

Respirology Rotating Learner Orientation Notes



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Rotation Description

The Respiratory Service rotation is primarily an inpatient rotation involving respiratory consultations on inpatients. When the service demands permit, opportunities may be available for outpatient ambulatory care or procedural clinics. This involves inpatient and emergency room consultations, preparation of inpatients for procedures, observation and, in some cases, performance of respiratory medicine procedures.

Should a learner wish to have a primarily outpatient experience in Respiriology, residents can also request a separate Respiriology Elective that can accommodate this.

Generally, learners are supervised by a Respiriology Fellow and the Respiriology attending on the Respiriology Consult Service. The Respiratory service will round on all new and repeat patients on a daily basis.

Meeting Times, Locations, and Service Expectations

The typical meeting times are at the discretion of the Fellow on consults, but will typically be approximately 08:30 A.M. If there is a Staff Teaching session from 08:30 to 09:30 and therefore the team will meet after that. Similarly, the team can meet after Medical Grand Rounds or M&M Rounds, if it is in season. Typically the team will meet in the Kidd 4 conference room (outside the Davies 4 ICU entrance) if it is not being used by another booked group.

Expectations of learners on service are to keep a keen knowledge of the patients they are assigned to, knowing their imaging, functional studies and relevant respiratory medications. Learners will typically assess follow-up patients in the A.M. between completing new consults. Clinical information will be relayed at approximately noon when the team meets to run the list. Any urgent matters can be brought to the attention of the Fellow on service sooner. Consults are typically seen and reviewed as a group in the afternoon, with associated teaching and bedside activities. It is the responsibility of the rotating learners to ensure their patients are up-to-date in the Resident Handover Tool.

The Respiriology service frequently uses WhatsApp to facilitate team communication. All residents are required to have a pager. For visiting electives, this will be arranged for you and you should make arrangements to pick it up during the morning of your first day on site. The pager must be returned upon completion of your elective.

The Respiriology service utilizes the resident handover tool available on PCS. If you are unfamiliar with this tool, please ask one of the fellows to show you where to access this. It is the responsibility of the housestaff to ensure that this list is up-to-date and accurate. Please ensure that you update it every day prior to leaving.

Generally, the day is between 08:00 hrs and 17:30 hrs. Occasionally, the service will be very busy and run late. It is generally expected that housestaff who are not on call will be released by 18:30 hrs if the day is running later than usual. Rare/extenuating circumstances may require later attendance.

Evaluations

Learners usually work with more than one attending during the block and composite evaluations are completed.

Academic Activities

1. Bi-weekly Respiriology housestaff teaching rounds on Monday and Friday mornings (8:30-9:30am - unless otherwise noted, a schedule will be circulated weekly)
2. Weekly Respiriology Rounds on Thursdays (4-5pm).
3. Monthly Respiriology Journal Clubs if occurring during your rotation and you have availability
4. Home Program Academic Half Day
5. Ad Hoc Respiriology Fellow Teaching or Attending Teaching
6. Working through the Respiriology Topic List independently
7. Other educational conferences in the Department.

Call

There are no respirology call responsibilities for rotating learners. All call responsibilities will be dictated by your base program.

Absences

All planned absences must be approved by your home program, and, occasionally, by the Respiriology Program. Generally, short-notice absences or overlapping vacation requests need to be approved by your home program and the Respiriology Program.

In the event of absence due to medical illness, bereavement, or other urgent or emergent circumstances, you are required to **notify all of the following individuals as soon as is possible**:

- Home program Program Administrative Assistant
- Respiriology Program Administrative Assistant
- Attending Staff Respirologist
- Respiriology Fellow on Service

This notification should be in-writing by email and, ideally, by telephone/text/message to the Respiriology Fellow and Respiriology Program Assistant.

In an effort to ensure adequate housestaff on the service we plan for absences when scheduling residents. Thus, please submit the following to the Respiriology Program Administrative Assistant at least 1 week prior to the start of the block or as soon as possible:

1. Approved Vacation
2. Academic Half Days
3. Post Call Days
4. Other Program or Educational activities removing you from service (Resident research day, QCare, Conferences, CaRMS interviews, exams, etc...)
5. Scheduled personal appointments and leaves (Medical Appointments, etc...)
6. Any other known event that will you being absent from the respirology service

Safety Equipment

- Please remember good infection control practices such as hand hygiene and contact precautions.
- Respiratory medicine potentially exposes learners to airborne pathogens and each learner **must have an up-to-date N95 fit test**. This should be worn in cases where airborne transmission is considered possible, in cases of suspicion of TB, and during all bronchoscopic procedures from start to finish.
- If you are ill with a respiratory tract infection, please use good hand hygiene, surgical masks, and gloves when seeing your patients on this service as they are at particular risk of decompensation should they contract your illness as they often have underlying lung illness.

Procedures

Procedures are completed at the discretion of the Attending Staff or Fellow on service, and are allocated based on experience and the level of the learner. Medical students are invited to observe any procedure to gain a wide degree of exposure. Further, they can assist with procedures and once a degree of comfort is established, can often perform simple procedures such as ABG and thoracentesis with supervision. Any learner who is uncomfortable with performing a procedure should let the Fellow or Attending know. Medical residents will be completing thoracenteses with supervision and assisting with more complex procedures.

Anesthesia and ICU trainees will complete more advanced procedures and have assigned bronchoscopy dates.

Multidisciplinary Exposure

For residents who wish to spend time with multidisciplinary members, the most relevant contact information is below. The multidisciplinary members are often willing to have you shadow them for several hours to get an idea of what they do. Please ensure that the respirology service has sufficient coverage before arranging time with the multidisciplinary team members.

ROTATION	PLACE AND TIME	CONTACT NAME	E-MAIL	EXTENSION NUMBER
Pulmonary Function Tests Laboratory	PULMONARY FUNCTION LAB <i>Monday to Friday: 8-16 h</i>	Angie Zapotichny	Angie.Zapotichny@kingstonhsc.ca	HDH-4686
Adult Asthma Education	ASTHMA EDUCATION CENTER <i>Monday, Tuesday and Wednesday mornings FAPC Armstrong 1S</i>	Patty Moyse	Patricia.Moyse@kingstonhsc.ca	3134
Respiratory Therapy (RT)	RT department Kidd 0; door 22-0-070 <i>Monday-Friday: 8:00-16:00 h</i>	Derry Thibeault	Derry.Thibeault@kingstonhsc.ca	7226
Sleep Disorders Education Center	SDEC at HDH	Nancy Farr	Nancy.Farr@kingstonhsc.ca	HDH 2478
Sleep Lab	Kidd 6 KGH	Helen Driver	helen.driver@kingstonhsc.ca	6052

Essential Elements of a Respirology Consultation

- Referring Physician and Referring Question or Concern
- Is the patient known to a Respirologist? Have you reviewed or obtained the records? (Queen's, Community, other city)

- Full standard respiratory history (onset, dyspnea, cough, hemoptysis)
- Associated features (occupation, exposure, triggers, environmental allergies, GERD)
- Relevant respiratory medications and doses (inhalers, antibiotics, airway clearance devices and frequency of use/compliance)
- Pulmonary function tests and trends
- Most recent chest imaging (CXR, CT chest). Please note that, frequently, it is necessary to review old imaging studies for comparison. If these are not immediately available on our system please make efforts to retrieve them via the Radiology film library or review on ConnectingOntario or HDIRS.
- Microbiology (sputum cultures, prior BAL cultures, pleural cultures including sensitivities)
- Prior procedures of note (bronchoscopy, chest tubes, PleurX)

Specific Patient Populations

CF

- Lung function (most recent FEV1)
- Microbiology & Sensitivities - organisms grown on previous culture (important to identify patients colonized with *Burkholderia cepacia* in particular; other organisms of note are *Pseudomonas*, MRSA, MSSA)
- Exacerbation history - helpful to know when most recent exacerbation was, and what antibiotics were used to treat
- Please note that all CF patients should be placed on contact and droplet precautions.
- Patients with *Burkholderia cepacia* must not be cohorted on the same medicine teams. Further, if you see and examine a patient with *Burkholderia cepacia* you should avoid, whenever possible, seeing any other CF patients on the service. *Burkholderia cepacia* is a very virulent and significant pathogen for CF patients that is associated with a number of complications and a worse long term prognosis. It is imperative that we prevent transmission to *Burkholderia cepacia* negative CF patients.
- Please note that CF patients have an admission order set specifically for them. This should always be used when they are admitted. Please take careful note of physiotherapy and medication timing when completing orders for CF.
- It is often helpful to liaise with Dr. Loughheed who knows all the CF patients very well. Generally, this will be done by the fellow on service.

Asthma

- How was the diagnosis confirmed (spirometry/PFT, methacholine, exercise test, etc.)
- Asthma phenotype
- Current therapies (inhalers, LTRAs, biologics, etc.)
- Exacerbation history

- Current and recent asthma control
- These patients may benefit from additional education with one of the asthma nurse educators, who can see these patients in hospital when requested

Pulmonary Hypertension

- Etiology / class (review the 5 WHO categories of pulmonary hypertension)
- Echocardiographic findings (you're not just interested in the pressures, but also what the RV is doing - is it hypertrophied, is it dilated, hypokinetic, etc.)
- Right heart cath - has this been done yet, and if so, what were the numbers?
- Current therapies

Well Known/Long Term Patients

- Our Respiriologists frequently have long term patients with whom they have established relationships. Generally, if such a patient is admitted, it is helpful to have yourself or the fellow drop and email to the respirologist to inform them that their patient is admitted and why.

Common Respirology Consults

- Asthma with severe / recurrent exacerbations
- COPD with recurrent exacerbations
- Sleep disordered breathing (e.g. OHS for home BiPAP)
- Work-up of suspected lung cancer
- Pleural Effusion

Making Follow-up Plans

Please ensure that the respirologist responsible for follow-up has been notified of the desired follow-up prior to discharge and prior to communicating the follow-up to the team and patients. The respirology Program has had a number of unfortunate circumstances in which expectations of appointments or tests were communicated as follow-up to patients and where the respirologist responsible for said follow-up was unaware or unable to provide the desired follow-up in the time frames communicated.

Useful Contacts

- **Laura Pascoal (Program Administrator)**
P:613-548-2300
email: laura.pascoal@kingstonhsc.ca
- **Brent Guy (PGY-5 Respiriology)**
Pager:613-650-3156
email: brent.guy@kingstonhsc.ca
- **Sean O’Loughlen (PGY-5 Respiriology)**
Pager:613-650-3139
email: Sean.ologhlen@kingstonhsc.ca
- **Hadeel Alqurashi (PGY-4 Respiriology)**
Pager: 613-650-0068
email: hadeel.alqurashi@kingstonhsc.ca
- **Kerry Lake (PGY-4 Respiriology)**
Pager: 613-650-3902
email: kerry.lake@kingstonhsc.ca
- **Jamil Ladha (PGY-4 Respiriology)**
Pager: 613-650-3869
email: jamil.ladha@kingstonhsc.ca
- **Paul Heffernan (Program Director)**
pager: 613-650-0336
email: paul.heffernan@kingstonhsc.ca

Useful Resources

CTS database of guidelines

<https://cts-sct.ca/guideline-library/>

Global Initiative for COPD

<https://goldcopd.org/>

Global Initiative for Asthma

<https://ginasthma.org/>

New England Journal of Medicine Thoracentesis Video

<https://www.youtube.com/watch?v=ivTyH09BcHg>

<https://www.nejm.org/doi/full/10.1056/NEJMvcm053812>

Canadian Tuberculosis Standards 7th Edition: 2014

<https://www.canada.ca/en/public-health/services/infectious-diseases/canadian-tuberculosis-standards-7th-edition.html>

An Approach to Interpreting Spirometry - American Family Physician

<https://www.aafp.org/afp/2004/0301/p1107.html>

American College of Chest Physicians Guidelines (Cancer Diagnosis and Management, Cough, Pulmonary Embolism, etc...)

<http://www.chestnet.org/Guidelines-and-Resources>

American Thoracic Society Guidelines

<https://www.thoracic.org/statements/>

European Respiratory Society Guidelines (Notably Pulmonary Hypertension...)

<https://www.ers-education.org/guidelines.aspx>

British Thoracic Society Guidelines (Flight, Diving, Pneumothorax, Chest tube Management)

<https://www.brit-thoracic.org.uk/standards-of-care/guidelines/>

National Tracheostomy Safety Project

<http://www.tracheostomy.org.uk/>

Ontario Home Oxygen Therapy Policy and Administration Manual

http://www.health.gov.on.ca/en/pro/programs/adp/policies_procedures_manuals/docs/home_oxygen_manual.pdf

Respirology Topic List

Please note that the following is not an all inclusive list but represents core/foundational respirology topics. Many of the below topics have very good UpToDate articles. Also, in the resources section above there are a number of resources that directly apply to the below topics.

1. Approach to common presenting symptoms in respirology: Dyspnea, Cough, Wheeze, Chest Pain, hemoptysis, and phlegm.
2. Basic Interpretation of Pulmonary Function Tests
3. Basic Interpretation of Chest X-Ray and other Imaging Techniques

4. Diagnosis and Management of COPD
5. Diagnosis and Management of Asthma
6. Diagnosis and Management of Pulmonary Embolism
7. Diagnosis and Management of Solitary and Multiple Pulmonary Nodules
8. Diagnosis and Management of Community Acquired Pneumonia
9. Diagnosis and Management of Pleural Effusions
10. Management of Malignant Pleural Effusions
11. Diagnostic and Therapeutic Thoracentesis
12. Diagnosis and Management of Pneumothorax
13. Diagnosis and Management of Chronic Cough
14. Diagnosis and Management of Tuberculosis
15. Diagnosis and Management of the patient with Hemoptysis
16. Diagnosis and Management of the Patient with Upper Airway Obstruction
17. Indications and Management of Home Oxygen Therapy
18. Caring for Patients with Tracheostomies
19. Diagnosis and Management of the patient presenting with Acute Dyspnea
20. Diagnosis and Management of the patient presenting with Acute Respiratory Failure
21. Management of Non-invasive Mechanical Ventilation for Acute and Chronic Disorders
22. Indications and preparation for Bronchoscopy
23. Diagnosis and Management of Empyema
24. Diagnosis and Management of the Interstitial Lung Diseases