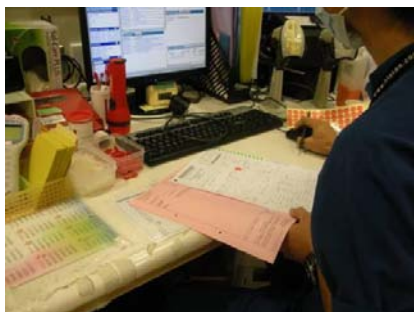
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evaluation audit was conducted in 1Q12 and overall compliance rates of 73.6% - 87.8% for using both checklists. Procedures for Surgical Counting for operations in Main Operating Theatres and Minor Operations or interventional Procedures in Interventional Suites were implemented in Feb 2012. Use of disposable gauze container in operation and delivery suites cluster-wide was piloted in January to Feb 2012.



### 2.4.3 Unique Patient Identification (UPI)

2D barcode scanning was implemented in Prince of Wales Hospital (PWH) Accident and Emergency Department (AED) in June 2011. No incidents related to wrong labeling incident were reported from PWH A&E since then. Implementation of the system in Alice Ho Miu Ling Nethersole Hospital (AHNH) AED in 2012/13 was planned.



## 2.5 Safety WalkRound

The Q&S team in individual hospital conducted patient safety walkrounds to establish lines of communication about patient safety with frontline and management staff, and to identify good practices and opportunities for improving safety; and to promote the safety culture.

Since Feb 2012, the Quality and Safety WalkRound members included staffs who were trained as Surveyor at the Australian Council on Healthcare Standards (ACHS). Infection control nurses, pharmacist, Occupational Safety and Health (OSH) coordinator and hospital administrator were invited to join the round, and to help identifying gaps for improvement. The feedback was good and positive.



## 2.6 Sharing and Learning

The annual Quality & Safety forum was themed “Medication Safety: Be Safe, Be Smart. Yes, We Have!” Dr. David U, President and CEO, Institute for Safe Medication Practices Canada was invited to be the plenary speaker at two pre-conference sessions and at the annual forum. 7 outstanding CQI projects on medication safety were presented at the forum. Over 500 attendances, including medical, pharmacy and nursing students, were recorded.



Risk Watch sessions were held regularly at PWH (bi-monthly) and quarterly at North District Hospital (NDH), Shatin Hospital (SH), Bradbury Hospice (BBH), and Cheshire Home, Shatin (SCH). The Risk Watch is a platform to share incidents with professional staff what and why the incidents happened and the learning points. The feedback was positive.

Monthly flyer (iSMART) on sharing incidents with smart tips were published every month. The subject of the flyer remained mostly medication incidents and identification which were high risk in practice.

## **2.7 Quality Management**

With structures in place for the preparation of hospital accreditation and gap analysis in 2012/13, more in-depth work was commenced. Infrastructures were consolidated. Policies/protocols and guidelines were developed at departmental level. iGateway, a search engine was constructed to facilitate efficient searching of policies/protocols and guidelines of HAHO and NTEC. Trainings and workshops were conducted by NTEC and HAHO. Staff engagement forums were organized to enhance staff's understanding of quality improvement. Strategic Workshop to engage senior staff and game booth for frontline staff were planned for 2012/13.

## **2.8 Hospital Accreditation**

Gap Analysis for PWH and NDH was confirmed: PWH scheduled on 5-9 November 2012, while NDH scheduled on 12-15 November 2012. To prepare for Gap Analysis, staff engagement to kick off the preparation was held in October 2011, and followed by CCE Forum in November 2011. The approach in NTEC all along is: Engagement (正心), Coaching (致知), Facilitation (利導), and Empowerment(實踐).

Subject Officers were invited to share the gaps and preparations in their responsible area in Steering Committee. Task Forces were established for cluster wide subjects, e.g. Consent, Care of Dying patient, Fall, Pressure Ulcer, Document Control, and Credentialing, etc. Sharing on subject standard in Quality Workshop was organized since January 2012.

## 3. Risk Prioritization

### 3.1 Identified Risks for 2011-2012

	<b>Clinical risks (in order of priority)</b>
1	Medication incidents
2	Patient Fall
3	Patient Misidentification
4	Patient injury during procedure
5	Outbreak of infectious disease
6	Communication between staff/patient/relative
7	Risky Patient care
8	Specimens error
9	Physical restrain
10	Wrong site surgery

	<b>Non-clinical / operational risk (not in order of priority)</b>
1	Shortage of manpower
2	Aging hospital facilities / faulty biomedical equipment
3	Workload
4	Insufficient space
5	OSH Workplace violence
6	Quality of Hot Water Supply
7	Insufficient patient beds (e.g. PICU beds)
8	OSH Manual handling Injury
9	Patient record - missing/documentation/storage
10	OSH Needle prick injury

## 3.2 Identified Clinical Risks (In Order Of Priority) for 2012-2013

	Clinical risks (in order of priority)
1	Medication - High Risk Medication
2	Medication - Known Drug Allergy
3	Medication - Transcription Error
4	Wrong Site/Patient/Type
5	Retained Instrument
6	Fall resulting in Hip Fracture
7	Infection Control - Multi-resistant Organisms
8	Clinical Handover
9	Early Detection of Deteriorating Patients

	Non-clinical / operational risk (not in order of priority)
1	People (HR & OSH) <ul style="list-style-type: none"> <li>● Manpower shortage</li> <li>● Staff complaints (clinical leadership)</li> <li>● Manual handling</li> <li>● Workplace violence</li> </ul>
2	Patient Relation <ul style="list-style-type: none"> <li>● Serious complaints and incidents</li> </ul>
3	Physical Resources <ul style="list-style-type: none"> <li>● Aging equipment</li> <li>● Inadequate space</li> </ul>
4	Finance <ul style="list-style-type: none"> <li>● Budget control</li> <li>● Drug budget</li> </ul>
5	Information <ul style="list-style-type: none"> <li>● System breakdown</li> </ul>
6	Media Relation <ul style="list-style-type: none"> <li>● Proliferation of media and risk to patients' privacy</li> </ul>

## 4. Risk Reduction and Quality Programs

### 4.1 Review of 2011 Risk Reduction Programs

#### 4.1.1 Medication Safety

In 2011/12, the main focus was still Medication Safety in NTEC. CQI projects were developed at cluster and department levels along six strategic directions as identified in 2010/11.

- a. In Apr 2011, Head Office Medication Safety Committee conducted a medication safety round in AHNH and NDH. Recommendations were followed up and most were achieved by the end of the year.



- b. In July 2011, in the Cluster Chief Executive (CCE) Forum, it was emphasized to staff: Marching Again – Road to Medication Safety. This was the second year medication safety remaining the top action target in the cluster.



- c. For drug prescribing, a cross-sectional study of the prevalence of polypharmacy, smart **prescription options and legibility of handwritten prescriptions** was **conducted in medical** departments in PWH, ANHN & NDH. Results were analyzed and shared in the annual Quality & Safety forum
- d. For drug dispensing, preventive management of look-alike sound-alike (LASA) medications were reinforced while the workflow of drug dispensing was re-engineered to improve the in-patient dispensing turn-around time.
- e. For drug administration, Standardization of Drug Administration Scheduling which led by Central Nursing Division (CND) was fully implemented on 1st August 2011 in PWH. The cluster-wide enhancement on dangerous drug handling and administration was implemented in 3Q2011. “Protected Time” and the use of drug apron were evaluated by CND and results showed these were helpful in reducing distraction during drug administration.

Drug Administration Schedule	
A. Oral / Topical Administration	
	Schedule
OM	8am
Daily	8am
PM	8pm
Nocte	10pm
BD	8am, 8pm
TDS	8am, 12N, 8pm
QID	8am, 12N, 4pm, 8pm
Q4H	8am, 4am, 8am, 12N, 4pm, 8pm
Q6H	8am, 6am, 12N, 6pm
Q8H	8am, 8am, 4pm 8am, 12N, 8pm
Q12H	8am, 8pm 8am, 12N
B. Parenteral Injection	
	Schedule
OM	8am
Daily	12N
PM	8pm
Nocte	10pm
BD	8am, 8pm
Q4H	8am, 4am, 8am, 12N, 4pm, 8pm
Q6H	8am, 6am, 12N, 6pm
Q8H	8am, 8am, 4pm 8am, 12N, 8pm
Q12H	4am, 4pm 8am, 8pm 8am, 8pm 8am, 12N
Q24H	Any times falling on Q4H schedule



- f. In October 2011, 20 “Be Safe, Be Smart” CQI medication safety projects submitted to the Smart & Outstanding Projects Competition were posted on line for voting and sharing. It received more than 3800 hits.



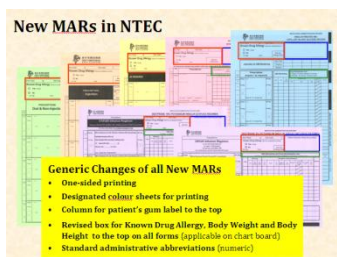
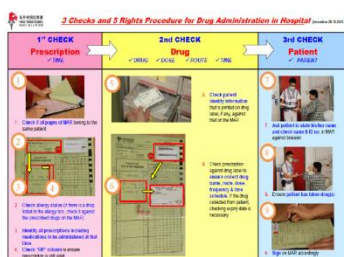
- g. Also In October 2011, individual hospitals organized various staff engagement and sharing activities on medication safety.



- h. On 28 Oct 2011, the annual Quality & Safety forum was held. Its theme was “Medication Safety: Be Safe, Be Smart. Yes, We Have!” Dr. David U, President and CEO, Institute for Safe Medication Practices Canada was invited to be the plenary speaker at two pre-conference sessions and the annual forum. For the pre-conference, two sessions titled “Strategies for medication” and “Learning from medication error” were targeted at senior and frontline staff respectively. At the forum, the culture slogan “Check, Check, Check” was re-affirmed. 7 outstanding CQI projects on medication safety were presented. Over 500 attendances including medical, pharmacy and nursing students were recorded.



- i. In December 2011, Revised MARs were implemented along with policies on safe administration and checking procedures. Staff feedback was solicited via iChat. A simple, easy to use and quickly accessible NTEC drug book on iDrug was constructed on iHosp.



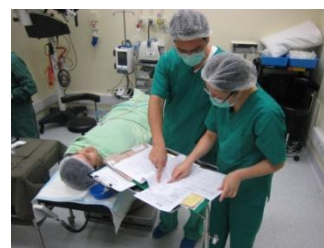
## j. Measurement and Monitoring

It was encouraging that medication incidents were decreased by 18.3% (207 cases in 2010/11, 169 cases in 2011/12). Among the group of incidents, incidents related to drug administration were decreased by 45% (110 incidents in 2010/11, 61 incidents in 2011/12).

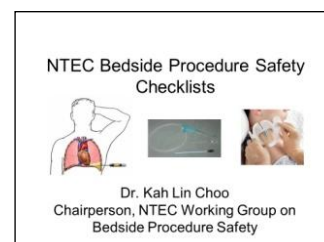
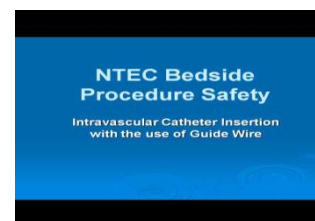
## 4.1.2 Surgical Safety

Safe surgery was another top priority of patient safety.

- a. In April 2011, 132 samples in 24 clinical areas were collected in the post-implementation audit on Interventional procedures safety procedures (Phase II). The overall compliance rate was 99.6%. NTEC Interventional procedure safety checklists were revised according to the audit feedback.



- b. In August 2011, Bedside Procedures Safety Procedures (Phase III) was implemented and 2 checklists were introduced. Two educational videos were produced and uploaded to iHosp to enhance staff understanding of bedside procedural safety. A cluster-wide evaluation audit was conducted in 1Q2012, with overall compliance rates of 73.6% - 87.8% for using both checklists.



- c. In February 2012, Procedures for Surgical Counting for operations in Main Operating Theatres and Minor Operations or interventional procedures in Interventional Suites were implemented.



- d. Use of disposable gauze container in operation and delivery suites to ease gauze counting was piloted cluster-wide in Jan-Feb 2012 and staff feedback was encouraging.



## 4.1.2 Fall prevention

A multi-disciplinary Task Force on Fall was set up with expansion of the Task Force membership under Nursing. The Task Force kept track on the fall incidents and preventive measurement. Policy and Guideline were reviewed for cluster practice. Preventive measures were conducted including fall assessment, Video on fall prevention, game booth and case sharing with departments. Alarm pad was applied to patients with high risk of fall. In 2011/12, the number of Fall was decreased. However, the number of patient fall with fracture or subdural haemorrhage was increasing. The incident trend was still a concern as one of the top clinical risk for 2012/13.

## 4.2 Quality initiatives, including accreditation

Policy developed and endorsed related to patient safety

The following policies were endorsed and put up in iHosp:

- Policy for Safe Administration of Medication
- Checking Procedures for Administration of Medication
- Bedside Procedures Safety Procedures
- Procedures for Surgical Counting for operations carried out in the Main Operating Theatres
- Procedures for Surgical Counting for Minor Operations or Interventional Procedures carried out in Interventional Suites
- Risk Management Policy
- Document Control Policy.

## 4.3 Preparation for Hospital Accreditation - Progress in NTEC

In Oct 2011, 3 Communication and Engagement Forum were held by HAHO at NTEC. 240 NTEC staff participated in the forums and various issues related to hospital accreditation were discussed.

In Nov 2011, CCE Forums themed “Accreditation – The Big Questions” were held in AHNH, PWH and NDH. Staff questions about hospital accreditation were discussed in the forums.

Following coaching workshops on hospital accreditation since 2009, a series of facilitation sessions called “Quality Workshops” to help staff understand the standard criteria and plan for improvement were organized starting from Jan 2012. “做好基本功、融入生活

中” was emphasized. The session was held in PWH and broadcasted to other cluster hospitals via video-conferencing. The first 3 sessions conducted in 2011/12 were attended by around 820 staff. The response was good and positive.

In 2011/12, departments and committees continued to refine their policies/procedures and guidelines and uploaded them to iHosp on NTEC intranet.

Risk Registry and CQI projects were collected from departments in the cluster and tabled in this report.

## 5. Learning and Sharing Information

Cluster	Canadian Patient Safety Officer Course	The Service Director (Q&S) and 2 Patient Safety Officers attended the Canadian Patient Safety Officer Course organized by Canadian Patient Safety Institute in Vancouver, Canada in February 2012.
Cluster	Certificate course on Patient Safety	2 Patient Safety Officers attended the certificate course organized by CUHK.
Cluster	Workshop on Documentation	4 workshops of Documentation and Document Control were held with around 250 staff attending.
Cluster	Quality Workshop	Following coaching workshops on hospital accreditation, a series of facilitation sessions to help staff understand the standard criteria and plan for improvement were organized starting from January 2012. “做好基本功、融入生活中” was emphasized. The session was held in PWH and broadcasted to other cluster hospitals via video-conferencing. The first 3 sessions conducted in 2011/12 were attended by around 820 staff. The response was good and positive.
Cluster	Evaluation Workshop	2 sessions of evaluation workshop to enhance the knowledge of participants in evaluating healthcare setting were held and about 130 staff attended.
Cluster	iSMART (alert flyer)	iSMART was issued monthly and the main emphasis was medication safety which was the theme of the year.
Cluster	Risk Watch	In PWH, Risk Watch (forum) for sharing and learning of incidents reported via AIRS was held bi-monthly. The audience reflected the forum was useful. In NDH, SH, BBH and SCH, Risk Watch was held quarterly.

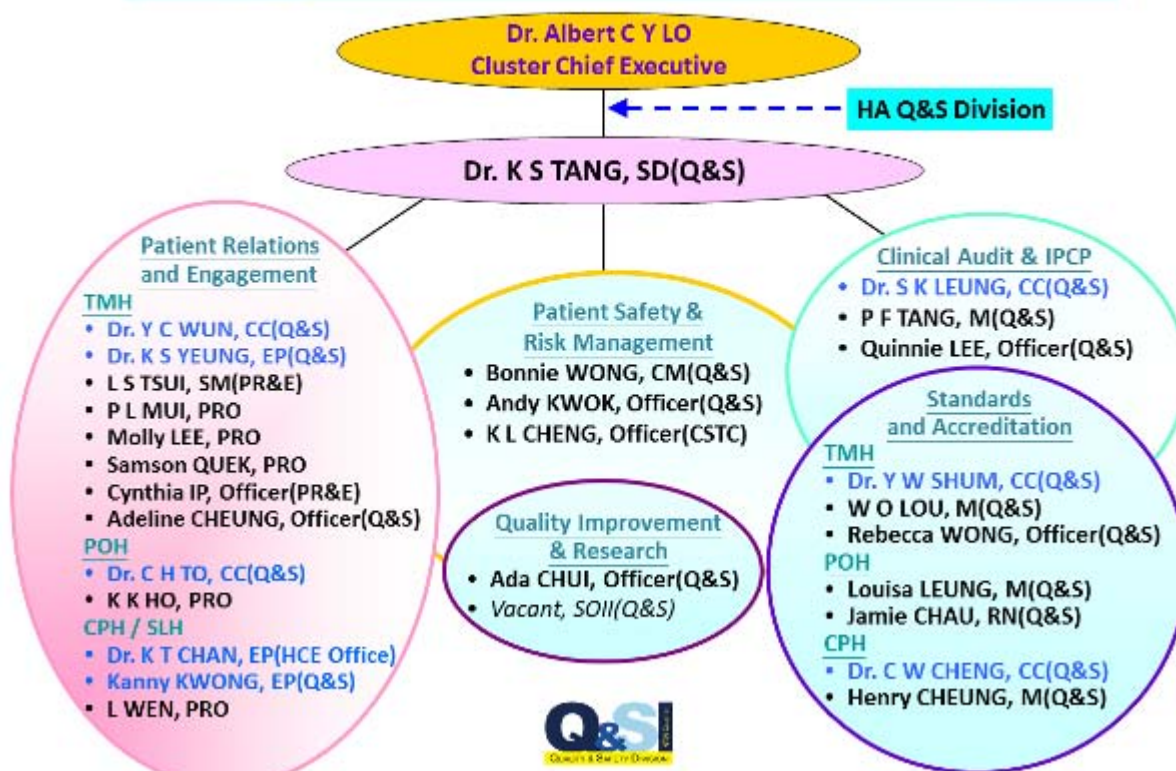
Cluster	Orientation of newly graduated nurses and continuing education of nurses on patient safety	Patient Safety Officers participated in the orientation and education of nurses on patient safety in the orientation program for newly graduated nurses in August 2011 and one-nurse-one plan throughout the year as organized by CND.
Cluster	Incident sharing sessions for new interns	A sharing session was held quarterly in April, July, October 2011 and January 2012 when new interns were rotated. Feedbacks from interns were good.
Cluster	International conference in Hong Kong	161 NTEC staff and the Quality and Safety team attended the 28 <sup>th</sup> ISQua (International Society for Quality in Health Care) International Conference themed “patient Safety; sustaining the Global Momentum” held in Hong Kong on 14 -17 September 2011. There were 2 oral presentations and 14 poster displays in the Conference from NTEC. 21 overseas participants of ISQua visited A&E, ICU and Paediatric Surgery ward in PWH during the conference. They were impressed with the high quality of hospital services and advanced CMS system in HA. Around 50 medical, nursing and pharmacy staff also attended the International Medication Safety Conference on 2-3 November 2011. There were 2 oral presentations and 7 poster displays from NTEC and one of the presentations won the best oral presentation.
PWH	Hospital Grand Round	Hospital Grand Rounds were organized quarterly. Quality improvement programs in clinical and non-clinical areas at department level were shared. Around 500 staff attended.
NDH	NDH Quality and Safety Newsletter	6 issues of the newsletter were published in 2Q2011 - 1Q2012
AHNNH	Fall prevention workshop	Training video on fall assessment was prepared and a Train-The-Trainers Workshop on fall prevention was organized.

## 1. Structure



w.e.f.: 15 June 2012

### Organisation Chart of NTWC Quality & Safety Division



## 2. Overview of Quality and Risk Management Issues

With the appointment of new Service Director (SD) (Quality and Safety) in NTWC in 2011/12, the Cluster Quality and Safety (Q&S) Division continued to reinforce quality and patient safety culture among our staff. Regular clinical department visits by Q&S during clinical departments' meetings was started for direct exchange of views on Q&S issues with our frontline staff. Above and beyond, a new "Quality Improvement and Research Supporting Team" has been set up in the Q&S Division. The Team collaborates with clinicians in performing quality research projects and provides statistical and project management advice.

On the skill enhancement side, the Cluster has been organizing in-house Basic Life Support (BLS) train-the-trainer workshops with a view to equipping a larger proportion of our colleagues with up-to-date resuscitation skills and knowledge. In addition, the Q&S Division had organized a two-day in-house mediation skill training workshop, which was welcomed by our clinical department coordinators who handled clinical complaints and incidents. Apart

from these new initiatives, the Cluster Clinical Governance Committee and its risk-related committees continued to monitor all incident trends, evaluate and advise on the appropriateness of the risk reduction strategies and programs throughout the year.

## 2.1 Q&S Promotion Visits to Clinical Departments

With an aim to promote Quality and Safety Culture and the services provided by Patient Relations Officers (PRO), the Q&S Division had arranged visits to clinical departments in the NTWC in an ongoing basis since January 2012. During these visits, views on quality and safety issues were exchanged freely and directly with frontline staff. Visits to the Clinical Oncology and O&G Departments were arranged in Feb and Mar 2012 respectively. The visits were well-received as reflected by our post-visit evaluation. The needs and concerns of frontline staff were better conveyed by this direct communication channel.



## 2.2 Mediation Training

Mediation is increasingly used in healthcare setting to facilitate communication between patients and physicians after an adverse medical event, to ease tension among members of care-giving teams, to resolve medical malpractice claims and to help family members and medical professionals in the reconciliation process. In view of the potential benefits from using mediation in healthcare system, Tuen Mun Hospital (TMH) had co-organized a training course on mediation with the Hong Kong Mediation Center in 1Q12. Thirty-six staff, including Chiefs of Services, Department Liaison Officers and other staff involved in handling clinical incidents and complaints, had successfully completed the training.



## 2.3 Training on Basic Life Support (BLS)

All healthcare professionals, including doctors, nurses and allied health professionals, in the NTWC were required to complete a training course on BLS. In 2011/12, twelve BLS train-the-trainer workshops were organized with a total of 138 doctors and nurses



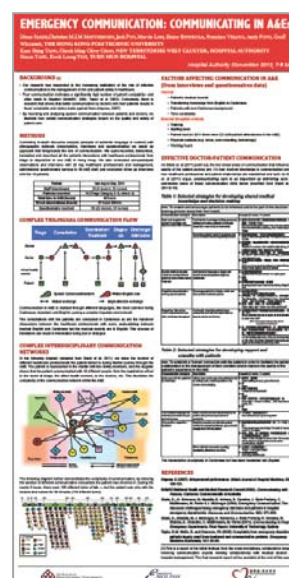
being trained as trainers to organize the continuous training workshops. Up till 31 Mar 2012, 42 training workshops had been organized and 833 staff had passed the training.



## 2.4 Research Activities

A research team was formed in the NTWC Q&S Division to coordinate and assist in performing quality research projects. The team provided statistical support to different departments and served as a contact point to liaise with both internal and external parties.

In 2011/12, a study on emergency communication in TMH was jointly-conducted by the Hong Kong Polytechnic University, TMH's Accident and Emergency Department (AED), and the NTWC Q&S Division. On the other hand, a study on Pok Oi Hospital (POH) staff's attitude and practice of applying physical restraint to patients was performed. This study would be continued and extended to TMH in 2012/13.



Further, two clinical researches were commenced and the phases of literature review and data collection were nearly completed. Abstracts of the abovementioned studies were written and accepted by local and international conferences.

## 2.5 In-situ Simulation Workshop (POH)

In-situ simulation not only combines the opportunity to practice technical and team work, but also identifies latent threats and system issues that can compromise patient safety. In mid- May and August, five sessions of in-situ simulation were conducted at Endoscopic Diagnostic Unit, Intensive Care Unit (ICU), Day Ward, AED and Department of Radiology in

POH. Participants reviewed and reinforced their skills and to problem-solve in their own clinical environment during simulation sessions. Improvement initiatives were identified, such as revamping the layout of E-trolley and revising the guideline of resuscitation call in POH.



## 3. Risk Prioritization

### 3.1 Identified Risks for 2011-2012

	Clinical risks (in order of priority)
1	Medication – prescription (allergy, dosage)
2	Medication – administration
3	Care of patient with acute deterioration of condition
4	Wrong drug dispensing
5	Handling of specimen
6	Patient identification - consultation
7	Care of critically ill patient – transfer and interdepartmental consultation
8	Team communication for caring of patient
9	Patient fall
10	Retention of medical items inside patient bodies

	Non-clinical / operational risk (not in order of priority)
1	Maintaining a quality workforce (loss of key staff/ workforce planning/ recruitment)
2	Capacity of Facilities (insufficient space and equipment)
3	Budget Control
4	congestion in ward (patient overcrowded)
5	Equipment breakdown/ failure
6	Resource Allocation (Insufficient fund for rising demand)
7	Performance (Staff morale /absence)
8	IT system failure / not able to support changing needs timely
9	IT security/ unauthorized access/ use
10	Cash collection

## 3.2 Identified Risks for 2012-2013

	Clinical risks (in order of priority)
1	Medication – prescription (allergy, dosage)
2	Medication – administration
3	Care of patient with acute deterioration of condition
4	Wrong drug dispensing
5	Handling of specimen
6	Patient identification - consultation
7	Care of critically ill patient – transfer and interdepartmental consultation
8	Team communication for caring of patient
9	Patient fall
10	Retention of medical items inside patient bodies

	Non-clinical / operational risk (not in order of priority)
1	Human Resource Risk <ul style="list-style-type: none"> <li>● Maintaining a quality workforce (recruitment and retention of professional staff)</li> <li>● Performance (Staff morale /absence)</li> </ul>
2	Physical Resource Risk <ul style="list-style-type: none"> <li>● Congestion in ward (patient overcrowded)</li> <li>● Capacity of Facilities (Insufficient space and equipment)</li> <li>● Equipment breakdown (Electricity failure)</li> </ul>
3	Reputation Risk <ul style="list-style-type: none"> <li>● Unfavorable media reporting (hospital image)</li> </ul>
4	Empowerment Risk <ul style="list-style-type: none"> <li>● Resource Allocation (Insufficient fund for rising demand)</li> </ul>
5	Financial Risk <ul style="list-style-type: none"> <li>● Budget Control</li> </ul>
6	IT Risk <ul style="list-style-type: none"> <li>● IT system failure / not able to support changing needs in timely manner</li> <li>● IT security/ unauthorized access/ use</li> </ul>

## 4. Risk Reduction and Quality Programs

### 4.1 Risk Reduction Strategies by Clinical risk-related Committees

Committees	Risk Reduction Programs
Clinical Audit Committee	1. Conducted clinical audit sharing meetings and lectures. 2. Conducted a range of cluster-wide clinical audits, including

Committees	Risk Reduction Programs
	cardiopulmonary resuscitation (CPR) records, blood transfusion and nursing documentation, fall and physical restraint.
<b>Correct Patient Identification Committee</b>	<ol style="list-style-type: none"> <li>1. Organized sharing session to raise staff's awareness of correct patient identification.</li> <li>2. Performed walk rounds in risky areas by committee members.</li> <li>3. Presented certificates to all patient-caring units achieving "Zero incident rate" or "Significant improvement".</li> </ol>
<b>Decontamination Safety Committee</b>	<ol style="list-style-type: none"> <li>1. Promoted safe use of Cidex and Cidex-OPA.</li> <li>2. Provided training for relevant staff on using Cidex-OPA.</li> <li>3. Modified the arrangement of using Cidex-OPA for disinfection.</li> </ol>
<b>Drug Administration Safety Committee</b>	<ol style="list-style-type: none"> <li>1. Introduced heparinized syringes for arterial blood gas sampling and reduced storage of heparin solution in clinical areas to one concentration only.</li> <li>2. Produced high risk medication label for top-up cupboard.</li> <li>3. Produced intravenous bottle opening and expiry label.</li> <li>4. Distributed magnifying glasses to all units for reading the small prints of intravenous medication bottle label.</li> <li>5. Piloted a Medication Administration Record administration ruler in paediatric wards.</li> </ol>
<b>Chemotherapy Advisory Committee</b>	<ol style="list-style-type: none"> <li>1. Formed the Chemotherapy Advisory Committee.</li> <li>2. Revised the cluster policy on intravenous / intrathecal chemotherapy.</li> <li>3. Performed audit on intrathecal chemotherapy.</li> <li>4. Promoted preprinted medication administration record for chemotherapy drugs.</li> </ol>
<b>Fall Prevention and Management Committee</b>	<ol style="list-style-type: none"> <li>1. Promoted the use of yellow vests to raise awareness of patients with high risk of fall.</li> <li>2. Performed an audit on fall prevention and use of Morse Fall Scale.</li> <li>3. Produced a video on fall prevention as a patient empowerment initiative.</li> <li>4. Provided an e-learning platform on fall prevention to staff.</li> </ol>
<b>Infection Control Committee</b>	<ol style="list-style-type: none"> <li>1. Replaced scalp vein set with new safety device.</li> <li>2. Promote the use of disposable medicine cups.</li> <li>3. Performed audit on the use and placement of sharp box.</li> <li>4. Provided on-site influenza vaccination service by Infection Control Nurses in designated wards/units.</li> </ol>
<b>Informed Consent Committee</b>	<ol style="list-style-type: none"> <li>1. Restructured the Informed Consent Committee.</li> <li>2. Updated the fact sheets on informed consent.</li> <li>3. Introduced the "Guiding principles of obtaining informed consent for procedures not performed by parent/caring team".</li> <li>4. Produced a "FAQ on the consent to medical and dental treatment for Mentally Incapacitated Persons (MIP) in adult".</li> </ol>
<b>Laser Safety Committee</b>	<ol style="list-style-type: none"> <li>1. Performed audit on laser safety.</li> <li>2. Empowered Departmental Laser Safety Officers by attending the Laser Safety Training organized by the Hong Kong Occupational and Health Council.</li> </ol>

Committees	Risk Reduction Programs
<b>Pain Management Committee</b>	Organized an Interventional Pain Management Workshop.
<b>Patient Pacification Committee</b>	<ol style="list-style-type: none"> <li>1. Conducted research study on staff attitudes towards the use of physical restraints in POH.</li> <li>2. Reviewed the physical restraint guidelines in AED and Paediatrics &amp; Adolescent Medicine Department (PAED&amp;AM).</li> <li>3. Performed an audit in the AED on physical restraint.</li> </ol>
<b>Point of Care Testing (POCT) Coordinating Committee</b>	Reviewed the quality control system of POCT Blood Gas and HemoCue Systems.
<b>Pressure Ulcer Prevention and Management Committee</b>	<ol style="list-style-type: none"> <li>1. Launched the electronic Pressure Ulcer Reporting System in POH.</li> <li>2. Conducted multi-disciplinary pressure ulcer rounds to enhance quality of care on pressure ulcer.</li> <li>3. Conducted certificate course on pressure ulcer care for healthcare professionals and supporting staff.</li> <li>4. Established a Central Inventory on Pressure Ulcer Preventive Devices Management System.</li> </ol>
<b>Procedural Sedation Committee</b>	<ol style="list-style-type: none"> <li>1. Conducted procedural sedation workshop.</li> <li>2. Developed an electronic staff learning platform on procedural sedation.</li> <li>3. Established a committee website for staff information.</li> </ol>
<b>Resuscitation Committee</b>	<ol style="list-style-type: none"> <li>1. Introduced a training program on CPR.</li> <li>2. Purchase End-Tidal CO<sub>2</sub> monitors for Advance Cardiac Life Support.</li> </ol>
<b>Single Use Devices (SUDs) Risk Management Committee</b>	<ol style="list-style-type: none"> <li>1. Set a priority list for the high risk items.</li> <li>2. Monitored the compliance to the HA guidelines on the Reuse of SUDs in NTWC.</li> <li>3. Conducted an annual audit on class II critical reuse SUDs. Compliance, risk factors and tracking system were identified.</li> </ol>
<b>Transfusion Committee</b>	<ol style="list-style-type: none"> <li>1. Implemented the NTWC Massive Transfusion Guideline.</li> <li>2. 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.</li> </ol>
<b>Trauma Advisory Committee</b>	<ol style="list-style-type: none"> <li>1. Organized trauma management courses.</li> <li>2. Performed audit on trauma mortality.</li> </ol>

## 4.2 Clinical Audit Committee

A clinical audit workshop was held on 1 Sep 2011. Technological advancement in on-line audits, UK's national registries in audit results, and the regulatory framework for clinical audits were discussed in this workshop. Audit Coordinators Sharing Meetings were held on bi-monthly basis to share departmental audit program and results.

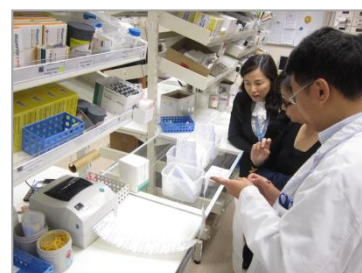
Cluster-wide clinical audits conducted in 2011/12 include:

- Cardiac Pulmonary Resuscitation records
- Blood transfusion and nursing documentation
- Fall prevention and physical restraint
- Informed consent process
- Inter-departmental overflow patients care standard
- Initial patient assessment documentation
- Pain assessment
- Interventional and bedside procedures safety checklist compliance.

## 4.3 Correct Patient Identification (CPI)



To better reflect the importance of correct patient identification in the patient caring process, the CPI Workgroup was upgraded to a Cluster Committee in Aug 2011. The CPI Committee continuously monitors the incident trend related to patient misidentification and a downward trend in 2011/12 was observed.

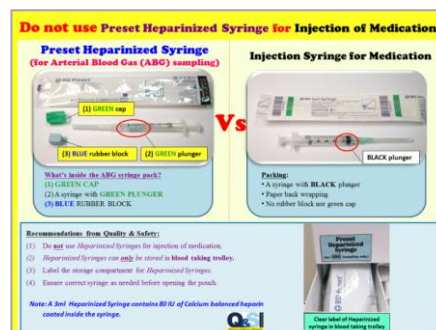


Furthermore, the CPI Committee held a sharing session in Nov 2011 to raise staff's awareness of CPI. Site visits to different clinical areas, including Paediatrics Units, Pharmacy and Tuen Mun Mental Health Centre, to identify risk factors of patient misidentification were conducted and corresponding recommendations were provided. In order to recognize the achievement of staff, the Committee awarded certificates to all patient-caring units achieving "Zero Incident Rate" or "Significant Improvement" in 2011. A total of 175 certificates were awarded.

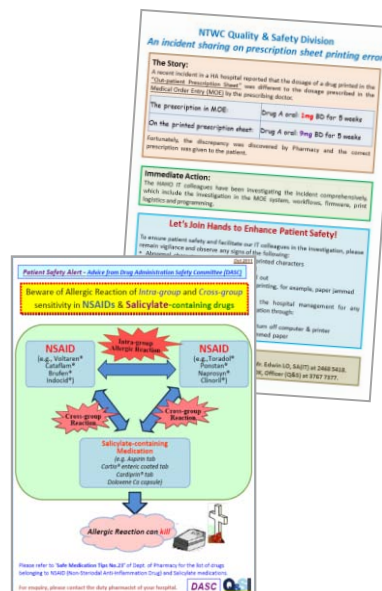


## 4.4 Enhancement of Medication Safety

Heparin solution (5,000 units per 5 ml), a high risk medication, was used for arterial blood gas (ABG) sampling in general wards. In order to enhance medication safety, the NTWC Drug Administration Safety Committee (DASC) had introduced the use of preset heparinised syringes for ABG sampling in June 2011. Positive feedback from clinical staff on the use of new syringes was received. Also, the number of wards storing heparin solution (5,000 units per 5 ml) was reduced from 44 to 11 wards in TMH (as at end Mar 2012).



Patient safety alert leaflets on specific topics such as 'Allergy Poster for Nonsteroidal anti-inflammatory drugs (NSAIDs) and Salicylate-containing Medications' and 'Alert on Inpatient Medication Order Entry (IPMOE) printing error' were distributed to clinical areas to raise our staff's awareness of medication safety. Magnifying glasses were distributed to all clinical wards to facilitate nurses in reading small prints on drug labels.



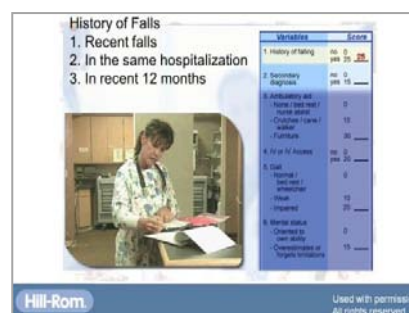
## 4.5 Enhancement of Chemotherapy Safety

The Cluster Chemotherapy Advisory Committee was set up in Aug 2011 to advise stakeholders on issues and incidents related to chemotherapy safety. An audit on Intravenous chemotherapy was carried out in 2011 with good overall compliances noted (overall 100% compliance in Department of Clinical Oncology and Hematology unit; and 97.2% compliance in Paediatric Oncology unit). The Committee also promoted the adoption of preprinted chemotherapy administration chart in the Oncology Department.

## 4.6 Fall Prevention and Management

### 4.6.1 Staff Competency on Fall Prevention and Management

Following the introduction of Morse Fall Scale, the standardized fall screening tool in NTWC, the Fall Prevention and Management Committee had developed an e-learning course to equip nursing staff with the skills to use of the scale appropriately. More than 900 colleagues had already completed the online training. In addition, education talks were arranged for several departments upon request.



### 4.6.2 Fall Risk Reduction in Patient Bathrooms

Patient shower en-suite has been identified as a high fall risk area. The committee extended a previous trial of treating shower tubs with anti-slippery spray, which greatly increases friction after application. The spray has been applied to 67 ceramic shower tubs.

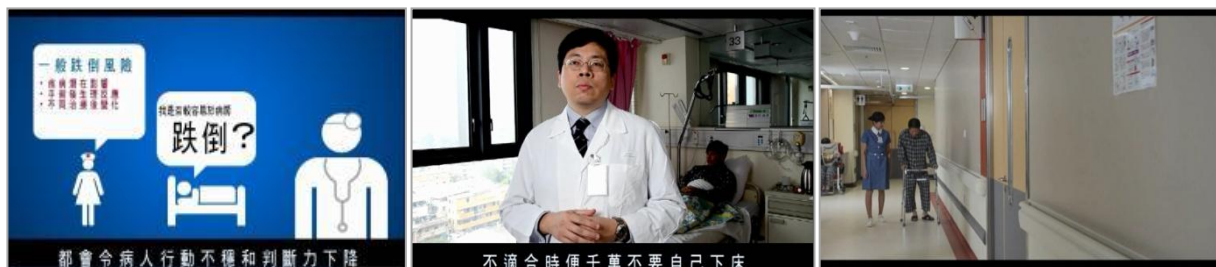
The committee went further to collaborate with facility management unit in advising on fall prevention elements in shower en-suites during the renovation of a ward in late 2011. The renovated bathroom suite would become a model in future ward renovation.

#### 4.6.3 Audit on Fall Prevention Practice

A regular fall prevention audit was performed in collaboration with the Cluster Nursing Services Division (NSD). The overall audit outcomes were satisfactory. In addition to regular audits, the Committee had also audited on the accuracy on use of the Morse Fall Scale. The audit result demonstrated that while colleagues generally applied the scale adequately, correct scoring in special circumstances could be further enhanced. Education plan in the coming year would target on this area.

#### 4.6.4 Patient Empowerment Video Program

With support from the NTWC patient empowerment fund and volunteers from the HKMA KS LO College, a video that promotes in-patient fall prevention from patient empowerment perspectives has been created. The video would be broadcasted in the NTWC channel and be played in other suitable occasions to maximize the reach to NTWC in-patients.



#### 4.6.5 Enhancing alertness on high fall risk patients with yellow vests

A trial run of applying a vest in bright yellow colour for ambulatory patients with high fall risk was piloted in one ward in POH in early 2011/12. With positive comments received, the committee would extend the trial to more TMH and POH wards in the coming months.

#### 4.7 Informed Consent Committee

The cluster restructured the Informed Consent Committee in 2011. During the year, the fact sheets of informed consent for various departments were updated and the Guiding Principles of obtaining informed consent for procedures not performed by Parent / Caring Team

was developed. A flyer in answering the FAQ on the Consent to Medical and Dental Treatment for 'Mentally Incapacitated Persons' (MIP) in Adult was designed and distributed.

## 4.8 Laser Safety Management

A sharing session and site visit of the Operating Theatre of Queen Mary Hospital (QMH) was co-organized with the QMH Laser Safety Management Team in Apr 2011. Forty staff from the cluster joined the sharing session and visited QMH. Experiences were shared and learnt from QMH colleagues.



On the other hand, the cluster initiated the first self-reported environmental audit on laser safety management in 2Q 2011. All areas with medical laser equipment (class 3b or above) had completed the “HAHO self-audit / checklist on medical laser safety” and were returned to the Cluster Laser Safety Committee. The compliance rate was 100%. To enrich knowledge of our colleagues on laser safety management, three staff including the chairman of the Cluster Laser Safety Committee and Department Laser Safety Officers were supported to attend the laser safety training organized by the Hong Kong Occupational & Health Council.

## 4.9 Pain Management

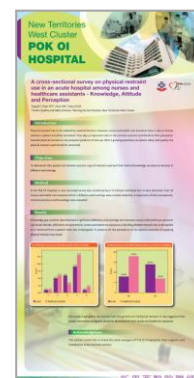
In collaboration with the Hong Kong Pain Society, a Cluster Interventional Pain Management Workshop was successfully organized on 12 May 2011. Over 170 participants joined the workshop and exchanged their views on contemporary pain management.

Pain assessment tools for ward staff were also designed so that a more consistent rating from patient experience could be obtained.



## 4.10 Patient Pacification (Safe Restraint)

In order to promote correct patient pacification (restraint) practice, a study, jointly organized by the cluster NSD and Q&S Division, was conducted to investigate our colleagues' attitude towards patient pacification before and after an educational campaign to be launched. By end March,



about 60 staff in POH were face-to-face interviewed while interview of staff in TMH would be performed in late 2012. The results were presented in HA convention 2012. Further, a workgroup was also formed to review the current guideline, restraint principles and documentation form.

## 4.11 Pressure Ulcer Prevention and Management



Building on the success of the electronic Pressure Ulcer Reporting System (ePURS) in TMH, this system was enhanced and rolled out to POH in 3Q 2011. Six workshops were conducted with over a hundred and fifty attendees. Furthermore, clerical staff was empowered to offer support to input and update information into the ePURS. With the support from clerical staff, nursing workload was lessened and completeness and timeliness of reporting was improved.

To enhance quality of care and provide expert advices on pressure ulcer management, the Cluster Pressure Ulcer Prevention and Management Committee initiated a “Multi-disciplinary pressure ulcer round”. Four visits were conducted in rehabilitation wards and ICU. Experts shared their view on management of patients with pressure ulcers with clinical colleagues during each visit. Staff welcomed the visit and treasured the opportunity to share experiences on managing pressure ulcers with experts.

The committee organized two classes of certificate courses (Level 2) on pressure ulcer management and was attended by 90 professional staff. Education talk on pressure ulcer prevention and care were also offered to supporting staff via the 「翱翔進修增值計劃 2011/12」. Besides training our staff, the committee believed that education to patients and their carers on pressure ulcer care was also important to prevent them from developing pressure ulcer. Based on this belief, an education leaflet was developed and produced for distributing to patients and their carers.



HK\$420,000 was donated by the SK YEE Medical Foundation Donations for establishing a central inventory of pressure care devices management system in the cluster. Pressure ulcer care devices such as cushions, adjustable / tilt-in-space chairs will be purchased and managed by occupational therapists. Appropriate devices would be offered to at-risk patients for pressure ulcer prevention.

## **4.12 Procedural Sedation Training**

With the implementation of Cluster Policy on Procedural Sedation in Apr 2011, all procedural sedations in the cluster had to be performed by trained doctors and complied with the cluster guidelines on procedural sedation. A series of 3-hour training workshops for doctors who needed to perform procedural sedation were organized. The names of trained doctors were maintained in the credentialing list. Over 300 medical staff had attended the workshop and passed the exit quiz, representing 74% of doctors who might need to perform procedural sedation in the cluster. On-going workshop would be arranged to cater for staff movement.

Checklist for procedural sedation was also promulgated in the cluster; all complications were monitored and reported to the cluster committee for cause analysis. From Apr to Dec 2011, during which the new policy was in force, the overall sedation related complication rate was low when comparing to international standards. The e-learning platform for nurses training was developed and around 500 nursing staff had passed the quiz.

## **4.13 Integrated Patient Care Plans**

Six patient information booklets and one pamphlet were produced from 4Q 2011 to 1Q 2012. Four revised booklets, namely Colorectal Cancer Management, Lung Cancer with Lobectomy Management, and Total Hip / Total Knee Replacement, were disseminated to concerned patients. Two new booklets and one patient empowerment pamphlet were launched for Brain Metastasis, Geriatric Hip Fracture, and Carpel Tunnel Syndrome respectively. These were distributed to concerned patients from 1Q 2012 onwards. An annual report of respective programs would be presented to Cluster Clinical Governance Committee accordingly.

## **4.14 Quality initiatives, including accreditation**

## **4.15 Hospital Accreditation Scheme**

### **4.15.1 Tuen Mun Hospital**

TMH underwent the first Organizational-Wide Survey (OWS) and was awarded full accreditation status for four years by the Australian Council on Healthcare Standards (ACHS) in 2010. After the OWS, a post-accreditation survey on “Understanding Organizational

Culture and Accreditation Performance” was jointly conducted by Tuen Mun Hospital and Nethersole School of Nursing of the Chinese University of Hong Kong. Six focus group interviews with thirty-six staff from different disciplines and levels were performed. The study result was shared in the Hospital Authority Convention 2011.

Last year, the hospital underwent the “Self-Assessment” survey for continuous assessment of the accreditation status. To further strengthen staff’s understanding on hospital accreditation and standards, three workshops were conducted with a hundred attendees. Positive feedback was received. Moreover, to strive for continuous quality initiatives, working groups were set up to follow up recommendations from surveyor team. Improvement actions that had been taken included the elimination of Cidex and Cidex-OPA in the open system, development of a mechanism to obtain consent for amniotic membrane transplant program and formulation of policy on cohorting paediatric patients.

The hospital also participated in the “ACHS Quality Improvement Awards 2011”. Seven projects were submitted and the project of “A complete audit on the length of stay and outcomes of major trauma patients undergoing secondary trauma diversion” of Accident & Emergency Department got the “Highly Commended Award”.



As one of hospitals in the HA participating in the pilot scheme of hospital accreditation, key members of TMH Hospital Accreditation Scheme shared their experiences on hospital accreditation with hospitals which participated in the extension phase.

#### 4.15.2 Pok Oi Hospital

In 2011/12, POH had started participating in the process of hospital accreditation and was striving for continuous quality improvement and stepping further to become a "preferred healthcare provider". The POH Hospital Accreditation Resource Centre was set up in Mar 2011. In regard to preparatory work, a series of staff engagement and communication activities, including forums and department visits, were commenced in Feb 2012. The timetable for OWS was still under discussion, while preparation for the gap analysis in early Aug 2012 was underway.

## 4.15.3 Castle Peak Hospital

In 2011, CPH had started preparing the ground work for accreditation since its decision to join the extension phase. The CPH accreditation team was set up in 2Q 2011. This team acted as a bridge between various clinical and administrative groups to facilitate coordinated preparation, and took up the advisory role on accreditation preparation work.



To enhance communication with frontline colleagues on accreditation, the team started issuing a bi-monthly newsletter, and set up the CPH accreditation website. A communication forum was also co-organized with HAHO's Quality and Standard Department in Nov 2011, with an attendance of over 130. The team will continue to work closely with all parties in the hospital to ensure readiness for CPH to undergo the gap analysis in 2Q 2013.

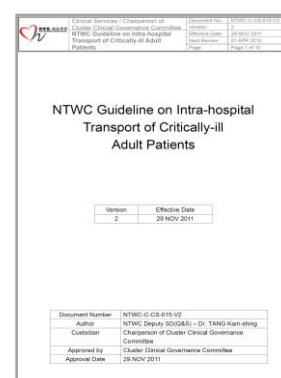


## 4.16 Inter-departmental Consultation Workgroup

With an aim to ensure patient safety by establishing good mutual understanding between specialties, an Inter-departmental Consultation Workgroup was established in Aug 2011. The terms of reference were developed and respective departments could submit discussion cases through a web-linked platform. The summaries were sent to concerned department heads to invite feedback. Furthermore, discussion points and its improvement plans would be reported to Cluster Clinical Governance Committee.

## 4.17 Intra-hospital Transport of Critically Ill Adult Patients

The Cluster Intra-hospital Transport of Critically Ill Adult Patients Working Group was formed in 2Q 2011. The working group was chaired by the NTWC SD of Q&S Division. Stakeholders from AED, ICU, M&G and Surgery Department served as members of the working group.



The Cluster guideline on intra-hospital transport of critically ill adult patients was developed and launched in 4Q 2011. The mechanism for granting clinical privilege of “Take up the role of team leader to transport critically ill (category 1) adult patients” to trained doctors was formulated and rolled out.

Five training workshops were conducted with 94 attendees, in which 87 of them were medical staff. Positive feedbacks were received from participants as well as their supervisors. With the aim to facilitate frontline colleagues to access the relevant information, a website was developed and launched in 2Q 2011. A training video was uploaded to the web. Staff was encouraged to view the video for revision if needed.



#### 4.18 Difficult Airway Management

With the aim to ensure safe and effective management of patients with anticipated and unexpected airway in TMH, a TMH Difficult Airway Management Working Group was established in Jan 2012. The working group was chaired by the NTWC SD (Q&S). Stakeholders from Anaesthesia & IC (A&IC), ENT, Neurosurgery, O&T and Surgery Department served as members of the working group. A guideline on management of un-anticipated difficult airway in operating theatre was being developed and the first in-situ simulation resuscitation drill would be conducted in the operating theatre in 2Q 2012.

#### 4.19 Surgical Quality and Safety Circle (SQSC)

The SQSC was established to promote Continuous Quality Improvement and ensure safety in the care of our surgical patients. Involvement of multiple health care professionals from different specialties and teams in the care pathways of complicated surgical patients is the rule rather than exception. Consequently, complex surgical cases were collected and reviewed by members of the circle from the Departments of A&IC, Surgery, Q&S Division. Key Performance Indicators were monthly reviewed by members to ensure efficient and effective collaborative efforts and communication among involved parties. In 2011/12, some potential risk areas were identified and corresponding risk reduction strategies were developed.

#### 4.20 Implementation of Bedside Procedures Safety Checklist

In accordance to the HA Safety Policy on Bedside Procedures, the NTWC has implemented the Bedside Procedures Safety Checklist in Aug 2011. The aim is to enhance

patient safety by including time-out checks before and after each bedside procedure, e.g. chest tapping, drainage and pleural biopsy. Individual clinical departments like the A&E and O&T departments as well as services like breast care service and fine needle aspiration had even implemented their own checklist specifically.

## 4.21 Phase 3 Unique Patient Identification (UPI)

To reduce the rate of mis-labelling and mis-identification of patient during the specimen collection process, the Phase 3 UPI project to use 2D barcode technology for all specimens including blood, urine and sputum for laboratory investigation (except for histology test) was piloted in Nov 2011 in CPH.

## 4.22 Choking Prevention

The working group formulated “the guidelines on prevention of choking” and had trialed the guidelines in Child and Adolescent Psychiatric team and Old Age Psychiatric team from Dec 2011 to Feb 2012. The guidelines would be implemented to all teams in 2Q 2012.

## 4.23 Intervention for Patients with Excessive Water Drinking Behaviour

Pilot on revised nursing intervention for patients with excessive water drinking behaviour had been done in some wards from 1 Jan 2010 to 30 Jun 2011. The “Body Weight Chart for Patients with Excessive Water Drinking Behaviour” had been revised and standardised. It had been approved by the Medical Record (MR) Committee with MR number assigned in Sep 2011.

## 4.24 Management of Patient Violence

The Guideline on Nursing Management on Patient Violence was piloted in all wards of General Adult Psychiatric team and Forensic Psychiatric team with comments and feedback collected. The final version had been formulated and approved by the CPH Nursing Committee. The total number of restraint in CPH was reduced by 18.7% from 1,049 (from Jul 2011 to Sept 2011) before the implementation of guideline, to 853 (from Oct 2011 to Dec 2011) after its implementation.

## 5. Learning and Sharing Information

### 5.1 Enhancement of Incidents Management

To strengthen the skills of staff in handling incidents, a training session on skills of Root Cause Analysis was held in Aug 2011 for CPH staff. In addition, an adverse event management sharing session chaired by Dr. S F LUI, Consultant (Quality and Risk Management) of HAHO Q&S Division, was also held in Dec 2011. Furthermore, to improve the communication between internal stakeholders and the cluster Q&S Division, the internal communication guideline of major incidents was formulated in Jan 2012.



### 5.2 Patient Safety Walk Rounds

Building on favorable responses from onsite discussion with frontline staff and ward management on patient safety concerns, Patient Safety Walk Rounds each time to two sites were organized weekly. In 2011/12, a total of 33 walk rounds to 60 clinical and non-clinical areas were completed.

To communicate the salient observations from these rounds, a sharing session was conducted in Feb 2012. About one hundred and seventy colleagues in the NTWC had attended.



### 5.3 NTWC Quality Journey

#### 5.3.1 Kaizen Sharing Forum

Eight Kaizen sharing forums were held. Twenty-two departments had presented

their Continuous Quality Improvement (CQI) projects in the monthly sharing forum. Over 800 audiences attended the forums in TMH and POH. Kaizen coordinators and alumni were invited to take part in a brief discussion with the presenters. Suggestions and ideas were shared in order to further improve their successful projects. Many outstanding projects were submitted and accepted by medical conferences.



### 5.3.2 Kaizen Room Open Day

Four open days were launched during the lunchtime in Kaizen Room in TMH. Selected CQI projects were highlighted and introduced to the visitors. The concepts of Quality Journey were also explained. It helped to promote the culture of quality improvement.



### 5.3.3 Gemba Walks

There were four Gemba Walks to clinical units held in 2011/12. Frontline staff expressed and exchanged their ideas on quality improvement with the top management. Good practices were video recorded and uploaded to the Q&S Division's website for sharing. Learning points were reported in newsletter.



### 5.3.4 Staff Training on Quality Journey

An "Induction of NTWC Quality Journey" was included in the Orientation and Induction Program to all newly joined staff. Six 2-day training on Process Improvement were provided to clinical and administrative staff. Identification of values and application of



quality tools in healthcare were illustrated. CCE was also invited to share his experience in the training session. There were around 90 candidates participated in the training over the past year.

## 5.4 Breakfast Gathering with Interns

Four breakfast gatherings for Interns were held in 2011 in order to share the safety concerns in clinical practices by the CCE, Intern Supervisors, SD and Cluster Manager of the Q&S Division. The gatherings were also good opportunities for Interns to build up friendship and sense of belongings in NTWC.



## 5.5 Annual Quality Conference

The Cluster has organized a two-day Annual Quality Conference successfully in Dec 2011. With the theme of ‘Towards Better Communication: Affective, Effective and Reflective’, three keynote speakers from UK and HK and two pre-conference workshops had enlightened more than 400 staff in better communication. Besides, over 40 abstracts were received for the NTWC Best Quality Improvement Project Competition, which demonstrated the quality commitment by staff in improving the quality service in NTWC.



## 5.6 Services Improvement Projects of POH

Several services improvement projects were identified in collaboration with students of the Master Degree of Interaction Design, Hong Kong Polytechnic University. These projects were designed to improve the patient experience of adolescents at DM centre and elders at SOPD in obtaining our services, to empower the ethnic minority patients in communicating their health condition to the healthcare providers at AED, and to provide the hospital information to the public through an e-platform. The students conducted field research, defined the project statement and worked out the improvement plans with concerned departments.

## 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 and Safety 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. 8 sharing sessions were held in NTWC from Apr 2011 to Mar 2012.

## 5.8 Clinical Skills Training Centre (CSTC)

The CSTC was found in 2009 and was providing different types of trainings such as Airway Management workshop, endoscopic workshop and ECG workshop. In 2011/12, the CSTC had organized 177 workshops, including 72 types of courses. Over 1700 colleagues had attended these courses.



## 5.9 Sharing experience in HA Complaints Management Seminar: “Form Complaints Culture to Cultured Complaints”

An HA complaints management seminar: “Form Complaints Culture to Cultured Complaints” was held by the Central Committee on Complaints Management and Patient Engagement (CC(CM&PE)) in November 2011 at the Hospital Authority Building for the aim to promote a positive complaints culture and enhance staff competencies and effectiveness in complaint handling. The target participants are the frontline managers and staff with complaint handling responsibilities. The Cluster Coordinator (Quality and Safety) was invited to be a member of the panel of speakers. He had also submitted an abstract of a NTWC “Moving Story” entitled “To Gain from a Loss” to illustrate how conflict situations and complaint cases have been managed and resolved in line with Vision, Mission and Value of HA.

For sharing of experiences in complaints management to the participants, SM(PR&E) had presented the “Moving Story” in the seminar and was presented a signature award among seven clusters by the Chief Executive of the Hospital Authority.



The PRO of POH had also shared the experience on different hot issues and cooling strategies of patient relations and complaints handling in NTWC.

## 5.10 Practical Communication Skill Training

SM(PR&E) continuously supported the Cluster Human Resources Department by introducing practical communication skill and conflict management skills in Orientation Programmes for newly recruited doctors and frontline staff. The SD(Q&S) also shared with the new residents on how to communicate with patients' relatives effectively. More intensive training workshop would be organized to junior doctors.



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