Training program of Paediatric respiratory medicine in Hong Kong

Competencies to be achieved

1) **<u>In-patients (throughout training programme)</u>**
   a) To be able to lead the management of patients with complex and highly complex respiratory disorders in isolation or in connection with other organ/ system failure. (appendix I & II)
   b) To order appropriately and to interpret diagnostic tests like imaging, lung function test, etc
   c) To be capable to prescribe assisted ventilation including noninvasive ventilation and continuous positive airway pressure, aerosol therapy
   d) To map out a pulmonary rehabilitation program for individual
   e) To be able to perform pleural procedures (e.g. chest drain insertion), flexible bronchoscopy and ultrasound thorax for acute cases.
   f) To be proficient in working with other health professionals and within a team where appropriate

2) **<u>Lung function training</u>**
   a) Competence in performing and interpreting:
   b) Mandatory:
      Full Lung Function Testing including spirometry, lung volumes, body plethysmography, and DLCO for children of different ages (minimum of 5 hands on tests and 30 interpretation)

   c) Desirable:
      Exercise challenge test, bronchial challenge tests, exercise challenge test, FeNO, Fitness to flight test, Infant and pre-school lung function test ,Cardiopulmonary exercise test , Nasal NO, respiratory muscle and airway resistance assessment

3) **<u>Sleep service</u>**
   Know and understand:
   1. Sleep Stages (Maturation from Preterm to infant to children)
   2. Circadian Rhythm
   3. Hypersomnia
   4. Insomnia
   5. Parasomnia
   6. Sleep-disordered breathing
      i. AASM scoring criteria for Paediatrics
      ii. Infant Sleep scoring
   7. Sleep-related movement
   8. Central Hypoventilation problem
   9. Special patient Group like Neuromuscular patients and Syndromal patients

   Competencies:
   1. Sleep laboratory service:
      Be able to read and report the following studies
      i. Overnight polysomnography
      ii. MSLT (Multiple Sleep Latency Test) (optional)
      iii. MWT (Maintenance of Wakefulness Test) (optional)

iv. Actigraphy (optional)

2. Sleep clinics
   Able to take a sleep history and manage clinical problems like
   i. OSAS
   ii. Central Apnoea Syndrome
   iii. Alveolar Hypoventilation
   iv. Circadian Rhythm problem, parasomnias, narcolepsy (optional)

3. Be able to order a NIV titration plan and interpret the results
4. Have experience of a multidisciplinary clinic with other specialist such as
   i. Dentist
   ii. Orthodontist
   iii. ENT surgeon
   iv. Maxillofacial surgeon

4) <u>Paediatric Respiratory Medicine Training: PICU Module (minimum 3 months, total PICU and NICU exposure not exceed 9 months)</u>

Upper airway management

- Diagnosis, assessment and management of acute epiglottitis, severe croup, tracheitis
- Assess and manage upper airway obstruction in ICU, diseases categories include: congenital malformations, infection related conditions, trauma and accident relate conditions
- Use of nasopharyngeal tube, oropharyngeal tube, laryngeal mask

Respiratory diseases management in PICU

- Congenital malformations affecting pulmonary functions
- Infection/inflammation related parenchymal lung conditions: severe pneumonia, pneumonitis, lung abscesses, interstitial lung diseases, bronchiectasis and empyema
- Acute Respiratory Distress Syndrome
- Acute and chronic respiratory failure
- Chronic lung diseases (Bronchopulmonary dysplasia)
- Status asthmaticus and severe bronchiolitis; and other severe obstructive lung disease
- Care and management of children with acute and chronic tracheostomy
- Management of primary and secondary pulmonary hypertension
- Respiratory and ventilatory care of those children with critical cardiac conditions
- Peri-operative respiratory care and assessment of cardiothoracic surgical children
- Respiratory and ventilatory care of children with neuromuscular disorder: acute respiratory exacerbations, peri-operative respiratory care, longer term respiratory management
- Peri-operative care of those children with skeletal condition that cause restrictive lung condition and initiation of longer term respiratory intervention

- Management of those critical pulmonary complications of those children with haematological or oncological conditions
- Management of those critical pulmonary complications of those children with immunodeficiency

Practise and knowledge on different modes of assisted ventilation
- Use of different modes of invasive mechanical ventilation
- Use of different non-invasive ventilatory support and different choices of interface
- Assess the need to initiate ventilator support
- Assess the criteria of extubation and post-extubation support
- Understanding and application of the assessment of lung mechanics in mechanical ventilation

Respiratory medicine related procedures in PICU
- Endotracheal intubation
- Flexible bronchoscopy: diagnostic and therapeutic
- Ultrasound assessment of pneumothorax, pleural effusion
- Chest tapping and chest drain insertion
- Care and assessment of tracheostomy, change of tracheostomy tube

Optional modules in PICU exposure
- Management of children on Extracorporeal Membrane Oxygenation (Veno-venous and Vento-arterial)
- Post-operative care of child with lung transplantation

Paediatric Respiratory Medicine Training: NICU Module (maximum3 months, total PICU and NICU exposure not exceed 9 months)

Management of acute respiratory condition in newborn and prematurity
- Respiratory distress syndrome
- Transient tachypnoea of newborn
- Pneumothorax and pleural effusions
- Congenital malformations causing airway obstruction: glossoptosis, cystic hygroma, vallecular cyst, vascular ring
- Upper airway obstruction in newborn: laryngomalacia, vocal cord palsy, haemangioma, subglottic stenosis an tracheal stenosis
- Congenital malformations affecting pulmonary function: congenital diaphragmic hernia, trachea-oesophageal fistula, congenital cystic adenomatoid malformation (congenital pulmonary airway malformation) and congenital lobar emphysema
- Meconium aspiration pneumonia and pulmonary hypertension
- Persistent pulmonary hypertension of newborn
- Congenital cardiac disease that affect pulmonary condition
- Acute respiratory failure related to infection, acute abdomen, neurological or metabolic conditions
- Peri-operative respiratory care of babies with surgical conditions
- Apnoea and hypoventilation syndromes

Knowledge and management of chronic lung disease

- Prevention of chronic lung disease
- Treatment of chronic lung disease
- Discharge planning: nutrition support, assessment and use of home oxygen therapy

Practise and knowledge on various ventilatory care in NICU
- Use of humidified heated high flow oxygen
- Use of non-invasive ventilation: CPAP, BiPAP
- Invasive mechanical ventilation
- High frequency ventilation
- Inhalational nitric oxide
- Different mode of synchronized assisted ventilation

Respiratory medicine related procedures in NICU
- Endotracheal intubation
- Direct laryngoscopy examination
- Chest tapping and chest drain insertion

5) <u>Airway endoscopy (to be done throughout training)</u>

This endoscopy training programme encompasses important skills and knowledge on various modalities of endoscopic assessment commonly used in PRM, namely, drug induced sleep endoscopy (DISE) and flexible bronchoscopy and flexible endoscopic examination of swallowing (FEES)

Training objectives:

a) To understand the indications, contraindications and potential complications of the above procedures and be able to obtain informed consent properly.
b) To understand normal and abnormal anatomy of paediatric upper airway.
c) To understand and operate relevant equipments.
d) To be familiar with pre-procedural patient assessment including, but not limited to, an assessment of clinical lab values, procedural risk factors, medication allergies, sedation and anaesthetic risks, and all other clinical factors relevant to the procedure.
e) To be able to administer sedation and local anaesthesia as necessary for the clinical situation in order to perform the procedure safely and to obtain useful information for diagnosis, assessment and treatment, and to organize a clinical team to perform the procedure safely and at a level appropriate for the clinical situation.
f) To be able to perform intra-procedural patient management, including assessment of vital signs, airway, mental status, intravenous access, and any other relevant observations or investigation to assure patient safety and well-being.
g) To be able to perform the procedures and interpret the visualized images and abnormalities independently.
h) To understand and perform post-procedural patient management, including assessment for complications, diagnosis and treatment of

complications, confirming and reporting results of the procedure and further discussion with the relevant specialists on management plans.

i) To be able to collaborate with speech therapists, occupational therapists, dietitians, and other related medical professionals in performing and interpreting FEES.

Training structure:

a) Trainees will be supervised by various PRM trainers throughout the whole training programme to meet the above training objectives.

b) Trainees are expected to undergo simulator training before performing the procedure on patients. After an assessment on basic knowledge and skills, trainees will be allowed to perform procedures on patients under supervision. The trainee would be expected to have a total of 45 endoscopies, of which 15 should be supervised bronchoscopies and 20 assisted bronchoscopies. The rest can be flexible endoscopic evaluation of swallowing (FEES), drug-induced sleep endoscopy (DISE) or bronchoscopies.

c) including Flexible endoscopic evaluation of swallowing (FEES) and drug-induced sleep endoscopy (DISE).

d) Desirable but not essential procedures include the following: BAL, brush biopsy, endo-bronchial biopsy, and bronchoscopic intubation.

e) Adequate documentation of cases done is expected.

f) Regular video review should be held as education sessions for experience sharing.

6) <u>Ambulatory service (throughout training)</u>

Competencies

a) Able to conduct a patient-centred clinic history and examination

b) Able to select appropriate investigations, interpret and apply results to reach diagnosis and monitor progress

c) Able to select appropriate inhalation device for drug delivery

d) Able to support children with chronic respiratory failure.

e) Practical experience of long-term ventilator support in children, including the choice and set up of equipment, and follow-up and troubleshooting.

f) Practical experience in the prescription, initiation, and supervision of children who require home oxygen therapy.

g) Able to communicate effectively to referring sources and patients

h) Able to write clear, concise medical notes and prescription

i) Able to lead an inter-disciplinary team to manage complex cases with multiple needs

j) Demonstrate knowledge of resource constraints and appropriate utilization of resources

k) Be able to carry out health education and promotion

l) For example: Asthma education, smoking cessation

Clinical Exposure

a) The trainee should be undertaking regular paediatric respiratory clinics during training, seeing both new and follow-up patients and discussing them with the trainer. During training they should be exposed to and gain competence in the out-patient management of

various diseases. (appendix I)

b) Expose to and desirably lead a transition clinic and multidisciplinary clinic during the training.

7) <u>Out-Reached service (desirable)</u>

Able to conduct visit to home of children with highly complex respiratory diseases

a) Able to conduct an inter-disciplinary home visit in a structured and organized manner with specific target achieved

b) For example: Assessment of home environment, equipment installation, transportation availability and carer's ability to attend medical need before discharging a SMA patient or patient requiring home ventilation etc.

c) Able to help with the patients' self-help groups

8) <u>Research and audit</u>

Training structure:

- Trainees will be mentored by a designated PRM trainer at the beginning of his/her training in PRM to work on a research project.
- The research project chosen by the trainee must be relevant to PRM.
- Throughout the training, the trainees are expected to present progress update at regular intervals.
- Trainees are encouraged to present their research findings at local and or international conferences.
- Trainees are also expected to learn and gain knowledge in different research methodologies.
- For those trainees entering into training programme from 2020 and onwards, they need to submit two original articles as their EXIT dissertations. Case report is not accepted but case series are accepted.

Audit

- Trainees are expected to demonstrate active involvement in clinical audit cycles.

Teaching

- Demonstrate a good aptitude in teaching at various levels and settings

Appendix I

Clinical conditions in PRM, including but not confined to

- Allergy
- Asthma and pre-school wheeze
- Environmental factors from air pollution to smoking on the developing lungs and the family.
- Respiratory infection with or without complications, e.g. Acute bronchiolitis, Mycoplasma infection etc.

- Mycobacterial and non-Mycobacterial infections with focus on pulmonary tuberculosis, TB pleural effusion, TB lymph node and latent TB infection
- Acute and chronic respiratory failure
- Sudden infant death syndrome and apparent life-threatening events
- Pulmonary complications on the intensive care unit, e.g. Acute respiratory distress syndrome, ventilator acquired pneumonia (VAP) etc.
- Near-Drowning
- Congenital lung malformation
- Chronic lung disease of prematurity
- Foreign body aspiration and chronic aspiration syndrome
- Gastro-oesophageal Reflux related Lung Disease
- Children with complex disability
- Chronic suppurative lung disease, e.g. Cystic fibrosis, bronchiectasis, lung abscess etc.
- Respiratory manifestation of systemic lung disease
- Immunocompromised chest problems
- Eosinophilic lung diseases and hypersensitivity pneumonitis
- Pulmonary vascular disease
- Cor pulmonale and pulmonary complication of cardiac diseases
- Restrictive lung diseases, e.g. Neuromuscular diseases, chest wall deformity etc.
- Sleep disordered breathing
- Other sleep disorders, e.g. Behavioral sleep problem, parasomnias etc.
- Behavioral aspects of respiratory lung disease, e.g. hyperventilation syndrome etc.
- Environmental lung disease, e.g. Hypersensitivity pneumonitis, effect of active and passive smoking, toxin inhalation etc.
- Rare diseases: Cystic fibrosis, obliterative bronchiolitis, interstitial lung disease, primary ciliary dyskinesia, bronchiolitis obliterans, bronchiolitis obliterans organizing pneumonia, pulmonary haemorrhage syndrome, respiratory malignancy, congenital central hypoventilation syndrome, narcolepsy etc.

Appendix II

Case Profile Definition: when case satisfies any one or more columns of the 2 sets of factors (Disease or Treatment)

Categorization of case complexity*	**Disease factors**		**Treatment factors**	
	Disease Severity (A)	**Disease Complications (B)**	**Level of Care / Isolation (C)**	**Procedures (D)**
Simple	mild	nil	clinic / ambulatory / general ward care, isolation: nil / contact / droplets	nil
Intermediate	moderate	mild (e.g. self-limiting, complete recovery)	general ward care, isolation: nil / contact / droplets / airborne / reverse	simple / non-invasive procedures (e.g. oxygen therapy, intravenous fluid)
Complex	severe	moderate (e.g. intervention required, short term morbidity but complete recovery anticipated)	HDU / SCBU / ICU / PICU / NICU care requiring intensive monitoring, with or without isolation	specialized / invasive procedures (e.g. chest drain, thoracocentesis, pleural biospy, bronchoscopy)
Highly complex	life-threatening	severe (e.g. intervention required, only partial recovery or presence of long-term morbidity)	ICU / PICU / NICU requiring ventilatory support, multi-specialty care, or surgical management, with or without isolation	highly specialized procedures (e.g. intubation, ventilation, surgery, plasmapheresis, interventional radiology, ECMO, lung transplant)

In-patient management

Trainee Name:

Trainee should record a total of at least 50 cases in to reflect competencies outlined in this section of the curriculum

Condition	**Number of cases**	**Assessments**			
(e.g.)		CBD	Reflective notes (n)	Case Presentations (n)	Case Summary Review
Bronchiolitis requiring respiratory support					
Acute severe asthma					
Community acquired pneumonia (CAP)					
Empyema					
Stridor					
Upper airway obstruction- adenotonsillar hypertrophy					
Upper airway obstruction- other					
Pneumothorax					

2. Most recent evidenced-based guidelines/reviews which the trainee is using for chronic disease management. The trainee should store and index these electronically.

Condition	Guideline source/title	Guideline date

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

In-patient management
Trainee Name:
Trainer's assessment:
Please comment on whether the trainee's current level is appropriate for independent consultant practice- 1. Ready for independent practice; 2. Almost ready for independent practice; 3. Not yet ready.

Competency	**Date**	**Independent practice (1/2/3)?**	**Comments** *(Must be inserted if assessment is not 1)*	**Trainer Name**	**Initials**
Assess need for admission					
Planning of investigation and management					
Recognition of deterioration					
Communication with family					
Liaison with MDT					
Discharge management					
Breadth of experience					
Overall					

Competencies- Ability to:

1. Determine the need for admission when assessing those referred, including psychosocial impact on need as well as medical need. Discussion on rounds
2. Determine, plan and explain to families the appropriate investigations and treatment. Observed by trainer
3. Recognise and manage severe and/or deteriorating respiratory problems including the need for and implementation of invasive and non-invasive ventilatory support Discussion on rounds.
4. Liaise with the multidisciplinary team caring for the patients 360
5. Give discharge advice to families with acute or chronic respiratory problems and arrange follow up as necessary. Observed by trainer.
6. Able to summarise care and plan appropriate future management. Case summary review, ward round presentation

Evidence (over 3 years)

1. Portfolio of at least 50 cases should be available, with at least 5 be reflective notes. These should demonstrate evidence based practice in the management of the conditions described.
2. At least 5 observed episodes of interaction with families – e.g. on explaining tests, explaining diagnosis / differential or giving discharge advice.

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Ambulatory care

Trainee Name:

Record of a total of ≥ 50 cases seen in clinic over 3 years, to reflect competencies outlined in this section of the curriculum

Condition	**Number of cases (total)**	**Assessments**		
		CBD(n)	Reflective notes (n)	Case summary review (n)
Allergy				
Asthma				
Pre-school wheezing				
Pulmonary tuberculosis				
Chronic respiratory failure				
Long term ventilator support				
Home oxygen therapy				
Congenital lung malformation				
Chronic lung disease of prematurity				
Gastro-oesophageal Reflux related Lung Disease				
Congenital lung disease:				
Bronchiectasis,.				
Bronchiolitis obliterans syndromes				
OSA				
Rare diseases: CF, ILD, PCD, Pulmonary haemorrhage etc.				
Respiratory manifestation of systemic lung disease				
Other and rare chronic lung diseases (Specify below)				

2. Most recent evidenced-based guidelines/reviews which the trainee is using for chronic disease management. The trainee should store and index these electronically.

Condition	Guideline source/title	Guideline date

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Ambulatory care

Trainee Name:

Trainer's assessment:

Please comment on whether the trainee's current level is appropriate for independent consultant practice- 1. Ready for independent practice; 2. Almost ready for independent practice; 3. Not yet ready.

Competency	**Date**	**Independent practice (1/2/3)?**	**Comments** *(Must be inserted if assessment is not 1)*	**Trainer Name**	**Initials**
Consultation skills					
Clinical assessment					
Appropriate investigations					
Appropriate treatment					
Clinic letter quality					
Appropriate discharge					
Breadth of experience					
Overall					

Competencies and how they might be assessed

1. The trainee should demonstrate an up-to-date understanding of respiratory symptoms and noises.- CBD/CSR
2. Organise investigations to aid diagnosis or to measure disease severity, understanding the diagnostic accuracy of investigations. CBD/CSR
3. Recommend and institute appropriate age-related treatments. CBD/CSR
4. Follow-up patients, monitoring disease progress and being alert to adherence to and side-effects of treatment. CBD/CSR
5. Take a holistic approach to patient, identifying adjunctive problems which may impact on health and disease management. CSR

Assessment:

1. Portfolio of 50 cases managed, representing all conditions in curriculum, together with some CBD / CSR
2. Signed off when supervisor considers that the trainee is able (on his/her own) to:

a). safely see new respiratory referrals (make diagnosis, order investigations, institute treatments and communicate findings and plans to children/parents),

b). provide appropriate follow up and know when to discharge or refer back to referring doctor.

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Flexible bronchoscopy

Trainee Name:

Observed			
	Supervisor	**Scope/method**	**Details (note of BAL, brush biopsy, mucosal biopsy etc)**
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Flexible bronchoscopy

Trainee Name:

Record at least 15 cases performed by trainee

Performed			
	Supervisor	**Scope/method**	**Details (note of case ID, underlying problem, and key findings)**
1			
2			
3			
4			
5			
6			
7			
8			
9			
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20			
21			
22			
23			
24			
25			

2. Evidence of knowledge:

	Evidence of knowledge
Infection control measures	
Processing techniques	

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Flexible bronchoscopy

Trainee Name:

Trainer's assessment:

Please comment on whether the trainee's current level is appropriate for independent consultant practice- 1. Ready for independent practice; 2. Almost ready for independent practice; 3. Not yet ready.

Competency	**Date**	**Independent practice (1/2/3)?**	**Comments** *(Must be inserted if assessment is not 1)*	**Name**	**Initials**
Appropriate use of investigation					
Manipulation of bronchoscope, and orientation					
Correct recognition of normal /abnormal appearances					
BAL					
Mucosal biopsy					
FEES					
DISE					
Overall- Competent at consultant level					

Competencies

Knowledge

1. Knowledge of the indications, contraindications, risks and complications of bronchoscopy in children and be able to explain these to parents. Discussion and observed by trainer
2. Knowledge of the indications for rigid bronchoscopy and non-bronchoscopic lavage and have observed these procedures on at least one occasion. Discussion with trainer
3. Knowledge of different procedures performed during bronchoscopy such as BAL, brush and mucosal biopsies. Written evidence/logbook
4. Knowledge of the maintenance and cleansing of equipment, and aware of risks of cross infection and how to minimise these. Discussion with trainer
5. Basic knowledge of processing techniques used in the laboratories and ideally witness these being performed on at least one occasion. Portfolio

Clinical skills/experience

1. Witnessed/performed 45 bronchoscopies in children and visualised all of the common abnormalities encountered in routine clinical practice. Logbook
2. Performed at least 15 bronchoscopies under supervision and be competent to perform procedures without further supervision. trainer sign-off

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Respiratory Function Measurements

Trainee Name:

Knowledge	**Assessed by**	**Date**
Methodology and underlying physiology of:		
Spirometry		
Lung volumes		
Body Plethysmography		
DLCO		
Generic issues		
Use of reference values		
Repeatability and diagnostic accuracy of tests		
Quality control in the lab		
Risk management		

Technique	**Tests (n)**		**Calibration**
	Performed	Reported	(n)
Spirometry			
Lung volumes			
Body plethysmography			
DLCO			

Full Lung Function Testing including spirometry, lung volumes, body plethysmography, and DLCO for children of different ages (minimum of 5 hands on tests and 30 interpretation)

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Respiratory Function Measurements

Trainee Name:

Trainer's assessment:

Please comment on whether the trainee's current level is appropriate for independent consultant practice- 1. Ready for independent practice; 2. Almost ready for independent practice; 3.Not yet ready.

Competency	**Date**	**Independent practice (1/2/3)?**	**Comments** *(Must be inserted if assessment is not 1)*	**Name (Trainer)**	**Initials**	**Name (Physiologist)**	**Initials**
Can explain physiological basis of tests							
Appropriate choice of test							
Perform range of tests							
Interpret and report range of tests							
Understands quality control in the laboratory							
Overall: Could run a respiratory laboratory							

Competencies

1. Able to explain or teach the underlying physiology - flow-volume curves, measurement of lung volumes, DLCO and body plethysmography- observed teaching/discussion
2. Perform spirometric testing, measurement of bronchodilator responsiveness, measurement of lung volumes, DLCO.- Observed by physiologist or trainer
3. Able to interpret tests and identify technically unacceptable ones.- observed by physiologist or trainer
4. Can explain repeatability, diagnostic accuracy and limitations of tests and use this in interpretation. Discussion with trainer
5. Able to calibrate equipment, maintain quality control and minimise risk in the laboratory. Demonstrates competence/discussion with trainer/physiologist
6. Understands and correctly uses reference data.-Observed/discussion

N.B. This module should be countersigned by a physiologist or technician as well as a trainer.

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Sleep Medicine

Trainee Name:

Knowledge	**Teaching/discussion with trainer**	**Date**
Be able to teach or otherwise demonstrate knowledge of		
Development and physiology of sleep and breathing		
Different conditions which cause sleep-disordered breathing		
Central apnoea syndrome		
Hypersomina /insomnia/ parasomnias (optional)		

Practical skills	**Cases**	
	N	Date
Take a sleep history		
Set up polysomnography sleep study		
Score and report PSG using AASM criteria		
Score/report MSLT/MWT/Infant PSG and actigraphy (optional)		

Experience					
Condition	**Number of cases**		**Assessments**		
	N	Date	CBD	Reflective notes	Clinic letter review
Obstructive Sleep Apnoea					
Central breathing disorder					
ALTE/infant apnoea					
Titration of NIV					

	Clinic type	Specialties involved	Date
Multidisciplinary clinic			

Evidence based materials and guidelines

Guideline source/title	Guideline date

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

Sleep Medicine

Trainee Name:

Trainer's assessment:

Please comment on whether the trainee's current level is appropriate for independent consultant practice- 1. Ready for independent practice; 2. Almost ready for independent practice; 3. Not yet ready.

Competency	**Date**	**Independent practice (1/2/3)?**	**Comments** *(Must be inserted if assessment is not 1)*	**Name (Trainer)**	**Initials**	**Name (Technician)**	**Initials**
Appropriate knowledge base							
Clinical assessment of sleep problems							
Able to set up sleep studies							
Able to interpret, report and take action on sleep studies and titration studies							
Able to manage clinical sleep problems							
Overall: Can function safely in independent practice							

Competencies

Background Teaching discussion with trainer

The trainee should

1. Know the physiology of sleep at different ages, sleep stages, their effects on cardiorespiratory status and changes with age, circadian rhythm physiology.
2. Know what clinical conditions disturb sleep and in particular those which result in airway obstruction and central apnoea
3. Know the different clinical pictures caused by different conditions
4. be familiar with the advantages and limitations of different sleep studies.

Written evidence in portfolio/ Observed teaching

Clinical skills

The trainee should be able to

1. take a sleep history Observed by trainer
2. set up a sleep study- Observed by trainer/technician
3. score and report PSG (at least 30 PSGs; 5 under close supervision) Observed by trainer/technician
4. Appropriately prescribe and interpret NIV titration Observed by trainer/CBD
5. Manage a range of clinical sleep problems CBD/logbook

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

PICU

Trainee Name:

Trainee should record a total of at least 20 cases in to reflect competencies outlined in this section of the curriculum (M)

Respiratory condition requiring care	**Number of cases**	**Assessments**			
		CBD	Reflective notes (n)	Case Presentations (n)	Case Summary Review
Obstructive lung disease					
Restrictive lung diseases					
Parenchymal lung diseases					
Upper airway diseases					
Management of chronic lung diseases					
Others					

Procedures	Number of cases
Endotracheal intubation (M, minimum 10)	
Change of tracheostomy tube (M, minimum 3)	
Chest drain insertion (M)	
Use of non-invasive ventilation (M)	
Use of invasive ventilation (M)	
Use of inhalational Nitric oxide (D)	

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

PICU

Trainee Name:

Trainer's assessment:

Please comment on whether the trainee's current level is appropriate for independent consultant practice- 1. Ready for independent practice; 2. Almost ready for independent practice; 3. Not yet ready.

Competency	**Date**	**Independent practice (1/2/3)?**	**Comments** *(Must be inserted if assessment is not 1)*	**Trainer Name**	**Initials**
Can manage complex or highly complex PRM disease with respiratory failure					
Competent at the range of necessary procedures					
Competent ventilator usage					
Breadth of experience					
Overall					

Competencies- Ability to:

7. Can manage patients with complex respiratory problems. Discussion with trainer/CBD
8. Has demonstrated ability to perform the procedures listed in the PICU curriculum. Observed by supervisors and logbook.
9. Can manage invasive and non-invasive ventilation appropriately. Observed by trainer. Discussion on rounds

Evidence (over 3 years)

3. Portfolio of cases should be available, demonstrating experience and competence at the range of conditions listed in the curriculum..

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

PICU

Trainee Name:

PATIENT MANAGEMENT LOG SHEET

Date	Name	ID	Diagnosis	Remarks

PAEDIATRIC RESPIRATORY MEDICINE- LOGBOOK

PICU

Trainee Name:

PROCEDURE LOG SHEET

Date	Name	ID	Procedure	Remarks

Record of rotation for PRM

Name of trainee		
Dates	Block	Training institute
	1	
	2	
	3	
	4	
	5	
	6	

Hong Kong College of Paediatricians

Paediatric Respiratory Medicine Subspecialty Training

LOG OF CLINICAL CASES

(Ambulatory Care/Inpatient/Lung function/Bronchoscopy/Sleep/ICU)#

#please delete as appropriate

Trainee : _____ Training Center : _____

Start date (dd/mm/yy) : _____ End date(dd/mm/yy) : _____

No	Date	Initial of patient	Diagnosis
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
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15			
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17			
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19			
20			

**Continue to log/attach log sheets as needed*

Endorsement (by Trainer/Supervisor at end of rotation or at least every six months)

Trainer or Supervisor: _____ _____ _____

(Name in block letters) (Signature) (Date)