# Malaysian HTA Section NEWSLETTER

:: Volume 12 :: September 2012

#### **NEWS**

MaHTAS has been redesignated as WHO Collaborating Center for Evidence-based Health Care Practice for Asia Pacific region for another term 2012-2014. This is the third term for MaHTAS to be the WHO Collaborating Centre.

### NEW CPGS DEVELOPED AND TECHNOLOGIES ASSESSED

Six Clinical Practice Guidelines (CPGs) and five Health Technology Assessment (HTA) reports were approved in the Health Technology Assessment and Clinical Practice Guidelines Council meeting 2/2011 and 1/2012 held on 9 January 2012 and 16 July 2012 respectively as listed in Table 1. Twenty-eight technology review reports were also endorsed (see Table 2).

# Table 1. Clinical Practice Guidelines and Health Technology Assessment reports approved in HTA-CPG Council meeting 2/2011 and 1/2012

#### Clinical Practice Guidelines (CPG)

- 1 Management of Acne
- 2 Management of Ischaemic Stroke -2nd Edition
- 3 Management of Severe Early Childhood Caries -2nd Edition
- 4 Management of Otitis Media with Effusion in Children
- 5 Management of Osteoporosis-2nd Edition
- 6 Orthodontic Management of Developmentally Missing Incisors

#### **Health Technology Assessment (HTA)**

- 1 Transnasal Oesophagoscopy (TNE)
- 2 Computerised Cognitive Behavioural Therapy for Adult with Depression
- 3 Immunochemical Faecal Occult Test (IFOBT) for Colorectal Cancer (CRC) Screening
- 4 Insulin Analogues
- 5 Serum alpha- fetoprotein (AFP) and / or Ultrasound for Hepatocellular Carcinoma (HCC) screening

All the HTA and TR reports, and CPGs are accessible online at http://www.moh.gov.my

#### Table 2. Technology review reports endorsed HTA-CPG Council meeting 2/2011 and 1/2012

	Titles	Recommendation		
	Cardiovascular			
1	Drug Eluting Balloon for Coronary Artery Disease – An Update			
2	Alif-1EBOO SAFE for coronary artery disease	Not recommended		
	Diagnostic Procedures & Screening			
3	Lung Ultrasonography	Recommended for research purpose		
	Eye Diseas			
4	Smart Tec Nanotechnology Laser			
	Female Genital Diseases And P			
5	Bakri Balloon Tamponade in Post Partum Haemorrhage	purpose		
,	Hepatobiliary diseases			
6	Gadoxetic Acid Disodium (Gd-EOB-DTPA) Liver-Specific Magnetic Resonance Imaging Contrast Agent	Recommended		
	Infectious Dis			
7	BCG Revaccination	Not recommended		
	Musculoskeleta			
8	Andullation Therapy System	Recommended for research		
9	Exogen Therapy	Recommended for research purpose		
10	Low Frequency Therapeutic Equipment Massager	Not recommended		
Neoplasms				
11	Cervical Cancer Vaccine: Gardasil® and Cervarix®	Recommended		
12	Oncotype DX: Breast Cancer Assay	Not recommended		
13	Focused Ultrasound Tumor Therapeutic System	Not recommended		
14	Cancer Microvessel Nano- Material Blockage	Not recommended		
Otorhinolaryngologic Diseases				
15	Hybrid Cochlear Implant	Recommended for research purpose		
16	Neuromonics Tinnitus Treatment	Recommended for research purpose		
	Skin and Connective 1			
17	Biologics for Psoriasis	Recommended		
18	MEBO® Burn Ointment	Recommended for research purpose		
1.6	Surgical Procedu			
19	Systagenix Wound Care Products	purpose		
20	Solution® Algorithm for Wound Care	Recommended for research purpose		
0.5	Wellness/Traditional Compl			
21	Water Purifier System	Recommended		
22	Energy Sauna	Not recommended		
23	Sky Eye	Not recommended		
24	Foot patches/foot pads	Not recommended		
25	Ozone Therapy – An Update	Not recommended		
26	Nagaiki 9000	Not recommended		
27	HF 9000P	Not recommended		
28	Air Purifier System	Not recommended		



#### TRANSNASAL OESOPHAGOSCOPY

Transnasal oesophagoscopy and barium radiological studies represent the primary means by which structural diseases of the oesophagus may be investigated. Until 1996, the oesophagoscopy performed by otolaryngologists has primarily been transoral approach using rigid oesophagoscope with patients under general anaesthesia. Beginning mid 1990s, otolaryngologists began to perform oesophagoscopy utilising an ultra thin, flexible scope passed transnasally, with the patients not sedated, solely relying on topical anaesthesia. This approach is called transnasal oesophagoscopy (TNE). Indications for TNE can be divided into three major categories: oesophageal, extraoesophageal and procedure related. This systematic review was conducted to assess the safety, efficacy or effectiveness and economic implication of using TNE compared with conventional oesophagoscopy for oesophageal and extraoesophageal diagnostic and therapeutic procedures by otolaryngologists.



Seventeen full text articles were included. There was fair level of evidence to suggest that TNE was effective for detection of oesophageal and extraoesophageal lesions such as

for screening examination in patients with dysphagia or globus pharyngeus or reflux symptoms, evaluation of patients with head and neck cancer and for detection of metachronous oesophageal squamous carcinoma in patients with head and neck squamous cell carcinoma. Evidence also suggested that TNE can be used to perform a variety of procedures such as biopsy of suspicious lesions in the upper aerodigestive tract, placement of wireless pH capsule to measure the pH levels in the oesophagus, transnasal balloon dilation of the oesophagus, secondary tracheoesophageal puncture and management of foreign bodies. There was fair level of evidence to suggest that TNE was well tolerated and can be safely performed in an office setting with topical anaesthesia. Complications associated with TNE were mild and uncommon such as self limited epistaxis, vasovagal reactions that required no treatment and self limited laryngospasm. There was no reported oesophageal perforation or major complication. Evidence suggest that there was potential direct cost saving derived by performing TNE in the office setting compared with rigid oesophagoscopy performed under general anaesthesia. It is recommended that the use of TNE is to be limited to the Head and Neck Centres for detection of oesophageal and extraoesophageal lesions and, for therapeutic procedures. Organizational issues such as training, manpower and funding need to be considered.

# IMMUNOCHEMICAL FAECAL OCCULT BLOOD TEST FOR COLORECTAL CANCER SCREENING

Transverse

Colorectal cancer (CRC) is one of the most common forms of gastrointestinal (GI) cancer in the world today. According to the latest report of the National Cancer Registry (NCR) in Peninsular Malaysia 2006, CRC was the second most common cancer after breast cancer. It is the first among male and also second among female. The purpose of this Health Technology Assessment (HTA) on immunochemical faecal occult blood test (IFOBT) was to evaluate whether, and under what conditions, it would be effective, safe, and cost-effective tests for CRC screening among general population in Malaysia. Faecal occult blood refers to blood in the faeces that is not visibly apparent. A faecal occult blood test (FOBT) is designed to identify hidden or small quantities of blood in faecal sample. There are two main types of FOBTs: guaiac-based faecal occult blood test (gFOBT) and IFOBT which is also known as faecal immunochemical test (FIT). The reference or gold standard for these tests is colonoscopy with biopsy.

Based on the assessment, IFOBT can be used in Malaysia as a screening test for CRC. The use of fully automated IFOBT assay would be highly desirable should a screening programme is to be introduced because of the large number of tests to be done and involving large number of laboratories. Automation allows time to be saved and could reduce the number of staff required to perform analysis, better standardization of results, and the application of very strict quality control criteria. From the diagnostic validity and cost-effectiveness perspective, the recommended cut-off points varied from 100 ng/ml to 150 ng/ml. A two-day faecal collection method was found to be more cost-effective compared to three-day faecal collection method for use in IFOBT as a means of screening for CRC. However, organizational issues such as training, manpower, good referral centre or system, and funding as well as sample collection, storage condition, sample analysis, and transportation need to be addressed at all levels. One must recognized methods to minimise the effect of high temperature and lag time before the faecal sample can be analyzed.

# COMPUTERISED COGNITIVE BEHAVIOURAL THERAPY FOR ADULTS WITH DEPRESSION



Depression is common and a leading cause of disability globally as well as in Malaysia. Cognitive Behavioural Therapy (CBT) has been recommended for management of certain types of depression in adults. However, access to CBT is limited due to too few therapists available. Computerised CBT is a self-help option that offers patients the potential benefits of CBT with less therapist involvement. It is a form of CBT, which is delivered using a computer either via a CD-ROM, DVD or the internet.

A systematic review was conducted and twelve studies were included. The results showed that there was significant reduction of psychological score in the CCBT group in all studies. When compared to controls, CCBT was as effective as CBT and superior to wait-list. It was as effective or slightly more effective when compared with Treatment As Usual (TAU) and as effective as Problem-solving Therapy (PST) and email therapy based on CBT. The pooled results of seven studies showed that CCBT was associated with significant improvement in Beck Depression Inventory (BDI) score at post-treatment with mean difference of -7.16 (95% CI -8.61,-5.72). CCBT was found to be acceptable to majority of patients and the study results showed that high percentages of patients were satisfied with the treatment. Economic evaluation studies showed that CCBT is likely to be cost effective if the society is willing to pay a modest value for a significant change in depressive symptoms.

CCBT may be recommended to selected group of patients with mild to moderate depression. It may also be used as an adjunct to antidepressants in patients with severe depression under the supervision of an experienced psychiatrist. The patients selected for this programme should be patients who have computers and internet access at home. These patients should also be proficient in computer and English. Criteria for selecting patients for this treatment should be developed before introducing CCBT program for adults with depression.

Continue reading the full report of these HTA at http://www.moh.gov.my/v/148



Participants listening to the lecture



Lecture by one of the speakers

# **HTA TRAINING**

Two health technology assessment (HTA) courses were conducted in 2012. The first course was conducted for HTA expert committee members on 27 to 28 February 2012 at Institute for Respiratory Medicine, Kuala Lumpur. Twenty-eight participants attended the course consisting of multidisciplinary expert committee members under different issues for technology assessment such as "Insulin Analogues", "Serum alpha-fetoprotein and/or ultrasound for hepatocellular carcinoma screening", "Management of haemophilia" and so on. The aim of the course was to impart knowledge and skills on conduct of HTA among the expert committee members to enable them to contribute better in the development of HTA report.

Another HTA course was conducted for health professionals from southern region of Peninsular Malaysia. The HTA Training for Southern Zone was conducted from 10 to 12 September 2012. The objectives of the training were to increase awareness on the role of Health Technology Assessment (HTA) and to impart knowledge and skills on the conduct of HTA among health care professionals. The training consisted of lectures and practical sessions. Thirty one participants mostly doctors and pharmacists from Johor and Malacca and some expert committee members involved in the training. At the end of the training most of participants described the course as successful and beneficial. They also become aware about MaHTAS and its products and the importance of evidence-based medicine in their practice.

## TR REPORTS IN BRIEF

# MILK DUCTS NIPPLE LOBULE

### **BREAST CANCER**

Breast cancer is the top cancer in women both in the developed and the developing world. In 2010, breast cancer becomes the second most commonly diagnosed cancer worldwide after lung cancer. According to National Cancer Registry (NCR) 2007, breast cancer was the most common cancer among Malaysian women, but sadly, between 50 and 60 per cent of patients was diagnosed until the late stages. About 1.3 million women are diagnosed with breast cancer world wide each year and 400,000 of them will die. Many of those deaths are preventable through early detection and treatment. Breast cancer occurs when the cells in the lobules (milk producing glands) or the ducts become abnormal and divide uncontrollably. These abnormal cells begin to invade the surrounding breast tissue and may eventually spread via blood vessels and lymphatic channels to the lymph nodes, lungs, bones, brain and liver. Various technologies have been developed for diagnosis, screening, examination, treatment, management and monitoring of breast cancer. MaHTAS has assessed a few technologies related to breast cancer namely Electrical Impedance Computer Mammography (MEIK), HER-2 Testing, SureTouch and Oncotype Dx: Breast Cancer Assay.

# Tens ample on the second of th

#### **HER-2 Testing**

Approximately 15-25% of patients with breast cancer have tumors that over express human epidermal growth factor receptor 2 (HER2) which is associated with

aggressive tumor growth and poor prognosis. Evidence suggests that HER2 status may be a predictor of response to chemotherapy and hormonal therapy in breast cancer patients and an essential predictor of response to the monoclonal anti-HER2 antibody trastuzumab. Immunohistochemical assay (IHC) antibodies to detect expression of HER2 protein on the surface of tumor cells. The level of HER2 protein expression is assessed semi-quantitatively by the intensity and percentage of staining, and scored on a scale of 0-3+ where 0 and 1+ are categorized as negative, 2= as equivocal and 3+ as positive. Fluorescence in situ hybridization (FISH) and chromogenic in situ hybridization (CISH) are based on the determination of HER2 gene copy number and use DNA probes. As the results obtained from FISH and CISH are numeric. these tests are more objective and quantitative than IHC.

Eight diagnostic studies and two cost effectiveness studies (one of which is systematic review) were included in this review. The evidence suggested that, HER2 positive status is IHC3+ or FISH positive, HER2 negative status is IHC 0, 1+ or FISH negative. A borderline IHC result of 2+ should be followed by performing a FISH test. If appropriate quality control/assurance procedures are in place of laboratory, either IHC or FISH methods may be used to determine HER2 tumor status. Due to the consequential costs (nonmonetary costs/side effects of the therapy with trastuzumab and monetary costs), it is recommended that all patients be screened with IHC, followed by FISH/CISH for IHC of 2+ (or of 2+ and 3+) as recommended in the HER2-testing algorithm. A national laboratory with a few central reference centers is recommended to be set up in Malaysia.

## Electrical Impedance Computer Mammography (MEIK)

The primary goal of breast cancer screening is to reduce its mortality through early detection. Electrical impedance tomography (EIT) scans the breast for electrical conductivity by passing electrical current through the body, detecting it on the skin with small probe and generating the measurements of electrical impedance as images.

Electrical impedance tomography offers possibly the most ideal diagnostic method for detection of early breast cancer. However, there was limited retrievable evidence from scientific databases in terms of its effectiveness. There was also no retrievable evidence on its safety and cost-effectiveness. Based on the above review, Electrical Impedance Computer Mammography (MEIK) for breast cancer screening is not recommended until high quality evidence is available to support the safety, effectiveness and cost-effectiveness.



#### SureTouch

SureTouch the uses Palpation Imaging (PI) or Tactile Imaging (TI) technology to breast cancer and depicts the Clinical Breast Examination. The findings are electronically displayed and documented. SureTouch is a fully integrated tactile sensing and visual

mapping system and the main components are hand-held tactile receptor, portable micro-computer, calibration scale and sheath.

There were very limited quality evidences to support the effectiveness and cost-effectiveness of Palpation/Tactile Imaging and none of its safety aspects. The retrievable evidences showed that it has reasonable sensitivity, specificity and positive predictive value. It could also characterize and differentiate between benign and malignant breast lesions, and improve communication between health care providers in the management of such condition. More scientific evidences are required to support the effectiveness, safety and cost-effectiveness of SureTouch and similar technologies. However, it can be recommended as a research tool in the screening of breast cancer.

#### **Oncotype Dx: Breast Cancer Assay**



Oncotype Dx use reverse transcription (RT) polymerase Oncotype Dx use reverse transcription (RT) polymerase chain reaction (PCR) technology or multi-gene expression profiling assay. This new genomic technology is claimed to be able to



detect the presence of breast cancer gene in DNA either in new case or recurrent cases which may help the clinician to identify which patients require what type of treatment (hormone therapy or chemotherapy/radiotherapy and surgery) based on their baseline risk of disease recurrence. Oncotype DX is an in-vitro multi-gene breast cancer assay to be used in conjunction with traditional histopathology. It assess the risk of disease recurrence in women with early-stage hormone estrogen receptor positive (ER+) only breast cancer and lymph node-negative breast cancer and assess the likely benefit from certain types of chemotherapy. It analyzes an expression of 21 cancer-related and reference genes by reverse transcriptase polymerase chain reaction and predicts the risk of disease recurrence at 10 years in term of Recurrence Score (RS) between 0 and 100.

Four studies regarding the effectiveness/efficacy were included in this review. However, there was no retrievable study on cost-effectiveness and safety. Based on the review, Oncotype DX has a potential to determine the risk of breast cancer recurrence through Recurrence Score (RS). However, it could not be recommended to be used in Ministry of Health facilities due to several limitations. While relatively the accuracy of the RS is not that reliable (warrant more clinical studies), the technology also involves an exorbitant cost and requires expert to interpret the RS correctly, otherwise erroneous decision is made.

#### **Seminar on CE markings of Medical Devices**

A course on CE marking was organised on 29th February 2012 to increase understanding on the requirement for CE marking for different categories of medical devices. The course was conducted by Mr. Tony Low, a consultant on CE marking from Singapore. The



seminar was attended by 41 participants comprising of clinical specialists, pharmacists and other health professionals.

#### **CME Talk on Cochrane Review for Public Health Interventions**





Professor Philip Baker

Mr. Francis Daniel

In collaboration with Julius Centre, University of Malaya, MaHTAS conducted a Continuous Medical Education (CME) talk on Cochrane Review for Public Health Interventions on 24 April 2012 at Putrajaya Health Office. The CME was delivered by Professor Philip Baker, an Adjunct Professor, School of Public Health Queensland University of Technology and also Director of Epidemiology, Central Regional Services, Queensland Health in Australia and Mr Francis Daniel, Advanced Epidemiologist for Evidence-Based Practice for Central Regional Service, Division of the Chief Health Officer, Queensland Health. Two topics namely 'Community wide interventions for increasing physical activity' and 'Non antibiotic treatment for sore throat' were presented.

#### **MONITORING AND EVALUATION**

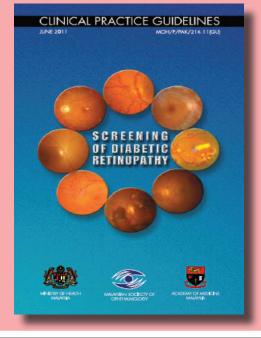
MaHTAS monitor and evaluate the CPG and HTA reports produced through Quick Reference (QR) Survey and MaHTAS User Feedback respectively.

QR survey demonstrated objectively QR utilisation rate among the target users. The respondents were selected randomly from public health facilities to represent all zones in Peninsular Malaysia as well as Sabah and Sarawak. In 2012, surveys on QR Management of Dengue Infection in Adults (2nd Edition) and QR Management of Chronic Obstructive Pulmonary Disease were conducted. The utilisation rate was 89.9 and 77.8% respectively. The respondents perceived both QR as good quality. About 27.7% and 65.8% of the respondents of QR Management of Dengue Infection in Adults (2nd edition) rated the QR as excellent and good respectively. As for QR Management of Chronic Obstructive Pulmonary Disease, 25.0% and 68.7% of the respondents rated the QR as excellent and good respectively.

In addition, MaHTAS user feedback survey was conducted to evaluate utilization of technology review (TR) and Health Technology Assessment (HTA) reports. The analysis of feedback received for two HTA reports and 30 TR reports showed utilization rate of 76.1% and 96.4% respectively. The quality of the HTA reports were rated as excellent and good by 28.6% and 63.9% of the respondents respectively whereas for TR reports 16.5% and 71.1% rated as excellent and good respectively.

CPG KEY MESSAGES

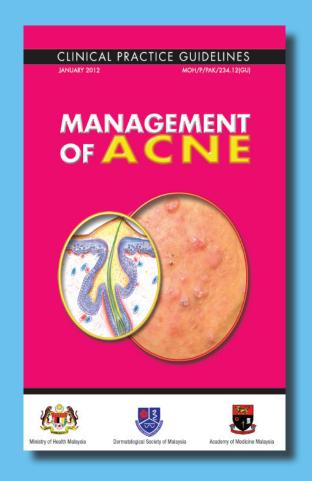
## **Screening of Diabetic Retinopathy**



- Diabetic eye disease is the commonest cause of visual loss among adults of working age. Prevalence of Diabetic Retinopathy (DR) is closely linked to Diabetes Mellitus (DM).
- 2. The ultimate aim for screening of DR is to detect sight threatening DR and to ensure timely treatment in order to prevent vision loss.
- 3. Screening for DR should be done in all patients with DM.
- 4. First screening for DR is done according to types and duration of DM e.g. it is done at time of diagnosis in adults and children with Type 2 DM.
- 5. International Clinical Diabetic Retinopathy and Diabetic Macula Oedema Disease Severity Scale is used for grading diabetic eye disease.
- 6. Examination (follow-up) schedule and urgency of referral to an ophthalmologist should be based on the grade and severity of DR including the presence of symptoms.

## **Management of Acne**

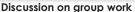
- 1. Acne is a medical disease which requires treatment.
- 2. If left untreated, acne may have a profound psychological and emotional impact.
- 3. Pathogenesis of acne is multifactorial which includes increased sebum production, *Propionibacterium acnes* proliferation, altered follicular keratinisation and inflammation.
- 4. A low glycaemic load diet and high fibre diet should be encouraged for acne patients.
- 5. Aims of acne management are to induce clearance of lesions, maintain remission and prevent relapse, physical and psychological complications.
- 6. Comprehensive Acne Severity Scale (CASS) may be used for grading of acne severity in clinical practice.
- 7. Topical therapy is the mainstay of treatment for mild and moderate acne.
- 8. Oral antibiotics may be used as treatment for moderate to severe acne, but should not be used for more than six months.
- Maintenance treatment should be commenced after an initial successful induction therapy to sustain remission.
- 10. Oral isotretinoin should only be prescribed by dermatologist.



# SYSTEMATIC REVIEW ON EVIDENCE -BASED CPG DEVELOPMENT & IMPLEMENTATION WORKSHOP 1/2012

**ACTIVITIES** 







Presentation of critical appraisal

The first workshop of the year for Systematic Review on Evidence-Based CPG Development & Implementation was successfully held at Bilik Permata Budi, Institute of Health Management, Bangsar, on 5 - 7 March 2012. A total of 38 participants attended it consisting mainly Development Group members of CPG on Management of Autism and CPG on Management of Bipolar Disorder. They were multidisciplinary healthcare professionals from the specialties of psychiatry, paediatrics, family medicine and others.

The objectives of the workshop were to create awareness and provide knowledge on the development of evidence-based CPG, and to encourage its implementation. The trainers/facilitators were MaHTAS staffs who emphasised the importance of a proper framework in developing such CPG. The participants worked in small groups to formulate clinical questions and retrieval of evidence. Other sessions focused on the different stages of the review process such as critical appraisal, analysis and synthesis of evidence, assessment of CPG quality based on AGREE and also the strategies used by MaHTAS in implementing its CPGs.

# TRAINING OF THE CORE TRAINERS ON CLINICAL PRACTICE GUIDELINES ON MANAGEMENT OF CHRONIC KIDNEY DISEASE IN ADULTS



Lecture by CPG Chairman



Case discussion



Case presentation by paramedics

As part of the implementation strategies, a training module (TM) will be developed from each CPG produced by MaHTAS. Such document is used to train healthcare providers nationwide on the related medical condition at national level and followed-up with echo training in the states.

Training of Core Trainers for the CPG Management of Chronic Kidney Disease (CKD) in Adults was held at Renaissance Hotel, Kuala Lumpur on 10 - 12 July 2012 for the doctors and 11 - 12 July 2012 for the paramedics. A total of 101 multidisciplinary healthcare professionals from both hospitals and health clinics attended it. The training was organised by Post-Graduate Renal Society Malaysia (PGRSM) in collaboration with Nephrologist Service and Health Technology Assessment Section of MoH.

The TMs encompassed importance aspects of CKD management i.e. disease burden, screening high risk group, effective and safe treatment, and referral criteria. The two training modules delivered to the participants were made up of lectures, case discussions and pre/post tests. There was active participation of the participants including presentation of group discussion by the paramedics. The training modules will be uploaded in the MoH and Academy Medicine Malaysia websites for wider accessibility. It is hope that these TMs will eventually help to improve the health care on CKD in the country.

# Training, Courses and Workshops Conducted from Jan 2012 until Sept 2012

- 1. HTA Training For Expert Committee & Seminar on CE Marking of Medical Devices. 27 29 Feb 2012
- 2. Systematic Reviews for Clinical Practice Guidelines Development and Implementation Workshops 1/2012

5 - 7 March 2012

3. Training of Core Trainers on CPG Screening of Diabetic Retinopathy

26 - 30 March 2012

4. Training of Core Trainers on CPG Management of Cancer Pain

16 April 2012

Continuous Medical Education (CME) Talk on Cochrane Review of Public Health Interventions

24 April 2012

 Training of Core Trainers on CPG Management of Chronic Kidney Disease in Adults

10 - 12 July 2012

7. Health Technology Assessment (HTA) Workshop for Southern Region

10 - 12 September

2012

# Training, Courses and Workshops Planned from October 2012 until September 2013

1	Training of Core Trainer of CPG Management of Acne	1 Oct 2012
2	Systematic Review for Clinical Practice Guidelines (CPG) Development and Implementation Workshops 2/2012	29 Oct - 1 Nov 2012
3	Training on Grading of Recommendations Assessment, Development and Evaluation (GRADE) for Clinical Practice Guidelines and Health Technology Assessment	21 - 25 Jan 2013
4	Systematic Reviews for Clinical Practice Guidelines Development and Implementation Workshops 1/2013	April 2013
5	Horizon Scanning Training	June 2013
6	Health Technology Assessment Workshop	Sept 2013

## Turnover of MaHTAS Staffs THOSE WHO NEWLY JOINED



Dr. Noor Aishah Yussof Senior Assistant Director UD 44 Start: 09 Feb 2012



Dr. Wan Nurzaty Iwanie Assistant Director UD 41 Start: 27 Aug 2012

#### **PLEASE CONTACT US AT:**

Malaysian Health Technology Assessment Section (MaHTAS) Medical Development Division, Ministry of Health Malaysia, Level 4, Block E1, Precinct 1, 62590, Putrajaya, Malaysia.



+603-8883 1245/6



+603-8883 1230



htamalaysia@moh.gov.my