Qikiqitani General Hospital
Emergency Department
Physician Orientation Handbook

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Welcome

1.1 Welcome

Welcome to the Qikiqtani General Hospital (QGH) Emergency Department. We're happy to have you joining our team. You will find our hospital to be supportive of our staff and open to your questions or concerns. We seek to practice in a transparent, self-reflective, non-blaming and constantly improving manner. QGH has a small emergency department by national standards, but it is high in per capita acuity and a unique place to practice emergency medicine. To that end, this handbook has been put together to assist physicians in becoming calibrated to our practice environment. We hope that this handbook will help you avoid pitfalls that we have encountered over the years. We suggest keeping a copy readily available on your phone or desktop to refer to as you start here.

We hope this is the beginning of a long, successful working relationship with us and all Nunavummiut. Nakurmiik! (Thank you!)

1.2 About The Emergency Department

The QGH ED sees an average of 50-70 patients per day, though this can vary widely. We service the community of Iqaluit and act as the referral centre for 11 other communities in the Qikiqtaaluq (Baffin) region.

ED Shifts
Day shift (D on schedule) is 7:30 am to 4:30 pm

Midday shift (M) is 12:30 am to 9:30 pm

Night shift (N) is 7:30 pm to 7:30 am

We expect you to generally go home at the end of the shift, but safe hand-over is our number one priority.

1.3 Emergency Physician Shift Responsibilities

Physicians will provide care to all the patients presenting to the ED. This includes patients from Iqaluit, as well as patients from the communities who have medical travel arranged by a scheduled commercial flight ("schedevac") or a medevac. There will be more information on schedevacs and medevacs later in this document.

Admissions occurring between 7:30 am and 4 pm are completed by the hospitalist. Once you have decided to admit a patient call the hospitalist to discuss

the case and they will write admission orders. As a courtesy many EM physicians will complete this admission if the hospitalist is occupied. After 4 pm it is the EM physician's responsibility to complete an admission history and physical and to write admission orders.

The hospitalist is on call until 11 pm to deal with ward issues and is expected to return to the hospital for ward emergencies. Peri-arrest scenarios may demand a brief EM physician assessment while awaiting the hospitalist to come from home if they are out of hospital during hours of call. Between 11 pm and 7:30 am the EM physician is solely responsible for ward emergencies not otherwise covered by surgery, paediatrics and obstetrics.

The hospitalist should be notified of patients admitted overnight and ward issues at 7:30 during handover. There is a handover tool to be completed for all admissions that occur after the hospitalist has left. This is located at the ED MD desk.

1.4 Admitting Patients

Every patient that is admitted through the ED requires an electronic admission note on Meditech which can be written by selecting the "GP Admission Note" note type. After the hospitalist daytime hours (4 pm) the emergency physician is responsible for writing this note so that the hospitalist has a clear story of the impression and admission plan for this patient. The Community Pager doctor and the Midday Shift doctor should advise the hospitalist of admissions before the end of their shift. The overnight doctor should review all admissions overnight with the hospitalist at 7:30AM.

Other things that are required for every admitted patient include:

- □ Medication reconciliation form (printed off by the nurse and signed by you)
- □ Adult or Pediatric Admission Order Set
- □ Additional appropriate order sets (ex. bronchiolitis, DKA)
- □ Mental health admission under the Mental Health Act requires a MHA Form 1, General Admission Order set and MH order set and MH Form 25 (see Mental Health Guidelines section).

Please note that purely surgical admissions are admitted under General Surgery. Occasionally, patients with medical comorbidities with a surgical diagnosis may be admitted under the hospitalist. Pediatric patients 16 years of age or under are admitted to pediatrics. Patients 16 or 17 years of age may be admitted to hospitalist or pediatrics. Mental health patients 12+ and over are admitted to the hospitalist.

1.5 Hospital Cardio-respiratory Arrests (Code Blue)

Code Blue resuscitations outside of the emergency department are the responsibility of the emergency physician unless the primary physician for the patient is available and would prefer taking over care, however, the emergency physician must attend first so this determination can be made. Note, it is expected that anesthesia and respiratory therapy is called to all code blue scenarios. Further more, paediatricians are the default paediatric code team leaders once they arrive. Additionally, general practice anesthesia fulfills a role in our institution as a critical care back up and can and will assist with any critically ill patient in the hospital or patients in outlying communities. They will also provide phone support or advice. We have had physicians hesitant or unaware of their role in the past. Don't hesitate to call for general critical care assistance, not just airway support, they're friendly and will help.

1.6 Neonatal Resuscitation & Deliveries

There are rare situations where the ED physician is called for support with neonate or in a delivery. This can occur at times when multiple deliveries are occurring at the same time, or if the OBS physician or pediatrician cannot make it to the hospital in time for a precipitous delivery.

1.7 Pediatric Patients

A QGH pediatrician is on call at all times. Do not hesitate to speak with the pediatrician about complex cases both in the ED or in the outlying communities. If you are considering an emergent transfer of a pediatric patient the pediatrician on call must be consulted. All pediatric admissions are under the pediatrician. Hand over for pediatrics occurs at 8AM. Since shift change in the ER is at 7:30AM, the department of pediatrics has agreed that overnight pediatric admissions that did not require overnight consultation should be handed-over to the on-coming pediatrician at 7:30 AM.

1.8 Obstetrical Patients

Obstetric patients presenting past 22 weeks with OB-related complaints are referred to the Ward to the OBS nurses and OBS MD on call. Those at any gestation with non-OB complaints, or those 22 weeks or less remain in the ED for care.

Guidelines for Patients with Threatened Preterm Labour in the ER

<u>12-20weeks gestational age</u>

- patients with missed, inevitable, or incomplete abortions can be difficult to

manage at this gestational age
- □ consider consultation with Iqaluit obstetrics on call
- □ consider consultation with general surgeon on call
- □ consider consultation with obstetrics in Ottawa.

20-22weeks gestational age
- □ strongly consider consultation with QGH obstetrics on call to assist with management
- □ obstetrics may take over management of these cases if agreed upon between physicians and documented in the chart

22 weeks gestational age and higher
- □ Please send this patients with no emergent non-obstetrical issues to the obstetrics floor.

Please note the above only applies for true cases of threatened preterm labour.

Please note that if after consulting Iqaluit general practice obstetrics it is deemed that the issue is medical and unrelated to pregnancy, patient's care may be returned to emergency physician.

Moreover, emergency physicians cannot send any pregnant patients to the ward for a non- stress test without first speaking to the Iqaluit obstetrics physician on-call.

1.9 CODE Phone

There is a 'Code Phone' at the nursing station in the ER. This phone is used for CTAS 1 cases in outlying communities that require immediate physician assistance. It is expected that staff drop what they are doing and immediately attend to these calls.

When responding to a code, it is recommended that you ask nursing staff on the other end to put their line on speaker phone. They are often under-resourced and running back and fourth to a phone adds to the stress and chaos of the situation. It is also difficult for the physician to give additional instructions when the nurse is not at the phone in the nursing station.

1.10 Sexual Assault Examination Kits

When there is only single physician coverage in the emergency department, a second physician is to be called in to complete sexual assault kits. In most cases, this would be the Community Pager physician. Please consult paediatrics for cases involving children.

Section 2 Services

2.1 About Meditech

If you are new to the hospital you will receive training on the use of meditech. Please be sure in the emergency department to sign up for your patients. Orders can be flagged on the system however, only investigations and not therapies are ordered on the system for now.

Meditech also has emergency department panels (basic, extended lytes, cardiac, abdominal, sepsis). Click “order sets” and search for these panels which begin with “QGH ER” as they are designated for our use. Be aware that cardiac and abdominal panels contain only the most typical tests to avoid over ordering. If there is something in specific (eg BNP) that you want, please add that manually to your order.

2.2 QGH Specialty services

The typical on call specialty services in Iqaluit include pediatrics, general surgery, general practice obstetrics and anesthesia. These services are available 24 hours a day, 7 days a week but call is done from home. These specialties will also provide assistance regarding the management of cases in our outlying region.

2.3 Ottawa Specialty Services

The vast majority of specialty consults are completed over the phone with a physician from Ottawa. ED nursing staff can page these physicians on the emergency physician’s request. Please be aware that with the exception of ophthalmology, cardiology and radiology QGH MD’s typically speak to the attending physician. Additionally, Ontario has a tele-specialty service called Criti-call. We do not use this service and have an agreement with the Ottawa Hospital directly. Occasionally, less experienced Locating Operators in Ottawa will try to direct you to this service erroneously. For pediatrics, please call CHEO (Children’s Hospital of Eastern Ontario). You may receive an on-call resident when calling their services.

2.4 Radiology Services Ottawa

All our images are read by radiologists in Ottawa. If the images are not visible, there has either been insufficient time for transmission (20-30 minutes) or there is a problem and the QGH Tech should be paged.

Overnight emergency radiology (eg. CT Head etc) is read by the resident. This is usually a PGY2 from radiology. The reports are finalized in the morning with the attending radiologist. Please be aware that these reports may occasionally change and use clinical judgement when deciding on whether a patient is safe to discharge and be vigilant of the final reports for cases you had read by the overnight resident. There have been problems.

During the day there are protocols used by the Ottawa Hospital regarding who reads what. So, if you are trying to have a CT head read during the day you must asked for "the radiologist on-call for CT Head" or for instance, "the radiologist reading pelvic ultrasound".

For Pediatric Radiology, the images in Ottawa can only be read at specific PACS stations at the Children's Hospital Of Eastern Ontario (CHEO). Services such as pediatric orthopedics cannot read images at most CHEO EMR stations.

2.5 QGH Radiological Services

Ultrasound
Ultrasound is available 24/7. Typically most ultrasounds are completed during the day. We have an institutional culture of delaying reasonable ultrasound exams until the morning. Of course, if something is truly emergent, for instance, testicular torsion, then it should be done emergently overnight.

CT Scans
CT technologists take call from home. They are on call 24/7 and are expected to complete emergent tests such as trauma series, CT head/neck, emergent abdominal scans etc overnight. Be considerate in your ordering of non-urgent tests overnight (for instance, CT Wrist).

Plain Films
Again, we have technologists on call 24/7 for emergent plain films. Low acuity (walk-in style) complaints can be delayed for the day shift, however, please pay attention to how many of these patients are being sent to return. It may be more reasonable to call the tech to come do 3 patients at 11pm for lower acuity complaints than hold up the Emergency Department the next day with follow-up patients from Radiology.

2.6 CT Coronary Angiography

QGH is pleased to offer CT Coronary Angiography. This test has a very high NPV. Consequently, it is great test for the moderate/low risk patient.

This is a nurse/CT technologist program run on Friday mornings and supervised by the Emergency Physician assigned to the morning shift that day. Nursing will come with the order set for the test. The test result is followed up on by the ordering physician. Please pay attention to drug interactions with metoprolol and bradycardia. Tests **must** be canceled if the target heart rate (<60) cannot be achieved. Heart rates in excess of the target will result in 10X the radiation being used, and an unacceptable non-diagnostic rate.

Nurses are trained to look for some of the above issues but the EM physician is ultimately responsible. These nurses have the direct number to cardiology fellows in Ottawa who are doing CT-CA's there at the same time. Please be sure if your patient cannot complete the test that a follow up plan for alternative testing has been made. This might include clinic follow up with the ordering physician, or angiography or PET organized with a cardiology referral.

2.7 Medical Day Unit Referrals

The Medical Day Unit (MDU) is available for IV antibiotic infusions. An order/referral is mandatory on meditech. Please complete the necessary order where applicable and have it sent to the MDU for assessment. MDU does not have physicians available everyday.

2.8 Poison Control and Toxic Overdoses

Poison control should be called for most poisonings and overdoses. Please be aware wait times are typically long. Have a nurse call on your behalf. Should an overdose be particularly complex or unusual, consider asking for the toxicologist on-call for poison control. Typically, the advice you will receive will come from a specialized nurse. In most cases, this will be sufficient assistance.

2. 9 Lab Services

Our hospital does almost all lab tests typically used in emergency departments. This includes CSF analysis. However, we do not provide full lab services over night. The list of labs provided over night is as follows:

HEMATOLOGY	BLOOD BANK	MICROBIOLOGY
CBC & Differential	Blood Products	Blood Culture
INR, APTT		Body Fluid Culture
Fibrinogen		CSF
D-Dimer		
CHEMISTRY		
Acetaminophen	Digoxin	Phenytoin
Ammonia	Ethanol	Phosphorous
Albumin	Glucose	Salicylate
βHCG	Lactic Acid	hsTroponin I
Calcium	Lipase	Urea
Carbamazepine	Liver Function	Uric Acid (pre-eclampsia)
CK	Magnesium	Urine Pro/Creat Ratio
Creatinine	Osmolality	Valproic Acid
C-Reactive Protein	Phenobarbital	

- GENTAMYCIN and VANCOMYCIN are NOT STAT TESTS. They will not be performed on a call back basis. Trough levels will be performed prior to next scheduled dose.
- Tests NOT listed on the STAT LIST will not be run as stats during regular Lab hours, nor during call backs.
- RVPCR will be run STAT only on approval of the office of the Chief Public Health Officer.

POINT OF CARE
Blood Gases - iStat
Electrolytes - iStat
Glucose - glucometer
INR – iStat
Troponin I - iStat

2.10 Transfusion Services/Massive Transfusion Protocol

Please note we have a Massive Transfusion Protocol. Below are the triggering criteria. Consider calling additional staff/specialities/services (eg. Anesthesia, Critical Care, Surgery etc) if the protocol requires activation.

Shock Index	HR/SBP > 0.9 has 1.6x risk of massive hemorrhage
ABC Score for trauma	1 point for: penetrating injury, BP≤90mmHg, HR≥120bpm, positive FAST. Score ≥2 has higher risk of massive hemorrhage
Resuscitation intensity	≥4 units of fluid within first 30 minutes 1 unit = 1 unit RBC or 1 unit plasma or 1L crystalloid or 500mL colloid.

Transfusion Products at QGH include:

PRODUCT	DOSE	EXPECTED CHANGE IN LAB RESULTS
Packed Red Blood Cells (pRBCs)	1 unit	Increase Hgb 10g/L
Plasma (FP/FFP)	15mL/kg	Decreases INR
Prothrombin Complex Concentrate (PCC)*		
When INR <3	1000 IU	Decreases INR
When INR 3-5	2000 IU	Decreases INR
When INR >5	3000 IU	Decreases INR
When INR is unknown	2000 IU	Decreases INR
Fibrinogen Concentrate (FC)	4g	Increase Fibrinogen 0.5g/L

Platelets can be ordered but take about one day to arrive, so generally we don't order them in the emergency department. IVIG is also available at the hospital. Cryoprecipitate is being phased out in favour of fibrinogen concentrate.

2.11 Combative Patients and the RCMP (Police)

It is acceptable to request RCMP support in dealing with combative patients in two instances:

(1) Assisting in initial physical restraint of combative patients who will require chemical restraint to facilitate admission or further observation;

(2) RCMP cells can be considered for a persistently combative patient who has been medically and psychiatrically cleared, is free to leave the ED, but presents safety concerns for others. Patients who have not been both medically and psychiatrically cleared are not appropriate candidates for RCMP cells (or discharge): they cannot be properly monitored in cells.

We have security in house, however, they are not specifically trained in delivering security services in the hospital setting, and are not required to physically detain/ confront patients. They are, however, generally helpful for Code White scenarios.

2.12 Procedural Sedation and Anesthesia in the QGH ED

All procedural sedation is performed with a minimum of two attending physicians present. One is responsible for the airway and sedation; the other performs the procedure.

An anesthetist is on call 24/7 for procedural sedation, and is the preferred physician for airway and medication management. This is especially important in children and the elderly. If there are two physicians available and one is experienced and competent with airway management, intubation and procedural sedation medications, then it is left to the discretion of the two physicians present whether to call anesthesia for assistance. If there are any concerns, the physicians should err on the side of caution and involve anesthesia. Our staff anesthetists are supportive, helpful, and non-judgemental.

For the following situations, the second MD must be an anesthetist:

- General anesthesia
- Pediatric patients under age 12 (a pediatrician with appropriate training and experience could also be the third healthcare professional for these patients)
- Patients with ASA scores of 3 or higher
- Hemodynamic instability
- Anticipated difficult intubation or BVM
- Procedures anticipated to take longer than 45 minutes
- Patients at high risk of aspiration
- Patients with a history of complications relating to anesthesia

2.13 Trauma and QGH General Surgery Referral Guidelines

There are two principles to follow:

- General Surgeon is available for advice at any time for any case if you need it. If in doubt, please call.
- There are exceptions to every rule. These are general guidelines, common sense to prevail.

General Guidelines

- Where possible, the General Surgeon and EM Physician should speak directly about the case.
- The surgeon should not be called until patient actually arrives in the emergency department and has been properly assessed by the ED MD. Rarely, circumstances may arise where ED MD has information suggestive of incoming unusual or catastrophic injury that surgeon might appreciate some advance warning to prepare for (e.g. bleeding AAA, extremity vascular injury, and head injury with possible need for decompression). However, calling to inform surgeon for a routine 'heads up' is generally not appreciated, particularly when patient is being transported from outside.
- If a general surgeon comes in for a trauma call, the surgeon will determine if they will be taking over the case and assume role of trauma team leader. The surgeon will communicate their role to ED MD and staff after arrival and assessment of patient.
- Trauma patients should be assessed by the staff emergency physician and not solely by the resident. If the resident is present when an unstable patient arrives, supervising MD should be contacted immediately to come in. Following assessment by the ED MD, the resident may call the surgeon if required.

Penetrating Trauma

- Do not explore wounds.
- The following circumstances require early surgeon notification. Continue resuscitation and workup until surgeon's arrival.
  - Stab wound to the neck, chest and abdomen.
  - Patient hemodynamically unstable, or has evisceration, active bleeding or peritonitis.
  - Penetrating extremity trauma suggestive of neurovascular compromise.
  - Unstable gunshot wounds, particularly if to the neck, chest and abdomen
  - Stable gunshot wounds: contact surgeon after initial assessment done by MD.

Blunt Trauma

- Blunt Trauma with hemodynamic instability or peritonitis, contact surgeon early.
- If serial hemoglobin (done one hour after original) has significantly dropped without explanation in an otherwise stable patient, get an ultrasound to assess for free fluid and call general surgeon when results are done.

Head Trauma

- General Surgeon is consulted for emergent decompression of epidural/ subdural bleeds when recommended by a consulting neurosurgeon in Ottawa.

Severe Extremity Trauma

- Surgeon must be notified immediately for any fracture with vascular injury, nerve compression or compartment syndrome.
- Open Fractures and irrigation. For any open fracture presenting less than 8 hours, if orthopedics advises, contact the surgeon right away to decide on the urgency of irrigation. If over 8 hours has elapsed from time of injury, there is no urgency to take open fractures to the operating room in the middle of the night for irrigation. Instead, please inform Surgeon at 8am.
- For any patient with amputated digits/limbs contact the Ottawa plastic surgeon on call for advice regarding potential for re-implantation if you are not certain.
- General Surgeons here do not do flexor tendon repairs; these are sent down to plastics.

2.14 Departmental Flow and the Charge Nurse

Please be attentive to departmental flow. For some physicians, the workload here may be heavy given that patients typically require more time investment than they would in a larger centre where ‘see-and-refer’ may be a more common part of practice.

The ED tracker is there to assist on meditech. Review it regularly, pre-read triage notes, and please discuss with the charge nurse arrangements of patient flow which make sense from a triage and resource/space allocation perspective.

2.15 Incident Report System

As said in the introduction, we seek to have a transparent, non-judgemental, improvement focused practice at QGH. To that end, we encourage incident reporting as means of tracking and improving quality of care. Incident reporting is not necessarily exclusively to adverse outcomes, but may also be related to proactively identifying risks at the hospital.

The incident reporting system can be found on the landing page of meditech.

2.16 Interpretation Services

Interpretation services are provided by the Government of Nunavut in French and Inuktitut. Being that we primarily serve the Inuit, Inuktitut interpreters are readily available in the hospital including overnight. Telephone interpreters for other languages are also available. Please offer interpretation services. Even when patients might speak to you in English, some, particularly those who struggle may prefer an interpreter. Asking Inuit who struggle in English if they prefer an interpreter is polite, considerate and generally well received.

2.17 Fracture Clinic

The QGH Fracture Clinic has been operating since January 2018. Please take the time to read through the information provided below and use this as a reference tool if you're thinking of referring a patient to this clinic in the future.

When :

Every Tuesday from 09:00 17:00.

Where :

QGH Outpatient Clinics

Patients:
Adults and Pediatric patients with acute nonsurgical musculoskeletal injuries. See below for appropriate referral diagnoses.

Staff:
Becky Lonsdale, RN handles appointments, referrals and assists the MDs in the clinic. Dr. F. Main, Dr. S. Doherty, Dr. P. Foucault, Dr. N. Purcell and Dr. S. Marin are the current staff MDs. The lead physician is Dr. Fiona Main.

How:
If you would like a patient to be seen in the Fracture Clinic a physician must complete a referral form on Meditech. Be sure to include details such as the diagnosis, what type of splint/cast was applied, the recommendations provided to you by the orthopedic surgeon on call and your care plan.

*The MDs in the Fracture Clinic do not have time during the clinic to call the on-call orthopedic surgeon. If you feel that an injury may require referral, it must be done by you, the referring physician, at the initial patient encounter.

What should be referred or discussed with Orthopedics directly from ER and NOT the Fracture Clinic?

- □ Open fractures
- □ Fractures with neurovascular compromise
- □ Intra-articular fractures
- □ Salter-Harris III/IV/V type injuries
- □ High risk areas (Femur, spine, elbow, hip, bodies of the calcaneus/talus, mid-shaft long bones)
- □ Neuropathic joints
- □ Pathologic fractures (Any fracture in a bone weakened by disease - benign/malignant/infectious)
- □ Humeral fractures
- □ Definitive scaphoid fractures
- □ Knee fractures or ACL tears
- □ Fractures requiring reduction
- □ High grade AC separations (Grade 3+)

What is an appropriate referral?

- □ AC separations (Grade 1-2)
- □ Non-operative clavicle fractures
- □ Elbow effusions (with no fracture seen)
- □ Undisplaced extra-articular distal radius fractures
- □ Clinical scaphoid injury with no radiographic evidence of fracture
- □ Undisplaced metacarpal/metatarsal fractures
- □ Finger/toe fractures
- □ Knee sprains (MCL and/or Meniscal)
- □ Isolated lateral ankle injuries (undisplaced lateral malleolus or sprains)
- □ ****Any fracture that you have discussed with ortho and they have advised non operative management****

What is an inappropriate referral?

- □ Back injuries/pain
- □ Injuries that are already being followed by a family physician
- □ Chronic conditions
- □ Infections

COMMUNITY PAGER AND MEDEVACS

3.1 Introduction to Community Pager

Community Pager (CP) is the term we used for the doctor assigned to take outside calls. The CP doctor is an emergency physician. The expectation during the day time is that this physician will take calls from 10:30 to 19:30 from the ED CP office. If there are few calls, the expectation is that the CP will see low acuity patients in the ED.

The night beforehand from 19:30 - 10:30 the CP physician is on-call for ED back up, OR assist, and Medevac's when approved by the Chief of Staff.

From 19:30 - 10:30 the pager calls are managed by the night/morning ED physician.

This role is challenging, particularly to the uninitiated. There are significant medico-legal risks associated with this role that must be balanced. Consequently, we would like to review the process and give advice about challenges other physicians have faced when working as the CP doctor.

3.2 Receiving A Call

Typically nurses will complete a Community Call Form and page the doctor. The goal is to have the CP doctor respond within 20 minutes where possible. It is expected the nurse will email this form to the Community Pager email folder. If you do not have access to this folder, you need to contact Medical Affairs to a request sent to IT Helpdesk.

When multiple forms arrive around the same time, please triage the calls as you would triage patients in the ER and respond accordingly. Incomplete forms are problematic, and you may request that the documentation be revised if you find it insufficient.

3.3 Responding to A Call

Where possible, respond quickly. Try to speak to the nurse who actually examined the patient and if a shift change has happened be sure to find out if the nurse you are speaking to has actually assessed the patient themselves.

3.4 Assessment Strategies

When speaking to nursing, be polite, professional and listen. Consider teaching when helpful. The following assessment strategies might be useful:

- Consider talking to the patient on the phone yourself or on speaker phone with the patient.
- Consider arranging telehealth assessment (see Telehealth below)
- Be sure to review timelines
- Be direct in your communication. Do not count on certain questions having been asked or that complex exam maneuvers have been done appropriately.

3.5 Video Telehealth

There is a video telehealth unit in the community pager office. It is a great tool to take a look at patients, interview mental health patients etc. It's simple to use. Click call, then select from the list the community health centre you would like to contact. Usually, you will need to remind the nursing staff on the other end to use the remote to un-mute themselves.

During the day, the bandwidth is shared with the educational system. It's ideal if you call the Health IT booking first*, so as to pick a time that ensures we do not bump other users. We get priority so if we don't check for other users first, we will bump them off. After 17:00 this is not a problem and we can simply use the technology without worries.

*Health IT Booking can also be selected from the directory

3.6 Decision and Disposition

In deciding what to do with your Community Pager patient the following options exist as dispositions.

- Reassess in Health Centre
- Home
- Scheduled Follow-up
- Next MD Visit
- Schedevac (Scheduled Commercial Flight Transfer to Iqaluit)
- Medevac (Emergency Medical Evacuation via fixed wing air ambulance)

- *Reassess in Health Centre*

You may request that a patient be reassessed in the health centre. As an example, you might ask that a patient you have elected to treat with oral antibiotics for cellulitis be reassessed by a Community Health Nurse (CHN) in 24 hours.

- *Home*

When sending patients home, it is recommended that you document your instructions to the community call nurse including what instructions you want relayed to the patient. Additionally, it is recommended that you write your orders on the Community Call Form rather than provide verbal orders to the CHN.

- *Scheduled Follow-up*

This is similar to a reassessment but you might schedule follow-up for less acute issues further down the road for instance in a subacute patient with gastritis to ensure their H. Pylori test is completed and determine if symptoms continue.

- *Next MD Visit*

For ongoing concerns, it is sometimes useful to schedule an MD appointment with the next visiting MD. In most communities visits are once every 4-6 weeks. Ask when the next MD is visiting, if the timeline is appropriate you can ask to have the patient put on the list for the next visit. If the time line is not sufficient consider a 'schedevac'

- *Schedevac (Scheduled Commercial Flight Transfer to Iqaluit)*

For patients with urgent, but non-emergent issues consider having the nurse organize a schedevac. The key question here is *"when is the next plane?"*. In some communities, particularly with weather concerns it could be 2-3 days before the next flight. This may be an unacceptable delay in some circumstances, for instance a moderately displaced radial fracture in a child should usually not wait 3 days for reduction. If the schedevac cannot be timed appropriately please medevac the patient.

You might consider in some circumstances risk mitigation tactics when using schedevac's such as prophylactic antibiotics. Also, consider the risks of in-flight deterioration such as repeat seizure or respiratory distress prior to ordering a schedevac.

- *Medevac (Emergency Medical Evacuation via fixed wing air ambulance) - see next section*

3.7 About Medevac's

To Medevac or Not

Key Considerations medevac
- The health centre cannot provide required care and undue delay could be harmful (CT for ?ludwig's angina)
- High acuity presentation (unstable trauma)
- Well patient but potential diagnosis could be catastrophic and inappropriate for commercial flight transfer (ectopic pregnancy)
- Critical laboratory or radiological investigation is not otherwise available in a timely manner (acetaminophen overdose)

About cost:

While medevac's are very expensive, cost is not a determining factor. Medevac should be ordered any time standard of care cannot be otherwise met. Any time a there is a significant risk that a delay of care could lead to a substantial harm to a patient the medevac should be ordered. We differ from some other jurisdictions with regards to our practice here. We aim to provide the same services to patients regardless of where they live. A patient should not go without an urgent head CT that is indicated just because they live in an outlying area. They should be medevac'd and receive that test.

3.8 Management of the Patient Awaiting Medevac

It is temping to simply order the medevac and end there, however a lot can be done in the hours waiting for the medevac including

1) pre-drawing labs/cultures that can be sent with the patient to QGH for processing
2) ensuring appropriate access is established (ie large bore IVs for patients at risk of bleeding)
3) fluid resuscitation
4) ensure patients who may need emergent surgery/procedures are fasting
5) initiating therapy based on empiric diagnosis (ie antibiotics for infection/sepsis - please ensure cultures are drawn first)
6) splinting fractures for comfort
7) frequent follow up with the CHN (especially for very sick patients) to reassess the situation and alter management as needed.
8) ensuring nursing has direction on contingencies to trigger calling MD back in the interim.

3.9 Documentation

After each consult is completed, please complete the Community Call Form. Write your name, instructions, orders, and your assessment in the provided space.Send it back to the sender and to the Community Pager email account. Completed Community Call Form emails should be dragged into the 'completed consults' folder in Outlook.

3.10 Special Situations

Medevacs Requiring MD Assistance

Occasionally, MD supported medevacs are required. Most frequently these include GP-OB, pediatrics and EM physicians. For emergency physicians, the most common call-out is for intubation or chest-tubes. To ensure the safety of patients and to avoid putting physicians in unnecessarily challenging circumstances, it is our policy that the Chief of Staff decides on what physician should attend a medevac. As our critical care staff are capable of intubation, the call for assistance may be for difficult airways and in some circumstances it is more appropriate to send an anesthetist on this call. Examples of this would be airway/neck trauma and airway burns.

Pneumothoraces

Patients with pneumothoraces or suspected pneumothroaces cannot fly without a chest tube. Should the diagnosis be unclear and MD with ultrasound (available from the medevac service Keewatin) should be flown to the community to clarify the diagnosis first.

Redirecting Medevac Teams/Planes

The charge nurse at our medevac service company Keewatin typically makes the medevac team staffing decisions in concert with their medical director on-call. Occasionally, they will ask the ER physician for assistance.

It may happen that a more acute event has occurred in the territory and the question of redirecting a medevac team comes up. In these circumstances, it is essential that physicians ask about staffing on the medevac plane they are seeking to redirect. It may be that the plane currently in flight has only an LPN to pick up a mental health patient. It would inappropriate to redirect this plane to a critical care call that requires an RT and critical care nurse.

Second patient on a medevac

Sometimes two patients will be put on the same medevac plane. This is appropriate where level of care or infectious disease concerns are not present. However, the cost per patient does not change when this occurs. The Government of Nunavut still pays for two medevacs.

Consequently, please do not put a second non-acute patient on a medevac plane. If you would not call a medevac for the second patient, they should be managed in the usual fashion with a schedevac or otherwise.

CT Head/Neck
Some jurisdictions avoid CT head/neck in patients that 'seem okay' to save on resources/medevac's. We provide CT Head/Neck on an emergent medevac basis to all patients for whom this test is indicated regardless of what community they live in.

Ectopic Pregnancy
It is expected that all patients being transferred for consideration of ectopic pregnancy are medevac'd. This is both the expectation of the Department of Emergency Medicine and Department of Surgery at QGH.

Acetaminophen and other toxic overdoses
In Nunavut, acetaminophen is an extremely common overdose. Iqaluit is the sole Baffin Region testing facility. Most patients with polypharm overdoses will need to be medevac'd and frequently started on NAC. Be aware, it is well documented in the emergency medicine literature that patients both exaggerate, tell the truth, and hide what they've taken during an intentional overdose. It is highly recommended that where there is **any** suspicion of acetaminophen, iron overdose, etc., that patients are medevac'd to Iqaluit for laboratory testing. It is not appropriate to order acetaminophen testing and then have the blood sent to Iqaluit over the next couple of days. The delay between blood draw and result is too long to be clinically useful.

Neonatal Jaundice
In cases where infants present to the health centre with new onset or worsening jaundice, these infants must have a timely bilirubin. In most cases this involves utilizing a medevac to bring the patient to QGH. If the patient is stable and a scheduled flight is available that will bring them to QGH sooner this could be considered. Blood draws in the community in some cases do not arrive at QGH for several days and this approach should not be utilized, as bilirubin is a time sensitive result. Severe hyperbilirubinemia can have significant, preventable consequences if left untreated. Clinical examination of jaundice to determine severity is inaccurate and unreliable, therefore a timely bilirubin must be obtained.

Conclusion

Thank you for reading our emergency department handbook.

Please send an email to the QGH Chief of Emergency Medicine, Dr Scott Marin, (smarin@gov.nu.ca) confirming you have read the handbook prior to your first shift.

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