Unofficial Guide To Life On Medical Teaching Unit (MTU)

For Dalhousie Clerks & Junior Residents

Version 1.0

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Introduction

This is an informal orientation guide – a compilation of some advice – intended mainly for clerks and PGY-1 's new to the medical teaching unit (MTU) on unit 8.2 and MTU-Emerge (MTU-ED) at the Halifax Infirmary. The original authors of this guide were mostly Dalhousie internal medicine residents, in their second year of residency, writing from the perspective of rising senior MTU residents with relatively fresh memories of being in your position, and lessons learned the "hard way". You will be senior residents fairly soon, just like us, and this guide is intended to help you along the journey.

We owe a great thanks, for feedback and guidance on this project, to the Allied Health Professionals of MTU – notably Linda Hutchins, Vicky Martin, and Elisa – and to Dr Chris MacKnight.

This is *the very first*, and still a bit rough, version of the guide. Version 1.0. We welcome feedback from all perspectives. If **you** have any feedback to offer, by all means let us know! Write us at uglmtu@gmail.com. There are also opportunities for interested contributors, especially among PGY-2's and PGY-3's. If you have an idea to be an author for a new section (e.g., care of patient who becomes acutely ill on the 8.2, insulin management, the discussion of code status with patients), please let us know. Our hope is that this guide will continually get better and better. Thanks.

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Editor

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The Patient Roadmap
MTU-ED Consults
The Team
Your Role on MTU

Patient Roadmap | *The Team* | *Your Role* | *Appendices*

Where Do Patients Come From?

- Home, assisted living, long-term health facility
- Outside hospital

How do they arrive?

- Via the Halifax Infirmary (HI) Emergency Department
  - Direct from residence, by private means of transportation or EHS
  - Direct transfer from outside hospital
  - Direct from GP's office, or clinic area
- From within the HI
  - Within-hospital transfers, e.g., step down from 3.1 IMCU or ICU
  - Transfer from other ward

Why the MTU?

- Medical problem
- Not "too sick" (e.g., needing mechanical ventilation)
- Not "too well" (e.g., COPD flare-up not requiring O_2 or IV antibiotics)
- Not better suited for a subspecialty admission, e.g., bed on neurology, cardiology, nephrology, hematology, medical oncology

What Do We Do at MTU?

Treatment of Medical Problems That Can't be Managed as an Outpatient

- Example: 68 year-old patient with pneumonia and spO_2 on room air of 72%, needing O_2 and IV antibiotics
- Example: Failure to thrive in patient with generalized weakness, and unexplained abdominal pain and appetite loss x 3/12

Monitoring and Care of Complications of Illness or Therapy

- Example: 75 year-old patient presenting with decompensated heart failure and started on IV Lasix

Investigation of Medical Problems

- Diagnostic imaging & lab work
- Therapeutic & diagnostic procedures, e.g., lumbar puncture, thoracentesis, paracentesis, joint aspiration

Counseling

- Clarification of goals of care
- Patient education, e.g., pathophysiology, therapeutic plan, prognosis

Functional Rehabilitation

- Physiotherapy & occupational therapy
- Dietary counselling
- Speech language therapy

Social and Economic Planning

- Social work

DISCHARGE PLANNING

Where Do Patients Go?

- Step out … discharge to:
  - Home, assisted living, long-term health facility
  - Referring hospital
- Step down to "Intermediate place" before being discharged
  - Community Health Unit (CHU)
  - Geriatric Restorative Care (GRC)
  - Progressive Care Unit (PCU)
  - Nova Scotia Rehabilitation
  - Off-service bed
- Step up to "more acute care place", e.g.,
  - 3.1 IMCU: Intermediate Medical Surgical Unit
  - 5.2 ICU: Intensive Care Unit
  - 6.1 CCU: Critical care Coronary Unit
- Step away … transfer to a non-MTU service, e.g., general surgery, hematology, vascular surgery, etc

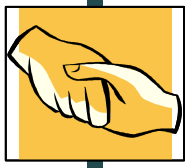
Barriers to Discharge

- Medical barriers, e.g., ongoing requirement of O_2
- Functional barriers: inability to walk, poor pain control, constipation
- Social barriers: No social supports
- Inadequate follow-up plan, e.g., no family physician

The MTU Team

Medical Teams

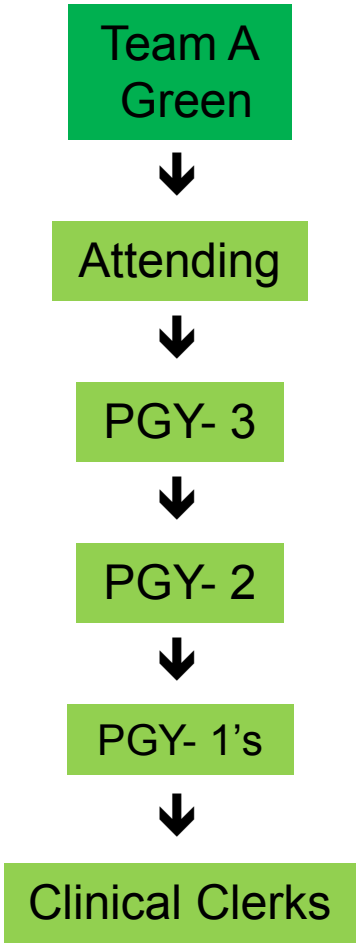
- Green
- Blue



Allied Health Care Professionals

- Nursing staff
- Pharmacists
- Dietician
- Speech language therapists
- Physiotherapists
- Occupational therapists
- Social workers

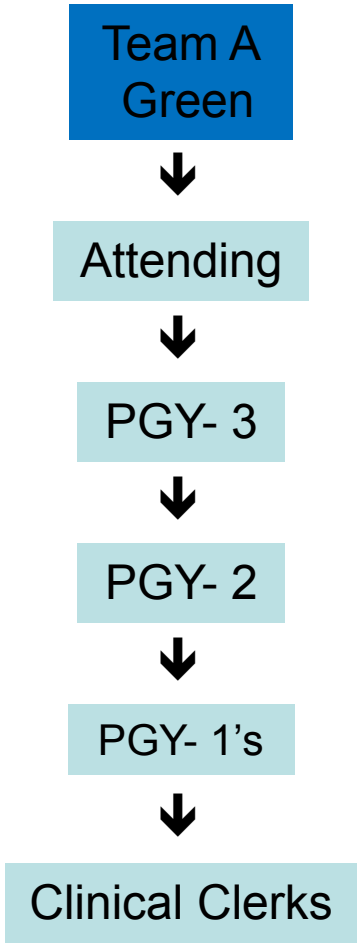
8.2 MTU Medical Team: Structure & Role of The “Higher Ups”



ATTENDING STAFF Roles
- Final decision-making over patient care
- Supervision of senior residents
- Family meetings
- MTU Medical team evaluations
- Teaching

PGY- 3 Roles
- Lead for morning report
- Rounding with one half team
- Noon teaching sessions
- Overlooking the team’s work
- Family meetings
- Overlooking discharge planning

PGY-2 Roles
- Rounding with 2nd half of team
- Assisting with overlooking patient care plans and discharge planning
- Family meetings



8.2 MTU Allied Health Professionals: Roles & "Relationship Tips"

	Charge Nurse	Registered Nurse (RN)	Licensed Practical Nurse (LPN)
Who are they?	• Nurse who has an overview of all patients on the ward • Oversees and helps co-ordinate admission and departure of MTU patients • Does not have in-depth information about patients. Refer patient-specific questions to the RN caring for the patient.	• Nurse responsible for hands-on care of a group of patients. • During the day, 8.2 is staffed with about 6 RNs and 6 LPNs. A given RN + LPN team is responsible for 6-7 patients together. • During the night, 8.2 is staffed with about 5 RNs and 4 LPNs. A given RN/LPN team is responsible for 7-12 patients together. • As the current general staffing policy is not to replace the first sick call, on a typical day the nursing team may be down 1 person with no replacement.	• Nurse who has a similar skill set to an RN, but does not perform what are considered more advanced nursing tasks like caring independently for more acutely ill patients. • Compared with before, LPNs are involved with an increasing range of patient care, now including meds administration, patient assessment, and taking off orders from the chart. LPNs do not start IVs, or take verbal orders. • When caring for patients who are relatively more stable and less acute, LPNs function more independently. • When involved in the care of sicker patients, LPNs work more under the direction of RNs.

Tips	• Notify them if:
	  ○ Telemetry is required
	  ○ Another level of care is needed (e.g., transfer to IMCU)
		• **When rounding on your patients in the morning, please read the "TO DO" list on the sheet of paper located opposite the most recent physicians orders sheet**. This is where our nurses flag burning issues that need to be addressed!
		• During or after rounds, remember to communicate to your patient‘s RN + LPN team:
		  ○ Daily care plan
		  ○ Important orders written in the chart, or labwork add-ons
		• Keep your patient‘s nurses “in the loop“! They shouldn’t feel like they have to chase you down all day long just to keep up with what is going on.
		• Watch your **chart etiquette**! During team rounding in the morning, take **only 4 charts at a time** from the shelf. Plus, try to keep an eye on the “TO DO“ list throughout the day.
		• Bear in mind, 8.2 nurses are short staffed at night. If a patient becomes ill, and needs transfer to a higher acuity ward, this is another reason to set up the transfer ASAP.	

8.2 MTU Allied Health Professionals: Roles & "Relationship Tips"

	Physiotherapy (PT)	**Occupational Therapy (OT)**	**Social Work (SW)**

Who are they?	• Specialists in rehabilitation of:
	  ○ motor function, muscle strength and joint mobility
	  ○ exercise/activity tolerance, posture
	  ○ gait and sensory perception
	  ○ lung function (e.g., chest therapy and airway clearance therapy)
		• Specialists in functional assessments of ADL's and IADL's
		• Often consulted when there is a decline in function or concern for patient's safety in home environment.
		• Can help with identifying need for aids such as wheelchairs, and household modifications toward improving safety.
		• Home visits or community OT possible if needed
			• Specialists in the psycho-social assessment of patients: formal / informal supports, finances, employment, medication coverage, addictions, housing / placement, transportation, grief / loss, protection / legal matters, and interpersonal stressors.
			• Consider consult if:
			  ○ Discrepancy between care needs and available resources
			  ○ Patient is a Veteran with need for increased supports.

Tips	• Consult with special form	• Consult with special form	• Consult with special form • Avoid vague referrals, e.g., "help discharge plan" • If an ALC patient becomes medically active, tell SW • Referrals for existing HCNS clients, VON nursing care, or home O_2 should be sent to HCNS – not SW

8.2 MTU Allied Health Professionals: Roles & "Relationship Tips"

	Pharmacy	Nutrition Services	Ward Clerk

Who are they?	• Pharmacists are present on the floor on weekdays 730 - 1530 h. One is assigned to each MTU team, and attends daily rounds.
	• Can phone (#473-8208) from 1530-2230 h on weeknights and 0730-2000 h on weekends.
	• Can gather accurate, up-to-date medication history.
	• Can provide education to patients on medications and medication calendars prior to discharge.
		• Dieticians are available on weekdays 0800 – 1600 h.
		• Dieticians provide:
		  ○ Patient education
		  ○ Advice on dietary needs, e.g., enteral feeds, TPN/PPN, & vitamin supplements
		  ○ Follow-up in Nutrition Clinic as needed
		• Dysphagia assessments are done by dietician and speech language therapist
		• Dietetic technicians work with dieticians, screening patients for malnutrition
			• Can assist with faxing any forms required for patient care, e.g., consults and diagnostic imaging requisitions
			• Co-ordinate booking of procedures off the MTU ward
			• Can help get materials set up for procedures done on the MTU ward
			• Can book follow-up appointments for patients being discharged

Tips	• A formal consult is not needed for their help.	• Consult with special form. For consults, page dietician. (Do not fax.) • TPN/PPN orders need to be filled out by 1300 hours	

8.2 MTU Allied Health Professionals: Roles & "Relationship Tips"

	Palliative Care	**Infection Control**

Who are they?	• A consult service with rotating RN and physician coverage. Available weekdays 0800 – 1600 h.
	• Address end-of-life issues, e.g.,
	  ○ Symptom control (e.g., pain, dyspnea, restlessness, GI problems, confusion) and acute crises
	  ○ Bereavement (acute and in follow-up)
	  ○ Arranging referral to community palliative care services. For example, palliative care can help link patients to palliative care home consult program, which works in conjunction with home care Nova Scotia.
		• This consultation service is available to 8.2 MTU on weekdays 0700 – 1500 h
		• Can advise on hospital policies regarding prevention and control of healthcare-acquired infections

Tips	• This service requires a consult. Be sure to explain to patient, or patient's family, that palliative care has been consulted.	• To reach, contact pager #6065 or local 473-4048.

Road of Arrival to MTU	Who sees the patient first (prior to you)	Your Role In The Emergency Department Internal Medicine (EDIM) Consult	Your Role on MTU When Patient Just Arrives (i.e., if on-call for MTU 8.2)	Your Role During Patient's Admission

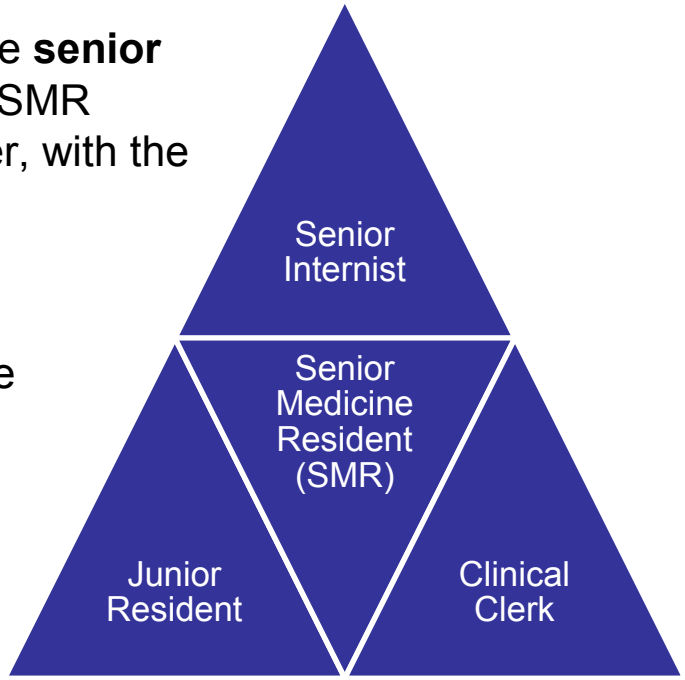
Presentation to the HI Emergency Department	Emergency physician +/- Emergency resident or clerk	**The EDIM Consult**
		• Done by clinical clerk, or resident
		• Reviewed with Senior resident or Senior internist, who then should write a brief note
		• Goals:
		  • Assessment and care of acute issues ("Is patient stable?") beyond what's been already done by the ED team
		  • Formulation of an impression of why the patient is unwell
		  • Creation of a "game plan": a list of pertinent issues (which can be medical or non-medical), each followed by a plan. "Disposition" is the issue of where the patient next should go (admit or not?) and what are goals of care
			The Admission Note
			• Done by clinical clerk
			• Reviewed by the junior resident
			• Goals:
			  • Evaluation of clinical status, and any change compared with when last seen by the MTU-ED team.
			  • Review of clinical course while in the HI ED (care received, changes in clinical status)
				Daily Rounds
				• Assess patients
				• Check results of investigations
				• Formulate daily plan, and help implement it
				• Write progress notes
				Discharge Prep
				• The day before an expected patient discharge, do 3 things: prepare the paperwork (more details later); put a sticker on the spine of chart saying the patient is leaving tomorrow; and make sure the charge nurse knows
				• **On actual date of anticipated discharge, aim to send patients home in the morning**. Often it helps to do a quick pre-teaching (pre-8 AM) round on patients you expect to send home later that morning.
				• Dictations should be done within 48 hours after discharge

Direct transfer to Medicine, via the HI Emergency Department	Emergency physician from transferring hospital. Not seen by HI ED staff or clerk.			
Transfer to MTU from within the Halifax Infirmary	Resident (+/- clerk) from transferring unit	Φ		

The Emergency Department Internal Medicine Consult (EDIM)

The EDIM Team

- The **senior medicine resident** (SMR), and the **senior internist**, together head the team. Ideally the SMR should act as much as possible as team leader, with the senior internist providing guidance.
- Senior internist makes the initial decision of whether to accept consult
- SMR, along with senior internist, is responsible for the triage of patients by urgency, and delegation of duties to junior team members (clinical clerks and junior residents)
- Every consult is reviewed with SMR or senior internist, depending on availability



The Emergency Department
Internal Medicine Consult (EDIM)

Triage

- ED physician at the Halifax Infirmary speaks with senior internist to request a consult. (Sometimes an MD from an outside hospital will call senior internist to arrange a "direct admission", which on patient's arrival at the ED again requires an EDIM consult .)
- If there's concern that the patient is acutely unwell, SMR or staff internist should first see patient and determine if a different initial consult team is needed (e.g., ICU, GI, cardiology, surgery)

Consult

- Start with a reassessment: **Is patient stable or not?** Check vital signs and mental status. If there are acute issues, get backup (in decreasing order): SMR/senior internist, junior resident, ED doc.
- Review old records (on HPF). Do a history & physical. Get collateral as needed, e.g., from family or pharmacy. Develop an **impression** of why the patient's unwell, with a **differential diagnosis**, and make a list of issues & plans. Verify your consult note has **patient`s name**, date & time!

Review

- Review consult directly with staff or SMR. Problem list and a management plan will be finalized
- SMR or senior internist writes a **review note**. If the patient is to be admitted, SMR or senior internist speaks with accepting medical service (e.g., resident on MTU, IMCU, CHU) to do a **handover** of the patient (i.e., synopsis of patient's story and key issues and plans)

Post-Consult Work

- To admit a patient, **first** promptly submit the yellow carbon copy of the "ED face sheet" to ED ward clerk. Next fill out: the medication reconciliation form, pre-printed order forms (e.g., MTU admission form), and requisitions for investigations (e.g., diagnostic imaging) or consultations . Pre-printed order forms and Physicians Orders sheets should document all interventions and investigations. While in the ED, patients need ongoing follow-up by the EDIM team as needed.

The Emergency Department Internal Medicine Consult (EDIM)

Consult Tips: Approach To a Focused History & Physical (H&P)

– Again: Is the patient stable or not? If stable, begin into figuring out the patient's chief complaint: **Why are they in hospital?** Or patient is not interviewable, begin with what you think the answer is. Then from chief complaint, develop a **differential diagnosis (DDx)** which then should shape your approach to H&P. Here is an overview, with some pointers:

Chief Complaint (CC)

DDx ⟺ HPI

- Many ways to build a DDx. Refer to Appendix for a review of some approaches.
- Key DDx items should include conditions that are common or life threatening
- May revise key DDx list based on initial HPI

- Description and time course of CC
- Associated symptoms. Factors that worsen or improve CC.
- Review of risk factors FOR or AGAINST key DDx list items
- Screen for B symptoms

More history

- Previous medical & surgical history. If geriatric patient: ADLs & IADLs (baseline versus now) +/- MMSE +/- CGA*
- FMHx, SHx, and goals of care
- Meds & allergies (detail reaction)
- Review of systems

Physical

- Head & neck
- CNS. Extent of exam should be in keeping with CC.
- CVS
- Resp
- Abdo
- MSK, Derm

Touch at least on all major systems. Focus on findings FOR or AGAINST key DDx items

Investigations

- Bloodwork, urine studies
- Microbiology and pathology reports
- Aspirate studies (CSF, pleural effusion, peritoneal fluid, etc.)
- Diagnostic imaging
- Think about what studies still need to be done

**CGA = comprehensive geriatric assessment (pre-printed form)*

The Emergency Department
Internal Medicine Consult (EDIM)

Consult Tips: Approach to the Management Plan

- Management plans are **critical** to continuity of care for patients who are admitted to hospital, especially those with complex, multi-system issues
- A key component is determination of the **disposition** of Emergency Department patient
  - Where does the patient go next? Here are some common possible answers…
    - Discharge home
    - Hold overnight in ED, then reassess in the morning
    - Admission (IMCU, MTU, CHU)
  - What are the goals of care for the patient? This question should be addressed with **every** patient. Here are some common possible answers…
    - Full code
    - No CPR, no intubation
- Qualities of a strong management plan:
  - **Critical** issues are met. These are ones that need urgent attention.
  - **Contextual** factors are incorporated. Patient's social history (e.g., alcoholism or homelessness) is considered in the overall plan (e.g., with orders for benzodiazepines PRN, or a consult to social work).
  - **Comprehensiveness**. The plan addresses both medical and non-medical issues.

8.2 MTU: WEEKDAY DUTIES

For more on A → E see slides to follow ...

8.00h	8.45 h or so	10.00h	12.00h	13.00h	17.00h

Morning Report

- Teaching in room 6016 (A)
- Pre-8.00h, consider a **PRE-ROUND** on expected AM discharges

Individual rounds (B)

- Review chart, results from investigations, and visit patient
- Develop list of issues and plans for day. Start progress note. (C)
- Senior team will see patients with acute issues, and often will see new patients

Team rounds

- Present new patients and old (i.e., "known from yesterday") patients
- Solidify list of issues & plans for the day
- Write orders, and prepare requisitions for consults and investigations +/- "heads up" phone calls as needed

Noon Teaching

- MTU senior or senior staff will have teaching session in room 6016
- Bring your own lunch!

Afternoon Duties (E)

- Follow up on issues and plans from team rounds. Finish progress notes. (D)
- Address new patient issues.
- Discharge planning. **Identify discharges for next day. Get paperwork ready. Put a sticker on the chart spine. Tell the charge nurse.**
- Handover key patient issues to on-call resident

Variations on The Usual Schedule

Tuesdays	Grand rounds at the Royal Bank Theater (8.00 – 9.00h)
Wednesday	Academic half day (AHD) for clerks in the afternoon, and some off-service residents in the morning
Thursday	AHD for internal medicine resident s in the afternoon
Post-call days	Round on your patients early, then do handover right after Morning Report,

8.2 MTU: WEEKDAY DUTIES

Tips for Individual Rounds

- During this time, see and examine each of your patients, review recent investigations and make yourself aware of any issues that have come up overnight (e.g., scan the “Physician Orders Sheet“ and Progress Notes for new issues, read the nurses notes and summary charts for vital signs, weights, and ins and outs over the past 24 hours depending on availability, and of course speak with patient). You're not expected to write your progress not at this time.
- You *are* expected to develop a list of your patients’ active issues, and a plan for how to treat each issue. In developing this list, always bear in mind the issue of discharge planning/disposition: After MTU, where is the patient going to go? Are they ready to go now? If not, what barriers are there? Don’t worry if your list of issues and plans is incomplete or even inaccurate. The senior residents and staff will be there to fill in details or make corrections.
- Eventually you should know your patients inside and out (though not necessarily on your first day with them). You should be aware of their past medical history and home medications, HPI and course in hospital (including investigations and treatments undergone), current active issues, current medications, and disposition plan. The staff and senior residents should be available always to answer questions, but as they are responsible for the whole team they won't have the opportunity to know each patient as well as you do. An old saying is, “your senior residents and staff should never know your patient better than you”!

8.2 MTU: WEEKDAY DUTIES

Tips on How to Present NEW Patients

- These patients have already been assessed by the MTU team in the Emergency Department, and should already have a list of issues and plans, and initial treatment. These patients are new to the 8.2 MTU team, however, and so require a more detailed presentation during team rounds.
- Presentations of new patients should cover:
  - Basic demographic profile (age, gender and place of residence, and maybe occupation) with pertinent previous medical history (e.g., “patient with COPD with multiple previous admissions” in the case of a patient now admitted for COPD exacerbation)
  - Brief HPI, including how they presented to Emerge (e.g., abnormal vital signs in Emerge, key physical exam findings and key investigational findings); treatments started in Emerge; and reason for admission
  - Other past medical history not already discussed (including baseline functioning, e.g., ADLs and IADLs, and functional thresholds for exertional dyspnea or angina)
  - Home medications & allergies
  - Social history (including any history of smoking, alcohol and substance use)
  - Review of systems
  - Issues over night based on morning assessment
  - Active issues & plans (including disposition)

8.2 MTU: WEEKDAY DUTIES

Example of How to Present a New Patient

"Mr. X is a 75-year-old former university professor who lives independently in a retirement home. He was admitted yesterday for pneumonia, presenting with a 3-day history of worsening shortness of breath on exertion, cough productive for purulent sputum and fever. He also had nausea and vomiting for the past 2 days with decreased oral intake and generalized weakness. In Emerge he was found to be febrile at 38.7, with a heart rate of 98, BP 130/80 and SpO2 of 85% on RA (94% on 3L/min of O2 via nasal prongs). Chest X-ray showed a right lower lobe consolidation. He was started on levofloxacin 500 mg IV OD. He was also found to have an increase serum creatinine of 150 from a baseline of 70. This was thought to be pre-renal secondary to volume depletion and he was fluid resuscitated with 2 L of normal saline overnight.

His past medical history is significant for hypertension, dyslipidemia and a previous MI in 1999 with stenting of his RCA with a bare metal stent. No history of diabetes, CHF or COPD. At baseline he is independent with respect to ADLs and IADLs, and has no exertional dyspnea or angina. Home medications include ASA 81mg PO OD, metoprolol 50 mg PO BID, ramipril 10mg PO OD, and atorvastatin 40 mg PO qhs. He has no known drug allergies. He lives independently in a retirement home. He quit smoking 25 years ago, and has a 20 pack-year history. He consumes 1-2 alcoholic drinks per week and uses no illicit drugs. Review of systems was non-contributory."

8.2 MTU: WEEKDAY DUTIES

Example of How to Present a New Patient (cont'd)

"… He has done well overnight. This morning his temperature is 36.5 with a heart rate of 70, BP 130/80 and SpO2 96% on 1 L/min of O2 via nasal prongs. He complains of generalized weakness and had little appetite for breakfast. On exam, he is a bit diaphoretic but in no acute respiratory distress, and there are prominent inspiratory crackles at the right lower lobe. WBC has improved to 12 today from 18 yesterday. Creatinine has improved to 100. Electrolytes are within normal range.

Active issues;
1) Community acquired pneumonia: The patient appears to be responding well to treatment with levofloxacin. We should continue to treat for a total of 7 days. He is weaning well from oxygen.
2) Acute kidney injury: Creatinine has improved with fluid rehydration. He is continuing on a maintenance of 100cc of normal saline per hour and his ramipril is on hold until his creatinine has normalized.
3) Disposition: Once he is weaned off oxygen he will be able to be discharged home to his retirement home. There are no predicted barriers to discharge. He is FULL CODE."

8.2 MTU: WEEKDAY DUTIES

Tips on How to Present ALREADY KNOWN Patients

- These patients have already been assessed by the MTU team in the Emergency Department, and should already have a list of issues and plans, and initial treatment. These patients are new to the MTU ward team, however, and therefore require a more detailed presentation during team rounds.
- In presenting these patients, the goal is not to reiterate the entire history but to give a synopsis of reason for admission and course in hospital, and to identify and address active issues
- Presentations of already known patients should cover:
  - Date of admission, and reason for admission
  - Synopsis of key elements from previous medical history, HPI, and hospital course (key issues, plans and results so far), .
  - New issues from past 24 hours, and how they have been managed so far
  - Any pertinent physical exam findings, and any pertinent investigations, from this morning
  - Issues and plans (including disposition)

8.2 MTU: WEEKDAY DUTIES

Example of How to Present An ALREADY KNOWN Patient

““Mr. X is a 70-year-old male from a retirement home admitted for pneumonia four days ago, presenting with fever, SOB and productive cough, and decreased PO intake with generalized weakness. At presentation he was in acute renal failure with a creatinine of 150. He has been treated with levofloxacin and fluid rehydration. While in hospital his oxygen requirements and renal function have improved. His home medication of ramipril was restarted yesterday. Physiotherapy 's assessment yesterday noted that he has been making improvements with mobilization.

Mr. X did well overnight with no new issues. He feels well this morning with no voiced complaints. His temperature is 36.5 this morning with a heart rate of 70 and BP of 130/80, his spO2 is 96% on room air. Overall he looks the best I have seen him so far although he still has some right lower lobe crackles on exam. His creatinine has normalized at 70.

Active issues:

1. Community acquired pneumonia: Mr. X is responding well to treatment with levofloxacin. He is off oxygen. He should continue mobilization with PT, and finish a 7-day course of antibiotics.
2. Acute kidney injury: Mr. X’s creatinine has normalized and his ramipril has restarted. He is off IV fluids and drinking well. This is no longer an active issue.
3. Disposition: If Mr. X mobilizes well today, we should plan for discharge back to his retirement home tomorrow morning. We should have follow-up with his family physician in 1 week.”

8.2 MTU: WEEKDAY DUTIES

Tips on….

- **Requisitions for investigations**
  - Generally these should state: type of study asked for, indication, and name of person making request (with pager #)
  - Clerks require co-signatures on these forms
  - Realize the pager number on requisition will be used for reporting of urgent results. If you will be post-call in thirty minutes, put down the pager number of a resident who will cover for you.
  - For important investigations, make phone call to communicate this verbally in addition to sending off form, or deliver it (e.g., to radiology) in person.
- **Requisitions for consults**
  - Should summarize the patient's admission story, and pose well-defined question s for the consulting service.
  - For most services, make a phone call to give a verbal "heads up" about the consult being sent off by fax
- **The "Physician Orders" Sheet:**
  - This should be a log of all requisitions and medical orders. State if **r**equisitions have **m**ade **o**ut ("RMO") or **n**ot ("RNMO"); and if **s**ent off (e.g., "RMO+S").
  - Date and sign orders, with your pager number. Clerk orders need to be co-signed by residents.
  - Beware that Physician Orders might be missing documentation of orders early on, e.g.:
    - While in Emerge. Look instead at the Emerge physician assessment sheet, and Emerge nursing records.
    - At the transferring center (e.g., Cobequid), prior to arrival at the Halifax Infirmary
- **Chart Etiquette**
  - Date and sign orders, with your pager number. Clerk orders need to be co-signed by residents.
  - Minimize the number of charts you take with you in hand during team rounding. At most, take only 4 charts at a time off the shelf.
  - **The day prior to an anticipated discharge, put a sticker on the CHART SPINE indicating that the patient is likely going the next day**. Do this to ensure everyone on the team (e.g., nurses, OTs, PTs, SWs) is in the loop!

8.2 MTU: WEEKDAY DUTIES

The "ID SOAP" Format

ID: State basic demographic information of patient, plus any pertinent elements from past medical history, then review date of and reason for admission, and course so far in hospital. Review any important changes in clinical status or management plan over past 24 hours.

S Subjective. How is the patient feeling today? Review of systems should include sleep, pain control, mobilization, appetite, voiding, and bowel habits.

O Objective. State vital signs. If relevant, state daily weight (or if relevant, and available, daily "Ins and Outs"). Discuss findings from focused physical exam.

A Assessment. What are the active issues?

P Plans. What are the plans for each issue?

8.2 MTU: WEEKDAY DUTIES

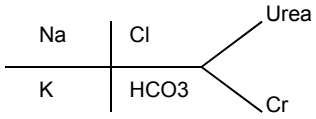
Example of The "ID SOAP" Note

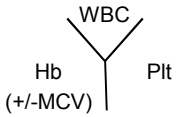
ID: 70 y.o. man admitted 4 days ago for pneumonia, complicated by AKI. Treated with levofloxacin, and fluid resuscitation, with good response. Ramipril was restarted yesterday.

S: Feeling better. Appetite back to baseline. Improved, but ongoing generalized weakness.

O: This morning, VS were BP 130/80, HR 70, RR 14 with spO2 is 96% on room air, and T 36.5 degrees.

- On exam
  - CNS: A + O ("alert and oriented")
  - CVS: S1 S2 no EHS ("extra heart sounds"), no murmurs, JVP 1 cm, no peripheral edema
  - Resp: breath sounds to bases with inspiratory crackles at right base
  - Abdo: bowel sounds present, soft, not tender
- Investigations





A: 70 y.o. man with pneumonia complicated by AKI. Improving with treatment. Generalized weakness gradual to resolve.

P:

- Issue #1. Community acquire pneumonia. Plan: Continue antibiotics for 7 days. Mobilize with PT.
- Issue #2: AKI. Patient is back to baseline Cr, and is eating and drinking. Plan: None (issue resolved).
- Issue #3: Disposition. Possible discharge back to retirement home tomorrow.

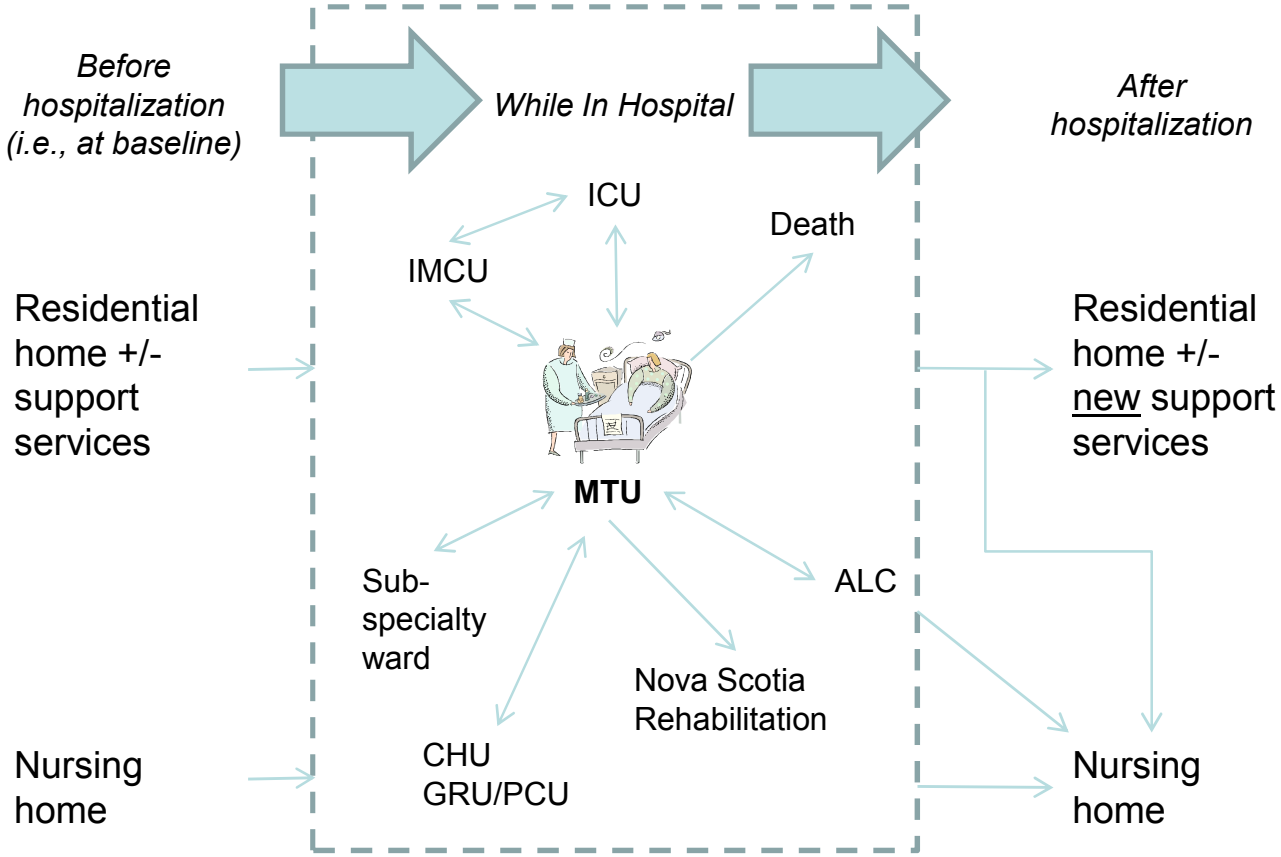
8.2 MTU: WEEKEND DUTIES

- Friday-To-Saturday Call at the Halifax Infirmary
  - Round on your MTU patients on Saturday morning
- Sunday-to-Monday Call at the HI
  - Round on your MTU patients on both Sunday and Monday morning
- Saturday-to-Sunday Call at the HI
  - Round on your MTU patients on both Saturday and Sunday morning
- All of the above applies to you whether you are on call for 8.2 MTU, or another Halifax Infirmary assignment (e.g., MTU-Emerge, or 8.1 Neurology), from Friday-to-Saturday / Sunday-to-Monday; or Saturday-to-Sunday.

8.2 MTU DUTIES

Discharge Planning

- All patients, eventually, will leave MTU
- Most patients will return to their residential home or nursing home, where they may need new support services. Some will need to transition from residential living to a nursing home.
- Some MTU patients ("alternate level of care" or "ALC" patients) will remain on MTU, with no active medical issues, while awaiting nursing home placement
- Some MTU patients will be transferred to another service
- Some MTU patients will pass away



8.2 MTU DUTIES

Designations for Disposition

Designation: DISCHARGE …	General criteria	Discharge work checklist
To residential home	• Recovering ADL independence, or stable baseline • Sufficient and willing caregiver to ensure: • Safety / supervision • Meals • Med supervision • ADLs and IADLs	• Standard work ❑ Explain to patient +/- family discharge plan (including FP visit within 1 week of discharge) ❑ Interim report (one copy for patient, who should bring this to outpatient FP follow-up) ❑ Discharge medication reconciliation form (one copy for patient, to bring to pharmacy to fill Rx) ❑ Physician Order to discharge from hospital • Plus or minus: ❑ Requisition forms for outpatient investigations ❑ Consult for outpatient follow-up with subspecialist (e.g., neurology follow-up for patient seen by neurology while on MTU) ❑ Other forms for home care (e.g., VON or home care nurse for once daily IV meds, PT/OT) ❑ Phone call to FP about key follow-up issues, e.g., sub-therapeutic INR at discharge date
To nursing home	• Newly impaired ADL • No need or unable to tolerate acute rehab • Lack of sufficient and willing caregiver (s) • Skilled nursing needs (e.g., wound care, IV meds)	

8.2 MTU DUTIES

Designations for Disposition

Designation: TRANSFER…	General criteria	Discharge work checklist
ICU	• This unit provides the highest level of acuity in the hospital, • Here patients have access to 1:1 patient-to-nursing care, mechanical ventilation, and pressers and inotropes.	• To transfer a patient to ICU: ❑ The resident on call for ICU should be consulted (with a phone call), who will see the patient and after discussing with ICU staff will decide whether to accept patient ❑ ICU resident will write a consult note and, if patient is transferred, transfer orders
3.1 IMCU	• This is an intermediate unit in between the ICU and the 8.2 MTU floor. • Here patients have access to non-invasive ventilation (e.g., CPAP and BiPAP) which is unavailable on 8.2 MTU.	• To transfer a patient to IMCU ❑ The staff physician covering IMCU needs to be contacted and accept the patient in transfer ❑ Transfer note ❑ Transfer orders to IMCU ❑ Notification of patient`s family

8.2 MTU DUTIES

Designations for Disposition

Designation: TRANSFER …	General criteria	Discharge work checklist

To CHU	• CHU is the community health unit, which is run by family physicians.
	• For patients who:
	  ○ Have a clear discharge destination
	  ○ Are **not** ALC (i.e., **not** awaiting placement at a nursing home)
	  ○ May have ongoing medical issues but should be medically stable.
		• To transfer a patient to CHU, the staff physician covering CHU must be contacted, and must accept the patient in transfer.
		• Transfer checklist:
		  ❑ Transfer note with synopsis of hospital course, and active issues and plans
		  ❑ Transfer orders

To GRU/PCU	• Two units under the geriatrics department • For elderly patients (> 60 years old) who are medically stable, have a clear discharge destination (but **not** ALC) and need further PT/OT prior to discharge.	• To transfer a patient to GRU/PCU, a consult must be made to geriatrics. If accepted, a transfer note and transfer orders (as above) will be needed.

8.2 MTU DUTIES

Designations for Disposition

Designation	Discharge work checklist
DECEASED	• Standard work: ❑ Examination of patient. Leave brief note in chart. ❑ Notification of next-of-kin. Express condolences. Remember to ask the standard question of whether they wish a postmortem examination preformed ❑ Notification of staff. For patients who pass away overnight (while you are on call), if death is expected (e.g., palliative patient), inform the attending physician the next morning. For unexpected deaths, notify attending physician without delay. ❑ Dictation. For patients who pass away overnight, the resident on call is not responsible to dictate a death summary. The resident or clerk who had been following the patient can do this in the morning. The dictation should be brief.

8.2 MTU DUTIES

Designations for Disposition

Designation	Discharge work checklist
DECEASED	• Standard work (cont'd): ❑ Death certificate ○ This is a legal document, and must be completed by a physician. Clinical clerks should not fill them out. ○ You are not responsible for filling out the entire form. Complete the patient's name, and the actual "Medical certificate of death" which is outlined in a thick black box in the right side of the form. Avoid abbreviations. ○ For asked for the cause of death, do not write the immediate cause was "respiratory arrest" or "cardiac arrest" as these events attend all deaths. In some cases, more than one antecedent cause may be identified. ○ If you are uncertain over how to complete a death certificate, you can contact the medical examiner for help. ○ One reference on how to fill out a death certificate is *Medical Certification of Death and Stillbirth: A Handbook for Physicians and Medical Examiners.* (2001, 2002). Also, here is a Web resource: http://cpsns.ns.ca.dnnmax.com/Portals/0/Guidelines-policies/policy-physician-obligations-death.pdf

8.2 MTU DUTIES

Designations for Disposition

Designation	Discharge work checklist
DECEASED	• Standard work includes: ❑ Notification of medical examiner. Reasons to call include when: ○ Cause of death is unknown or cannot be determined. (Note: Palliative patients have chosen not to have investigations, but this does not mean the cause of death is unknown ; contacting the medical examiner would be unneeded.) ○ Death is known or suspected to be the result of violence, accident, poisoning or suicide; death is unexpected; or improper or negligent treatment of the decedent is suspected ○ Death occurred soon after a fracture or other injury, no matter how trivial ○ Death is thought to result from a suspected misadventure, negligence or accident on the part of a physician or other healthcare provider ○ Death occurs within ten days of an operative procedure or under initial induction, anesthesia, or the recovery from anesthesia. (Note: A misconception is that if a patient dies within 24 hours of admission, the medical examiner needs to be notified. This is not the case.) ○ When you are not sure the medical examiner should be contacted.

For more on when to contact the medical examiner refer to: http://cpsns.ns.ca.dnnmax.com/Portals/0/Guidelines-policies/policy-physician-obligations-death.pdf

Admission Criteria for Geriatric Restorative Care (GRC) & Progressive Care Unit (PCU) – as of April 2011

- Over age 65 (consideration will be also be given to frail patients between 60-65 yrs)
- Are **considered frail** as they have multiple interacting problems (e.g. poor mobility & balance, falls & fear of falling, dementia/resolving delirium, dependence in ADL/IADL, pain, incontinence, depression/anxiety, poor nutrition, complex family dynamics and poor home environment, etc.)
- Require a specialized interdisciplinary team with expertise in geriatric assessment and therapy
- Are medically stable (as assessed by the consultant geriatrician) and do not require interventions that preclude participation in therapy
- Have the *potential* to make functional gains (with evidence of some functional gains already being made during therapy sessions)
- Have the physical and cognitive capacity to participate in therapy
- Have the physical and cognitive capacity to maintain the weight bearing status that has been ordered by orthopaedics (consideration may be given to patients who cannot maintain weight bearing if they are still able to work on transfers, work in parallel bars, do upper extremity strengthening etc.)
- Have an anticipated length of stay between 1-8 weeks (consideration will be given to both shorter and longer stay patients as required)
- Have a potential discharge site identified *prior* to admission (e.g. home or assisted living)
- Are not currently in or will be discharged to a Level II nursing home (consideration may be given to residents in Level I nursing homes if they have potential to return to Level I)
- Do not have a Restorative Care Unit available in the home hospital (exceptions may be made if most of the family members are located in the Halifax area or if the patient's needs cannot be met in other Restorative Care units)
- Are not waiting to go to the Nova Scotia Rehabilitation Centre
- Are agreeable to being admitted to Geriatric Restorative Care/Progressive Care Unit (may require some encouragement)

3.1 IMCU ADMISSION CRITERIA

Medical Surgical Intermediate Care Unit (MSIMCU),
3rd Floor Halifax Infirmary
Clinical Admission Criteria

This is a 12 bed unit for patients whose needs for both physician supervision and nursing care exceed the usual capabilities of general acute care unit but do not require the intensive care unit.

Inclusion Criteria:

- Patients who require a higher level of Nursing care than can be provided on general acute care units.
- Patients who require continuous monitoring of vital signs both manual and mechanical or continuous cardiac monitoring (this does not include overnight oxygen trending for sleep apnea).
- Patients who require assisted ventilation including assist/control, pressure support and non invasive ventilation
- Patients who require weaning from mechanical ventilation, extubation or the decannulation of tracheotomy tubes.
- Patients who have undergone a long operative procedure with significant blood loss and require close monitoring.
- Patients requiring close monitoring of fluid and electrolyte imbalances
- Patients requiring an arterial line, or have a Cordis® line in place or requiring CVP monitoring.
- Patients requiring infusion of inotropes such as dobutamine or dopamine (if < 5mcg/kg/min).
- Use of intravenous cardioactive medications (e.g. nitrates, beta-blockers, calcium channel blockers), sedatives, narcotics, etc. as approved by the QEII intravenous manual.
- Other activities that may, from time to time, be judged by the leadership team to be appropriate to patient needs, and are safe and practicable.

Patients are inappropriate for the MSIMCU and require ICU admission if:

- They require hemodynamic monitoring with a Swan-Ganz catheter.
- They require nursing care in excess of a 1:2 Nurse: Patient ratio or constant on unit presence of the physician team.
- They have hemodynamic instability not responsive to volume loading. Use of dobutamine or dopamine > 5mcg/kg/min.
- They are difficult to mechanically ventilate requiring pressure control ventilation, neuromuscular blocking agents or Propofol.
- Patients requiring CRRT

Patients may be admitted to the unit:

- Directly from the Emergency Department, PACU or outpatient facility
- In transfer from the general acute care units
- In transfer from other hospitals
- In transfer from the Intensive Care Units