

HOSPITAL AUTHORITY QUALITY AND SAFETY ANNUAL REPORT 2014-2015 (APR 14 - MAR 15)



醫院管理局
HOSPITAL
AUTHORITY

Acknowledgement

In this Hospital Authority Quality and Safety Annual Report (previously named “Hospital Authority Quality and Risk Management Annual Report”), effort has been put to summarize and highlight the major quality and safety issues, effective risk reduction initiatives and innovative learning and sharing platforms of Hospital Authority Head Office as well as the seven clusters in the year. Apart from demonstrating our continuous hard work on attaining better quality of healthcare services, we sincerely hope that our healthcare professionals could gain invaluable insights from others’ experiences and achieve even better results in their respective echelon.

We are grateful to the staff who have been working hand-in-hand with us and strived their best endeavor to contribute to a safer and higher standard of healthcare in Hospital Authority. Thanks to the colleagues who have made the publication of this report a success.

Quality and Safety Division

Hospital Authority

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Opening Message



This annual report is an archive of what we have done and allows us to trace back our history. Over the years, I see that we are evolving in 3 directions: the “what” – from safety to other aspects of quality; the “who” – from a few “experts” to engagement of all staff and our patients; and the “how” – from empirical to scientific.

Insofar as safety being one aspect of quality in healthcare, the term “quality and safety” appears slightly funny to me but it reflects our emphasis on patient safety which is no doubt very important. Ensuring patient safety is necessary yet insufficient: it is no good

for a patient managed not harmed unnecessarily but not getting their problem managed effectively and efficiently in a timely and patient-centered manner. Quality is reflected in the everyday work of all our staffs who directly or indirectly deliver our service to our patients. And while we may excel in some aspects of quality improvement, it is not possible to improve our healthcare without the direct involvement of our colleagues who are all experts in their own domain. While we always talked about evidence-based medicine and adopt a scientific approach in healthcare, the same is also true for quality improvement. There is a whole improvement science for us to learn from and contribute to.

Two recent movements illustrate these points. The first one is the introduction of lean and six sigma into healthcare, various named “Kaizen” or “WISER”. This is a movement to engage staff to revisit our healthcare processes scientifically in their clinical microsystem, looking into not only safety but efficiency. The healthcare system is complicated and we certainly cannot ignore the experience and science accumulated in systems improvement in other industries. Lean, six sigma, human factors engineering are but some aspects we can learn from systems engineering. There are many other areas we can explore. Learning some basics in these areas also enable us to communicate with the experts in those areas for larger scale improvements.

The second movement is crew resource management training using simulation method. As I learned from Dr Jeff COOPER during my visiting scholarship in Boston, simulation is but one manifestation of learner-centered education. The world is changing rapidly nowadays and everyone must learn to keep up with the changes. Using methods we used during the industrial age is no longer adequate. We must explore more effective methods to educate our staff, no matter for technical skills, non-technical skills and improvement methods, to ensure the quality of our staff and the quality of our service.

Yet, all these changes are just in the beginning. And may I quote Sir Winston CHURCHILL in closing this opening message: ***This is not the end, not even beginning of the end, but may be the end of the beginning.***

Dr SO Hing Yu
Chairperson
Committee on Quality and Safety
Hospital Authority

Hospital Authority Head Office (HAHO)

Hospital Accreditation

HA continued with the implementation of hospital accreditation program in 20 hospitals. The biennial "[Report on Hospital Accreditation in Hospital Authority 2013-2015](#)" had been published which summarized the major progress of accreditation at corporate and hospital levels from April 2013 to March 2015.



Web-based Informed Consent Form (ICF) System

A corporate electronic informed consent system had been developed in 2015 to improve patient experience and staff workflow. Clinical staff could print a comprehensive, standardized, and legible information (without abbreviation) consent form from the system in either English or Chinese, thus reducing handwriting time and errors. As of March 2015, informed consent information for over 2,000 procedures was aligned by clusters and clinical Coordinating Committees / Central Committees (COC / CC) in HA.

The screenshot shows the "Hospital Authority - Informed Consent Form (ICF) System" interface. It includes a "Custom Print Consent-Form" section with fields for Cluster/Hospital (KWC), Department/Sub-specialty (ORI), Doctor Name (Please select CHAN, HING SHING), Procedure Name (Total Hip Replacement), Consent Form type (Consent for Operation / Procedure / Treatment), Consent Form Language (English), Print Date (01-Feb-2016), Print Copy (1), and Print Supplementary Sheet (0). There are "Generate Form" and "Reset" buttons. A "Result" section at the bottom has a "[Print Consent-Form]" link.

Access Management

In 2014/15, the HA had uploaded the Special Out-patient Clinic waiting time information in HA website for all eight major specialties and enhanced the electronic referral system.

A 6-month pilot programme of direct booking of radiological investigation, for instance, general radiography, fluoroscopy, ultrasonography and computerized tomography, by the Family Medicine Specialist Clinics was commenced in August 2014.

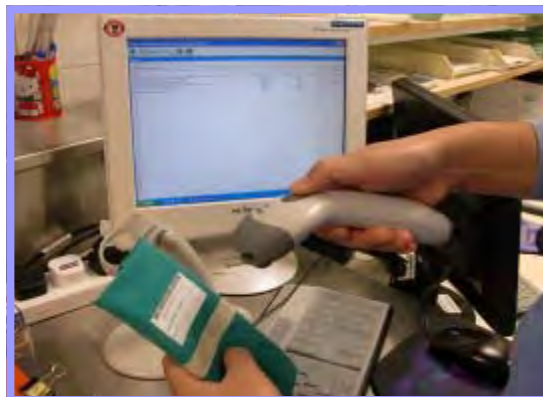
Sterilization Enhancement

In 2014/15, the Surgical Instrument Tracking System (SITS) had been rolled out to 9 hospitals:

- * Caritas Medical Centre
- * Tung Wah Hospital
- * Queen Elizabeth Hospital
- * Princess Margaret Hospital
- * North Lantau Hospital
- * Tung Wah Eastern Hospital
- * Alice Ho Miu Ling Nethersole Hospital
- * Hong Kong Buddhist Hospital
- * Tuen Mun Hospital

SITS would be completely rolled out in 2015/16.

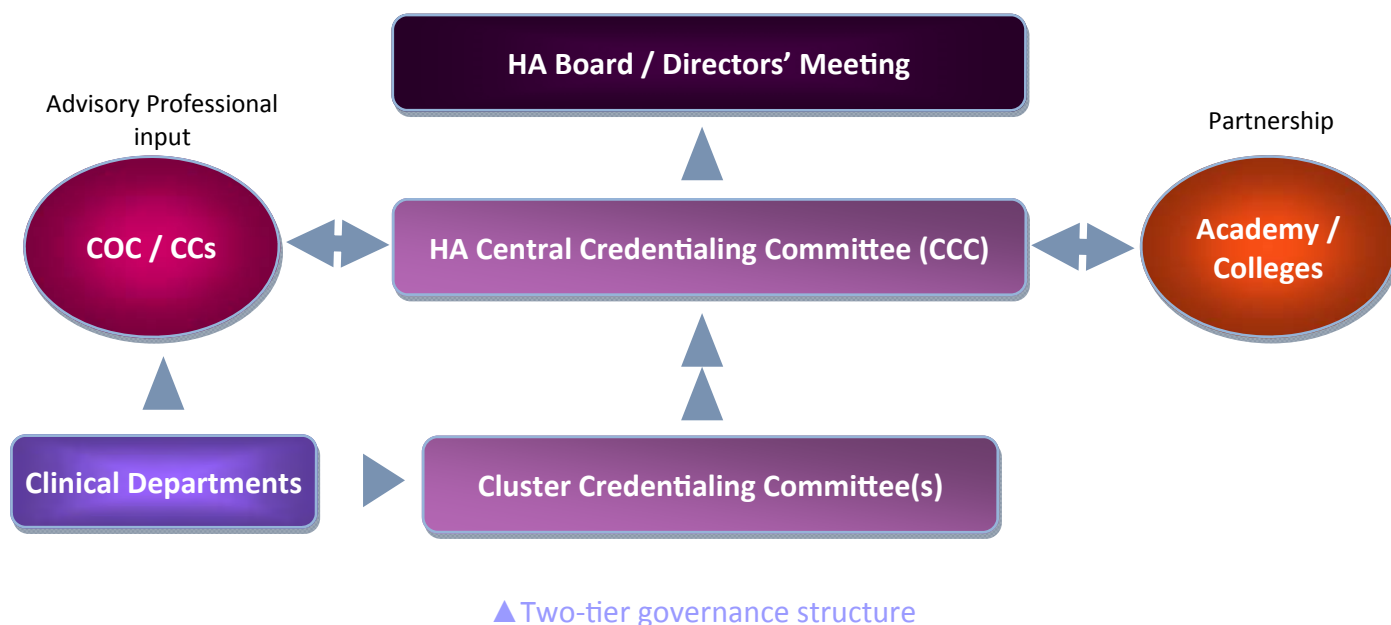
“Item Cataloguing” was successfully live-run in SITS. As of March 2015, there were more than 90,000 instruments items in SITS from 23 operating theatres and more than 59,000 items (about 63%) were mapped.



Checkpoints of the Surgical Instrument Tracking and Tracing System ►

Corporate Credentialing System and Governance

The HA Board had endorsed the corporate development of credentialing and two-tier governance structure.



By March 2015, the first batch of five high risk and complicated procedures from 3 specialties had been submitted to CCC for endorsement. Communication channels with Hong Kong Academy of Medicine on credentialing in HA were also established.

COC / CC	Name of Procedure
CC (Cardiac)	Left Atrial Appendage Occlusion (LAAO)
	Percutaneous Coronary Intervention (PCI)
	Transcatheter Aortic Valve Implantation (TAVI)
COC (Surgery)	Robotic Assisted Laparoscopic Radical Prostatectomy
COC (Anaesthesia)	Cardiac Anaesthesia (Adult)

Operating Theatre (OT) Utilization

In 2014/15, standardized cancellation reasons of elective operations were implemented in the OT booking system for facilitating the analysis and monitoring of OT utilization. Development of indicators to monitor the efficiency and utilization of OT were being explored.

Cancel OT

HKID: B6101025 Case: Name: TEST, FCS 5 Sex: M Age: 34y Ward: Bed:

By: FUNG I At: 27/11/2014 17:04 e.g. 31/12/2006 23:59

Requested by: Hosp. List Clear

Reason *
Please select...
Patient refused
Invalid consent
Preoperative instructions not followed
Patient had procedure performed already
Patient default admission
Unexpected change in medical status
Change in treatment plan
Equipment not available
No ICU bed
No available OR time (Long list)
Give way to Emergency
Move to emergency list
Weather / disaster
Back up / Standby case
Blood product availability
Surgeon not available
Anaesthetist not available
OT nurse not available
OTA not available

* Mandatory field

For local monitoring, a set of OT management tools was piloted in Queen Mary Hospital and would be further implemented in all hospitals.





Endoscopy Services

The HA had started to review the HA-wide endoscopy services in 2014/15. The reference standard of manpower provision for endoscopy service was being studied for alignment.

Updates on the Sentinel and Serious Untoward Event Policy (SE & SUE Policy)

The SE & SUE Policy would be updated to align the Chinese translations of SE and SUE with Department of Health. A supplementary note on definitions and qualification criteria of SE would be added.

Advance Incident Reporting System (AIRS) Enhancement for Special Programme

Integrated Chinese-Western Medicine (ICWM) Programme

Pilot Hospitals

- * Tung Wah Hospital
- * Pamela Youde Nethersole Eastern Hospital
- * Tuen Mun Hospital



Hospitalized patients with

- * Stroke
- * Back pain
- * Cancer

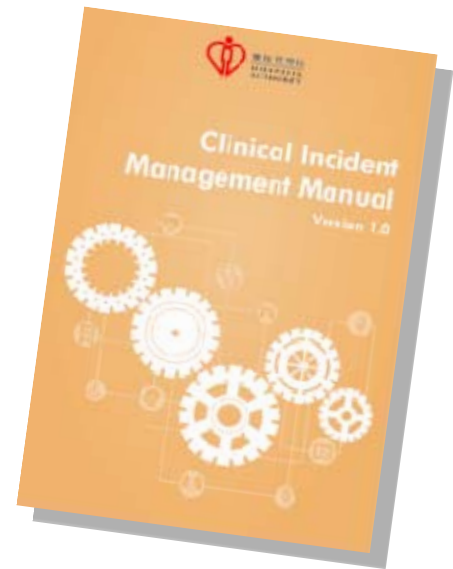
Enhancement on AIRS to support ICWM

Patient Specialty	Clinical Oncology
Date of Occurrence (e.g. 31/12/1901)*	Today Time hour min
Special Programme	<input checked="" type="checkbox"/> Integrated Chinese-Western Medicine (ICWM) Pilot Programme
CMS Patient ID*	
CMS Patient ID*	

☒ Integrated Chinese-Western Medicine (ICWM) Pilot Programme

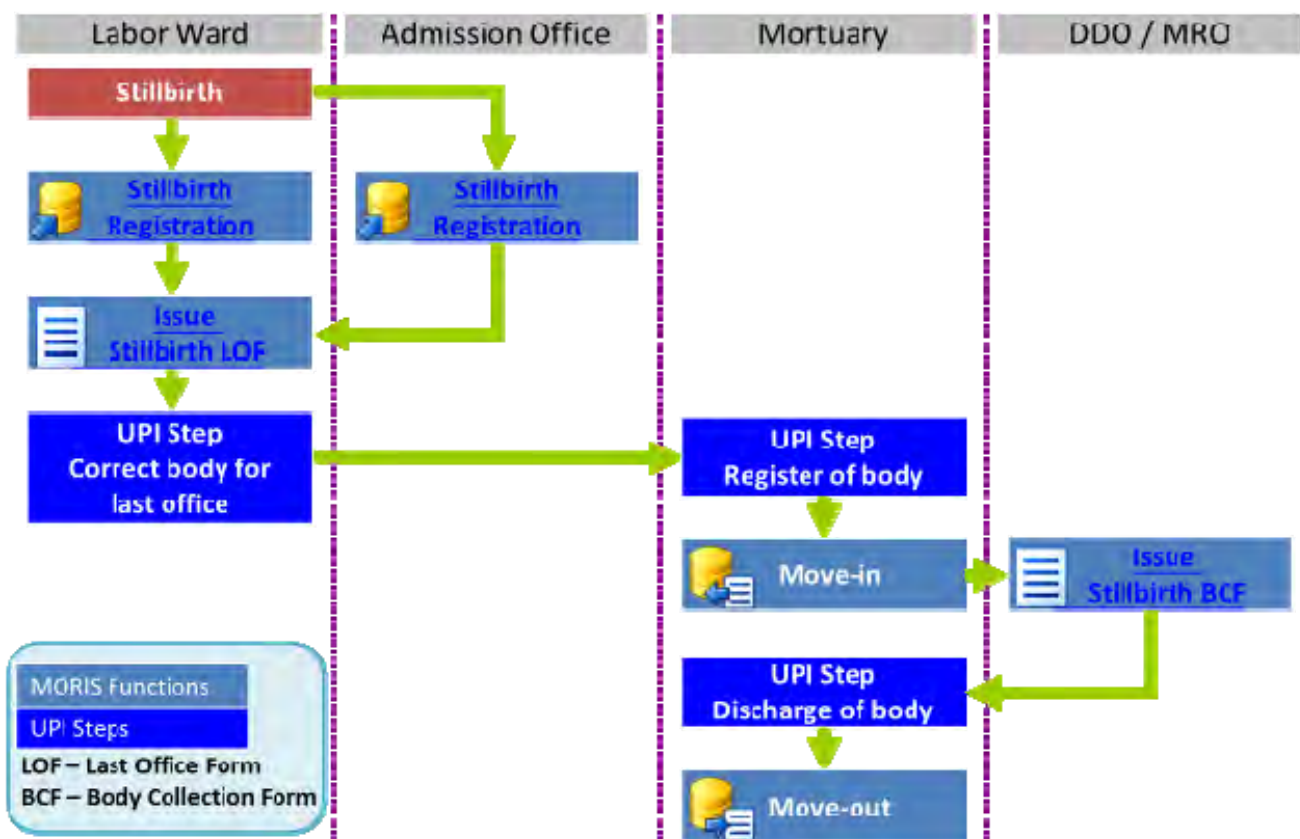
Clinical Incident Management Manual

The purpose of the manual was to provide guidance on reporting, investigation, analyzing and monitoring of clinical incident in order to improve patient services from incident analysis and lessons learnt.



Unique Patient Identification (UPI) Programme - Stillbirth Identification

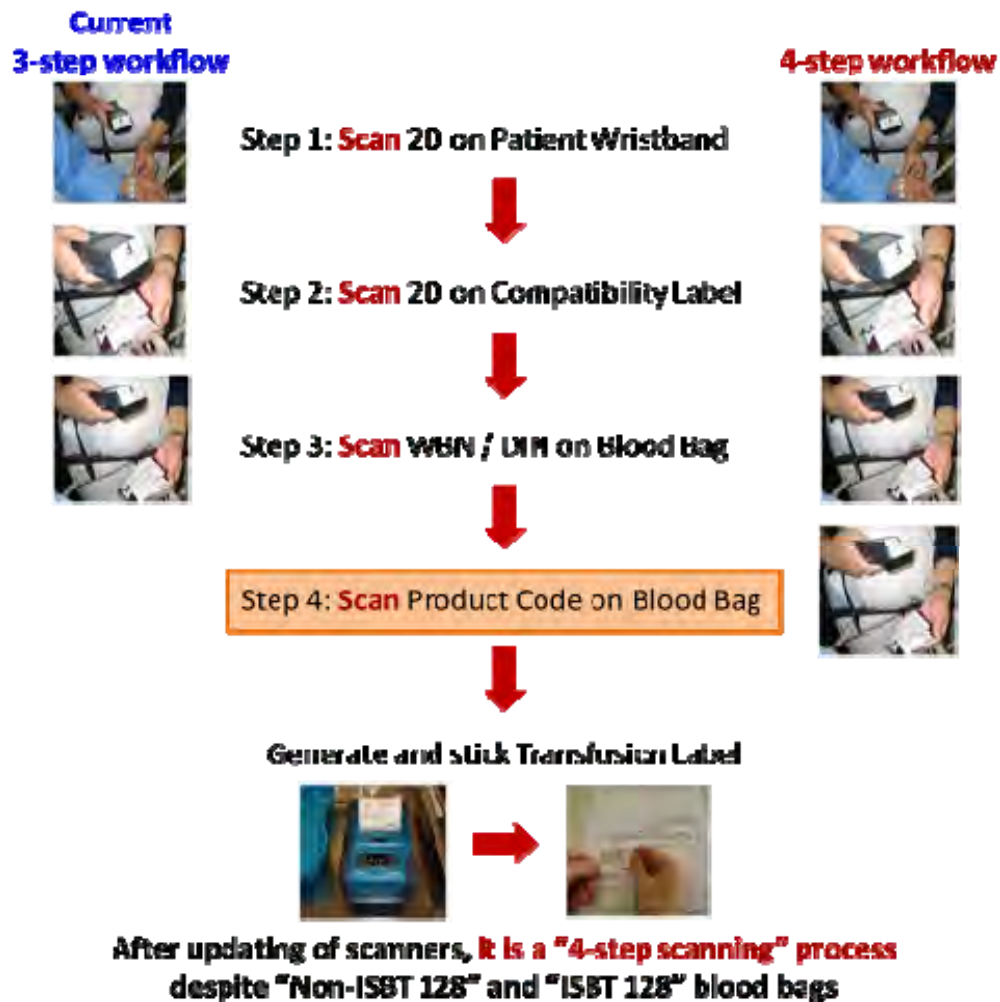
The HA had adopted the 2D barcode technology in UPI to ensure the correct identification in all 8 birthing hospitals.



▲ Stillbirth identification in HA hospitals

Workflow Changes on Blood Administration

To align with the Hong Kong Blood Transfusion Service's safety initiative to implement the international Information Standard on Blood and Transplant (ISBT 128) for enhancing traceability and surveillance, scanning of blood product code for verification was now mandatory.



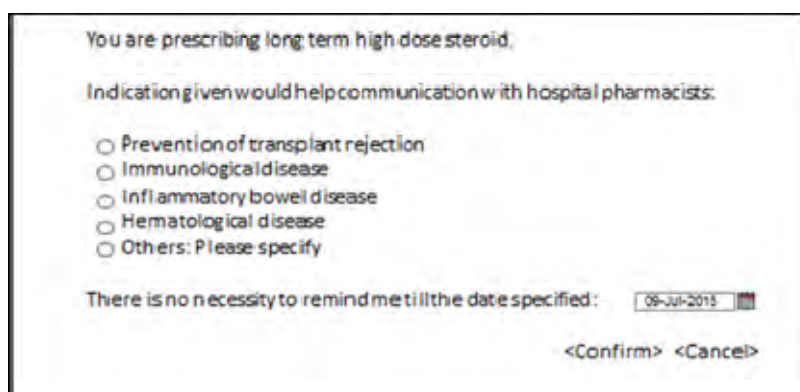
▲ New blood administration workflow

Information Technology Enhancement for Medication Safety

With the remarkable efforts from Information Technology and Health Informatics Division of HAHO, cluster quality and safety offices and various stakeholders, including Medication Safety Committee, Coordinating Committees and Central Committee (Cardiac Service), the followings enhancements on CMS were successfully implemented:

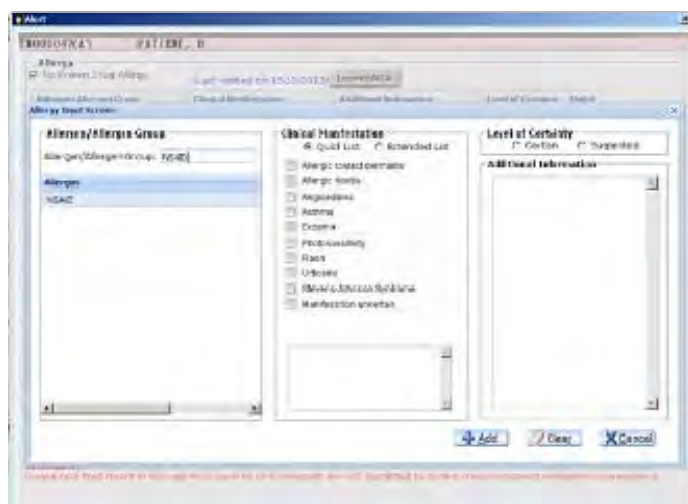
To prevent prescription of unintended long term high-dose steroid

A pop-up message was developed in Medication Order Entry (MOE) to alert staff when long term high-dose steroid was prescribed. It was piloted in Kowloon East Cluster and New Territories West Cluster and would be further implemented in all clusters.




To eliminate free text entry

A new structured allergen group of non-steroidal anti-inflammatory drug (NSAID) had been available in CMS since August 2014. With the auto-check function, staff would be alerted when NSAID was inadvertently prescribed to such patient. The ultimate goal is to eliminate free text entry.



To avoid inappropriate discontinuation of dual anti-platelet therapy (DAPT)

A CMS alert on DAPT was developed. With this function, staff could alert clinicians and pharmacists among HA hospitals.





Web Platform

Embracing the era of modern technology, the Patient Safety and Risk Management Department (PS&RM) had been exploring innovative methods for getting patient safety messages across different stakeholders. In 2015, PS&RM webpage was revamped and [animated messages](#) were developed and published.

Publications

HAHO and clusters had been publishing different newsletters / bulletin to communicate with staff on selected patient safety topics as well as good practices and innovative solutions for continuous quality improvement and promotion of safety culture.

Hospital Authority Head Office	Quality Times, HAHO HARA, HAHO
Hong Kong East Cluster	Near-miss Digest, HKEC Quality Bulletin, HKEC
Hong Kong West Cluster	Quality Reminder, HKWC

Kowloon Central Cluster	Quality & Safety Bulletin, KCC Patient Safety, KCC Quality & Safety Newsletter, KH
Kowloon East Cluster	KEC Quality & Safety Bulletin, KEC Quadruple Synergy, KEC Safety News, TKOH
Kowloon West Cluster	Quality Bulletin, PMH Safety Gist, PMH Quality and Safety Newsletter, YCH Quality and Safety Newsletter, CMC
New Territories East Cluster	iSMART, NTEC iQuality, PWH Q&S Newsletter, NDH
New Territories West Cluster	Kaizen Post, NTWC Safe Clinical Practice Bulletins, NTWC Patient Safety Tips & News, NTWC Surgical Quality and Safety Circle Bulletin, NTWC



Hong Kong East Cluster (HKEC)

Hospital Accreditation

Pamela Youde Nethersole Eastern Hospital (PYNEH) had its second Organization-Wide Survey (OWS) done in June 2014. With the concerted and commendable effort of all staff members, PYNEH was accredited with “Extensive Achievement” (EA) in the following 10 criteria:

- 1.1.2 Care planning and delivery
- 1.1.4 Care evaluation
- 1.1.7 Care of dying and deceased
- 1.5.3 Pressure ulcer management
- 1.5.5 Management of blood and blood components
- 2.4.1 Better health and wellbeing
- 2.5.1 Research programme
- 3.1.3 Credentialing and scope of clinical practice
- 3.2.1 Safety management systems
- 3.2.3 Waste and environment management

Tung Wah Eastern Hospital (TWEH) is the second HKEC hospital got accredited by the Australian Council on Healthcare Standards (ACHS). TWEH attained “Marked Achievement” (MA) in 45 criteria and “EA” in “Skin Integrity and Wound Management” and “Patient Fall Prevention”.

TWEH attained 45 MA & 2 EA ►

▼ PYNEH was accredited 10 EA





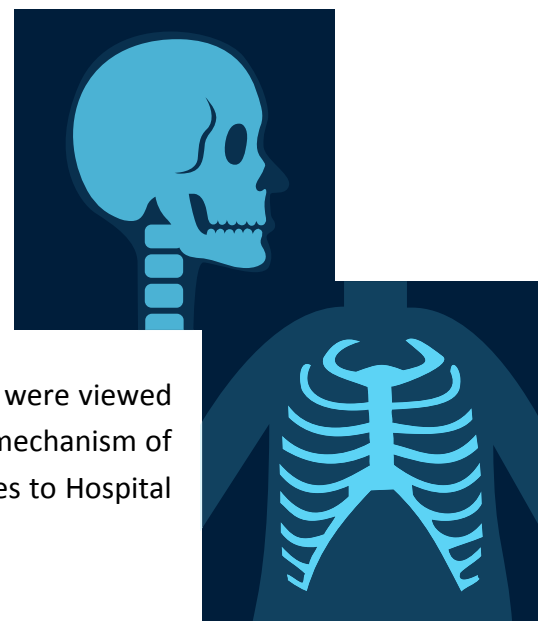
Clinical Handover - Modified Early Warning Signs (MEWS)

HKEC Guideline on MEWS for Patient Monitoring and Clinical Handover was first implemented in June 2010. HKEC Quality and Safety (Q&S) Office conducted clinical audit on MEWS and survey on doctors' and nurses' feedback on MEWS in July 2014. The overall compliance of MEWS assessment on admission or transfer-in was satisfactory. As reflected from the survey, majority of doctors and nurses indicated the HKEC MEWS guideline was easy to follow and they supported the use of MEWS for clinical handover. The audit and survey results were shared in Q&S lunch forum in November 2014 to reinforce staff compliance on MEWS guidelines on clinical handover. On top of the abovementioned survey and audit, Patient Assessment Form was further rolled out to different wards in PYNEH and Cheshire Home in October 2014.

◀ Vital signs observation chart, showing the MEWS scores on vertical bars

Controlling the Risk of Missing Important X-ray Findings in Specialist Out-patient Department (SOPD)

In view of the potential risk of delayed X-ray film viewing, PYNEH established a multidisciplinary working group in December 2014 to formulate a holistic approach to mitigate the risk of missing important X-ray findings and ensure films ordered in SOPD were viewed in a timely manner. The working group would review the existing mechanism of X-ray review in SOPD and proposed relevant improvement measures to Hospital Management for endorsement in 2015/16.



Medication Safety

The Drug Allergy Warning Sheet was reviewed and revised with pre-printed numbers and rows to facilitate the counting of drug allergies so that staff could easily document and comprehend patient's drug allergy record. A pamphlet on Allergy Drug List was also prepared for easy reference. Medication Safety Rounds continued to be regularly conducted to share good practice and identify room for improvement.

Chinese Drug Names	English Drug Names	Chinese Drug Names	English Drug Names
1. PENICILLINS	1. PENICILLINS	2. CEPHALOSPORINS	2. CEPHALOSPORINS
3. CARBAPENEMS	3. CARBAPENEMS	4. AMINOGLYCOSIDES	4. AMINOGLYCOSIDES
5. GLYCOPEPTIDES	5. GLYCOPEPTIDES	6. NSAIDS	6. NSAIDS
7. SULPHONAMIDES	7. SULPHONAMIDES	8. G6PD Deficiency	8. G6PD Deficiency

▲ A pamphlet on Allergy Drug List was prepared for colleagues' easy reference

To prevent the use of known drug allergens, Ruttonjee and Tang Shiu Kin Hospitals was also exploring to colour coded and rearrange the medication trolley in Accident and Emergency Department for quick visual identification.



▲ Edges of medication trolley were highlighted for quick visual identification

Promotion of STFS and ►
forearm protector



Hazard Control Enhancement Programme

- * Increase awareness of “Slip, Trip & Fall” by organizing Cluster Slip, Trip, Fall and Struck (STFS) Awareness Day and floor cleansing trainings, trial use of spill pads and safety working shoes etc.
- * Provide proper & effective ductless fume hood for Histology Laboratory to handle xylene
- * Develop improvement programme for manual handling operation (MHO) and workplace violence such as procuring MHO relieving devices and forearm protector as personal protective equipment





Cultural Change for Patient Safety — Crew Resources Management

PYNEH was the first hospital in Hospital Authority (HA) that piloted the Crew Resource Management (CRM) training programme in 2009. HKEC had extended the CRM training from classroom-based to clinical simulation experiential training. We also noted the cultural change that colleagues were more willing to speak up in work setting.



Forums for Continuous Quality Improvement

Ruttonjee & Tang Shiu Kin Hospitals organized its Continuous Quality Improvement Forum cum Award Presentative Ceremony on 18 November 2014. The theme was “Quality Healthcare – Everyone’s Share”. Dr T L LEE, Chief Manager (Quality & Standard), Hospital Authority Head Office, was invited as the keynote speaker of the Forum.

Dr T L LEE was invited to deliver a speech on the ►
Overview of Quality Management in Healthcare



Q&S Audio Visual Library

Q&S Office produced 6 videos as staff educational materials on selected Advance Incident Reporting System (AIRS) incidents and complaint cases to raise staff awareness. The cases covered the topics on fall, medication, patient misidentification and communication. The videos had been uploaded on Q&S webpage for colleagues' easy reference.



Hong Kong West Cluster (HKWC)

Hospital Accreditation

Queen Mary Hospital (QMH) passed the Australian Council on Healthcare Standards (ACHS) Organization-Wide Survey (OWS) conducted on 13 - 17 October 2014. QMH achieved the criteria below with Extensive Achievement (EA):

- 1.1.4 Care evaluation
- 1.1.6 Ongoing care
- 1.1.7 Care of dying and deceased
- 1.2.1 Information on and access to care and services
- 1.2.2 Access prioritized
- 1.3.1 Appropriate care and services
- 1.5.3 Pressure ulcer management
- 1.5.4 Falls management
- 1.6.1 Input from consumers
- 2.4.1 Better health and wellbeing
- 2.5.1 Research programme



Tung Wah Hospital Early Warning System (TEWS)

Tung Wah Hospital (TWH) Early Warning System and “Guideline on Tung Wah Hospital Early Warning System - TEWS” were developed and used to identify patients at risk of deterioration. Any one of the vital sign falls into the coloured zone (i.e. zones 1 to 3) would trigger the TEWS actions. The frequency of observation and clinical responses would change according to the zone specific response.

Zone	Monitoring	Clinical Response
Any sign in Dark Brown Zone 3	Continuous close monitoring	Inform IC & Doctor immediately, activate resuscitation process if necessary
Any sign in Brown Zone 2	Increase frequency	Inform Doctor to assess the patient ASAP +/- inform IC
Any sign in Light Brown Zone 1	Consider increase frequency	Manage pain, fever, distress, sputum. Discuss with senior nurse for consider clinical review by doctor
Signs in White Zone 0	Monitor as prescribed by doctor	Continue prescribed treatment

Level of Consciousness (LOC): A = Alert, V = Response to Verbal, P = Response to Pain, U = Unresponsive (Change is more important than status)
 Blood Pressure (BP): Lying = , Standing = , X =
 Pain Score: VAS (0 - 10)

▲ TEWS was used to identify patient at risk of deterioration



Continuous Quality Improvement (CQI) Forum cum the Best CQI Award 2014/15

The third CQI forum cum the Best CQI Award was held at GH on 11 March 2015 to promote safe culture and enhance staff awareness on quality healthcare.

Fall

A new guideline was developed and implemented at GH in July 2014. Risk assessment and care plans were standardized. A new fall prevention programme was introduced by Occupational Therapy Department which included functional training, simulation of functional task, remedial activities, education on home safety and home visits.

**HOSPITAL AUTHORITY
GRANTHAM HOSPITAL**
Fall Risk Assessment and Intervention Record

Admission Date (to _____) (Q1-10)
Name _____
Sex _____ Age _____ Clinical History _____
Diagn. _____ Sign. _____ Ref. _____

Part A: Risk Assessment (tick in appropriate box)
1. **History of fall** (tick in appropriate box)
2. **Secondary diagnosis** (tick in appropriate box)
3. **Antidotality risk** (tick in appropriate box)
4. **Intervention Therapy / Safety Lock** (tick in appropriate box)
5. **Call** (tick in appropriate box)
6. **Mental Status** (tick in appropriate box)
7. **Risk Level** (L: < 45; M: 45-55; H: > 55)
8. **Part B: Care plan** (tick interventions corresponding to risk factors identified, also consider other common risk factors on back page.)
9. **Standard Interventions for all risk levels:**
10. **Interventions for at-risk patients:**
11. **REMEMBER**
12. **EDUCATE**

Standard Interventions for all risk levels:
1. Call bell, walking aid and essential items within reach
2. Bed at appropriate height
3. Ensure proper footwear and proper trousers
4. Environment uncluttered
5. Establish toileting routine
6. Display fall hazard signage
7. Use fall alarm device
8. Place bed close to nurse station for close monitoring
9. Restrain as the last resort
10. Others:
11. Others:
12. Others:

REMEMBER
• Keep bed and wheelchair locked when stationary
• Place bedside table and equipment on patient's stronger side and have patient get out of bed on stronger side
• Consider referral as specific risk factors are identified to reduce risk for falls
• Consider need for medication review by Doctor and/or Pharmacist
• Communicate high risk for fall status upon patient transfer to other unit

EDUCATE
• Actively engage patient family in Fall Prevention
• Teach proper footwear & use of assistive devices
• Teach patient use of grab bars
• Provide patient family education pamphlets as appropriate
• Teach PCAs using SPs during regular round

Standardized fall risk assessment and intervention record

Kowloon Central Cluster (KCC)

Hospital Accreditation

The Australian Council on Healthcare Standards (ACHS) Organization-Wide Survey (OWS) for Queen Elizabeth Hospital (QEH) was conducted during 21 - 25 July 2015 and full accreditation for 4 years was awarded. The OWS recommendations were presented in hospital committees and action plans were developed with regular review on the progress.

The Gap Analysis for Hong Kong Buddhist Hospital (HKBH) was conducted during 4 - 6 August 2014. Post-Gap Analysis visit was made twice by the ACHS Co-coordinator. The OWS would be conducted from 16 to 18 November 2015.

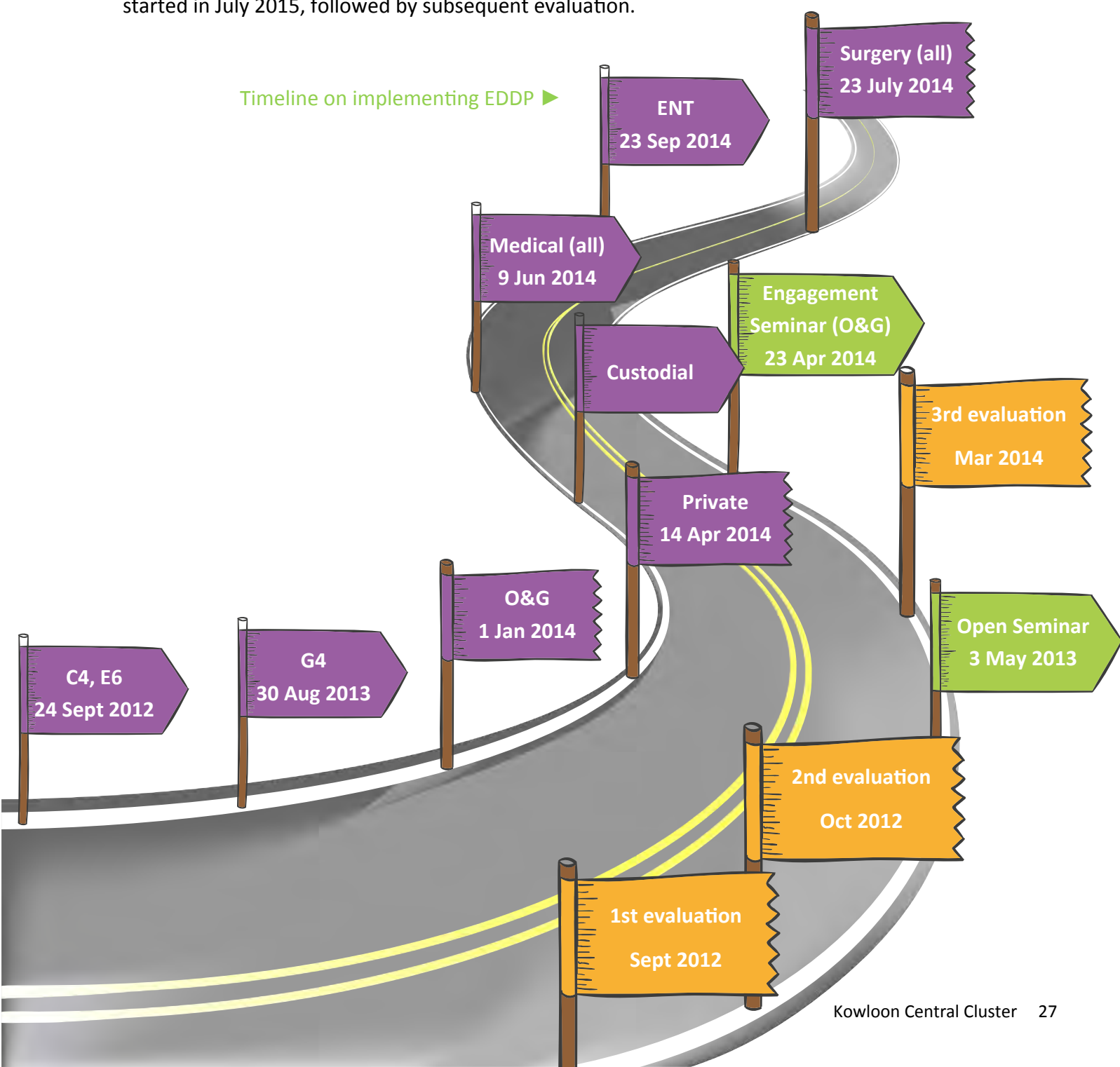


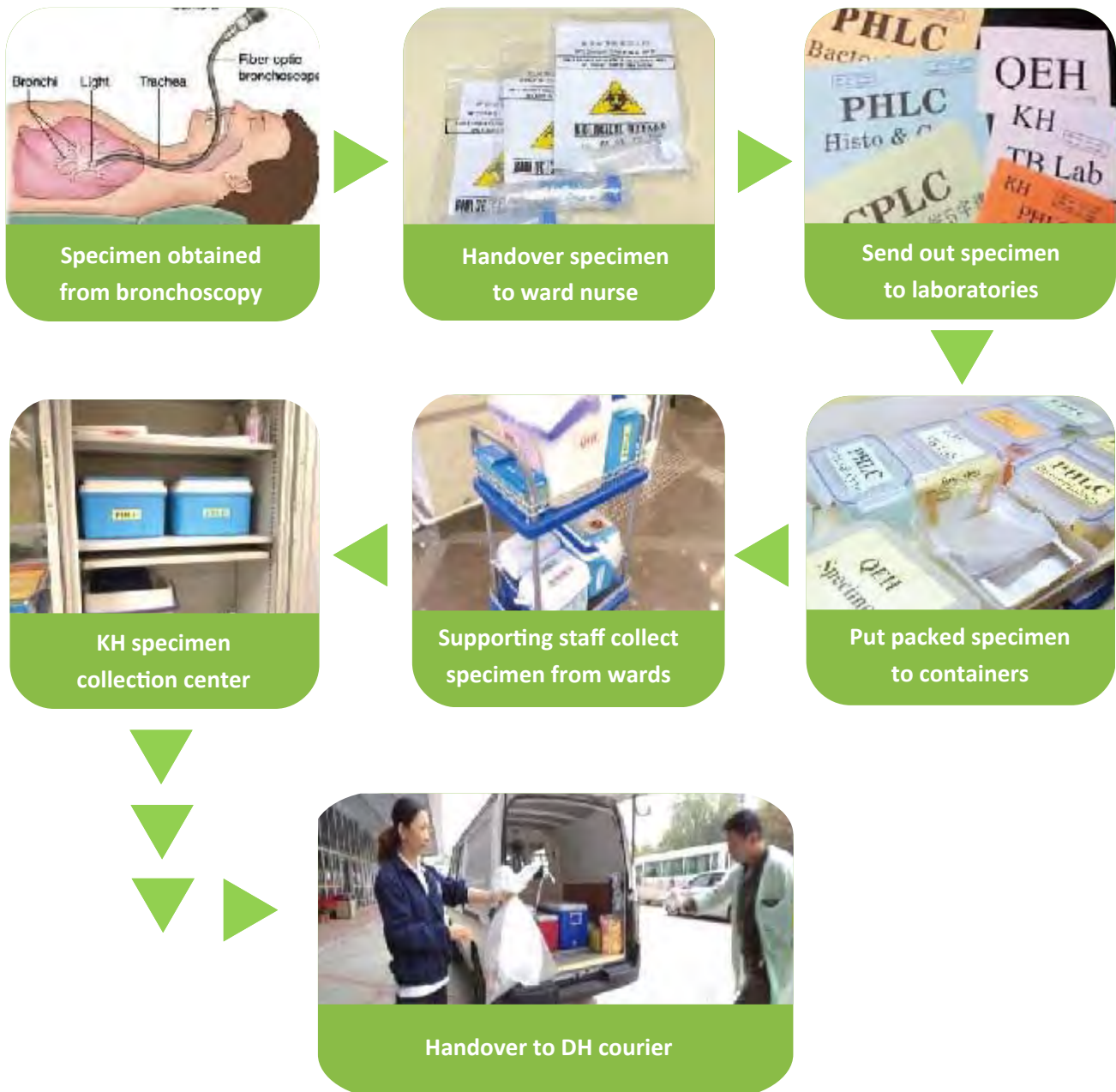
Early Detection of Deteriorating Patient (EDDP)

The Guideline on EDDP included a set of early warning physiological parameters, a graded response system and an observation chart. The implementation in QEH had been extended to private and custodial wards, Department of Obstetrics & Gynaecology (O&G), all medical wards, all surgical wards and the ear, nose and throat (ENT) ward. Staff engagement seminars were held before implementation. Ongoing evaluation including staff survey and clinical audits would be conducted for programme improvement.

Introduction of Modified Early Warning Signs (MEWS) at HKBH helped nursing staff, especially junior one, to detect patients with early deterioration in condition and trigger action accordingly. Pilot introduction was commenced in January 2015 and full implementation would be started in July 2015, followed by subsequent evaluation.

Timeline on implementing EDDP ►





▲ Procedure to send out specimen to laboratories

Risk Mitigation

An "Easy Fit Pajama" was designed for frail patients who were prone to silent fracture in Kowloon Hospital (KH). Several "Lean" programmes had also been implemented to streamline the process for sending important specimen to laboratories in Department of Health (DH) as well as QEH.

Transport of Critically Ill Patients

Forum on Transport of Critically Ill Patients was held in April 2014 in QEH and a video on Transport of Critically Ill Patients to Magnetic Resonance Imaging (MRI) Suite was prepared in January 2015. It would be incorporated into the existing e-learning programme after editing.

With the introduction of the transPAC portable ventilators, roadshows for transPAC training were conducted to ensure safe use of the device. Train-the-trainer courses were provided and session for transPAC training was added to the existing regular Portable Ventilator Training Course.



▲ A transPAC portable ventilators

Near Miss Reporting

In order to nurture an "Open Disclosure Culture", KH introduced a "Near Miss Reporting Recognition Scheme". Apart from that, different forums on "Open Disclosure" were conducted to frontline colleagues in the year, so as to foster an environment of "Open Disclosure" while tackling different incidents.

KCC Quality and Safety (Q&S) Division conducted seminars on reporting near misses through Advance Incidents Reporting System 3 (AIRS 3). The culture of reporting near miss was gradually building up at HKBH with an increase in the number of reported near misses as compared to previous years.





Safety Round

In KH, in order to cultivate a safety culture, the Patient Safety Round was increased from quarterly to eight times per year in 2015. By doing so, hospital senior management and Q&S colleagues could visit each department or unit once in a one-year cycle.

In HKBH, Hospital Safety Rounds which were led by senior hospital management as well as senior clinicians from QEH were conducted. Continuous quality improvement (CQI) forum was held. There were also accreditation newsletters issued to staff on a regular basis.

The first Hospital Safety Walkround for Hong Kong Eye Hospital (HKEH) was held on 5 March 2015. Various quality and safety issues were identified and follow-up actions were devised for continuous quality improvement. Regular safety walkrounds would be held in every quarter.



KCC DRUG ALLERGY CROSS REFERENCE TABLE (BY DRUG GROUPS IN ALPHABETICAL ORDER) (HONGKONG PHARMACY BOARD)

Cross-Allergy Reference Table (KCC)

▲ (by alphabetical order) (by Group)▲

KCC Drug Allergy Cross Reference Tables

Medication Safety

The KCC Drug Allergy Cross Reference Tables (in drug groups and in alphabetical order of drug name) were updated according to HA Guideline on Known Drug Allergy Checking and uploaded to the KCC pharmacy webpage.

New dangerous drug (DD) ledgers had been used since April 2014 in KCC clinical areas after discussion in the KCC Medication Safety Committee. The KCC Standardization of DD Labeling was revised.

▼ Tallman DD labels

Standardization of Dangerous Drugs Labeling in KCC
Prepared by pharmacy on behalf of KCC MSC (last updated Jul 2015)

Parenteral or non oral preparations	
Alfentanil 1mg in 2ml Inj Amp (Rapifen)	Methadone 10mg in 1ml Inj Amp (Physeptone)
Cocaine 5% Eye/Nasal Drops	MIDazolam 15mg in 3ml Inj Amp (Dormicum)
DIAzepam 10mg in 2ml Inj Amp (Valium)	MIDazolam 5mg in 5ml Inj Amp (Dormicum)
DIAzepam Emulsion Inj 10mg in 2ml Amp (Diazemuls)	Morphine 15mg in 1 ml Inj Amp
DIAzepam 5mg in 2.5ml Rectal Solution (Valium)	LORAzepam 4mg in 1 ml Inj vial (Ativan)

Oral Preparations:	
ALPRAzepam 0.25mg Tab (Xanax)	LORAzepam 1mg Tab (Ativan)
ALPRAzepam 0.5mg Tab (Xanax)	Methadone 5mg Tab (Physeptone)
BROMAzepam 1.5mg Tab (Lexotan)	Methylphenidate 10mg Tab (Ritalin)
BROMAzepam 3mg Tab (Lexotan)	MIDazolam 15mg Tab (Dormicum)
CloBAzam 10mg Tab (Frisium)	Morphine 2mg/ml Syrup
CloNAzepam 0.5mg Tab (Rivotril)	Morphine sulphate SR 10mg Tab (MST continus10)

Kowloon East Cluster (KEC)

Hospital Accreditation

With the overwhelming support and dedication of all United Christian Hospital (UCH) staff, the Organization-Wide Survey (OWS) was conducted successfully in UCH in March 2014. The Australian Council on Healthcare Standards (ACHS) Certificate Presentation Ceremony was held on 12 May 2014 to signify this remarkable milestone of being accredited.

In Tseung Kwon O Hospital (TKOH), the ACHS Gap Analysis was held from 2 to 5 September 2014. Meeting with all sponsor teams were held to discuss the action plans to address the Priority Action Items (PAIs) suggested in ACHS Consultancy Report. The OWS would be conducted in November 2015.



◀ ACHS Certificate Presentation Ceremony in UCH

▼ ACHS Gap Analysis Summation Conference in TKOH



“Between-the-flags”

In order to enhance the mechanism of detecting deteriorating patients so that prompt actions could be taken for proper treatment, “Between-the-flags” had been rolled out to clinical departments of UCH since 2 July 2014. “Between-the-flags” was a “track and trigger” tool used to record the vital signs or observations graphically so that trends could be tracked visually. The triggering zones were colour-coded and incorporated into existing patient assessment forms customized for each department according to their own sensitivity level requirement. Audit would be conducted to assess its effectiveness.

<div style="display: inline-block; vertical-align: middle; text-align: center;"> Hospital Authority United Christian Hospital </div>		<small>(Affix Patient Particulars label Here or Use Block Letter)</small> Hospital No: _____ MRN: _____ Name: _____ HKID No.: _____ Sex / Age: _____ Ward: _____ Bed: _____ Dept: _____	
DETAIL CHART			
Date			
Time			
SpO ₂ (%)			
O ₂ (L/min)			
CVP (cmH ₂ O)			
Temp (°C)			
Pain Score: NRS/VAS/ODS			
Resp. Rate (/min)			
Blood Pressure (mm-Hg) 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10			200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 or Pulse Rate (/min)
		Red Zone	
		Yellow Zone	
		Normal Zone	
		Yellow Zone	
		Red Zone	
CLINICAL NOTES			

▲ A “track and trigger” tool used to record the vital signs or observations graphically



KEC Quality & Safety Symposium 2014

The “KEC Quality & Safety Symposium 2014” was organized on 24 June 2014. The theme for this year was **“The Science and Art of Patient Care”**. We were honoured to have Professor Francis K L CHAN from the Chinese University of Hong Kong, Professor Paul LAI from the Chinese University of Hong Kong / Prince of Wales Hospital and Dr T Y CHUI to deliver keynote lectures on their views from different perspectives.

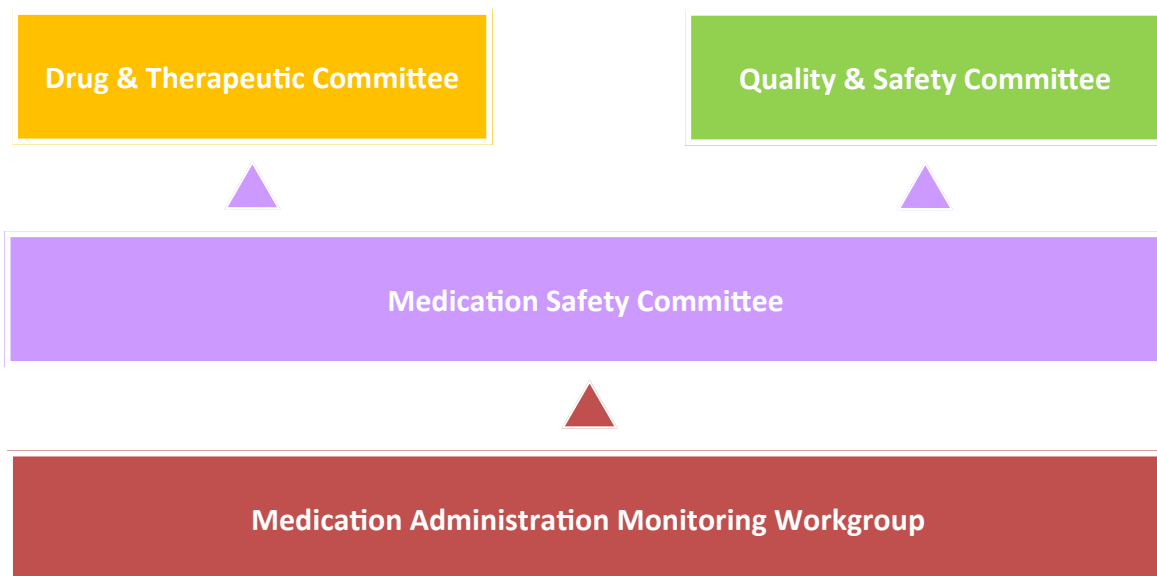
Crew Resource Management (CRM) Training Workshops

The CRM project was rolled out in KEC in 2014/15 with the main theme of “Mental Skills in Preventing Errors”. The enrolment was overwhelming and all the workshops were arranged successfully with affirmative feedback. While the main target participants were middle-line / experienced doctors and nurses this year, it would be further extended to frontline professionals in the coming years.



Medication Administration Monitoring Workgroup

To foster drug administration safety culture in UCH, Medication Administration Monitoring Workgroup, chaired by General Manager (Nursing) was formed. Frontline nursing supervisors were engaged for case digest on each medication incidents / adverse drug events. Moreover, the Workgroup acted as a valued platform in facilitating intensive and effective sharing of lessons learned as well as bright ideas on mitigating risks among different specialties.



▼ Members of Medication Administration Monitoring Workgroup



Kowloon West Cluster (KWC)

Hospital Accreditation

Australian Council on Healthcare Standards (ACHS) conducted Organization-Wide Survey (OWS) from 17 to 21 November 2014 in Prince Margaret Hospital (PMH) and PMH was awarded 41 Marked Achievements (MA) and:

Outstanding Achievement (OA)

1.6.1 Input from consumers, carers and community

Extensive Achievements (EA)

1.5.1 Medication management

1.5.3 Pressure ulcer and wound management

2.3.4 Information and communication technology

2.4.1 Better health and well being

3.1.2 Governance structure and delegation practices

OWS in PMH ▼





▲ OWS in CMC

Caritas Medical Centre (CMC) completed the second OWS in August 2014 and achieved 4 years full accreditation with 4 EA:

1.1.6 On-going care

1.1.7 Care of dying and deceased

1.6.1 Input from consumers, carers and community

3.2.3 Waste and environment management

ACHS conducted Gap Analysis in Yan Chai Hospital (YCH) from 24 to 27 November 2014. A Forum on Hospital Accreditation was arranged on 3 March 2015 for hospital staff to understand the action plans for the Priority Action Items (PAI).

The ACHS Quality Week was held in Our Lady Maryknoll Hospital (OLMH) in August 2014 for the preparation of Periodic Review in 2015. Selected topics including top risks on medication safety, patient identification, patient fall, infection control, occupation safety and health (OSH) and medical record management were arranged for staff participation.



◀ ACHS Quality Week in OLMH



Gap Analysis in YCH



Medication Safety

In North Lantau Hospital (NLTH), In-patient Medication Order Entry (IPMOE) was successfully launched on 24 September 2014. An IPMOE website was also developed to facilitate access of information by staff.

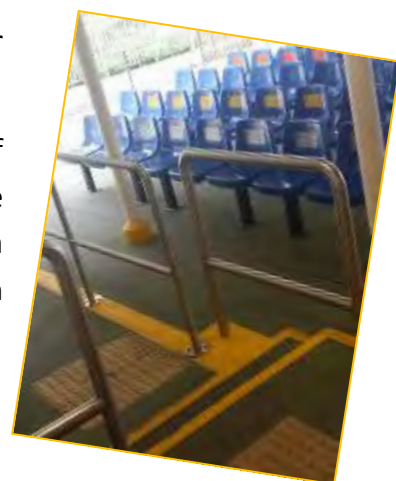
Fall Prevention

Kwong Wah Hospital (KWH) had standardized the use of Morse Fall Scale Assessment Tool in all adult wards and the use of “Cordless bed monitor system for prevention of patient fall” was adopted in the Neurosurgery Department in September 2014.

OLMH installed wireless sensor alarm system in all wards for prevention of fall in 4Q 2014.

Handrail fences were installed at the step near the entrance of Wu York Yu General Out-patient Clinics (GOPC) by Family Medicine Department to prevent patient fall from using the step. In addition, a patient fall prevention programme was launched to recruit patients with high risk of fall for training.

Installed handrail fence to prevent fall ►



Crew Resource Management

Crew Resource Management was rolled out at KWC in 2014/15. The course objectives were to enhance medical and nursing staffs' awareness on human factors in medical incidents, improve team communication and teamwork, acquire skills for conflict resolution, briefing and debriefing, and learn cognitive skills of maintaining situational awareness and decision making. It also aimed to reduce the occurrence of medical incidents / near miss cases for enhancing patient safety.





KWC Quality & Safety (Q&S) Forum

The KWC Q&S Forum was conducted on 9 January 2015 at PMH. The forum consisted of thematic speeches, continuous quality improvement (CQI) project presentations and poster exhibition. One of the speakers, Dr Joseph LUI (Advisor (Capital Project), HAHO) was invited to share his view on hospital accreditation and the way forward. The other speaker, Mr Andy KUNG (Senior Manager (Infection, Emergency and Contingency), HAHO) was invited to share his experiences on the subject of response to major incidents.

Guidelines on Do-Not-Attempt Cardiopulmonary Resuscitation (DNACPR)

The Guidelines on DNACPR was implemented across Hospital Authority (HA) by HA Head Office (HAHO) on 6 October 2014, which superseded “Guidelines on In-Hospital Resuscitation Decision” issued in 1998. Flagging of DNACPR for non-hospitalized patients in Clinical Management System (CMS) was subsequently rolled out in February 2015. In addition, a flow chart to complete the DNACPR form and a designated folder for holding the DNACPR and End-of-Life (EOL) form had been designed for wards in PMH.



New Territories East Cluster (NTEC)

Hospital Accreditation

Alice Ho Miu Ling Nethersole Hospital (AHNH) and Tai Po Hospital (TPH) went through the Australian Council on Healthcare Standards (ACHS) Organization-Wide Survey (OWS) in May 2014 and were fully accredited for 4 years. The hospitals were the first among all Hospital Authority (HA) hospitals honored with Extensive Achievement (EA) in [Criteria 1.5.7 - 'Nutritional Needs'](#).



WISER (We Innovate, Services Excel Regularly) Programme

The WISER taskforce was formed in July 2014 to facilitate the implementation of WISER initiatives with the aim of fostering a culture of openness and innovation through continuous quality improvement. The first NTEC Lean Leader Course was conducted from November 2014 to March 2015.



NTEC Quality and Safety (Q&S) Forum – Clinical Handover and Handling of Deteriorating Patients

The annual cluster Q&S Forum themed “Handover- Continuity 傳心傳意” was held on 11 November 2014 to promulgate handover as a key to continuity of care and patient safety across the healthcare settings. Prof. John LEONG, HA Chairman was invited to officiate the Forum. The concept of ‘from person to person and from problem to plan’ was highlighted. The micro-cinema “The Handover Games: Catching Fire” was premiered and 7 NTEC Continuous Quality Improvement (CQI) projects on handover were presented. Handover game booth was run during lunch reception.

The Taskforce on Clinical Handover & Detecting Deteriorating Patients had drafted the NTEC Policy on Early Detection of Deteriorating Patients to define the standard and framework on early detection and management of deteriorating patients. Pilot use of Modified Early Warning Signs (MEWS) and Paediatric Early Warning System (PEWS) in detecting deteriorating patients were continued at North District Hospital (NDH).





Crew Resource Management (CRM)

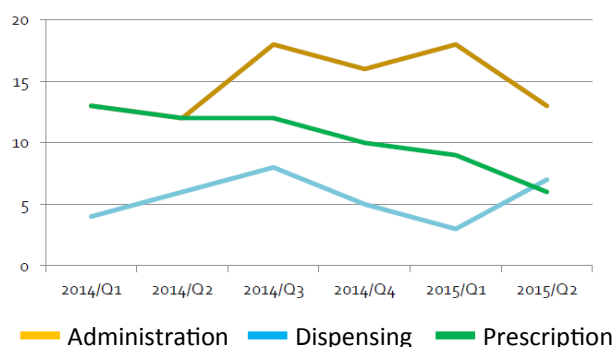
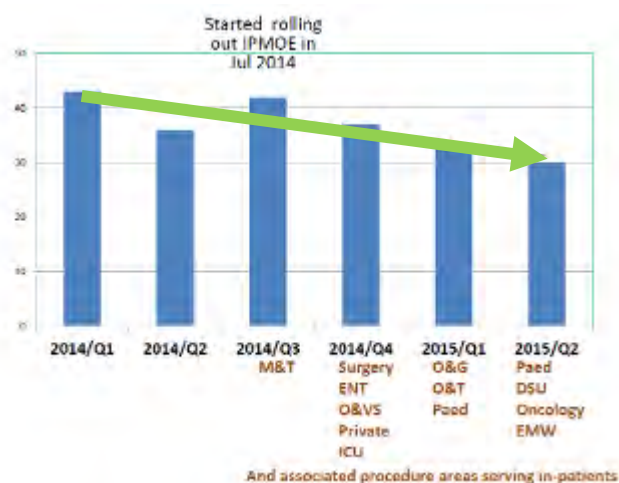


As initiated by the HA CRM Steering Committee, the NTEC CRM Planning Taskforce was established in the second quarter of 2014 to plan and implement CRM training. The training was designed to enhance team work and communication during critical situations with the aim to promote patient safety. Basic training classes and instructor courses were conducted in 2014/15.

Enhancement of Medication Safety

The In-patient Medication Order Entry (IPMOE) had been smoothly implemented to all departments of Prince of Wales Hospital (PWH) since 9 July 2014. Failure Mode and Effect Analysis (FMEA) was performed to assess the associated risks proactively before implementation. The programme would be rolled out to other cluster hospitals in 2016.

The finding of the interim evaluation was encouraging. Not only that staff reported improvement in workflow and efficiency in checking medication, but a downward trend was also observed in the number of medication incidents related to transcription error, known drug allergy, illegible prescription, drug omission and wrong patients.









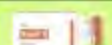
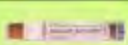




▲ Trends of medication incidents

Risk Reduction Strategies for Safe Insulin Therapy

As there was an increasing trend of incidents related to insulin from 2011 - 13, a work group had been formed to address the issue. 4 risk reduction strategies were consolidated to mitigate the identified risk areas:

- * Standardize the prescription and administration schedule
- * Redesign the insulin Medication Administration Record (MAR) record to synchronize prescription and administration
- * Design categorized information related to the various types of insulin
- * Educate and communicate

Recommendation for Insulin Administration in NTEC Clinical Areas (1)					
Description	Administration	Brand Name	Action Profile	Drug preparation	
				Vial	Pen fill
Short Acting Insulin	30 minutes before meals or specified	Actrapid	Onset: 0.5 hour Peak: 1.5 to 3.5 hours Duration: 7 to 8 hours		
		Humulin R	Onset: 0.5 hour Peak: 2 to 4 hours Duration: 6 to 8 hours		
Intermediate Acting Insulin	30 minutes before meals or specified	Protaphane	Onset: 1.5 hour Peak: 4 to 12 hours Duration: 24 hours		
		Humulin N	Onset: 1 hour Peak: 4 to 10 hours Duration: 16 to 18 hours		
Pre-Mixed Insulin	30 minutes before meals or specified	Mixtard 30 30% Actrapid & 70% Protaphane	Onset: 0.5 hour Peak: 2 to 8 hours Duration: 24 hours		
		Humulin 70/30 30% Humulin R & 70% Humulin N	Onset: 0.5 hour Peak: 2 to 12 hours Duration: 16 to 18 hours		

For all unopened Insulin (vial, penfill or disposable pen)











- Keep refrigerated at 2 - 8°C until expiry date

Handling Insulin vial:

- For cloudy insulin, roll the vial before injection.
- Avoid shaking the insulin vial.

For all in-use Insulin (vial, penfill or disposable pen)



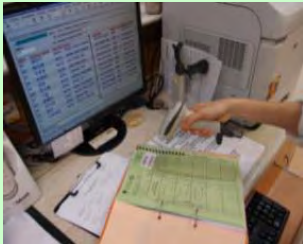

- Do not expose to direct sunlight
- Keep at room temperature, below 25°C
- Do not refrigerate once opened
- Must be used within 4 weeks
- Mark "open & use before date" on in

Recommendation for Insulin Administration in NTEC Clinical Areas (2)					
Description	Administration	Brand Name (Generic Name)	Action Profile	Drug preparation	
				Vial	Disposable pen
Rapid Acting Insulin Analogue	within 10 minutes before meals	NovoRapid FlexPen	Onset: 10 to 20 mins Peak: 1 to 3 hours Duration: 3 to 5 hours	NA	
		Humalog Humalog KwikPen	Onset: within 15 mins Peak: 1 hour Duration: 3.5 to 4.5 hours		
		Apidra SoloStar (Glulisine)	Onset: 10 to 20 mins Peak: 1 to 2 hours Duration: 4 hours	NA	
Pre-Mixed Insulin with Rapid Acting Insulin Analogue	within 10 minutes before meals	NovoMix 30 FlexPen	Onset: 10 to 20 mins Peak: 1 to 4 hours Duration: 24 hours	NA	
		Humalog Mix25 KwikPen	Onset: within 15 mins Peak: 1 hour Duration: 16 to 18 hours	NA	
		Humalog Mix50 KwikPen	Onset: within 15 mins Peak: 1 hour Duration: 16 to 18 hours	NA	
Long Acting Insulin Analogue	OM or Nocte or specified (Disregard of meal time)	Levemir FlexPen (Detemir)	Onset: 1 to 2 hours Peak: no pronounced peak Duration: 24 hours	NA	
		Lantus (Glargine) Lantus SoloStar (Glargine)	Onset: 1 to 2 hours Peak: no pronounced peak Duration: 24 hours		

▲ Recommendation for insulin administration in NTEC clinical areas

Strategies to Reduce Transcription Errors

The evaluation results of the second stage of trial on strategies to reduce transcription errors from 14 April to 15 June 2014 in 7 departments of AHNH, PWH, NDH and Shatin Hospital (SH) were satisfactory and doctors' compliance improved when compared with the first trial in November 2013.

Risk Reduction Strategies for Trial	
<p>1. Medical officers' (MO) direct prescription</p>  	<ul style="list-style-type: none"> * Prescribe medicines directly by MO as far as possible * Do not accept "Resume usual medicine" or equivalence unless supplemented with effective communication as needed
<p>2. Use of barcode scanning</p> 	<ul style="list-style-type: none"> * Scan barcode to access correct patient profiles in Clinical Management System (CMS) * Encourage each other to use it
<p>3. No routine transcription at night time</p> 	<ul style="list-style-type: none"> * Reduce unnecessary workload at night time * Put up reminder signage as needed



Quality and Safety Walkrounds

Quality and Safety Walkrounds were conducted in all cluster hospitals. Visits were paid to clinical and non-clinical units by multidisciplinary teams. Safety issues were identified in various aspects: pharmacy, environmental safety, infection control, occupational safety as well as administrative issues. Reports were uploaded to the individual i-Hospital website for sharing.

i-Learn Module on Procedural Safety for Interns

A [self-learning package](#) on procedural safety was produced by the procedural safety sub-committee and uploaded to the electronic learning platform for interns. Besides sharing the incidents related to various procedures, safety tips on prevention of wrong site / wrong side surgery and retained instrument was shared.



New Territories West Cluster (NTWC)

Hospital Accreditation

To prepare for the second Organization-Wide Survey (OWS) of Tuen Mun Hospital (TMH) scheduled from 15 to 19 September 2014, the Hospital Accreditation Website was further revamped to provide staff with more structured information and easier access. Seven Extensive Achievements (EA) were received.

The first OWS of Castle Peak Hospital (CPH) was conducted from 26 to 29 May 2014 and 2 EA were obtained. At Pok Oi Hospital (POH), bi-weekly departmental visits were arranged since December 2014 to prepare for the Periodic Review Survey scheduled on 1 - 3 June 2015.





Critical Incident Psychological Services Centre (CIPS Centre)

The NTWC CIPS Centre had started to operate since October 2014. In accordance with the stepped care model, the Corporate Clinical Psychological Services (CCPS), CIPS Centre and Critical Incident Support Team (CIST) provided psychological support to Hospital Authority (HA) staff at high, medium and low intensity levels respectively.

Service Intensity	Service Provider		Service Unit	Scope of Services
High	Corporate Level	Corporate Clinical Psychologists	Oasis— Center for Personal Growth and Crisis Intervention	<ul style="list-style-type: none"> * Psychological assessment / intervention * Planning and provision of critical incident support services
Medium	Cluster Level	CIPS Manager (Experienced Social Workers)	CIPS Centre	<ul style="list-style-type: none"> * Counselling services * Coordination of Critical Incident Psychological Services
Low	Hospital Level	Staff (Voluntary participants)	CIST	<ul style="list-style-type: none"> * Peer-led emotional support services * Psychological first-aid
Prevention	Corporate Level	Corporate Clinical Psychologists	Oasis— Center for Personal Growth and Crisis Intervention	<ul style="list-style-type: none"> * Professional training



Medication Safety

Following the Medication Safety Forum held in March 2014, the Drug Administration Safety Committee uploaded [medication safety educational videos](#) onto the NTWC Intranet in June 2014 and launched a Medication Safety Online Quiz system in August 2014 to test staff's knowledge in medication safety.

Do-Not-Attempt Cardiopulmonary Resuscitation (DNACPR)

A kick-off ceremony on NTWC Taskforce for DNACPR was held in September 2014 with expertise from Hospital Authority Head Office (HAHO) sharing the updated HA Guidelines on DNACPR and Advance Directives, following with practical workshops. The updated guidelines were rolled out successfully in the cluster in the fourth quarter of 2014.



Patient Safety Walkrounds (PSWs)

Patient Safety Walkrounds covered POH, TMH and CPH. Different areas for improvement were identified and the related follow-up actions were implemented accordingly. To disseminate the good practices observed during PSWs, sharing sessions were conducted in TMH and POH in March 2015. The programme was accepted for presentation in the HA Convention 2014 and was awarded the Best Oral Presentation Award.



Annual Quality Conference (AQC)

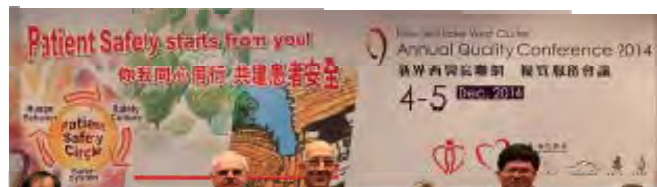
The 9th AQC was held on 4 and 5 December 2014 in TMH with the theme “Patient Safety Starts from You”. Distinguished guests from the Institute for Healthcare Improvement (IHI) in the United States, the China Light and Power HK Limited, Cathay Pacific Airways etc. were invited. Their invaluable safety experiences and insights in different domains enlightened us on proper attitude and procedures that were essential to patient safety.

One of the key lectures was “Using the IHI Global Trigger Tool (GTT) to measure Hospital Adverse Events”. GTT was aimed to systematically detect healthcare related adverse effects by identifying triggers in a healthcare institution. NTWC had modified it for trial as a systematic clinical audit tool since August 2014 in the Department of Surgery.

NCC MERP Index for Categorizing Medication Errors



- No Error
- Error, No Harm
- Error, Harm
- Error, Death





Crew Resource Management (CRM) Training Programme

A locally adopted simulation-scenario based CRM curriculum for healthcare professionals which involved high-fidelity simulators was formulated. A group of healthcare professionals was equipped to become simulation-based CRM instructors. Participants' satisfaction as well as their perception of current work situation, CRM knowledge and competency were assessed by a standardized questionnaire before and after the workshop.





In-situ Simulation Drill

The NTWC In-situ Simulation Subcommittee was formed in 2014 with members from Departments of Accident and Emergency and Intensive Care Unit, Operating Theatre, Nursing Services Division and Quality and Safety Division. Through the drills, participants and observers could identify rooms for improvement on the effectiveness of resuscitation skills as well as the collaboration of clinical providers under the dimensions of team and communication efficiency.

Procedural Sedation Safety

A custom print informed consent for procedural sedation was prepared for endoscopic procedures. Checklists for procedural sedation were revised and a checklist of procedure with sedation for patients of Cardiac Catheterization Laboratory (CCL) and Department of Radiology (RD) was also developed in September 2014.

Checklist of Procedure with
Sedation (for CCL / RD) ►

HOSPITAL AUTHORITY
New Territories West Cluster

CHECKLIST OF PROCEDURE WITH SEDATION
(for CCL / DR)

Date: _____

Reflex Pathway:
☐ No sedation
☐ Sedation
☐ Deep sedation
☐ General anesthesia

Procedure:
 Name: _____
 ID: _____
 Date: _____

Procedure Site:
☐ CCL
☐ DR

Procedure Operator:
 Name: _____
 ID: _____
 Date: _____

Sedation Provider:
 Name: _____
 ID: _____
 Date: _____

Procedure Details:
 Procedure: _____
 Sedation: _____
 Sedation Level: _____
 Sedation Agent: _____
 Sedation Dose: _____
 Sedation Duration: _____
 Sedation Monitoring: _____

Procedure Room Checklist:
☐ Oxygen saturation monitoring
☐ Blood pressure monitoring
☐ Heart rate monitoring
☐ Respiratory rate monitoring
☐ Sedation level monitoring
☐ Sedation agent monitoring
☐ Sedation duration monitoring
☐ Sedation agent storage
☐ Sedation agent disposal
☐ Sedation agent labeling
☐ Sedation agent expiration date
☐ Sedation agent lot number
☐ Sedation agent batch number
☐ Sedation agent manufacturer
☐ Sedation agent storage location
☐ Sedation agent disposal location
☐ Sedation agent labeling location
☐ Sedation agent expiration date location
☐ Sedation agent lot number location
☐ Sedation agent batch number location
☐ Sedation agent manufacturer location
☐ Sedation agent storage location
☐ Sedation agent disposal location
☐ Sedation agent labeling location
☐ Sedation agent expiration date location
☐ Sedation agent lot number location
☐ Sedation agent batch number location
☐ Sedation agent manufacturer location

To be completed in the Procedure Room before procedure starts

Procedure Operator: _____
 Sedation Provider: _____
 Date: _____
 Time: _____

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