ACCESS

(Acute Care Emergency Surgical Services)

&

ON CALL GENERAL SURGERY

A GUIDE FOR RESIDENTS & MEDICAL STUDENTS

Victoria Hospital & University Hospital

Updated: October 25, 2021

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Welcome to ACCESS General Surgery

The *Acute Care and Emergency Surgery Service* (ACCESS) is an inter-professional general surgery service that is responsible for all consultations in the emergency department and inpatient wards, and acute general surgery patients admitted to the ACCESS team. This service was created to improve patient flow through the emergency department and streamline general surgery consultations throughout the hospital. Each day, specific OR time is set for ACCESS specifically to ensure acute general surgery patients are receiving surgical services in a timely manner. This information is important to residents on our elective teams as well, as you will be functioning like the ACCESS team when you are on-call at night or over the weekends. As well, you may be asked to assist the ACCESS team during the day time throughout the week.

This is a busy service with lots of learning opportunities! This orientation manual was designed to provide you with an overview of the service, expectations, and useful tidbits. If you have any questions or concerns after reading this manual, please feel free to speak with your Senior Resident or the Nurse Practitioner (NP).

Team Members

- General Surgery Consultant (each week is a different consultant)
- Senior Resident
- Intermediate Resident
- Junior Resident
- Clerks
- Nurse Practitioner
- General Surgery Coordinator
- Allied Health (Occupational Therapy, Physiotherapy, Social Work, Dietician, Speech Language, Pharmacist, Skin Wound and Ostomy Team [SWOT])

Important Phone & Pager Numbers

Victoria Hospital – Important Numbers

General Surgery North	54895	SWOT	14386
General Surgery South	54902	CCAC	14321
ACCESS Nurse Practitioner (Kim Shantz)	15855	MRI facilitator	55008
General Surgery Coordinator (Sonja McLeod)	15118	CT facilitator	56171
Social Work	14927	Ultrasound facilitator	55332
Occupational therapy	18780	IR facilitator	54985
Physiotherapy	14447	Pathology Rush	32956
Speech Language	14927	PICC Nurse	18058
Dietician	14259	General Surgery Clinic	75792
Pharmacist	17596	Admitting	58116

VH General Surgery Faculty & Office Support

Muriel Brackstone	15770	E4-107	58712	76617	Kandie Magorka
Daryl Gray	14610	E2-217	76583	76546	Valerie Coad
Steve Latosinsky	17670	E4-107	58740	58744	Angela Faulkner
Rob Leeper	19728	E2-215	58547	58775	Gurinder Gill
Ken Leslie, **Chair/Chief**	17639	E2-213	76778	76764	Shelley Coad
Allison Maciver	15246	E4-107	53658	58744	Olivia Dye
Brad Moffat	14691	E2-216	58547	58775	Gurinder Gill
Mike Ott	15966	E2-211	58260	58378	Marcie Vandenberghe
Neil Parry, **VH Site Chief** **Director Trauma Program**	14883	E2-217	76583	76546	Valerie Coad
Kelly Vogt **Assistant Director Trauma** **Resident Research Coordinator** **Assistant Program Director**	15829	E2-220	57420	58273	Laura Allen
Terry Zwiep	19553	E2-214	58260	58378	Marcie Vandenberghe
Ella Brackstone **Central Referral Clerk**		E2-216	57420	58273	

University Hospital – Important Numbers

General Surgery 8IP	32400	Admitting	35191 / 33191
General Surgery 8OP	33188	Angio/IR Suite	35210
8IP HASU	36897	OR Booking	35846
General Surgery Managers Rebecca Walters Barb Bergtroyer	 17425 / 35613 17292/35663	PICC Nurse	13962 / 34864
Charge Nurse Phone	35441	Pharmacist	19111 / 34805
Social Work	17648 / 32798	CCAC	14770 / 32690
Occupational Therapy (Carol-Ann/Andy)	15135	Physiotherapy	13780
Dietician (Sarita)	15876 / 35876	Dietician (Helen)	15458 / 36721
SWOT (Lina)	15805 / 35805	SWOT (Megan)	18485 / 34104

UH General Surgery Faculty & Office Support

Nawar Alkhamesi	13397	UH – C8-116	33985	33052	Melissa Bedard
Patrick Colquhoun, **UH Site Chief**	14498	UH - C8-128	33287	33313	Katherine Pereira
Ward Davies	10433	UH - B8-007	33458	33132	Emma Boug
Ahmad Elnahas	13285	UH – C8-005	33612	33213	Ashlynn Pereira
Jeff Hawel	13387	UH – C8-120	32963	33569	Marcie SimmondsHill
Rich Hilsden	19902	UH – C4-211	32920	1-855-538-2926	Stephanie Vandeloo
Tina Mele	15973	UH – C8-004			email or page directly
Doug Quan **Fellowship Director HPB/Transplant**	13831	UH - C8-122	33355	33264	Evelyn Belanger

Christopher Schlachta **Medical Director CSTAR**	17585	UH - B7-216	33478	33481	Karen McCormick
Anton Skaro	13280	UH - C4-211	32904	33858	Lauren Gillespie
Ephraim Tang	14245	UH – C4-211	32920	33858	Stephanie Vandeloo
Julie Ann Van Koughnett **Program Director**	13577	UH – C8-002	33312	33260	Karen Sabine

General Surgery Administrative Support

Christine Bruckschwaiger **Division Administrator**	VH – E4-112	33269	33068	Cell: 519-636-5497
Rachel Liston **Residency Program Administrator**	VH – E2-214	55983		

Pediatric General Surgery

Andreana Butter **Chair/Chief Pediatric Surgery**	14223	VH – B1-188A	58401	58241	Lisa Tingey **Admin Assistant** Joanne Collie **Medical Secretary**
Jennifer Lam	19607	VH – B1-132A	58578	58241	Joanne Collie
Neil Merritt	15997	VH – B1-192A	58454	58465	Emma Campbell
Nathalie Seemann	19884	VH – B1-132A	58578	58241	Emma Campbell

Weekly Schedule

* Start time each morning will be communicated by the Senior Resident depending on the number and acuity of patients and rounds for the day.

Victoria Hospital

	Monday	Tuesday	Wednesday	Thursday	Friday
Teaching Rounds		7-8 (once a mth)	7-8		
Clinic					
OR	8–3	8 - 3	9–3	8 – 3	8–3

*every Tuesday at 0830 is interdisciplinary rounds at Victoria Hospital in the B9 General Surgery conference room. One representative from each team should attend to discuss discharge planning for each patient.

University Hospital

	Monday	Tuesday	Wednesday	Thursday	Friday
Teaching Rounds			7-8		
Clinic – no clinic at UH					
OR time varies with ACCESS					

Daily Routines

Victoria Hospital

Morning Ward Round:	between 5:30 am - 6:30 am (to be determined daily by the Senior Resident)
Morning Handover:	in the OR lounge, with consultant, ACCESS and on-call team around 7:00 am to 7:30 am
ACCESS OR /Consults:	all hours between morning handover and 5:00 pm
Tuck-In Rounds:	end of the day with Senior Resident(s)
On-call Handover:	5:00 pm with the on-call team in the OR lounge

University Hospital

Morning Round:	between 5:30 am- 6:30 am (to be determined daily)
Morning Handover:	weekdays 7:00 am-8:00 am in the Duff Room (C8-125) with consultant, ACCESS & on-call team
Weekend:	7:00 am -8:00 am in the Duff Room C8-125, unless there are no admissions the night prior or ORs scheduled for the day, then the on-call senior familiar with the patients will call/text the surgeon to discuss and plan the day.
ACCESS OR / Consults:	all hours between morning handover and 5:00 pm
Tuck-In Rounds	end of the day with Senior Resident(s)
On-call Handover	5:00 pm in the Duff Room (C8-125)- all on-call and ACCESS residents must attend

Victoria Hospital

General Surgery Ward	B9-100	Endoscopy Suite	B2-220
OR Female Change Room	D2-319	General Surgery Clinic	E2-200
OR Male Change Room	D2-331	B6 Junior Call Room	Code: 3629
Interventional Radiology	C2-200	Resident Locker Room (just past the elevators)	B9 – 001

University Hospital

General Surgery Ward	8th Floor	General Surgery Clinic	8th Floor
OR	2nd Floor	Locker Room (Male Rm B8-023)***** Locker Room (Female Rm C8-101)***** Call Room	8th Floor Code: 3208# 8th Floor-no code 10th Floor Code: 4325*
MSICU	2nd Floor	Interventional Radiology	2nd Floor
Duff Conference Room	C8-125: code 3415		

***Note**: Lockers (Male & Female at University Hospital) are assigned to junior residents by Christine Bruckschwaiger. An email will be forwarded to you with locker information, please use assigned locker.

PowerChart Lists

ACCESS General Surgery – The list includes all admitted patients to the service and is maintained by Admitting only (no one else can add or remove patients from the list). You can add this list to your PowerChart screen ahead of time by clicking list maintenance, new, medical service, and ACCESS.

NOTE: PowerChart has an order *Change of Most Responsible Physician* if you need to change the Surgeon or Service at any time. This notifies the ward staff of any changes in service/surgeon so the proper team is paged. You may also call admitting to have this officially changed in PowerChart.

ACCESS Consults – This list contains all active consultations, and you can add patients to the list, but only the Senior Residents should be removing patients. If a patient was a consult that is later admitted to ACCESS, you can remove them from the list once the patient is visible on the admitted list. You will be proxied to the list a couple of days before your rotation, or if not ask your Senior Resident to proxy you.

ACCESS Dictations – All patients who require a dictation (admission note, discharge summary, etc.) should be added to this list. Once you have dictated a note, please remove the patient from the list. Ask your Senior Resident to proxy you to the lists.

ACCESS PATIENTS FOLLOW UP APPOINTMENTS

When an ACCESS PATIENT is discharged after hours (evenings, weekends or holidays):

1. Physicians must put an order for a follow up in the computer
2. Floor Clerks will receive the communication of the follow up
3. Floor Clerks MUST call the doctor's office and leave a message with the patient's PIN and follow up order
4. Floor Clerks will continue to make the appointment cards but will write "MESSAGE LEFT" on the card for the patient
5. Nurses will instruct patients at discharge to call the office and make their own appointment once the office is open

Note: when ACCESS patients get discharged during normal business hours the floor clerks will call the physician's office and make the appointment over the phone.

Team Member Responsibilities

Senior Resident

- Leads morning rounds and creates plans for the patients with the team
- Primary operator/first assist with consultant
- Second assist during intermediate operating days
- Reviews consults and determines management plans
- Delegates team member activities after handover
- Assist with ACCESS clinic
- Reviews floor issues/discharge planning with team

Intermediate

- Assists Senior Resident with morning rounds
- May enter morning PowerChart orders
- Splits operating room time with Senior Resident
- Second assist in OR when possible
- Reviews consults and determines management plans with Senior Resident
- Reviews floor issues/discharge planning with team
- Assists with ACCESS clinic
- Maintains ACCESS morbidity and mortality list
- Assumes Sr Resident role when Senior Resident is away
- Assume Jr Resident role when there are none available (post-call, vacation etc.)

Junior Resident

- Management of floor issues
- Enter orders on PowerChart during morning rounds
- Follow up blood work/investigations ordered in the morning
- Ensure daily completion of all items on the "green sheets" located on the ward
- Dictation of more complex discharge summaries
- See consultations and admissions, reviews with Sr. Resident
- Attend weekly nursing rounds when the nurse practitioner is not available
- First call for emergency room and inpatient consultations
- Assists in OR if/when floor/consults issues are dealt with
- Teach clerks how to manage/assess surgical patients
- Assist with ACCESS clinic

Clerk

- Print team lists for all team members at the beginning and end of the day
- Write daily progress notes during morning rounds
- Attempt to deal with items on the "green sheets" located on the ward
- Follow up blood work/investigations ordered in the morning
- Dictation of routine discharge summaries
- Assist with consultations, reviews with Jr. Resident
- Assists with OR when possible (one is in OR/one helps with floor/consults)
- Work with Jr. Resident to enter orders and manage surgical patients
- Assist with ACCESS clinic

Nurse Practitioner

- Management of ward while surgical team is operating
- Create plans for patients with the team and perform family meetings
- Round each morning to provide input, charting and/or entering orders
- Review orders, blood work and tests of admitted patients daily
- Available for any questions/concerns from residents
- Assist with ACCESS clinic and consultations as needed
- Discharge plan and liaise with allied health
- Complete patient specific paperwork (insurance forms, notes for work, EI forms)
- Dictation of discharge summaries (Mon – Fri from ward)
- Assists with Jr. Resident orientation

Call Expectations

The on-call schedule will not exceed 1:3 for Senior Residents (home call) and 1:4 for Jr. Resident (in house), General Surgery has implemented a "night shift" for junior residents rotating on the service. The shifts run Monday to Thursday and each resident would do 4 shifts in a 28-day block. Residents have the weekend off starting the Friday morning after they finish their night shift until the following Monday morning. The resident starting the night shift is not expected to report for duty the morning of the start of the night shift. Residents are to be excused from clinical duty no later than 7:00 am.

At Victoria Hospital, there is a junior resident trauma pager that must be carried at all times by the junior resident on call in addition the regular assigned pager.

Junior Resident On-Call responsibilities:

- Management of all admitted general surgery patients
- First call for consultations from the emergency department and wards
- Review any floor concerns you are not comfortable with and all consults with the Senior Resident on-call (discuss specifics with your Senior Resident that evening when starting your shift)

NOTE: When post-call forward your pager to another member of the ACCESS team or your elective team.

Call Switching Process – Residents may change call amongst each other but **MUST** confirm with the Chief Resident. Additionally, Christine Bruckschwaiger (christine.bruckschwaiger@lhsc .on.ca) must be notified before the call change is made official in order to update the Switchboard On-Call schedule.

OR Expectations / Policies / Bookings for Junior Residents

If two Junior Residents are present on the team, one may be delegated to the OR if the inpatient workload permits. It is the responsibility of those two residents to fairly divide the time. If there is only one Junior Resident, then the expectation is that floor concerns and consults are fully addressed prior to joining the team in the OR. Non-surgical, off-service residents are welcome to join the OR, when feasible, if this is within their own person goals for the rotation, but

no OR expectations are required of you. Surgical residents (on and off-service) are expected to assist in the OR, perform the pre-procedural pause, and supervise medical students inserting foley catheters with proper technique, when feasible.

Intra-operatively, the expectation is that the Junior Resident knows the patient, including the past medical history, relevant blood work, relevant imaging and anatomy and their indications for surgery. Technical proficiency is not expected and will be taught in the OR where needed. The Junior Resident is expected to complete the post-op orders at the end of the case and place in a planned state for the PACU nurse to initiate.

OR BOOKING

- All booking sheets are present at the OR front desk. You must notify the charge nurse and anesthetist on-call of any new bookings (usually the Senior Resident or Intermediate Resident will do this unless you are told otherwise). The booking sheets must be fully completed, including procedure name, special equipment, time requested, and booking urgency (A, B or C1/2). The Senior Resident/Intermediate will walk you through this process.

VH OR Booking

- There is dedicated ACCESS OR time from Monday to Friday and cases are booked on the pink ACCESS booking sheets available at the OR front desk during this time (normally 0800 – 1500). The white booking sheets are to be used when a case is being booked in the regular emergency time (after 1500).

UH OR Booking

- There is no dedicated ACCESS OR time daily, therefore booking an operative case is completed by filling out a booking sheet at the OR front desk, and notifying the charge nurse and anesthetist on-call.

Trauma (Victoria Hospital only)

*When a *Trauma Team Activation* is initiated, the ACCESS Junior Resident and Senior Resident trauma pager will be activated with an estimated time of arrival, and you should proceed to the Trauma Bay located in the Emergency Department. The ACCESS Junior Resident who has ATLS training will carry the pager from handover until 5pm, and the on-call Junior Resident will carry the pager at all other times. The trauma will normally be run by the Trauma Team Leader, but if the TTL has not yet arrived, then an Emergency Physician or the General Surgery Senior Resident will be in charge. The senior resident will be paged at the same time as the junior resident and will present to all trauma activations in addition to the trauma team.

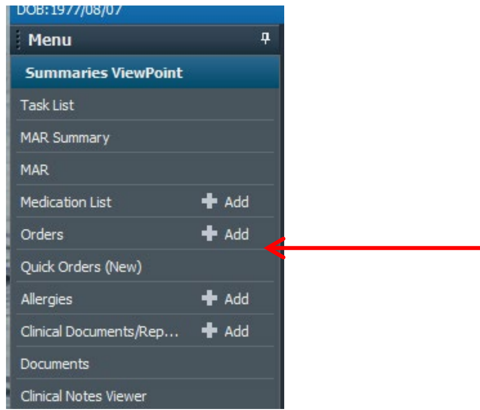
The Junior Resident's responsibility during a trauma is to:

- Listen to the TTL who will delegate a role within your capabilities
- Surgical residents only will be expected to perform an abdominal exam and focused assessment with sonography for trauma (FAST)
- Chest tube insertion under supervision (unless a Traumatology resident is present)
- Dictate a general surgery consultation note after the full extent of injuries is determined (if possible)

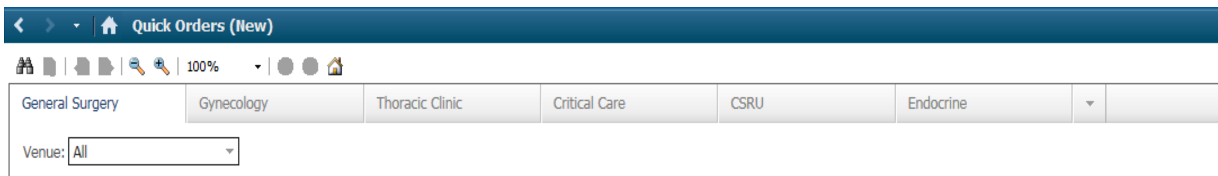
Quick Orders

A *General Surgery Quick Orders* page is available on PowerChart as a reference for orders typically used on service, especially noting the power plans/order sets that are specific to General Surgery and must be used. Below is how to access quick orders.

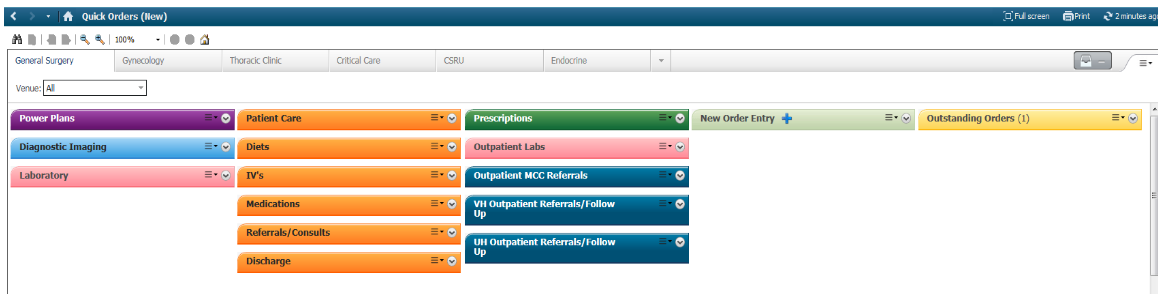
1) Click on the Quick Orders (New) in the menu bar to the left hand side of the screen of PowerChart.



2) After selecting *Quick Orders,* choose **General Surgery** from the drop down arrow (if necessary). The drop down arrow displays all *Quick Orders* available for the different services within LHSC. You can toggle back and forth between them.



3) General Surgery Inpatient and Clinic Quick Orders will then be displayed. You can click on the arrows to see what orders are available under each widget.



Column #1 - **Power Plans** (admission, ERAS, Surgery Pre-op, Surgery Post-op and other power plans), **Diagnostic Imaging** and **laboratory**
Column #2 - **Inpatient Orders** - diets, antibiotics, IV's, medications, referrals/consults & discharge
Column #3 - **Outpatient / Clinic Orders** - outpatient prescription is for clinic only

Consults

The ACCESS team is responsible for all consults from the emergency department and from inpatient services from 0700 until 1700 during weekdays. After 1700 and on weekends the on-call team will be responsible and any patients that are admitted or need to be followed will be handed over to the ACCESS team on Monday at morning rounds.

All consults should go through the Consult Pager. This is a group pager name "General Surgery Consults – VH/UH Campus" at extension 19570 and 19327, respectively. You will need to "Take On-Call" to receive the consults to your

personal pager through Beep. Your senior resident can assist you with this and ensure you are added to the group. Please ensure the incoming resident "Takes On Call" from you before you leave.

The Junior Resident is the first call for all consults and is responsible for triaging consults and determining whether or not it is safe to send a medical student to see a patient. The Junior Resident then reviews the case with either the Intermediate Resident or the Senior Resident. It is usually a good idea to "eye-ball" a patient prior to having a clerk perform the consult on their own. All sick patients should most certainly be seen by the Junior Resident and **not** a medical student.

It is expected that the Junior Resident will initiate initial resuscitation or simple medication orders (eg. analgesics) for a patient prior to reviewing with the Senior Resident. Ultimately the disposition of ED consults (eg, admit to ACCESS, consult another admitting service or discharge home) will be determined after reviewing the consult with the Senior Resident.

NOTE: All consults **MUST** be since **within 15 minutes** of receiving the consult. Consults that may be operative (eg. appendicitis, free air, ischemic bowel, incarcerated hernias, necrotizing fasciitis, trauma) should be verbalized to the intermediate or Senior Resident at time of receiving the consult. This allows the Senior Resident to be aware of the patient in order to review them in a timely fashion and plan how to efficiently use the ACCESS OR time to accommodate that patient.

Consulting Another Service

When you are consulting another service, please enter the order in PowerChart as documentation and communication.

The types of orders you can enter include:

- *Consult to Adult Palliative Team LHSC* – for all adult palliative care requirements.
- *Consult to Geriatric Consult Liaison Team* – for all patients 65 and older
- *Consult to Physician* – for any other service

*****For the Palliative Care Team and Geriatric Liaison Team please be specific with the details in your PowerChart order, as these orders reach those teams specifically, and do not necessarily require a phone call to the team.

NOTE: In an emergent situation, such as stroke, STEMI, or cardiac/respiratory arrest, you can initiate the following to assist you emergently via switchboard by calling 55555 for Code Blue, Pre-Arrest, Code Stroke and Code STEMI. If you require the Critical Care Outreach Team, call 33333 for assistance.

Admissions

Admissions may occur from the emergency department or clinic, and all potential admissions must be reviewed with your Senior Resident prior to agreeing to admit the patient or entering orders. To make an admission to the service as simple as possible, please consider the following.

"Admit to" Order

All consults must have an "Admit to" order to be admitted to the service. Service is ACCESS.

Resuscitation Status

All admitted patients must have a discussion around goals of care and documented resuscitation status. The order is "Resuscitation Care Status."

General Surgery Admission Order Set

There is a *SURG – General Surgery Admission* order set in EMR orders. Please use this order set for all admissions. You MUST review the order set each time to ensure you are ordering specific to the patient, and not randomly click all possible boxes. Some general tips:

- Diet: if they will possibly have a procedure, will need to be NPO. If possible procedure the following day, need to be NPO at midnight. Can give clear fluids up to 2 hours before a procedure.

- Pain medications: generally all patients should have around the clock Tylenol ordered. Do not give NSAIDs after bowel surgery. Do not give NSAIDs without a PPI also ordered. Select either hydromorphone OR morphine if required.
- Generally all patients should have daily CBC, lytes, Cr at minimum.
- If the patient requires an NG tube, order the NG tube to low intermittent suction. Order an xray to check placement – a communication order must be placed once you have checked the placement on xray for nurses to be able to put medications down the NG tube. Put patients on a PPI. Generally order fluid replacement; usually normal saline + 20 mmol K 1:1 or ½:1.
- Most patients should receive VTE prophylaxis. If not, ensure there is a clear reason and this is handed over.
- Consider allied health: physiotherapy, occupational therapy, SWOT, social work; this is particularly important in frail patients or patients with potential barriers to discharge.
- Medications can be ordered "on call" which means they will be sent with the patient to the OR. This can include VTE prophylaxis (for long cases) and antibiotics (generally, cefazolin for the majority of cases, add metronidazole for anaerobic coverage in bowel procedures).

SURG - General Surgery Admission (Planned Pending)
Resuscitation Status
Please ensure paper resuscitation form is completed/reviewed
Alerts
☐ Airborne Precautions
☐ Contact Precautions
☐ Droplet Precautions
☐ Droplet/Contact Precautions
Diet
☐ NPO
☑ Advance Diet as Tolerated
☐ Clear Fluid Diet (Clear Fluid Diet LHSC)
☐ Regular Diet (Regular Diet LHSC)
☐ Cardiac Diet (Cardiac Diet LHSC)
☐ Diabetic Diet (Diabetic Diet LHSC)
Activity
☑ Activity as Tolerated

<u>Preprinted Order Sets</u> Consider the following order sets on all admitted patients.

1. **COMMON – Electrolyte Replacement** - This order set enables nursing to replace common electrolytes (Mg, K, Phos) based on preset orders, without needing to page for regular replacement. Always ensure you activate the order that prevents nursing from using this order set if the patient's creatinine is greater than 200. Otherwise, this should be ordered in most patients (will prevent many pages!)

2. **COMMON – Nausea/Vomiting** – Ondansetron and diphenhydrinate po or IV will be your main selections, but if your patient is elderly please reconsider ordering diphenhydrinate due to the potential of the medication causing delirium.

3. **COMMON – VTE prophylaxis** – Most patients admitted to general surgery should be placed on VTE prophylaxis. There are only a few reasons why dalteparin prophylaxis should be held (active bleeding and awaiting IR procedure). ***If you are considering not ordering dalteparin prophylaxis on admission, please discuss your concerns with your Senior Resident first.***

Victoria Hospital

- Prophylaxis dalteparin is given at bedtime (@ 2200), therefore, when ordering change the time to 2200 or at bedtime.

University Hospital

- Prophylaxis dalteparin is given daily (@ 0800), which the orderset already defaults to.

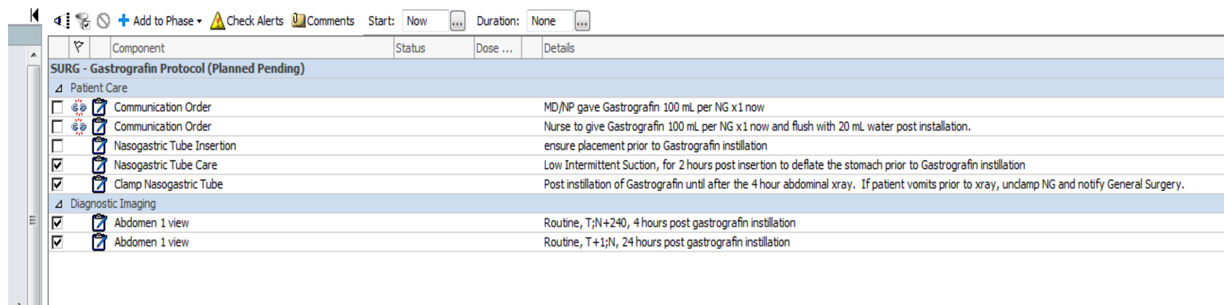
*****At times, a patient may require prophylaxis dalteparin on call to the OR, confirm the need with your Senior Resident.

4. **SURG – Gastrografin Protocol** – If your admission requires the Gastrografin Protocol for small bowel obstructions due to adhesions there is a standardized protocol found under Quick Orders or by searching for the order set.

If Gastrografin is to be given on a **General Surgery ward** (B9-100 at VH or 8 Inpatients at UH), *you may give the contrast **or** order for nursing staff to give the contrast.* If nursing is to give the prep, please inform the nurse / nursing unit that the order has been entered and initiated to ensure timely administration of the contrast. Nursing will document the contrast on the IN/OUT record and follow up with the x-ray department related to the timing of the abdominal x-rays at the 4 and 24hr mark as per protocol.

If Gastrografin is to be given in the **ER or on any other ward**, *the contrast is to be given by the NP or physician*. By selecting the *communication order* that says the contrast was given by the MD/NP, this is the time stamp (your documentation) of the contrast being given. When ordering the abdominal x-rays, please change the date/time required to reflect 4 and 24 hours post instillation of the contrast.

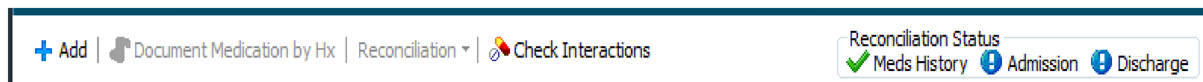
Below is how the standardized Gastrograffin Protocol appears in PowerChart.



Medication Reconciliation

When admitting a patient, please ensure the *most accurate* **Best Possible Medication History** has been completed under the *Document Medication by Hx* tab on PowerChart to ensure our team is aware of all patients' home medications. Once a medication history has been completed on admission, a green check mark will be placed beside the medication history, as shown below.

Please ensure that you perform a *Medication Reconciliation* on **EVERY** patient on admission, post-op, transfer within the hospital and discharge. Once this has been completed, a green check mark will occur beside Admission and/or Discharge. When you perform medication reconciliation on admission, order all of the patient's home medications, and then **suspend** the medications you do not want the patient to receive. This way all medications are visible on the MAR as a visual reminder to the medical team of the home medications the patient has not yet restarted in hospital.



Medications to Hold on Admission

When holding any medication on admission or post-operatively, consider the SAD MAN acronym. These medications are important to hold as many general surgery emergency admissions present with hypovolemia and these medications may worsen hypotension, but perhaps more importantly may exacerbate acute kidney injury. Holding any home medication should be considered on a case-by-case basis.

NOTE: Beta-Blockers are shown to reduce cardiovascular complications in the perioperative period and should be held in only extreme circumstances.

S – sulfonylureas
A – ACE inhibitors
D – diuretics, direct renin inhibitors
M - metformin
A – angiotensin receptor blockers
N – non-steroidal anti-inflammatories

Typically, any form of anti-thrombotic or anti-platelet should be held on admission in preparation for surgery. There are a few indications when holding a medication has more risk then benefit, such as a fresh bare metal coronary artery stent (within 12 months of insertion), mechanical aortic valve, or in atrial fibrillation with a high CHADS score. In some of these cases we may elect to bridge patients with either full-dose low-molecular weight heparin (eg. Fragmin) or with a heparin infusion. ***It is important to clarify this with your Senior Resident when admitting a patient on these medications.***

NOTE: Metformin needs to be held for 48 hours after having CT with IV contrast. IR will place an order in a planned state for you to initiate when this occurs.

Medications to be Given Immediately or STAT

When you want to give a medication (therapeutic dalteparin, heparin infusion or antibiotics) immediately or STAT due to the urgency of dose timing, remember that communicating with nursing is key, as an order placed in powerchart is NOT flagged to nursing, and may not be checked for up to 4 hours. As well, consider giving the first dose STAT/NOW on your order, as otherwise powerchart will automatically default giving the med at 0800 (daily). On any medication order you have the option of giving the first dose now/stat, see the picture below.

Details for **piperacillin-tazobactam**
Details | Ingredient Details | Order Comments | Diagnosis
Review Schedule **Remaining Administrations: 5 Stop: 2016/06/22 06:00**
*Route of Administration: IV
*Frequency: q6 hours
PRN: Yes No
PRN Reason:
Infuse Over: 30
Infuse Over Unit: min
*Duration: 5
*Duration Unit: dose
Requested Start Date/Time: 2016/06/21 11:59
Stop Date/Time: 2016/06/22 0600
First Dose Priority: STAT
Special Instructions:
Rx Considerations:
Patient's Own Meds: Yes No
0 Missing Required Details | Dx Table | Orders For Cosignature | Sign

ERAS (*E*nhanced *R*ecovery *A*fter *S*urgery)

What is ERAS all about?

The Patient Experience

- Involves patient and family earlier in the surgical journey
- Increased knowledge and education pre-operatively around expectations and outcomes while in hospital
- Facilitates the clinical team and patient working together
- Ensures that patients have a smoother recovery from surgery with minimal side effects

Access to Care

- When patients recover faster, we are able to provide care to more patients more efficiently meeting the ministry standards

Quality and Safety

- Standardized best practice guidelines help ensure desired clinical outcomes are consistently achieved by using care pathways
- Quality based program directly related to ministry funding for surgery case
- Data collection required for Ministry of Health and Long-Term Care case-cost funding (bowel pathway and patient activity logs used for benchmarking length of stay)

All elective and emergent patients undergoing a bowel resection, with or without an ostomy are considered "ERAS patients". This concept of ERAS will soon move to other surgical services, not just General Surgery.

Includes laparoscopic and open resection cases → LOS 3-4 day without ostomy
→ LOS 5-6 days with ostomy

The standardized ERAS PowerPlans MUST be used pre- and postoperatively for all patients and are found on the quick orders page.

SURG – ERAS- Day of Procedure Prep (*Supports nursing in Surgical Preparation Unit; can be completed in surgery clinics and put in a "Planned State.*)
SURG – ERAS- Bowel Resection WITH Ostomy (Multiphase)
SURG – ERAS- Bowel Resection WITHOUT Ostomy (Multiphase)

Concepts:

- NPO is old school – clear, carbohydrate rich fluids up to 2 hrs pre-op → APS on board
- Start oral fluids 2 hrs postop and may have advance diet as patient tolerates on POD #1 (built into)
- Less IV fluids pre and post-op, minimal fluid boluses post-op
- Urinary output – 20cc/hr x 3 hrs acceptable
- APS may assist with pain management
- Up in chair for all meals , chewing gum + 3-4 walks/day
- Foley removal on POD #1 standard unless otherwise indicated (**must change order**)
- Patient may be discharged as long as they are passing gas, not necessarily having bowel movements.
- Patient involvement by completing daily activity log book used for Ministry data collection purposes.

NOTE: During morning rounds, you should review patient goals and the daily log book with the patient.

Discharges

Please use the ***Common Discharge Module*** for all discharges. The more information you include in this module the better to keep communication open with nursing. Common things to include:

1. *Follow- up appointment* – **must** be with the surgeon that performed the surgery, or ask the Senior Resident or Nurse Practitioner if you are not certain. NO patient should be sent to the ACCESS clinic without permission from your Senior Resident or NP. Indicate if no follow-up is required.
2. *Communication order* – use this order if you require your patient to follow up with their family physician for staple removal, reassessment, etc. As well, if there is specific information you want nursing to reinforce to the patient (such as restarting a medication).
3. *SW LHIN referral* – Ex: HMV Drain – Change dressing daily. Please remove drain if output <30cc/24 hours over 2 consecutive days.
4. *Medication Reconciliation* – ensure all home medications have been resumed in hospital (if the med should be restarted), and complete the medication reconciliation. This provides the patient with clarification of what meds to continue once home.
5. *Scripts* – ensure all scripts are printed, signed, and placed at the front of the patient's chart.

Orders | Medication List

Add to Phase | Check Alerts | Comments | Start: Now | Duration: None

	Component	Status	Dose ...	Details
	COMMON - Patient Discharge (Module) (Planned Pending)			
	Patient Care			
☐	Return to Clinic			
☑	Communication Order			**To see family physician POD#10 for staple removal. Please send...**
	Allied Health			
☐	Outpatient Allied Health Referral (Outpatient Allied Health Referral VH)			
	Discharge Planning			
☑	Discharge Patient			
☐	Discharge Medical Transportation			Emergency Medical Transport
☑	Follow Up Office Appointment			**Return to Office/Clinic: 4 weeks**
☐	Outpatient Clinic Referral (Outpatient Clinic Referral SJ)			
☐	Outpatient Clinic Referral (Outpatient Clinic Referral UH)			
☐	Outpatient Clinic Referral (Outpatient Clinic Referral VH)			
☑	Request for CCAC Referral			**Nursing - remove drain if output < 300cc/24hrs each day over 2...**

Details

Dx Table | Orders For Cosignature | Save as My Favorite | Initiate | Sign

*Discharges can occur at any time, but the hospital expects patients to be discharged by 1100 each morning. Remind your patients to have their ride arrive by 10am on day of discharge.

CCAC Referrals on Discharge

There are CCAC forms specifically for wound management, IV therapy, and PICC line care.
If you have any questions please ask nursing or page the CCAC Care Coordinator for assistance.

Victoria Hospital

- Forms are located in the CCAC Binder in the centre report room.

University Hospital

- Forms are located on the shelf behind the nursing station.

Antibiotics

Typically on general surgery the following antibiotics are used for the following reasons:

Pre-op or On-call for Surgical Site Infection (SSI) Prophylaxis

- Clean wounds (eg, lymph node biopsy, lipoma excision): none
  - Exceptions: hernia with mesh insertion: cefazolin
- Clean-contaminated (incision into GI-tract without gross contamination)
  - Upper GI: cefazolin
  - Lower GI (colon): cefazolin + metronidazole
- Contaminated (incision into GI-tract with contamination but no infection)
  - Cefazolin + metronidazole
  - Ceftriaxone + metronidazole
  - Piperacillin/tazosin
- Dirty (incision into an already infected field)
  - Piperacillin/tazosin
  - Imipenem
  - +/- fluconazole

NOTE:

- Patients being treated for an intra-abdominal infection do not typically need additional pre-operative antibiotics (eg. Appendicitis, cholecystitis)

- Always confirm the preop antibiotic with the Senior Resident if you are unsure

Post-op

- Post-operative antibiotics are given on a case-by-case basis, ask the Senior Resident
- Generally, elective cases do not require post-operative antibiotics (exceptions may include incisional hernia repair with drains in place)
- In general, post-operative antibiotics are administered for contaminated surgical fields
    - Ceftriaxone + metronidazole
    - Piperacillin/tazosin
    - Imipenem
    - +/- fluconazole

ERCP Cefazolin o/c to procedure

NOTE: Cephalosporins are safe in patients with penicillin allergies due to very low cross-reactivity

Pain Medication

Non-opioid

- Tylenol
- NSAIDs ***** AVOID IN ALL PATIENTS WITH BOWEL ANASTOMOSIS OR AKI *****
    - Ibuprofen for oral
    - Ketorolac/Toradol for IV/IM administration
    - Order with a daily PPI
- Gabapentin

Opioid

- In general, do not prescribe narcotics without around the clock Tylenol
- Tramadol OR Tylenol/Tramadol AKA Tramacet **Not covered on the Ontario Drug Plan!!*
    - Do not give with SSRI/SNRI, if history of seizures
    - Prodrug: works well in some patients but not in others
- Tylenol/Codeine AKA Tyelnol No3
- Tyelnol/Oxycodone AKA Percocet
- Hydromorphone AKA Dilaudid or Morphine
    - Use as subcutaneous or oral
    - Generally, subcutaneous early postoperatively and transition to oral early
- Hydromorphone Contin
    - Prescribed BID for long acting pain control
    - Should generally be avoided in **ACUTE** surgical patients
- Fentanyl patch
    - Prescribed q72hrs for long acting pain control
    - Should be avoided in **ACUTE** surgical patients

Patient Controlled Analgesia, Epidurals, Lidocaine infusions and Ketamine infusions

- Administered, managed and can only be ordered by the Anesthesia & Acute Pain Service (APS)
- May be consulted pre-operatively if necessary
- Generally contain opioid (PCA and epidural) and local anesthetic (epidurals)

- Epidurals can be cause hypotension therefore consider it as an etiology before administering fluid boluses to patients
- Patients with developmental delay and elderly patients may forget to use their PCAs, reminders are helpful but sometimes need to consider nurse administered analgesia

NOTE:

- If APS is involved in the patient's care, then their orders trump all pain/sedation orders. If you want to add in pain/sedation medications, or stop any of the APS pain modalities, **you must speak to the APS team** (Mon-Fri 0800-1600) or the Anesthesia resident on call first.

Skin Wound and Ostomy Team (SWOT)

The Skin Wound and Ostomy Team is a group of wound/enterostomal therapists available for consults in regards to wound care/management, ostomy marking, and ostomy management. If you require the assistance of any SWOT member, please enter the order on PowerChart (see below) with details of what you require of their service, making sure to use the drop-downs (ie: type of wound therapy, wound location, ostomy marking). An urgent ostomy site marking (ie. OR in the next few hours) requires you to page the SWOT team member to notify.

Skin/Wound Care Referral – for all wound management referrals, including VAC therapy.
Ostomy Care Referral – for any concerns regarding an ostomy, including ostomy site marking

NOTE: If a patient is discharged home with VAC therapy or a new ostomy, SWOT will fill out and submit the proper paperwork to CCAC. Any other wound will require a CCAC form filled out by you.

Dictations

All dictations must be performed within a timely manner and MUST follow the dictation templates found in appendix A. All admission and consult dictations should be dictated stat (*6) within a few hours of seeing the patient. Discharge summaries need to be completed within 24 hours. Discharge summaries of patients discharged Monday to Friday from the floor will be the responsibility of the Nurse Practitioner with the assistance of junior residents and clerks, while all other discharges (weekends or from PACU/Day Surgery) are the responsibility of all residents and clerks. Appendix A contains templates of how dictations on General Surgery MUST be completed. If you assign a dictation to a medical clerk, please ensure your clerk is dictating based on the requirements General Surgery expects. The following require a dictation:

- All discharges from ACCESS
- All consults seen in the emergency department that are sent home
    - **Please ask your senior if NESA/SESA should be cc'ed on these dictations
- All admissions
- All patients seen in clinic
- All procedures performed (central lines, chest tubes, sigmoidoscopy, etc.)
- All in-hospital consults

Dictation Services – 519-685-8500 extension 35131

Dictation Codes

30 Preadmission Clinic Note 31 History and Physical 32 Operative Report 33 Discharge Summary 34 Consultation 35 Emergency Room Report	37 Progress Note 38 Admission Note 39 Procedure Report (performed in clinic) 40 Death Summary 41 Telephone Correspondence Note	80 Clinic Report 84 Trauma Resuscitation Note 93 In-hospital Transfer Note

Surgical Associates

All patients seen in consultation in the emergency department or the ward, who are not assessed by a staff surgeon, must be billed to *North End Surgical Associates* (University Hospital) and *South End Surgical Associate* (Victoria Hospital). These dictated notes also include any procedure (ex: chest tube insertion, suturing, abscess drainage) performed by a resident. These notes must be dictated on behalf of the surgeon on call and copied to either North End Surgical Associates (UH) or South End Surgical Associates (VH). As well, each ACCESS team will have a powerchart list titled Surgical Associates that the patient must be added to.

If a patient requires a follow up appointment, please have them follow up in the clinic of the surgeon on-call or their regular surgeon if already on service. Simply leave a message with the secretary of that surgeon to have the patient called with a follow-up appointment.

Nursing Notes

A few helpful reminders from your colleagues in nursing:

1. **Clinical Progress Notes** – ensure when charting during morning rounds that the daily plan for the patient is clearly written, as nursing uses this information to aid in planning their day, and reduces pages to residents to clarify questions and concerns. It is your responsibility to ensure the medical clerk is writing proper progress notes, and that the plan written matches the plan the team verbalized.

2. **Nursing Concerns** – to reduce the number of pages to residents throughout the day, please address the nursing concerns on either the clipboards (green sheets) or front of patient chart at both morning rounds and end of day handover.

3. **Changes in Plan** – please call/communicate as able to nursing staff when a plan of care changes outside of the general surgery normal procedures to ensure open and fluid communication.

APPENDIX A

GENERAL SURGERY CONSULT NOTE / NON-ER ADMIT NOTE

DATE OF CONSULTATION:

REASON for REFERRAL:

IDENTIFICATION:
☐ indicate who or medical/surgical service that made the referral

HISTORY of PRESENTING ILLNESS: **italic*important details to include*
☐ How presented to hospital (home, nursing home, transfer from another hospital)
☐ When symptoms started
☐ Brief overview of pertinent symptoms

PAST MEDICAL HISTORY:
The following conditions MUST be included if present:

☐ Cancer & Metastases	☐ COPD	☐ Congestive Heart Failure	☐ Dementia
☐ Diabetes	☐ HIV	☐ Liver Disease	☐ Paraplegia/Hemiplegia
☐ Renal Disease	☐ Previous Transplants	☐ Gastric Varices	☐ Rheumatic Disease

PAST SURGICAL HISTORY:
***** include prior endoscopy procedure, year and results

CURRENT MEDICATIONS:
*****stat medication only, do not include amount, route or frequency

ALLERGIES:

SOCIAL HISTORY: **only include if any of the following are present*
☐ Smoker (pack/yr)
☐ ETOH (quantify number of drinks & years)
☐ ADLs (indicate who patient lives with and if independent with ADLs or not)

FAMILY HISTORY:
*indicate family history relevant to diagnosis/disease of patient
*indicate no family history if relevant to diagnosis/disease of patient

PHYSICAL EXAM:
☐ Vital signs (Temp, HR, BP, RR, Sp02)
☐ Relevant physical exams
☐ Review of systems

SUMMARY of INVESTIGATIONS:
☐ Labs
☐ Radiology studies and results

ASSESSMENT / PLAN: **keep to a 1-3 line description*
☐ State if plan is *operative* vs. *non-operative* management
☐ Briefly outline plan in point form
☐ Include if further investigations are pending and type
☐ Indicate follow up plan, including tests or clinic appointments

GENERAL SURGERY ADMISSION NOTE TEMPLATE

DATE of ADMISSION:

MOST RESPONSIBLE DIAGNOSIS: **diagnosis, not a symptom*

IDENTIFICATION:

HISTORY of PRESENTING ILLNESS: **important details to include*
☐ How presented to hospital (home, nursing home, transfer from another hospital)
☐ When symptoms started
☐ Brief overview of pertinent symptoms

PAST MEDICAL HISTORY:
The following conditions MUST be included if present:

☐ Cancer & Metastases	☐ COPD	☐ Congestive Heart Failure	☐ Dementia
☐ Diabetes	☐ HIV	☐ Liver Disease	☐ Paraplegia/Hemiplegia
☐ Renal Disease	☐ Previous Transplants	☐ Gastric Varices	☐ Rheumatic Disease

PAST SURGICAL HISTORY:
***** include prior endoscopy procedure, year and results

CURRENT MEDICATIONS:
*****state medication only do not include amount, route or frequency

ALLERGIES:

SOCIAL HISTORY: **only include if any of the following are present*
☐ Smoker (pack/yr)
☐ ETOH (quantify number of drinks & years)
☐ ADLs (indicate who patient lives with and if independent with ADLs or not)

FAMILY HISTORY:
*indicate family history relevant to diagnosis/disease of patient
*indicate no family history if relevant to diagnosis/disease of patient

PHYSICAL EXAM:
☐ Vital signs (Temp, HR, BP, RR, Sp02)
☐ Relevant physical exams
☐ Review of systems

SUMMARY of INVESTIGATIONS:
☐ Labs
☐ Radiology studies and results

ASSESSMENT / PLAN: ******keep to a 1-3 line description*
☐ State "*admit to ACCESS General Surgery*" under the care of Dr. ___________
☐ State if plan is *operative* vs. *non-operative* management
☐ Briefly outline plan in point form
☐ Include if any and type of further investigations are pending

GENERAL SURGERY DISCHARGE SUMMARY TEMPLATE

DATE of ADMISSION: **DATE of DISCHARGE:**

MOST RESPONSIBLE DIAGNOSIS: ** diagnosis, not a symptom*

- Be specific (ex: Small Bowel Obstruction due to…….)
- Even if pathology pending, indicate if concerning for cancer Ex: Query Colon Cancer

PROCEDURES / DIAGNOSTICS:

- Chronological order
- Outline date and diagnostic type with brief result
- State date, type of surgery, and surgeon

COMPLICATIONS: **ALWAYS indicate the microorganism involved if available*

Possibilities: ☐Pneumonia ☐ Central Line Infection, ☐Wound infection ☐Sepsis
☐Anastomotic Leak ☐ Wound Dehiscence ☐Urinary Tract Infection

HISTORY of PRESENTING INLLNESS:
*brief overview of presenting illness, along with how presented to hospital (ie: ER, clinic, another hospital)

PAST MEDICAL & SURGICAL HISTORY:
The following conditions MUST be included if present:

☐ Cancer & Metastases	☐ COPD	☐ Congestive Heart Failure	☐ Dementia
☐ Diabetes	☐ HIV	☐ Liver Disease	☐ Paraplegia/Hemiplegia
☐ Renal Disease	☐ Previous Transplants	☐ Gastric Varices	☐ Rheumatic Disease

COURSE IN HOSPITAL & DISCHARGE STATUS:
*brief explanation of overall stay in hospital, including any of the following if applicable:
1. Admitted to*:* ☐ ACCESS General Surgery ☐ General Surgery
2. Indicate if was admitted to ICU / CCTC during admission.
3. Indicate if the past medical history increased length of stay? Ex: Pneumonia related to COPD
4. Significant investigations in hospital and results and/or pending pathology/results.
5. State the following interventions if occurred:

☐ Cardioversion	☐ Invasive Ventilation (intubated) > 96 hours or < 96 hours	☐ Chemotherapy	☐ Parenteral Nutrition (TPN)
☐ ECMO	☐ Paracentesis	☐ Dialysis (type of dialysis)	☐ Pleurocentesis
☐ Feeding Tube (type)	☐ Radiotherapy	☐ Heart Resuscitation (CPR)	☐ Tracheostomy
☐ Access Devices (PICC, Central Line)			

6. State brief medical assessment on discharge
7. Cleared for discharge by: ☐Physiotherapy ☐Occupational Therapy ☐Social Work ☐Dietician
8. Discharged to: ☐Home ☐LTC ☐Passed Away ☐Withdrawal of Care ☐Palliative Care
☐AMA ☐Another Medical Centre/Accepting Physician

DISCHARGE MEDICATIONS:
☐ Home medications (*only state name of med*)
☐ Medications held on discharge (*indicate when may restart*)
☐ Medications changed in hospital (*indicate changes*)
☐ Medications prescribed (*indicate amount, route, frequency and number dispensed*)

DISCHARGE PLAN: **indicate each of the following if applicable*
☐Education provided to patient.
☐Follow up appointments & pending results
☐Follow up needed by Family Physician
☐CCAC ordered and type of service

GENERAL SURGERY OPERATIVE NOTE

DATE:

PREOPERATIVE DIAGNOSIS:

POSTOPERATIVE DIAGNOSIS:

OPERATION PERFORMED:

SURGEON:

ASSISTANTS:
□ Residents
□ Medical students
□ Surgical assistants

ANESTHETIST:

ANESTHESIA:

SPECIMENS TO PATHOLOGY:
1.
2.
3.

CLINICAL HISTORY:
□ Brief history of presentation and disease
□ Consent obtained

OPERATIVE REPORT:
□ Surgical safety checklist (antibiotics, DVT prophylaxis, medical history, side of surgery marking)
□ Prepping and draping
□ Incision - location, orientation, unusual features
□ All steps of the procedure
□ Objective findings and features
□ Any unplanned events (change of procedure, anesthetic events, consults, injuries, frozen sections)
□ Type of implants used
□ Drains left in place
□ Sponge, needle, instrument counts reported as correct by circulating nurse

OPERATIVE SUMMARY:
□ Restate the operation performed
□ Important technical aspects/ unplanned events
□ Specimens for pathology
□ Disposition
    □ PACU
    □ Step down unit
    □ ICU
    □ Plan