MIS/Bariatric/Endoscopy Service

Here is an introductory document about your upcoming rotation on our team. First of all, we would like to state our general expectations, which are that you come ready and prepared to work, whether in clinic, on the wards, in multidisciplinary meetings, in the operating room or the endoscopy suite.

You will have the opportunity to work with three surgeons (Drs. Chand, Marcotte and Luchette). Each will work with you in the OR, outpatient clinic, on the wards and in conferences. This is your opportunity to learn as much as you can from each person. We would hope you are interactive during the entire rotation. The more you ask questions the more we see that you are interested in learning.

A progression is expected during the rotation, when we see that you progress (both technically and in patient care), more tasks will be given to you.

The overall cases that the residents and students will be exposed to include general surgery and endoscopy.

An emphasis will be on MIS, however the opportunity to learn about general surgical principles should be the main focus. For students, this includes understanding how to interview a patient, perform physicals, assess and plan for a possible intervention. For junior and mid-level residents this includes understanding the pathophysiology of common diseases that affect the gastrointestinal system including the esophagus, stomach biliary system. There will also be an emphasis on abdominal wall surgery and obesity care.

To help keep you on track during the rotation, residents will be assigned modules on SCORE. Please complete them by mid-rotation. This is for all residents at each level. These modules will allow you to critically evaluate a patient or disease process. The tools in SCORE will include textbooks, radiologic imaging and videos of commonly performed procedures (open, laparoscopic, robotic and endoscopy). These modules will be assigned by the surgeons throughout the rotation. Please check the assignments on a weekly basis.

Seniors (4 and 5)

We expect PGY-5 residents to be present in the OR for all appropriate level cases. We expect PGY-5 residents to send attending surgeons a quick text message, page or phone call at the conclusion of morning rounds (around 7:30 AM or 8:00 AM) to let them know of recent evolution of their patients and discuss management plan for that day.

We expect PGY-5 residents to present cases at M&M conferences if our service is chosen to present a case. If no M&M case is selected to be presented that week, the PGY-5 resident is expected to present a case at the DHC conference (see below).

We expect PGY-5 residents to manage the team and assign tasks and coverage as deemed appropriate to ensure an efficient service. On the weekend, the PGY-5 is to prepare the weekly schedule and assign coverage for clinics and OR cases. A email, sent by the senior, will need to go to all team members including all resident complement, attendings, students, and APNs and include the upcoming week. This will give each person ample time to prepare for the case, clinics, conferences, etc.

If a PGY-5 resident cannot be present in the OR, the PGY-5 resident needs to assure appropriate coverage for the case (either by getting PGY-2 to act as first assistant if appropriate or asking another senior resident available to cover).
Mid-levels (2 and 3)

We expect PGY-2 residents to be present and scrubbed in all cases (there are tasks that can be directed to the PGY-2 resident once the PGY-5 resident masters them, and there is so much to learn by watching colleagues operate).
We understand that PGY-2 residents might need to cover consults and clinics and not be available to come to the OR.
Doing floor work and writing notes will NOT be considered as an appropriate reason to not be present in the OR, as all notes should be written and orders put in before the start of the OR day. The more and earlier you communicate with the attendings the faster the plans can be designed and implemented.
Remember that you need 250 procedures by the end of your PGY-2 to be board-eligible!

Juniors

We expect PGY-1 residents to be present in the OR as much as possible. If 2 residents (PGY-2 and PGY-5) are scrubbed in, the resident is to observe the case on monitors. There are tasks that can be directed to the PGY-1 resident once the PGY-2 resident masters them, and there is a lot learn by watching colleagues operate.
We understand that PGY-1 residents might need to cover consults and clinics and not be available to come to the OR.
Doing floor work and writing notes will NOT be considered as an appropriate reason to not be present in the OR, as all notes should be written and orders put in before the start of the day in the OR.
Remember that you need 250 procedures by the end of your PGY-2 to be board-eligible!

Medical Students

We expect medical students to be present in the OR. It is expected they perform placement of a Foley catheter in an independent fashion by the end of the rotation. They should also learn proper positioning, closing of skin and other wounds.
Opportunities will arise to scrub in (when second resident not available to come to the OR), especially Wednesday AM. We expect medical students to read on the patient (chart and imaging review and question/examine the patient in the pre-op area, if appropriate) and read on the pathophysiology of the underlying disease, the therapeutic options, the operation planned, as well as the surgical anatomy concerning the procedure planned.
Medical students are expected to participate in daily rounds with the residents and present their patients when rounding with the attending.
Medical students are expected to study and read on advanced laparoscopic surgery/bariatrics (see articles and textbook references attached) but also do the necessary readings to cover the objectives of their Surgery rotation.
Residents/Students

We expect you work hard in the simulation lab. Once you have mastered techniques in the lab is when you will apply them on patients. Dr. Marcotte will host training at the simulation lab from 2:30PM to 3:30PM on the 1st and 3rd Wednesdays, all available residents and students are expected to be present.

Tasks in the operating room are progressing in terms of difficulty, only once you complete each of them will you be asked to perform a task on “the next level”, and this varies due to your level of training (both clinical year and technical skills). An example of such skills progression (for a gastric bypass) would be: Second assistant (holding camera) -> First assistant (trocar placement, handling EEA, exposure and fluidity in steps of the operation) -> Operator (Different steps of the operation)

For the operator, the tasks could be divided as
• Initial peritoneal access
• Liver retractor placement
• Running the bowel (measuring BP and Roux limb)
• Stapling (transecting candy cane, transecting bowel, creating gastric pouch)
• Laparoscopic suturing (GJ, closing common enterotomy and mesenteric defect on JJ)
• Doing a side-to-side anastomosis

Residents are to prove they are comfortable and proficient as a robotic bedside assistant prior to have the opportunity to operate on the console.
We expect all residents to complete two (2) operative assessment forms during their rotation.
Part of the “grading” will depend on the preparation for the OR, the OR tasks (appropriate for the level of student and resident).

GI Lab

Participation from residents and students in the GI lab is expected and should not be limited to writing notes and putting in orders. All residents need to make sure they reach their required numbers and expertise to perform endoscopy, both upper and lower. The resident/student assigned to the GI lab will be determined by the senior resident.
Residents will be asked to perform endoscopic maneuvers that are relative to their proficiency.
Residents will need to complete SCORE modules assigned by the end of their rotation and achieve FES certification in order to be board-eligible.

Conferences

We expect all senior residents on the service to present at least one case at the biweekly multidisciplinary DHC conference (a 10 minute powerpoint presentation oriented on the challenging part of the case, with appropriate imaging/pictures of the case and a quick discussion and review of literature on the subject at hand). This conference is attended by students, medical and surgical residents, GI fellows and attendings, radiologists and surgeons. The services that present include MIS/Colorectal/Surgical oncology, radiology and gastroenterology.

We expect all residents and medical students on the service to prepare a 15-minute presentation on a theme of their choice related to our service to be presented to the team at the biweekly (1st and 3rd Wednesday) MIS conference from 3:30PM to 4:30PM. All members are to present once per month.
All members of the team are expected to also attend DHC conference, M and M, Wed morning conferences (Grand rounds and educational conference).
If you will not be able to attend then you must let the chief know and have it posted on the weekly schedule prior to the start of the week. This includes the students that have other educational events.
Example Week

A typical week on the service would be

MONDAY
7 AM  Digestive Health Center (DHC) Conference (2nd and 4th of the month)
AM   Chand OR                   Marcotte MSBC clinic
PM   Chand LUMC GI lab           Marcotte OR
5 PM  M&M Conference

TUESDAY
AM   Chand MSBC Clinic            Marcotte LOC clinic
PM   Chand GMH GI lab   Marcotte MSBC clinic    Hernia clinic (1st and 3rd)

WEDNESDAY
7 AM  Department of Surgery Grand Rounds
AM   OR (Chand and Marcotte)
PM   OR (Chand)
2:30 PM  Simulation lab (1st and 3rd of the month)
3:30 PM  MIS service academic conference (1st and 3rd of the month)

THURSDAY
AM   Chand OR                   Marcotte GMH GI lab
PM   Chand GMH GI lab   Marcotte or Luchette OR    Chand/Marcotte LOC Swallowing Clinic

FRIDAY
AM   Marcotte OR                  (+/- Chand LOC clinic)
PM   Marcotte OR                   Luchette LOC clinic
Summary

1. Each member of the team (resident and students) should plan on being in the OR and outpatient clinic. All notes should be in by 8 AM and all members of the team should write notes.

2. Each member should take the opportunity to review the patients history (OR, wards, outpatient clinic) well in advance to the encounter. Consents are to be obtained electronically using iMed consent tool.

3. Each member should prepare for each case in the OR, review the steps and execution in order to demonstrate progression during the rotation. Ask for a video copy of the procedure.

4. Each member should plan on not only attending educational conferences but also presenting at them.

5. Each member should make an emphasis to round with the attending (medical students that are following the patient should not only write the note but make a thorough assessment and plan and present the patient to the respective attending).

6. Each week a schedule should be sent by the senior (over the weekend).

7. Each week the resident should review SCORE for assignments (they will be given at the start of the rotation and at the beginning of the week).

8. Each level of resident must complete two Operative Assessment Forms as well as their GAGES endoscopy skills evaluations forms.

9. Each senior resident must have completed FLS prior to the start of the rotation.

10. Please use the resources (Smart text, Order sets, Patient Handbooks, Educational videos) that are part of the rotation. Please ask questions if unclear.

11. Each member should meet with Dr. Chand and Dr. Marcotte at the beginning, mid- and at the end of the rotation. Set this up with Saundrya Lomax #72820.
Guidelines for ordering tests and for correct documentation for bariatric surgery patients (preoperative and postoperative)

NPV (Initial clinic visit)-use .MSBCINITIAL CONSULT note

1. Verify what has already been ordered by other providers and cross reference what is recommended by our center for each type of procedure (gastric bypass, sleeve gastrectomy, adjustable gastric band, duodenal switch) and risk of patient (green, yellow, orange and red pathway). Preoperative and post-operative order sets are in EPIC under MSBC

2. Open the MSBC INITIAL VISIT-2013 smartset and complete each required dropdown. Do not delete or alter what is requested. This is to be done only if bariatrician/APN did not already place these orders in.

3. Look for the tab with the anticipated surgery. If unsure, select gastric bypass.

4. Click all items in that tab. If a patient had a cholecystectomy, they do not need an abdominal U/S.

5. In the ORDERS tab, order an EGD to be performed at GOTTLIEB (unless instructed otherwise).

   • When asked If Yes, please select Endoscopist: select Dr. Chand or Dr. Marcotte (attending that evaluated the patient, first available, or patient choice)

-Order a colonoscopy if they are 50 y.o or more and did not have a recent colonoscopy done. If African American order a colonoscopy if they are 45 yo or more and did not have a recent one done.

   • When asked If Yes, please select Endoscopist: select Dr. Chand or Dr. Marcotte (attending that evaluated the patient, first available, or patient choice).

**Please give pt and explain the handout for the appropriate testing (EGD /colonoscopy). The patient will need prescriptions for Golytely and Magnesium Citrate (APN will provide closer to date of exam).

6. In the CARDIOLOGY ORDERS tab, order an EKG 12-LEAD-ALL LOYOLA LOCATIONS, unless an EKG or stress test has been done within the past year. If the patient is already followed by a cardiologist, will need cardiac clearance (pre-operative testing deferred to cardiologist).

7. If instructed to, order a SLEEP STUDY WITH CONSULT – LOYOLA

8. Select appropriate DIAGNOSES and be sure to add them to the active problem list
H&P (pre-op apt)-use smart text note MSBC Pre-op progress note

1. Review the pathology findings at the time Endoscopy (ie biopsy results for H.Pylori) and document the findings and treatment. Document any cardiac or pulmonary testing and any lab abnormalities.

2. Please assure the electronic consent (with iMed) is completed (no abbreviations should be used). Select the robotic procedure if that is what is planned.

3. Prescribe the required medications:
   - Protonix 40 mg tab take 1 tab daily Dispense 30, 2 refills (give unless they are already on a PPI)
   - Colace 100 mg capsules Take BID PRN Dispense 60, 3 refills
   - Zofran ODT 8mg Take 1 tab q 8 h PRN Dispense 10, 3 refills
   - Scopolamine (Transderm-Scop) 1.5 mg. Apply one patch and change Q72 hours Dispense 4 patches, 2 refills
   - Tylenol 325 mg Take 2 tabs q 6 h PRN Dispense 60 tabs. 0 refill
   - Oxycodone 5 mg immediate release Take 1 tab q 6 h PRN Dispense 10 tabs. 0 refill
   - Neurontin 300 mg Take 1 capsule q 8 h PRN. Dispense 21 Cap. 0 refill
   - Carafate 1gm/10ml solution. Take 10 ml 4 times a day. Dispense 420 ml 2 Refills (Only needed if on NSAIDS including Aspirin)

4. Make sure that the medical assistant has given the patient the red handout titled “It’s official you have a surgery date”

DAY OF SURGERY orders: “Phases of care”

1. On the days preceding the operation, open the patient’s chart from the schedule.
2. Thoroughly review the patient’s chart (this will allow you to prepare for the case)
3. Open “Surg/Proc Nav” navigator
4. Select “Pre” on top of the screen
5. Open the Inpt/Pre Ordersets tab
6. Use the “IP MSBC BARIATRIC SURGERY DAY OF SURGERY ORDERS” orderset
7. Fill out necessary orders. Do not forget to order prophylactic antibiotics.
   - Note the need to increase dosage of Ancef to 3g for patients over 120 kg.
   - If they have a Penicillin allergy, please order Aztreonam AND Vancomycin, not one or the other. Note the dose of Vanc of 1.5 grams for patients over 90 kg.
   - For MRSA positive patients, please order Vancomycin 1g IV. Vanc takes more than 1 hour to infuse so should be started at least 1.5 hour before the start of the case.
8. Sign the orders
9. Select the case to link those orders to.
DAY OF **ENDOSCOPY** orders: “Phases of care”

1. On the days preceding the endoscopy, open the patient’s chart from the schedule.
2. Thoroughly review the patient’s chart (this will allow you to prepare for the case)
3. Open “Surg/Proc Nav” **navigator**
4. Select “Pre” on top of the screen
5. Open the **Inpt/Pre Ordersets** tab
6. Use the **GI LAB INPATIENT/OUTPATIENT PRE-ORDERS** orderset
7. Select the appropriate procedures(s) to be done
8. Fill out necessary orders. Do not forget to order **prophylactic antibiotics if a PEG will be placed or dilation will be done**. Note the need to increase dosage of Ancef to 3g for patients over 120 kg. If they have a Penicillin allergy, please order Aztreonam AND Vancomycin, not one or the other. Note the dose of Vanc of 1.5 grams for patients over 90 kg. For MRSA positive patients, please order Vancomycin 1g IV. Vanc takes more than 1 hour to infuse so should be started at least 1.5 hour before the start of the case.
9. Sign the orders
10. Select the case to link those orders to.

**POST-OPERATIVE** orders: “Phases of care”

1. On the day of the operation, open the patient’s chart from the schedule.
2. Open “Surg/Proc Nav” **navigator**
3. Select “Post to Floor” on top of the screen
4. Open the **Med/Orders Rec** tab
5. Review current orders
6. Click “Next” to Reorder Prior to Admission Meds
7. For each entry, choose “Order”, “Replace”, “Don’t Order” or “Discontinue”
8. Click “Next” to put in New Admission Orders
9. Use the **“MSBC BARIATRIC SURGERY POSTOP ADMISSION ORDERS (LUMC)” orderset**
10. Click and fill out necessary orders.
Sign the orders

**ROUNDS** orders

1. On the day of rounds, open the patient’s chart from the Patient List.
2. Open “Rounding” **navigator**
3. Open the **Med/Orders Rec** tab
4. Review Prior to Admission Meds
5. Click “Next” to Reorder Prior to Admission Meds
6. For each entry, choose “Order”, “Replace”, “Don’t Order” or “Discontinue”
7. Click “Next” to put in New Admission Orders
8. Sign the orders
**DISCHARGE**—use the “Discharge” *navigator*

1. On the day of discharge, open the patient’s chart from the Patient List.
2. Open “Discharge” *navigator*
3. Open the Med/Orders Rec tab
4. Review Prior to Admission Meds
5. Click “Next” to Review Orders for Discharge
6. For each entry, choose “Modify/New Prescription”, “Resume”, “Stop Taking” or “Don’t Prescribe”
7. Click “Next” to put in New Orders for Discharge
8. Sign the orders
9. Write discharge instructions using *smart text note* [MSBC Bariatric Surgery Discharge Instructions]
10. Write Discharge Summary using [msbcdcssummary]

**RPV (Post-op visits)—use [MSBCINITIALPOSTOP note]**

1. Review and document the liver pathology findings at the 1 week post-op visit
   - If the patient has fibrosis or if their NASH score is 4 or above order a hepatology referral for Dr. Kallwitz. All post-op orders are in the [MSBC OP Follow-up orders 2013 order set]

2. At the 1 month post-op, visit Actigall should be ordered if their pre-op ultrasound was negative for gallstones
   - Ursodiol 300 mg capsule. Take 1 capsule BID for a total of 6 months. Dispense 60, 5 Refills
REFERENCES

Attached are Classic Papers and Guidelines in the field of metabolic and bariatric surgery as well as advanced laparoscopic surgery that we invite you to review before the start of your rotation.

Resident will be assigned these modules on SCORE which you are expected to complete by mid-rotation

**MIS Surgery PGY1**

- Morbid Obesity
- Gastroesophageal Reflux/Barrett's Esophagus
- Dysphagia
- Inguinal and Femoral Hernia
- Ventral Hernia

**MIS Surgery PGY2**

- Morbid Obesity
- Morbid Obesity - Operation
- MIS Equipment and Troubleshooting
- Physiologic Changes Associated with Pneumoperitoneum
- Videos
  - Colonoscopy
  - Endoscopy, Flexible, Upper Gastrointestinal
  - Laparoscopic Cholecystectomy
MIS Surgery PGY5 - First month

Morbid Obesity - Operation
MIS Equipment and Troubleshooting
Principles and Techniques of Abdominal Access
Physiologic Changes Associated with Pneumoperitoneum
Morbid Obesity

Videos
Endoscopy, Flexible, Upper Gastrointestinal
Colonoscopy
Laparoscopic Cholecystectomy
Laparoscopic Ventral Hernia Repair
Laparoscopic Roux-en-Y Gastric Bypass

MIS Surgery PGY5 - Second month

Hiatal Hernias
Antireflux Procedure - Laparoscopic
Gastroesophageal Reflux/Barrett's Esophagus
Esophagomyotomy (Heller).
Paraesophageal Hernia - Laparoscopic Repair
Abdominal Wall Reconstruction - Components Separation

Videos
Laparoscopic Heller Myotomy
Laparoscopic Inguinal Hernia Repair
Laparoscopic Paraesophageal Hernia Repair
Laparoscopic Nissen Fundoplication
We identified several textbooks as a reference for this rotation:

**Minimally Invasive Bariatric Surgery**

which you can access online through the Loyola library at [http://pegasus.luc.edu/vwebv/holdingsInfo?searchId=805&recCount=25&recPointer=3&bibId=2152733](http://pegasus.luc.edu/vwebv/holdingsInfo?searchId=805&recCount=25&recPointer=3&bibId=2152733)

We recommend you read these chapters first

7. Patient Selection: Pathways to Surgery
9. Operating Room [...] for Laparoscopic Bariatric Surgery
10. Anesthesia for Minimally Invasive Bariatric Surgery
11. Postoperative Pathways in Minimally Invasive Surgery

**Sleeve gastrectomy**
14. Technical aspects
15. Outcomes
16. Complications

**Laparoscopic Adjustable Gastric Banding**
19. Technique
20. Outcomes
21. Post-op management
22. Complications

**Gastric Bypass**
24. Transoral Circular Stapled Gastrojejunostomy Technique
28. Outcomes
29. Complications
31. Nutrition
38. Endoluminal Bariatric Procedures
44. The High-Risk Bariatric Surgery Patient
Additional Books and articles

Evidence Based Approach to Minimally Invasive Surgery

Two copies are in the resident room

However, if you cannot locate one of these, please stop by Dr Chand’s office and he will be able to give you a copy for the rotation.

Sections in the textbook that are relevant include

1. General
2. Esophageal
3. Gastric
4. Biliary Tract Surgery
5. Hernia Surgery

If you have any questions please do not hesitate to ask.