


# Hospital Authority
# Quality & Risk Management
# Annual Report
# 2009 - 2010
## (Apr 09 - Mar 10)

## ACKNOWLEDGEMENT

We would like to express our deepest appreciation of the support from all frontline colleagues, hospital risk managers, clinicians, executives of hospitals, and colleagues of cluster quality and risk management departments in improving patient safety. We would also like to thank them for their contributions in the risk mitigation strategies and programmes.

Patient Safety and Risk Management Department

Quality and Safety Division

## TABLE OF CONTENTS

## Opening Message

This is the second publication of the Hospital Authority Quality and Risk Management Annual report, compiled by the Patient Safety and Risk Management Department, Quality & Safety (Q&S) Division. The purpose is to facilitate sharing of Quality and Safety practices across the Hospital Authority (HA). Over the past few years, the HA Head Office (HAHO) Quality and Safety team has made annual visits to all seven HA clusters for an informal exchange with cluster Quality and Safety teams, HCEs and CCEs. The purpose was to review on-going Quality and Safety programs at the cluster and hospital levels and to discuss Quality and Safety plans and programs for the coming year. We have been most impressed that all seven clusters have set up a framework and structure to oversee Quality and Safety work, as well as defined key processes and taken forward Quality and Safety programs. With the on-going accreditation process, we have also observed evaluation and Continuous Quality Improvement as part of our routine work. We trust this annual publication will further enhance the learning and sharing culture across HA – as this is a key element in the quest by HA to ensure effective, efficient and safe healthcare for our patients.

Dr. SF Lui, Consultant (Q&S), HAHO

for Q&S Division, HAHO

# Hospital Authority Head Office

## 1. Structure & Initiatives


Patient Safety & Risk Management

Quality & Standards

This chapter details the patient safety and quality management initiatives implemented in 2009/10. Quality in health care has various dimensions, which cover patient care quality, professional quality and management quality, and a complimentary multi-pronged approach is necessary. In 2009/10, the Quality and Standard Department focused on several key areas – establishing quality management system, access management, communication and sharing, and clinical measurement.

The Patient Safety and Risk Management Department serves patients by spearheading, creating and refining our system designs and care processes so as to reinforce patient safety. These designs are further enhanced by the appropriate use of information system and technology. We emphasize the development of staff capability and new competencies to cope with the ever changing healthcare environment and increasing expectations of our community.

In order to facilitate reporting and share the lessons learned, we strive to improve our incident reporting and management system. We also target at proper data analysis so as to

identify clinical risk, formulate service plans to tie in with resources, transform our healthcare environment and provide a safer and more efficient healthcare to our patients.

## 1.1 A Systematic Approach to Continuous Quality Improvement – Hospital Accreditation

In its quality journey, HA has developed a set of patient care standards to promote quality and safety as an integral part of its annual planning process. However, by adopting a self-assessment approach, the HA quality and safety system is not perceived to be as robust or credible as other external hospital accreditation systems, particularly in face of the ever-rising public expectations for both quality and information of services provided. Hospital accreditation offers a formal, structured and systematic evaluation of hospital services, and is well recognized as a proven tool for continuous quality improvement (CQI) in the healthcare setting.

With support and collaboration from the Government, the Private Hospitals Association (PHA) and the Department of Health (DH), HA launched the Pilot Scheme of Hospital Accreditation (Pilot Scheme) in May 2009 in close partnership with an international accrediting agent, the Australian Council on Healthcare Standards (ACHS). The main objectives of the Pilot Scheme are to establish the infrastructure of accreditation, assess the feasibility of implementing an accreditation program, enhance public-private collaboration and evaluate and recommend on the future model of accreditation in Hong Kong (HK). Private hospitals have also procured services directly from ACHS on their own. Five public hospitals, namely CMC, PYNEH, QMH, QEH and TMH as well as 3 private hospitals, namely the Baptist Hospital, Hong Kong Sanatorium & Hospital and Union Hospital voluntarily joined the Pilot Scheme.

Central to introducing the concept of accreditation as a framework and process for CQI in HA is soliciting support and participation of key stakeholders. The Pilot Scheme was launched with intensive engagement and training programs which have substantially enhanced the awareness of and support to accreditation.

Consultancy surveys by teams of Australian surveyors were conducted in the 5 pilot (public) hospitals in December 2009 to identify their readiness for Organization-wide Survey (OWS) to attain accreditation status. The survey teams revealed strong leadership and commitment to quality and engagement of all staff groups, as well as various innovations and achievements in prioritized risk areas, such as patient identification, medication safety and informed consent. Some common areas for improvement, such as sterilization practice of reusable surgical instruments in Operating Theatres, credentialing and documentation management were identified for hospitals to align with the international standards. The pilot hospitals have scheduled their OWS in the latter half of 2010.

Given the differences between Australia and HK in local culture, healthcare practice, laws and regulation, a Task Force on Standards co-chaired by representatives of HA and PHA was established to review application of the latest ACHS Evaluation and Quality Improvement Program (EQuIP) in HK. By involving experts and inviting feedback from stakeholders and patient groups, the Task Force aimed at developing a HK version of EQuIP 4 recognized by ACHS and The International Society for Quality in Health Care (ISQua).

Trained and experienced surveyors and a robust surveyor system are key to all accreditation programs. By adopting a systematic surveyor training, evaluation and appointment program in partnership with ACHS, the Pilot Scheme has successfully trained and appointed 21 local health care professionals as ACHS(Hong Kong) Surveyors who will be given the same recognition and status as ACHS surveyors in March 2010.

## 1.2 Access Management

In 2009/10, HA identified pressures areas in its service and standardized the data definitions in measuring their waiting time. By collating information from multiple modules of the Clinical Management System, the management could monitor the key indicators through real-time data in specialist outpatient (SOP) services, elective surgeries and radiology services. Through discussions in various task forces on waiting time, specific programs addressing the

pressure areas were developed. HA also identified elective surgeries for cancer, cataract and joint replacement, diagnostic imaging and SOP services as the key pressure areas. To prepare for the launching of the Pay-for-Performance Quality Incentive Program in 2010/11, SOP and cancer waiting time have been included as the indicators for performance measurement. Clinical-based electronic referral system has been piloted in 3 clusters (HKEC, KCC and NTWC) since early 2010 to enhance feedback mechanism between referral sources and receiving ends to facilitate effective communication and HA will further develop e-transfer and e-triage according to the master development plan.

### 1.3 Communication and Sharing

To support accreditation as a continuous improvement process involving different levels and service areas, an IT platform named "CQIs" was developed. It is a HA-wide database of quality improvement projects for learning and sharing, quality planning and streamlining documentation for accreditation.

In February 2010, a periodic publication on quality improvement programs, named "Quality Times", was published. It aims at enhancing communication among staff through sharing of updated information, the best practices as well as relevant international comparisons.

### 1.4 Clinical Measurement

A Working Group on Clinical Indicators was formed in October 2010 and standard reports for three clinical indicators were prepared. Commissioned training on measurement to improve healthcare quality was conducted in order to promote clinical measurement.

### 1.5 Unique Patient Identification (UPI)

The introduction of the 2D barcode system in our clinical processes provides an adjunct

procedure to ensure correct patient identification. The system has been successfully implemented in cross-matching and mortuary service. Phase 3 (Blood and Non-blood Specimen Collection) of the initiative was successfully piloted in 2009 in 5 hospitals (PWH, TMH, CMC, UCH and QEH). It will be rolled out to all hospitals by 2011. The further application of 2D barcode in high risk medication, mobile radiography and Accident and Emergency Services will be explored.

The material and the printing method of the wristbands for paediatric and adult patients have been improved to prevent the recurrence of wristband related patient injury.


1.6 Surgical Safety


The HA has aligned with the World Health Organization (WHO) framework of "Safe Surgery Saves Life" and implemented the surgical safety checklist under a policy. To ensure the correct patient receiving correct operation at the correct site, the policy is being implemented in three phases.

Phase 1 - "Surgical Safety Policy" was implemented in operation theatres on 1 June 2009. Cluster Quality and Safety Offices coordinated post-implementation audit and opinion surveys in April 2010.

Phase II - "Interventional Procedure Safety Policy" was implemented on 1 October 2010 in interventional suites. Procedure based checklists were required for some suggested procedures, e.g. endoscopy, cardiac catheterization and radiotherapy.

Phase III - "Bedside Procedure Safety Policy" will be implemented in March 2011. It recommends adoption of checklists in high risk bedside procedures among which it is mandatory for "Chest tapping and drainage" and "Insertion of central venous catheter with use

of guide wire".

1.7 Revamp of Advanced Incident Reporting System (AIRS)

The AIRS is a tool for incident reporting with capacity for further development in incident management, e.g. near miss reporting, data analysis, incident monitoring, etc. The Hong Kong Productivity Council (HKPC) was commissioned to conduct a user functional requirements study in August 2010.

The project team conducted a vast number of consultations with different functional user groups. The opinions collected have been analyzed and compiled. The future incident reporting system would cover the following three elements:

(a) Easy reporting, especially for near misses;

(b) Adoption of incident classification from the WHO system to facilitate international reference and benchmarking; and

(c) Capability to provide management reports.

1.8 Patient Safety Culture Survey

As suggested by the Group Internal Audit (GIA) report on incident reporting, HA has conducted a Patient Safety Culture Survey for all staff. It was based on the framework published by the Agency for Healthcare Research and Quality (AHRQ) in 2009 covering 12 main areas. The questionnaire has been reviewed and translated into Chinese. The final questionnaire with English and Chinese translation has been validated for data collection.


The questionnaire has been put on the Patient Safety and Risk Management website for departments, hospitals or clusters for future use. The survey was completed in 1Q2010 and the response rate was 43% (25,186 copies returned). The survey helps drive the direction of improvements in enhancing patient safety. The key focus areas include teamwork within units, management support for patient safety and non-punitive response to error. The findings have been communicated to staff through the HA Staff Forum and cluster meetings.

| Factor | Description |
|---|---|
| 1 | Teamwork within units |
| 3 | Organizational learning - continuous improvement |
| 2 | Supervisor/manager expectations & actions promoting patient safety |
| 4 | Management support for patient safety |
| 8 | Frequency of events reported |
| 11 | Handoffs & transitions |
| 9 | Teamwork across units |
| 5 | Overall perceptions of patient safety |
| 6 | Feedback & communication about error |
| 7 | Communication openness |
| 10 | Staffing |
| 12 | Non-punitive response to error |

## 1.9 Crews Resources Management (CRM)

Originated from aviation, CRM is a structured training program for a team to handle incidents. It has been proven to be effective in clinical areas like Intensive Care Unit, Operation Theater and Accident & Emergency service. In healthcare organizations, it focuses not on the technical knowledge and skills required for patient care but rather on the delivery of care within an organized hospital system.

The CRM training helps improve cognitive and interpersonal skills required to manage patient care (e.g. assertiveness, decision-making, communication, leadership, adaptability and flexibility, and situation awareness) and focuses on the effective use of all available resources (human resource, hardware, information, etc). It emphasizes the team approach for achieving

Hospital Authority Head Office

safety, and the use of briefing and debriefing time for reflective learning.

The PYNEH started a pilot CRM programme in 2009 and gained positive staff feedback. A formal evaluation will be conducted in 1Q 2011.

1.10 Strategies for Phasing out Reused Single Use Devices

Single Use Devices (SUD) are medical devices manufactured for use on an individual during a single procedure and to be discarded thereafter. However, SUD are routinely reprocessed for reuse worldwide for various reasons.

Reprocessing introduces uncertainty on the safety and efficacy of the SUD, and transfers product liability from the manufacturer to the care provider. With the structures and processes of registration and risk assessment in place in HA, efforts were focused primarily on making safe reuse of SUD, including:

(a) Risk-stratification of SUD into high / moderate-high / moderate / low / very low categories;

(b) Policy to stop reuse of high risk SUD;

(c) Financial resources to replace all moderate-high risk SUD;

(d) Lessons learned and shared through incident reporting via AIRS; and

(e) Bulk tendering of SUD.

Progress has been made in creating a central system containing the list of moderate-high risk SUD currently reused in HA hospitals. The central list will prove useful in the budget bidding process for phasing out the reuse of SUD in HA.

## 1. Structure & Initiatives



The vision of the Hong Kong East Cluster (HKEC) is founded on the good traditions of its six cluster hospitals in providing quality care. Through building of clinical leadership and infrastructure conducive to continuous organizational learning, the cluster aims at fostering a safety culture at all levels.

### 1.1 Management Structure

The Cluster Quality and Risk Management Office ('the Office") functions as the main vehicle to increase the capacity of the cluster management to lead and drive cluster-wide quality and safety. Key stakeholders, at all levels and dimensions, who are responsible for quality standards and respective high risk areas, are engaged. They form a fully integrated team in moving towards clinical and organizational effectiveness for patient safety.

1.2 Engaging new clinical leaders

To strengthen clinical leadership to sustain quality and safety improvement, **five Deputy Directors** have been appointed with effect from 1 February 2010 to continue driving the mainstream quality programs. The appointment period is two years. Attainment of **clinical buy-in and ownership** from clinical departments has been achieved through their active involvement in the design, development and implementation of quality programs.

1.3 HKEC Annual Plan Program 09/10

The Annual Plan Programs 09/10 were accomplished as follows:

(a). Single Use Device (SUD)

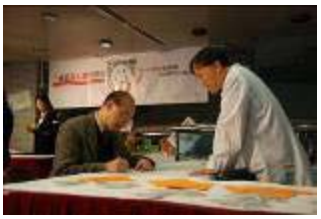
Subsequent to funding allocation from HAHO, **phasing-out of 8% of class II critical items of SUD for reuse or reprocess** was completed in February 2010. This was achieved through the collaborative efforts of nursing staff from various interventional suites and the infection control unit as well as administrative staff from the procurement office**.**

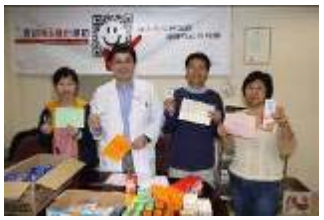
For the year 10/11, HAHO has further approved $2.3 million (less 0.5% efficiency gain) for phasing-out of 16 SUD items for reuse or reprocess. The budget would cover 10% of the critical items in the priority list.

(b). Correct Patient Identification

The **Correct Patient Identification Campaign** continued in 09/10 to enhance staff awareness in high risk areas. A Quality & Safety Forum was held in May 2009 to address the common issues on patient identification encountered by frontline staff. A series of campaign activities were launched. Quiz booths were set up in all HKEC hospitals on 19-22

January 2010 where a total attendance of 2,162 (31% of HKEC staff) were recorded.



Analysis on the quiz results identified the following areas that required knowledge enhancement

- Personal core identifiers
- Best identifiers in patient identification process
- Handling of patients with identical names admitting to the same ward

Various promotional items namely medical record confidential cover, stationary clip, octopus holders were distributed to frontline staff.

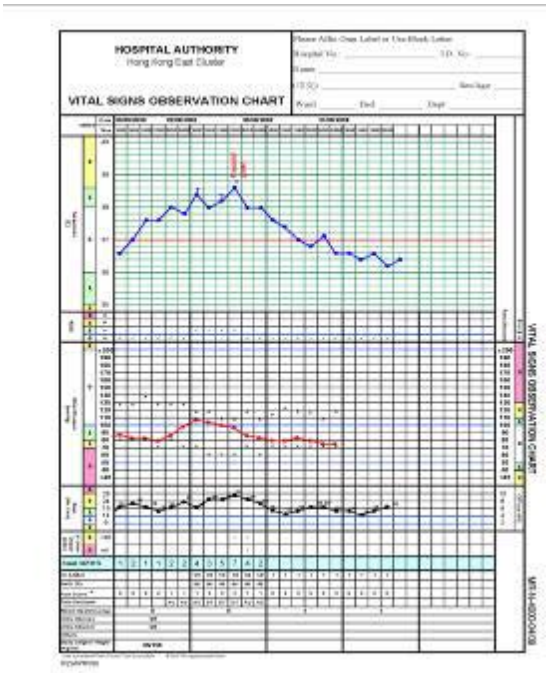

The following systems are being rolled-out:

- **Team "time-out" policy** has been extended to **bedside invasive procedures requiring written consent** in ward setting with effect from 1 October 2009. Seven common bedside procedures are selected, namely Abdominal tapping, Bone marrow biopsy, Chest drain insertion, Fine needle aspiration, Joint aspiration, Lumber puncture/ drain and Pleural biopsy/ tapping.
- **2D barcode technology in blood and non-blood sampling would be implemented subject to equipment procurement by HAHO.**

A self assessment audit on "team time-out" was conducted in March 2009. A total of 191 cases were reviewed in the audit and the result revealed 99.98%, 95.45% and 100% of compliance in PYNEH, RHTSK and TWEH respectively. Areas of non-compliance were identified and reinforcement measures are instituted.

(c). Clinical Monitoring and Handover Communication

To improve quality of care for patients with unstable or critical condition, HKEC has started to roll-out by phases a standardized clinical monitoring and handover system based on **Modified Early Warning Scores (MEWS)** since April 2009. A common ward language is now in place to facilitate communication amongst r medical and nursing staff on patient condition, particularly on critical cases requiring close monitoring and review.




(d). Prevention of Patient Suicide

Phased implementation of "Prevention of Patient Suicide in general ward" has been piloted in the Department of Medicine, PYNEH since 1 September 2009. A **new checklist of "Suicide risk screening and suicide precaution observation record (general ward)**" has been put in use to facilitate risk assessment and follow-up management based on a multi-disciplinary approach.

Quality and Safety Forum entitled "Prevention of Patient Suicide -- A Multi-disciplinary Approach" was held in November 2009 to **enrich staff with knowledge of in-patient suicide prevention** and to introduce the new guideline and checklist in practice. The results of a pilot survey in PYNEH showed that more than 70% of frontline staff agreed that the observation checklist could:

- Provide a quick guide for assessment and intervention
- Enhance staff awareness, communication and documentation, and
- Improve rapport with patients and families.

A **comprehensive environmental scanning** was carried out in March 2009 by a multi-disciplinary team comprising doctors, nurses, clinical psychologists, facilities professionals and hospital administrators within the compound of PYNEH. High risk locations were identified and improvement works to the physical environment were completed in 09/10.


巡查醫院高危地點
減低病人從高處跳下的風險

The number of patient suicide sentinel event has dropped from a total of 7 (October 07 to March 09) to zero in 09/10.

(e). Surgical Safety

Pursuant to HA Surgical Safety Policy, a new set of surgical safety practice with **a surgical safety checklist has been implemented in the operating theatres** with effect from 1 October 2009. The aim of the practice is to reinforce safety checking in three phases (Sign-in, Time-out, Sign-out) and foster better communication and teamwork amongst the disciplines involved. Compliance audit was carried out in March 2010 showed overall satisfactory compliance.

1.4 HKEC Annual Plan Program 10/11

Based on the priority risks identified through a bottom-up approach and inputs of the key stakeholders, Annual Plan for 10/11 has been drawn up as follows:

(a). Crew Resource Management (CRM) Campaign

The HKEC Training Centre has launched Crew Resources Management training in PYNEH since October 2009 as a pilot program funded by HAHO to foster patient safety

culture through enhanced teamwork, interpersonal communication, decision making and leadership. CRM is originated from aviation industry which identified human error as the primary cause of aviation accidents. The training encompasses a wide range of knowledge, skills and attitudes including teamwork, briefing, debriefing, assertion, situational awareness and decision in optimizing the use of all available resources (equipment, procedures and people) to ensure safety.

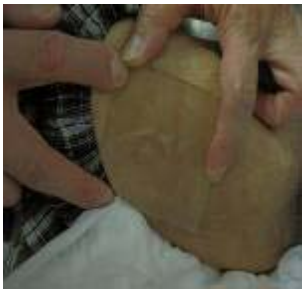



Patterning with overseas consultants on CRM training, PYNEH has trained up a group of doctors and nurses as CRM trainers to facilitate in the tailor-made workshops where the course materials are based on incidents in PYNEH and HA.

To work towards building a safety culture, CRM Campaign would be launched to reinforce the use of CRM tools in daily practices. Various communication channels will be used for message dissemination, including the CRM Gallery, Intranet and distribution of promotional items to frontline staff.

(b). Pressure Ulcer Prevention and Care

In the light of technological advances and increasing complexity of disease, engaging relevant expertise in knowledge transfer and continuous improvement in the prevention and management and pressure ulcer has become critical in reducing pressure ulcer incidence. A multi-disciplinary working group has been formed comprising nursing and supporting staff, doctors, occupational therapists, physiotherapist as well as dietitians.



Quality & Safety Forum on " Myths on Pressure Ulcer Prevention" was conducted in August 2009 followed by a series of train-the-trainers workshops entitled "Multi-dimensional Pressure

Prevention and Care in 1Q-2Q 10. A total of 66 nursing and allied health colleagues have become qualified as Pressure Ulcer Link Persons to facilitate knowledge transfer within their respective departments.

A team of nurse specialists, occupational therapists and physicians has researched and designed a special Coccyx-Free Seat Cushion which can effectively even body weight from the sacrococcygeal region to other body parts. The specially designed cushion would be provided for use in each ward. Assessments using "body prominent identification meter" and direct visual observation using a plastic sheet are introduced to clinical areas to facilitate early identification of problems.

The three-tier would management model had successfully speeded up the healing of 33% of chronic wounds and reduced 8% would dressing in General Out-Patient Clinics and Community Nursing Services.

(c). Spot Award Scheme


Based on the well-established Spot Award Scheme launched by the Human Resources Division, HKEC has enhanced the Scheme since 2010 with an element of patient safety where supervisors are strongly encouraged to recognize colleagues who successfully prevent medical incident by alerting colleagues on an observed problem or potential risk at work. People, process and technology are defences against adverse incidents. No single safety barrier is perfect. When all failure modes line up, staff vigilance is all that is left between the patient and significant hazard. Through the enhanced scheme, we continuously appeal to staff in maximizing teamwork in striving towards safety.

## 2. Risk Prioritization

In prioritizing the top clinical risks, a bottom-up approach was adopted through discussion with the Q&RM Coordinators based on the risk registers submitted by clinical departments. Risk reduction strategies were formulated by the respective Functional and Divisional Committees as well as working groups designated to oversee specific risk issues.

2.1 Top 10 clinical risks for 2009/10 and 2010/11

| | **Top Clinical Risk 2009/10 (in order of priority)** |
|---|---|
| **1** | Patient Identification |
| **2** | Clinical Handover Communication & Documentation |
| **3** | Suicide |
| **4** | Medication |
| **5** | Infection Control |
| **6** | Fall |
| **7** | Pressure Ulcer |
| **8** | Staff Competence |
| **9** | Blood Transfusion |

| | **Top Clinical Risk 2010/11 (in order of priority)** |
|---|---|
| **1** | Patient Identification |
| **2** | Communication |
| **3** | Surgical Safety |
| **4** | Medication |
| **5** | Fall |
| **6** | Pressure Ulcer |
| **7** | Suicide |
| **8** | Infection Control |
| **9** | Staff Competency |
| **10** | Blood Transfusion |

2.2 Top 10 Non-clinical (operational) risk for 2009/10 and 2010/11

Divisions of Administrative Services, Human Resources and Finance oversee non-clinical risks and implemented risk reduction measures accordingly.

| | Top non-clinical / operation risk 2009/10 (not in order of priority) |
|---|---|
| **1** | Fire Safety |
| **2** | Security |
| **3** | Transportation service within hospital |
| **4** | Medical supplies – product quality |
| **5** | Data Security and confidentiality |
| **6** | Incorrect payroll (due to implementation of new ERP HCM System and consequential introduction of new procedures / practices) |
| **7** | Payroll and cash handling |
| **8** | Legislative compliance for PYNEH Charitable Trust |

| | Top non-clinical / operation risk 2010/11 (not in order of priority) |
|---|---|
| **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 defect |
| **8** | Medical supplies – product quality |
| **9** | Incorrect payroll (due to new implementation of ERP(HCM) and new procedures/practices) |

## 3. Risk Mitigation

3.1 Top 10 clinical risks for 2009

(a) Patient Identification Risk

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| | Correct Patient Identification Campaign | [Details given in 1.4 (b) Annual Plan] |
| | Implementation of team time-out on 7 bed-side invasive procedures requiring informed consent | |

(b) Clinical Handover Communication & Documentation

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| | Modified Early Warning Scores | [Details given in 1.4 (c) Annual Plan] |

(c) Patient Suicide

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| | Mutli-disciplinary model and Staff engagement in suicide prevention | [Details given in 1.4 (e) Annual Plan] |

(d) Medication

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| 1. | Auto-display of HKEC drug history in CMS in PYNEH | Feedback from staff was positive on facilitating a enhancing comprehensive review of drug profile |
| 2 | Medication Reconciliation service by clinical pharmacists in acute medical admission wards | |
| 3 | Electronic Medication Administration Record (eMAR) system in PYNEH | There has been no medication incidents resulted from illegible prescriptions |
| 4 | Drug allergy list on “Drug Allergy Warning (DAW) Sheet | [to be evaluated] |
| 5 | Removal of muscle relaxants as ward stock | Positive feedback received from members of Medication Review Panel |
| 6 | Educational forum “Medication safety – You can make a difference! How to get a spot award conducted in February 2010 | Total attendance of 324 staff. Evaluation showed a satisfactory feedback of 4.94 average scores over 6 |

(e) Infection Control

<table>
<tr><th>No.</th><th>Programme name</th><th>Evaluation on effectiveness</th></tr>
<tr><td>1</td><td>Compliance audit<br>● To ensure safe and effective patient care practices<br>● CABSI (PYNEH & RHTSK) : continuous monitoring of Central line 5 bundles during line insertion and management<br>● Isolation precautions<br>● Peripheral venous care (TWEH)</td><td>● Overall compliance on isolation precautions audit was 87.7%<br>● CRBSI rate in Adult ICU<br>✧<table><tr><th>Yr</th><th>PYNEH</th><th>RHTSK</th></tr><tr><td>07 /08</td><td>0.69</td><td>NA</td></tr><tr><td>08 /09</td><td>0.35</td><td>2.6</td></tr><tr><td>09/10</td><td>0.40</td><td>1.3</td></tr></table>● Overall compliance on isolation precautions audits was 87.7%<br>● Line infection rate decreased from 2.15 infection / 1000 catheter days to zero infection in phase 2</td></tr>
<tr><td>2</td><td>Enhancing surveillance system<br>● Identify proportion of ESBL species and nosocomial ESBL infection rate<br>● Prevalence Survey on Infection and Antimicrobial Resistance in WCH</td><td>● ESBL-positive organism infection = 0.86/1000 BDO<br>● Common organism causing infected bedsore, UTI and RTI identified. Antibiotic choice of treatment of the captioned infection found appropriate</td></tr>
<tr><td>3</td><td>Attachment Program for Infection Control Nurse</td><td>● Attachment programme for WCHH ICN to TWEH was completed<br>● ICN from SJH & WCHH to PYNEH ICN to be continued</td></tr>
<tr><td>4</td><td>Hand Hygiene Observation Survey</td><td>● Compliance rate of >80%</td></tr>
<tr><td>5</td><td>Enhancing needleless system for venepuncture</td><td>● Cluster NSI decreased by 37% after provision of needleless connector, vacuette single-use holder and shield IV catheter since Mar 09</td></tr>
<tr><td>6</td><td>Improvement program on blood culture to reduce contamination Training to supporting staff</td><td>● Blood culture assessment form developed and all phlebotomists were being assessed</td></tr>
<tr><td>7</td><td>Promoting practice of Standard Precautions</td><td></td></tr>
</table>

(f) Risk of Fall

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| 1 | Enhancement of fall prevention<br>● Evidence-based guideline and Morse Fall Scale adopted in 2010<br>● Continuous monitoring of incident trending by specialty, benchmark with group 1 hospitals<br>● Environmental safety check-lists for patient safety round (nursing) and standardized the design of "Need Assistance" signage in HKEC<br>● Refresher training to nurses | ● The fall incidence remained stable |
| 2 | Development of multi-disciplinary community fall prevention program<br>● Set up Allied Health (AH) Fall Clinic by occupational therapist (OT) and physiotherapist (PT) in 2009 to provide patient education and home assessment<br>● Developed multi-disciplinary fall prevention protocol<br>● Established a referral mechanism with GOPCs | ● Total attendance from Sept 2009 to March 2010<br>✧ 3130 (Sai Wan Ho GOPC )<br>✧ 164 (Violet Peel GOPC)<br>● Achieved early detection and intervention to the elderly at risk of fall which may lead to admission to hospital |

(g) Pressure Ulcer

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| 1. | Enhancement of pressure ulcer prevention and management | [Details given in 1.4 (d) Annual Plan] |

(h) Staff Competence

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| 1 | Task Group set up to look into current practices of different specialties and review with respect to Australian Council of Healthcare Standards in Jun 08 | ● Direction and strategic planning on credentialing were defined<br>● Clear policies defined to facilitate departments to develop their specialty-specific skills and procedures. |
| 2 | Establishment of hospital structure and framework for credentialing and introduction of new intervention | |

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| 3 | Monitoring system to ensure medical, nursing and AH staff have vaild registration / practising certificate | |
| 4 | Pilot framework of Competency Model of Minimal Assess Surgery (MAS) | The Hospital committee maintains a central registry of HAMSINP applications and coordinates regular return of significant changes to existing procedures where appropriate to complete the process cycle<br>● Documented scope of clinical practice/competency for high risk, high volume and/or high cost procedures from clinical, nursing and allied health divisions<br>● The pilot credentialing model was presented to COC of General Surgery at Corporate level in Sept 2009 and adopted for implementation in general surgery in other HA hospitals |

(i) Blood Transfusion

| No. | Programme name | Evaluation on effectiveness |
|---|---|---|
| 1 | Compatibility labels on all blood components: new version of LIS is ready for the printing of compatibility labels with 2D barcode | ● No incident on patient mis-identification in blood sampling was reported |

3.2 Non- clinical (operational) risks for 2009/10

| No. | Programme name | Action & Result |
|---|---|---|
| **Fire Safety** | | |
| 1. | Awareness training of Fire Safety | Promote e-learning fire safety training module to all staff. |
| 2. | Education on fire safety | Provide training on fire safety in cluster hospitals through the 98 fire ambassadors |
| 3. | Inspection of Fire Safety | Inspection and Senior Executive Walk-around programmes being planned |

| No. | Programme name | Action & Result |
|---|---|---|
| **Security** | | |
| 4. | Security alertness | Produce a training video on security alertness for existing and new staff |
| 5. | Security response plans | Compile security response plans for occurrence of crimes such as assault, burglary, destruction of property, internal and external disturbances, drug abuse, gambling and etc. |
| 6. | Security control through capital works | (a). Improvement works for security Control Room in RHTSK and PYNEH<br>(b). Installation of Centralized CCTV System<br>(c). Upgrade of Access Control and Security System at HKEC Hospitals |
| **Data Privacy** | | |
| 7. | Review the workflow of handling confidential waster paper | (a). Redefine the respective roles and responsibilities of MRO staff and housekeeping staff.<br>(b). Re-organize the whole procedures on labeling, recording, storage, collection and disposal of confidential waster paper. |
| 8. | Enhanced measures on data security | Install CCTVs to MRO to enhance surveillance |
| 9. | Staff training on handling confidential papers | Provide training to staff of housekeeping contractor |
| 10. | Establish system for sharing of compliance checklists amongst cluster hospitals | Collect and upload checklists on intranet<br>(a). Update the subject officer list to legislative compliance from time-to-time<br>(b). Add 1 more subject officer related to legislation related to race discrimination. |
| **Occupational Safety and Health** | | |
| 11. | Enhance skill and knowledge on safe handling of domestic chemicals. | (a). Organize training sessions to supporting staff in cluster hospitals<br>(b). Develop chemical safety training to OSH Link Persons as knowledge resource. |
| 12. | Conduct safety audit in Manual Handling Operations | Pilot MHO Risk Assessment Tool in Neuro-medical wards of TWEH, Psycho-geriatric wards of PYNEH, Geriatric wards of RHTSK and SJH. |

## 4. Learning & Sharing Information

### 4.1 Managing information

(a). Cascading of Lessons

The overall trend of incidents and complaints are analyzed and discussed in Cluster Incident Review Panel (CIRP). The analysis includes incident/ complaint trending, major contributory factors to incidents/ complaints, significant learning and sharing as well as recommended improvements.

Department Q&RM Coordinators and Panel of Specialists are invited to present cases in CIRP . Observers from different disciplines are also invited to sit in the meeting to enhance learning.

Lessons are cascaded through multi-channels at Medical Committee (to COSs), Clinical Q&RM Meeting (to Department Q&RM Coordinators and Panel Specialists) and Forums (to frontline staff).

The CIRP has successfully fostered positive culture and value, encouraged active participation and involvement from line management in the design, development and implementation of the subsequent improvement programs.

With the empowerment in case review process and formulation of improvement measures, clinicians are held accountable and become the key driving forces for quality and safety issues.

(b). Survey on Sharing of incidents at departmental level

In order to understand the effectiveness of the learning and sharing mechanism, a survey on sharing of CIRP incidents was conducted between 23 July 2009 and 11 September 2009. Structured questionnaires were sent to each department for completion. The response rate was 73%. The findings included:

- Departments shared lessons from incidents in audit/clinical case review meetings (37%), M&M Meetings (37%) and Department Meetings (26%);
- Over 68% shared lessons every on a quarterly basis or at a more frequent mode;
- 84% of the departments arranged either Department Q&RM Coordinators and Panel of

Specialists to lead the sharing;

- Over 74% had target participants of doctors at the meetings; and
- While 42% had notes of meeting, others did not have documentation about the lessons shared.

## 4.2 Departmental Report

Qualitative and quantitative analysis on complaints, appreciations and Patient Satisfaction Survey is provided to each department in PYNEH for review annually. Based on the analysis, departments formulate improvement actions to address the department specific issues identified.

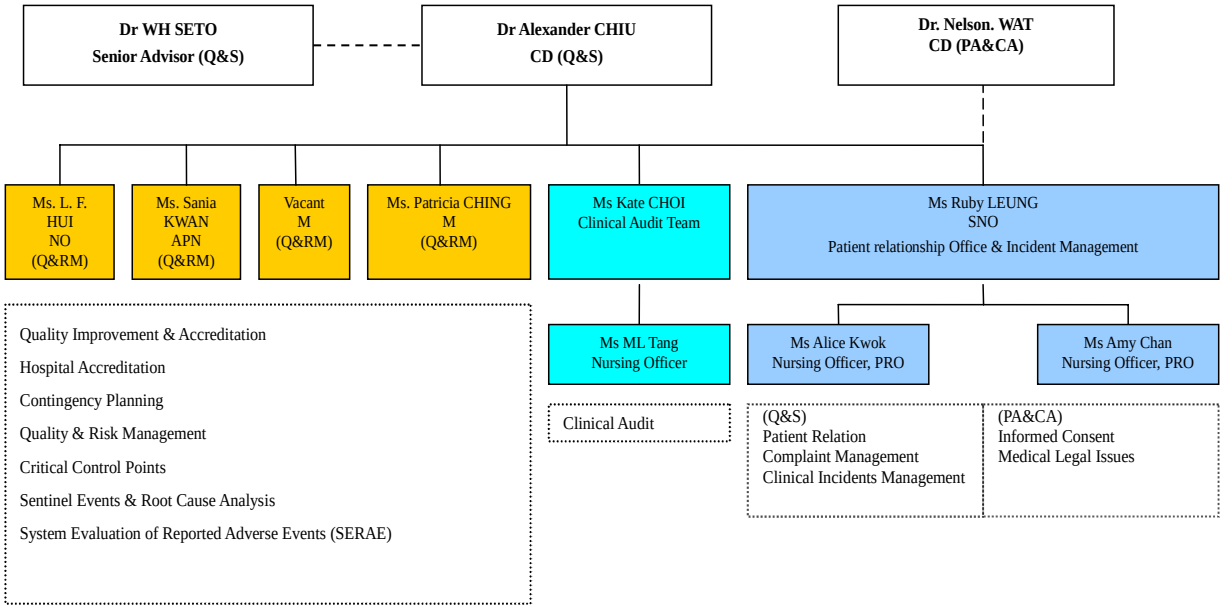
## 4.3 Department Roadshow

The department roadshow provides a platform for learning and sharing of department-specific significant lessons extracted from incident and complaint management. To fit in the busy schedule of clinicians, the Q&RM Office incorporates department roadshow in clinical department meeting or mortality and morbidity (M&M) meeting on a regular basis.

## 4.4 Hospital Accreditation

In June 2010, PYNEH has undergone an Organization Wide Survey (OWS) for hospital accreditation by the Australian Council on Healthcare Standards. In preparation for the OWS, the Q&RM Office has provided our clinical and nursing Q&RM coordinators with overview on the standards related to quality and risk management in various meeting occasions. The areas of concern identified and recommendations made by the mock consultancy surveyors were highlighted.

## 1. Structure & Initiatives




Hong Kong West Cluster Quality & Safety Model


The terms of reference and membership of the Cluster Quality and Risk Management Committee are:

a. To steer and coordinate activities related to quality and risk management in cluster hospitals;
b. To develop policy, guidelines and indicators related to quality and risk management;
c. To identify, evaluate and prioritize risk areas, and treat risks through the existing quality and risk management framework;
d. To communicate and disseminate quality and safety knowledge to colleagues for sharing and learning in the promotion of quality and safety;
e. To engage patients and communicate with community partners in advocating quality and safety;
f. To monitor and review the adequacy, efficiency and effectiveness of the quality and risk management system and activities; and
g. To report to Cluster central administration and Central Committee on Quality

and Risk Management, on the issues related to quality and safety as appropriate, and share information / experience with other clusters through HAHO.

**Membership**

| | | |
|---|---|---|
| Chairman | : | HKWC CD(Q&RM) |
| Core members | : | CCE, HCE QMH/TYH, Deputy HCE (CS) QMH, HCE DKCH/FYK/MMRC, HCE GH, HCE TWH, CGMN, GMN QMH/TYH, GMN DKCH/FYKH/MMRC, SNO GH, GMN TWH, members of Q&S Department |
| RM function managers | : | infection control, blood transfusion, occupational and environmental safety, patient falls and suicide, technology & therapeutics issues, medication incidents, security, information & technology, fire safety |
| Co-opted/ by invitation | : | (as and when necessary) |
| Secretary | : | APN (Q&RM) |

1.2 Surgical Safety Checklist was implemented smoothly in Operation Theatre services in May 2009, Integrated Endoscopy Unit in July 2009, Department of Psychiatry (for Electro-convulsive Therapy (ECT)) in August 2009 and Cardiac Catheterization Laboratories in November 2009. The plan is to roll out interventional checklist to all high risk procedures in Queen Mary Hospital.

1.3 A working group consisting of pharmacists, doctors and nurses was established in September, 2009 aiming to review the whole process of in-patient drug administration procedure with foci on i) ward stock streamlining; ii) drug dispensing logistics; and iii) medication incidents. Among the ten clinical departments, all departments have plans to reduce ward stock while two departments have returned most of their ward stock. Overall stock will be reduced by 38%, Antibiotics by 82% and high alert medications by 40%. The working group would further work on and evaluate the project.

1.4 Integrated Quality and Safety WardRound to all clinical and non clinical areas commenced on 27 January 2010. A multidisciplinaary team with members from Quality and Risk Management, Pharmacy and Central Nursing Department, Occupational Safety, Health and Environment team and Health Information Record Office took part in the walkrounds. It was a continuous quality improvement initiative with an aim to help frontline staffs in identifying areas for improvement, implementing changes and monitoring of their own performance.

## 2. Risk Prioritization

2.1 Top clinical risk reduction strategies for 2009 (as reported last year)

| | Top clinical risk reduction strategies |
|---|---|
| 1 | Implement WHO 2nd challenge for Safe Surgery |
| 2 | Enhance laboratory specimen labeling and reporting |
| 3 | Enhance medication safety by improving safety of "look-alike and sound-alike" medications and drug reconciliation to all call wards |
| 4 | Prevent patient fall related to obligatory physiological activity |
| 5 | Extend Hand Hygiene Programme to all cluster hospitals |
| 6 | Enhance patient assessment by nurses for accurate patient documentation and initiate actions – integrate with accreditation programme |
| 7 | Extend clinical pathways to other areas |
| 8 | Reduce Acute Respiratory Diseases (ARD) outbreak in hospital by using WHO ARD Infection Control Guideline |
| 9 | Reduce medication errors and explore use of 2D barcode for drug administration in the wards. |

2.2 Top non-clinical risk reduction strategies for 2009

| | Top non-clinical / operation risk reduction strategies | |
|---|---|---|
| | Type | Nature |
| 1 | Finance | Enhance Private patient billing |
| 2 | HIRO/ IT | Enhance Personal Data Security |
| 3 | IT | Institute PACS data storage and off-site backup |
| 4 | Property | Improve hospital security |
| 5 | Corporate | Enhance compliance with statute and ordinance |

2.3 Top clinical risk reduction strategies for 2010-2011

(based on the submission for the mid-term report: updating / amendment if required)

| | Top clinical risk reduction strategies |
|---|---|
| 1 | Implement WHO second challenge for Safe Surgery |
| 2 | Enhance medication safety through reducing ward stock |
| 3 | Enhance correct patient identification of laboratory specimen using 2D barcode system |
| 4 | Enhance nursing care quality with structured nursing care plan |
| 5 | Implement integrated quality and safety walkround |
| 6 | Incorporate integrated peri-operative nursing documentation into patient's medical record |
| 7 | Integrate clinical documentation for all clinical specialties |
| 8 | Improve in-patient dispensing system |
| 9 | Standardize instrument sterilization and tracking system through out all areas in QMH |
| 10 | Streamline CSSD processes |

2.4 Top non-clinical risk reduction strategies for 2010-2011

| | Top non-clinical risk reduction strategies |
|---|---|
| 1 | Enhance private patient billing |
| 2 | Institute PACS data storage and off-site backup |
| 3 | Enhance hospital security with regular staff update |
| 4 | Systematic monitoring of compliance with statute and ordinance |
| 5 | Enhance fire safety through regular fire drill, training and mandatory paper drill |
| 6 | Reinforce personal data security through training and paper drill |

## 3. Risk Mitigation

3.1 Review of 2009 programs

| Item | Program name | Action & Result |
|---|---|---|
| 1 | Enhance personal data security | (a). 87 new medical record carts were delivered to wards in December 2009;<br>(b). Hard copies of the medical records were centrally stored in Medical Record Office; and<br>(c). Centralized website was developed for housing cluster Information Security and Privacy Information. |
| 2 | Implement WHO second challenge for Safe Surgery | (a). The Checklist would further be implemented in Coronary Care Unit (CCU) and other areas; and<br>(b). Audits on Surgical Safety were conducted in November 2009 and March 2010. |
| 3 | Enhance laboratory specimen labeling and reporting | The panic laboratory results were delivered promptly with 24 hours coverage for In-patients and Out-patients. |
| 4 | Enhance medication safety through medication reconciliation and "TALLman" labeling | (a). Since February 2009, Clinical Pharmacists reviewed patients' medications on admission; and<br>(b). "TALLman" lettering was adopted in ward top-up cabinet for LASA drugs. |
| 5 | Prevent patient fall | Falls further decreased from 245 (2007) to 202 (2008) and 182 (2009). |
| 6 | Extend Hand Hygiene Program | Overall compliance rate increased from 56% to 70%. Department of Paediatrics and Adolescent Medicine achieved 93%. |
| 7 | Enhance patient assessment | Audit on documentation of nursing Kardex A, Nursing Care Plan and Nursing Discharge Plan would be conducted in 2Q 2010. |
| 8 | Implement clinical pathway | (a). End-of-life Care pathway was piloted in Clinical Oncology Department in August 2009; and<br>(b). Clinical Pathway on Elective Coronary Artery Bypass Graft (CABG) will be implemented in 2Q 2010. |
| 9 | Reduce medication errors through 2D barcode system | Unit dosing was piloted in private wards. 2D Barcode system would be implemented when equipment is available. |

3.2 Planning for 2010 programs

| Item | Program name | Action & Result |
|---|---|---|
| 1 | Reinforce personal data security | (a). Conduct compliance check on the "Information Security and Privacy" in all clinical departments;<br>(b). Stock-take and streamline CCTV in clinical |

| Item | Program name | Action & Result |
|---|---|---|
| | | departments; and<br>(c). Install security shields for computer systems which could be easily accessed by public/patients. |
| 2 | Implement WHO 2nd challenge for Safe Surgery | (a). Continue to implement the Surgery Safety Checklist in other areas/units, e.g., AICU; and<br>(b). Conduct audits in the departments/units which have already implemented. |
| 3 | Enhance medication safety and reduce medication errors | (a). Minimize ward stock;<br>(b). Revise Medication Administration Record; and<br>(c). Enforce pharmacy vetting system. |
| 4 | Enhance correct patient identification | Implement 2D Barcode System for specimens other than type and screen in 4Q 2010 |
| 5 | Enhance patient assessment | (a). Roll out Nursing Care Plan and Nursing Discharge Plan to all wards; and<br>(b). Evaluate and revise the Nursing Kardex A. |
| 6 | Enhance safety culture and risk identification | (a). Conduct Integrated Quality and Safety WalkRound on every Wednesday and Thursday afternoons by Q&RM, Pharmacy, Health Information Record and Central Nursing Department, and Occupational safety & Health colleagues;<br>(b). Identify risks and areas for improvement; and<br>(c). Follow-up and make corrective measures. |
| 7 | Prepare for Hospital Accreditation | (a). Make action plans, follow-up progress and evaluate outcomes for the 18 priority action items;<br>(b). Prepare hospital staff for the Organization Wide Survey in 4Q 2010. |
| 8 | Implement peri-operative nursing documentation | (a). Incorporate integrated peri-operative nursing documentation into patients' medical record; and<br>(b). Integrate OT count sheet into peri-operative nursing documentation. |
| 9 | Integrating clinical documentation | Integrate patients' progress and management documentation into one single record for all clinical areas |
| 10 | Improve in-patient dispensing system | (a). Continue to monitor in-patient dispensing turn-around-time; and<br>(b). Make plans to enhance dispensing system. |
| 11 | Streamlining CSSD processes | Continue to streamline CSSD services and processes in preparing for merging of TSSU/CSSD QMH |

## 4. Learning & Sharing Information

Include root cause analysis performed & quality improvement

### 4.1 CQI projects

| No | Topic | Action & Result |
|---|---|---|
| 1 | Enhancing service excellence at J-1 private clinic | (a). Enhanced environment aesthetically;<br>(b). Enhanced staff training on service quality;<br>(c). Streamlined appointment scheduling and room assignment;<br>(d). Enhanced dispensing and payment system;<br>(e). Implemented customer-focused pharmacy advisory service; and<br>(f). Project completed. |
| 2 | Enhancing biopsy specimens' prescribing to processing at Department of Radiology | (a). Streamlined processes from prescribing by clinicians, obtaining biopsies at DR to receipt of specimen at AP laboratory;<br>(b). Implemented CMS and OPAS access for DR;<br>(c). Enhanced training on GCRS for DR staff and house-officers; and<br>(d). Project completed. |
| 3 | Safe surgery checklist | (a). Implemented "Safe surgery checklist" to all OTS of QMH;<br>(b). Audit conducted in March 2010; and<br>(c). "Safe surgery checklist" version 2 implemented on 1 April 2010. |
| 4 | Enhancing potential liver transplant candidates' information and communication with hospital | (a). Improved patient information pamphlet;<br>(b). Established patient enquiry system; and<br>(c). Project completed. |
| 5 | Blood and blood product collection by porter team | (a). Separated blood and blood product transport boxes;<br>(b). Enhanced training for porter team; and<br>(c). Project completed. |
| 6 | Safe Midazolam usage in general ward | (a). Removed large volume Midazolam from general wards;<br>(b). Audit of compliance checked; and<br>(c). Project completed. |

| No | Topic | Action & Result |
|---|---|---|
| 7 | Improving pest control performance with emphasis on kitchen and pantries in clinical areas | (a). Enhanced pest control treatment regime for catering department;<br>(b). Developed performance measurement and reporting system between administration and contractor; and<br>(c). Project completed. |
| 8 | Streamlining CSSD processes | (a). Delineated access for sterile and non-sterile items at autoclave room;<br>(b). Enforced sterile store access restriction; and<br>(c). Continue to streamline CSSD processes. |
| 9 | Streamlining of ward linen supply | (a). Revisited top-up system;<br>(b). Adjusted supply according to demand;<br>(c). Implement monitoring system; and<br>(d). Project completed. |
| 10 | Streamlining pharmacy ward stock system | (a). Reduced ward stock at two clinical departments and pending further return of ward stock from other departments; and<br>(b). Reduced high risk medications in general wards. |
| 11 | Integrating clinical documentation | Implemented integrated clinical documentation at all clinical areas. |
| 12 | Improving in-patient dispensing system | (a). Started staggered hour dispensing system; and<br>(b). Monitoring of turn-around-time from requisition to dispensing in progress. |
| 13 | Reducing oxygen stock at ward level | (a). Stock-take of oxygen cylinders at clinical areas; and<br>(b). Streamlined oxygen cylinder stock at all wards. |
| 14 | Implementation of acute stroke pathway – from admission to rehabilitation | (a). Acute stroke guidelines implemented since Dec 2008;<br>(b). Service capacity evaluation based on data collected since guidelines implementation; and<br>(c). Clinical pathway implemented in June 2009. |
| 15 | End-of-life pathway | (a). Pilot project implemented since July 2009; and<br>(b). For data evaluation and explore plan of implementation. |

| No | Topic | Action & Result |
|---|---|---|
| 16 | Enhance SOPD appointment system to reduce queuing time | Reduced bookings per batch and extended consultation appointment time. |
| 17 | Restructure existing CSSD to TSSU & CSSD to meet the ACHS sterilization and disinfection standard | (a). Working group on sterilization and disinfection set up;<br>(b). OTS flash sterilization discontinued; and<br>(c). OTS instrument tracking commenced. |
| 18 | Enhancing nutritional assessment scheme to identify and improve nutritional support for at risk patients | Pilot scheme implemented at O&T and gynae-oncology and oncology patients |

4.2 Quality and safety publication

Quality and safety publications were established in 2009/2010.

| Publication | Frequency | Topics |
|---|---|---|
| QMH Newsletter – CQI session | Bimonthly | (a). Introduction to CQI;<br>(b). QMH's CQI journey;<br>(c). The CQI process – FADE cycle; and<br>(d). Integrating CQI & Risk Management. |
| Accreditation Newsletter | Monthly | (a). Hospital accreditation at QMH: what, why, when & why;<br>(b). The most beautiful woman;<br>(c). LASAMA;<br>(d). Hospital accreditation: everybody's business;<br>(e). Accreditation onsite interview;<br>(f). No room for complacency;<br>(g). Surveyor's comment: culture; and<br>(h). Surveyor's comment: specific issue. |
| Quality Reminder | Monthly | (a). Verbal order;<br>(b). Confidential waste disposal;<br>(c). Risk of multi-dose vials;<br>(d). Oral syringes;<br>(e). Proper use of portering service;<br>(f). Proper use of blood refrigerators; |

| Publication | Frequency | Topics |
|---|---|---|
| | | (g). PS- how much does this abbreviation worth?; and<br>(h). Preserve the privacy of personal information. |

Acccredittion Newsletter

Quality is not an act. It is a habit.

追求質素並非做樣子，而是養成習慣。

*QMH Accreditation Newsletter—Issue 9 • January 10*
*By Dr Alexander Chiu, HKWC Asst. CD (Q&RM)*

By now I am confident the hospital accreditation team has accomplished the target of "everybody aware" and we hope with our new round of exercises we can achieve "everybody cares" and eventually arrive at the fruitful outcome of "everybody benefits".

At present the accreditation team is focusing our effort to perform ground work on ultra major issues. These issues are ultra major because if we do not demonstrate their system in place, we will simply not be accredited. They are also ultra major because the success of which will require significant resources input, system adjustment and most importantly, mindset changes in people.

The introduction of nursing care plan is one example. This is an unfamiliar concept to many and its introduction is anticipated to arouse heated discussion, bargaining and even resistance before we can arrive at something the majority concurs. With a new care plan, we will also need to educate our staff why we are doing so. It will indeed be our failure if staff chooses to believe this is a window dressing and not a reform for continuous improvement. Finally we will need to conduct evaluation after implementation to incorporate our user's wisdom in order to further refine the care plan. If we can achieve that, it signifies a change in mindset and ultimately, a change in our culture.

I would like to refer to the famous quote by Aristotle: "*Quality is not an act. It is a habit.*" This is very true and I wish you can agree with me what is done today is not a one-off act, but a habit of continuous quality improvement that will benefit Queen Mary Hospital and public health care.

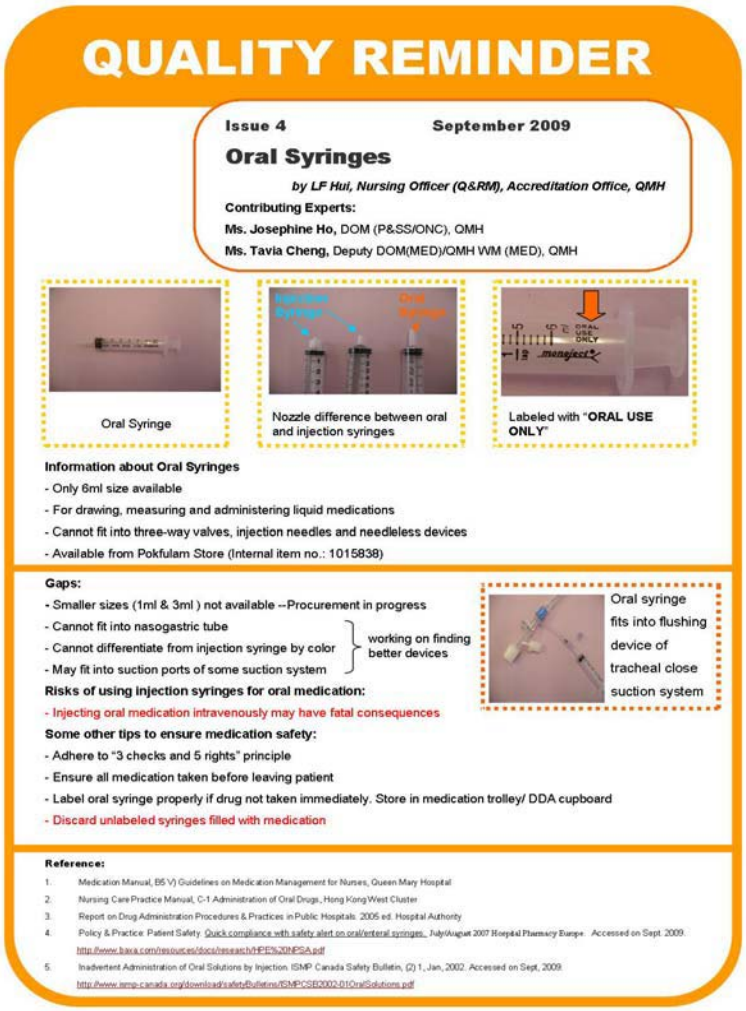
我相信醫院的認證團隊至今已經實現「人人認識」的目標，我們希望透過下一階段的工作能實現「人人用心」及最終實現「人人受益」的理想結果。

目前，認證團隊正籌備幾項重要項目的基礎工作。這些工作項目之重要性在於，如果我們無法展示此類工作的制度存在，我們將無法獲得認證。要想在這些重要領域獲得成功，必須投入資源，調整機制，還要改變員工的思維模式，尤以最後一項最為重要。

引入護理計劃正是其中一例。很多員工並不熟悉此工作概念，不難預計，引入該計劃很可能引發激烈交涉，討價還價，甚至阻力，才能獲得共識。實行新護理計劃前後，我們還須向員工說明這樣做的原因。如果員工認為新計劃不過是走走形式，而非持續的改革措施，就是我們工作的失敗。我們會在實施後再進行評估，融入同事的智慧，從而進一步改進護理計劃。如果能實現該目標，我們就能改變員工的思維模式，最終改變醫院的文化。

我想借用亞里士多德的至理名言：「*追求質素並非做樣子，而是養成習慣。*」我希望所有人都能認同，今日我們的努力並非一次性行動，而是一種持續提高質素的習慣，並最終將使瑪麗醫院及公共醫療獲益。

Quality Reminder



QUALITY REMINDER

Issue 4 September 2009

**Oral Syringes**

*by LF Hui, Nursing Officer (Q&RM), Accreditation Office, QMH*

**Contributing Experts:**

**Ms. Josephine Ho,** DOM (P&SS/ONC), QMH

**Ms. Tavia Cheng,** Deputy DOM(MED)/QMH WM (MED), QMH

Oral Syringe

Nozzle difference between oral and injection syringes

Labeled with "**ORAL USE ONLY**"

**Information about Oral Syringes**

- Only 6ml size available
- For drawing, measuring and administering liquid medications
- Cannot fit into three-way valves, injection needles and needleless devices
- Available from Pokfulam Store (Internal item no.: 1015838)

**Gaps:**

- Smaller sizes (1ml & 3ml ) not available --Procurement in progress
- Cannot fit into nasogastric tube
- Cannot differentiate from injection syringe by color
- May fit into suction ports of some suction system

} working on finding better devices

Oral syringe fits into flushing device of tracheal close suction system

**Risks of using injection syringes for oral medication:**

- Injecting oral medication intravenously may have fatal consequences

**Some other tips to ensure medication safety:**

- Adhere to "3 checks and 5 rights" principle
- Ensure all medication taken before leaving patient
- Label oral syringe properly if drug not taken immediately. Store in medication trolley/ DDA cupboard
- Discard unlabeled syringes filled with medication

**Reference:**

1. Medication Manual, B5 V) Guidelines on Medication Management for Nurses, Queen Mary Hospital
2. Nursing Care Practice Manual, C-1 Administration of Oral Drugs, Hong Kong West Cluster
3. Report on Drug Administration Procedures & Practices in Public Hospitals. 2005 ed. Hospital Authority
4. Policy & Practice: Patient Safety. Quick compliance with safety alert on oral/enteral syringes. July/August 2007 Hospital Pharmacy Europe. Accessed on Sept. 2009. http://www.baxa.com/resources/docs/research/HPE%20NPSA.pdf
5. Inadvertent Administration of Oral Solutions by Injection. ISMP Canada Safety Bulletin, (2) 1, Jan, 2002. Accessed on Sept, 2009. http://www.ismp-canada.org/download/safetyBulletins/ISMPCSB2002-01OralSolutions.pdf

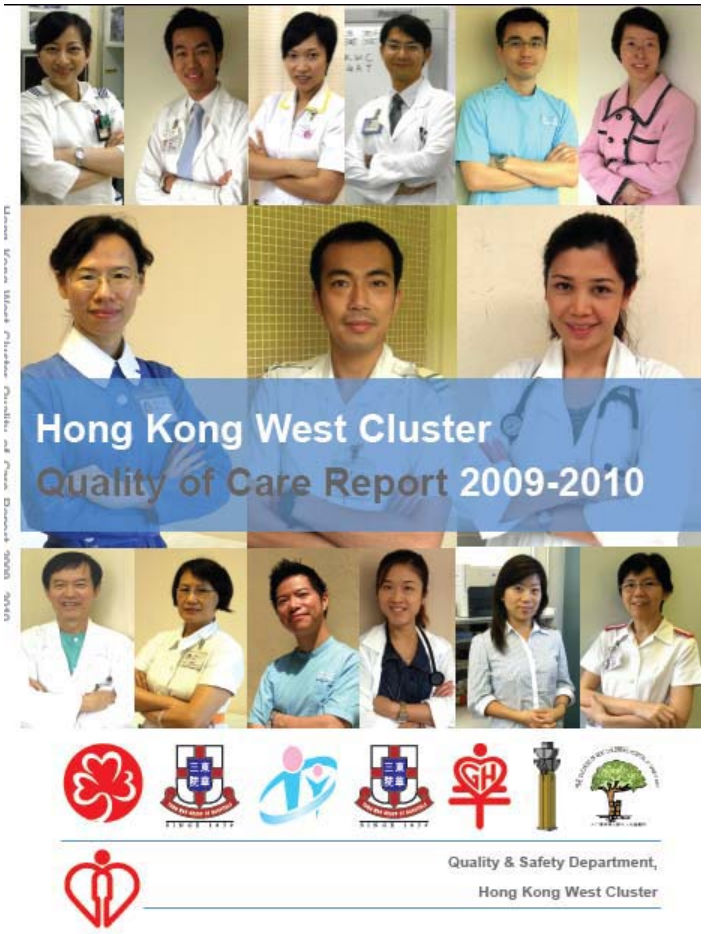
4.3 Integrated quality and safety walk rounds with subsequent "Quality of Care Report"

From January 2010, a team comprising of ACD (Q&RM), SNO(CND), clinical pharmacist, OSH coordinator and APN (Q&RM) started to conduct twice weekly quality and safety walk rounds to all clinical areas with the aim to identify areas for improvement. A total of 38 clinical areas have been visited from January to March 2010. Half yearly "Quality of Care Report" will be published in June 2010. The integrated quality and safety walkrounds will be implemented in other cluster hospitals in 2011.

Examples of opportunities for improvement include:

| High risk areas | Intermediate risk areas | Low risk areas | Follow-up actions | |
|---|---|---|---|---|
| | | | Immediate | System improvement |
| Pharmacy – concentrated electrolyte not locked properly | | | Enforce locking up of concentrated electrolyte separately | Pharmacy initiated regular audit |
| | Nursing – incomplete nursing assessment | | Enforce filling in of all assessment items | Provide training<br>Revise nursing assessment |
| | | House-keeping – excess stock level and inventory | Rationalize request according to demand based on previous data | Review and streamline procurement and asset management procedure |

Quality of Care Report



4.4 Staff Education and Training

(a). Hospital accreditation seminars – in June, August., October and December 09, February & March 2010

(b). Patient safety seminar for professional staff

(c). Blood transfusion related

- OTBTS & summary of incidents;
- Transfusion safety & annual report;
- Safety in blood transfusion for care related workers / workman / drivers; and
- Transfusion for nurses (GH).

(d). Medication related

- Pre-internship block;
- Medication safety & prescriptions writing;
- Medication safety on cytotoxic drug;
- Structured education programs for intern;

- Medication incidents; and
- Medication related fall accident & prevention for nurses.

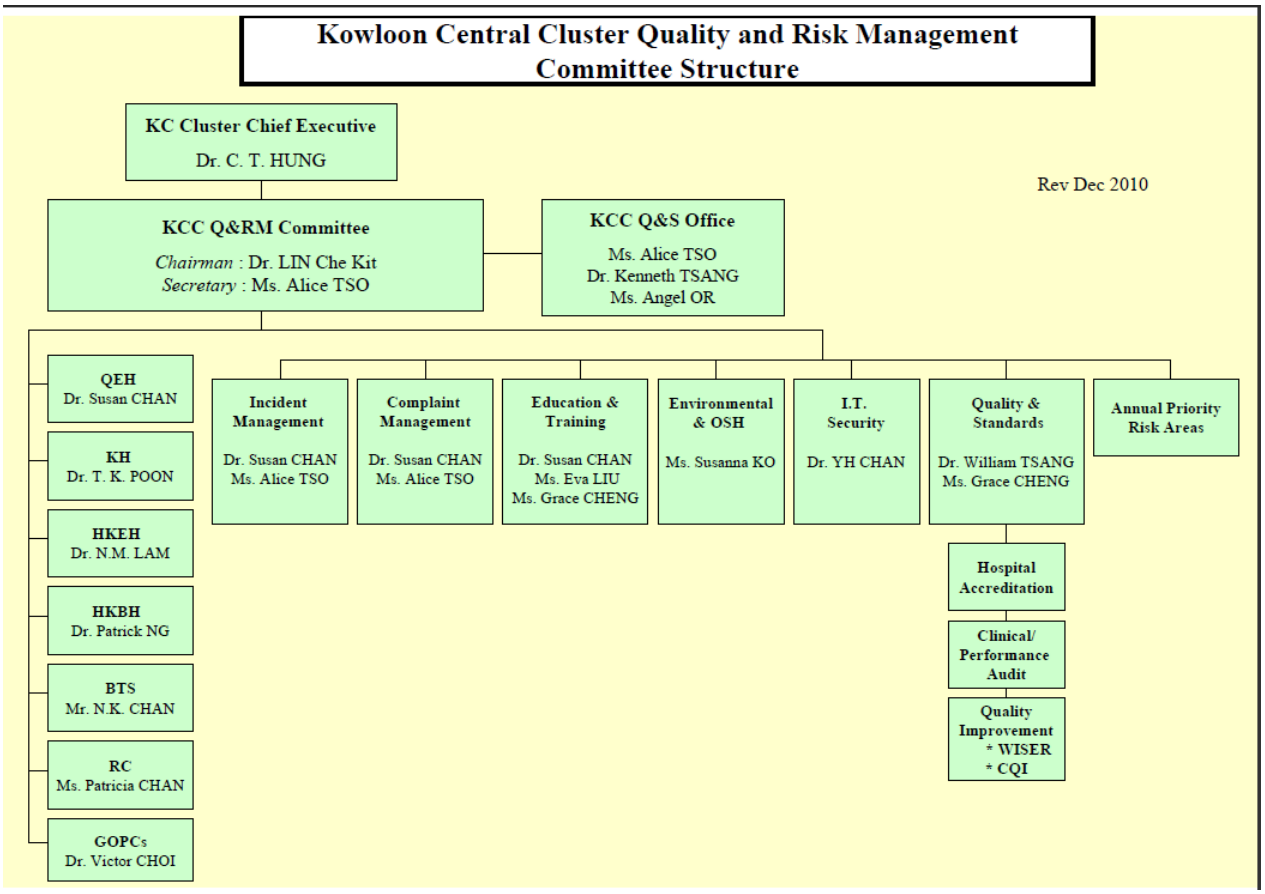
(e). Infection control

- Infection control seminars; and
- Infection control Link Nurse training.

(f). OSH related

- OSH Induction program;
- Chemical safety;
- Environmental protection and management of clinical wastes;
- OSH enhancing program for safety wardens;
- Electrical safety;
- MHO curricular for catering services;
- Safe handling of medical gas;
- Workplace violence; and
- Breakaway & restraining technique.

## 1. Structure & Initiatives





This report covers the period from 1st April 2009 to 31st March 2010. This past year has been a year of significant progress in terms of structure, process and we hope outcome as well in the long run.

The cluster has revised its quality and risk management structure. With the new Quality and Risk Management Structure in KCC, QEH has established its own Quality and Risk

Management Committee, with the first meeting held on 19 May 2009. All departments are invited to nominate a Quality and Safety Co-ordinator as member of the Committee which would meet on a quarterly base to share information and discuss on quality and risk management issues. The Cluster Risk Officers have also been renamed as Quality and Safety Officer to reflect their extended role in quality management.

Further to the findings of the report of Survey on Work Health and Safety Culture, it was recommended that the role of OSH coordinators be merged with that of Quality and Safety Officer. This has been adopted and implemented in QEH.

The cluster has established a new Quality and Safety Office manned by full time as well as part-time staff. The office is an executive arm of the Cluster Quality and Safety Committee. The role of the Quality and Safety Office is to derive, drive, support and monitor cluster priority risk areas, risk reduction programs and improvement efforts. The part-time staffs are presently Executive Partners from clinical departments. This effort allowed greater clinical participation and permeation of concepts of quality and safety.

1.2 Years of Safety

KCC has continued its effort in enhancing patient safety. The Patent Safety Pledge has been posted up at prominent areas in each cluster hospital. A Patient Safety Convention was held on 27 & 28 November 09 with the theme of “Total Engagement in Patient Safety”. Local and overseas guest speakers were invited to share their experiences on safety. Cluster efforts in patient safety were also showcased and celebrated in the same occasion.

Patient Safety Pledge and Staff Safety Pledge


Patient Safety Convention

2009/10 was the Year of Staff Safety (the second of the Years of Safety). A workgroup was formed under the KCC Quality & Risk Management Committee and has put a lot of efforts to promote and enhance staff safety. During the Patient Safety Convention, the Staff Safety pledge was signed and is being arranged to put up next to the Patient Safety Pledge. They would thus be seen in pairs.

The following activities were organized in this Year of Staff Safety:

(a). A Staff Safety Culture survey was held in May 09. The results were shared in the Cluster Strategic Planning Workshop on Staff Safety to assist in the formulation of action plan to enhance staff safety.

(b). A Strategic Planning Workshop on Staff Safety was held on 20 June 2009 and a follow up meeting was held on 2 September 09 to consolidate the action plan.

Strategic Planning Workshop on Staff Safety

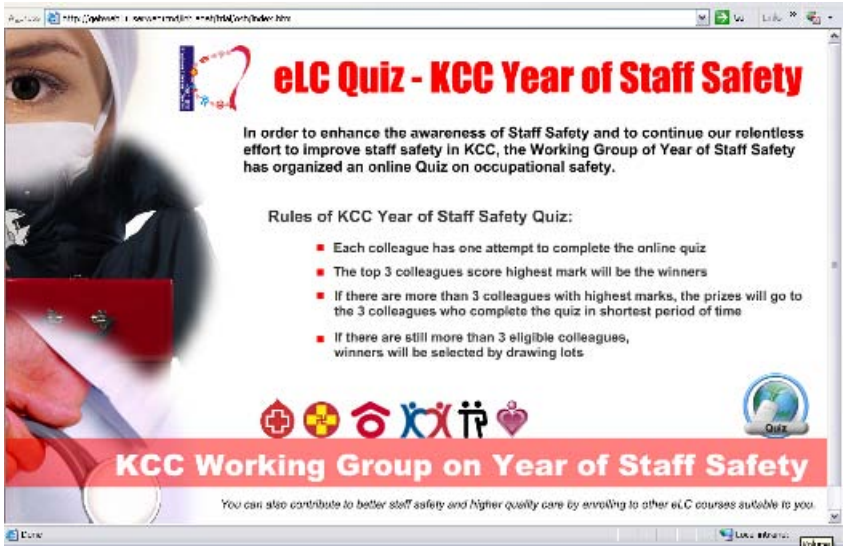
(c). A Staff Safety Pledge was endorsed by the KCC Quality and Risk Management Committee and was signed in the Patient Safety Convention.

(d). A slogan competition on Staff Safety was organized with 27 submissions. Results were announced in the Patient Safety Convention and prizes were given to the winners. The slogans were then used to design posters and computer screen savers which were then put up throughout the cluster's clinical and non-clinical areas.


Slogan Competition

(e). A Staff Safety webpage was added to the Cluster Quality and Safety site and linked to a pool of guidelines and articles shared with the OSH website.

(f). To enhance staff safety awareness, an electronic quiz competition was organized for professional staff (clinical & management) and another staff safety quiz competition named「百萬富翁之一百萬個零意外」was organized for supporting staff. The responses to these competitions were overwhelming and prizes were given to the winners




Electronic quiz competition for professional staff




Staff safety quiz competition for supporting staff「百萬富翁之一百萬個零意外」

Seminars or activity (e.g. lunch-time concerts) with specific topic on staff mental wellness were organized to increase staff awareness on mental wellness. Guest speakers came from both internally (e.g. Dr Derrick Au) as well as religious groups.

Lunch-time concert

Joyful life talk

1.3 Safety Rounds

This was previously the Patient Safety Round. With the recommendation on a closer

working relationship among different works of safety, representatives from Environmental & OSH Committee participated in the rounds as well. Departments visited including Paediatrics (QEH), Pharmacy (KH), Dietetic (KH), Medical Record Office (QEH), QEH kitchen area, Yaumatei Satellite Renal Dialysis Centre and Pre-admission service (QEH).

The Risk Register of the respective department was reviewed and new risks were identified during the safety rounds. Recommendations for improvement were made to the departments which would revise their Risk Registers incorporating the results of the Rounds. The results will now also be entered into a newly developed electronic tracking system. The Quality and Safety Office will monitor the progress of the planned improvement works and will refer to relevant parties for follow ups.

Safety Rounds

1.4 WISER Movement

WISER taskforce was formed in Oct 2009 chaired by the Cluster Chief Executive. WISER is more than Lean management. While Lean describes a thinking paradigm and a set of tools, WISER is looking at the broader scope of engaging staff for innovation and for service excellence. The cluster has now 3 Blackbelts and 74 Greenbelts trained in Lean Six Sigma. The KCC Q&S Office took up the role of the executive arm of this movement.

In-house training programs are being run / developed. They include A3 process improvement workshops, 5S refresher training, in-house facilitators training and general engagement training. A manual is also being developed on the process of running a WISER improvement projects (previously coined RIE's, rapid improvement events). Several projects have been completed in Department of Medicine, Ambulatory Care Centre, Operating Theatre

of QEH and YMT, GOPC pharmacy. Some have achieved good results.

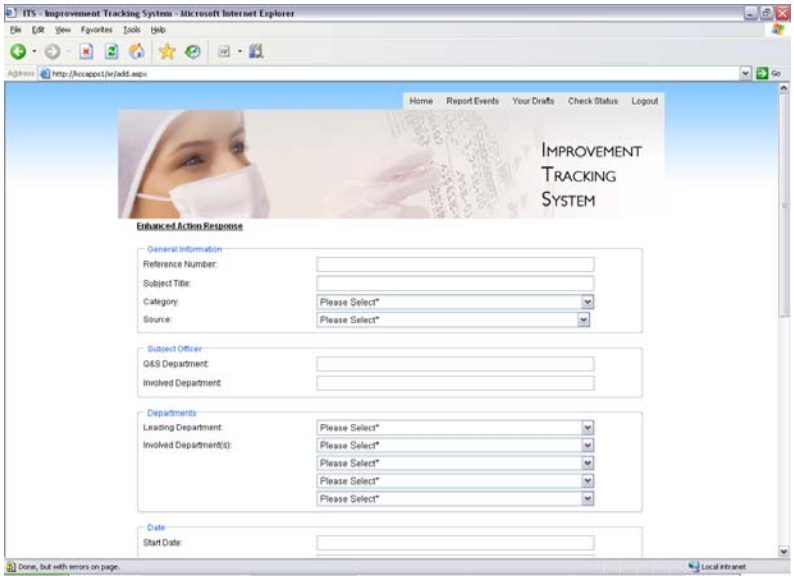
2 groups of staff, approximately 50 in total, went to visit hospitals in Singapore to learn about the implementation of Lean management in healthcare. The visits were shared with cluster Quality and Safety Coordinators in a forum.

WISER Room

A WISER room dedicated for the use of all improvement projects was furnished and will come into service in May 2010.

1.5 KCC Electronic Improvement Projects Tracking System

As mentioned in the previous paragraph, a system was developed to track the progress on improvement works. The data from this system comes from (i) safety rounds; (ii) complaints; (iii) risk reduction strategies from the reports of sentinel and serious untoward events; (iv) near-misses; and (v) other relevant sources. The system is in its first phase and is currently a close-system where only staff from the Quality and Safety teams can access. This system served to close-the-loop on the many efforts made in identifying risky areas.



1.6 Building Safety Culture

As quality and risk management is a priority area in KCC, the publishing of Quality &Safety Bulletin has been increased to 4 issues per year.

The KCC Quality and Safety Website provides updated information, references, standards, good articles and risk alerts for sharing. The objective is to increase staff alertness on quality and safety.

To enhance staff's alertness on different types of patient risks, the electronic patient safety alert (ePS) was maintained and an editorial board is now formed to review the contents of these alerts. They were sent to all KCC email users on a bi-weekly basis.

KCC Quality and Safety Forums were held with focus on sharing improvement efforts as well as learning from the experts (Ms. Kim Ashall from Rotherham Hospital, UK and Dr. Patrick Chu, Medical Director, Clinical Support Division, Royal Liverpool University Hospital, UK.)

KCC Quality and Safety Forums

## 2. Risk Prioritization

2.1 Table 1: Ten Priority Risk Areas for 2009/10

| 10 Priority Risk Areas for 2009/10 | |
|---|---|
| 1 | Patient identification (specimen labeling) |
| 2 | Infection control (NSI & MDRO) |
| 3 | Medication Safety (medication administration in ward) |
| 4 | Safe surgery (full compliance with WHO checklist) |
| 5 | Patient data security (paper record) |
| 6 | Clinical management communication |
| 7 | Communication between staff / patient and relatives |
| 8 | Patient fall |
| 9 | Staff safety – fall |
| 10 | Staff safety – heavy lifting |

2.2 Table 2: Ten Priority Risk Areas for 2010/2011

| 10 Priority Risk Areas for 2010/2011 | |
|---|---|
| 1 | Patient identification (specimen labeling) |
| 2 | Infection control (MDRO and non-ICU staff sanitization behaviour in ICU) |
| 3 | Medication safety (medication reconciliation & safe dispensing) |
| 4 | Safe surgery (compliance HA Safe Surgery policy in OT and Interventional Suites) |
| 5 | Patient data security (paper record) |
| 6 | Sedation safety |
| 7 | Document control |
| 8 | Patient fall |
| 9 | Pressure sore |
| 10 | Investigation Findings Alert safety |

## 3. Risk Mitigation

3.1 Table 3: Risk Reduction Strategies for the 2009/10 Ten Priority Risk Areas

| No | Priority Risk Area | Action & Result |
|---|---|---|
| 1 | Patient identification (specimen labeling) | (a). The implementation of the 2D barcode system for labeling all in-patient specimens has commenced in QEH on 29/6/09 and also in BH since 1/12/09; and<br>(b). Hitherto, there were only few incidents of mislabeling of specimen reported. (2D-barcode system was not used in these incidents). These incidents were being investigated. |
| 2 | Infection control (NSI & MDRO) | (a). Developed a standard of practice on "Management on Needle Stick Injury and Mucosal Exposure to Blood and Body Fluid to Health Care Workers";<br>(b). Review the NSI reduction program in selected wards (Intervention wards). Conduct staff survey to evaluate the acceptability and usability of the new introduced needleless device. Overall 73% staff in the intervention wards are willing to continue to use the new needleless device; and<br>(c). No. of NSI incidence related to IV needle-tubing assemblies decreased from 1.165 to 0.079 /1000 patient bed days. |
| 3 | Medication Safety (medication administration in ward) | (a). Enforce compliance with the recommendation of "High Risk Medication" from the Medication Safety Committee of HAHO;<br>(b). Worked out a new workflow from medication reconciliation to administration;<br>(c). Performed a FMEA of the AOM in ward and identified key risk areas for further actions; and<br>(d). Formulate a list of approved drug abbreviations for KCC. |
| 4 | Safe surgery | (a). Adopted the HAHO Safe Surgery Policy;<br>(b). Performed audit on Safe Surgery Policy cluster wide |

| No | Priority Risk Area | Action & Result |
|---|---|---|
| | | at QEH and HKEH in March with satisfactory compliance rate;<br>(c). A checklist is being designed to follow each patient all the way from pre-admission state till post-operative care in surgical wards;<br>(d). Rolled out Safe Surgery concept to all areas of intervention involving anaesthetists; and<br>(e). Rolled out of all 3 phases of the Safe Surgery Policy to the Cardiac Catheter Laboratory. |
| 5 | Patient data security (paper record) | (a). Use new patient gum label for in-patient and A&E since 20 May 2009. The label contains patient name (Chinese & English) and case number with its bar-code only. It helped to reduce the risk of exposing patient's HKID in public area;<br>(b). Keep all potential legal case medical records separately at the store room. The room is securely locked and only accessed by authorized staff;<br>(c). To have better tracking of loan out medical records, regular reminders are sent to borrowers to remind them to return the records immediate after use; and<br>(d). A database on location of medical records not kept by MRO has been compiled to facilitate Data Access Request under Personal Data (Privacy) Ordinance. |
| 6 | Clinical management communication | (a). A laminated color version SBAR chart was post up in ward to facilitate the use of SBAR concept in clinical communication;<br>(b). A revised intra-hospital patient transfer form is implemented in QEH on 1/8/09 to improve communication on patient transfer; and<br>(c). There are plans to explore the use of MEWS score and electronic handover. |
| 7 | Communication | (a). A seminar on communication namely「全心傳意系 |

| No | Priority Risk Area | Action & Result |
|---|---|---|
| | between staff / patient and relatives | 列」第三講「歲月流金」was organized for staff and public. Total no. of participants was ~ 300;<br>  <br>「歲月流金」<br>(b). The book「拆走醫院的炸彈」 has been completed and a book launch was organized to promote the book to staff and public; and<br>  <br><br>(c). 『九龍中樂建關愛合唱團』 CARPS choir established. The choir consisted of patients and staff.<br>  |
| 8 | Patient fall | (a). Distributed ”防跌十訣” posters to all wards;<br>(b). 16 sessions of refresher training provided to supporting staff in Nov 09 and Feb 10; and<br>(c). Reinforced staff to participate in e-learning program “Prevention of Fall”. |
| 9 | Staff safety – fall | (a). Regularly inspect and rectify uneven floor;<br>(b). Install anti-slip tape at high risk areas; |

| No | Priority Risk Area | Action & Result |
|---|---|---|
| | | (c). Install anti water splashing facilities at washing basin;<br>(d). Appeal to staff for reporting wet floor incident;<br>(e). Switch on lighting earlier during rainy day;<br>(f). Managing 'Wet' Floor to prevent fall incident; and<br>(g). Proper use of stepping stools / ladders with various size and model for reaching high level objects. |
| 10 | Staff safety – heavy lifting | (a). Shortening the ordering time for lifting aids / tools through arrangement of bulk purchase for selected models and/or availability of buffer stocks;<br>(b). Provision of portable patient hoists at HKBH and QEH wards; and<br>(c). Develop mechanism for lending transportation tools and equipments to departments / wards. |

3.2 PLAN for 2010-2011

QEH will be going through the exercise of Hospital Accreditation. This will certainly help to highlight areas requiring improvements or underdeveloped. This, together with work on the new top 10 priority risk areas will be the major tasks of 2010-2011. Project facilitation and monitoring will be done via WISER / Cluster Q&S Office.

3.3 HOSPITAL ACCREDITATION

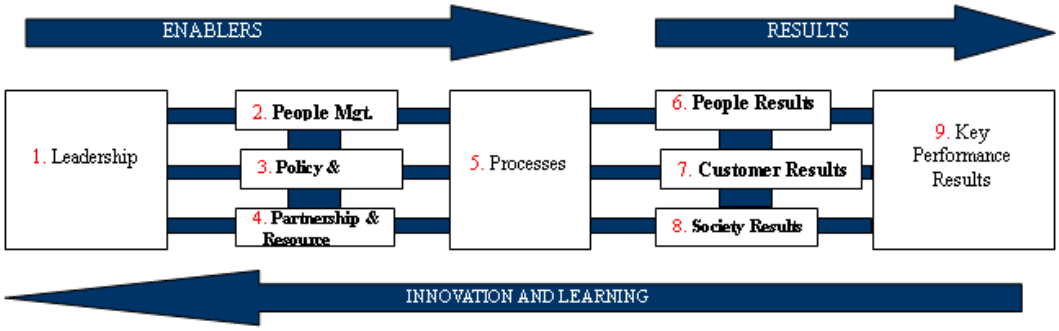
(a). APBEST Implementation in QEH

In 2009, Queen Elizabeth Hospital embarked on a journey of improving corporate governance and achieving service excellence through the application for the Asia Pacific Business Excellence STandard (APBEST) Award. Three managerial departments and four clinical departments have joined the program, with an aim to identify the strengths and areas for improvement through the application of criteria for self-assessment and scrutiny by external examiners.

In applying for the Award, the nine EQA (European Quality Award) criteria of the EFQM

(European Foundation for Quality Management) Excellence Model are used as a guide and assessment tool for continuous quality improvement (see Fig. 1). This is done through strengthening of leadership, enhancement of strategies and processes, review of key performance indicators (KPI), identification of areas for improvement (AfI), and promotion of innovation and learning. The arrows depicted in the EQA criteria scheme emphasize the dynamic and cyclical nature of the model: Innovation and Learning help to improve Enablers, which in turn lead to improved Results. Enabler criteria are concern with how the organization undertakes key activities. Critical review of the Results provide further opportunities and incentives for Innovation and Learning, thereby completing the self-perpetuating cycle of continuous improvement.

Fig.1: EQA Criteria exemplified by the EFQM Excellence Model




The QEH APBEST Award programme has been commenced in January 2009, with a one-year implementation plan highlighted by 22 consultation sessions (3.5 hours each) conducted by an external expert Consultant. The Consultant guides the participants through the award-winning process resulting in the Final Submission Document (FSD) addressing in detail all the EQA criteria. The preparation exercise is fruitful in its own right, as it has given a good chance for various departments to sit back and reflect on their RADAR (i.e., Review – Approach – Deployment – Assessment - Results).

The Award Board of Examiners, comprising renowned local and overseas experts in their own national quality award assessment, will assess the FSD, conduct on-site verification visit, provide written feedback, and decide on the final Award result. To the best of our knowledge, this is the first instance of the application of the EQA criteria, through the APBEST Award, for achieving quality management and continuous improvement in the

Healthcare setting in the Asia-Pacific region.

By February 2010, 20 sessions has been conducted including sessions for training on 5-S Green-belt and Lean-5S. Final paper submission has been made in December 2009 and site visit and presentation to examination board will be conducted in August 2010 after rescheduling.

(b). ACHS Hospital Accreditation in QEH

In line with the mission, vision and value of KCC in pursuing continuous improvement in quality and safety of health care, QEH has participated the Hospital Accreditation Pilot Scheme led by the Food and Health Bureau. The Consultancy program has been commenced in mid-May and a series of staff engagement programs and readiness training have been conducted. A full time Quality Manager from Australia has been invited to provide onsite support for QEH in preparing the program and conducting a gap analysis.

The Hospital has undergone a Consultancy Survey in December 2009.

With reference to the gap analysis conducted by the ACHS Consultants and Quality Manager, multidisciplinary working groups have been set up to review the target issues as identified including Housekeeping & Cleanliness, Clinical Outcome Evaluation, Document Control, Admission Criteria / Discharge Planning and Websites Update.

In response to the report of Consultancy Survey issued in January 2010, committees and working groups have been set up to review and formulate follow up actions according to the suggested areas for improvement and recommended priority action items. Areas for priority actions include appropriateness of care in specific clinical area; infection control, housekeeping and sterilization; timely reporting and awareness of near misses at department level; credentialing and scope of service; role delineation of external service providers; monitoring of license and compliance to ordinance; assurance of a safety system and monitoring of performance of biomedical equipment.

Participating the pilot program aims to engage the staff of QEH and KCC together to work at system and other issues, and eventually bringing hospital services to international healthcare standards at all fronts.

## 4. Learning & Sharing Information

Learning points from investigation of incidents were shared with staff through meetings, forums, webpage and Bulletin, Highlighted below were some significant learning points that had been shared:

4.1 Patient identification

When direct verification of identity with patient is not available (the patient is a child, sedated, cognitively impaired or has communication deficit such as demented or confused), verification must be made with a responsible adult either a patient relative or another staff.

4.2 Mislabeling of specimen

(a). Staff are reminded to strictly follow the steps of collection and labeling of specimen; and

(b). Emphasis was put especially on blood cultures.

4.3 Medication

(a). Drug label must be read carefully to avoid administering expired drugs;

(b). The concept of Medication Reconciliation was shared in Dept of Medicine's Post-graduate Meeting; and

(c). House Officers of Dept of Medicine were especially reminded on the ease of committing the error of mixing up potassium level result and white cell count result due to the design of the print-out.

4.4 Infection Control

(a). Safe practice in using sharp is emphasized in ensuring staff safety; and

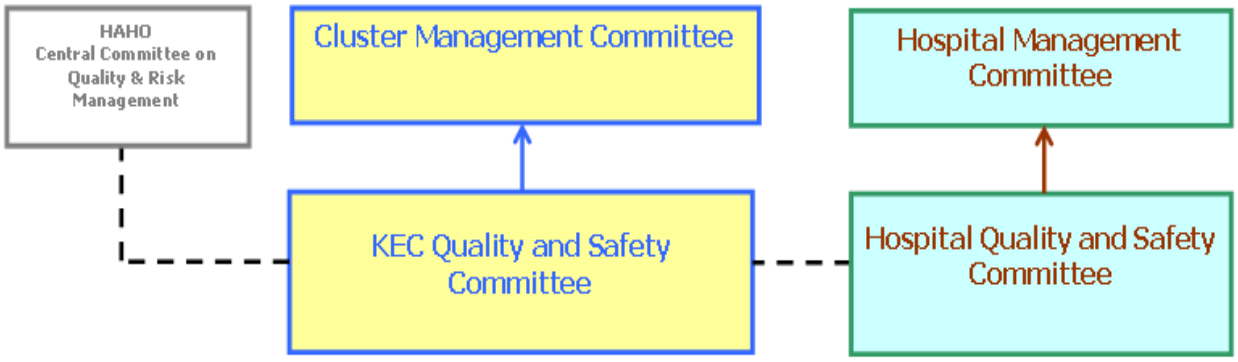
(b). A workgroup convened to work on palliative services in KCC and new workflow are being designed.

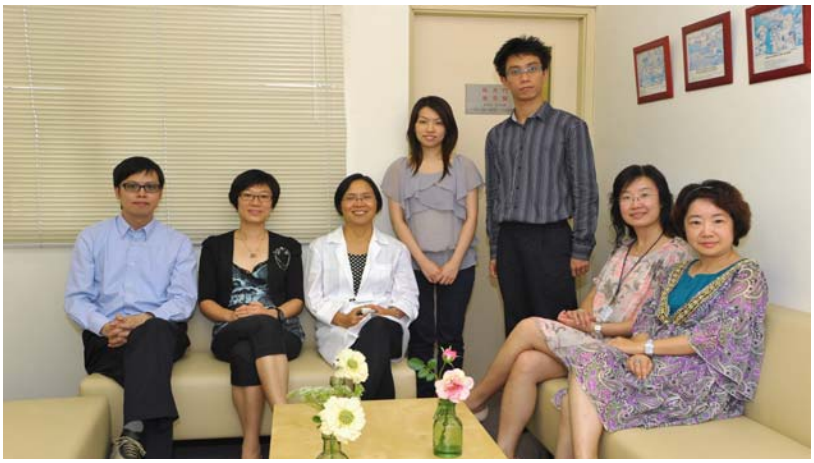
4.5 Surgical safety

(a). The message on the importance of speaking up in OT was conveyed by CGM(N) to OT nurses in a debriefing exercise; and

(b). It has now been implemented thatcompleteness of second check has to be acknowledged verbally by Surgeons as well as Anaesthetists.

## 1. Structure & Initiatives



1.2 Setting up of the KEC Information Security & Privacy Office (IS&PO)

Data security and privacy is one of the key focused areas in our cluster. The management had injected resources to set up the KEC IS&PO in 09/10 with 1 full time APN in place to manage the daily operation. A KEC Policy Statement was signed by CCE. A cluster ISP Committee was also set up to oversee management of the subject area. The committee aimed to establish an engagement mechanism for disseminating key messages in order to abate potential ISP hazards. ISP ambassadors were recruited in each specialty for promoting / enhancing staff awareness and competency.

1.3 KEC Quality Week 2010

To cultivate the concept of CQI in KEC and pave way for future accreditation, the KEC Quality Week 2010 was organized for the period 15 to 19 March 10. One of the focuses of this event was the KEC Quality Conference 2010 held on 15 March 10 under the theme"完善

醫療質安，全賴共同努力 **Quality Healthcare – Everybody's Share".** The conference had successfully delivered a platform for colleagues to share and excel on the quality journey. Apart from 2 keynote lectures, a competition for the best CQI program was also held which had received an overwhelming response from staff of all disciplines.

1.4 Cross Cluster Survey on Standards

As a warm-up exercise for future accreditation process, KEC had organized the 3rd cross cluster survey in Jan 10 with KWC (PMH) and TKOH. There were 4 ACHS criteria underwent the survey process. Summation sessions were held after each survey during which good practices and service gaps were shared. Follow up on those identified gaps were arranged as a means to attain continuous quality improvement.

1.5 Implementation of New SE / SUE policy (Jan 2010)

A series of staff communication forums were held for promulgating the implementation:

(a). UCH Risk Management Committee - 13 Nov 09;

(b). Staff Forum on the New HA Sentinel Events and Serious Untoward Events Policy at TKOH (Video-conference to HHH & UCH) - 17 Nov 09;

(c). Staff Forum on Sentinel Events / Serious Untoward Events Policy at HAHO (Video-conference to HHH, TKOH & UCH) - 20 Nov 09;

(d). Risk Seminar on Serious incidents - Sharing & Learning - 2 Dec 09; and

(e). KEC Risk Management Committee - 11 Dec 09.

1.6 KEC Inter-hospital Transfer

A WG had been set up to review and streamline the KEC Bed Booking System for patients transferring from TKOH/UCH to HHH. By allowing direct electronic communication of bookings and results, the efficiency of patient transfer in terms of turnaround time and booking flexibility had been improved. The project was started in Jun 09 and full launch was

in place from 10 May 10 onwards.

1.7 Inter-Hospital Dispensing of Drugs upon Patient Transfer within KEC

There was process re-engineering on the area with major workflow and improvements summarized as follows:

(a). New work flow from Jul 09 - UCH & TKOH pharmacy would check the discharge prescription against HHH drug formulary. Drugs available in HHH would not be dispensed. A 5-day medication would be dispensed for non-HHH formulary items.

(b). Review conducted in Sept 09 - 129 patients (64%) transferred to HHH needed not to wait for dispensing upon inter-hospital transfer; 94.3% (cost $33,554) of drugs needed not be dispensed upon transfer (minimize possible wastage).

(c). Service improvements brought about by the initiative:

- Standardize and streamline inter-hospital dispensing procedures in KEC;
- Minimize duplicated effort of pharmacies in different hospitals;
- Align drug formulary of 3 hospitals;
- Enhance accountability of the received drugs; and
- Reduce patient waiting time for inter-hospital transfer.

1.8 Mislabelling / Non-labelling of Specimens

A working group was set up in Jul 09 to mitigate risks by means of workflow tracing. Posters were designed and disseminated in order to keep staff alert. A feedback mechanism with the Pathology department was also set up. Relevant progress had been duly reviewed at the 'Lessons Learnt over Breakfast' gathering in Feb 10.

1.9 Surgical Safety

The KEC Risk Management Committee had coordinated implementation of the surgical safety checklist in UCH and TKOH. Post-implementation audit revealed the compliance rate

of UCH and TKOH was around 99.5% and 100% respectively. Areas of improvement of the 2 hospitals had been identified:

(a). UCH - The following information was to be incorporated into the checklist as improvement measures:

- Checking of patient's identity with also the theatre list;
- Surgeons to review any critical / unexpected steps as non-routine steps; and
- Prescription of prophylactic antibiotics at indicated time.

(b). TKOH - Staff awareness was enhanced and practice of site marking was aligned.

1.10 Single Use Device

The KEC SUD Working Group was formed to work with the HA SUD Advisory Group for review of operational needs and funding requirement. In 09/10, the HA Central Reused SUD Database System (Class II Critical & Semi-Critical) was developed with a view to mapping reused SUD items with all cluster hospitals. This system for 6 specialties was completed by around mid-10. The central recurrent funding in 09/10 at $3M for procurement of KEC 8% SUD items had been fully utilized.

For 10/11 upcoming plan, according to the general protocol on reprocessing of SUD in HA hospitals, KEC hospitals would conduct regular audit on reuse of SUD at least once a year to maintain the requisite quality standard. The audit for 10/11 should be completed in 1Q11. The HA Advisory Group on Reuse of SUD would propose policy to confine registration of new SUD (no new item and one-by-one replacement). In line with the direction for phasing out high risk items, HA will send the relevant list to respective COCs for prioritization.

## 2. Risk Prioritization

2.1 Top 10 clinical risks for 2009 / 10 (as reported last year)

| | KEC TOP 10 clinical risks |
|---|---|
| **1** | Patient documentation |
| **2** | Medication incident |
| **3** | Wrong site surgery |
| **4** | Resuscitation |
| **5** | Patient suicide |
| **6** | Restrainer |
| **7** | Inter-hospital transfer |
| **8** | Patient fall |
| **9** | Transfusion |
| **10** | Retained foreign objects |

2.2 Top 10 Non-clinical (operational) risks for 2009 / 10 (as reported last year)

| | Type | KEC TOP 10 operation risks (not necessarily in order of priority) |
|---|---|---|
| **1** | Compliance / IT | Patient data security |
| **2** | Compliance | Mortuary |
| **3** | OSH / Security | Workplace violence |
| **4** | OSH | Manual handling operations |
| **5** | Corporate / Compliance | Compliance of HA related ordinances |
| **6** | Physical resources | Health and safety: Fire |
| **7** | Physical resources | Facility breakdown / Utilization (environmental safety scanning) |
| **8** | IT | Computer virus outbreak led to IT system breakdown |
| **9** | IT | Security breaking through unauthorized wireless LAN led to data leakage |
| **10** | Property / Security | Security and access to wards / departments |

2.3 Top 10 clinical risks for 2010 / 11 (in order of priority)

| | **KEC TOP 10 clinical risks** (in order of priority) |
|---|---|
| **1** | Medication incident |
| **2** | Wrong site surgery |
| **3** | Retained foreign objects |
| **4** | Specimen mislabelling |
| **5** | Patient suicide |
| **6** | Inter-hospital transfer |
| **7** | Patient fall |
| **8** | Patient documentation |
| **9** | Resuscitation |
| **10** | Transfusion |

2.4 Top 10 Non-clinical (operational) risks for 2010 / 11 (not necessarily in order of priority)

| | **Type** | **KEC TOP 10 operation risks (not necessarily in order of priority)** |
|---|---|---|
| **1** | Compliance / IT | Information security |
| **2** | OSH / Security | Workplace violence |
| **3** | Compliance | Mortuary |
| **4** | Corporate / Compliance | Compliance of HA related ordinances |
| **5** | Physical resources | Health and safety: Fire |
| **6** | OSH | Manual handling operations |
| **7** | IT | Visitors requiring medical assistance |
| **8** | Physical resources | Facility breakdown / Utilization (environmental safety scanning) |
| **9** | Property / Security | Security and access to wards / departments |
| **10** | IT | Computer virus outbreak led to IT system breakdown |

## 3. Risk Mitigation

3.1 In line with the development 2009 / 10 KEC Risk Register for both clinical and operational risks, the corresponding risk reduction strategies and programs were identified and monitored. The results are summarized below:

3.2 KEC Review of Clinical Risks for 2009 / 10

| Item | Program name | Action & Result |
|---|---|---|
| 1 | Patient documentation | Audit on Nursing Documentation in KEC<br>(a). UCH Compliance rate: 97.31%;<br>(b). TKOH Compliance rate: 98.93%; and<br>(c). HHH Compliance rate: 98.48%. |
| 2 | Medication incident | Post implementation audit on compliance to Guidelines on Safe Management of Conc. Electrolytes in KEC Hospitals - 100% compliance in KEC hospitals.<br>Re-engineering of the dispensing logistics upon inter-hospital transfer of patients in KEC hospitals.<br>(a). Reviewed in September 2009;<br>(b). 64% of patients transferred to HHH – no drug dispensed; and<br>(c). 94.3% of drugs – no need to dispense upon transfer to HHH. |
| 3 | Wrong site surgery | Introduction of Surgical Safety checklist from Jul 09<br>Audit<br>(a). UCH Compliance rate: 99.8%; and<br>(b). TKOH Compliance rate: 100%. |
| 4 | Restrainer | KEC Risk Seminar was conducted in UCH on 8 July 2009 to share with hospital staff on the practice of physical restraint.<br>The prevalence survey on physical restraint was conducted in KEC hospitals on 10 March 2010. The objectives of the prevalence survey on physical restraint are: |

| Item | Program name | Action & Result |
|---|---|---|
| | | (a). To identify the prevalence of physical restraint in hospital to obtain the background information on need for physical restraint;<br>(b). To collect information on the prevalence on utilization of physical restraint devices; and<br>(c). To recommend strategies for continuous improvement.<br>The restraint rate of UCH (8.96%) and TKOH (10.69%) was comparable to Group 1 of HA hospitals (8.82%). The restraint rate of HHH (27.25%) was comparable to Group 2 of HA hospitals (15.25%). The major indications for restraint were prevention of patient fall (UCH & TKOH) and prevention of patient from tampering with medical devices (UCH, TKOH & HHH). The prevalence survey provides trend data for review. |
| 5 | Inter-hospital transfer | Process re-engineering for inter-hospital dispensing of drugs upon patient transfer within KEC.<br>(a). 129 patients (64%) transferred to HHH did not need to wait for dispensing upon inter-hospital transfer; and<br>(b). 94.3% (cost $33,554) of drugs did not need to be dispensed upon transfer – minimize possible wastage. |
| 6 | Transfusion | Modification of GCRS BB module to include automatic retrieval of relevant laboratory results in T&S and component requesting screens for KEC.<br>Completed and live run on 6th July 09. |
| 7 | Retained foreign objects | Introduction of Surgical Safety checklist from Jul 09<br>Audit<br>(a). UCH Compliance rate: 99.47%; and<br>(b). TKOH Compliance rate: 100%. |

3.3 Review of Operational Risks for 2009 / 10

<table>
<tr><th>Item</th><th>Program name</th><th>Action & Result</th></tr>
<tr><td>1</td><td>Patient data security</td><td>Website - The hit rate was around 3000 since Jan 2010.<br>Workshop -
<table>
<tr><td>Seminar</td><td colspan="2">YOUSEE Channel ONE</td></tr>
<tr><td>Attendance</td><td>Watched live</td><td>Watched replay</td></tr>
<tr><td>157</td><td>58</td><td>98</td></tr>
</table>
Audit - Compliance rate for clinical & non-clinical departments were 98.97% & 100% respectively.</td></tr>
<tr><td>2</td><td>Workplace violence</td><td>Cluster Security Committee - Increased awareness, experience sharing and aligned standards/good practices.<br>Training – 2 level I courses with 548 participants & 2 level II courses with 31 participants.<br>Risk Assessment Checklist - Reduce WV incidents by 11.7% in comparison to 2008/09 (68 to 60 cases).</td></tr>
<tr><td>3</td><td>Manual handling operations</td><td>(a). Safety program conducted with follow-up recommendations which will be consolidated in 2010/11;<br>(b). 10 classes of MHO refresher trainings with 1366 participants;<br>(c). 8 classes MHO Assessor Training with 175 participants;<br>(d). 2 video training materials for hospital beds and stretcher;<br>(e). Reduce MHO incidents by 10.8% in comparison to 2008/09 (111 to 99 cases).</td></tr>
<tr><td>4</td><td>Compliance of HA related ordinances</td><td>Full compliance reported to HA in Dec 2009.</td></tr>
<tr><td>5</td><td>Health and safety: Fire</td><td>The Cluster Fire Safety Committee ensured awareness, experience sharing and aligned standards/good practices.</td></tr>
</table>

| Item | Program name | Action & Result |
|---|---|---|
| 6 | Facility breakdown / Utilization (environmental safety scanning) | Planned maintenance with periodic drill on contingency plan in event of facility breakdown - Actual annual availability of facilities was above the targeted annual availability. |
| 7 | Computer virus outbreak led to IT system breakdown | All KEC computers had been installed with SEP 11. Besides virus and spyware protection, the software also provided a better rootkit detection/removal, cookie cleanup, proactive threat protection against zero-day attacks with behavioural-based analysis. |
| 8 | Security breaking through unauthorized wireless LAN led to data leakage | All HA wireless LAN access points and all registered wireless computers in KEC were upgraded to WPA2. Only registered users and their registered wireless computer could gain access to HA wireless LAN. |

3.4 Planning for 2010/11 programs

**KEC Clinical Risks for 2010 / 11**

| Risk | Top 10 clinical risks | Action Plan |
|---|---|---|
| 1. | Medication incident | (a). Strategies to reduce incidents on prescribing / administering "KDA" drug to patients; and<br>(b). Minimize risks in the use of "Neuromuscular Blocking Agents". |
| 2. | Wrong site surgery | OR of TKOH<br>(a). Establish, implement and conduct audit on "Surgical Safety Checklist";<br>OR of UCH<br>(b). Conduct audit on "Surgical Safety Checklist"; and<br>(c). Develop "Surgical Safety Checklist" in Chinese version to facilitate better verbal communication |

| Risk | Top 10 clinical risks | Action Plan |
|---|---|---|
| | | among surgical team members. |
| 3. | Retained foreign objects | OR of TKOH & UCH<br>(a). Launch web quiz on HAHO periop nursing standard of "Counting of Accountable Items used during Operative Procedures" as a self-test for every OR nurse;<br>(b). Develop intraopertive "Count Sheet" as medical record and for hospital accreditation; and<br>(c). Devise "Gauze Count Bag" to eliminate swab rack in OT room and to facilitate infection control & counting, and for hospital accreditation. |
| 4. | Specimen mislabelling | Establish clear instruction for users to adopt right specimen containers for specimen collection. |
| 5. | Patient suicide | (a). Adopt HAHO initiative to further strengthen the existing systems for minimizing suicide incidence; and<br>(b). Incorporate the suicide assessment tool recommended by the "HAHO TF on Patient Suicide" for frontline staff to early detect those patients with high suicidal risk in general wards of HHH, TKOH & UCH. |
| 6. | Inter-hospital transfer | Streamline HHH Bed Booking System to facilitate patient transfer from UCH / TKOH to HHH. |
| 7. | Patient fall | *Reduction of fall risk:*<br>(a). Assessment of fall risk will be conducted for all inpatients in 3 cluster hospitals;<br>(b). Individual clinical unit is requested to monitor its own |

| Risk | Top 10 clinical risks | Action Plan |
|---|---|---|
| | | fall rate and recommend improvement plans;<br>(c). Fall rate will be monitored in individual hospital and KEC NQRM; and<br>(d). Sharing of good practices among 3 hospitals. |
| 8. | Patient documentation | *Enhancement of nursing documentation:*<br>(a). Standardize the content of nursing observation chart in KEC;<br>(b). Pilot Patient Assessment System in UCH; and<br>(c). Evaluate the audit result of "Nursing Documentation" completed in 1Q10 and recommend improvement actions. |
| 9. | Resuscitation<br>(Ensure and monitor the resuscitation of patients both within the hospital complex and in the hospital vicinity) | (a). Implementation :<br>● Staff education<br>Scheduled training on BLS & recognition of cardiac arrest and conditions requiring resuscitation; and<br>● Staff awareness<br>Define catchment areas and corresponding response teams; availability of resuscitation drugs and equipment; program flowchart / algorithm / telephone hotline for activating the response team & periodic program reminders by posters / seminars / website and drills.<br>(b). Program monitoring<br>● Capture cases and perform regular audit by reviewing the resuscitation records to ascertain |

| Risk | Top 10 clinical risks | Action Plan |
|---|---|---|
| | | compliance;<br>● Availability of scheduled training on BLS; and<br>● Periodic program reminders to staff. |
| 10. | Transfusion | Internal audit on compliance with requirement for performing ABO on new cases by 2 independent technical staff during office hours. |

**Operational Risks for 2010 / 11 (not necessarily in order of priority)**

| Risk | Top 10 risks | Action Plan |
|---|---|---|
| 1. | Information security | (a). KEC (UCH, TKOH & HHH) Annual ISP Audit; and<br>(b). KEC e-media Disposal Day. |
| 2. | Workplace violence | (a). Issue Security Newsletter to enhance awareness & experience sharing;<br>(b). Security Seminar by Crime Prevention Bureau;<br>(c). Security Training in collaboration with PWH;<br>(d). Patient Restraint Training coordinated by Psy Unit;<br>(e). Purchase of forearm cuff for security team;<br>(f). WV Training (level I + physical restrainer skill); and<br>(g). Consolidate recommendations made in last risk assessment at high risk departments. |
| 3. | Mortuary | Internal audit on compliance with SOP on reception and issuing of bodies. |

| | | |
|---|---|---|
| 4. | Compliance of HA related ordinances | (a). Update subject officers about the guidelines and related implementation documents of the HA ordinances under their scope of operations; and<br>(b). Consolidate returns from KEC subject officers to ensure the HA related ordinances are complied with on an on-going basis. |
| 5. | Health and safety: Fire | (a). Cluster Fire Safety Committee to align standards & practice;<br>(b). Develop fire safety orientation checklist for induction and refresher training purpose at frontline;<br>(c). Standardize design of fire evacuation plan;<br>(d). Design fire inspection checklist for routine inspection; and<br>(e). Coordinate Fire Safety Ambassador Training. |
| 6. | Manual handling operations | (a). Form local support network for MHO & DSE;<br>(b). Conduct regular MHO refresher training to supporting colleagues who are at high risks;<br>(c). Conduct annual MHO refresher training to MHO coordinator/subject officer;<br>(d). Conduct OSH/MHO training to newly recruited nursing colleagues; and<br>(e). Produce training material in MHO assisted aids/equipment. |
| 7. | Visitors requiring medical assistance | Conduct drill on relevant incidence. |

| | | |
|---|---|---|
| 8. | Facility breakdown / Utilization (environmental safety scanning) | <u>Medical Equipment</u><br>(a). Annual utilization report for major and selected minor equipment;<br>(b). Perform annual equipment breakdown analysis (on major and minor equipment) to review breakdown rate of individual equipment for management review;<br>(c). Aged major and minor equipment (e.g, equipment aged over 10 years) with high breakdown rate and / or no maintenance support will be accorded with higher priority within KEC in the CBV 3-5 year equipment planning exercise.<br><u>Hospital Engineering Systems</u><br>(a). Enhance planned maintenance programme;<br>(b). Conduct drill on contingency plan regularly; and<br>(c). Review plant and facility utilization profile and backup capacity. |
| 9. | Security and access to wards / departments | (a). Drill on contingency plan for Access Control System breakdown;<br>(b). Review keeping and management of door keys in Security Department;<br>(c). Review the key copying procedure; and<br>(d). Set up SOP for key management and ACS card management. |
| 10. | Computer virus outbreak led to IT system breakdown | Based on the weekly PC compliance reports from HOIT, local ITs will take immediate action to update the virus definition files on those non-compliance computers. |

## 4. Learning & Sharing Information

4.1 The annual quality project "KEC Quality Week" reinforces the CQI concept in daily operational practice.

4.2 The bi-annual Cross Hospital Pre-accreditation Survey arouses staff awareness on current position and stimulates initiative for improvement.

4.3 The newsletter 'AIRS Monthly' shares with colleagues on matters and activities related to quality & safety.

4.4 The cluster and hospital risk management committees discuss on important quality & risk areas and deliberate on corresponding Q&S policies & strategies.

4.5 The executive safety walk round organized at monthly interval enables direct interface between management and frontline staff to identify room for service improvement.

4.6 The cluster executive patient safety walk round (around 3 times a year) strengthens support to patient safety.

4.7 The monthly risk seminar, ongoing quality forums and training workshops enable staff to update and gain skills and knowledge on quality and risk related areas.

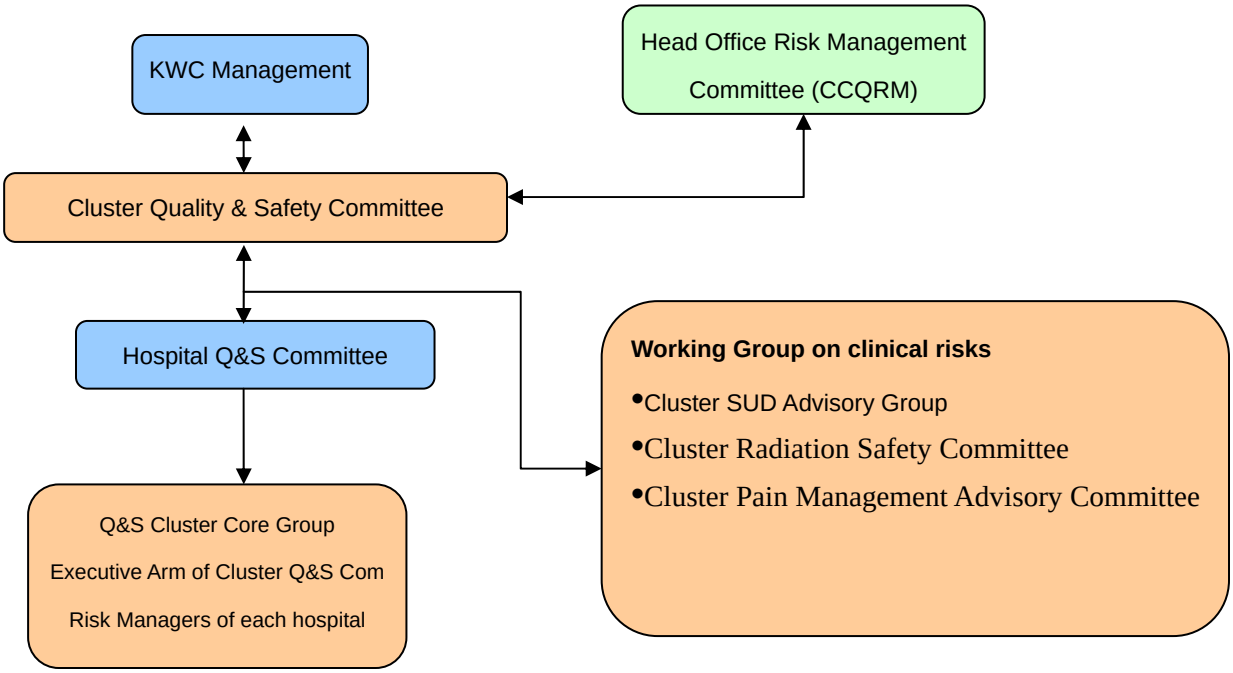
4.8 The 'lessons learnt over breakfast' gathering provides a platform for stakeholders to deliberate and share strategies for improving service areas with perceived risk.

4.9 The root cause analysis reports identify learning points for staff sharing and service improvement.

4.10 The various audit projects aims at closing the service gap for quality improvement.

4.11 The quarterly AIRS trend helps ascertain and monitor risk areas for formulation of appropriate measures.

## 1. Structure & Initiatives




This report is a 12 month review on the areas related to quality and patient safety in Kowloon West Cluster (KWC) from 1 April 2009 to 31 March 2010.

The Cluster Risk Management Committee had renamed as Cluster Quality & Safety Committee since August 2009. The Committee meets quarterly to oversee all the quality and patient safety issues, such as developing patient safety strategies, standards and policies, facilitating patient safety programs at cluster and hospital levels, and cultivating a safety culture through training, sharing and monitoring. A Cluster Quality and Safety Core Group are in place to serve as an executive arm to Cluster Q&S Group members are Hospital Coordinators of Quality & Risk Management from KWC hospitals. Working Groups were established to oversee risk reduction priorities and coordinate the activities across the hospitals in the cluster.

With good collaboration among members of the team, KWC had successfully launched a number of quality and patient safety initiatives with effective measures to improve patient safety in these hospitals. Regular forums and training workshops were held for the staff in the cluster.

The first part of this report covered the major quality improvement initiatives implemented in KWC for 2009-2010. The second part covered the incident reporting data & trend analysis. The final part is about quality improvement projects and training activities.

## 1.2 Hospital Accreditation Program

Workshops on the document control system were conducted by external consultant (HK QAA) with around 100 managers attended. Preparation for Hospital Accreditation was in progress in CMC. 40 department coordinators attended 2.5 days ACHS workshop and specialty workshops. Briefing on ACHS framework and documentation system. IT training on hosting of departmental webpage was done. Visit by ACHS surveyor and Quality Managers in July 09. Communication via Road show to number of clinical and non-clinical departments/units and Briefing on progress of accreditation project in Sept 09

CMC is one of the pilot hospitals going through the first Hospital Accreditation. Active

staff engagement & quality improvement is underway.


(a). Briefing session on accreditation project to sponsors, project team members and dept co-ordinators in CMC

(b). Cross hospital survey: TMH, UCH, PMH on 6 ACHS Standards


(c). Preparation for the next Cross Hospital Survey between UCH, TKOH & PMH

## 1.3 Promotion of Patient Safety Culture via Training & Sharing

Various programs had been implemented to enhance staff knowledge and skill related to patient safety:

(a). Training on Risk Management & Patient safety for all new residents and nurses were conducted between July and September 2009



(b). Training sessions on use of UPI to new residents were held every quarterly

(c). RCA training workshops were conducted. External expert and hospital Quality Manager

(d). Cluster Quality & Risk management Forum were held to share the experience of implementation of quality programs.


(e). A Lean Management workshop for KWC staff, 10 Lean projects were formed in respective hospitals.


(f). A visit to Singapore hospitals to learn the experience of application of Lean management & other quality initiatives. The group was lead by Cluster Chief Executive and other senior clinicians.


(g). A Workshop namely Failure Mode Effect Analysis (FMEA) for KWC senior nurses, Pharmacists and doctors were organized in February 2009. The total attendance was 50. FMEA is a proactive tool, technique and quality method that enables the identification and prevention of process errors before they occur

(h). Audits on prevention of fall, administration of IV infusion, catheter care, management of re-use SUD and Safe Surgery would be completed within 2009-10

## 2. Risk Prioritization

2.1 Table 1: Ten Priority Risk Areas for 2009/10

| 10 Priority Risk Areas for 2009/10 | |
|---|---|
| 1 | **Medication administration**<br>- non-compliance of AOM standards and patient identification guidelines. |
| 2 | **Medication dispensing**<br>- look-alike or sound-alike drug names and packaging;<br>- given to wrong patients |
| 3 | **Patient Identification**<br>- care given to wrong patient |
| 4 | **Patient care**<br>**- fall** with serious injury |
| 5 | **Infection Control**<br>- Infection control practice non-compliance |
| 6 | **Manual Handling**<br>- Lifting |

2.2 Table 2: Ten Priority Risk Areas for 2010/2011

| 10 Priority Risk Areas for 2010/2011 | |
|---|---|
| 1 | **Patient care**<br>**- fall with serious injury** |
| 2 | **Medication Safety : patient identification, Drug Allergy, high risk medication and LASA medication** |
| 3 | **Medication Safety : Drug reconciliation on admission / discharge** |
| 4 | **Staff (OSH) Injured whilst lifting or carrying** |
| 5 | **Infection Control: Infection control practice compliance** |
| 6 | **Patient Treatment, Care & Monitoring : Patient identification** |
| 7 | **Patient Examination & Assessment : Care of acute deterioration patients** |

### 3. Risk Mitigation

Risk reduction strategies had been in place for mitigation of top risks identified for the cluster in 09-10. Progress for the 12 months is listed:

| **KWC Risk Mitigation Program on HA Top Risks for 09-10** | |
|---|---|
| **Patient / Label Misidentification** | |
| Program name | Action & Result |
| Pilot bar-coding technology in other blood tests<br>  | (a). UPI Phase III was implemented in CMC since November 08. Other KWC hospitals had rolled out to some wards in March 2010.<br>(b). A cluster working group was formed to plan & monitor the progress of roll out process including staff training & monitoring of the compliance.<br>(c). It was planned to have full implementation when the new devices arrived.<br>(d). Quality audit to Hospital Officers to ensure proper procedure for cross matching are followed |
| Safe Surgery | (a). Cluster Safe Surgery Workgroup was set up since 2007<br>(b). Implementation of the HA Surgical Safety Policy corresponding to the HAHO in HA hospitals wef 1 June 2009.<br>(c). Piloted the WHO Safe Surgery Checklists Program in KWH<br>(d). Safe Surgery audit conducted at 5 Operation theatres in KWC hospitals in 10/3 to 23/3/10. 134 samples recruited with 99.6% compliance rate achieved.<br>(e). Plan for cluster audit on Safe Surgery and Informed Consent in every alternate year<br>(f). Piloted Bedside Time-out in M&G Department in PMH |

| Medication Safety | |
|---|---|
| Medication safety | Enhance safe practices<br>(a). Reviewed the stock of high risk medication and Dangerous in-ward in PMH<br>(b). Announcement to engage patient to corporation during medication administration<br>(c). Pilot Checklist upon discharge focus on medication on discharge in PMH<br>(d). A new pediatric drug dilution chart is established and adopted in Department of Pediatrics, KWH & PMH<br>(e). Daily monitoring and recording on temperature of drug refrigerator in Clinical Departments in WTSH & PMH<br>(f). Monthly check of staff's compliance to drug storage and return drug policy by supervisors in TBCU, WTSH<br>(g). Designated storage place for IV antibiotics with colour code in TBCU, WTSH<br>(h). Update the Drug Allergy Reference card in PMH<br>(i). Enhance staff competency<br>(j). Strengthened the assessment on medication administration for all nursing staff. Reviewed on process of Administration of Medication in WTSH<br>(k). Annual inspection on Safe Medication practices conducted in PMH<br>(l). Conducted Audit on "Administration of Oral Medication" and "Intravenous Medication" in WTSH<br>(m). Learning & sharing<br>(n). Seminar for drug administration medication and safety in |

| | |
|---|---|
| | using of infusion pump in PMH<br>(o). PA announcement before medication round in PMH & WTSH |
| **Infection Control** | |
| Response to HSI | (a). Revised the response plan for ID outbreaks in KWC<br>(b). Drill on HSI outbreak conducted Enhance cluster coordination and staff resilience through risk management training & visits to IDC |
| Hand hygiene, SSI | (a). Monitoring program on hand hygiene and SSI in PMH<br>(b). Organized Hand Hygiene Promotion Week in KWC hospitals<br>(c). Conducted audit on “Hand Hygiene” |
| Clinical waste | (a). Set up of clinical waste depot in WTSH<br>(b). Audit on proper waste management in PMH |
| **Patient Suicide** | |
| Suicide prevention strategies | (a). Cluster Working Group Formed in March 09. Chaired by CMC COS(M&G) and Cluster RM core team members and rep from each hospitals<br>(b). Share the cases and learning points among the groups<br>(c). Organized 4 training sessions in KWC to promote the awareness of health care providers in the cluster |
| **Patient Fall** | |
| Review on risk assessment tools | (a). Monitor the trend. Fall rates in hospital were monitored by individual Central Nursing Department. Measures were implemented and regular reviewed.<br>(b). Conduct aggregated RCA for patient with serious outcome after falls.<br>(c). Video show on during visiting hours to communicate the risk of fall to patients & relatives<br>(d). Assign Fall-link nurses in ward to promote patient safety and |

| | |
|---|---|
| | staff awareness in WTSH & KWH<br>(e). Started investigation of fall cases by Shift Supervisor / Fall-link Nurse using "跌倒分折表" in WTSH and PMH<br>(f). Conducted sharing forum on Fall Data with frontline nurses every quarterly in WTSH |
| **Pressure Sore** | |
| Review pressure sore prevention programs | (a). Pressure ulcer & physical restraint surveillance program was conducted<br>(b). Pressure ulcer rates were benchmarked<br>(c). Regular training and sharing on good practices were conducted<br>(d). For early identification and better prevention of pressure sore development, Braden scale is used for risk identification in KWH wef 1/3/2010.<br>(e). Adopted Braden scale as risk assessment tool for identifying at risk patients in WTSH<br>(f). Implemented use of heel protectors / elevate lower limbs for patients with mobility / activity ≤ 2 in pressure sore risk assessment in WTSH<br>(g). Conducted briefing on Braden scale risk assessment tool in WTSH<br>(h). Conducted sharing forum on pressure sore incidents every quarterly to frontline nurses in WTSH |
| **Patient Assessment** | |
| Develop system for the effective identification of a deteriorating | (a). Working group was formed with members from Head Office Doctors Work Reform Team, HO Nursing Section and representatives from medical & nursing staff from cluster |

| | |
|---|---|
| patient | hospitals was formed in Sept 09.<br>(b). Electronic Patient Assessment System was implemented in 2 wards,<br>(c). Study on the use of MEWS in KWH, PMH & YCH general medical & Surgical wards would be conducted by 1Q 10 |
| **Communication between Caregivers** | |
| Use of SBAR as a common communication tools between caregivers | (a). Briefing sessions conducted and implemented in various clinical units.<br>(b). Use of SBAR as communication tools for patient condition and shift handover was introduced in most hospitals |
| **Documentation** | |
| Document Control | (a). Workshop on Approach to System Documentation was organized in June and July 09.<br>(b). Document control system piloted in CMC since Aug 09 |
| **Personal Data (Privacy) Ordinance** | |
| Personal Data (Privacy) Ordinance | (a). Awareness program to enhance staff knowledge on the new ordinance held<br>(b). Special designed bags for protection of patient data during transport<br>(c). Incident alert was issue and communicated to all staff |
| **Building Up Safety Culture** | |
| Patient safety around to promote safety culture in YCH & PMH | (a). Regular patient safety rounds were conducted<br>(b). Issued identified were followed up. |
| Forum on SE and AIRS was held in June | Forums to provide feedback on learning from incidents were held quarterly |

| | |
|---|---|
| 09. | |
| Promote the culture on continuous improvement via Lean Management / Six Sigma training | (a). Two training sessions were held with 11 projects started<br>(b). Sharing on lean project conducted<br>(c). 30 staff attended the Six Sigma Green Belt Projects with 5 Six Sigma projects completed |
| **Early Defibrillation Program** | |
| Early Defibrillation program | (a). Response plan for patient with cardiac arrest revised<br>(b). Replaced all the defibrillators with AED functions in wards<br>(c). More than 95% of PMH nursing staff and 50% of allied health staff process valid BLS providers certification<br>(d). Security staff were trained and capable to use AED<br>(e). Audit for timeliness of resuscitation<br>(f). Qualified nurse will initiate defibrillation |

## 4. Learning & Sharing Information

### 4.1 Programs / Initiatives related to Patient Safety

(a). 3-level training for nursing staff to operate the new Renal Replacement Therapy Machine provided by ICU, KWH

(b). Disaster Plan and Pandemic Contingency Plan were revised by ICU, KWH

(c). Baby abduction drill held by Administrative Services Department, Department of O&G and Paediatrics KWH

(d). CPR drill performed by ICU with Allied Health Department, KWH

(e). Security guidelines were reviewed and updated by Administrative Services Department, KWH

(f). Minimize tracheostomised inpatients aspirating foods/drinks during swallow assessments by Speech Therapy Unit KWH

(g). Alert sign for vulnerable / severe osteoporotic patients in Department of O&T, KWH

(h). Drafting of Departmental Risk Management Release on Radiation Safety by Radiology – Practice of ALARA and Lead Protection Cover in Pediatric Radiography

(i). Consultation and feedback from frontline on CMS Breakdown Contingency Plan

(j). Fever room ventilation checking in all non –DFC (Designated Flu clinics) & DFC

- Update of electronic nursing discharge summary for psychiatric general adult patients.

  Integrate sub-specialty i.e. child & adolescent, elderly and learning disability into nursing discharge summary.

(k). Patient in private clothing in KCH– second phase

(l). Communication Drill conducted by AED, KWH:

(m). In order to have smooth operation for large number of victims in AEDs of HK related to the coming East Asian Games, a drill was conducted within 16 AEDs in HK. This drill allowed A&E staff of different hospital to capture patients' information effectively, and it was completed successfully within one hour.

(n). 5 Sharing sessions on Emergency Airway Management for all ICU nurses was held by

ICU, KWH

- Management of A-Sheath after the patient have Embolectomy was standardized by ICU to ensure patient safety

(o). Fire Drill and bomb threat drill conducted by Administrative Services Department, KWH

(p). Resuscitation drill conducted in OT, KWH

(q). Departmental Guideline on Safe Handling of Continuous Epidural Analgesia was reviewed and training for nursing staff was conducted in Department of Surgery, KWH

(r). User guide and troubleshooting references cue cards were updated and attached to all infusion pumps & syringe pumps in Private Ward, KWH

**4.2 Programs / Initiatives related to Infection Control**

(a). Working group on prevention of HC MRSA infection in CMC

(b). Blood culture contamination surveillance and audit was conducted by KWH/ WTSH and all departments in PMH

(c). Internal training by IC nurses to all OT staff held by Department of Anaes &OTS, KWH

(d). Full compliance of mandatory infection control training during HSI was enhanced by Department of Pathology., KWH

(e). Procedure guideline for collecting water specimen from Water Purification System to ensure patient safety during Haemodialysis was revised by ICU, KWH

(f). Operation procedures under HSI alert were reviewed by Administrative Services Department, KWH

(g). Provision of education talk on collection of blood culture & NPA by ICN in Private Ward, KWH

(h). Ensure adequate PPE supplies and training for infection control by Speech Therapy Unit, KWH

(i). CSF sampling guideline was revised in ICU, KWH

(j). Water Filters (1 micro & 0.2 micro) was installed in ICU, KWH to filter tap-water for rinsing Bronchoscopes after Cidex-OPA disinfection

(k). Clinical waste compliance checked by Administrative Service Department, KWH

(l). Ensure adequate PPE supplies & training for Infection Control in Speech Therapy Unit, KWH

(m). 2-month Hand hygiene Audit conducted by Infection Control Unit, KWH

(n). Adequate PPE supplies ensured and training for infection control conducted in Speech Therapy Unit, KWH

(o). Review on operation procedures under HSI alert in WTSH

(p). Set up of clinical waste depot in WTSH

(q). Organize Hand hygiene Promotion Week (220 staff and 15 wards / departments / units participated the activities) in WTSH

**4.3 Programs / Initiatives related to OSH**

(a). OSH Safe Management System were reviewed in PMH .

(b). Conducted SMS assessment to clinical areas. Overall result encouraging, compliancy

(c). Assessment and Inspection:

- Campaign in PMH on of Most Reliable Unit “靠得住單位”

(d). Safety Culture Promotion:

- KWC hospitals would consider to apply for the WHO International Safe Workplace Programme (ISWP) in 2010-2011.

(e). OSH team centralized the Cytotoxic Waste Disposal procedure in PMH.

(f). Laser Safety Working Group planned to conduct Cross Department Inspection in 2Q and one Paediatric staff was sponsored to attend Laser Safety Training in OSHC. Chemical Safety Road Show conducted in YCH & OLMHon 2/2 with 358 participants

**4.4 Programs / Initiatives related to Patient Fall**

(a). Post delivery / operation clients were escorted on her first visit to washroom or whenever necessary in Department of O&G, KWH / PMH

(b). Fall Prevention Working Group was re-organized with multidisciplinary team.

### 4.5 Programs / Initiatives related to Medication Safety

(a). A new pediatric drug dilution chart is established and adopted in Department of Pediatrics

(b). Briefing: Nursing audit on administration of IV medications using IV / syringe pump

(c). FEMA on patients on Metformine undergoing radiology procedures with contrast conducted in Department of Surgery, PMH

(d). Sharing of safety use of infusion pumps in ICU, Paed & Oncology in PMH

(e). Conducted annual medication safety inspection round in PMH

(f). Audit on standard procedures for patient on home leave in KCH

(g). KCH Hospital-wide audit on drug management

(h). Medication safety in WTSH

- Monthly check on staff's compliance to drug storage and return drug policy by supervisors in TBCU
- Started daily monitoring and recording on temperature of drug refrigerator in Clinical Departments

### 4.6 Programs / Initiatives related to Critical care

(a). Standardized the hospital wide e-trolley checking record

(b). Launched the Early Defibrillation Program in all clinical areas

(c). Conducted drill in transporting patient from SOPC to A&E

(d). Briefing on use of AED to security staff

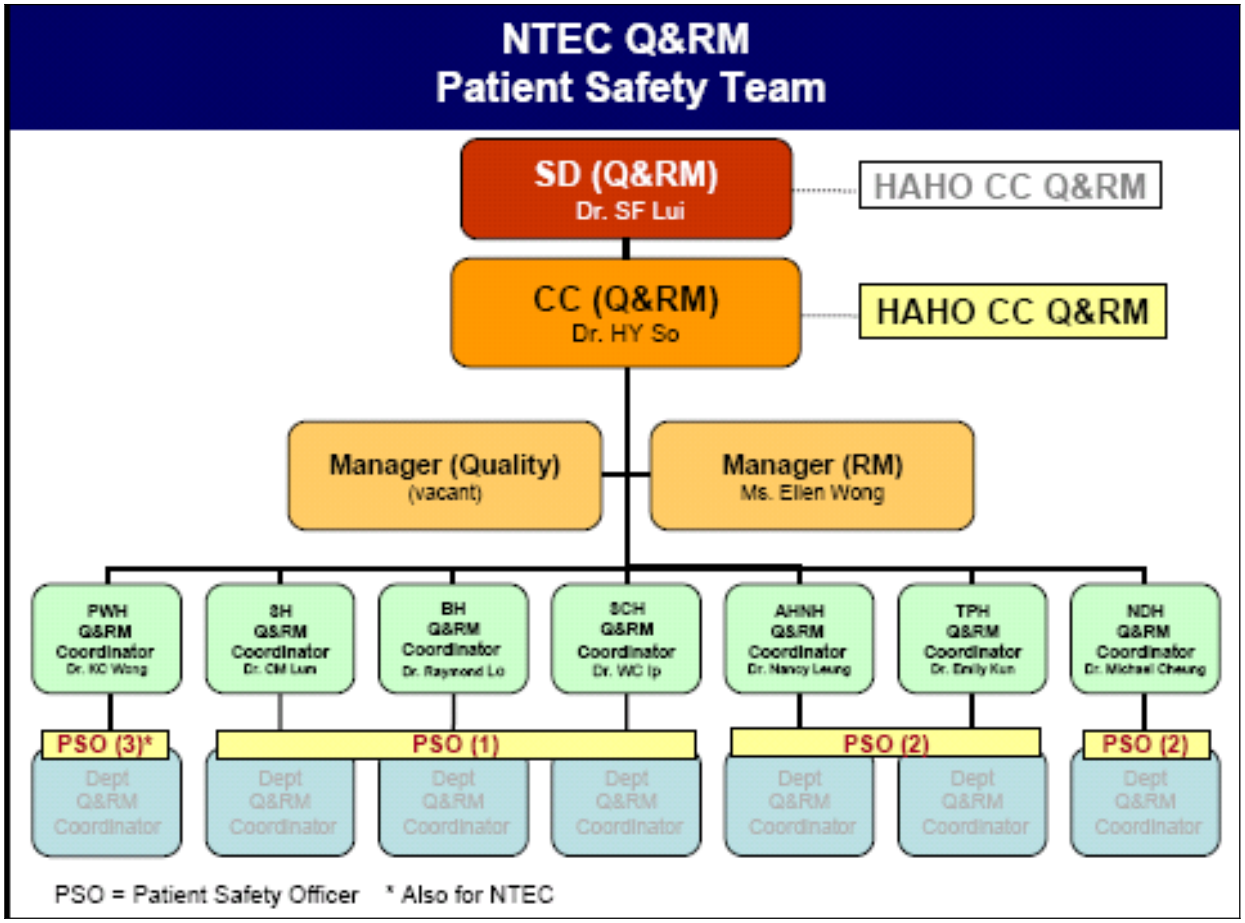
(e). CPR drill in all wards,

(f). Transfer of critically patients was audited by Department of Neurosurgery, KWH and all wards in PMH

(g). Resuscitation chart review for all patient undergoing CPR

(h). Preparation list revised and experience sharing for escort patient to PMH for MRI was conducted by ICU, KWH

## 1. Structure & Initiatives




**NTEC Patient Safety Team**

3 **Patient Safety Officer (PSO)** of RN grade joined the existing team of 5 PSO (APN grade) on 1 October 2009. They are part of the NTEC Patient Safety Team (together with the Cluster Q&RM Coordinator / Manager and Hospital Q&RM coordinators).

1.2 Safety Culture

(a) Patient Safety Culture Survey

All NTEC Hospitals joined this corporate-wide survey conducted in January 2010. The response rate of NTEC was 51.9% (HA overall response rate was 42.6%). The 4 composites in which NTEC scored high were: teamwork within units (68%), management support for patient safety (61%), supervisor/manager expectations and actions promoting safety (58%), as well as organizational learning, continuous improvement (57%). The 4 composite scores which were scored substantially lower than AHQR (an international benchmark) and required attention were: overall perceptions of patient safety (42%), communication openness (31%), staffing (27%), and non-punitive response to error (17%)

(b) Incident Decision Tree

The Q&S team worked together with the HR department in the deliberation on the use of the Incident Decision Tree to appropriately attribute the accountability and responsibility of a staff for an occurred adverse incident. After extensive briefing, the process is being implemented across NTEC since October 2009.

1.3 Safety Design and Practice

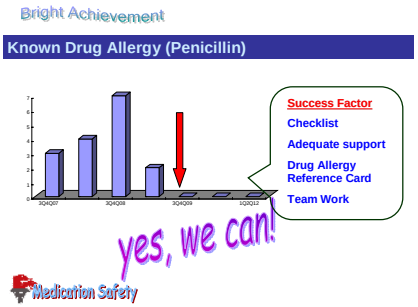
(a) FMEA approach to review safety issues

The 8 groups formed in 2008 had recommended or completed risk reduction programs designed based on analysis of the selected process using FMEA methodology.

- **Retained instrument/gauze** –procedures on gauze counting for main OT were revised. Policy for Gauze Counting in main OT and minor OT were drafted.
- **Naso-gastric (NG) tube:** policy on NG tube management including the checking of tube integrity upon removal was promulgated on 1st Aug, 2010.
- NTEC Policy on the safe use of **concentrated potassium chloride** for paediatric was promulgated on 1st November, 2009.

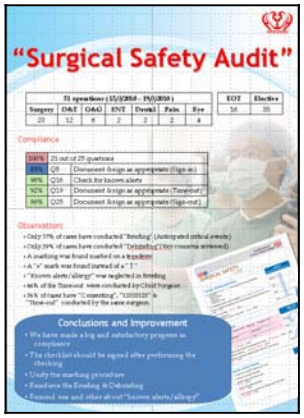
- NTEC Policy to prevent the prescription of antibiotics to patient with **known drug allergy** was promulgated on 3rd August 2009 in all in-patient wards in NTEC. An audit conducted in November 2009 showed good compliance. No incident related to known drug allergy was reported since promulgation of the policy.

**Check List**


- In response to the World Health Organization program, the PWH Surgical Department established the safe surgery procedure by using "123 Safe Surgery 123"approach. The framework was adopted in NTEC with effect from 1 October 2009. Audit was conducted in March 2010 in all main OT of PWH, AHNH and NDH. The overall compliance rate was 98.8%.

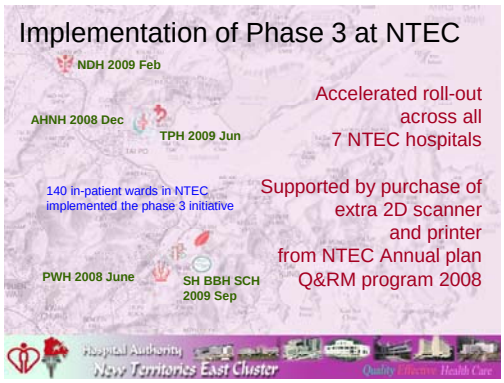
NTEC Safe Surgery Checklist

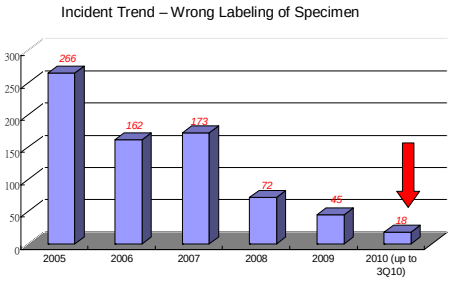




(b) Roll out of phase III of UPI (Unique Patient Identification) program

Unique Patient Identification using 2D barcode system for all specimens was rolled out to TPH, SH, BBH, SCH in June and September 2009, and that indicated the completion in roll-out of phase III to all in-patient wards in NTEC hospitals. The result of phase III

was most encouraging, as it has virtually abolished error involving use of wrong patient specimen label. On 1st December 2009, UPI program was piloted in the AED of NDH. All AED attendants had 2D barcode wristband applied at the triage station for purposes of patient identification and generating label for specimen label. The work process was found to be smooth and feedbacks were positive.




1.4 Staff Engagement

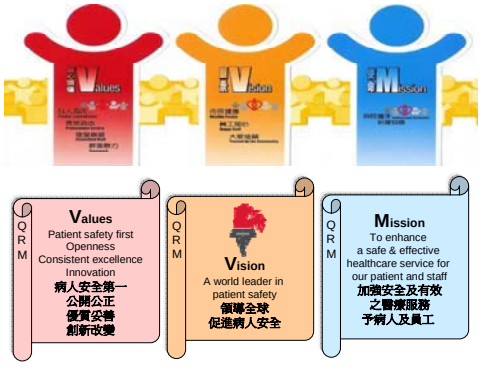
(a) NTEC Quality and Patient Safety Week – October 2009

The theme of the NTEC Quality and Patient Safety Week in 2009 was “From Risk to Quality”. Activities around the theme were organized in all 7 NTEC hospitals. Each hospital also selected the best program(s) for presentation at the cluster quality presentation forum held on 27 October 2009, which was attended by 320 staff. Feedbacks were encouraging.



(b) NTEC Strategic Planning workshop on Quality & Safety - 19 September 2009

60 staff of different grade, profession and from all 7 hospitals within the cluster joined together to work out the direction for quality and safety. Key issues discussed included reporting culture, learning and sharing, staff engagement, patient engagement and safety versus efficiency. The group also discussed and established the followings to be the core values behind the Q&S movement in NTEC: ***Patient safety first***, ***Openness***, ***Consistent excellence***, and ***Innovation***.




(c) Hospital Safety Walk Rounds

Hospital Safety Walk Rounds were conducted in hospitals within the cluster since 2009. In PWH, 26 sessions of Safety Walk Round had been conducted. In AHNH/TPH a total of 40 wards/units were visited, as well as safety ward rounds focusing on 'Fall preventions' conducted at 40 clinical units. In NDH, 26 sessions conducted and 52 department / wards had been visited. In SH, BBH, and SCH, Safety walk Round conducted once per month.

The team consist of senior management, Hospital Q&RM Coordinators, Risk Manager and the Patient Safety Officers. Good practices and areas for improvement were identified and acted upon. Key issues were reported in hospital management meetings for action and sharing.

(d) Cluster based Pharmacy Rounds

SD(Q&S) lead a team to visit all the pharmacies (including pharmacies of GOPCs) of NTEC to identify potential risks in drug dispensing in April 2009. Follow up actions were carried out based on the recommendations.

(e) Quality and Patient Safety Grand Round for frontline staff

Three sessions were held at PWH during which risk reduction / CQI projects from the Departments of Surgery, Paediatrics, Clinical Oncology, Operating Theatre, Physiotherapy, and Administrative Services were shared in the cluster. Feedbacks were very good. Similar session was held in NDH in May 2009.

1.5 Preparation for Accreditation

Cluster management decided that all 7 NTEC hospitals should prepare themselves for hospital accreditation. The aim is to facilitate continuous improvement in quality of healthcare within the cluster using accreditation as a tool.

NTEC adopted the following approach :

(a) Using quality and safety as the main axis, adopt a CQI approach, do the basic well, as a standard way of work and life.

(b) Each department should review / improve their documentation of key operation / patient care processes, protocol/guideline, identify risk area (risk assessment) and areas for CQI

(c) Use the new **iHospital** web platform to facilitate the process (documentation of structure, process and outcome)

(d) **4 Key processes: Engagement, Coaching, Facilitation, Empowerment**

(e) 13 engagement sessions were conducted, and 1335 staff attended in NTEC. The coaching workshop was arranged in April, May and June 2010, 477 staff attended the workshop.


200 NTEC department coordinators attended a one-day training workshop, to understand the requirement of ACHS on the clinical standards.


## 2. Risk Prioritization

2.1 Top 10 clinical risks for 2009 (in order of priority)

| | TOP 10 clinical risk |
|---|---|
| 1 | Medication incidents |
| 2 | Misidentification of patients |
| 3 | Fall Incidents |
| 4 | Mislabel specimen / blood from wrong patient |
| 5 | Patient restraint |
| 6 | Infectious Disease Outbreak |
| 7 | Suicide |
| 8 | Positioning of naso-gastric tube |
| 9 | Missing Patient (at risk) |
| 10 | Transfer patient |

2.2 Top 10 Non-clinical (operational) risk for 2009

| | TOP 10 operation risk (not necessary in order of priority) |
|---|---|
| HR | Manpower/Workload |
| Property | Aging hospital facilities / faulty biomedical equipment |
| HR | Staff morale |
| OSH | Manual handling Injury |
| OSH | Workplace violence |
| IT | IT system breakdown |
| Property | insufficient space / bed |
| Corporate | Fire / smoke hazard |
| Corporate | Security |
| OSH | Needle prick injury |

## 2.3 Top Clinical risk area 2009 - Action for 2010

| | 2 key areas with 4 focus actions<br>二 重點、四 項目 | |
|---|---|---|
| 1 | Medication | (a) Drug administration by nursing staff (protected process)<br>(b) High risk medications e.g. Paediatric drug prescription and administration<br>(c ) Drug reconciliation on admission / discharge |
| 2 | Safe Surgery / Intervention | (a) Wrong site surgery (major / complex operation)<br>(b) non-main OT area / intervention unit |
| 3 | Identification | (a) Wrong patient information retrieved from CMS (IP & OP)<br>(b) Specimen handling / labeling (non-ward area) |
| 4 | Patient Risk | Reduce risk / consequence of fall |
| 5 | Patient Assessment | Identify critical ill patient (e.g. use of MEWS) and appropriate timely management |
| 6 | Communication | (a) Communication between caregivers<br>(e.g. use of SBAR to focus on the key points)<br>(b) Follow-up of critical result |

## 3. Risk Mitigation

3.1 Review of 2009 programs

| Item | Program name | Action & Result |
|---|---|---|
| 3.1.1 | Build accountability structure | (a). RN(PSO) were deployed from nursing to Q&RM, and allocated to AHNH/TPH, PWH/SH/BBH/SCH, and NDH with effect from 1 October 2009; and<br>(b). The Department Q&RM coordinators were invited to participate in Root Cause Analysis (RCA) panel for some Sentinel Event cases. 40 senior staff attended the RCA Forum, and 28 attended the RCA workshop arranged by HAHO in February 2010. |
| 3.1.2 | Enhance Staff Engagement | iHOSP was developed for department at ntec.home. Department coordinators were trained to upload their department guidelines / protocols etc. to iHOSP department page for easy reference. By 31/3/2010, all departments in NTEC launched their department page in iHOSP. |
| 3.1.3 | Safe Design and implementation | (a). Safe Handling of Specimen - To ensure the safe delivery of specimen, a Delivery note was developed in PWH to send together with the special specimen, e.g. biopsy, CSF, to lab. After the implementation, the missing of specimen was drop to one case in 09/10;<br>(b). The Safe Surgery Checklist (123 Surgical Safety 123) was launched in NTEC in October 2009. All operation conducted in OT conducted the process of "*Pre-anaesthetic (sign-in), Time-out process, & Post-operative safety-check (sign-out)*"with reference from WHO. An audit was |

| Item | Program name | Action & Result |
|---|---|---|
| | | conducted in March 2010 in main OT of AHNH, NDH, and PWH. The overall compliance rate was 98.4% (n=94);<br>(c). The format for SBAR was pilot in medical wards, and the format for MEWS was standardized in NTEC which was fully implemented in NTEC in 2010/2011; and<br>(d). The document control policy was being approved in NTEC. 4 workshops for document control were conducted since September 09, around 200 staff attended. Feedback was good and useful. |
| 3.1.4 | Medication Safety | (a). To enhance the medication safety when prescribing antibiotic to patient with known drug allergy, a checklist was developed. An audit was conducted in November 2009, compliance rate was 94.2%, whereas the low compliance rate was lack of signature of checker. After the implementation, there was no incident reported related to patient with known drug allergy;<br>(b). NTEC Patient Safety Policy and Protocol 2009-4 concerning the Use of intravenous potassium chloride in paediatric wards was launched in 19 October 2009;<br>(c). No ward stock for muscle relaxant, except the minimal stock in ICU, A&E;<br>(d). In PWH, all discharged patient drug were collected from ward to pharmacy in every working day;<br>(e). In NDH, ward activities was re-organized to enhance safe administration of medication and streamline the workflow; |

| Item | Program name | Action & Result |
|---|---|---|
| | | and<br>(f). In BBH, Old model (MS16A) Syringe Driver were replaced by new model (NIKI T34) in view of its simplicity, functionality, transferability and safety. |
| 3.1.5 | Prevention of Fall | (a). Video clip on Fall prevention (developed by SH) was uploaded to ntec.home;<br>(b). NDH purchased 30 sets of fall alarm pad for high risk area; and<br>(c). Fall rate in 09/10 was 0.51 which was a decreased compare with 08/09 (0.55). |
| 3.1.6 | Patient restraint | The protocol for use of restraint was standardized in NTEC. A video clip for different type of restraint was developed, and promoted in NTEC as education tool for nursing and supporting staff. The observation chart was also revised. |
| 3.1.7 | Suicide | (a) The suicidal assessment form was developed and pending for endorsement and implementation; and<br>(b) A team including Facility managers, Security Officer, and Patient Safety Officer conducted safe environment scanning in some ward area. The scanning started from PWH, then roll out to other hospitals in NTEC. Recommendation were made to department concern. |
| 3.1.8 | Positioning of naso-gastric tube | The policy and procedure for checking and removal of NG Tube was developed. The checking of NG tube in correct position and integrity was reinforced. |

3.2 Planning for 2010 / 2011 programs

| Item | Program name | Action |
|---|---|---|
| 3.2.1 | Medication Safety | (a). Summit 911 – a special meeting to discuss the strategies for medical safety;<br>(b). Medication Safety Forum will be arranged in each hospital and cluster wide forum on 15 December 2010;<br>(c). Lean Project 1 – Drug reconciliation for medical patients upon discharge from hospital ;<br>(d). Lean Project 2 - To streamline the "Administration of Medication" round by nursing staff in the Neonatal Unit and to improve medication safety;<br>(e). Lean Project 3 - To improve the safety and efficiency of In-patient drug requisition and dispensing process;<br>(f). Standardization of schedules for drug administration;<br>(g). Protected time for drug administration;<br>(h). Review "3 Checks and 5 Rights" procedure; and<br>(i). Review Dangerous Drug Policy in NTEC. |
| 3.2.2 | Surgical Safety | Implement phase II Checklist for minor OT and interventional procedure in non-OT area |
| 3.2.3 | Misidentification of patients | (a). Facilitate the use of 2D barcode for taking X-ray; and<br>(b). Facilitate the 2Dbarcode system in non-ward area. |
| 3.2.4 | Hospital Accreditation | (a). Set up hospital project team;<br>(b). Appoint coordinators, Quality Manager, and Quality Officers; and<br>(c). Facilitate CQI from clinical departments. |

## 4. Learning & Sharing Information

### 4.1 Learn from Incidents

6-monthly review of Sentinel Event / Serious Untoward Event – It was scheduled every 6 month that CCE, HCEs, and Q&S Committee members will review the RCA reports and discuss the recommendation, and actions to be taken for each Sentinel Event and Serious Untoward Event. For incidents of retained instrument, the checking the integrity of instrument before and after procedures could be enhanced; communication between staff / department could help in tracing and understanding. The tracking system of instrument was being piloted in PWH. Feedback from staff was good. The Medication incidents did alarm the management and reinforced medication safety. Through the review, the loop hole of the system was alert and made effort to fix.

### 4.2 Staff Engagement

Safety walk round is an effective measure to increase staff awareness of patient safety and quality of services. Participation of staff from clinical departments in safety walk round did arouse their alertness on daily practice. With the assistance from the Risk Management Team, the involved departments adopted the advice and standardized the practice, e.g. pre-op Checklist, and the Delivery note for Specimen handling.

### 4.3 Staff Education and Training

(a). Intern training clips production

As a supplementary training kit of the orientation program for interns, a series of intern training clips on the following topics were produced and uploaded onto “Video Gallery” of NTEC Webpage (ntec.home):

- Demonstration on Blood Taking using Barcode Scanning System;
- Demonstration of setting up intravenous access for infusion; and
- Demonstration of administration of i.v. medication.

(b). Demonstration the application of Restrainer- in mid-April 2009.

In order to enhance staffs' knowledge and to minimize patient fall incident, sale representatives from respective agent were invited to conduct life demonstrations of the Segufix Harness and Pelvic Holder in mid-April 2009. About 150 attendants from various departments had attended. Training clips production on Segufix Harness, Pelvic Holder and HA-supplied safety vest;

(c). **EQUALsafe** – A 1 ½ day course on Quality and Risk Management topics and tools, 4 courses have been conducted for 129 staff involved with Q&S and middle management staff in 2009;

(d). **Workshop on Documentation** – 5 sessions being conducted, around 200 staff attended;

(e). **iQRM** (web platform) is now fully established to facilitate learning and sharing;

(f). **iSMART** (one page information sheet on risk issue) were issued fortnightly since April 2009. Feedback from staff was very good; and

(g). **Risk Watch** (forum) for staff was held monthly.



## 4.4 Conclusion

In 09/10, NTEC Quality and Safety Team has achieved a milestone that high risk incidents are under control with zero incident reported in following area: Known Drug Allergy, in-patient specimen with wrong labelling, specimen for Type & Screen and blood transfusion, etc. The promotion of safe culture through education, sharing & learning, and walk round proved to be effective in safe alertness and practice. However, there is still rooms for improvement especially in medication safety which to be the main focus for coming year.

## 1. Structure & Initiatives

### Organisation Chart

**Service Director (Q&RM)**
Dr. K L CHUNG

***Patient Relations (PR) Team***
Mr. L S TSUI, HM

**Patient Relations**
Dr. A K B KITCHELL, CC

**TMH PRO**
Ms. P L MUI, HM
Ms. Molly LEE, HM
Ms. Crystal TSANG, EOII

**POH PRO**
Ms. K K HO, HM

***Quality & Safety (Q&S) Team***
Ms Bonnie WONG, CM

**Audit Team**
Dr. S K LEUNG, CC

**Patient Safety & Audit Team**
Ms. P F TANG, HM
Ms. Louisa LEUNG, HM
Ms. Josephine TIU, EOII

**Quality & Std. Office**
Dr. Y W SHUM, CC

**Quality & Standard Office**
Ms. W O LOU, HM
Mr. Andy KWOK, EOII

**Lean Office**
Dr. C W CHENG, CC

**Lean Office**
Mr. Henry CHEUNG, EOII
Mr. Oliver CHAN, EOII

*The PR Team*

*The Q&S Team*

## 1.1 Hospital Accreditation Scheme (HAS)

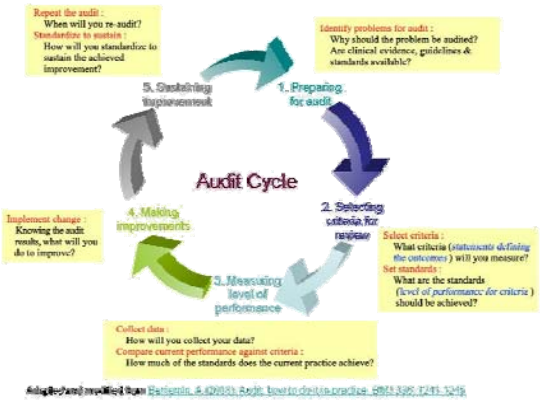
Organizational structure for HAS has been established in TMH, which included the set up of 4 levels of working teams. Teams are including: 1) Cluster Quality & Standards Working Team, 2) HAS Project Team, 3) HAS Subject Team and 4) HAS Department Coordinators. Staff engagement includes ACHS quality manager visit, 24 department road shows, 3 staff forum, 4 training workshops and over a hundred meetings were conducted. NTWC HAS website was developed.

Consultancy survey with 4 ACHS consultants & 2 local surveyor trainees was conducted in TMH in DEC 2009. After the survey, the team recommended 18 priority action items for 7 criteria. In response to the received recommendations, working groups on nursing care plan and operating theatre sterilization & disinfection were formed. Care monitoring mechanism and credentialing system were following up by concerned parties. Review on cluster policies and other levels of documents were in progress. An electronic fire safety training platform was developed to facilitate staff to have their annual training.

## 1.2 Cluster Clinical Audit Committee

IT system Dendrite for data information was installed in September in TMH in assisting data capturing and analysis process. Training would be conducted for surgical team leaders and their delegates. Three Nursing audits included IV Medication, Indwelling Urinary Catherization and Nursing Documentation were commenced in September one by one. Preparation on Blood Transfusion Procedure and AMI audits were commenced in SEP 2009 respectively. Cluster Medication Administration Record audit exercised in NOV 09 and audit on current procedural sedation practice was conducted across relevant departments/units in DEC 2009. Audit on surgical safety checklist was conducted in MAR 2010.



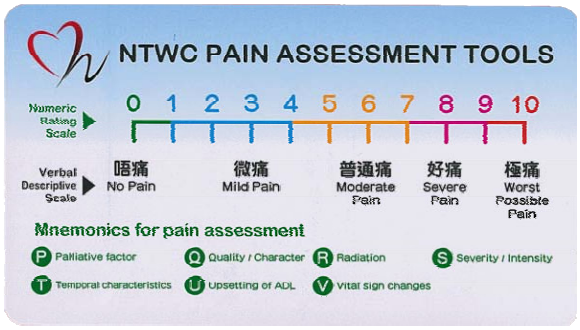


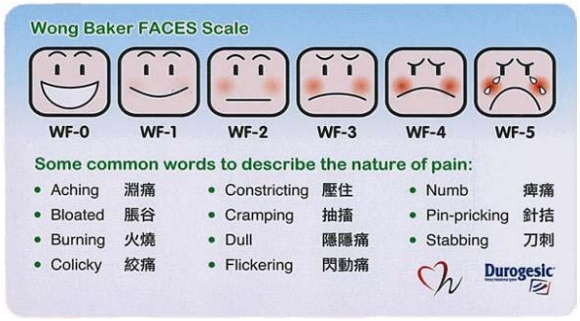

## 1.3 Cluster Drug Administration Safety Committee (DASC)

Hospital round on Medication Safety by CPO visited TMH & CPH on 16 July. Q&RM worked with the committee for the Medication Administration Record audit. We have been lining up the exercise for ordering suitable name chop stamping on Medication Administration Record. Stamping the name and code of doctor can facilitate interdepartmental communication for drug prescription.

## 1.4 Cluster Pain Management Committee

In APR 2009, Cluster Pain Management Committee was formally set up and the Cluster Policy on Pain Management was endorsed. The Guidelines on Management of neuropathic pain and use of opioids had been adopted in JUL 2009. The guidelines for acute pain assessment & Postoperative pain management had been endorsed in AUG 2009. Committee members liaised with IT department to develop the website for promulgating the information in JUL 2009.

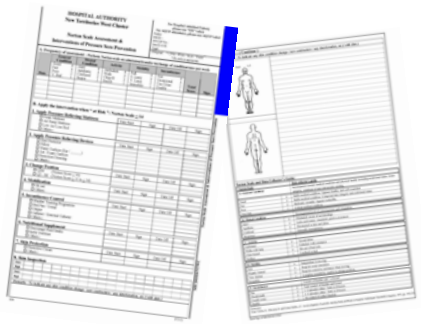



8 nursing staff and 1 medical staff were sponsored to attend Annual Scientific Meeting in Anaesthesiology in Hong Kong on 24 & 25 OCT 2009. One committee member was sponsored to attend the international Fellowship Program in the Department of Anaesthesiology and Pain Medicine of the Seoul National University Hospital in Korea from 11-15 JAN 2010 and one member was sponsored to attend the Australian Pain Society and the New Zesland Pain Society Combined Annual Scientific Meeting from 28-31 MAR 2010 in Australia. The attendants presented their learning experience in the committee meeting. An annual plan on cluster pain management was discussed in JAN 2010 including staff training on cancer pain management, launching core-competence training on acute pain management by e-learning system.

1.5 Cluster Pressure Ulcer Prevention and Management Committee (CPUPMC)

A working group was formed under the CPUPMC for standardizing the screening tool for assessing patients' risk of developing pressure ulcers in NTWC. Norton scale was selected and put on trial in Q3 09 & roll out in Q1 10. 2 classes of certificate course were conducted in Q4 09 & Q1 10. A symposium with local speakers and overseas expertise was held in NOV 2009.

Another working group was formed for developing an electronic pressure ulcer reporting system in the cluster. Framework of the new system has been developed in Q1 10. It will put on trial in Q2 10 and roll out in TMH in 2010 / 11.

1.6 Cluster Procedural Sedation Safety Committee

The initial committee meeting was held in DEC 2009 and discussed the TOR and policy on cluster procedural sedation safety committee. Staff training and credentialing were developed as 2010 / 11 annual plan. The panel was set up by collaborating with Hong Kong College of Anaesthesiologists for preparing Safe Sedation Course to our staff. Two identical workshops will be conducted in MAY & JUN 2010.

Work group was formulated to discuss the complications reporting mechanism regarding to significant procedural sedation and developed time-out checklist for procedural sedation. The time-out checklist and reporting mechanism will be trial in Q3 10.

1.7 Cluster Resuscitation Committee

Monthly CPR record audit was conducted and analytical report was sent to respective specialties quarterly in OCT 2009 & JAN 2010. 49-98 CPR in-pt episodes were performed in cluster monthly. The survival rate was around 33-52 % and 9-16 % had activated resuscitation team.

## 2. Risk Prioritization

2.1 Table 1: Ten Priority Risk Areas for 2009/2010

| 10 Priority Risk Areas for 2009/2010 | |
|---|---|
| 1 | Human Resource Risk –Maintaining a quality workforce (loss of key staff/ workforce planning/ recruitment) |
| 2 | Physical Resource risk - Capacity of Facilities (insufficient space and equipment |
| 3 | Financial Risk - Budget Control |
| 4 | Physical Resource risk - Congestion in ward (patient overcrowded) |
| 5 | Physical Resource risk - Equipment breakdown/ failure |
| 6 | Empowerment Risk - Resource Allocation (Insufficient fund for rising demand) |
| 7 | Human Resource Risk - Performance (Staff morale /absence) |
| 8 | IT Risk - IT system failure / not able to support changing needs timely |
| 9 | IT Risk - IT security/ unauthorized access/ use/ loss of personal data |
| 10 | Financial Risk - Cash collection |

2.2 Table 2: Ten Priority Risk Areas for 2010/2011

| 10 Priority Risk Areas for 2010/2011 | |
|---|---|
| 1 | Medication - administration (intrathecal + IV + oral) |
| 2 | Medication prescription - allergy + dosage |
| 3 | Mis-identification of patient (consultation) |
| 4 | Handling lab result filing error + miscommunication |
| 5 | Handling of specimen - mis-labelling |
| 6 | Care of acute deterioration patients |
| 7 | Handling of fragile patients |
| 8 | Fall |
| 9 | Patient choking + ingestion of FB |
| 10 | Suicide (in-hospital) |

## 3. Risk Mitigation

3.1 Review of 2009 programs

| Item | Program name | Action & Result |
|---|---|---|
| 1 | Cluster Trauma Advisory Committee | (a). Trauma Round / Trauma Course 2009<br>● Conduct regular staff training and to enhance knowledge, skill and technique of staff on trauma management.<br>(b). Trauma Audit Review Meeting<br>● Conduct regular Trauma Audit Review Meeting to inquire into cases which were filtered out by Trauma Audit Filters; and explore means to improve the standard of care for those preventable/ potential preventable cases.<br>(c). Primary Trauma Diversion NTWC<br>● Keep on monitor the progress of Primary Trauma Diversion in NTWC.<br>(d). Massive Blood Transfusion Guideline NTWC<br>● Introduce Massive Blood Transfusion Guideline to improve and standardize patient care. |
| 2 | Cluster Pain Management Committee | No Dologesic in AED<br>● Introduce new formula of evidence base medicine to control pain; and<br>● Standardize assessment tool and enhance staff training on pain assessment score and pain management. |
| 3 | Cluster Infection Control Committee | (a). Antibiotics stewardship program<br>● Enhance training on proper use of antibiotics and target to reduce MRSA.<br>(b). Hand hygiene program<br>● Enhance hand hygiene practice by conducting regular training aimed to reduce Avian Influenza and other infectious diseases. |
| 4 | Cluster Transfusion Committee | Safety practice on handling blood and blood products<br>● Reduce transfusion transmitted infection by reviewing practice of issuing, transporting and storing blood product as well as enhancing staff training on blood product handling. |
| 5 | Single Use Device Committee | (a). Development of the committee website<br>● Provide a platform for sharing training resources.<br>(b). Review the cluster policy on management of single use medical device<br>● Ensure policy coherence with “HA guidelines on reuse of SUD”.<br>(c). Fade out the reuse of SUD<br>● Review registry of single use device and replace by phases. |
| 6 | Cluster Clinical Audit Committee | Surgical outcome analyzation colorectal, upper, GI, breast and urology cancer surgery<br>● Introduce DENDRITE system for data capture and analysis to facilitate monitoring of KPI. |
| 7 | Cluster | Audit on CPR activities monthly |

| Item | Program name | Action & Result |
|---|---|---|
| | Resuscitation Committee | ● Promulgate cluster resuscitation policy;<br>● Standardize resuscitation trolley; and<br>● Conduct regular staff training and drill to enhance knowledge, skill and technique of staff on resuscitation. |
| 8 | Drug Administration and Safety Committee | "No Code No Drug"<br>● Review parental dilution table and intubation drug kit to ensure patient safety;<br>● Develop system of vaccination recording in CMS to enhance communication between healthcare professionals;<br>● Conduct MAR chart audit to facilitate monitoring on drug prescription; and<br>● Ensure the safety in using high risk medication through reinforcement of correct patient identification and proper storage in designated area. |
| 9 | Cluster Fall Committee | Enhancement in Fall prevention and management<br>● Improve the workflow of fall incident reporting and filtering in order to enforce effective patient monitoring and facilitate the development of departmental improvement measures;<br>● Facilitate the development and implementation of improvement measures in departments by appointing fall representatives and conducting walk round; and<br>● Enhance education on patient care for supporting staff. |
| 10 | Cluster Pressure Ulcer Prevention and Management Committee | NTWC Pressure Ulcer Electronic Reporting System<br>● Set up a new reporting system and use of assessment form to facilitate monitoring of patient care. |

3.2 Planning for 2010 programs

| Item | Program name | Action & Result |
|---|---|---|
| 1 | Fall Prevention and Management | (a). Refresh training for all supporting staff;<br>(b). Posting prevention tips;<br>(c). Redesigned workflow to ensure supporting staff paying more attention to patients by:<br>● Assigning each supporting staff in designated cubicle<br>● Encouraging them to stay in their designated cubicle as much as possible<br>(d). All other prevailing fall prevention measures maintained |
| 2 | Trauma Management | Conduct training program in trauma management. |
| 3 | Infection Control | Target on using antibiotics and MRSA. |
| 4 | Blood Transfusion | (a). System review<br>● Mandatory training program for all individual in the transfusion process |

## 4. Learning and Sharing Information

### 4.1 Hospital Patient Safety Walkrounds

Since patient safety round is a well recognized tool for successful development of culture of safety in an organization, NTWC adopted this method in order to enhance the development of a culture of safety among staff in the Cluster. 11 safety rounds were conducted in the last half year in POH, TMH and TSW GOPC. Focuses for the safety round included fall incident, specimen and blood product handling, drug dispensing and administration, identification of dead body, patient transfer, registration, mark site and time out practice. During the safety round, penal members made different recommendations to enhance patient safety and quality of service such as allocating cool pad in secondary container for carrying blood product to maintain the storage temperature, purchasing grinder to replace mortar and pestle for individual patient in order to avoid mixing up drug of different patients, using color label to differentiate expiry date of drug to reduce time in checking the drug. Besides the recommendation, good practices observed in the safety round were also shared with different departments through hospital meetings.

### 4.2 Annual Quality Conference

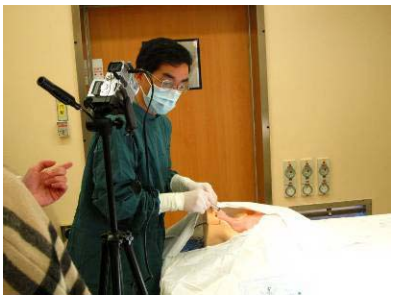
Q&RM coordinated a 2-day quality conference on 4-5 Dec 09. The Organizing Committee was formed in May 2009 and chaired by a SMO of CPH with members come from multidiscipline of NTWC hospitals. The keynote lecture and workshop covered a variety of topics including whole system transformation, new thinking in management concept and 7 habits.

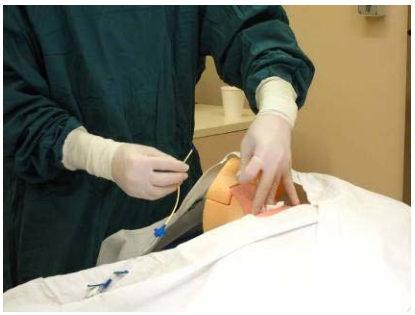
4.3 Response plan for person requiring emergency medical assistance in hospital vicinity

The response plan was reviewed and incorporated with the requirement for regular drill, handling of trauma case and response plan for Renal Dialysis Centre.

4.4 Follow up on incidents

(a.) For the incident of retaining central line in the patient body, video for demonstrating insertion of guidewire was shot and posting on cluster website as training material.





(b.) TMH Q&RM liaised with HAHO IT Department for changing default setting in printing laboratory result. For discharged patient, “Discharged” was printed on the laboratory result instead of bed number to avoid misleading the clinical staff in treating the existing in-patient.

4.5 Integrated Patient Care Plan Support Team

During the review period, six teams were coordinated to present in Clinical Governance Committee for program evaluation. The program included Geri-hip Fracture, Colorectal Cancer Management, COPD Enhanced Home Care, Cardiac Rehabilitation Program and Upper GI Cancer Management. Outcome measures were reviewed and the improvement plans will be implemented and monitored.

AMI preliminary data and care planning was presented in CMC meeting. Carpal Tunnel

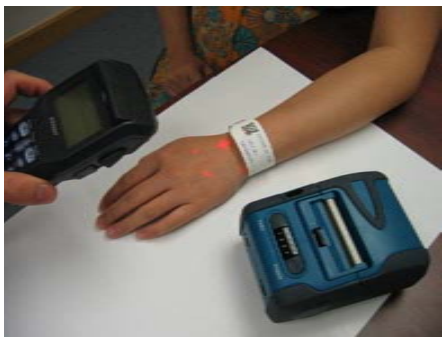
Syndrome Management Program & Colorectal Cancer Management Program and program on upper GI surgery were presented during NUH visit in HK. Booklet on cluster breast cancer management was launched in Q1 10 and patient focus group for colorectal cancer patients was conducted in JAN 2010.

4.6 Work group for Implementation of MEWS in NTWC


The staff forum was held on 13 NOV 2009. Two external guests & five internal speakers were invited to conduct the talk on MEWS. 318 attendants participated in the event and suggested the invaluable comments. An integrated observation chart was standardized and rolled out in JAN 2010 across in-patient departments except department of ENT, Neurosurgery, Obstetric, Ophthalmology, Paediatrics & Adolescent Medicine and psychiatric services.

4.7 Phase 3 Unique Patient Identification (UPI)

To reduce the rate of mis-labelling and mis-identification of patient during the specimen collection process, Phase 3 UPI project to use 2D barcode technology for all specimen including blood, urine, sputum for laboratory investigation (except for histology test) was fully implemented for all in-patients in TMH in MAR 2009 and in POH in FEB 2010.



4.8 Correct Patient Identification Working Group


A working group was established in Q4 09 and aimed to monitor and identify risks related to misidentification of patients in the cluster. It also advises cluster management on risk reduction strategies for the prevention of misidentification.

4.9 Cross Cluster Quality Surveys

Three clusters including NTWC / TMH, KEC / UCH and KWC / PMH conducted the 2nd survey exercise in APR 09. Six criteria based on ACHS standards were surveyed, they included: (1) Informed consent process, (2) Discharge / transfer process, (3) Health records management, (4) Records management systems, (5) Safety management systems, and (6) Emergency & disaster management.

4.10 Record of Gauze / Swab Packing

A standardized record was developed for providing a common platform for staff to communicate on packed item(s) in patient's cavity. This new form has been rolled out to surgical stream units in TMH in JAN 2010.

4.11 Critical Equipment Replacement Program

Certain models of infusion pump and syringe driver were found to have potential risk. A replacement exercise was conducted in the review period. 111 sets of drip rate type infusion pump and 45 sets of syringe driver were removed from operation.

4.12 Patient Safety Culture Survey

A staff forum was conducted in DEC 2009 for promulgating this survey which was conducted in NTWC in JAN 2010 with 48 % of NTWC staff responded.

## 4.13 Lean Office


### (a.) Gemba walks

The Lean Office coordinated 3 Gemba Walks to 8 clinical units in TMH and CPH. Frontline staff exchanged opinions with and raised suggestions to the management during the Walks. Suggestions were actively followed up: e.g. in response to staff suggestion of utilizing an old computer in a ward, the management coordinated quickly to adjust the network setup accordingly. Following each Gemba Walk, the Lean Office would publish an article to share with all staff about the good lean practices in the visited units.


### (b.) Kaizen sharing forums

The Lean Office organized a year-end Kaizen Sharing Forum in November 2009, which included a sharing session on the lean journey experience in another hospital. 3 more sharing forums were held in Q1 10 with a substantial makeover in order to enhance the sharing experience of both the presenters and the audience. These forums attracted a total audience of over 800. Reports of the shared projects were collected and shared with staff on the intranet and in the Kaizen room.

(c.) Kaizen room open day

5 Open Days were organized where all staff could drop by the Kaizen room at their convenience. Staff of the Lean Office would introduce the lean concepts as well as the project display to visitors.

(d.) RIE on medical consumables delivery to POH wards

A rapid improvement event was held in Q4 09 aiming to improve the delivery of medical consumables to wards in POH. Q&RM and the service stakeholders worked together in the one-day event to devise a delivery system based on Kanban principles. Pilot has been done with encouraging results.

(e.) Sharing of NTWC Lean Journey with the wider healthcare community

Exchanges on lean experiences were made during the reception of guests from the various renowned overseas healthcare organizations. The Lean Office also submitted the lean experience to wider sharing platforms such as HA convention and ISQua 2010 to facilitate further learning and sharing.

4.14 Patient Relations Office

(a.) Patient Focus Group

In the last year, Patient Focus Groups were formed for patients with chronic renal failure, breast cancer, nasopharyngeal carcinoma, thalassemia, psychiatric illness, AED, Paediatrics, Gynaecology of POH, colorectal cancer patients in TMH and discharged mental patients in CPH. Through the discussion and direct feedback, needs of patients and concerns our efficiency and service delivery mode could be identified. The collected feedback was invaluable to improvement of healthcare services.

(b.) Sharing Session on Incidents and Complaints in NTWC

Development of the sharing sessions aimed to share the learning points from incidents and complaints with the staff in order to avoid occurrence of similar incident and complaints. There were 7 sharing sessions were held in NTWC from APR 2009 to MAR 2010.

4.15 Staff Education and Training

(a.) Kazien Post – in Oct 09 to May 10


The 4th, 5th and 6th issue of Kaizen Post was distributed to NTWC staff in JUN, OCT 2009 and MAR 2010 respectively. Publishing the newsletter aimed to promote patient safety and sharing on the related improvement plan including precaution of patient fracture, using of time-out chair and promotion of tourniquet, shortening waiting time by specifying schedule for CPH outpatient appointment, e-Bedlist to facilitate bed allocation in CPH, tailor-made sweater for paediatric patient on Bilibed.

(b.) Lean management training – Since Apr 2009

Trainings at different levels were given by the Lean Office members and collaborators. As a major step forward, we developed a training module introducing lean concepts to supporting staff in a nutshell. Up to the moment, more than 3000 staff received basic lean training, and 400 have been equipped with skills and knowledge to conduct Kaizen activities in their departments.

(c.) Basic Life Support Training (BLS) – in May 10

Q&RM conducted BLS training with Tang Siu Kin Training Centre to enhance knowledge and skill of NTWC staff in handling persons who are in urgent need and treatment within vicinity of HA institutions. 4 days of identical BLS training sessions were conducted in MAY 2009 for both clinical staff and supportive staff. Over 200 participants attended the training sessions.

(d.) Medical Intervention on Clinical Emergency (MICE) – 5 course completed from Aug 2009 to Feb 2010

Q&RM has been coordinating a series MICE program for clinical staff including both doctors and nurses to handle clinical crisis with simulator in NDH training centre. Two workshops were conducted in the last half year and target departments were Department of Medicine and Geriatrics, Accident and Emergency Department.

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病人身份