

“Special Attention Reminders” for CT Reports and Weekly Summary in New Territories West Cluster - Alerting Clinicians on the Significance of Computer Tomography (CT) Findings

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Untoward events due to overlooking radiology results can lead to potentially devastating consequences. Since 2015, the Department of Radiology & Nuclear Medicine of NTWC has been working closely with the Information Technology and Health Informatics Division at HAHO to explore and devise means to improve communication between radiologists and clinicians via the Radiology Information System (RIS). The “Special Attention Reminders” for CT reports and a weekly summary page were developed and implemented in NTWC as a pilot project.

These special attention reminders of CT reports were triggered by radiologists on three situations: (1) confirmation of new cases of malignancy by CT scan; (2) incidental CT findings of suspicious malignancy; and (3) follow-up cases with CT findings of suspicious tumour recurrence. CT scans being booked for urgent attention were excluded. A weekly summary page of these special attention reports was generated to serve as a second reminder and a safety net.

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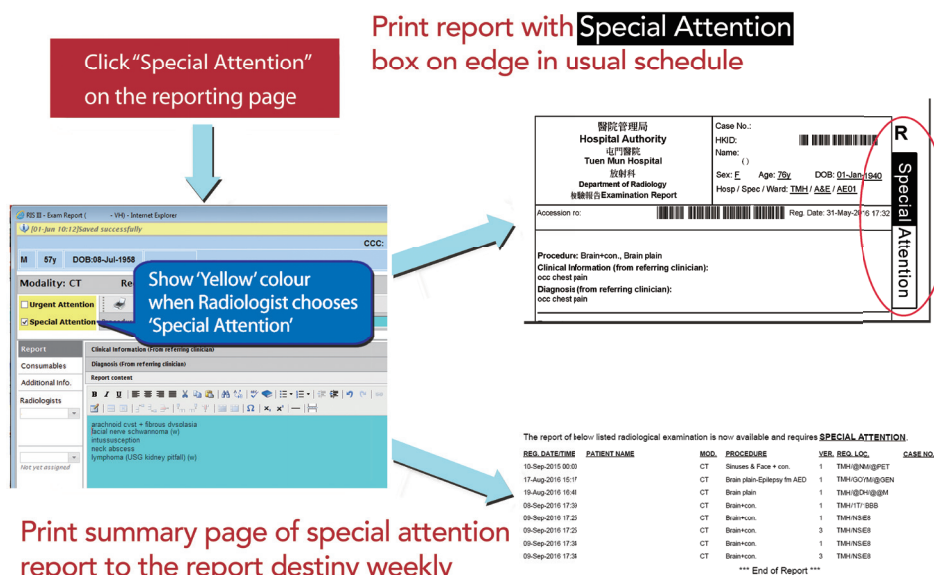
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Editorial Comments

Overlooking radiology results could cause serious consequences in the treatment plan for patients. Systems have to be implemented to minimize the potential for this risk. This pilot project demonstrated a sound measure to bring to the attention of the attending physician clinically significant CT findings as soon as possible.

Its implementation was able to reduce the risk of missing important CT results. I look forward to the sharing of the application of this function to other imaging modalities among clusters in future.

Dr C K CHING,
Deputizing Service Director
(Quality & Safety), KECC



Click “Special Attention” on the reporting page

Show ‘Yellow’ colour when Radiologist chooses ‘Special Attention’

Print report with **Special Attention** box on edge in usual schedule

Print summary page of special attention report to the report destiny weekly

RES. DATE/TIME	PATIENT NAME	MOD.	PROCEDURE	RES. RESQ. LOC.	CASE NO.
16-Sep-2016 00:00		CT	Skullcs + Face + con.	1	TMR@MM@PET
17-Aug-2016 15:17		CT	Brain plain-Epilepsy In AED	1	TMR@GM@BOEN
19-Aug-2016 16:48		CT	Brain plain	1	TMR@DH@GM
08-Sep-2016 17:39		CT	Brain+con.	1	TMR@TY@BBB
08-Sep-2016 17:20		CT	Brain+con.	1	TMR@NSB
08-Sep-2016 17:20		CT	Brain+con.	3	TMR@NSB
08-Sep-2016 17:39		CT	Brain+con.	1	TMR@NSB
08-Sep-2016 17:39		CT	Brain+con.	3	TMR@NSB

The trial was conducted from December 2016 to March 2017. A total of 282 CT special attention reports, covering all clinical specialties, were issued. Of the 147 cases reviewed, 34 cases (23%) required immediate action. All cases were handled promptly. Surveys for radiologists and clinical staff had been conducted and positive feedbacks were received.

The special attention CT report has proven its effectiveness in enhancing communication between clinical staff, and that it also increases the awareness on important radiological findings. Riding on the favourable results, this new function has been introduced to other HA hospitals. Application of this function to other imaging modalities has also been adopted.

Timer Tourniquets – Towards a New Era of Patient Safety in Hong Kong West Cluster

By HKWC Occupational Safety & Health Team/ HKWC Quality & Safety Department



Timer Tourniquet

A tourniquet is an essential tool for collecting blood samples from our patients. It can become a hazard if the tourniquet is not released after completion of the procedure. The risk is genuine, particularly in the in-patient setting. Incidents of 'retained tourniquet after blood taking' have been reported not infrequently on AIRS, prompting implementation of risk reduction strategies.



Timer is activated during blood taking procedure (green light)



Alarm was activated (red light)

Since 1Q 2017, the HKWC Occupational Safety and Health Team has been working with a supplier on the design of a tourniquet equipped with a pressure sensor, timer and both audio and visual alarms. The sensor and the timer are activated when the tourniquet is in use, and the alarms will alert the healthcare worker performing the blood taking if the sensor has not been deactivated by releasing the tourniquet by the preset time. The 3D printing design is geared to minimize physical discomfort and the device can be disinfected by routine methods. The tourniquet was introduced as a pilot project in Queen Mary Hospital in 1Q 2018, with positive comments from the users.

The feedbacks from the users are incorporated into the design of a second generation tourniquet with lower power consumption and can be conveniently customized to

suit different operational needs with adjustable preset time. With the support of the Cluster management, this second generation pressure sensor tourniquet will be implemented in all hospitals in HKWC by 4Q 2018.

Editorial Comments

Blood collection for diagnostic testing is one of the most frequent clinical activities. Retained tourniquet after blood taking is not an infrequent incident. With the advancement in technology, the tourniquet timer pilot project in QMH has received good feedback from users. It would be worth promulgating the adoption of this technology following the full implementation in HKWC.

Ms Karen MAK
Senior Manager (Allied Health), HAHO

Sleep Laboratory in Kowloon East Cluster

By **Dr Chi Wai CHOW**, Kelvin, Resident Specialist, Ear, Nose & Throat Department, United Christian Hospital

Diseases affecting sleep are common and may result in significant morbidity and health consequences. Management of sleep-related illnesses affecting paediatric, medical, psychiatric patients and sleep-related breathing disorders, require multidisciplinary collaboration.



Our newly established multi-disciplinary sleep laboratory in Kowloon East Cluster aims to provide a one-stop diagnostic and therapeutic service to facilitate efficient care delivery. With the collaboration of the participating departments which include Medical, Paediatrics, Psychiatry, Oromaxillofacial and Ear, Nose & Throat, resources could be utilized in a much more efficient manner. A wider range of diagnostic tests and therapeutic interventions could also be made available. We are grateful for the support from the Hospital Authority to this joint venture. The great work from the nurses, full-time sleep technologists and clerical staff of our sleep laboratory has provided a strong foundation for provision of the best care for our patients with sleep related problems.

The strategic arrangement of the laboratory allows comprehensive exposure to a wide range of conditions for our medical, nursing and technological staff under training. Doctors in charge of patients undergoing testing in the laboratory are able to communicate closely with the sleep technologist to tailor the diagnostic and treatment procedures, and to discuss in detail about the findings in raw data representing different body parameters during sleep. We hope that our service can continue to improve and evolve as we fine tune and incorporate innovative ideas to our work.



Editorial **Comments**

Under-diagnosis and under-treatment for sleep-related disorder are common, and one of the reasons which hamper patients to seek treatment may be the time taken and the hassle for diagnosis and treatment. Therefore, sleep laboratory in KEC should be commended for this great achievement of a multidisciplinary collaboration to deliver a much more efficient one-stop service.

Dr C W LAU
Service Director (Quality & Safety), HKEC



Multidisciplinary Care Bundle for Pressure Injury Prevention and Management in Hong Kong Buddhist Hospital

By Ms Adeline CHAN, Ward Manager, Department of Nursing, Hong Kong Buddhist Hospital

Prevention and management of pressure injuries are among the biggest challenges in hospital care due to the great impact on patients' lives and the high cost of treatment involved. In order to enhance the quality of care to patients in high risk of developing pressure injuries, Hong Kong Buddhist Hospital (HKBH) adopts a multidisciplinary care bundle for pressure injury prevention and management.

Starting from 2017, HKBH nursing department has been equipping nursing staff to become link nurses to assess and monitor wound status, and develop care plan for patients with pressure injuries in wards. Supporting staff have also been empowered by link nurses to further enhance their knowledge and skills in the care of pressure injury prevention. A series of preventive strategies, including same direction turning, skin protection over buttocks, heel free program and monthly wound round, were rolled out by phases since then.

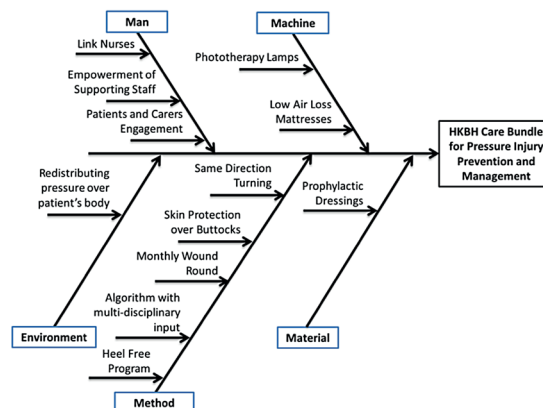
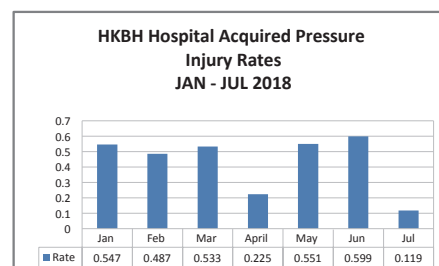
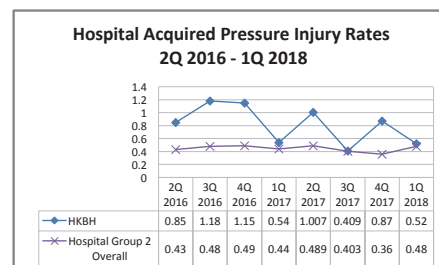
As the equipment and interventions required to prevent pressure injuries are less expensive than the cost of treatment,¹ more resources were allocated to the tools for pressure injury prevention in HKBH. As measures of preventing the formation of new pressure injuries, phototherapy lamps for controlling diaper associated rash and low air loss mattresses for regulating the skin microclimate were commenced to use in all wards since September 2017 and March 2018 respectively. Prophylactic dressings were also introduced to patients with poor mobility in integrated palliative unit in June 2017.

National Pressure Ulcer Advisory Panel introduced five pressure injury prevention points, including Risk Assessment, Skin Care, Nutrition, Repositioning and Mobilization; and Education.² According to HKBH algorithm of pressure injury prevention and management which was developed in July 2017, patient is assessed by nurse, dietitian, occupational therapist and physiotherapist upon admission. Multidisciplinary care plan is then formulated and the collaboration continues in the whole patient journey. Upon discharge, community services, information on nutritional supplement and pressure relieving device; and out-patient mobility training are offered and arranged for patient if needed. Education talks on pressure injuries were well organized to patients and carers to empower and engage them in risk reduction interventions.

After implementing the aforesaid interventions, the "hospital acquired pressure injury rate" gap between HKBH and Hospital Group 2 overall narrowed in 2017. HKBH even attained the rate as 0.119 in July 2018. The enthusiasm of HKBH colleagues involved in the pressure injury prevention and management was paid off and well recognized by the encouraging result.

Reference:

- 1 Parslow N, Campbell K, Fraser C, Harris C, Kozel K, Kuchnker J, et al. Risk Assessment & Prevention of Pressure Ulcers. Supplement. Registered Nurses' Association of Ontario. Toronto, Ontario, Canada: 2011.
- 2 National Pressure Ulcer Advisory Panel, Pressure Injury Prevent Points, April 2016



Editorial Comments

Pressure injury continues to be a concern in Hong Kong healthcare system. HKBH's multidisciplinary approach on prevention and management of pressure injury, together with engagement of frontline staff, patients and their carers, make a significant difference in incident rates. We hope this care bundle can be replicated in other HA hospitals.

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