mater education

RMO RESPIRATORY HANDBOOK

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WELCOME FROM THE MEU

Please read this handbook in conjunction with the RMO Orientation Handbook which is accessible on the MEU website via Zenworks or http://mededu.matereducation.qld.edu.au/handbooks/

MEU Contact Details

If you're experiencing difficulty with any aspect of the term, clinical or otherwise, please contact the term supervisor and/or PVMEO as early as possible.

Director of Clinical Training (DCT)	Ph. 8229
Prevocational Medical Education Officer (PVMEO)	Ph. 8431
Vocational Training Medical Education Officer (VTMEO)	Ph.1560
Medical Education Admin Officer	Ph. 8272
Medical Education Manager	Ph. 8114

INTRODUCTION

Welcome to the Respiratory Unit. The respiratory unit at the Mater covers a diverse range of conditions under the umbrella terms of General Respiratory, Cystic Fibrosis and Sleep. Our patients vary in age, from 15 to 100 years old. Patients often have undifferentiated illnesses, multiple comorbidities and complex diseases. There is a big emphasis on a multidisciplinary team approach and detailed discharge planning. As a RMO in the respiratory unit, you will be tasked with a variety of work including ward rounds, team meetings, updating patient records and clinical skills and procedures for a wide range of respiratory conditions.

It is expected you will be exposed to a broad range of conditions across these three entities including:

- Adolescent and adult cystic fibrosis
- Acute and chronic airways obstruction – asthma, chronic obstructive pulmonary disease
- Acute and chronic respiratory infection – pneumonia, bronchiectasis
- Acute thromboembolic disease
- Pulmonary malignancies
- Acute respiratory failure and non-invasive ventilation
- Sleep disorders and CPAP

The Adult Respiratory Medicine webpage of the Mater Adult Hospital:
http://www.mater.org.au/Home/Services/Adult-Respiratory-Medicine.aspx

We hope you will have a valuable experience working with our team.

UNIT OVERVIEW

We operate a team based approach to respiratory medicine with all members of the team regarded as vitally important to the overall functioning of the unit.

We have two consultants taking primary care of public inpatients, with two further consultants covering outpatient clinics:

Dr Lucy Burr (Term Supervisor)	contact by mobile phone at any time
Dr Simon Bowler (Unit Director)	contact by mobile phone at any time
Dr Adrian Barnett	contact by mobile at any time
Dr Robert Carroll	contact by mobile at any time

(Respiratory and Sleep physicians – covering inpatients and clinics)

Dr Katherine Semple is an outpatient Respiratory and Sleep physician

Dr Burr, Dr Barnett, Dr Carroll and Dr Bowler provide month on-call consultant support and supervision and are happy to be contacted at any time.

We have an Advanced Training Registrar, a Basic Training Registrar and a Resident/Intern working with our team.

Respiratory Registrar (AT)	#0106
Respiratory Registrar (BT)	#4430
Resident or Intern	#0071

Importantly we also have a Senior Respiratory Nurse Practitioner, Rebecca Keating (1083) and an Administration Officer, Cathy Churchward/Lana Sandmann (1205), who are vital team members and provide a wealth of information and assistance.

Other important contacts within the department include:

Grace Madden (Chief Respiratory Scientist)	#8146
Glenice Uhrle (Chief Sleep Scientist)	#2185

Informing your consultant

Please contact at any time on the following:

Dr Lucy Burr	Ext 6739	Mobile: 0481 616 516
Dr Simon Bowler	Ext 1178	Mobile: 0411 407 996
Dr Adrian Barnett		Mobile: 0410 415 414
Dr Rob Carroll		Mobile: 0432 148 825

The consultant on call must be notified of any critically ill patient, of any plans to consult another unit and before any patient transfer.

LEARNING OBJECTIVES

During the term the intern or RMO is expected to become familiar and comfortable with managing common medical problems. A brief and by no means exhaustive list includes:

- Asthma, CF, Acute and Chronic airway disease, and Pneumonia.
- Common cardiovascular conditions.

The RMO should be able to:

- Examine (including ordering and interpreting tests) patients and diagnose common medical problems;
- Develop communication skills with patients and relatives, health professionals and carers;
- Plan patient management;
- Prescribe and administer medication within scope of practice;
- Safely perform and assist with procedures;
- Monitor patient care and the effects of treatment;
- Admit, refer, review, transfer and discharge patients; and
- Maintain accurate and comprehensive records.

The junior doctor is expected to develop a robust working knowledge of these conditions and their management (including pharmacotherapy). Importantly, he or she is expected to recognise their limits and be able to identify appropriate sources of additional information (textbooks, library, Medline, Up to Date etc.) and self-direct learning using these.

You should develop the ability to accurately interpret the following tests:

- ECG
- Plain CXR
- Spirometry and complex lung function tests

During the term you should develop the ability to independently perform the following procedures:

- Venesection and IV cannulation
- Spirometry
- 12 lead ECG
- arterial blood gas sampling

You should understand the principles of and be capable of:

- Giving bad news
- Dealing with angry patients / relatives
- Counselling patients to stop smoking

You might develop the ability to perform the following under direct supervision:

- pleural aspiration and drainage
- intercostal catheter insertion using Seldinger techniques
- lumbar puncture

Intern Requirements of the Medical Board of Australia (MBA)

The MBA requires interns to undertake a term of at least 10 weeks providing experience in medicine. This term must provide supervised experience in caring for patients who have a broad range of medical conditions, and opportunities for the intern to participate in:

- assessing and admitting patients with acute medical problems ;
- managing inpatients with a range of medical conditions, including chronic conditions ; and
- discharge planning, including preparing a discharge summary and other components of handover to a general practitioner, subacute facility, residential care facility, or ambulatory care.

According to the MBA, the term in medicine provides important learning opportunities within the following; these represent the majority of your Term Learning Objectives.

Domain	Term Learning Objectives	Expected opportunities	
The intern as scientist and scholar	• Consolidate, expand and apply knowledge of the aetiology, pathology, clinical features, natural history and prognosis of common and important presentations at all stages of life.	Complete Admissions Attend clinics Review patients Attend MET calls	
The intern as practitioner	• Place the needs and safety of patients at the centre of the care process. Demonstrate safety skills including effective clinical handover, graded assertiveness, delegation and escalation, infection control, and adverse event reporting.	Ward call handover Awareness of ERIC and a safety escalation processes Observe Aseptic Non Touch Technique with IVC, Hand hygiene practice	
	• Communicate clearly, sensitively and effectively with patients, their family/carers, doctors and other health professionals.	Experience in breaking bad news MDT meetings Inpatient registrar referrals	
	• Perform and document a patient assessment, incorporating a problem-focused medical history with a relevant physical examination, and generate a valid differential diagnosis.	Complete Admissions Clinic attendance	
	• Arrange common, relevant and cost-effective investigations, and interpret their results accurately.	Daily ward work Pathology review ECG interpretation	
	• Safely perform a range of common	IVC insertion; ABGs; ECGs	

	procedural skills required for work as an intern.	Spirometry; IDC	
	• Make evidence-based management decisions in conjunction with patients and others in the healthcare team.	Ward rounds	
	• Prescribe medications safely, effectively and economically, including fluid, electrolytes, blood products and selected inhalational agents.	Asthma / COPD management; blood product management Iv fluid management	
	• Recognise and assess deteriorating and critically unwell patients who require immediate care. Perform basic emergency and life support procedures, including caring for the unconscious patient and cardiopulmonary resuscitation.	Attendance at MET calls ALS, Simulation Education / Friday PIP attendance	
	• Retrieve, interpret and record information effectively in clinical data systems (both paper and electronic).	Verdi results acknowledgement, Timely use of CH@T discharge summary program	
The intern as a health advocate	• Apply knowledge of population health, including issues relating to health inequities and inequalities; diversity of cultural, spiritual and community values; and socio-economic and physical environment factors.	Consider and apply patient specific care plans and follow up needs Utilise site and phone Interpreter services	
	• Apply knowledge of the culture, spirituality and relationship to land of Aboriginal and Torres Strait Islander peoples to clinical practice and advocacy.	Utilise and engage Indigenous Liaison Officers in patient care Demonstrate awareness of cross cultural communication	
	• Demonstrate ability to screen patients for common diseases, provide care for common chronic conditions, and effectively discuss healthcare behaviours with patients.	Undertake counselling around management of lifestyle risks for patients eg smoking / Dietary medication compliance in diabetes	
	• Participate in quality assurance, quality improvement, risk management processes, and incident reporting.	Utilise ERIC when required Escalate abnormal results appropriately	
The intern as a professional and leader	• Provide care to all patients according to *Good Medical Practice: A Code of Conduct for Doctors in Australia*, and demonstrate ethical behaviours and professional values including integrity; compassion; empathy; and respect for all patients,	Demonstrate organisational values Participate in organisational recommended learning	

	society and the profession.		
	• Optimise their personal health and wellbeing, including responding to fatigue, managing stress and adhering to infection control to mitigate health risks of professional practice.	Rosters feedback, complete end of term survey	
	• Respect the roles and expertise of other healthcare professionals, learn and work effectively as a member or leader of an inter-professional team, and make appropriate referrals.	Attend and participate in MDT meeting	
	• Self-evaluate their professional practice, demonstrate lifelong learning behaviours, and participate in educating colleagues	Utilise log book for reflection	
	• Take increasing responsibility for patient care, while recognising the limits of their expertise and involving other professionals as needed to contribute to patient care.	Develop structure for assessment and management	
	• Effectively manage time and workload demands, be punctual, and show ability to prioritise workload to manage patient outcomes and health service functions.	Streamline approach to assessment, prioritisation of ward work Demonstrate increasing efficiency with job experience	

Individual Learning Objectives (ILOS)

Your supervisor will discuss and develop learning objectives with you at your face-to-face orientation and evaluate progress towards them at mid- and end-of-term assessment. These ILOs are to be documented on the *Start-of-Term Orientation Checklist* before submission.

DUTIES AND RESPONSIBILITIES

Remember, you are an ***active*** member of the therapeutic team and are expected to help formulate and then implement the unit's management plans.

The expectations for each team member are as follows:

Advanced Trainee	Basic Trainee	Resident/Intern
Clinics		
Clinics x 4	Clinic x 2	Ad hoc clinics as required
Bronchoscopy		
Bronchoscopy x 2 per week	Can attend if interested	Can attend if interested and ward

Must know indications and plan for bronch on for each list	work complete

Advanced Trainee	Basic Trainee	Resident/Intern
Wards		
Oversight of all ward patients	Daily ward round	Daily ward round
Take phone calls for all ED referrals		Elective admissions (mostly CF)
Effective delegation to BT		
Consultant ward round	Consultant ward round	Consultant ward round
- must know all patients	-must know all patients in detail	-will be expected to present/know 2-3 patients in detail
		Discharge prior to 10 am preparation (stamp)
Unacknowledged results	Unacknowledged results	Unacknowledged results
HITH		
Communication with HITH nurse and pharmacist	As per resident	Review bloods/levels daily – flag abnormal results
Discharge Summaries		
Assist with discharge summaries	Assist with discharge summaries	Discharge summaries
Education Sessions		
Respiratory Education Talks (multiple)	One case presentation/audit per term	One case presentation /audit per term
CF Journal Club (once per month)		
Pleural Procedures		
All pleural procedures - must inform consultant	Can participate in pleural procedures (always under supervision)	Can participate in pleural procedures (always under supervision)
CF Team Meetings		
Dictate Team Meeting Notes on Mondays	Attend Meeting/Participate as necessary	Present all inpatients
Prep CF clinic when on for CF clinics		
Lung Cancer MDT		

Present all respiratory team patients	Attend meeting, present relevant ward patients	Attend meeting

Advanced Trainee	Basic Trainee	Resident/Intern
Lung Function Reporting		
Report 30-40 per week Meet with Dr Carroll every Friday at 11:30 to review reports Attend weekly RFT reporting calibration session	Report 5 studies per week with the AT – present report to AT every Friday at 11:30 am Attend weekly RFT reporting calibration session	Attend weekly RFT reporting calibration session
Weekend Cover/On Call		
No on call or weekend cover	Saturday ward round 8-12, 1 in 2 with resident No on call	Saturday ward round 8-12, 1 in 2 with BT No on call

SCOPE OF PRACTICE

RMOs are not permitted to perform any clinical procedure without direct observation, at least in the first instance. The clinical supervisor will then inform you what is to happen in future, with regard to whether or not direct supervision is required. This will be dependent on the skill itself and level of proficiency exhibited. Within hours direct supervision will be available from both the basic and advanced respiratory trainees as well as the term supervisor.

CONSULTANT WARD ROUND (GENERAL RESPIRATORY)

Dr Bowler, Dr Burr, Dr Barnett, and Dr Carroll will do 2 consultant ward rounds per week. They take the format of a business round whereby the whole team sits down with the pathology and radiology and each team member presents their patients to the consultant who will dictate a note. Please ensure this has made it into the chart by the end of the day (this is usually the responsibility of the intern/resident, but the registrars must ensure this has been completed by COB). Patients will then be reviewed by the consultant and team in person.

The AT must know all of the patients and will take the lead in the discussion. The BT will must also know all of the patients and will be aware of the specific details of the patients (e.g. lung function, social set up etc)

The Intern/Resident will know all the patients well and will present 2-3 patients at a minimum per consultant ward round. The intern will bring spare ward lists for the consultants and the Dictaphone from Cathy/Lana (Level 7 Respiratory Office).

CF Team Meeting

Every Monday and Thursday at 12 pm, all CF inpatients are discussed as well as any critical outpatients. The intern/resident will present the inpatients. The AT will present the outpatients. The AT will prep for the Monday CF clinic on the months that they are on.

Ward Rounds

BT/Intern: Review every patient and document patient progress and plans on a daily basis M-F (and alternate Saturday)

- documentation should include the patient's current problems/ issues and your plans for their management
- Must include a date, time, the names of the people on the round and your signature and pager number
- you should also include an estimate of the patient's discharge plan

AT will physically review ward patients most days, but have a working understanding and overview of all the ward patients.

Communication is vital to and from the team, with:

- The patient and their relatives
- The nursing staff (ensure nursing staff know about plans for their patients);
- Other departments in the hospital
- The referring doctor

Arrange investigations as appropriate including paperwork, etc. Review all results each day, document in notes as appropriate and ensure that any abnormal results are actioned appropriately (if in doubt, ***ASK***). Discharge summaries are crucial communications, please ensure that they are:

- Complete within 24 hours of discharge. Ideally should be given to patients to take away with them at discharge.
- Accurate, concise and particularly highlight any changes to medications that have occurred
- Ensure local doctor details are correct so that summary actually makes it to the gp

Completion of coding forms in a timely manner is essential for the overall running of the hospital. There is a mandatory education unit in MOVES – Rebecca Keating can also assist.

Patients with cystic fibrosis are a challenge. Most patients are friendly and co-operative but remember they have likely been admitted many, many times. CF patients should actively participate in therapeutic decisions. Be prepared to listen and always discuss plans with the patient and your Registrar/Consultant.

Daily primary care

This includes all patients in the intern's unit. A daily ward round is to be performed, usually accompanied by the Registrar. A further review in the evening may be required. A daily print-out of the list of unit patients can be obtained from VERDI.

Daily record
A daily chart entry with documentation of findings and management decisions is essential. It should be headed "RMO WR" or "Reg/RMO WR" if accompanied by the Registrar. ALWAYS include date, time and ward and sign your name – including your printed surname.

Discharges
We aim to have all of our patients **discharged prior to 10 am** on the day of discharge. The team will discuss expected discharge dates (EDD). These need to be documented in the chart **and on the journey board of the relevant word**. For the CF patients there is a discharge stamp which needs to be put into the chart with the EDD to enable effective planning form the ward perspective.

The Resident is responsible for the function of electronic discharge summaries which are automatically faxed electronically on sign-off to the patient's GP. However it is the AT responsibility to ensure the resident has adequate time to complete them.

Discharges from the unit require advance planning. However, communication with the patient's GP remains an important responsibility of the resident. The discharge summary must be completed at the time of discharge, with diagnosis, medications and follow-up plans clearly outlined. The patient's GP should be contacted, if appropriate, by telephone prior to discharge, *especially if the patient has died*. If important, hand-over information needs to be given. This should all be faxed by the Ward Clerk; however, this is something which the resident may have to do.

Everyone in the team is very helpful so just ask as many questions as you like. Remember to contact the previous resident if they are still at the Mater.

HANDOVER

Ward Call Handover
Ward Call commences at 4:30pm.The form at the end of this document will assist you with daily handover.

At the completion of your shift, *it is imperative that you 'handover' your patients* to after-hours medical staff if there is any concern over their clinical stability. This should include:

- Patients who require review of investigations after hours,
- Any patient with the potential to deteriorate and require higher level of care, or
- Any patient who requires further medical review before usual working hours resume

Even if you believe you have no patients in these categories to hand over, you must still attend this meeting.

Adequate patient handover is critical for ensuring timely patient review and ensuring patient safety and is a prime responsibility of all medical staff.

** *Remember* – if you do not handover a sick patient, they remain ***your responsibility*** until care is resumed by day staff and any potentially preventable complication that arises during that period will remain *your responsibility*.

End of Term Handover
It is the responsibility of the incoming RMO to meet with the outgoing RMO, to discuss clinical handover of patients and ward specific information. Handover takes place during the 12:30-13:30 education session on

the last Friday of each term. This is a catered handover session, held in the Duncombe Building, Level 4, Mater Medical Study Space. RMOs rostered on at that time are required to attend.

All RMOs are encouraged to use the Rolling Term Handover Form (ROVER) which is located on the Medical Education Unit Website and provided at end of term handover. RMOs are reminded via email and page, to attend handover. The name of the person you need to handover to is available on L Drive, ALLUSERS, in the folder called 'docrost'. Use the phone directory on the intranet homepage to find their contact details or contact switch. If the details provided are incorrect (e.g., because a recent roster amendment has occurred) it remains your responsibility to follow up the correct person and undergo term handover.

WEEKEND WARD ROUNDS

The respiratory intern/resident will be required to participate in a Saturday morning ward round. They will review the respiratory inpatients. The ward round will be completed independently. Direct supervision, for emergencies, will be provided by the medical registrar on call (as agreed with the director of physician training). Indirect supervision will be provided by the respiratory consultant on call via the telephone. The consultant will be within 10 – 20 minutes' drive away and will be contactable instantly via telephone. The intern should feel supported and will be encouraged to discuss any concerns whether related to the patients or their workload at any time. The intern will not be expected to perform anything outside of their scope of practice.

SUPERVISION

Supervisors

Term supervision is conducted by Dr Lucy Burr/Dr Simon Bowler. Clinical supervision is provided by Unit Consultants and Registrars, and all consultants are contactable if problems arise and the registrars are not available.

Escalating concerns

Any problems or questions regarding care of inpatients should be referred to one of the Unit Registrars. If the registrars are not available, then the consultant should be contacted directly. If you need to contact your consultant, you can do this via switch.

UNIT ORIENTATION

Orientation to the Ward

Unit orientation is conducted for each resident and registrar at the commencement of each term. This takes place in an interview (face to face meeting) involving the consultant. However it remains the responsibility of the registrar/resident to seek this orientation within the first TWO days of starting a new rotation.

The following areas will be covered:

- Reporting lines
- Daily roster
- Term roster (your hours each day)
- Unit policies, protocols and procedures

- Term learning objectives
- Discussion and documentation of your individual learning objectives for the term
- Assessment
- Handover with the previous junior doctor
- How daily clinical handover is conducted
- Expectations in terms of: workforce role, personal development, professional education, and education of attached medical students

Start of Term Checklist

All RMOs complete the Start of Term Orientation Checklist with their Term Supervisors within the first week of a new term. The checklist is completed online and the link is available on the Medical Education Unit website (http://mededu.matereducation.qld.edu.au/cpd-requirements/all-forms/).

Residents/ Interns should take time to peruse all relevant guides or handbooks for the unit before presenting for work and discuss any concerns with the Senior Registrar.

Reporting Lines

The intern / resident reports directly to the Clinical Supervisor and/or Term Supervisor – if he or she is unavailable (e.g. absent on sick leave), please report to the relieving registrar. In particular, please contact at any time of day regarding the following:

- Worsening conscious state
- Severe hypoxia
- Acute medical deterioration

The hospital is also serviced by a MET (Medical Emergency Team) for critical changes in condition.

Consultant ward rounds

There are two consultant ward rounds per week: Monday and Thursday (Dr Burr, Dr Barnett and Dr Carroll), and Monday and Friday (Dr Bowler). You should familiarise yourself with the patient's condition and progress, and ensure appropriate x-rays and investigation results are available. Consultants dictate a consultant note. Please ensure this has made it into the chart ASAP - by the end of the day.

POLICIES AND PROCEDURES

Mater policies and procedures are located on the Mater Document Centre, which can be accessed via Zenworks or the Mater Intranet. The most relevant procedures to Respiratory are listed below:

- Cystic Fibrosis Patient Management – Document ID PR-CLN-900223
- Humidified high flow oxygen therapy – Document ID WI-CLN-900099
- Non-invasive ventilation – Document ID PR-CLN-900009

UNIT ROSTER AND TIMETABLES

Hours are 8 am – 4.30 pm with a 30 minute lunch break. There will be a fortnightly Saturday morning ward round (for the BT and Resident). Your regular working hours need to add up to 76 hours / fortnight under the current Enterprise Bargaining Agreement. As such, the resident/intern has every Friday afternoon off (from 1pm) and the BT has every Monday morning off. The AT has every second Wednesday off.

ANY UNROSTERED OVERTIME will need to be authorised prior to the event and signed by the relevant Consultant on each occasion.

Unit timetable (interns are highlighted in RED)

DAY	TIME	ACTIVITY	LOCATION
Monday	09:00 - 11:00	Dr Burr/Barnett/Carroll Ward round†	Wards
	12:00 – 13:00	CF Team Meeting	TBA
	13:00 – 14:00	Medical Grand Rounds	Cronin Room
	14:00 – 16:30	CF Clinic*/Dr Bowler Ward Round‡	MYAC L4/Reg room
Tuesday	09:00 – 12:00	Sleep Clinic**	Level 4 Salmon
	12:00 – 13:00	Lung cancer multidisciplinary meeting	QRI, 1st floor
	13:00 – 16:30	Respiratory Clinic (Dr Bowler/Caroll)	Level 4 Salmon
Wednesday	08:00 – 12:00	YA Resp/Severe Asthma Clinic(alt week)	Level 4 Salmon
			Level 3, Conf. Room 3
	12:30 – 13:30	Registrar teaching	Endoscopy unit, lvl 5
	13:00 – 16:00	Bronchoscopy (with Dr Barnett)	
Thursday	0800 - 0900	State wide NTM meeting (monthly)	TEAMS
	0900 - 1200	Respiratory Clinic (Dr Burr/Barnett)	Level 4 Salmon
	12:00 – 13:00	CF Team Meeting	Level 4 Salmon
	13:00 – 15:00	Dr Burr/Barnett/Caroll Ward round	Level 4 Salmon
Friday	09:00 – 11:30	Ward Duities/Dr Bowler Ward Round‡	Reg Room Level 9
	11:00 – 12:00	ILD MDT (monthly – 3rd week)	QXR meeting room
	12:00 – 13:00	Respiratory Educational Meeting	Level 3, conf room 4
	13:00 – 16:00	Bronchoscopy (Dr Carroll)	Endoscopy unit, level 5

‡ When Dr Bowler is on (April and August)

*Odd numbered months

**Even numbered months

Education Sessions

You are encouraged to attend as many relevant sessions as possible.

DAY	TIME	ACTIVITY	LOCATION
MONDAY	1 pm – 2 pm	Medical Grand Rounds	Level 3 Conf room, MAH
TUESDAY	12.30 pm -1.30 pm	RMO Education – **Protected Teaching Time**	Level 4, Duncombe Building
WEDNESDAY	12.30 pm -1.30 pm	Registrar Medical Education session	Medical registrar room, 9B
THURSDAY	8 am – 9 am	1st Thursday of the month – Mycobacterial meeting	The Dome, L4 Salmon building
	12.30 pm -1.30 pm	RMO Education – **Protected Teaching Time**	Level 4, Duncombe Building
FRIDAY	12 noon – 1 pm	Respiratory Unit Meeting	Level 3 conf room 4 MHB

ASSESSMENT AND FEEDBACK

Assessment

It is the responsibility of the RMOs to seek a mid-term and end-of-term assessment with their term supervisor. If you're experiencing difficulty with any aspect of the term, clinical or otherwise, please contact the term supervisor and/or medical education, early. The MEU will send out a reminder email with instructions to all RMOs one week prior to all due dates. The assessment form can be accessed at any time from the Medical Education Unit website via Zenworks or http://mededu.matereducation.qld.edu.au/cpd-requirements/all-forms/

There is also an optional self–assessment section located at the beginning of the assessment form, which you are encouraged to complete and discuss with your supervisor. However if you wish to complete this separately you can complete the RMO form Self-Assessment Form which is located on the Medical Education Unit Website under 'Assessment Forms'.

Feedback

Your clinical supervisor/s will provide regular written feedback regarding your progress via your assessment forms, and verbal feedback on a daily basis. If you have concerns or would like more regular feedback, speak to your supervisor in the first instance and the MEU if required. At the end of your rotation, you are required to complete the end-of-term unit evaluation survey and provide valuable feedback on your supervision.

For more information regarding assessment and feedback, please refer to the RMO Orientation Handbook.

APPENDIX 1: TIPS AND TRICKS FOR THE RESPIRATORY TERM

In the morning:

- Team meets at 08:00 at respiratory registrar office on level 7
- Resident arrives prior to update list (20 minutes is usually sufficient)
- Respiratory list found in shared file → computer>L drive>all users>medical handover>resp handover> respiratory list
- Print 4 copies of list (AT, BT, yourself, Bec – Nurse Practitioner) + 1 extra if there is a consultant round that day

Cystic Fibrosis Admissions (Resident/BT) – IF UNSURE ALWAYS ASK! – REBECCA KEATING OR DR BURR

Booking a CF Admission (usually coordinated by the NP/CN)

Step	Instructions
1.	Cystic Fibrosis patient will be identified from the outpatient clinic or via team meeting as requiring admission by the CF team
2.	If CF patient requires a Peripherally Inserted Central Catheter (PICC)to be inserted: • A request form is generated from Verdi with the words: "**PICC insertion for CF patient**" • Form is emailed to olivia.hunt@qldxray.com.au AND Cassandra.perry@qldxray.com.au and a date given • PICC booked for that date – with a time between 11am to 1pm
3.	Once PICC time and date is known a BCO form to be completed (by the Respiratory A/O or Respiratory CN/NP) with correct location for admission based on recent sputum microbiology (confirm with NP or refer to Cystic Fibrosis Patients - infection prevention and control Guideline (GD-CLN-900030)). • CF patients with *Burkholderia cenocepacia* are to be admitted to ward 8A • CF patients with *Mycobacterium abscessus* species to be admitted to ward 9A • all other CF patients to be admitted to MYAHCB
4.	BCO form to be given to the Respiratory A/O for actioning • Coordinate PICC time with admissions • Confirm with Patient • Email BCO to admitting ward, booking office, patient flow managers and CF team
	End of Instructions

- **ALWAYS ENSURE CF PATIENTS ARE PRE-ADMITTED TO PREVENT DELAYS TO MEDICATION DOSES**
  - The Nurse Practitioner has a list of planned admissions in the Respiratory office, they are also discussed every Monday and Thursday at the team meeting
- **Documentation**
  - Use most recent detailed letter to assist with admission paperwork;
  - Make sure you put genotype (e.g. homozygous delta508), recent microbes (e.g. colonised with pseudomonas), antibiotics and expected date of departure (if known) on the list
- **Medication Chart**
- Use most recent pharmacy discharge summary for medication list (these must be checked with the patient on admission)
- Antibiotics
- Antibiotic choice is typically:

- tobramycin IV 5-7mg/kg daily @ 9 am (for entire admission) - start at last tolerated dose (usually between 300-500mg)
- + ceftazidime 2g TDS **UNLESS ALLERGIC:** if unsure, check with CF consultant or Nurse Practitioner
- Generally rotate second antibiotic after 5-7 days (keep tobramycin the whole time), choices include:
  - piptaz is 18g/24 hours or piptaz 4.5g 6 hourly
  - aztreonam is 6g/24 hours or aztreonam 2g 8 hourly or
  - meropenem 2g 8 hourly or
  - cefepime 2g 8 hourly
- **Avoid TDS/QID dosing if possible – infusers much better**
- Add Bactrim DS 2 tablets BD if co-cultured staph in the last 12 months.

- Other Meds
  - Chart 2 L IV saline on day one, then cease.
  - Chart heparin 50 units in 5ml normal saline flush TDS for all patients on TDS antibiotics dosing (see Central venous access devices and midline catheter procedure document (PR-CLN-900053).)
  - On the PRN side please chart 6% Hypertonic saline (discuss with physiotherapist) and nebulised salbutamol 5mg.
  - Chart heparin 50 units in 5ml normal saline for portacath de-access on day of discharge as per the Central venous access devices and midline catheter procedure document (PR-CLN-900053).
  - If previous line-associated thrombus chart rivaroxaban 10mg daily if there is no haemoptysis or other contraindication.
- **Required tests**
  - Peripheral bloods should be avoided at all times. Wherever possible a PICC/midline/portacath should be utilised for pathology tests as per the Central Venous access devices and midline catheters – procedure (PR-CLN-900053).
  - Annual review bloods and OGTT should be done as close to the end of an admission as possible if not completed as an outpatient prior.
  - All patients need: FBC, ELFT, CRP and HbA1c performed on admission
  - All patients need 3 x CF sputum culture and 1 x AFB sputum culture forms
  - Tobramycin levels are done on second day, then weekly unless dose is changed.
  - Aim for AUC 85-100
  - levels are done @ 1 hour and 6 hours post infusion
  - Opportunistic screening (Annual bloods and scans) – Annual bloods can be requested if they are out of date. Additional testing will be discussed at the CF Team Meeting
  - Annual bloods can be requested in Verdi by: pathology request form> unit groups>mater adults hospital>adult respiratory>annual bloods (select all except GTT, which needs to be booked in separately, fast for 6 hours prior) – THESE ARE DONE AT **THE END** OF AN ADMISSION if required
- **Other**
  - Infection control procedures must be followed at all times. Ward allocation is dependent on most recent microbiology. Individuals with *Burkholderia cenocepacia* will be admitted to ward 8A only. Individuals with *Mycobacterium abscessus* species will be admitted to ward 9A only. All other individuals will be admitted to Mater Young Adult Hospital Centre Brisbane.

- Patients in the Mater Young Adult Hospital Centre Brisbane are to be seen in the following order (Refer to Cystic Fibrosis Patients - infection prevention and control Guideline (GD-CLN-900030)):
    - Non-pseudomonas-colonised patients
    - Pseudomonas
    - Pseudomonas + other (e.g. staph)
    - Non abscessus NTM
    - Inpatients with *M. abscessus* or *B. cenocepacia* are not seen on the same day as any other CF patient. If possible, another team member should see the patient on a specific day, however if the interaction simply involves a non-physical interaction (e.g. discussing results), team members may see them on the same day or in a different order, presuming all contact precautions have been adhered to. This would not include in room physiotherapy or lung function testing.
- Wear gown and gloves if entering room; clean stethoscope if examining a patient

DISCHARGE BEFORE 10A.M. (Resident)

- Team has goal of planned discharges prior to 10a.m.
- Make sure you sign off medications the day prior if possible, including authority scripts
- Ask patient if they need a medical certificate so as not to delay departure
- Make sure patient is aware of this expectation that they are gone from the ward by 10a.m. (can go to transit lounge etc...)
- Can stamp chart if not requiring team review prior to discharge (see below)
- Try and see planned discharges early on the ward round

Bronchoscopy Bookings (AT)

- Fill out purple booking/consent form and give to endoscopy bookings on Level 4 Salmon Building (Monique or Kathy, 8183)
- If in outpatients, give patient info sheet (kept in folder in outpatients). Tell them about which medications to withhold if relevant and write that into info sheet.
- Ensure it is documented in letter or booking form where the imaging is held (eg Mater, QXR, Qscan). Consider arranging for imaging to be imported (PACS transfer form).
- For late/urgent bookings, call Endoscopy NUM (usually Nicole/Ruth) directly on 1630

BRONCHOSCOPY (AT)

- Wednesday and Friday afternoons in Level 5 Day Procedure Unit
- Start at 1.00 pm.
- Usually limit to 4 bronchs per list (including maximum 2 EBUS procedures)
- All done with anaesthetic support.
- EBUS TBNA and Guide Sheath/Radial EBUS available.
- **For EBUS FNA, call cytology on 8461 to arrange on site assistance**.
- Supervision by Dr Barnett and Dr Carroll.
- Reports using ENDOVAULT system.

EBUS (looking for lymph node sample)	**EBUS mini probe (looking for lung tissue)**
=EBUS FNA	=EBUS radial probe
=EBUS convex	=EBUS transbronchial biopsy
=EBUS convex probe	
Need cytologist present to identify cells	Need a bronchoscope with a 2.0mm channel P180 4.9mm bronchoscope to fit probe on to.
Also need ordinary bronchoscope as we will generally do a diagnostic bronchoscopy as well.	Need II
Procedure duration 45-60 minutes.	No cytologist (tissue sample sent to histology)
	Procedure duration 75 minutes.

PLEURAL PROCEDURES (AT)

- All procedures must be discussed with a consultant.
- Pleurocentesis and pleural drains (pigtail seldinger kit)
- Done on the wards (either at bedside or in ward procedure room)
- Handheld ultrasound kept in office for markups/assessment
- Bruce Martin (Clinical Nurse) will assist with pleural procedures if required.
- Please inform both **Rebecca Keating and the relevant consultant** that a pleural procedure is planned and when it is occurring.
- **Please notify the relevant ward NUM after a procedure is completed to arrange for equipment replacement**

LUNG FUNCTION REPORTING (AT/BT)

- Lung function is accessed on Respiro
- Obtain log-in and password from Grace Madden
- Reports are typed directly into the program and saved for Consultant sign-off

LUNG CANCER MDT

- Tuesdays at 12pm at QRI building, Level C meeting room
  Email patient details to Elroy (on MDM_coordinator@health.qld.gov.au) to be added to the list. Include reason for discussion, which consultant they belong to, where images and pathology are (QLD xray, Mater etc).

BiPAP/NIV

If BiPAP indicated and patient would be a candidate for intubation if required, should ideally be managed in ICU rather than ward (guideline rather than policy). Those patients who aren't ICU candidates can be managed on the ward with a **recommendations for care (pink form)** completed. Ideally 9A or 10A however may need to be started elsewhere with a BiPAP competent nurse until 9A/10A bed available.

CPAP/Sleep

- Sleep scientist available to troubleshooting masks and downloading machines.
- Overnight oximetry is available through the sleep scientist.
- Diagnostic, CPAP and bilevel titrations are available. Please ensure to give the scientists instructions when requesting a study (ask the consultant for help).
- Sleep reports are found in Verdi under Scanned documents>Investigations,

MYCOBACTERIAL TELECONFERENCE

- Monthly on Thursday mornings at 8:00
- Dial in at The Dome in the Salmon Building
- Usually discussion of difficult cases with the occasional didactic educational talk.
- Coordinated by TPCH infectious diseases registrar.

HITH PATIENTS

- Note for bronchiectasis patients the dose of Piptaz in 13.5g/24 hrs, CF patients is 18g/24 hrs
- Please call the HITH registrar/consultant to handover the patient
- Check bloods/results daily/as needed
- Ensure patient has weekly face-to-face outpatient review while on HITH
- Most patients (bronchiectasis) require 10 days of IV abx max – 14 days only in rare circumstances. Discuss all CF HITH LOS with Dr Burr/R Keating.

ILD XRAY MEETING

- Monthly meeting in QXR meeting room Level 6, Mater Medical Centre Friday at 11 am
- QXR will arrange PACS transfer if notified in a timely manner.
  Patients are emailed to Lisa Welsh on lisa.welsh@qldxray.com.au

Step	Instructions
1.	The meeting coordinator sends out a reminder email asking for cases **1 week before** the MDT.
2.	Respiratory doctor identifies a potential patient for discussion and emails the case to the meeting coordinator. The email must include: • Name • UR number • Where the images were performed • Whether there is any histology to be performed • **What specific question needs to be answered** (e.g. ? IPF)
3.	The meeting coordinator emails a list of cases to the MDT **48 hours** before the meeting. ***No more than 8 cases can be discussed in any one session*** Where there are more than 8 cases to discuss, the respiratory doctor will be contacted to determine the urgency of review.
4.	Case discussed at MDT
5.	The **respiratory advanced trainee** (or the consultant presenting) dictates the outcome of the MDT directly into Verdi using the letter template "ILD MDT". The dictation must include: • Names and positions of the people present • "the case of xxx was discussed on (date) with the question of xxxxx" • Radiology opinion • Pathology opinion (where histology performed) • Consensus opinion
	End of Instructions

LUNG CANCER FOLLOW UP – POST RESECTION

Based on consensus guidelines (which are a bit variable), the Mater respiratory unit has agreed to the following post resection follow up plan:

For Mater patients:

They will be discussed in the MDT within **2 weeks of surgery** – AT to ensure the patient has been booked on the MDT list

Following discussion, if patient is for respiratory follow up (i.e. no adjuvant chemo etc) they will be seen in clinic **within 12 weeks after surgery** – AT is to ensure the patient has a booking, or the consultant will check if the AT is away

The follow up process is then as follows:

- Clinical review at 3 months post op
- 6 monthly CT scans for 2 years
- Annual CT scans from year 3 onwards – if patient functionally well.

At the 3 year mark we will refer the **patient back to the GP** with a recommendation for annual CT assuming the patient is functionally well enough to tolerate further surgery if a subsequent cancer is found. The GP can refer the patient back in if there is any concern on the CT.

BOOKING PATIENTS FOR CT GUIDED BIOPSY

Step	Instructions
1.	Request must include: • Request form (Verdi generated) • Pathology form – for Histopathology/MC+S etc These are **both** sent to QIdXray
2.	• Coags and FBC must be completed before procedure (arranged by the requesting doctor) • Patient advised to cease anticoagulants etc. if necessary
3.	Patient Scheduled for lung biopsy • Ideally a morning procedure (before 1 am) due to the length of patient recovery (typically 4-6 hours)
4.	Patient has biopsy (performed by radiology)
5.	Patient has CXR immediately post procedure • CXR is reviewed by QXR radiologist
6.	Patient observed clinically for 4 hours
7.	Patient has repeat CXR at 4 hours which is reviewed by QXR radiologist
8.	• IF patient **clinically stable** AND no significant pneumothorax, can be discharged with follow up – QXR radiologist will contact admitting team to confirm stability of patient • IF patient has **significant pneumothorax**, QXR radiologist will arrange ICC if necessary and contact admitting team to complete overnight admission paperwork and clinically assess the patient. After hours, if a patient requires an emergent ICC due to clinical instability, the MET call process will be enacted and on site doctors trained in ICC insertion (e.g. QXR, ED or ICU) will place an ICC as required.
	End of Instructions

The above applies to requests for lung biopsy sent to QXR MHB by a requestor with admitting rights to MHB. Requests for lung biopsy from providers **without** admitting rights to MHB will be directed to discuss the admission with the Mater Respiratory Team.

For referrals for lung biopsy to the Mater Respiratory team, **external providers** will be expected to do the following:

1. Arrange transfer of radiology to QXR PACS
2. Send a request email including patient details / contact info, site for core bx/FNA, indication, co-morbidities, medication to the respiratory advanced trainee (contact AT through Mater Switch 07 3163 8111).

3. Arrange for detailed clinical history (a recent clinic letter, lung function, obs etc) to be faxed to Cathy Churchward Catherine.churchward@mater.org.au (Respiratory A/O) for including in the Mater Health Record.

4. Arrange the patient to have a form for ELFTs, FBC, and coag (PT, APTT)