Please note: Information of key importance is in shaded boxes. Please read this information before your first call night.
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Introduction

This manual is a practical guide to your rotation on General Internal Medicine at St. Michael’s Hospital.

Our goal is to achieve excellence in clinical care and education. If you have any questions, concerns or suggestions, please contact Dr. Nigel Tan, Chief Medical Resident (ext. 2442, cell: 647-669-9646), Dr. Ophyr Mourad (ext. 5541, pager: 685-9029) or Dr. Yuna Lee (ext 3019, pager: 685 9707).

Educational Objectives

The University of Toronto Postgraduate Program in Core Internal Medicine has developed the following learning objectives for your rotation on the General Internal Medicine Clinical Teaching Unit. These objectives correspond to the seven CanMEDS roles identified by the Royal College of Physicians and Surgeons of Canada.

Medical Expert

- To develop independent skills as a consultant and a teacher in the context of providing care for in-patients with a wide variety of undifferentiated and multiple medical conditions
- To develop skills in communication with patients and families
- To develop leadership skills in the context of running a team composed of junior housestaff and medical students
- To develop skills in the integration of a multi-disciplinary approach to patients with complicated medical illness
- To refine skills in evidence-based medicine
- To develop an approach to the diagnosis and management of a wide variety of clinical problems
  - Cardiovascular—heart failure, coronary artery diseases, atrial fibrillation, sudden cardiac death, valvular heart disease, hypertensive emergencies, syncope, shock
  - Respiratory—obstructive airway diseases, pleural effusion, thromboembolic disease, malignant disease, lower respiratory tract infections, interstitial lung diseases
  - Gastrointestinal—GI bleeding, peptic diseases, acute and chronic liver diseases and their complications, diarrhea, pancreatitis, undifferentiated abdominal pain
  - Rheumatologic—acute monoarthritis, acute and chronic polyarthritis, vasculitis
  - Hematology—anemia, thrombocytopenia, bleeding disorders, lymphadenopathy, splenomegaly
  - Nephrologic—acid base abnormalities, electrolyte abnormalities, acute and chronic renal insufficiency, proteinuria, hematuria
  - Neurologic—stroke, seizures, delirium, dementia, peripheral neuropathy, headache, vertigo
  - Infectious—fever of unknown origin, complications of HIV infection, appropriate use of antibiotics, acute infectious illness (meningitis, encephalitis, pneumonia, endocarditis, gastroenteritis, sepsis, septic arthritis, cellulitis, pyelonephritis)
  - Endocrinologic—diabetes and its complications, adrenal disorders, thyroid disorders, complications of steroid use, calcium disorders, osteoporosis
  - Oncologic—hypercalcemia, superior vena cava obstruction, febrile neutropenia, haematologic malignancies, approaches to common solid tumours
  - General—weight loss, overdose, drug reactions, fatigue
  - Ethics—end of life care, informed consent, capacity assessment
  - Geriatric—frequent falls, incontinence, polypharmacy, failure to cope, the social admission
  - Pregnancy—hypertension, diabetes, preclampsia, thromboembolic diseases
- Technical skills (note that you will continue to gain experience during subspecialty rotations for many of these procedures; procedure marked with an ** are those for which the Royal College of Surgeons and Physicians of Canada expects competence from a general internist)
  - Arterial puncture for blood analysis**
  - Bone marrow aspiration and biopsy
  - Endotracheal intubation**
  - Insertion of central and peripheral venous lines**
  - Knee aspiration**
  - Nasogastric tube insertion**
  - Paracentesis**
  - Thoracentesis**
Communicator
- To demonstrate effective tools for gathering historical information from patients and their families
- To demonstrate effective tools for gathering collateral information from patients’ families
- To be able to effectively communicate information regarding treatments to patients
- To be able to effectively communicate medical recommendations to consulting medical services

Scholar
- To be able to critically appraise the literature regarding the diagnosis and treatment of issues in General Internal Medicine

Manager
- To be able to supervise more junior members of the medical team
- To develop time management skills to reflect and balance priorities for patient care, sustainable practice, and personal life

Collaborator
- To understand the role of allied healthcare professionals in the management of the patient

Health Advocate
- To identify opportunities for patient counseling and education regarding their medical conditions
- To educate patients regarding lifestyle modifications that may prevent disease including modification of cardiovascular risk factors

Professional
- To demonstrate professional attitudes in interactions with patients and other healthcare providers

Patient Safety
Patient Safety is one of the key underpinnings of care at St. Michael’s Hospital. As front-line health care workers, Residents and Medical Students are uniquely positioned to identify systems failures and individual adverse events or near misses. Residents and students are also often best able to propose unique and effective solutions to problems that compromise safety. Patient Safety is thus a critical element of the Internal Medicine rotation. Residents are expected to:
- Report specific adverse events or near misses using the hospital’s “Event Tracking” tool. This can be found on the front page of the intranet site.
- Appreciate that Patient Safety concerns – raised by anyone – are addressed in a blame-free environment.
- Voice any concerns regarding a policy or practice that the resident feels may be unsafe. These can be raised with your attendings, or with the Chief Medical Resident.
- Participate in Patient Safety Rounds, during which the fundamentals of Patient Safety are explored, and specific incidents discussed.
Without a focus on Patient Safety and event reporting, positive changes cannot be made for our future patients.

Team Structure
General Internal Medicine at St. Michael’s Hospital has 4 housestaff teams (A, B, C, and D). Housestaff teams consist of 1 attending staff physician, 1 senior resident, 2-3 junior residents, and 0-4 clinical clerks. Call is fully representative, meaning that the senior resident and clinical clerks are from a single team, with 1 junior on call from each of the other teams. Team E is the academic hospitalist team covered by an attending staff physician, a senior medicine resident and 0-2 clinical clerks.
The senior resident on each team should note the team members’ schedule of clinic days and academic days early in the rotation and document them on the eSignout tool. If there are significant gaps in coverage, particularly on call days, the Chief Medical Resident and the attending physician should be informed.
Our assigned beds are on 14 Cardinal Carter (4 step-up unit beds, 60 ward beds—including 2 flex step-up beds). Our patients are occasionally “bedspaced” to other wards, but are repatriated when beds become available. The 6 bed Acute Care of the Elderly unit run by geriatrics is also on 14CC (please see below).

**Allied Health**

Each team is complemented by allied health professionals, including a case manager, discharge planner, pharmacist, physiotherapist, occupational therapist, PT and OT assistants, speech language pathologist, dietitian, recreational therapist, and a chaplain.

**E-signout system (ESO)**

Each team has an electronic signout to keep track of patients. It can be accessed from any computer in the hospital via a web browser. To access ESO, type “edischarge” into any web browser. Your user name and password are the same as your Novell user name and password (which is also the same as for your Soarian access).

**On-Call Hours and Duties**

Please arrive at 8 a.m. (INCLUDING WEEKENDS) Call is until 8 a.m., with ongoing care and sign-over to finish by 10 a.m.

Note that there will be 1 senior resident on call from 1 team (with their team’s clerks), and 3 junior residents taking call for the other 3 teams (1 housestaff per team each night).

*As per the PAIRO-CAHA agreement and University of Toronto Policies, both residents and clinical clerks should leave the hospital post-call no later than 10AM (24 hour call + 2 hour signover).

**Emergency Department Consults**

The Medical Advisory Committee has prepared guidelines for the most appropriate consultation service for patients with specific presenting complaints and/or diagnoses. These guidelines, last updated in October 2012, are found in Appendix A.

Team E usually takes consults from the Emergency Department from 8 am to 12 pm on weekdays. Team E also admits and provides ongoing care for these patients. The housestaff team on-call may be called upon to see Emergency Department consults before 12 pm if an excessive number of patients have been referred. Team E patients are signed over to the on-call team on evenings and weekends. The housestaff teams take consults from the Emergency Department at all other times and when Team E is unavailable or has reached its quota.

The senior resident (or the medicine junior resident, if the senior resident is away) should be the first person from the Team to see the patient in the Emergency Department. It is inappropriate to send a clerk or intern to do the initial assessment. If the resident determines after his or her initial assessment that the patient requires admission, the resident will complete the preliminary GIM-RAPID admission orders and notify the emergency department nursing staff.

There is a representative call system in effect with juniors from each team represented. Patients are to be distributed between teams (see below).

**Working in the Emergency Department**

Expected response times for consultations in the ED are as follows:

- Responding to pages
  - New Consult pages < 5 minutes
  - All other pages < 15 minutes
- To arrive in ED and make decision to admit patients **within 1 hour** of receiving consult
  - At times it is not possible to make decision to admit – senior residents should prioritize patients based upon acuity.
  - If a resident from any service wishes to refer a patient on to a different service for admission, that resident must review the case with his/her attending physician first.
If the resident determines after his or her initial assessment that the patient requires admission, the resident should notify the emergency department clerical and nursing staff that the plan is to admit the patient. The residents should also initiate admission orders so that the admission can be processed (detailed medication and investigation orders are unnecessary). This decision should be made ideally within 60 minutes of referral in accordance with the SMH Medical Advisory Committee. A clerk or junior resident may then be called to perform a full history and physical and enter full admission orders, which must then be electronically cosigned or reviewed by a resident respectively.

Professionalism in the Emergency Department
The staff physicians in the Emergency Department at St. Michael’s Hospital are highly experienced and skilled clinicians, and the vast majority of patients referred to medicine require admission to the hospital. The relationship between medical housestaff and staff physicians in the Emergency Department must be characterized by professionalism and mutual respect at all times.

GIM-RAPID
GIM- RAPID (Rapid Assessment and Planning to Inform Disposition) was piloted October 2011 and resulted in a decreased length of stay for GIM patients by almost 2 days! The key components of RAPID are as follows:

i) RAPID assessment of patients in ED by Senior Residents - if they meet admission criteria and are stable for the ward, basic admission orders (Admit to: Diagnosis: Diet, Activity, Vital frequency, IV fluid rate, Emergent drugs + investigations) are to be put in Soarian within 1 hour of receiving the consult. STAT investigations including labs and medical imaging should be flagged using the diagnosis specific (e.g. CHF) GIM RAPID orderset on Soarian.

Junior residents and medical students can then assess patients in detail and put in the remainder of the orders once they review the case. Please note that even if patients are admitted after 1 hour of receiving the consult, they should still be admitted using GIM RAPID orderset to expedite investigations.

The RAPID program should apply to approximately 90% of patients referred to GIM - the 10% of patients who do not obviously need a GIM admit in the ED (e.g. - you want to send them home, or you suspect a surgical problem and want further imaging / surgical consult before decision to admit) should not be admitted via the RAPID program. Patients admitted to the Step-Up unit are not part of the RAPID program.

ii) Patients admitted under the RAPID program will be RAPIDly transported to 14CC within 4 hours of a decision to admit - with no bedspacing of new admissions. On 14CC they will have priority access to labs and imaging as if they were an ER or critical care patient. (Using the "GIM RAPID" order set under the "General Internal Medicine" order sets in CPOE).

iii) Stable patients closer to discharge with a clear disposition will instead be bedspaced to other wards.

E-Admit system (EAS)
The GIM service uses a web-based program for generating admission notes. The program can be accessed from any computer in the hospital, by typing “eadmit” into any Internet Explorer web browser. Your login and password are the same as your Novell (Soarian) username and password.

Once a senior resident or staff physician has completed their note on e-Admit, a transcription will immediately be generated on Soarian.

The electronic medication reconciliation sheet is populated during e-Admit, but must be printed and signed for each patient to ensure accurate medication reconciliation by pharmacy.

Admission Order Sets (CPOE)
To facilitate optimal patient care, standardized order sets have been prepared for a variety of situations. These are all available through CPOE (Computerized Physician Order Entry). You are required to use these in the appropriate situations:

- CHF Exacerbation
- Acute Coronary Syndrome
- COPD
- GI bleed
- Pneumonia
- Stroke
- General Internal Medicine Admission to the Medical Ward
- Admission to the Step-Up Unit
- Diabetic foot ulcers
- IV insulin (e.g. for diabetic ketoacidosis or hyperosmolar non-ketotic states)
- Alcohol withdrawal

Order sets are also available to document important aspects of patients care including:
- Patient who is leaving against medical advice
- Discharge orders (will be placed in the chart of every patient admitted to 14CC)
- DNR order form
- A change in status of a patient to ALC (Awaiting long-term care)

**MSICU transfers**

Team E does not take transfers from the MSICU unless the patient is known to Team E housestaff. All MSICU transfers are assigned to the housestaff team on-call the day that the patient comes out of the ICU. Patients are repatriated from the ICU to the team (including Team E) that was consulted on the patient in the Emergency Department, or the team that transferred the patient to the ICU.

The process for an MSICU transfer is to occur as follows:
- The MSICU physician, nurse practitioner or charge nurse will request a bed on 14CC by calling bed flow.
- Once a bed has been identified on 14CC, the MSICU will alert the 14CC charge nurse and case managers.
- If the patient is deemed appropriate for the ward by the charge nurse and case managers, they will ask the resident to go and assess.
- The senior resident should assess the patient within 30 minutes to determine suitability for transfer. The medicine resident should page the MSICU resident upon arrival to the MSICU in order to receive verbal handover prior to reviewing the chart and assessing the patient.
- If the patient is suitable for transfer to a regular ward bed (MSICU patients cannot be transferred to the Step-Up Unit), the MSICU physician or resident will write and reconcile transfer orders on Soarian which will become active immediately. See Appendix G for information about what level of care orders can be safely executed on 14CC by our nurses.
- Once on the floor, the patient’s RN should reconcile the MSICU transfer orders with their electronic medication administration record. The medicine resident must review all orders and also enter care orders (e.g. frequency of vital signs, AAT, etc.).

No patient should be transferred from the MSICU to General Internal Medicine without an order confirming the patient has been accepted. If a patient is transferred to the floor without General Internal Medicine being consulted, please inform the Chief Medical Resident or Dr. Yuna Lee immediately. Once transferred, the resident on the floor should see and assess the patient promptly.

The MSICU should not call for a consult until an available bed on 14CC has been identified. However, if a patient cannot be transferred to General Internal Medicine until the following day (e.g. because of a change in bed availability or a change in the patient’s condition) the senior medicine resident admitting on the day of the actual transfer should be notified to assess the patient. The patient would subsequently be cared for by the team admitting on the day of the transfer.

**The readmission rule**

Re-admitted patients are assigned to the team (including Team E) that cared for the patient during his or her previous admission, if the patient was discharged from the medical team within the last 14 days and the housestaff who cared for the patient are still on the Team. All other patients who require re-admission will be cared for by the team on call.
Overnight pages from the ward

An “Urgent Call Only” policy has been instituted from 5 pm to 8 am on 14CC. This was done to reduce the number of calls from the nursing stations to the interns. To ensure that this is sustained, you may need to politely remind the nurses of this policy. Please let your CMR know about frequent violations of this policy.

Team Blackberries

Each team has a designated blackberry that is carried by the senior resident during the daytime, and by the resident covering that team after hours. This allows the nursing staff on any unit to contact the physician most responsible for a given team by using one number only. If you are carrying a team blackberry, it means you are covering that team. **If you observe a red telephone in the top right corner of the screen, you must contact the HELP desk (ext 5751) immediately as your blackberry has lost its connectivity. The username for each blackberry is TeamX, and the password is smhX (X = A, B, C, D, E for each Team).**

A document with instructions on how to change the settings for the blackberries and how to trouble shoot if the blackberry is down can be found in the Dropbox folder titled “Useful CTU Stuff” → “Blackberries”

Notification of attending staff physicians

Attending staff should be notified immediately in the following situations: planned discharge of a patient from the Emergency Department, significant deterioration of a patient on the ward, transfer of a patient to the ICU or CCU, and when a patient dies unexpectedly.

If there are bed issues or if another service refuses to accept a patient, contact your staff immediately for staff-to-staff discussions. It is not your responsibility to settle these disagreements. **In general, a good rule is: “If you think about calling your staff you should call your staff.”**

On-call rooms

There are 4 on-call rooms on 14CC. Access is controlled by card readers. At the start of your rotation on General Internal Medicine, please contact Betty Ann Lemieux (416-866-6060x4176, lemieuxb@smh.ca) if your ID badge is not programmed to give you access. Residents have priority over these call rooms; Core clerks have designated call rooms on 8 Bond for which they have pre-programmed swipe access. Elective clerks taking call can sign out a room on 8 Bond with Security or they should go home by 10pm and come in to help out the following day.

Post-call policy

The post-call policy states that housestaff who have been in hospital overnight on-call should be able to leave the hospital by 10AM on their post-call day. The attending staff physician should assist with patient care issues on the senior resident’s post-call day.

Inability to participate in call

The back-up call system exists to provide emergency coverage for residents who are unable to participate in a call shift due to acute medical illness or urgent personal matters.

If a resident is unable to participate in call, he/she must immediately notify:

i) Chief Medical Resident

ii) Education Coordinator (Betty Ann Lemieux)

iii) Attending physician on the rotation

iv) Locating department once a back-up resident has been confirmed to ensure pages are appropriately redirected.

The Department of Medicine expects that Internal Medicine call shifts are distributed amongst residents equitably throughout the academic year. A resident who misses a call shift will be expected to make up the missed call (or back-up) shift at a later date. Conversely, attempts will be made to reduce future call (or back-up) duties of residents who are activated from the back-up pool proportional to their extra shifts.
### Code Blue team

The senior resident on call is the leader of the Code Blue team. The senior resident is expected to have completed ACLS training; if you have not been ACLS certified please inform the Chief Medical Resident immediately.

The remainder of the official Code Blue team consists of:

- Medicine PGY1 (or off-service resident with ACLS training)
- Anesthesia Resident
- MSICU Nurse
- ICU resuscitation Nurse Specialist
- Respiratory Therapy
- IV Nurse
- Ward Nurse

The senior medical resident is responsible for:

- Delegating, prioritizing and directing the Code Blue team’s activities
- Determining when to discontinue resuscitation efforts as appropriate (made in collaboration with Code Blue Team and attending physicians if possible)
- Communicating with the ICU charge nurse to arrange transfer of patient after successful resuscitation
- Ensuring sign over to physician accepting care. This may require the team leader to accompany the patient to the ICU
- Reviewing, correcting, and signing the resuscitation record (this will be provided by the ICU nurses)
- Assigning accountability as appropriate: contacting of coroner if required, notifying family, requesting post-mortem examination, requesting organ/tissue donation

**NOTE:** There is a Code Leader (Senior Resident) Arrest Record on the crash cart which the SMR should fill out after every code blue is completed (even if it wasn’t a cardiac arrest – seizures, respiratory failure included!) – See Appendix F

### Subspecialty services

#### Services covered by the Senior Consulting Resident (SCT)

From 5 pm to 8 am on weekdays, as well as on weekends, the following services are covered by the subspecialty call team (SCT):
- Consultations for Endocrinology, Infectious Diseases, HIV, Medical Consults, Rheumatology, Dermatology and Allergy/Immunology,
- Nephrology, Respiratory, Gastroenterology, Hematology and Oncology. Coverage of inpatients admitted to the HIV, Respiratory, Gastroenterology, Nephrology, Oncology and Hematology services and new admissions to these services are seen by the SCT.

Patients who present to the ER with problems related to one of the above subspecialties will be referred to GIM or the subspecialty as outlined in the ED Consultation Guidelines. **However, if the GIM resident requires an urgent consult from one of these services after normal working hours, the GIM senior resident may contact the subspecialty staff directly, thought the subspecialty staff may want the consult to be done in full by the SCT resident overnight. Non-urgent consults should be deferred until normal working hours.**

SPECIAL ADMISSION GUIDELINES APPLY when the GIM census is above 80 patients (Appendix B). If you are the on-call senior resident, make note of the GIM daily census that is delivered to the team blackberry.

#### HIV service

During normal working hours (Monday to Friday from 8 am to 5 pm), all patients with HIV infection who present to the ED with complications of HIV requiring hospital admission will be referred to the HIV Service. The patient will be assessed in the ED by the HIV Service and subsequently admitted to 2 Donnelly. If there are no beds available on 2 Donnelly the patient will be referred to GIM for admission, unless GIM is over the census of 80 (see Appendix B). If the reason for admission is unrelated to the patient’s HIV infection (e.g. does not involve an opportunistic infection, opportunistic malignancy or antiretroviral toxicity), the patient will be referred to GIM for admission. Such patients presenting with a community-acquired pneumonia (not confirmed or suspected PJP) will be admitted to GIM.

After regular working hours (5 pm to 8 am on weekdays, as well as on weekends):

If there is bed availability on 2 Donnelly and the HIV Service admission criteria are met, the SCT resident will be consulted to admit the patient to the HIV Service and review the case with the HIV/ID attending physician on call.
Even if the GIM Census is > 80, if there is no bed available on 2 Donnelly/Queen then the patient will be admitted to GIM. When there are no beds on 2 Donnelly/Queen the patient will be admitted to Team Medicine and be reviewed with the staff internist on call. An HIV attending staff physician is always available by telephone to discuss the evaluation and management of HIV patients requiring admission (both to Team Medicine and HIV). Furthermore, when an HIV patient is admitted to Team Medicine, the HIV service should be formally consulted in order to provide concurrent care for the patient during his or her admission.

### Examples of conditions admitted to HIV Service
(The disease must be active and the reason for hospital admission):

- Pneumocystis jiroveci pneumonia (PJP)
- Toxoplasmosis
- Progressive multifocal leukoencephalopathy
- Mycobacterium tuberculosis
- Mycobacterium avium intracellulare
- Cytomegalovirus
- Fungal infections
- Lymphoma
- Coccioidiomycosis
- Kaposi’s sarcoma
- HIV-related diarrhea
- Esophagitis (CMV, HSV, candida, Kaposi’s sarcoma)
- Antiretroviral toxicity

### Examples of conditions that are not admitted to the HIV Service:

- Community acquired pneumonia
- Cellulitis
- Wound infection
- Osteomyelitis
- Homelessness as sole reason for admission
- Liver disease (unless related to antiretrovirals)
- Heart disease
- Pancreatitis (unless related to antiretrovirals)
- Thrombotic diseases
- Psychiatric illness
- Surgical illness
- Undiagnosed conditions

### Hematology-Oncology service

All patients known to the SMH hematology and oncology service presenting with problems related to active cancer or complications from treatment are admitted to 2 Donnelly. General Internal Medicine is generally not involved with these patients. The SCT Consults Resident should be called for new or existing consults on these patients (from the ED or from other inpatient services), and the SCT Wards Resident should be called for problems related to patients already admitted to Hematology or Oncology on 2 Donnelly.

### Hemodialysis and Peritoneal dialysis patients

Patients on either hemodialysis or peritoneal dialysis requiring admission will be sent to the Emergency Department for initial investigations. Patients with hemodialysis complications (e.g. line infection, electrolyte abnormalities, volume overload, etc.) will be admitted to Nephrology. Patients with other medical problems (e.g. pneumonia, venous thromboembolism, stroke, etc.) will be seen by both Medicine and Nephrology (SCT resident) and will be admitted to GIM unless GIM is above a census of 80 (see Appendix B). (please see the admission guidelines in Appendix A and specific guidelines clarifying GIM and nephrology admissions (in Appendix A and Appendix C)

### Respirology patients

All patients with a most responsible admission diagnosis of hemoptysis or related to the care or complications of patients with cystic fibrosis should be admitted by the SCT to the Respirology service. Patients who are followed and have been seen by a SMH respirologist within the last year, and present to the Emergency Department requiring admission for another pulmonary condition should be admitted by the SCT to the Respirology service. If there are no beds available on 6 Bond OR if the most responsible admission diagnosis is not pulmonary related, the patients should be admitted under General Internal Medicine unless GIM is above a census of 80 (see Appendix B for details). The patient’s staff respirologist should be notified that their patient has been admitted to GIM.
Rheumatology patients
Rheumatology patients requiring admission will be referred to General Internal Medicine. Rheumatology staff will contact the senior medical resident to discuss the patient prior to the patient’s arrival, and will round regularly while the patient is admitted.

Cardiology patients
All patients seen by a staff SMH cardiologist in the past 2 years who present to the Emergency Room with a cardiac chief complaint, and require hospital admission will be referred to the Cardiology Service. If the most responsible admission diagnosis is non-cardiac, then the patient will be referred to General Medicine for admission and will be reviewed by the medical team with the GIM staff.

Examples of patient presentations that are referred to and admitted solely to the cardiology service regardless of a past affiliation with a SMH cardiologist are below. The disease must be active and the reason for hospital admission.

- Hemodynamically unstable arrhythmias
- Congestive heart failure or pulmonary edema with EKG changes or positive cardiac enzymes
- Acute coronary syndrome (complicated and uncomplicated)
- Cardiogenic shock
- Cardiac tamponade
- Complete heart block
- Ischemic Chest Pain with positive cardiac enzymes
- Pacemaker or ICD failure
- Cardiac medication related toxicity

Hepatology Patients
Many of our patients with decompensated cirrhosis, severe hepatitis (alcoholic or viral) require referral to a hepatologist. For inpatients on GIM requiring a consult from one of the Toronto General Hepatologists (Dr. Florence Wong or Dr. David Wong), the GI service at St. Mike’s should first be consulted. If the staff GI physician feels a hepatology consult is warranted, the GI staff will contact Dr. Wong directly on our behalf.

For outpatient hepatology referral, please fax a referral to Dr. Florence Wong’s office (referral form is in the DropBox).

Daily Routine

i) Team Based Morning Report – Sign-over takes at 8:00 sharp. The teams meet in the following rooms:
   Team A = 14CC-047
   Team B = 14CC-079
   Team C = 14CC-77a
   Team D = 14CC-084
   Residents and clerks from each team meet their staff from 8-9 to review new admissions and do case-based teaching.

ii) Bullet Rounds – these start at 9:00. Teams A & B meet in the small conference room (14-047), while Teams C & D meet in the large conference room (14-084). One team bullets at a time. Housestaff confer with nursing and Allied Health to rapidly review patients and develop discharge plans. Bullet Rounds should last no more than 15 minutes per team.
   During bullet rounds, please enter orders as they are discussed using the available portable computers.

iii) First Priorities – After Bullet Rounds, patients scheduled for discharge that day should be seen first and discharged, preferably before 11am. The senior residents should see the patients in the Step-Up Unit first, to determine whether they are stable enough for transfer to the ward. See Appendix G for description of monitoring available on 14CC ward beds.

iv) Noon Rounds – These occur daily at 12:00 in 14-084. Grand Rounds are held at noon on Wednesdays, either in the Li Ka Shing 2nd floor auditorium or in the Paul Marshall lecture theatre on B1, Donnelly Wing.

From Monday to Friday, the day begins at 8:00 a.m. with Team-Based Morning Report in the team rooms above.

Bullet Rounds are held daily and start at 9:00 a.m., immediately following Morning Report. Teams A & B meet in the small conference room (14CC-047), while Teams C & D meet in the large conference room (14CC-084).

Bullet rounds should last no more than about 15 minutes per team. During bullet rounds, please enter orders as they are discussed using the available portable computers.
Educational Rounds
Noon Rounds
With the exception of Wednesdays, there will be daily educational sessions on a variety of topics in internal medicine from 12 to 1 pm, in 14CC-084. Lunch is provided. In July and August, Noon Rounds will focus on internal medicine emergencies. Case Rounds will occur at noon 1-2 times per week, where GIM teams will present an interesting case to the GIM staff for discussion.

On Wednesday between 12 and 1 pm, Medical Grand Rounds take place in either the Li Ka Shing 2nd floor auditorium or in the Paul Marshall lecture theatre on B1, Donnelly Wing.

Harvey Simulation Teaching
Each team has a monthly booking to enjoy cardiac simulation teaching with “Harvey” in our simulation center. These sessions run on Wednesdays from 2pm-3pm and 3pm-4pm, alternating to a different team each week.

Written Documentation

Chart notes

<table>
<thead>
<tr>
<th>The senior resident is responsible for reviewing and confirming the findings of the more junior housestaff. On admission, the senior resident should write a succinct summary outlining the main aspects of the history and physical examination, and the overall impression and plan for investigation and treatment. The level of detail required in this note will depend in part on the experience of the junior housestaff and the quality of his or her admission note. <strong>All notes written by clinical clerks must be co-signed by physician housestaff on a daily basis.</strong></th>
</tr>
</thead>
</table>

Progress notes should describe new findings and results, and update diagnoses and treatment plans. Changes in the therapeutic plan are particularly important to document, with a clear outline of the underlying reasons for the change. For active patients, a daily concise note is expected. Patients who have been deemed ALC do not require a daily assessment and note but should be evaluated 1-2 times per week.

Writing orders

All orders including vital signs, care orders, medications and tests are to be entered electronically on SOARIAN. If a patient is in the emergency department and NOT admitted to hospital however, orders must be written on green order sheets until decision to admit is made. In the emergency department, requests for imaging should be written on the designated yellow request forms and the radiology resident should be paged for STAT imaging requests.

Co-signing of orders

Please note the following policies regarding orders requiring co-signature:

- **Medical students orders must be co-signed electronically** – these are found by filtering for “inactive orders” in the patient order profile, and selecting the “co-sign” button. It is our policy on 14CC that orders or suggestions written by consulting services must be co-signed and entered electronically before they can be carried out. The 14CC clerical staff perform chart checks twice daily and will page you if there are suggest orders on your patient to enter.

- **Verbal orders for urgent/emergent care** are to be accepted by the RN who then writes it on green order sheet, provides care, then enters orders electronically. The resident must “co-sign” these verbal orders – they appear in the order box to the left of your census on Soarian.

- **Verbal orders for non-urgent care** - if the physician is unavailable [with family/sick patients] the process is the same as for urgent care orders. If the physician is close to a computer, then he/she enters order - there is NO time expectation for when this non-urgent order is entered.

- **Orders for transfusion of blood products** must be entered by a physician (verbal orders cannot be accepted).

- Currently, any orders that are entered into CPOE automatically print for the ER RNs to work with. When med students enter orders, those orders also print for the ER RN. However, the ER RN has no way of knowing if they have been co-signed. Therefore, the medical students should not enter orders while the patient remains in the ER.
Referral Forms
Please complete referral forms to refer to the following services (they can be found on the intranet/unit/dropbox):
- Wound Care/Chiropody
- Acute Care of the Elderly/Geriatrics
- Palliative Care
- Home Oxygen
- Diabetes Education – in patient and out patient
- Hepatology (Dr. F Wong)

Discharges
Discharge orders
Please inform the nurse when electronic discharge orders have been completed.

E-discharge system (EDS)
Resident housestaff are responsible for completing a discharge summary for all discharged patients, as well as for patients who have died in hospital. The senior resident should ensure that this task is completed in a timely fashion (on the day of discharge). We suggest that you start working on a discharge summary on the day of your patient’s admission.

The GIM service uses a web-based program for generating discharge summaries. The program can be accessed from any computer in the hospital, by typing “edischarge” into any web browser. Your login and password are the same as your Novell (Soarian) username and password.

Discharge Time 11:00 am
We aim to have patients discharged by 11 am. Please complete discharge summaries and prescriptions prior to 11 am whenever possible and communicate with the discharge planners and nurses to help facilitate timely discharges.

Ambulance Transfers
Please complete discharge summaries and orders the night prior to discharge as ambulance transfers occur as early as 7 am.

For all patients who are expected to be discharged the following day, discharge summaries should be completed, printed, and on the patient’s chart the night before discharge.

Weekend discharges
All teams should review their patients every Friday to identify potential safe weekend discharges.

There is a discharge planner available on Saturdays to help the teams facilitate discharge plans for Saturday, Sunday and Monday mornings. The D/C Planner will look to meet with the on call residents between 9am-10am to hear about new admissions and potential discharges. Please be sure to speak to the Planner on Saturdays.

Alternate Level of Care
Patients who are medically stable and awaiting placement in a nursing home, chronic care facility, or rehabilitation facility should be designated Alternative Level of Care (ALC) using the appropriate form. These patients are automatically placed on the waiting list for transfer to Bridgepoint Hospital or Providence Health Centre, which care for patients who no longer require an acute medical care bed and are awaiting placement or transfer to a rehabilitation centre. For patients being transferred, a complete discharge summary, as you would do for any patient being discharged from hospital, is required.
PGY3 Internal Medicine Clinic, the Post Discharge Clinic and the Rapid Re-assessment Clinic

Located on the 4th floor of the Cardinal Carter Wing, the PGY3 Internal Medicine Clinic and the Post Discharge clinics are ideal venues for follow-up. Referral forms for the clinics are available on 14 Cardinal Carter or alternatively, appointments may be scheduled by emailing aimgp@smh.ca. The fax number for referrals is 416-864-5714.

For Internal Medicine clinic bookings, including the Post Discharge clinic, call Maureen McClenaghan at 864-5928 or email her at aimgp@smh.ca.

The rapid re-assessment clinic was established to see patients assessed in the ER who did not require admission but would benefit from a medical re-evaluation within a couple of days. To book a patient in the clinic, the same steps as outlined above are required. Maureen McClenaghan must be notified and the patient should be provided with the date and time of their appointment (on their discharge summary). The patient should be instructed to go to the clinics on 4CC to check-in for their appointment. Upon arrival, Maureen will page the resident to evaluate that patient on 4CC.

ACE (Acute Care of the Elderly) Unit

The ACE unit is a 6 bed unit located on 14CC and is staffed by the Regional Geriatric Program (RGP). Elderly patients referred in the ED may be eligible for an ACE admission. The purpose of the ACE unit is to provide coordinated, inter-professional, geriatric inpatient assessment and treatment for older adults with acute medical issues.

Admission Criteria

A person aged 70 years or older who requires admission for an acute medical condition, has the potential to return to or close to a pre-illness level of functioning, and has one or more geriatric syndromes which include:

- recurrent falls, poor mobility and balance
- unexplained or acute functional decline, or potential for functional decline
- cognitive impairment, dementia, delirium, or combination
- polypharmacy
- malnutrition and/or unintentional weight loss
- elder abuse
- incontinence

Exclusion criteria

Patients will not be eligible for admission to the ACE Unit if the patient:

- requires intensive medical monitoring (e.g. telemetry, step-up unit admission)
- resides in long term care or requires long term care as their support system is exhausted
- presents with severe/end-stage dementia or terminal disease
- presents with primarily an active psychiatric diagnosis and/or behavioural issues
- has designated ALC status

ACE Admitting Process

An ACE appropriate patient requiring admission is referred to GIM by the ED physician. The GIM physician may then refer the patient to the ACE service by paging the Geriatric Emergency Management (GEM) pager (416-685-9109) between 8 am and 4 pm. If an ACE bed is available, the patient will be admitted directly from the Emergency Department after being assessed by the Geriatrician or delegate. If no ACE bed is available, the patient will be admitted to GIM, followed by a consultation to the RGP service. If an ACE bed becomes available in 24 to 48 hours of admission, the patient may be transferred to the ACE Unit with their care being transferred to the geriatrics service. After hours and on weekends, any patient meeting the ACE criteria is admitted to GIM and referred to the geriatric team the next business day.

ACE unit coverage after hours and on weekends
After hours (evening) coverage on weekdays of the ACE team is provided by a resident on GIM who is also on call for one of the other CTU teams. Detailed signover is provided from the daytime Geriatrics resident/staff physician to the on call resident at 5pm each day. The ACE unit has a dedicated (Team G) Blackberry that is signed over at this time.

On weekends, a Geriatrics PGY4/5 resident receives signover and the Blackberry at approximately 10am Saturday and Sunday from the post-call resident. It is the responsibility of the Geriatrics PGY4/5 resident to contact the post-call resident so as to not disrupt the GIM resident workflow. When rounding on weekends has been completed, the PGY4/5 resident will then signover to the current on call GIM resident assigned to cover for remainder of the day and overnight – i.e. GIM residents are NOT expected to complete routine rounding on the ACE unit on weekends.

### Obtaining Investigations

<table>
<thead>
<tr>
<th>Housestaff are advised to discuss all STAT investigations with the appropriate service provider (e.g. the radiologist, the patient’s nurse, the phlebotomist, or the laboratory) to ensure that investigations are performed in a timely manner.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On 14CC the nurses have been trained in phlebotomy, please ask the charge nurse to help with STAT bloodwork.</td>
</tr>
</tbody>
</table>

### Patients being seen in the Emergency Department

**Prior to a patient being admitted, while in the ED, investigations should be ordered on the ‘green sheets.’ Imaging requests require a yellow paper requisition; STAT imaging requests should be discussed with the radiology resident on call overnight, and with the appropriate staff radiologist or fellow during the day. Bodily fluids that you have obtained yourself (e.g. cerebrospinal fluid) should be personally transported to the laboratory.

** IF you know a patient will be admitted please advise the ED clerical to admit them first and then enter all investigations online using the diagnosis specific GIM-RAPID orderset (e.g. CHF orderset with RAPID admission)!!**

Always notify the ED Nursing shift leader about any investigations that you would like done STAT before the patient is transferred to 14CC. Examples:

- Blood cultures, q4h lytes for hyponatremia, other labs
- Administration of antibiotics
- STAT Plain X-rays to be done in ED

### Patients who have been admitted

Both laboratory investigations and imaging requests should be ordered via CPOE. Please use the GIM-RAPID orderset to ensure your patient has timely access to labs and imaging.

### MRI Screening Form

Please complete the MRI Screening Form and have it faxed to ext. 5114 when you are ordering and MRI.

### Miscellaneous Ward Issues

#### Diagnostic and Therapeutic Internal Medicine Procedures, 14CC Ultrasound

A procedure cart containing all necessary materials for common procedures in internal medicine is available and stored in the clean utility room across from the Step-Up Unit (passcode 4994#). Carts must be left outside of patient rooms in the hallway to prevent contamination of materials. Once taken out of the cart, all supplies must be used and discarded safely.

#### Dedicated 14CC Ultrasound

A Point of Care Ultrasound is now available on the ward to assist you with your procedures. It is located in the storage closet across from the 14CC South Call rooms. The key for this closet can be found on the Senior and Junior Resident Arrest Pagers, in the charge nurses office, and additionally the CMR carries a key. All core medicine residents will be trained on use of the ultrasound at the start of the rotation. Central lines should not be inserted at the bedside for routine IV access in ward patients; it is preferable to insert IVs with ultrasound guidance (if appropriately trained) or to arrange for PICC line insertion by radiology. Ward patients who require urgent insertion of a central line should be transferred to the Step-up Unit, ICU, or CCU.
Patient-controlled analgesia (PCA)

Patient-Controlled Analgesia (PCA) is available on 14 Cardinal Carter, and can be arranged through the Acute Pain Service (APS).

Day passes

The general policy on General Internal Medicine is that day passes are inappropriate; in general, a patient who is well enough to leave the hospital is well enough to be discharged. On very rare occasions (e.g. to visit a potential placement site or to attend to an extremely urgent personal matter), exceptions may be made after discussion with the case manager and/or the attending physician.

Patients leaving against medical advice

At St. Michael’s Hospital, many patients who are capable of making their own decisions leave the hospital against medical advice. It is our policy that these patients should be formally discharged; we do not hold beds open for these patients. If they return to the hospital and require hospitalization, they should be readmitted through the Emergency Department. The standardized pre-printed orders for patients leaving against medical advice are designed to help ensure the best care possible under the circumstances; you are strongly encouraged to use these when a patient insists on leaving the hospital.

Soarian Tips and Tricks

Electronic Medical Record

When you have Soarian open to a patient record, there is an area entitled “Charting”. On the left hand side there is a column that states “Meds and IVs”. This allows a real time view of the patients’ medications. Paper MARs are no longer in use on 14CC.

Encounter Summary

This is launched in the same way as the Viewable Medication Profile, and can be used to quickly review previous admissions and clinic visits. Unfortunately, transcriptions cannot be viewed from the Encounter Summary, but a quick glance at the Encounter Summary is still often helpful.

PRO – Patient Results Online

This program gives access to laboratory values, imaging reports and clinical notes from Toronto-area hospitals and laboratories for a particular patient. It can be accessed in the same way as the Viewable Medication Profile. Once loaded, click the institutions you wish to view and click “Authorize Access”. Note that you can filter and select a date range for results.

Customizing your census

Soarian allows you to automatically generate a roster of patients admitted to your team. To do this, click on the magnifying glass (i.e., the ‘find tool’) on the main page and then the ‘patient service’ tab. Click on SMH, scroll down to find your team (e.g. ‘Team Medicine D’), and then on the down arrow. Save and close to exit. Unfortunately there is a lag between your admission orders and the time the patient appears on your roster, so you may still need to manually add patients who are being seen in the Emergency Department.

Clinical Clerks

We aim to provide an excellent learning experience for senior medical students on the General Internal Medicine clinical teaching unit. The housestaff play a vital role in their educational experience. Clerks should receive feedback from the senior resident after each case presentation. Residents will be asked to provide both formative and summative feedback to medical students. Clerks are not allowed to care for patients admitted to the Step-Up unit but may be paired with a junior resident to provide ongoing care.

Third-year clerks (under the new curriculum)

- Spend 8 weeks on Team Medicine and must have all their activities carefully supervised.
- Should admit 1-3 patients per call night.
- May cover ward patients at night if appropriate towards the end of the rotation.
- Stay overnight while on call.
- Do not take call the night before exams, before the portfolio session and on the last Sunday of the rotation.
• Should have graduated responsibility carrying an average of 1-3 patients in the first 1-2 weeks, and eventually 4-6 patients.
• Protected teaching time: ~ 4 hours per week, typically Wednesdays 12-2pm, Thursdays 1-2pm, and Friday 12-1:15pm
• Clinic time: students are expected to attend an ambulatory clinic one full day a week for 3 weeks. Please check the schedule with the clinical clerks as the clinic day can vary each week.
• Post-call, clerks must be out of the hospital by 10AM

Elective clerks
Each elective clerk is treated on an individual basis. Some are able to assume the same responsibilities as University of Toronto medical students; others need closer supervision and/or a reduced patient load.

Co-signing of clerks’ notes and orders
The policy of the College of Physicians and Surgeons of Ontario and the Canadian Medical Protective Association requires that medical notes must be signed by a supervising physician (e.g. the senior resident or the staff physician) on a daily basis.

End-of-Life Care and Other Ethical Issues
“Code Status” and philosophy of care

The resident housestaff should have discussions about the philosophy of care with patients and families as soon as possible. In particular, the “Code Status” of the patient should be ascertained and the pre-printed form for code status should be completed on CPOE. Patients who are transferred from a long-term care facility will usually arrive with an advance directive; these should be confirmed with the patient or substitute-decision maker if possible. Please ensure that your sign-out list indicates the updated “Code Status” of every patient. A patient whose code status has not been ascertained should be designated as being “Full Code.” The attending staff physician must cosign the “Code Status” orders within 24 hours for the order to remain valid. ALL PATIENTS NEED A CODE STATUS ORDERED ON ADMISSION; default to FULL CODE if you have not yet discussed Code Status in depth with the patient.

Substitute decision makers
As soon as possible after admission, identify any patient who is incapable of making his or her own decisions, so that a substitute decision maker can be identified or appointed. The Clinical Ethics Service is available to provide consultation and advice; call extension 5670 to obtain assistance.

Patient confidentiality
Absolutely no aspect of a patient’s illness, including the reason why a consultant is called, should be mentioned to anyone other than the patient without expressed consent from the patient. Many of the patients on the GIM clinical teaching unit carry diagnoses that are especially sensitive (e.g. HIV/AIDS, drug/alcohol dependence, psychiatric diagnoses, sexually transmitted infections, etc.).

The following guidelines should be adhered to when discussing patient health information:
• If the issue you will be discussing is likely to be sensitive, ask friends and family to leave and then ask the patient whether there is anyone he/she wishes to be present while you discuss this particular health issue
• For all patient encounters, if other individuals are within earshot (e.g. friends, family, roommates, etc.), ask the patient whether you may discuss his/her health in their presence
• If you are visiting the patient as a representative of the HIV service (or another service whose name alone might identify the patient’s diagnosis), do not introduce yourself as “the resident from the HIV service” when others are present. Instead, say “My name is [your name]. The doctors who are taking care of you asked me to see you to help with your care while you are in hospital.”
• All printed patient information should be disposed of in containers marked specifically for confidential material
• Conversations about patients should not be conducted in areas where they might be overheard (e.g. elevators, hallways, the open parts of nursing stations, cafeterias, etc.)
• Explicit patient consent is required for disclosure to a third party, except where specifically required by law (e.g. for reporting patients who are at risk for motor vehicle collisions)
• **Residents should not discuss health care information with police officers;** ask the police officer to speak with the charge nurse who can either verify their search warrant or direct them to Health Records

**Palliative Care Unit (PCU)**
The Palliative Care Unit provides physical, psychological, and spiritual care for patients suffering from terminal illness and their friends and family. To refer patients, call 5226. Occasionally, on-call CTU residents may be called to pronounce death for patients in the PCU.

**PCU Admission Criteria:**
- The patient and the family agree to stop further active treatment for their illness and understand and agree to the philosophy of Palliative Care.
- A “Do Not Resuscitate” status has been agreed to by the patient and family
- Estimated survival is 3 months or less (for St. Michael’s Hospital PCU)
- Estimated survival is 6 months or less (for Bridgepoint, Baycrest, and Toronto Grace PCUs)

**PCU Exclusion Criteria:**
- Feedings via nasogastric tubes (previously established G-tubes are acceptable)
- IV for hydration
- Life expectancy of less than 24 hours (though the PCU will provide consultation on the medical ward)

**What to do when a patient dies**
When you are called because a patient on the ward has died, take a moment to think about what you are going to do and what questions you might be asked. If you don’t know the patient, ask the nurse what he or she knows about the patient and family situation.

Consider whether the coroner needs to be notified. The coroner must be called if the death was unnatural (e.g. due to foul play, suicide, accident, negligence, medical misadventure or malpractice) or unexpected.

Examine the patient and offer condolences if the patient’s family is present. The family may wish to stay while you examine the patient, or they may wish to leave. There is no ‘official’ way to examine the patient; one approach is as follows:
- Check the pupillary response to a bright flashlight
- Listen for heart sounds for ~30 seconds
- Listen for breath sounds for ~1 minute

Do not perform sternal rubs, nipple pinching, dolls’ eye maneuver, etc., as these techniques can be distressing to the family.

Offer the option of requesting an autopsy. The hierarchy in granting permission for an autopsy is as follows:
1. Spouse
2. Any offspring who has obtained the age of majority
3. Either parent
4. Any sibling who has obtained the age of majority
5. Any other kin who has obtained the age of majority

If the body is unclaimed and the coroner does not order an autopsy for legal purposes, there are no avenues to pursue in order to gain permission for a post-mortem examination.

Consider calling the chaplain (in house 24/7, at 416-685-9234).

If you have not called the coroner, you will need to complete a death certificate. Remember that “cardiac arrest” and “respiratory failure” are not causes of death. If you cannot come up with a cause of death then you probably need to call the coroner (e.g. if someone comes to the ER in respiratory failure and dies before a diagnosis can be made).

You should notify the attending physician. (If death was imminent you can delay notifying attending until the morning.) The note you write in the chart should include:
• Date and time of note
• Time of pronouncement
• One sentence re: cause of death
• One sentence re: examination findings
• Note whether family present or informed
• Note notification of attending (or reason for deferral), involvement of chaplain, coroner, etc.
• Sign and print your name legibly, and include your pager number.

Step-Up Unit
Philosophy and basic principles
The General Medicine Ward on 14CC operates a 4-bed Step-Up Unit that is reserved for those patients admitted to General Internal Medicine who require a level of care that is intermediate between the Intensive Care Unit and the ward. The opportunity for close patient monitoring is afforded by a 2:1 nurse to patient ratio as well as state-of-the-art technology. It is not a Step-Down Unit, whereby stabilized patients are transferred from the ICU. Patient traffic in this unit will be coordinated by the senior residents and attending physicians on General Medicine and supervised by the Step-Up Unit Medical Director.

One Step-Up patient can be managed in an isolation room if non-invasive positive pressure ventilation (e.g. BiPAP), nebulizers or droplet precautions are required. When the isolation room is in use the Step-Up nursing capacity is reduced to 3 beds. The Step-Up isolation room does NOT have negative pressure capability.

Specific admission criteria are required to ensure that the limits of care that can be rendered are not exceeded. The Step-Up Unit is reserved for those patients with a reversible medical condition who have a reasonable prospect of recovery. Criteria for admission will be based on diagnosis and patient status.

Patients can only be admitted to the Step-Up Unit through the Emergency Room or from the General Internal Medicine ward. A patient who fulfills the diagnostic criteria may be admitted directly from the Emergency Room. A ward patient whose condition evolves such that he or she requires more monitoring may be transferred from the ward bed to a Step-Up Unit bed. Regardless of the origin of admission, patients in the Step-Up Unit remain admitted under the same General Medicine attending physician. Care of the patients in the Step-Up Unit will be the responsibility of the appropriate house staff and this will continue following the patient’s discharge from the Step-Up Unit. Patient care in the Step-Up Unit will be the primary responsibility of residents. If the patient of a clinical clerk is admitted to the Step-Up Unit, the clinical clerk may continue to follow the patient and write daily progress notes; however, all orders must be entered by a resident, and these patients should be assessed daily by the Senior Resident.

If a patient in the ER requires a Step-Up Unit bed and one is not available the process as outlined in Appendix E should be followed.

Admission criteria for Step-Up based on specific condition or disease
Patients with the following conditions are likely to be appropriate candidates for the Step-Up Unit.

A. CARDIAC
1. Hemodynamically stable arrhythmias requiring continuous monitoring (e.g. rapid atrial fibrillation, atrial flutter, AVNRT, etc.)
2. Congestive heart failure or pulmonary edema requiring non-invasive positive pressure ventilation, furosemide infusion, or close supervision
3. Hypertensive urgencies requiring intravenous medications and continuous monitoring – note that any patient on a continuous INFUSION requires ICU care.

B. PULMONARY
1. Patient demonstrating respiratory deterioration requiring closer supervision but not requiring intubation
2. Patients with existing lung disease with the potential for worsening respiratory insufficiency (e.g. severe pneumonia, asthma)
3. COPD exacerbation or hypercarbia requiring non-invasive positive pressure ventilation

C. NEUROLOGIC
1. Acute stroke syndrome
2. Meningitis/encephalitis with change in level of consciousness
3. Non-alcohol related seizures
4. Neurological disorder requiring frequent neurological vitals, not meeting criteria for admission to the neurology or ICU services

D. METABOLIC
1. Diabetic ketoacidosis
2. Non-ketotic hyperosmolar coma
3. Hypercalcemia requiring aggressive fluid replacement
4. Thyroid storm
5. Hypo- or hypernatremia with change in level of consciousness
6. Hypo- or hyperkalemia with EKG changes

E. TOXICITY AND INGESTIONS
1. Drug ingestion requiring frequent neurological, pulmonary or cardiac monitoring (but not requiring intubation for airway protection)

F. GI
1. Large GI bleed responsive to IV fluid therapy
2. Severe pancreatitis not requiring vasoactive medications or ICU admission

G. ID
1. Sepsis without hemodynamic instability

H. OTHER
1. Any patient, who at the discretion of the admitting staff physician or senior resident, would benefit from more frequent monitoring of vital signs and/or nursing interventions. Please see Appendix G for explicit description of the nursing interventions available on the 14CC ward BEFORE you select step-up for your patient for this indication.

Exclusions criteria for Step-Up based on specific condition or disease
Any patient who fulfills admission criteria to the ICU or CCU should not be admitted to the Step-Up Unit. Patients with the following conditions are not appropriate candidates for the Step-Up Unit.

A. CARDIAC
1. Hemodynamically unstable arrhythmias
2. Congestive heart failure or pulmonary edema with EKG changes or positive cardiac enzymes
3. Hypertensive emergencies with end organ damage requiring intravenous medications and continuous monitoring
4. Acute myocardial infarction (complicated or uncomplicated)
5. Cardiogenic shock
6. Cardiac tamponade
7. Complete heart block

B. PULMONARY
1. Patients with acute respiratory failure who are at imminent risk of requiring intubation

C. NEUROLOGIC
1. Status epilepticus

D. TOXICITY AND INGESTIONS
1. Unstable drug ingestion requiring frequent neurological, pulmonary or cardiac monitoring or intubation

E. GI
1. Large GI bleed unresponsive to IV fluid therapy
F. ID
1. Sepsis with hemodynamic instability or multi-organ dysfunction

G. OTHER
1. All patients requiring pulmonary catheter-based monitoring
2. All patients requiring inotropic or vasopressor support
3. Patients who meet admission criteria for the ICU or CCU and whose medical needs exceed those that can be provided in the Step Up Unit
4. Patients from whom aggressive therapy is being withheld and are receiving only comfort measures
5. Patients requiring respiratory isolation (i.e., negative pressure isolation because of possible TB or another aerosolized pathogen)
6. Patients immediately post-cardiopulmonary resuscitation

Caring for patients in the Step-Up Unit

| Given their higher level of acuity, Step-Up Unit patients should be rounded on by the senior resident immediately following Bullet Rounds. This will also facilitate decision-making about patient disposition. The most responsible housestaff will make decisions about his/her respective patient’s suitability for discharge from the Step-Up Unit. The length of stay of patients admitted to the Step-Up Unit is expected to be 24-48 hours. |

Discharge of patients from the Unit will take place when:
- The clinical status has stabilized and the need for intensive patient monitoring is no longer necessary and the patient can be cared for on the general medical ward, or
- A patient's status has deteriorated and invasive monitoring or support in an intensive care unit is required

It is important that the senior resident on a team with patients in the Step-Up Unit give direct signover to the on-call senior resident at the end of every day as they may be called upon to co-manage sick patients.

Policies and Procedures

A detailed manual of policies and procedures unique to the Step-Up Unit has been prepared. This includes protocols relevant to issues such as medication administration, hemodynamic monitoring and non-invasive ventilation.

Arterial and central venous lines may be inserted if clinically indicated. Hemodynamic monitoring will be limited to the evaluation of central venous pressure. Pulmonary artery catheters will not be used under any circumstance.

All catheter insertions must be documented as “procedure notes” in the patient chart.

Housestaff on General Internal Medicine are not expected to be proficient in the insertion of arterial and central venous lines. In the event that such lines are required and housestaff are not comfortable with their insertion, there are several potential avenues through which to acquire assistance. The Chief Medical Resident may be contacted to assist with line insertion. Alternatively, the MSICU and Anesthesia on-call residents may also be contacted. Finally, the respiratory therapist assigned to the Step-Up Unit may insert (or assist in the insertion of) radial arterial catheters.

Telemetry

Indications for Telemetry for GIM patients

Level 1 Indications for the use of telemetry outside of a critical care units, according to the AHA are:
- Acute coronary syndromes including unstable angina
- Post angioplasty when complicated
- Post cardiac surgery
- Post pacemaker insertion if patient is pacemaker dependent
- Temporary pacemaker
- AV Block
- Long QT
- Intra-aortic balloon pump
- Acute heart failure with pulmonary edema

It may be reasonable to consider Telemetry in the following situations:

- Assessment and monitoring of patients with drug or chemical toxicity known to cause cardiac arrhythmias (tricyclic antidepressants, phenothiazines, digitalis, antiarrhythmics).
- Assessment, monitoring and control of atrial fibrillation with rapid ventricular response requiring medical therapy

Exclusions for Telemetry

- Patients who have been stable and arrhythmia free after 48 hours of consecutive monitoring
- Patients admitted with the diagnosis of “rule out acute coronary syndromes” who are pain free and who have a normal electrocardiogram or one that is unchanged from previous tracing and no elevation of cardiac biomarkers
- Patients who are terminally ill and not candidates for therapy for arrhythmias
- Patients undergoing routine, uncomplicated (diagnostic) coronary artery catheterization
- Patients with chronic stable atrial fibrillation
- Patients with asymptomatic ventricular ectopy who are hospitalized for non-cardiac causes
- Patients with pacemakers and or AICD who are not suspected of having device malfunction
- Patient with identified non-cardiac causes of syncope, near syncope or dizziness
- Patients with stable congestive heart failure
- Patients admitted for respiratory ailments such as asthma or pneumonia, without underlying heart disease

Criteria for Discharge from Telemetry

- Clinical stabilization of acute decompensated heart failure, arrhythmia, or chest pain (with negative work-up)
- Resolution of chest pain in patients who have had an uncomplicated myocardial infarction after a period of observation of 2 to 4 days post event

Telemetry is a limited resource within the hospital. The use of telemetry in the appropriate patient population is encouraged and should be re-evaluated every 24 hours. Telemetry should be discontinued when no longer required and this should be communicated to the charge nurse to permit re-allocation of this resource.

Flex GIM Step-Up Beds [Room 14CC-06]

The Flex Step-Up Unit was introduced in 2006 for 3 purposes: (1) to accommodate post-thrombolysis patients when no beds are available in the ICU, (2) to accommodate cystic fibrosis patients requiring antibiotic desensitization, and (3) to serve as 2 extra telemetry beds for General Internal Medicine. The beds are prioritized for purposes (1) and (2).

Post-thrombolysis and antibiotic desensitization patients are to be cared for by their respective services (i.e., Neurology and Respiratory), and not by General Internal Medicine. Should a medical consultation be required on these patients, Medical Consults or the appropriate subspecialty service should be called. In the event of an emergency, Team Medicine will provide necessary care until the most responsible service arrives.

When used as telemetry beds, the Flex Step-Up Unit should accommodate only those patients well enough to be on the 14 Cardinal Carter ward. Patients requiring closer monitoring should be transferred either to the Step-Up Unit or to the MSICU.

Infection Control Admission Precautions Guidelines

All patients require an order for their infection control status when they are admitted to the General Internal Medicine service. If no special precautions are required, order “Routine Precautions.” It is useful to write the indication for the order as well, if that is not clear from the admitting diagnosis.
If a patient has been admitted with isolation orders that you no longer feel are necessary, you should page the infection control practitioner to reassess the situation. If you have documented an alternative diagnosis in your progress notes, the infection control practitioner will be able to discontinue the precautions. On weekends this is particularly appropriate so that patients do not occupy our respiratory isolation rooms unnecessarily, you may have to page the infection control worker on call to facilitate this.

**Tuberculosis**

Many patients at St. Michael’s Hospital are admitted with a possible diagnosis of TB. Many of these patients do not need to remain in hospital for a diagnostic workup. It is not uncommon to discharge a patient from the ER with presumed TB; of course, this can be done only if there is a good follow up plan in place.

Patients with suspected TB who are clinically well and likely to adhere to scheduled outpatient follow-up can be referred to the TB clinic.

<table>
<thead>
<tr>
<th>Patients who are not likely to adhere to scheduled outpatient follow-up should be admitted and kept in hospital.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the pre-test probability of TB is low, one negative concentrated sputum sample (e.g. a negative AFB stain from Toronto Public Health) is sufficient for discontinuation of isolation status. If the pre-test probability is high, three negative concentrated sputum samples are required before the isolation status can be discontinued. Three Sputum AFB samples should be collected 8 hours apart.</td>
</tr>
</tbody>
</table>

When TB is suspected, sputum can be collected either spontaneously or by induction with hypertonic saline (e.g. “induced sputum”). If a patient can produce sputum spontaneously, inducing sputum is unnecessary. Induced sputum is labour-intensive and requires negative pressure isolation, and therefore often causes significant delay.

If in doubt as to whether a patient can cough up sputum or not, order a regular, morning sputum collection for TB and then check to see whether the patient was able to produce sputum or not.

**Clinical Pharmacy Services on General Internal Medicine**

Our pharmacists are: Pulkit Bhuptani, Ruby Liang, Sharan Lail, and Sara Yousaf. Clinical services on 14CC are available from 8 a.m. to 4 p.m. Monday to Friday. Central pharmacy support (ext.1336) is available 24 hours per day.

**Services provided by clinical pharmacy**

- Medication education to patients (e.g. warfarin counseling, inhaler education etc.)
- Link patients with medication compliance aids upon request (e.g. dosettes, blister packing services)
- Help to clarify patients’ medication histories in selected situations
  - Note that this is primarily the responsibility of the resident caring for the patient. (In rare instances, when this service is required, write “pharmacy to clarify medications” on order and follow-up with a page to the pharmacist)
  - All patients should have their medication history documented on the St Mike’s Medication Reconciliation Form (Appendix H)
- Monitor drug levels ordered and recommending dose adjustments (e.g. phenytoin, vancomycin, aminoglycosides)
- Assess drug regimens for 14CC and Step-Up Unit patients. Help team determine optimal drug/dose for disease states
- Drug information

**Online pharmacy resources**

- Pharmacy website—available through SMH Intranet (smhinet; click on “pharmacy” tab on the left), includes online version of hospital formulary, IV manual and various drug protocols (e.g. febrile neutropenia, MRSA decolonization, LMWH dosing in renal insufficiency and obesity, aminoglycoside once daily dosing guidelines, etc.)
- Micromedex—available through SMH Intranet, and directly online by typing “mdx” as the website address
- eCPS—available through SMH Intranet
• ODB formulary and LU codes – available through SMH Intranet, and directly online at http://www.health.gov.on.ca/english/providers/program/drugs/odbf_eformulary.html. Alternatively, Google “e-formulary”

Pharmacy policies
• Therapeutic Interchange/AutoSub Policy - Pharmacy will interchange or substitute selected non-formulary agents with formulary agents (e.g. PPI interchange is lansoprazole, ACE-inhibitor interchange is ramipril, etc.). Please cosign therapeutic interchange orders.
• Patient’s own medications - With the exception of non-formulary items, patients should take medications supplied by the pharmacy. For non-formulary items, if the patient’s supply is available in-hospital then please specify “may use patient’s own supply” next to the medication order.
• Verbal orders taken by pharmacists - These are active orders but must be cosigned within 24 hours.

Helpful hints for medication order writing and CPOE entry
General tips:
• Check allergy status, renal function and hepatic function before writing medication orders - if not available, have a look back at medical notes and indicate allergy

Medication Specific
• Be aware of patient’s long acting medication preparations and include ER/CR designation in the order. Examples include: diltiazem ER, oxycodone CR, etc.
• Acetaminophen orders (e.g. Tylenol plain, ES, #1-4, Percocet) should include a max daily limit of 4 grams/day from all sources (3g/day in the elderly, 2g/day in liver disease).
• Duration of therapy should be specified for antibiotic orders
• Once weekly medications - specify the day of the week
• Combination products come in various combinations of medications/strengths. SMH does not carry all combination products and may substitute for individual ingredients. Thus, it is helpful to include the name and strength of each component when ordering combination products. Examples include: Symbicort, Advair*. *Note: for Advair, please also specify MDI vs. Diskus.
• Methadone is a tightly regulated narcotic—before ordering methadone, please talk to a pharmacist regarding Health Canada requirements for prescribing approval (additional information can be found on the intranet)

Medication Reconciliation

| All Patients on 14CC should have medication reconciliation performed on admission, transfer to other units (e.g. MSICU) and on discharge. On admission, medication history should be obtained from the patient and appropriate collateral sources (e.g. Ontario Drug Benefit profile, home pharmacy, family members), and these drugs must be recorded on the green Medication Reconciliation form or on the e-admission note (Appendix H). |

At discharge, the physician should consult this form and reconcile medications. The discharge summary should be used to communicate to the patient’s pharmacist meds you would like to stop (e.g. NSAIDs), and meds you would like to add.

Nursing on General Internal Medicine
The nursing staff on 14CC would like to take this opportunity to provide you with some tips to help you navigate the unit during your medicine rotation:

The Staff on 14CC
• Nursing shifts are 12 hours long (starting and ending at 730 or 1930).
• Our unit employs clinical assistants (CA) to assist the nurses, and perform simple patient care tasks.
• The Charge RN is the person you need to talk to if you want to move patients around the unit (e.g. moving a patient into step-up, or into an isolation room) or if the patient requires extra staff (e.g. form 1, patients who need constant care). Monday-Friday during the day there are 2 Charge RNs – 1 assigned to teams A and B, 1 assigned to teams C and D. At night 1
Charge Nurse covers all teams. Your Charge RN can help you with ward care (e.g. daily weights) and help execute care plans.

Navigating 14CC

- **How to read the board:** the day shift nurses are listed on the left side of the board. The night shift nurses are listed on the right side of the board. The CAs are listed in the center of the board.
- If you urgently need to speak to a specific nurse, you can ask a clerical to page the nurse to the nursing station.
- **Vital signs** are electronically entered into the computer. They can be found under “Clinical Documentation”
- **Nursing Kardexs** have been replaced by CPOE – care orders and information can be found on Soarian.

Orders on 14CC

- Charts need to be kept at their appropriate station to allow all services and allied health to access patient information
- **Please inform the RN of all STAT orders to ensure the order is carried out in a timely fashion**
- DNR order must be cosigned by your staff within 24 hours for it to remain valid
- MRI orders will not be complete until the MRI screening form (paper) has been completed by the MD and the clerical has faxed it to the MRI department.

Things that every RN you will ever work with will want you to do:

- **Please follow-up on orders that need to be reassessed** (vitals q4 x24hrs and then RA, daily assessment of Lasix or Coumadin, Bloodwork x 2 days then RA, etc.) and reassess/reorder/discontinue the order as necessary.
- Reassess frequency of bloodwork orders (q6h, q8h, q12h, OD, etc.) to decrease unnecessary poking of the patient.
- Please **remember to co-sign** the suggestions made by other services and enter them into CPOE.
- Dressings – if you need to see the dressed wound or need a wound swab, please coordinate with the RN prior to removing the existing dressing.

We hope these things will be kept in mind during your time here on 14CC. We are all here to provide our patients with a high standard of care, and hopefully this section will facilitate communicate between the staff more effectively in order to serve our patients better. We look forward to working with you!
Appendix A—Guidelines for Emergency Consults

Background
The following are guidelines for the most appropriate consultation service for patients with specific presenting complaints and/or diagnoses. This has been developed in consultation with service chiefs and attending physicians, and was approved by the MAC of St. Michael’s Hospital (September 2008). These are meant as guidelines, and not as inviolable rules. It is recognized that, in the individual case, circumstances may exist which make other consultation choices more appropriate.

General Principles
(1) In general, patients will be referred by Emergency Physicians to services as outlined below. If a consulting service to which a patient has been referred feels that the patient might be better managed on another service (by virtue of either clinical expertise or availability of beds), the first service may make such arrangements provided that a disposition decision is able to be made in a timely manner.
(2) As previously agreed upon by the MAC and the Chief Medical Officer, admission disputes between two (or more) services will be arbitrated by the Chief of Emergency Medicine on a case-by-case basis. This will only occur when the two (or more) staff physicians from these services cannot reach an agreement as to which service will admit the patient. The decision of the Chief of Emergency Medicine in these cases will be final; however, transfers between services may occur at a later time on the inpatient units.
(3) A service will be called for any patient requiring readmission 7 days or less after discharge from that service: e.g.: a patient previously admitted to GI who returns with abdominal pain will be referred to GI, with the expectation that this service will provide the care and admission (if necessary) for this patient. The emergency physician may also choose to involve another service if the current presenting problem falls outside the scope of the previous service: e.g.: a patient previously admitted to Orthopedics with a hip fracture who returns with an MI – the Emergency physician will involve Cardiology AND will notify Orthopedics.

Acute Strokes
- SMH is a stroke centre.
- ALL patients who are to be assessed for thrombolysis are to be seen by Neurology staff. These patients are to be admitted to Neurology/ICU.
- In the event that the ICU has no beds and a patient receives thrombolysis, he/she will be admitted to the Flex Step-Up Unit under the care of Neurology. If the patient is deemed not to be a candidate for thrombolysis, then Neurology will assume the responsibility of repatriating the patient back to his/her sending hospital.
- Team Medicine will not admit any patients who have received or will receive thrombolysis, or any patients with complications of thrombolysis.
- Team Medicine will continue to admit stroke patients who are not candidates for thrombolysis, but only if one of the following conditions is met
  - The patient’s ‘home’ hospital is SMH
  - The patient’s ‘home’ hospital has no beds AND the General Internal Medicine service at SMH has open beds. (If neither service has beds, the patients is to be sent back to the Emergency Department of the ‘home’ hospital)

Return-to-service consults (previously known as “bounceback” consults) from ED to GIM
The official policy on management of patients who were discharged from the GIM service who return to the ED:
- there is no “24 hour Direct to GIM policy” whereby patients discharged by us automatically get re-referred without seeing an ED doc
- patients must be assessed by ED doctors and referred if they have a medical complaint warranting admission or if ED doctors have concerns with follow up plans for the patient.

Premature ED Consults – Referral of patients before investigations are ordered or results available
The Senior Medical Resident may ask ED staff to delay consultation until these investigations have been returned **ONLY if the results of the tests will change which service will be involved for patient’s care and disposition.**
It is not the responsibility of the Senior Medical Resident to follow-up on these investigations themselves, or to initiate referral to the most appropriate service (e.g. cardiology if high troponin).
Cardiology – GIM

All patients seen by a SMH cardiologist in the past two years who present to the Emergency Room with a cardiac chief complaint and requiring hospital admission will be referred to Cardiology. If the most responsible admission diagnosis is non-cardiac, then the patient will be referred to General Medicine by Cardiology for admission and will be reviewed with the GIM staff. When a patient known to the Cardiology service is admitted to Team Medicine, the staff cardiologist will be notified. Concurrent care and cardiology consultation will be determined on a patient specific basis.

<table>
<thead>
<tr>
<th>CARDIOLOGY REFERRAL</th>
<th>INTERNAL MEDICINE REFERRAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples of patient presentations that are referred to and admitted solely to the cardiology service if seen by an SMH Cardiologist in the last two years:</td>
<td>Examples of patient presentations that may be referred to internal medicine. (If NOT seen by SMH Cardiologist within last two years)</td>
</tr>
<tr>
<td>1) Congestive heart failure or pulmonary edema as primary presentation</td>
<td>1) Stable congestive heart failure as new diagnosis responding reasonably well to diuretic therapy in the ER</td>
</tr>
<tr>
<td>2) SVT (Including A. Fib. And A. Flutter) as primary diagnosis</td>
<td>2) Stable congestive heart failure in association with other serious medical conditions (eg COPD, pneumonia)</td>
</tr>
<tr>
<td>3) Syncope NYD</td>
<td>3) Stable congestive heart failure as primary diagnosis associated with minor troponin rise which is thought to be secondary to heart failure (Example: Demand related Troponin elevation &lt;3)</td>
</tr>
<tr>
<td>4) Arrhythmias requiring continuous monitoring</td>
<td>4) Stable SVT (including A. Fib. Or A. Flutter) as primary diagnosis.</td>
</tr>
<tr>
<td>5) Hypertensive Emergency</td>
<td>5) Syncope NYD</td>
</tr>
</tbody>
</table>

Examples of patient presentations that are referred to and admitted solely to the cardiology service regardless of a past affiliation with a SMH cardiologist. The disease must be active and the reason for hospital admission.

| | |
| 1) Acute Coronary Syndromes—compatible symptoms as primary presentation associated with troponin rise and/or ECG changes | 1) Unexpected troponin elevations not thought to be ACS (For example, demand related Troponin elevation < 3 ) in association with serious medical illness such as pneumonia, PE, sepsis, etc) |
| 2) Chest Pain for diagnosis - ischemic sounding chest pain as primary presentation in absence of ECG changes/troponin elevation and in the absence of other potential causes, eg. pulmonary embolus | 2) SVT if secondary to general medical illness (associated minor troponin rise acceptable) |
| 3) Unstable congestive heart failure (where CHF is cause of instability) - requiring acute therapy in addition to diuretics (bipap, ventilation, pressors, significant troponin – e.g. >3) | 3) Congestive heart failure secondary to, or coinciding with other serious medical conditions (COPD, pneumonia) |
| 4) All pts whose presenting syndrome is thought to be due to significant valvular heart disease (including endocarditis) | |
| 5) All serious primary ventricular arrhythmias | |
| 6) All primary second and third degree heart block | |
| 7) Unstable SVT (incl. A.Fib. and A. Flutter) | |
| 8) Pacemaker or ICD failure | |
| 9) Cardiac Tamponade | |
| 10) Suspected aortic dissection | |

Cardiology will automatically be consulted for all patients admitted to GIM with suspected endocarditis or heart failure secondary to a newly identified or severe valvulopathy.
# Cardiology

## Arrhythmia
- **Hemodynamically unstable**
  - All
  - Cardiology
- **Pacemaker/ICD Failure**
  - All
  - Cardiology
- **2nd/3rd degree heart block**
  - All
  - Cardiology
- **Serious Ventricular**
  - All
  - Cardiology
- **Stable SVT (Incl. A.Fib/Flutter)**
  - Seen by SMH cardiologist within last 2 years
  - All others
  - GIM

## Syncope NYD
- **Seen by SMH cardiologist within last 2 years**
- All others
- GIM

## ACS /Ischemic Syndrome
- **CHF**
  - Unstable OR ECG changes OR significant +ve troponin thought to be ACS (e.g. >3)
  - Seen by SMH cardiologist within last 2 years
  - All others (even with minor troponin rise, e.g. <3)
  - GIM

## Cardiac medication-related toxicity
- **All**
  - Cardiology

## Symptomatic valvulopathy (Incl endocarditis)
- **All**
  - Cardiology

## Hypertensive emergency
- **Seen by SMH cardiologist within last 2 years**
- All others
- GIM

## Nonoperative Aortic Dissection
- **All**
  - Cardiology
### Gastrointestinal Disease

<table>
<thead>
<tr>
<th>Condition</th>
<th>Initial Management</th>
<th>Follow-up Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GI Bleed</strong></td>
<td>If unstable</td>
<td>MS-ICU</td>
</tr>
<tr>
<td></td>
<td>If from a known surgical lesion</td>
<td>General surgery</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Diverticulitis</strong></td>
<td>All</td>
<td>General surgery</td>
</tr>
<tr>
<td><strong>Bowel obstruction</strong></td>
<td>All</td>
<td>General surgery</td>
</tr>
<tr>
<td><strong>Pancreatitis</strong></td>
<td>If from gallstones or other obstructive cause</td>
<td>General surgery</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Hepatitis or liver failure</strong></td>
<td>If followed by GI for this</td>
<td>GI</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Alimentary foreign bodies</strong></td>
<td>Require surgery</td>
<td>General surgery</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GI</td>
</tr>
<tr>
<td><strong>Inflammatory bowel disease</strong></td>
<td>If followed by GI for this</td>
<td>GI</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
</tbody>
</table>
## Genitourinary / Renal Disease

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
<th>Subspecialty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pyelonephritis</strong></td>
<td>In the setting of (1) infected renal stone or (2) obstruction</td>
<td>Urology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GIM</td>
</tr>
<tr>
<td><strong>All renal transplant</strong></td>
<td>All patients referred to nephrology, subsequent disposition based on guidelines on subsequent pages (“Nephrology-GIM clarification &amp; agreement”)</td>
<td>Nephrology</td>
</tr>
<tr>
<td><strong>Dialysis (PD/HD)</strong></td>
<td>CHF, electrolyte disturbance, sepsis of unknown source or line sepsis. PD patient with peritonitis. PD access issue</td>
<td>Nephrology</td>
</tr>
<tr>
<td></td>
<td>Fistula/vascular access problem</td>
<td>Vascular surgery</td>
</tr>
<tr>
<td></td>
<td>Reason for admission is an issue for which presence of dialysis is incidental</td>
<td>Appropriate subspecialty as outlined elsewhere in this document</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
</tbody>
</table>
# Hematology / Oncology

**Note:** Oncology patients presenting with problems *unrelated to an active cancer*, or who are *not followed by an SMH Oncologist* should be referred to the most appropriate service for their *acute* condition.

<table>
<thead>
<tr>
<th>Congenital bleeding disorder (With active/recent bleed)</th>
<th>All</th>
<th>Haematology/ Oncology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute or palliative oncology problem</td>
<td>Acute structural Problem (e.g. bowel obstruction)</td>
<td>General surgery</td>
</tr>
<tr>
<td>All other problems related to active cancer (including DVT/PE) OR treatment complication OR suspicion of recurrence</td>
<td><strong>Followed by SMH Oncologist:</strong></td>
<td><strong>NOT Followed by SMH Oncologist:</strong></td>
</tr>
<tr>
<td></td>
<td>Haematology/ oncology</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>Unrelated to active cancer</td>
<td>Most Appropriate service as per remaining guidelines</td>
<td></td>
</tr>
</tbody>
</table>
Examples of patients NOT admitted to the HIV service: Bacterial pneumonia, cardiac disease, cellulitis, homeless / under housed (as the sole reason for admission), unrelated liver disease, unrelated pancreatitis, any acute surgical disease, psychiatric illness, thrombotic or other vascular disease, or undiagnosed conditions.

Examples of conditions NOT admitted to the HIV Service.

- Bacterial pneumonia
- Cardiac disease
- Cellulitis/wound infections/osteomyelitis
- Homeless/Underhoused as sole reason for admission
- Liver disease (unrelated to antiretroviral toxicity)
- Pancreatitis (unless as a result of antiretroviral therapy)
- Surgical disease, acute (any)
- Placement issues
- Psychiatric illness
- Thrombotic or other vascular disease
- Undiagnosed conditions

Examples of opportunistic infections admitted to HIV Service. The disease must be active and the reason for hospital admission.

- Coccidioidomycosis
- Cryptococcosis
- Cryptosporidiosis (must be the reason for admission)
- Cytomegalovirus disease (active)
- Encephalopathy, HIV-related (must be the reason for admission)
- Esophagitis (candida, CMV, HIV, HSV, KS)
- Histoplasmosis
- Isosporiasis (must be the reason for admission)
- Kaposi’s sarcoma (must be the reason for admission)
- Lymphoma (unless admission to Haem/Onc)
- Mycobacterium avium complex (active disease, must be the reason for admission)
- Mycobacterium tuberculosis, any site
- Pneumocystis jiroveci pneumonia (formerly PCP)
- Progressive multifocal leukoencephalopathy (must be the reason for admission)
- Toxoplasmosis - brain

Miscellaneous

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<table>
<thead>
<tr>
<th>Condition</th>
<th>Department</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulitis</td>
<td>Upper extremity</td>
<td>Plastic surgery</td>
</tr>
<tr>
<td>Face</td>
<td></td>
<td>Plastic surgery</td>
</tr>
<tr>
<td>Requiring surgical</td>
<td></td>
<td>Plastic surgery</td>
</tr>
<tr>
<td>procedure e.g.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>debridement, I &amp; D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All others</td>
<td></td>
<td>GIM</td>
</tr>
<tr>
<td>Osteomyelitis</td>
<td>If post-operative</td>
<td>Original service</td>
</tr>
<tr>
<td>Septic or unstable</td>
<td></td>
<td>GIM/ ICU</td>
</tr>
<tr>
<td>All others</td>
<td></td>
<td>Orthopedics</td>
</tr>
<tr>
<td>Parotitis</td>
<td>All</td>
<td>ENT</td>
</tr>
</tbody>
</table>

**Addendum: Memorandum of agreement (Drs. MacDonald, Hyland, Mourad)**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinal osteomyelitis/epidural abscess</td>
<td>Neurosurgery</td>
</tr>
<tr>
<td>Back or neck pain</td>
<td>Neurosurgery</td>
</tr>
<tr>
<td>Neurological deficit or lesion</td>
<td>Neurosurgery</td>
</tr>
<tr>
<td>Requiring surgery or patient</td>
<td></td>
</tr>
<tr>
<td>previously seen by staff neurosurgeon</td>
<td></td>
</tr>
<tr>
<td>All others (eg. Pain control)</td>
<td>Internal medicine</td>
</tr>
</tbody>
</table>

**Nephrology-GIM Clarification & Agreement**

1. Peritoneal Dialysis patients presenting with an issue relating to dialysis or with peritonitis are referred to Nephrology. Patients on peritoneal dialysis presenting with issues not related to dialysis will be referred to GIM; Nephrology will follow in consultation to facilitate dialysis.

2. Renal Tx patients presenting to ER with a medical issue are to be referred and evaluated first to Nephrology. Subsequent disposition will be guided by the guidelines attached.
3. Patients on GIM who have been initiated on renal replacement therapy in hospital will be transferred to nephrology once their acute medical issues have been stabilized.

4. The disposition of patients in MSICU who have been initiated on renal replacement therapy will be dealt with on an individual basis.

Renal Transplant Admissions

(To be decided by Nephrology resident after consult)

To Nephrology

1. Admission for Transplant
2. Acute Rejection
3. All Infections/Sepsis
4. AKI not otherwise explained
5. Anti-rejection drug toxicity

To Team Medicine

1. Diabetes
2. Non TPA stroke
3. GI bleed
4. Malignancies excluding PTLD

If a patient is seen by a nephrology MD or resident in the dialysis unit and sent to the ED for admission to nephrology, the ED physician does not need to assess the patient. If the nephrology MD believes the patient should be admitted to GIM (e.g. for Community Acquired Pneumonia), the staff nephrology MD should directly call the staff GIM MD to communicate this plan. The patient will be sent to the ED “Direct to Medicine” from the dialysis unit.

If a dialysis patient comes to the ED independently (e.g. by ambulance, not from the dialysis unit), the ED physician should assess and refer to the most appropriate service as per the consult guidelines above.
ED Referrals from Nephrology Clinic/Dialysis

Patient in nephrology clinic / dialysis with acute medical problem

Acute medical problem falls under nephrology related disease as per MAC guidelines?

Yes

Attempt direct ward admission as per SMH bed policy (attached)

If reasonable and possible, initiate any pertinent investigations to address patient’s problem

No

Notify the on-call Nephrology resident to see the patient directly in the emergency department

Is bed available

Yes

Patient sent directly to ward from nephrology clinic / dialysis

No

Provide a written referral note to the patient and direct them to the emergency department (you do not have to call the ED)

1. Peritoneal dialysis: patient with nephrology or PD-related issue
2. Hemodialysis: patient with CHF, electrolyte abnormalities, line sepsis or sepsis with unclear source*
3. Renal transplant: patient with nephrology-related issue

*note: septic hemodialysis patients with a known source other than line sepsis go to GIM
# Neurological Disease

<table>
<thead>
<tr>
<th><strong>Stroke/ high-risk TIA</strong></th>
<th>If thrombolytic candidate</th>
<th>Neurology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Seizure</strong></th>
<th>Status epilepticus, CT +ve</th>
<th>Neurosurgery</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Status epilepticus, CT –ve</th>
<th>Neurology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Acute intracranial bleed</strong></th>
<th>Operable/ to assess operability</th>
<th>Neurosurgery</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Non-operable</th>
<th>GIM or ICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palliative care</td>
<td></td>
<td>GIM</td>
</tr>
</tbody>
</table>
### Respirology

**NOTE:** Patients presenting with large volume hemoptysis or an underlying diagnosis of Cystic Fibrosis are always referred to Respirology. Admission to Respirology or Medicine for patients presenting with other respiratory conditions, known to Respirology (seen within the past year) will otherwise be determined by the daily census.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Referral Criteria</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hemoptysis</strong></td>
<td>Massive / unstable</td>
<td>MSICU</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>Respirology</td>
</tr>
<tr>
<td><strong>Complications of cystic fibrosis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>Respirology</td>
</tr>
<tr>
<td><strong>COPD/ asthma</strong></td>
<td>If seen by a SMH respirologist within the last year</td>
<td>Respirology</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Bronchiectasis</strong></td>
<td>If seen by a SMH respirologist within the last year</td>
<td>Respirology</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Pulmonary hypertension</strong></td>
<td>If seen by a SMH respirologist within the last year</td>
<td>Respirology</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Pulmonary fibrosis/ interstitial lung disease / Bronchogenic carcinoma</strong></td>
<td>If seen by a SMH respirologist within the last year</td>
<td>Respirology</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Bronchiectasis</strong></td>
<td>If seen by a SMH respirologist within the last year</td>
<td>Respirology</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>GIM</td>
</tr>
<tr>
<td><strong>Pulmonary embolism</strong></td>
<td>Hemodynamically Unstable / thrombolysis</td>
<td>MSICU</td>
</tr>
<tr>
<td></td>
<td>Not related to malignancy</td>
<td>GIM</td>
</tr>
<tr>
<td></td>
<td>PE related to active cancer</td>
<td>Followed by SMH Oncologist: Haematology/ oncology</td>
</tr>
</tbody>
</table>

*Followed by SMH Oncologist: Haematology/ oncology*
Respirology Continued

All patients seen by a staff SMH respirologist in the past year who present to the Emergency Room with a respiratory chief complaint, and require hospital admission will be referred to the Respirology Service or GIM depending on the daily census of each service (see below).

1. If the most responsible admission diagnosis is hemoptysis or related to the care or complications of patients with cystic fibrosis, then the patient will be admitted under the care of the respirology service.

2. If the most responsible admission diagnosis is not pulmonary related, then the patient will be referred to General Medicine for admission and will be reviewed by the medical team with the GIM staff.

3. The Respirology attending staff will always be available by telephone to discuss the evaluation and management of Resp patients requiring admission (both to Team Medicine and Respirology). Furthermore, when a patient known to the Respirology service is admitted to Team Medicine, the staff respirologist will be notified that their patient has been admitted to GIM. Concurrent care and respirology consultation will be determined on a patient specific basis.

<table>
<thead>
<tr>
<th>Examples of patient presentations that are referred to and admitted solely to the respirology service regardless of a past affiliation with a SMH respirologist. The disease must be active and the reason for hospital admission.</th>
<th>Examples of conditions that may be referred to respirology if a patient has been seen by a SMH respirologist within the last year.</th>
</tr>
</thead>
</table>
| •Hemoptysis  
•Complications of Cystic Fibrosis | •COPD/Asthma  
•Complications of therapy for a primary pulmonary diagnosis [e.g. tuberculosis]  
•Bronchiecasis  
•Pulmonary hypertension  
•Pulmonary fibrosis/ interstitial lung disease  
•Bronchogenic carcinoma  
•Thrombotic disease |

Medicine/Respirology Daily Census modifiers:

Patient requiring admission with a respiratory issue known to a SMH respirologist:

<table>
<thead>
<tr>
<th>Medicine Census</th>
<th>Respirology Census</th>
<th>Accepting Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anything</td>
<td>&lt; 15</td>
<td>Respirology</td>
</tr>
<tr>
<td>&lt; 80</td>
<td>&gt; 15</td>
<td>GIM</td>
</tr>
<tr>
<td>&gt; 80</td>
<td>16-19</td>
<td>Respirology</td>
</tr>
<tr>
<td>Anything</td>
<td>&gt; 20</td>
<td>GIM</td>
</tr>
</tbody>
</table>
### Traumatic

<table>
<thead>
<tr>
<th>Condition</th>
<th>Relevant Body Area</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand injuries</td>
<td>All</td>
<td>Plastic surgery</td>
</tr>
<tr>
<td>Spinal trauma</td>
<td>Cervical</td>
<td>Neurosurgery</td>
</tr>
<tr>
<td>Thoracolumbar with neurological deficit</td>
<td></td>
<td>Neurosurgery</td>
</tr>
<tr>
<td>Thoracolumbar without neurological deficit</td>
<td></td>
<td>Orthopedic surgery</td>
</tr>
<tr>
<td>Inability to ambulate</td>
<td>Primary reason for admission is the presence of active fracture (incl. stable fractures e.g. pubic ramus fracture, stable vertebral fracture)</td>
<td>Orthopedic surgery</td>
</tr>
<tr>
<td></td>
<td>Primary reason for admission is due to a medical issue normally referred to subspecialty service</td>
<td>Appropriate service as outlined elsewhere in this document</td>
</tr>
<tr>
<td></td>
<td>Neither of the above</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>Rib fracture(s) requiring admission for pain control and observation</td>
<td>All</td>
<td>General surgery</td>
</tr>
</tbody>
</table>
Appendix B—Protocol for Admission when GIM census exceeds 80 patients

The ER referral process remains unaffected. Patient admission disposition will be made without delay or multiple consultations.

* Patients will be admitted to GIM once Respirology in-patient beds exceeds 20. The Respirology inpatient census includes the general respirology ward and the admitted patients with cystic fibrosis.

** Patients will be admitted to GIM if the Nephrology service is admitting, assessing or managing a patient scheduled for or immediately post-operative from a renal transplant.
Appendix C—Orientation to 14CC Communication Stations

Welcome to 14CC. The administrative staff on the unit would like to take this opportunity to provide you with a general overview of how the communication stations function.

The stations are staffed by Clerical Assistants Monday – Sunday a 0700 to 2300h. Please feel free to introduce yourself and ask for assistance at any time! Diana is the Administrative Manager and can be reached at extension 5376 or at pottdcl@smh.ca should you wish to discuss any issues or concerns.

Clerical Assistants support stations at both the north (rooms 62-118) and the south (rooms 02-08 30-60 and the Step Up Unit) and play an important role in the functioning of the unit. Their responsibilities include:

- Reception
- Non Medication Order Entry (NMOE)
- Response and dispatch to patient call bells
- Patient chart management
- Overseeing patient activities (admissions/discharges, completion of tests/blood work, booking ambulances, arranging follow-up appointments)
- Administrative support at the stations (fax, photocopier, supply of forms)
- Organization of the communication stations and report rooms

To assist the clerical staff in their many duties, it would be appreciated if you would keep the following in mind:

1. Charts should never be removed from the stations without the clerical staff being made aware
2. Orders should be flagged and charts should be returned to the chart holder after use. Orders should indicate date, time, with printed name and signature.
3. If there are STAT orders, please bring these specifically to the attention of the clerical staff.
4. The clerical staff should be advised of who is covering the teams at all times.
5. Where possible please use phones and computers in the report rooms located behind the stations to avoid congestion at the front and reduce overall volume.
6. For security reasons, personal belongings should not be left under the counter in the report room.
7. Please clean up after yourself – i.e. empty coffee cups etc. to maintain cleanliness and order.

Please print double sided and only what is necessary also remember to pick up your print job.

Some other tidbits of information:

<table>
<thead>
<tr>
<th>Item</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old charts</td>
<td>On Sovera (scanned and accessible online)</td>
</tr>
<tr>
<td>D/C’d pts charts</td>
<td>In North report room, in according to team -</td>
</tr>
<tr>
<td></td>
<td>(A,B,C,D,E)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Nursing Station</td>
<td>5335, 6734</td>
</tr>
<tr>
<td>South Nursing Station</td>
<td>6736, 6737</td>
</tr>
<tr>
<td>Step-up Unit</td>
<td>3112, 3113</td>
</tr>
<tr>
<td>Fax machine (located at North Station)</td>
<td>416 864-5447</td>
</tr>
<tr>
<td>South Fax Machine</td>
<td>416-864-5196</td>
</tr>
</tbody>
</table>


Appendix D—Admitting and Discharging Patients from the Step-Up

Admitting a Medicine Patient to the Step Up Unit from the ED

Step Up Orders entered for Medicine patient

1. ED charge nurse (CN) speaks with 14CC CN; is a Step Up bed on 14CC available?
   - YES: Admit to Step Up
   - NO: Is there a patient in Step Up that fulfills criteria for transfer to regular ward bed?
     - YES: Transfer patient to ward and admit ED patient to Step Up
       *If 14CC does not have an available ward bed the 14CC CN contacts the DHO to identify if there is another unit that can accept transfer of a 14CC ward patient to create capacity on 14CC.
     - NO: *The ED CN contacts the MSICU CN to identify if a bed is available in the MSICU for flex Step-Up
       - YES: Patient transferred to MSICU as a Flex Step-Up patient. The ED CN requests SMR to give verbal handover to the MSICU Resident as patient is transferred to MSICU.
       - NO: Patient remains in ED to receive Step-Up level care
         *ED CN notifies 14CC CN of name and J # of patient flexed to MSICU. 14CC CN puts name of patient on tracking list in CN office.

*This step should be taken regardless of wait time in the ED.

Review of the patients in the Step Up patients both in ED and the 14CC unit is to occur by the SMR to identify the ‘most acute’ patient. This patient should be the one that is flexed to MSICU. At the time of transfer to the MSICU, the SMR will provide verbal handover to the MSICU resident; NB: the MSICU resident will not evaluate the patient until he/she arrives in the MSICU. If there is no bed available in the MSICU for flex support, the patient will remain in the ED to obtain critical care level monitoring. The SMR will re-evaluate patients on a regular basis to determine if Step-Up level care is required. The SMR should use their discretion in deciding when staff physician input is required; when appropriate and the resident is confident in their decision, staff physician is not necessarily required to decide that a patient no longer requires step-up level care. They will also assess if the patient is a candidate for admission to a regular ward bed with telemetry and Q2H vitals, or Q4H vitals.

The patients flexed to MSICU will be given priority of transfer to Step-Up when a bed becomes available. If a patient in the flex MSICU bed is safe to transfer to a regular medical bed, the team will be notified of the pending transfer and be afforded an opportunity to determine the suitability of the transfer.
Transferring a Medicine Patient to the Floor from the Step Up

***Step Up patients should be assessed promptly after bullet rounds to see if they may be transferred to the floor.

1. Clinical criteria that need to be met prior to transferring the patient to the floor:

i) Hemodynamic criteria:
   - HR between 50 – 110 for > 8hrs.
   - MAP > 75 or sBP 95 – 170 for > 8hrs.
   - Patient has not required > 4 units of PRBCs in the preceding 24 hrs.
   - Patient’s hemoglobin has been stable for >12 hrs.

ii) Pulmonary criteria
   - RR 10-20 for > 8hrs.
   - O2 sat >94% on < 4L O2 via NP (>88% if COPD patient) for > 8hrs.
   - Patient has been off BiPAP for > 12 hrs.

iii) Neurological criteria
   - Patient is awake with GCS>13 (unless expressive aphasia from stroke)

Any patient can be transferred out of the Step-Up Unit at the discretion of the medical team and Attending physician’s clinical judgment

2. Frequency of vital signs has been reassessed in order to reflect the following:

   - Patient no longer requires an arterial line for blood work and hemodynamic monitoring.
   - Patient does not require telemetry.
   - Frequency of vital sign monitoring has been reassessed.

   Orders should include the following if applicable:
   - “Discontinue ART line; discontinue telemetry”

3. Medications have been reviewed and those that can only be administered in the Step-Up Unit have been discontinued or an alternative substituted, when appropriate.

Typical Orders for Transferring a Patient from the Step-Up Unit to the Ward

Through CPOE, enter:

1. “Transfer to ward, Team X, Attending Physician”
2. Stop orders for medications that can only be given in the Step-Up Unit
3. Change Vital Sign frequency orders
4. Through “care orders” do the following
   1. “Discontinue arterial line” (if applicable)
   2. “Discontinue telemetry” (if applicable)
   3. “Continue other orders”
Appendix E—Senior Resident Cardiac Arrest Note Template

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MEDICAL NOTES – CARDIAC ARREST SUMMARY

Code Blue Leader Summary

Date of arrest: ____________________________ Location (Floor, Room) ____________________________

Time arrest called: ____________________________

Witnessed arrest: YES NO If No, when was patient last seen well?

Type of Cardiac Arrest:

□ Ventricular Fibrillation/Tachycardia
□ PEA/Asystole

1) CPR started prior to arrest team arrival? Yes No

2) Defibrillator in the room prior to arrival of arrest team? Yes No

   (a) Defibrillator pads attached prior to arrival of arrest team? Yes No

   (b) Defibrillator turned on prior to arrival of arrest team? Yes No

3) Was patient defibrillated? Yes No

   If Yes, specify how many times

   1 2 3 ________________

4) Did you administer epinephrine? Yes No

   If Yes, specify how many times

   1 2 3 ________________

5) Was there return of spontaneous circulation? Yes No

   (a) If Yes, how was this identified (e.g. pulse/EtCO2) ____________________________

6) Was there a rhythm change from the initial rhythm? Yes No

   If Yes, please indicate new rhythm ____________________________

If there was no cardiac arrest, please specify why Code was called:

□ Arrhythmia (bradycardia/tachycardia) WITH PULSE (Specify type: ____________________________)

   o If bradycardia - requiring PACING? Yes No

□ Respiratory arrest / desaturation

□ Decreased level of consciousness /Seizure Blood sugar ____________________________

□ Other: ____________________________

Please describe briefly your resuscitative efforts, including any difficulties encountered. Please use the back of the page if additional space required:

________________________________________________________________________________

________________________________________________________________________________

What was the duration of your resuscitation efforts? ____________________________ minutes

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Residents’ Manual
What other drugs were administered during arrest?

☐ Calcium chloride  ☐ Bicarbonate  ☐ Anti-epileptic ________________

☐ Atropine  ☐ Amiodarone  ☐ Thrombolysis  ☐ Magnesium

☐ Sedation for intubation _______________________________________

Other: _______________________________________________________

Patient Disposition (pick one):  Arrest Bed (Location: )  Floor Bed  Deceased

Name of Cardiac arrest Team Leader: ______________________________________

Signature Cardiac arrest Team Leader: ______________________________________

Additional Notes:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
Appendix F—Acceptable Orders for the 14CC Ward

14 CC – Acceptable Orders for the floor:

Vital Signs:
- Q 4 hrs
- CIWA protocol Q1 hr

IV Infusions:
Insulin
- Accepted on the floor with clearly defined parameters (i.e. insulin protocol)
- Accucheck/ blood glucose monitoring Q 1-2 if indicated for a short amount of time, with defined timeline (e.g. for the next 12 hours) if RN work load becomes too much, then frequency should be re-evaluated (Bedside RN should inform Charge RN if the workload is too much).

Mucomyst, Lasix, Heparin, Pantoloc/Octreotide are standard infusions for the floor

Labetalol:
- Only for step up – 1:1 RN – patient ratio

Nitroglycerin:
- Only for step up – 1:1 RN – patient ratio

Urine Output Monitoring:
- RNs should be able to assess Urine output Q 4 hours

Suctioning:
- Q 3-4 hour requirements

Bloodwork:
- Routine & Q 4 Hours
- Additional: Stat orders as needed
- RNs are trained to do bloodwork – please contact the charge nurse to assist with STAT or critical bloodwork. They will assist with phlebotomy or page the phlebotomist.
Appendix G—Medication Reconciliation Form

St. Michael's

Pre-Admission (Home) Medication List and Reconciliation Form
Keep form at the beginning of the Physician Orders

Page No. _____

Allergy/intolerance to Medication & Food
☐ No Known Allergies ☐ Unable to obtain ☐ Allergies as follows (describe reaction):

List all the patient's medication ordered and/or taken prior to admission.
Include prescription, over the counter, and herbal medications.

<table>
<thead>
<tr>
<th>New Correction</th>
<th>Medication Name</th>
<th>Dose</th>
<th>Route</th>
<th>Freq</th>
<th>Time / Date of Last Dose (not PAF)</th>
<th>Continued (Not Required)</th>
<th>Stopped</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ No Pre-Admission Medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Concerns/Follow-up:

<table>
<thead>
<tr>
<th>COMMUNICATION TOOL ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature/Title (for Reconciliation)</td>
</tr>
<tr>
<td>(print)</td>
</tr>
<tr>
<td>First Day Surgery RN review on day of surgery</td>
</tr>
<tr>
<td>Signature/Title</td>
</tr>
<tr>
<td>(print)</td>
</tr>
<tr>
<td>Source of Medication List (check all that apply):</td>
</tr>
<tr>
<td>☐ Patient ☐ Family ☐ MAR from other facility ☐ Medication vials or list ☐ Other</td>
</tr>
<tr>
<td>Pharmacy Name:</td>
</tr>
</tbody>
</table>

INSTRUCTIONS ON REVERSE

PRE-ADMISSION (HOME) MEDICATION LIST AND RECONCILIATION FORM