
# NRGH ED Physician Orientation Manual

**March 2013**

# TABLE OF CONTENTS *(click on a section to jump there)*

# SECTION 1: INTRODUCTION - NRGH ED

**Welcome to the NRGH ED:**

Welcome to the NRGH ED. We are a dynamic progressive and innovative bunch and look forward to having you here. The enclosed information should help you figure out most of the idiosyncrasies of our department. If you find there is something that you encounter that isn't covered here then please feel free to 'write'er 'up and send it to me for inclusion.

We take pride in our ability to work together to see ALL the patients presenting through our doors for care. We make our best effort to see everyone in a reasonable time period as we believe the patient determines the emergency but we determine our response to it. We have a number of processes that are different from what you may have experienced in other centers – our streaming or ambulatory area and the CDU – each of these are described in the following pages.

The department has its own philosophy and mission statement and each month we focus on word that the staff have chosen to define the community we are members of. These are listed and defined in the *Philosophy and Mission Statement* document in the Physician Orientation Manual Appendices folder in the pdf portfolio.

Please take the time to read through these notes and make yourself familiar with its location in our electronic notice board. Each section can be quickly 'jumped' to be by using the table of contents on the left of the document.

It can get pretty busy but we work together, with a sense of humor, and do the very best we can to treat each patient we meet as though they were our own family. We look forward to working with you and once again welcome.

Drew Digney

Site Chief, NRGH ED

**Definitions used at NRGH Emergency Department:**

EP – Emergency Physician

MRP – Most Responsible Physician

ED - Emergency Department

CNL – Clinical Nurse Leaders – Charge nurses

Flow Regulator – Nurse in charge of pt movements in Station A and B

CNE – Clinical Nurse Educator

FN – FirstNet - ED computer application for tracking and documentation

**Department Leaders:**

NRGH ED Site Chief – Dr Drew Digney

NRGH ED Manager – Jill Breker

CNL – Karen Ibbitson; Helen No; Louise Stickley, Valerie Gferer; Jenny Robson

CNE – Darin Abbey

Director, Emergency Services & Trauma Care – Suzanne Fox

Medical Director, Emergency Services & Trauma Care – Dr. Mike Flesher

Central/North Trauma Medical Director – Vacant

Physician Equipment Lead – Dr. Derek Moore

Physician Medication Practice & Safety Lead – Dr Ben Ho

Physician Quality Assurance Lead – Dr. Chris Rumball

Physician (Rounds) Education Lead – contact Debbie.Hagen@viha.ca

# SECTION 2: SHIFTS

## SHIFT RESPONSIBILITIES (General Principles)

### General principles

1. Patient safety and Quality of Care is first and foremost in the division of responsibilities by the physicians on a shift-by-shift basis.

2. Part of the spectrum of quality care is the very negative impact on delays to being seen for ALL patients presenting to the ED for care.

3. Physicians should move from one area to the other in a timely manner to ensure appropriate flow within the department keeping the service targets in mind to help determine where their services would be most beneficial.

4. Every effort should be made to ensure that physicians are not staying extra hours beyond the commensurable time periods.

5. ALL patient need to have a ED MD attached to their name so there is always a MRP in the department. This includes the patient sent in with EMRGENT medical concerns to see another NRGH physician. See the *Most Responsible Practitioner* document in the Physician Orientation Manual Appendices folder in the pdf portfolio.

### Quality Access target times based on CTAS are:

| | |
|---|---|
| Level 1 | Immediate Care |
| Level 2, 3 | 4 hours - Door to Discharge |
| Level 4, 5 | 2 hours - Door to Discharge |
| To meet the above targets ideal **Door** to **MD** times should be no more than: | |
| Level 1 | Immediate care |
| Level 2, 3 | 60 minutes – Door to MD |
| Level 4, 5 | 30 minutes – Door to MD |

## NRGH ED Physician Shifts

| Shift | Care Location | Time | Shift Activities |
|---|---|---|---|
| **Early 06-14h** | All Areas | 0600 - 0800 | All Patients<br>Take on patients from night MD<br>Phone calls from overnight patients |
| | Station C and Station A | 0800 - 1200 | patients depending on wait<br>Cover Trauma until TTL arrives |
| | Station A | 1200 - 1300 | Clear out station A |
| | | 1300 – 1400 | Clean-up |
| **Day 08-16h** | Station A and B | 0800 -1500 | Determine patients by Wait times/ Quality Access Target times above |
| | | 1500 – 1600 | Clean-up |
| **Mid-Day 10-18** | Station A and B | 1000 - 1700 | Determine patients by Wait times/ Quality Access Target times above |
| | | 1700 - 1800 | Clean-up |
| **Swing 12-20** | Station C and assist in Station A | 1200 - 1900 | Determine patients by Wait times/ Quality Access Target times above |
| | | 1900 – 2000 | Clean-up |
| **Teatime 13-21** | Station A and B | 1300 – 2000 | Determine patients by Wait times/ Quality Access Target times above |
| | | 2000 - 2100 | Clean-up |
| **Afternoon 16-01** | Station A and B | 1600 - 2400 | Determine patients by Wait times/ Quality Access Target times above |
| | | 2400 - 0100 | Clean-up |
| **Evening 17-01** | Station A | 1700 - 1900 | Determine patients by Wait times/ Quality Access Target times above |
| | Station C and A | 1900 - 2400 | Determine patients by Wait times/ Quality Access Target times above |
| | | 2400 - 0100 | Clean-up |
| **Late 18-02** | Station A and B | 1800 - 0100 | Determine patients by Wait times/ Quality Access Target times above |
| | | 0100 - 0200 | Clean-up |
| **Night 24-06** | Everywhere | 2400 - 0600 | bring roller blades |

**Management of patients towards end of shift**

With respect to item 4 above, depending on that status of the flow within the department, the principles below define the management of patients towards the end of shift:

- Leave heavy and/or complicated patients for a new physician within 30 minutes of the end of your designated time in the acute area. Please start any obvious BW or DI if required.
- Every effort should be made to 'clean-up' your own patients.
- If an MD is beyond their scheduled times and they are awaiting results then asking to hand over that patient to another MD is reasonable.
- If the MD is waiting for a single item and it is not expected to be available for a long period of time ( >30-45min) then it would also be reasonable to ask to hand over that patient.
- A patient will be deemed under your care if your name is still attached to the patient in the FN (FirstNet) tracking shell. If you do not want to be called then be sure to transfer the patient to another on-site MD so all staff know who is responsible for the patient's care in the department at all times.

We are ALL working TOGETHER to see all the patients presenting to the department in a timely manner so look at the MD- Assess tab and go where you think it will help the most.

**PROVIDE THE GREATEST GOOD TO THE GREATEST NUMBER**

## CTAS and NRGH

While we recognize the importance of CTAS there are times when the blind following of this system will actually lead to increased waiting times and delays to care for patients. To help understand why we do things a little differently in Nanaimo please refer to the *CTAS Essay* document in the Physician Orientation Manual Appendices folder in the pdf portfolio.

In essence we see patients in the following order:

1. Critical level 1
2. Sepsis, STEMI
3. First come first serve attempting to see patients within the quality access targets identified above.

## ***SIGN OUT/SHIFT COMPLETION ( Charts, Extra Hours Times)***

**End of Shift Checklist**:

- Check FirstNet tracking shell (computer) and ensure all your patients have appropriate dispositions
- If disposition incomplete, transfer patient verbally and via tracking shell to colleague
- Complete electronic documentation
- When leaving EP's office, check back of door for departure sign-out sheets (overtime hours or even just departure time are intermittently monitored for manpower assessment)
- Return phone to dock
- Return Vocera to docking station for recharging

## ***TRAUMA TEAM LEADER (TTL) SHIFTS***

All NRGH EPs are expected to cover TTL shifts, and as such they are programmed into the schedule. Current ATLS is encouraged.

**TTL Responsibilities:**

- call back within 10 minutes
- attend within 40 minutes
- complete all appropriate Primary and Secondary surveys, interventions, lab review, consultations/transfer arrangements

**Autolaunch:**

- Patients may arrive at NRGH with EMT advising "Autolaunch initiated".
    - This means Ambulance dispatch has notified pilots and paramedics of possible urgent transport requirement.
- TTL has 30 minutes to accept or decline Autolaunch services,
- If accepted anticipate helicopter arrival within the hour.

**TTL Shift:**

Check in with site chief regarding details of the TTL shift.

**Compensation:**

- TTL on call coverage is paid at MOCAP 1 rate (25$/hr). Paid automatically by NEPA.
- All work on this shift including CDU or MDC patients are billed Fee For Service.
- If a Trauma is called the services for the Trauma should be billed FFS.
- *Familiarity with billing codes will increase your income!*

# SECTION 3: GENERAL INFORMATION

## ***EMERGENCY DEPARTMENT LAYOUT***

The Emergency Department has several areas that can be broken down as follows. See the map or watch the NRGH New ED department video on YouTube – both are included in the pdf portfolio.

- **Check-in**:
  - Check-in desk is occupied 24/7 by fulltime triage nurses who are responsible for seeing all patients coming in to the ED accessing ED care.

- **Station C**:
  - Sub-acute area.
  - 15 patient cubicles with the numbers listed above the entry.
  - For higher acuity patients that must lay in a stretcher for their entire ED visit.
  - All beds have monitors that are connected to a central monitor at the desk.
  - Station C is divided into 4 sections: C1, C2, C3 and C4. For the most part we operate out of C1 and C3.
  - C1 has a secure room (room 3) and bariatric room (room 2)
  - C3 has rooms with private toilets and 2 negative pressure rooms (rooms 21 & 22).

- **Station B ( Blue area)**
  - Ambulatory area for patients that do not need to lie down.
  - Large internal waiting area
  - 5 examination/interview spaces.
  - None of these spaces have monitors in them, patients deemed to require this level of observation will need to be moved to station C.
  - 4-chair alcove for treatment and observation. This room has a dedicated work station for Unit clerks, nursing and medical staff.

- **Station A (Orange area/Fast track)**:
  - 3 exam/treatment spaces.
  - Includes monitors equipped for procedural sedation only.
  - Includes a mobile cast cart and procedure cart for the area.

- **Resuscitation/ Trauma**:
  - Easily holds 2 patients but can expand to hold 4.

    - No dedicated staff to this area.
    - Used for initial resuscitation and stabilization only before the patient is moved to ICU, the OR, another area of the department or . . .

*. . . another unmentionable area that begins with an "M".*

- **Clinical Decision Unit (CDU)**:
    - 5 stretchers and 3 chairs reserved for CDU patients. More on this later

- **Psychiatric Emergency Services (PES):**
    - The entire area is cardlock secured
    - 2 secure locked rooms
    - 3 psychiatric CDU rooms
    - 2 interview rooms
    - Large waiting/lounge area accessible to a large enclosed secure open air courtyard.

- **Administration corridor (Hall of Power):**
    - Corridor behind station C that is accessible by card lock and . . .

*. . . houses a bunch of offices for people to sit around in and laugh at each other! No really, they do.*

- **Change rooms:**
    - On the bottom floor accessible from the stairs off the administration corridor.
    - Showers, scrubs and lockers all located here.

- **Staff Lounge –ED Bistro**;
    - Across the hall from the change rooms.
    - Fridge, coffee, microwave, dishwasher, TV and access to outside staff courtyard.

*If you eat upstairs, the only rule is NO FISH!*

- **Bike storage**:
    - Located outside lower corridor.
    - Secure bike storage for the athletic types.

## ***ACCESS TO DOC ROOM***

Docs Room is located in the administration corridor behind station C.

- Access can be obtained by preprogrammed key card.
- There are desks, computers, dictaphone, and fridge.
    - We sometimes use this office for a quick snack but a nicer place to eat is downstairs in the lounge.

- We ask that you leave things tidy and that food stuff brought into the fridge be removed at the end of the shift as housekeeping refuses to clean that fridge.

## ***CLOTHING***

- Hospital scrubs are available for wear during your shift and are on a rack outside the locker /change.
- There is a laundry bin for dirty scrubs located in the hall outside the change room.
- Most of us wear lab coats during our shift.
  - If you wish to obtain one speak with Jill Breker, ED Manager, about ordering one.
  - The embroidery template we have is at 5 Star embroidery where they keep the design on file.
  - Cost was approximately $17-18 per coat and $9.50 for the label.

## ***TELEPHONES***

From time to time you will need to communicate over the phone.
When you start your shift:

- Pick up the portable phone found in its dock in the ERP Office according to your shift.
- Call 56960 to reach 'doctor locating'. Tell them who you want to talk to and they will call you back once they have that person on the line.

*With the great power to get hold of someone, comes great responsibility/irritation at fielding calls from people who think they need to talk to you.*

**Pre-Arrival Calls**

Your phone may ring at any time.

- This may be a doctor you asked to get hold of, or a doctor from an outside clinic calling to dump someone on you.
- Other callers may include but are not limited to: pharmacies, paramedics, nursing outposts, pranks, and loved ones
- With Pre-arrival calls it is often clear what the problem is, you need to document the information in an electronic Pre-Arrival form.
  - This is really important so other docs know what is coming in and it also alerts check-in and the CNLs to expect someone.

*It is a marvelous service, how it is done is no concern of yours. Think elves.*

- You will learn more about the pre-arrival form in your onsite orientation

## ***CHART FLOW***

Hybrid Documentation

- In October 2012 the ED moved into its new location. As part of the design of this space the department was advised that we were to be Paperless.
- Three months before opening it became apparent that this commitment would not be fulfilled.

- On Paper
  - We have jury-rigged a system to support those aspects of our documentation that are still on paper. These include:
    - EHS records
    - Lab and imaging orders
    - Medication documentation
    - General meds and activity orders for nursing

- Electronic
  - The rest of our documentation is on computer
    - tracking board,
    - check-in documentation
    - nursing documentation and
    - Physician documentation.

## Clipboard Flow

The following will briefly outline the flow of clipboards that have the order sheets and medication information, by area, through our ED.

### Station A

- Patients place the clipboard in plastic rack near the nursing station in A.
- Picked up by nursing the clipboards are placed in a 'toaster' in front of the examining rooms on the clip board rack.
- After seeing patients in their rooms, orders written on the chart can be given either to the unit clerk (main B station) or to the nurse in Station A
- If leaving lab/X-ray orders with the nurse ensure he/she is aware they need processing or take the chart to the clerk yourself.

- After orders are processed charts will live on the lower shelves of the clipboard rack on the desk in station A.

**Station B**:

- Patients place the clipboard in plastic rack near the nursing station/unit clerk desk in B.


- The Flow regulator reviews the chart and patient briefly to assess urgency of care.
- If delays to MD the Nurse Initiated activities (NIAs) are started.
    - Bloodwork, pain control and minor treatment.
- Clipboard is then moved to the main Clipboard rack mountain into one of the toasters on top.

    - 3 clipboard racks:
        1. orders/unit clerk,
        2. Patient awaiting nursing and
        3. Patient awaiting MD assessment.

- The order in which clipboards/ patients are taken from these racks are not fixed and whoever can get to the patient first should see and assess without delay.
- After seeing patients in their rooms, orders written on the clipboard should be placed in the Unit clerk toaster or the shelf for nursing orders on the clipboard mountain.
- After processing, the charts will be placed in the appropriate toaster or into on of the slot that corresponds to the patient last name.
- We try to follow this pattern all the time, sometimes the nurse will have the clipboard by their respective work station.

*For those over 5 feet tall, the bottom row is really low so look way down.*

*Sometimes the chart will simply evaporate into the celestial ether and magically reappear three days later with a note from the patient's lawyer requesting your detailed notes.*

**STATION C**:

- Patients do not carry their own clipboards.
- These are brought by the CNL and are placed in a rack next to the unit clerk desk.
- There is one unit Clerk for all areas of Station C and they reside in C1.
- The process is a little different for C1 and C3. This flow is under review and a process for standardization is being worked… you will be shown the ropes when you get here.

**PES**:

- Clipboards sit on the desk in the staff work area
- For Orders, give them one of the staff to have processed.

## ***Computers/ Electronics Documentation***

- NRGH ED is the first acute care location in VIHA to move to electronic documentation for physicians. This has been a challenging process and is very much a work in progress. We are seeing benefits from this change but are still experiences many hiccups and are actively working to improve the experience for EP's.
- In order to support new NRGH Physicians/ Locums with this technology an EP orientation is provided and the electronic documentation training is a piece of that orientation.

**ELECTRONIC PHYSCIAN CHART COMPLETION**:

- Charts MUST BE completed at the end of each shift.
    - As you plow through this the time to think of ways to create macros and shortcuts to make it real easy to do this as you go and not delay care to patients during the next shift (this will make more sense once you have taken the training).

> - *Fun little game that some of the sicker members of the group have perfected.*
> - *Seriously, a little time spent at this stage, no matter how tired you are, will save you mountains of time later. Go home now.*

## ***MAILBOX ISSUES***

### Mailboxes

- Each doctor has a "mailbox" in the doctor's lounge.
- Here is where you will find printed reports, junk magazines and consults.
- This is where VIHA sends official material like privileges renewal etc.

## ***DICTATION #/CODES***

- You will be assigned a dictation number once you have been set up with Medical Affairs (tel: 53005). This number will always be your MSIP# preceded by 0 (i.e. 01234)

## ***SHAREPOINT***

- Emergency Physicians have access to a sharepoint with easy access to documents used in the ED i.e. Clinical Orders and Protocols.
- This is located on the toolbar on the Firstnet tracking screen.
    - To arrange access contact the ED Site Chief, Dr Drew Digney or email Therese.lowe@viha.ca
    - You must have a VIHA email account before access can be processed.

# SECTION 5: CLINICAL PROCEDURES IN THE ED

## ***CODE COVERAGE***

- **08-23h** - EPs are responsible for responding to codes in hospital during the day.
    - EPs are responsible for running the code until it is called or another physician is available to take over the patient's care.
- **23-08h** - ICU physician, who is in-house, is responsible for responding to code blues.
    - It is recommended, however, that an EP respond as well, and assume responsibility until the Intensivist arrives in case they are held up in the ICU.
- Once another in house physician arrives to assume care you are free to get out of there and return to your primary workplace.

*As much as we all wish . . . the patients didn't stop coming in just 'cause you went to a code.*

## ***MEDICAL ASSISTANCE/ ADVICE***

- While on duty, EP may receive calls for advice from the Bamfield nursing station.
    - Located on the West Coast of Vancouver Island, South of Uclulet at the end of a 50 km bumpy road.
    - The nurses can fax any information you require about the patient (ex. ECG).
    - If you feel that the patient needs to be seen by an MD, the nurses will arrange transfer for the patient, usually to Port Alberni.
- We also provide medical advice to local FPs, clinic MDs and others working in Port Alberni and Ladysmith.
    - These MDs often do not have the same training nor expertise that we have so please be very willing to accept a transfer if they are sounding worried.
    - If the patient doesn't need NRGH care it is usually not an issue to repatriate once they have been assessed.
    - We are usually very clear that they are being transferred for an assessment and not to be admitted, operated on, get an MRI at 01:00 or see a particular sub-specialist.

## ***STATION B - AMBULATORY***

- The ambulatory area concept was pioneered in 2008 and has been an incredible success.
    - This process and physical layout change resulted in a decrease in the door to doc time of 40 to 50%.
    - The idea is simple - instead of making patients wait in chairs in the outside waiting room we select out those patients that can safely be cared for without them needed to lay down for the entire stay.
    - We begin their assessment, investigations and treatment in a supervised waiting area that has dedicated examination (NOT WAITING) rooms nearby.
    - Remember these were patients left sitting in the outer waiting area in a chair with no care other than repeat vitals every so often.

- The process is as follows:

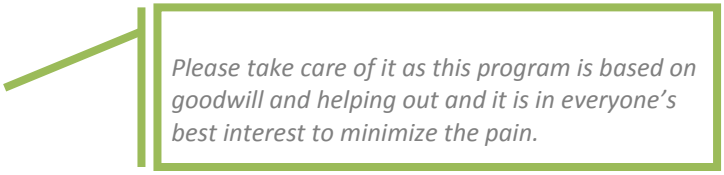
    1) Patient has check-in (triage) assessment
    2) Patient is not requiring a stretcher for their care
        - this determination is not governed by triage category or diagnosis but by the judgment of the check-in nurse
    3) The patient is seen by their primary nurse or MD whoever gets to them first.
    4) They are moved from the waiting area to one of the examination rooms for a private interview and examination.
    5) The patient then returns to the waiting room for any further therapy or procedures thus freeing up a space for the next patient.
        - Change the location of the patient so ALL staff know where the patients are at all times. It takes a second.
    6) If the nurse or MD determines that the patient NEEDS to lay down they are to return the patient to the waiting area and
        - advise the charge nurse that a stretcher is required and/or
        - click the cubicle request event on FirstNet.
- This process, while not ideal, allows us to continue to provide care and avoid potential gridlock that prevents any care from being delivered.

## ***CALL ISSUES***

- Specialist physician on-call roster is posted each day on paper at computer terminal desks.
- Doctor locating also has this information.
- To contact any physician on call, simply **phone 56960**. Locating will contact the physician and they will return your call on your portable phone.

## ***HOSPITALIST COVERAGE***

- Currently NRGH Hospitalists are unable to fully staff all of their night coverage between the hours of 23:00 to 08:00.
- In an effort to support our colleagues, and their program, there are a select group of EPs who cover the uncovered nights.
- Switch board has the call schedule of docs covering hospitalist call for the night.
- If there is a concern regarding a hospitalist patient switch board will contact the doc on call.
- If it is a hospitalist on call they will be called.
- If it is a designated EP covering, the night doc will field the call first out of courtesy.
- If it is something manageable either by phone or a quick assessment on the floor.




- If it is more complex and the department patient load does not safely allow for you to leave the department, then have the switch board operator contact the EP on call for the hospitalist as indicated on the NEPADOCS website www.nepadocs.com
- The designated EP will take the call and come in from home if required.

## ***Specialties***

### ICU

- 24 hour in house coverage.
- If you have an unstable patient, or any other ICU candidate, call them, don't "babysit" the patient overnight.
- All thrombolyzed MI's go to ICU.
- Stable ACS goes to telemetry (internal medicine).
- We have a new sepsis protocol. Any septic patient meeting criteria mandates urgent ICU referral.
- The protocol can be found on the SharePoint and referenced separately in this manual.

## Internal Medicine

- Coverage for ED consults from 0800-2300.
- After 2300, you have a couple options.
    - If you think the patient is potentially unstable, contact ICU for minimum telephone consult.
    - If patient is stable and is a clear-cut admission that requires telemetry (ACS), admit to the internist for the following day.
    - In this circumstance, we provide courtesy overnight coverage, and notify the MRP at 0800.
    - If it is a stable patient, that needs admission with more complicated medical issues, but not telemetry, then admit to GP/hospitalist and request internist consult the following day.

## Nephrology

- ED consults for Hemodialysis patients, ARF, and PD.
- Nephrology wants to hear about these patients at admission 24/7.

## General Surgery

- ED consults from 0800-2400.
- Surgical emergency, 24/7.
- Recurrent SBO's with benign exam admit to GP/hospitalist.
- Recurrent pancreatitis with expected benign course, admit to GP/hospitalist
- New pancreatitis/complicated, admit to surgery.
- Overall, this group does not want patients admitted to them without their prior knowledge.
- For "after-hours" patients who you think are highly likely to be surgical, call and discuss if you think patient could become compromised overnight.
- If the case is possibly surgical, but less clear cut, and requires a.m. imaging, either admit to CDU if appropriate (>80% chance of D/c the following day), or if patient arrival is early am, then hold as emergency patient and obtain 0800 surgeon's consult.

## Gynecology

- ED consults 0800-2400. Surgical emergency 24/7
- Most "after hours" gyn cases are either clearly stable or unstable.
- The stable cases such as R/O ectopic with stable vitals are either admitted to CDU pending imaging, or held in ED for consult/imaging depending on patient arrival time.
    - For example, BHCG+ R adnexal pain and tenderness with minor PV bleeding, stable vital and hemoglobin that arrive at 2330 should be CDU. Same patient at 0400 is a hold for imaging/consult.

- Be aware that it is pretty much impossible to obtain after-hours formal ultrasound.

**Orthopedics**

- ED consults 0800-2300.
- Limb threatening 24/7
- Typically we write admission holding orders and notify ortho on call for the garden variety stuff such as hip fractures.
- Admit to the on call ortho for the following day for after-hours admissions.
- For patients with complicated comorbidities, GP/hospitalist should also be notify and involved.
- For opinion whether case is surgical or not, they can review x-rays on computer in hospital or from home and advise.

**Radiology/ Diagnostic Imaging**

- 08-17h - regular weekdays, contact the radiologist assigned to the imaging modality you require.
    - **Call 56960** and ask Doctor Locating for CT radiologist, ultrasound radiologist, etc.
- After **17**h, it will be the radiologist on call.
    - If you have a clinical scenario that mandates an immediate scan such as a trauma, you must contact the radiologist first to discuss.
    - They will provide a verbal report when scan completed.
- On **weekend evening and nights**, if you have a clinical scenario that mandates next morning imaging, you should contact the radiologist to advise them of the request, either before midnight or at 08h.
    - This is particularly important for ultrasound as the tech may only be brought in for a few hours in the morning.
- In addition to the scans you need an immediate interpretation; we also have the ability to order certain exams without consulting with Radiology in advance. See the following:

| Diagnostic Type | Inclusion | Procedure |
|---|---|---|
| **Urgent CT or Ultrasound requiring radiologist interpretation** | Patients whose immediate management will be affected by the results of the imaging | • Contact on-call radiologist to request the scan<br>• May be asked to be available to the tech while contrast is administered<br>• Tech will contact radiologist once image complete<br>• Radiologist should contact EP with results of the scan |
| **Non urgent and Non-Contrast CT** | For those patients that the EP determines will need a non-urgent, non-contrast scan and who would be sent home and having follow up the next day or later | **See:** process chart for Scanning Non-Contrast CT Heads and CT KUB's ordered by Emergency Physicians (EP's) at NRGH below |
| **For all other scans (abdo for example)** | | • Contact on-call radiologist to request the scan<br>• May be asked to be available to the tech while contrast is administered<br>• Tech will contact radiologist once image complete<br>• Radiologist should contact EP with results of the scan |
| **Next day CT slots** (Available during weekdays) | • Patients unable to get non-urgent and non-contrast CT overnight<br>• Patients who need CT to make management plan and require follow up in the AM | • Ensure there is a slot available with the unit clerk<br>• Complete req<br>• Send patient home with time to return in AM and instruction to present to ER after scan completed or to their FP is appropriate<br>*No slots available*<br>• If it is the evening, contact on-call radiologist to arrange a time the next day.<br>• If it is overnight, copy the chart for the AM EP to contact radiologist in AM to set up a time for the patient to return for the appropriate scan. |
| **Next day Ultrasound slots** | Patients who need non-urgent ultrasound to make management plan and require follow up in the AM | • Ensure there is a slot available with the unit clerk<br>• Complete req<br>• Send patient home with time to return in AM and |

| | | |
|---|---|---|
| | | instruction to present to ED or FP after scan completed<br>*No slots available*<br>• If it is the evening, contact on-call radiologist to arrange a time the next day.<br>• If it is overnight, copy the chart for the TTL to contact radiologist in AM to set up a time for the patient to return for the ultrasound. |

| **Process for Scanning Non-Contrast CT Heads and CT KUB's ordered by Emergency Physicians (EP's) at NRGH.** | |
|---|---|
| 0730-1500h | • CT Technologists code CT requests from EP and scan patients within a reasonable period of time. |
| 1500-2100h Weekdays<br>0800-1600h Weekends | • ERP's **must** speak directly to the CT Technologist @ **54354 or Spectra phone #52512** to request a scan (CT C-head or KUB).<br>• The CT Technologists will scan the patient within a reasonable period of time, and contact the Radiologist upon completion. |
| 2100-2330h Weekdays<br>1600-2300h Weekends | • EP's must call the General Technologist directly @ **52573 or Spectra phone # 55995**to request a scan.<br>• If the Technologist on duty is too busy, then the Technologist will call in the on-call CT Technologist to perform the scan.<br>• Once the scan is completed, the Technologist will notify the on-call Radiologist. |
| 2330-0730h | **Non-urgent exams:**<br>• **If the patient is going to be discharged**: EP's **must** speak directly to the General Technologist to perform the scan and then send the patient back to emergency.<br>• The Radiologist **does not** need to be notified.<br>• If the technologist is too busy, the patient can return the following day in one of the two appointment times provided (12:00/12:30).<br>• **The on-call technologist is NOT to be called**. |
| 2330-0730h | **Urgent exams: (Patient not to be discharged)**:<br>• EP's **must** speak directly to the General Technologist to perform the scan and send the patient back to emergency.<br>• Once the scan is complete, the Technologist will inform the ERP.<br>• The radiologist is available on call if needed.<br>• If the Technologist is too busy, he/she must confirm with the EP before calling the on-call CT technologist to come in, or have the patient wait until the technologist has completed more urgent exams. |
| • Only ER Physicians can request CT Head and KUB scans without radiologist approval.<br>• If there any discrepancy between EP impression and radiologist impression, the radiologist will contact the on-duty EP in the AM<br>**Please Note:** The radiologist is available on call throughout this process for the CT technologists and EP as needed. | |

**ENT**

- ED consults 0800-2400,
- Life threatening situations 24/7
- Be aware that our 3 local specialists are in a regional call group with the other members.
    - Dr Adams based in Duncan.
    - When he is on call, you can contact him through Doctor Locating to discuss the situation.
    - He cannot come to our facility.
    - If he needs to be involved in care urgently, the patient will have to be transferred to him in Duncan.

**Plastic Surgery**

- ED consults 0800-2400
- Digit threatening 24/7
- Be aware that our 4 local specialists are in a regional call group with 2 specialists in Campbell River.
- For the more urgent surgical cases, discuss and transfer to Campbell River when they are on call.
- They are linked with our X-ray PACs, so can also view images and provide advice.
- Major burns are not managed locally, Contact BC Bedline. Your patient will be directed to Victoria or Vancouver.

**Urology**

- ED consults 0800-2400,
- life threatening/ testicle threatening (more than life) 24/7
- Be aware our 3 local specialists are in a regional call group with Comox hospital.
- Cases which require urgent surgical intervention in this instance need discussion with Comox urologist and transfer.

**Pediatrics**

- ED consults 0800-2400.
- 24/7 for any unstable cases.
- If you admit patient after midnight and have any potential overnight concerns, pediatrician should be advised as these patients are usually transferred to the ward soon after admission.
- Be aware that a pediatric urgent outpatient clinic is available mon-fri as an option for after hour's cases you think warrant timely referral the following day, but not necessarily admission.
    - Ask the unit clerk to fax your referral request.

**Psychiatry**

- ED consults 0800-1600.

- Evening telephone consultation available.
- If you have a clear-cut psychiatry admission after-hours, and a psych bed is available, you can admit to psych unit with GP/Hospitalist MRP, who then contact psychiatrist of their choice in am.
- If disposition not clear, admit to CDU if evening.

**Neurology**

- No formal call.
- Expectation is to attempt to contact our 2 local neurologists during regular office hours (Dr Block or Dr Waterman).
- For after hours, the Victoria call group will discuss urgent cases, including thrombolytic candidates.
- Local intensivist also needs to be contacted if you are considering thrombolyzing a stroke.

**Neurosurgery**

- In Victoria. Contact through Doctor Locating.
- Be aware of ongoing issue surrounding timely transfer. Scenario often arises involving head trauma with bleed in brain.
    - Neurosurgeon reviews scan and advises that potentially surgical but not immediately.
    - They usually don't have beds, so patient with potential to deteriorate stuck here until bed available.
    - Internists/intensivists refuse to get involved based on medico-legal risks.
    - Sometimes GP/Hospitalist will assume care prior to transfer, but not always.
    - Can involve a lot of frustrating phone calls, often with the end result being an emergency limbo patient with a subdural, GCS 14, being passed from EP to EP for 3 days.
    - After several years, no solution yet.
    - Most important point is that if patient deteriorates in any way, neurosurgeon needs to be contacted immediately and advised.

**Vascular Surgery**

- In Victoria. Contact through Doctor Locating. Generally no major issues.

**Infectious Disease**

- Dr Forrest. Available for telephone consult most days during regular office hours.
- He also does ICU call, and is not available at that time and ID in Victoria can be consulted.

**Opthalmology**

- ED consults 0800-2400,
- Vision threatening 24/7
- Be aware that our local specialists are in a regional call group with the Duncan ophthalmologists.
    - When the Duncan specialist is on call, they will often have you send the patient to their clinic.
    - We have the map and directions.
    - Ask the unit clerk.

**Dentistry**

- The Dentists provide 1 person on call for the city after-hours, and weekends.
- Patients can be given this number, and a call service will put them through to the dentist.
- If the patient has the bucks, the dentist will make arrangements to see them in the office and charge a big after hour's premium.
- If no dollars, no dentist.
- They won't come to hospital for anything routine, but if you have a case that warrants urgent intervention, contact through Doctor Locating **56960**.

**Oral surgery**

- 3 local specialists provide mostly seamless coverage with occasional day not covered.
- They do most of the facial fractures at our hospital. Will also see facial space abscesses secondary to dental infections, as these are beyond the scope of the dentists

## ***HOT STROKE – presently on hold as ICU has withdrawn support. NO HOT STROKE IN NANAIMO***

- Defined as a thrombotic stroke that meets the criteria for treatment by thrombolysis. Generally accepted as a CVA symptom-onset to thrombolysis administration time of 4 hours or less.

**Steps:**

1. Identify patient at Triage
2. Rapid MD assessment to ensure patient meets entry criteria for thrombolytics

3. Follow and complete the Hot Stroke Protocol sheets found in order slots at main desk – 'TPA in Stroke'
4. Stat CT Head
5. Inform Radiologist on-call for CT during day hours and on-call radiologist off- hours of initiation of Hot Stroke CT(approval not required) and then discuss CT result with radiologist
6. Contact Victoria neurologist on-call for stroke service via switchboard to discuss and follow their recommendation
7. If patient appropriate for lysis then contact NRGH intensivist and initiate Rx> Patient will be admitted to ICU post initial administration of lytic in ED

## **SEPSIS**

Coming soon- Please ask Darin Abbey CNE at NRGH ED for details on the Sepsis Protocol

# SECTION 6: SERVICES WORKING WITH THE ED

## ***ADMITTING A PATIENT***

The following are admission categories used in NRGH ED: Admission to hospital or transfer to another facility (BC Bedline) or admission to the Clinical Decision Unit (CDU).

**Admission to Hospital**

- Admission to hospital may occur when the patient requires treatment that cannot be done promptly in the Emergency Room.
- This process is generally reserved for sick patients who will require supportive resuscitation, intravenous antibiotics, oxygen supplementation, or surgical services.

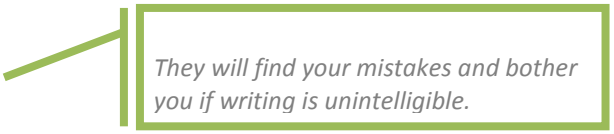
**Admission Process Requirements**

- Patients may be admitted by EP directly to the hospital in most instances.
- Exceptions to this occur with respect to the ICU and Pediatric department who have 'closed wards' requiring specialists as Most Responsible Physicians (MRP).
    - In these cases the On-Call specialist is consulted prior to admission orders being written.
    - Depending on the circumstances the consultant may see the patient in the ED or after discussion orders may be written by the EP to admit the patient.
- Although frowned on by Canadian Association of Emergency Physicians, Nanaimo ED has a collegial relation with its hospital based staff and EPs will often write admission orders on behalf of our hospital MRPs.
- All patients must have a MRP that is notified at the time of admission and this should be documented at the time orders are written.
- If the MRP cannot be immediately contacted and formal hand over of care is not completed the EP will be the MRP until such time as this is completed (primarily in the overnight hours-another example of our collegial relationship with our specialists and FPs).

Order Requirements

- Admission order sheets are located in the racks near workstations.
- All admission require the following:
    - MRP documented in the orders.

    - Legible diagnosis.
    - Contact precaution assignment be selected.
    - If germane, a level of intervention status should be documented on the order sheet. (Consider the use of the designation "Allow Natural Death" if appropriate.)
    - Include Diet order and Activity level.
    - Allergies need to be documented on the admission sheet.
- Once order sheet has been completed the EP will give it to the ED Unit Clerk for processing.




- Please consider carefully who to select as MRP in order to provide the best care for the patient.
    - Patients who do not require immediate Specialist care will be admitted to a General Practitioner.
    - If the patient's own physician does not maintain hospital privileges then the admission may fall to the Hospitalist.
    - In some instances the patient may require overlap of several services. In these cases the MRP may be a Specialist, Family Practitioner or Hospitalist.
- Intravenous antibiotic treatment alone may not necessitate admission if, in the opinion of the EP, this could be administered as an outpatient by utilizing Medical daycare.
- See the following documents in the Physician Orientation Manual Appendices folder in the pdf portfolio for further information.
    - *Mental Health Act Consent for Treatment*
    - *Patient Care Orders*
    - *Pre-Printed Physician Orders*

## ***BEDLINE***

- Call BC Bedline at **1-866-233-2337** toll-free in B.C.
- BC Bedline collaborates with physicians and other health care providers to ensure an integrated approach for the safe, efficient transfer of acute and critically ill patients to the appropriate level of care both within and outside of British Columbia.
- B.C Bedline is utilized when a patient's care needs exceed those of the facility in which he/she presently resides.
    - Patients are triaged according to category with **LLTO** (Life and limb Threatened Organ) having highest priority.
    - Typical situations would be the need to transfer a patient inside or outside of VIHA to a higher level of care or to facilitate admission to an alternate VIHA facility when NRGH resources are full.

- Examples:
  - Transfer of a patient to B.C. Children's Hospital
  - Transfer to Vancouver General Burn Unit or ICU
  - Transfer to Victoria (non-trauma) specialty services (Trauma/TTL transfers should be directed to Victoria TTL MD on-call)

## ***Clinical Decision Unit***

Admission Criteria

- Short term admission for the following needs:
  - 80% probability of discharge home
  - For rapid arrangement of diagnostic tests
  - Short term medication requirements
  - Referral/Liaise with social work, psychiatric crisis team contact or seniors outreach team can often be accomplished through the Clinical Decision Unit (CDU).
- Primarily focused on following algorithmic protocols to ensure timely treatment, reassessment and discharge.
- Staffed by Medical/Surgical nursing staff and overseen by EP.
- No cardiac monitors are available.
- Goal is 24 hours or less with a maximum of 48 hours in the CDU.
  - At this point the decision must be made to either discharge the patient or formally admit them to the hospital.
  - Protocol admission orders are available on the intranet under ED physician documents and are printable for admission.

## CDU Protocol List

1. Abdominal pain
2. Alcohol Withdrawal
3. Allergic Reaction
4. Asthma
5. Back Pain
6. Cellulitis
7. Flank Pain & Hematuri
8. Head Injury
9. Pneumonia
10. Psychiatric Issues
11. Seizures
12. Social Interventions
13. Toxicology Acetaminophen overdose
14. Toxicology ASA overdose
15. Toxicology Benzodiazepine overdose
16. Transfusion
17. Transfer to Outside institution
18. Venous Thromboembolism
19. Vomiting and Dehydration
20. Minor trauma
21. General OD

CDU General Principles

- While you may be familiar with this concept it works a little different at NRGH.

*It actually works!!!*

- The CDU is a dedicated in-patient area adjacent to the main department.
- The unit is closed to all admission except those made by EPs. The patients are admitted under one of 21 defined protocols.
- The pre-set orders for each of these can be found by selecting **ED Physician Documents** at the top toolbar in FirstNet then choose NRGH documents and look for the protocol.


- CDU patients are cared for by defined EPs who rotates through the day (day – evening – night)
  - re-assessments are on an as needed basis
  - Discharges should occur once the patient no longer needs acute in-patient care regardless of the time of day.
- The Clinical Decision Unit is a way of holding on to patients who will benefit from a short stay to determine whether they can be discharged or if they need to be transferred to an acute care bed in the hospital.

- On average, 20% require full hospital admission.
- In particular we utilized this service to try to rapidly assist in the return to home of the frail elderly that need some additional supported to keep out of the clutches of the hospital and the pitfalls that has to offer.
- The maximum stay in the CDU is 48 hours and then the decision to discharge or transfer must be made.
- If discharging a patient they will require a discharge summary as all discharged admitted patients require.
    - To do this use the dictation system and press the discharge summary button and dictate away.
    - This doesn't need to be extensive but a SUMMARY of the stay and what happened and why they needed transfer or what follow-up is required if discharged.
    - It shouldn't take more than 2-3 minutes.
    - A discharge order will also need to be written.

## ***CRISIS RESPONSE TEAM (CRT)***

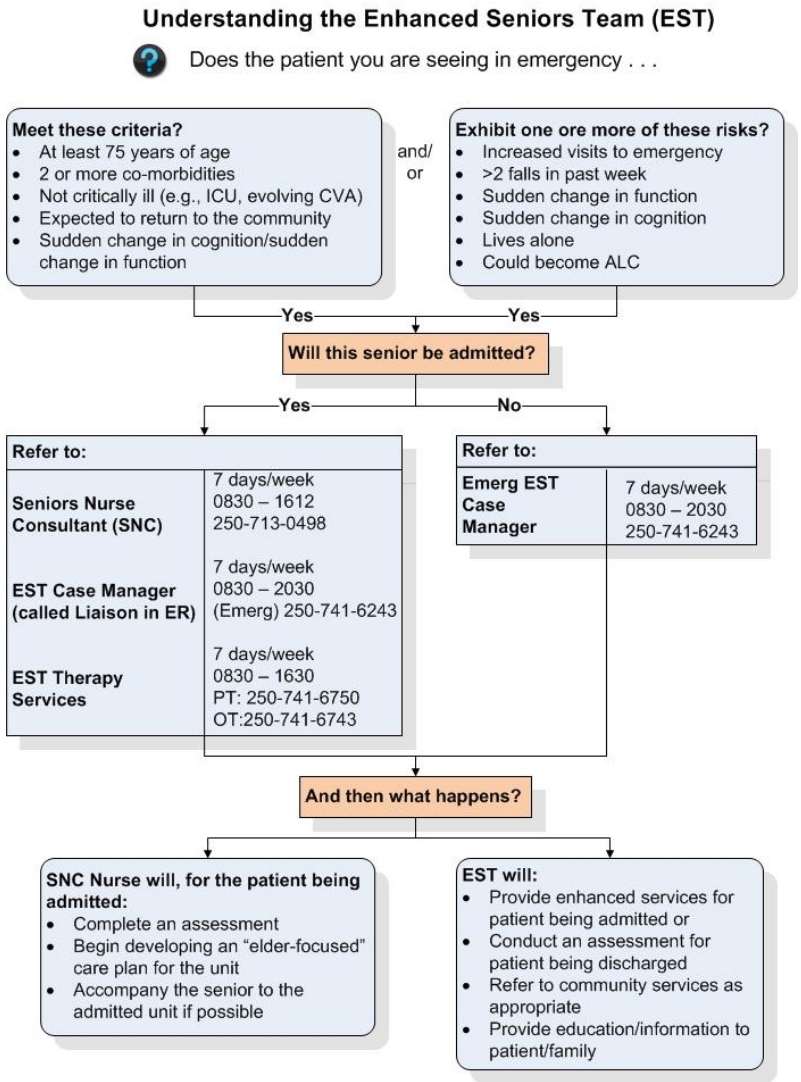
Hours – 0800 – 2300  7 Days a Week

**SERVICE MANDATE:**

- The Crisis Response Team (CRT) is a Mental Health and Addictions community team of nurses and social workers with an office based at Brooks Landing.
- The primary role of this team is to assess risk, make a plan for stabilization and then refer to appropriate services.
- They see patients under 17 years old in the ED and follow adult patients at the Brooks Landing Walk-in clinic who are experiencing an emotional, mental health and/or addictions crisis.
- The team members can see the client after the presentation in the ED/PES for "Urgent Follow-up" in the community and this is organized by the PES staff.
- In some cases, CRT will have seen the client in the community and will call the charge nurse in ED to say a relative or the RCMP is bringing the client in.
    - In this case, CRT will also come to the ED and talk to the EP.

## ***GERIATRIC ASSESSMENTS (EST) (see chart below)***

- Hours
  - Case manager 0830 – 2030,
  - OT/PT 0830 – 1630
  - If ESP PT not available on weekend, contact on-call PT for hospital through switchboard.
- This team consists of OT, PT, Case managers, and rehab assistants.
- They see frail at risk seniors age 75 and over identified in the ED with the potential to return to the community.
- If patients present and are discharged after hours, a notification can be sent to the patient's GP so that the GP can make a request to Home Care services for assessment.
- The following chart should help make the options more obvious.



# ***IV THERAPY (IVT)***

## Examples of ED diagnoses that may require IVT:

- Cellulitis or other infections resistant to oral antibiotics (e.g. osteomyelitis, oral abscesses, etc)
- Anemia or other blood dyscrasias
- Refractory electrolyte or iron deficiencies, etc
- Not specifically IVT, but included for completeness is out-patient DVT /PE initiation therapy which is handled in a similar fashion to IVT.

## EP directed IVT options:

ED treatment:

- For some patients one dose of IVT may be indicated prior to discharge on oral antibiotics (eg. pyelonehritis, nonfebrile neutropenia).
    - In these cases IVT is no different than other routine ED interventions.

Medical Day Care (MDC):

- This is the most common choice for administration of out-patient IVT that may require a few days to stabilize.
- MDC IV antibiotics are usually once or occasionally twice-daily regimes.
- Referral to MDC requires the completion and faxing of the MDC Referral Form (see below).
- There are EP, RN and Unit Clerk tasks to be completed for the referral.
- Please ensure that the patient is provided with the instruction sheet and understands the process involved. (Please refer to the "Clinics" subsection of the Orientation manual to understand EP responsibilities for coverage of the MDC unit.)

CDU:

- For elderly or otherwise debilitated patients that are not ill enough to require routine admission, but may need temporary medical support for 24-48 hrs then there is a CDU admission protocol for IV antibiotic or transfusion therapy.

Paediatric patients:

- Paediatric patients requiring more than one or two doses of IVT are generally either admitted or managed as out-patients through the Paediatric Clinic.
- Both options require a Paediatric Consult to asses and treat.

**Choice of medications:**

Antibiotics:

- The most commonly ordered IVT regime is oral Probenecid followed by:
    - IV Ancef, Clindamycin, Cefuroxime, Ciprofloxacin
    - other regimes can be ordered and will evolve with time and drug resistances.
    - Within the CDU protocol there are a number of standard IV antibiotic regimes outlined as tic-box options.

Transfusions:

- Most blood product transfusions are referred to MDC but advance coordination with MDC is mandatory.
- Blood product cross-matching may require a day or two of preparation
- A specific MDC appointment is required because of the lengthy time-in-chair requirements for infusion.
- Other types of electrolyte or iron infusions are special order and also require very specific coordination of care.

DVT/PE initiation therapy:

- There is a DVT protocol binder requiring review and EP signatures that directs the initiation of anticoagulation therapy.
- It is started in the ED then referred to MDC for a 5-day (+/-) follow-up.
- INRs are drawn daily
- a LMW Heparin product (currently Dalteparin) is administered along with oral Warfarin.
- This continues daily through the MDC until the INR is considered therapeutic as per the ordered protocol.
- EPs are not generally involved after the initiation of therapy unless there is a drug reaction or protocol violation.
- GPs are usually listed as MRP.

**NOTE**:

- It is the responsibility of each EP to ensure that IVT is only initiated and maintained on patients that will clearly benefit from ongoing IVT.
- Infectious Disease, General Surgical, Orthopedic or Plastics Consults may be indicated.
- Most specialists are familiar with the MDC Clinic, use it themselves and may occasionally consult on IVT patients already attending the MDC facility.
- See the following documents in the Physician Orientation Manual Appendices folder in the pdf portfolio for further information:
    - *Outpatient Antibiotic Therapy*
    - *Medical Daycare Blood Product Booking Form*

## ***SOCIAL WORK***

Hours

- 0800-1545 or 0830-1600 hours 7 days a week (including statutory holidays)
- The scheduled Social Worker will answer calls and address concerns during these hours, generally deferring referrals of a non-urgent nature received later in the day to the next day or other team members as appropriate.
- In emergent cases (ex. Traumas or where serious issues have been identified earlier on and are continuing), the Social Worker may work past their scheduled hours (overtime).

Mandate

- Social Workers provide assessment, care planning, intervention, consultation, and referral for services where the social, economic, emotional or psychological circumstances of the patient present barriers to care, and/or an optimum level of functioning.

Assigned Areas of coverage

1. The ED, ICU and Surgical Day Care, (7 days/week).
2. On weekends and statutory holidays: the entire hospital for urgent matters.
3. All Code Blue calls in the hospital.
   - The ER Social Worker will respond to all of these and will remain as needed, particularly if the Social Worker assigned to that area is not available or able to effectively manage all of the Social Work tasks.

How to make a referral:

1. The Social Workers **do not** all have access to First Net and **may not be able to see the referral icons**.
   - please do not request a consult solely through the first net system without phoning them as well.
2. A request for a Social Work consult can be written as an order and the unit clerk will process it. After hours referrals are most effectively processed in this manner and/or with a phone message.
3. The ER physician may choose to speak to a Social Worker directly about a particular patient and may contact them by phone or in person on the ward.
   - Telephone messages may be left after hours and will be followed up the next morning.

Note:

- In many cases, the Social Worker may already be involved with a patient as a referral may have been initiated by a professional in the community before the patient arrived. For example the EMS crew, RN,

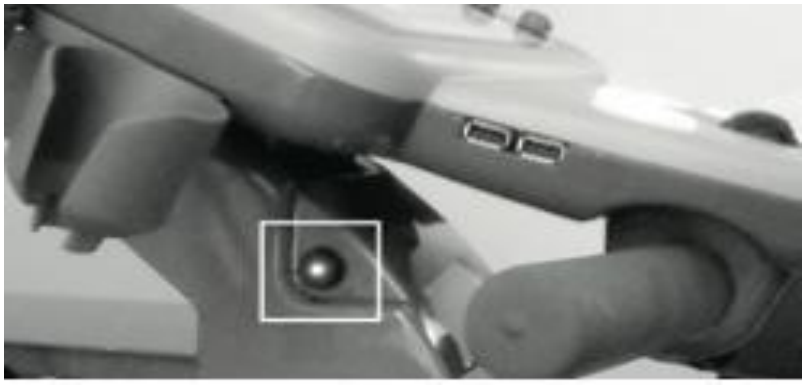
the Enhanced Seniors Team (EST) or the Social Worker themselves while case finding.

| **Social Work Interventions** | |
|---|---|
| Child Protection | • assisting staff where concerns have been raised regarding a child's safety and well being<br>• acting as a liaison with the Ministry of Children and Family Development regarding children where there may be concerns raised by the ED. |
| Financial | • Income Assistance, Immediate Crisis, Fair Pharmacare, prescriptions |
| Domestic Violence | • Assessment, information, housing |
| Guardianship Consultation | • Temporary Substitute Decision Maker, Power of Attorney (POA), Representation Agreement, Child Protection |
| Trauma and critically ill patients | • If present, the primary person responsible for contacting family of the patient and meeting with them in the quiet room.<br>o The Social Worker is available to accompany the ED Physician to discuss the patient's medical status with the family.<br>o **Note**: The NRGH ED supports family witnessed resuscitation. The Social Worker is one of the professionals that will be involved in this type of situation. |
| Death Notifications | • Assist the ED Physician with death notification to family and friends and then continue to work with the family. |
| Transportation | • TAP forms, priority boarding on the ferry, arranging transportation home, family of patients about to be transferred to another city on an emergent basis. |
| Grief and crisis | • miscarriages, catastrophic diagnosis, imminent death, caregiver burnout, family support while in the ED |
| Discharge Planning | • elderly < 75 years old (and those over 75 who do not meet EST criteria) who may require in home supports, addressing discharge barriers.<br>• Note: the Enhanced Seniors Team (EST) manages > 75 years old who meet their criteria. If for some reason they are unavailable then the ED Social worker will address those referrals. |
| Complicated situations | • Assist staff in problem solving and accessing resources for difficult and complicated discharges and/or situations to prevent admission. |
| Assessment | • MMSE, Geriatric Depression Scale |
| Referral Assistance | • assist the ED Physician in completing referrals to:<br>a. The Seniors Outreach Team (SORT Senior Mental Health – Community Specialist: Dr. Numah);<br>b. The Seniors Outpatient Clinic (SOPC – includes a multidisciplinary assessment as well as ongoing programs such as physiotherapy. Specialist: Dr Kim King) |
| Staff Support | • Provide support to the staff, answer questions and seek out information needed relevant to the patient not readily available. |
| There may be other situations not listed above that the EP would like assistance from the Social Worker. Further, with the multitude of professional teams involved throughout the hospital the EP may be | |

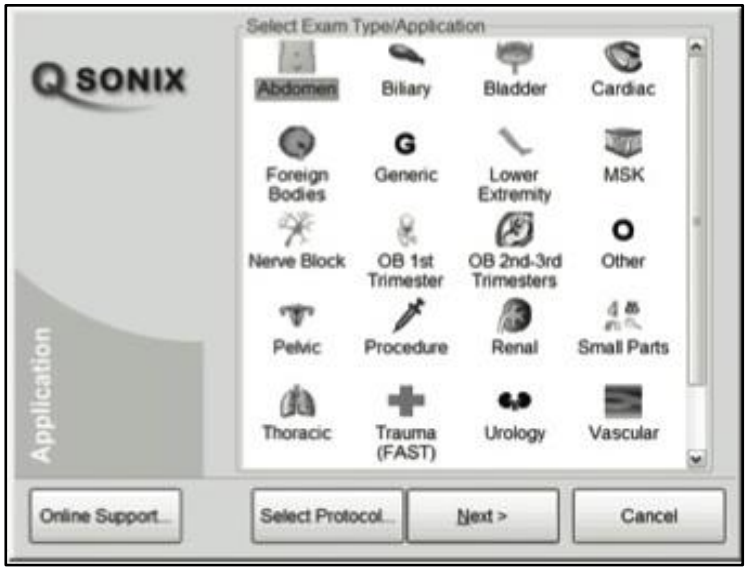
unclear where the referral should be directed. The EP is welcome to consult with the Social Worker regarding any referral as needed.

## ***ULTRASOUND (BEDSIDE)***

- The bedside ultrasound is kept in the main department underneath the radiology view screens.
    - The unit includes a trolley cart with lockable wheels.
- It should be kept plugged in when not in use so remember to unplug the unit prior to moving it.
- The unit should be left on at all times
- If the unit freezes or for some reason is found "off" then the power button is located on the left side of the unit just under the touch screen console:



- Please have the unit plugged into AC power when powering it up.
- Prior to starting your scan, a ED specific menu will appear when the Q button is pressed:





The menu looks like this:

- Most of the work done by the "abd" curvilinear probe can be done with the "Trauma FAST" preset.
    - Select the preset using the trackball to move the pointer and the arrow button to select.
    - The next screen asks you to select the probe prior to the probe being "live".
- We have the high frequency linear, the curvilinear, and the phased array probes attached to the unit.
- We also have a endocavitary probe
    - Stored in the med room in the bottom left cubby hole. The cubby hole also stores the sterile probe covers and sterile gel for ultrasound guided procedures.
- While scanning, the 2 most used knobology dials are depth and gain.

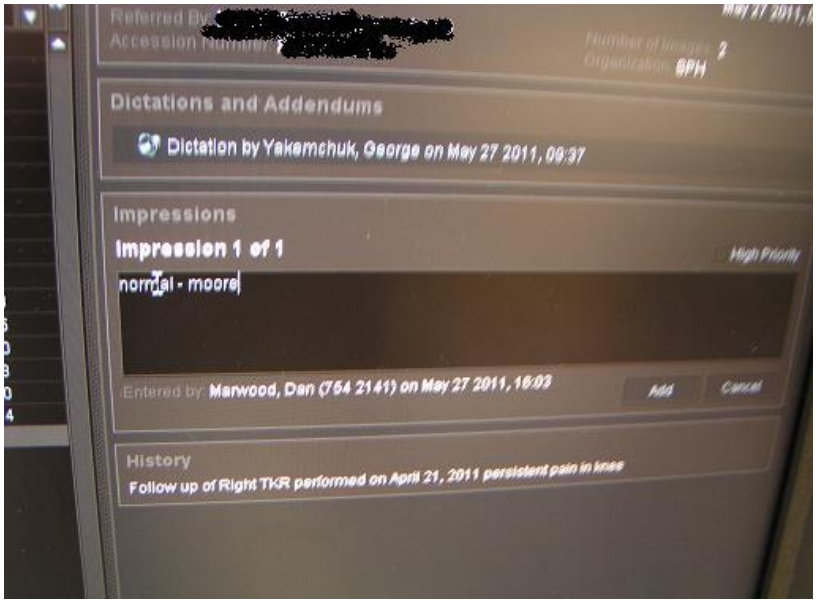
    - They can be activated by touching the appropriate button (on the bottom right of the touch screen)
    - then adjust using the accompanying knob to the right of the corresponding touch button:


- When the scan is complete
    - Wipe off the probe with the specialized wipes from the package which should be taped the back of the view screen (high tech!)
    - If the package is missing or empty, ask the charge nurse to replace it.
    - The probe should be cleaned with the "standard" disinfectant wipes as a last resort if the other wipes are unavailable as repeated exposure to the virex/peroxide on these wipes causes breakdown of the plastic on the probe head.
- Remember also to handle the probes with care;
    - The probe must either be in the scanner's hand or in the machine probe holster.
    - These probes cost $10,000 each and are easily broken if dropped.
- Endocavitary probe:
    - *(these steps are under revision.)*
- When returning the ultrasound unit to the "dock" under the radiology view screens, remember to **plug the unit back in** - the batteries do not like being completely drained.
- A complete overview of the features of the machine are beyond the scope of this manual - if wanted, Ben Ho or Don Propp can supply a copy of the user manual.

# ***XRAY IMPRESSIONS RADIOLOGY INTERPRETATION***

- Once you have viewed a radiological image on PACS scroll to "reports" on the top line.


- This which will open a reporting window on the screen




- Notice that for a very fresh report and on weekends you can also listen to hot-off-the-press audio interpretations as well –
    - click the speaker symbol and put on the headphones.
- You will see an option to click "impression" or "add impression"
    - Select and open a text box
    - Enter your interpretation of the image.
    - Select **add** to save it into the system.

        - This allows the radiologist to know whether you caught the fracture/effusion/significant finding.
        - Try to do this for every X-ray you see.
    - Put your name into the interpretation as well, PACs are often left logged on by the same user all day, with multiple users accessing it, by adding your name allows the radiologist to know whom to call if they catch something you missed during your shift.
        - Interpretation examples:
            - chest neg – moore
            - no # - moore
- At this point, for any x-ray of which you're unsure (e.g. pediatric elbow)
    - It is essential to confirm with the patient that you have the right phone number on the ED chart.
    - It is not infrequent that we need to call a patient for a missed x-ray and find that the phone number is wrong and can't get hold of the patient to recall them!!!
- A radiologist is going to double-check the x-ray in the morning – if they see something was missed they call one the morning EP who will call the original EP.
    - What's the best number to call you in case we need to?

# SECTION 7: OUTPATIENT CLINICS

**Please verify and clarify patient contact information prior to the patient leaving the ED**

| **Out Patient Clinics** | |
|---|---|
| Out Patient DVT Clinic | • This clinic is for patients with ultrasound proven DVT can be set up to receive LMWt Heparin and Coumadin initiation via a streamlined clinic in Medical Day Care.<br>• Check with unit clerk to obtain Ordersets.<br>• Complete and sign the orders and phone the MRP as they will be the ones fielding future calls on Coumadin orders etc.<br>• There is also a patient education pamphlet in the orderset binder which aids in clarifying things to the patient! |
| Rapid Cardiac Clinic | • This clinic is for low risk cardiac patients who have had a negative 6 hour troponin and could be discharged home provided we could provide a timely EST.<br>• This clinic functions on Mondays and Thursdays and is supervised by an internist.<br>• There is a referral form for your completion and then you can give to the unit clerk to allocate you a time slot.<br>• The patient instructions for the EST and time of appointment should be reviewed and given to the patient prior to discharge.<br>• If there are no timely time slots available you will have to page the internist on call or speak to the patient's internist to obtain a time, or opinion on how urgent the EST should be obtained.<br>• See the *Rapid Cardiac Assessment Clinic – Referral and Booking Form* document in the Physician Orientation Manual Appendices folder in the pdf portfolio. |
| Medical Day Care (MDC) | • Medical Daycare is available 7 days a week and you can set up patients to go there for things like repeat Antibiotics, transfusions and IV medications that don't need to be done on an emergent basis.<br>• Daily IV Antibiotic patients are the bulk of what we send.<br>• Complete a preset order sheet and faxed with the shortstay form to medical daycare.<br>• Attached to the antibiotic orderset is an instruction sheet for the patient with a map to MDC.<br>• We ask all returning patients to go for followup at 9:30 in the morning despite the time of their initial dose of antibiotics given in the ED.<br>• This is to facilitate nursing and docs reassessment in MDC.<br>• Other things sent to MDC must be sent with orders and specify an MRP to field calls for the nurses.<br>  ○ e.g. a chronic anemia who needs a transfusion and is hemodynamically stable could be sent in the am for a transfusion to MDC.<br>• You should phone the family doc to be MRP and write the orders and fax to medical daycare. |

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| | • See the following documents in the Physician Orientation Manual Appendices folder in the pdf portfolio for further information:<br>o *Medical Daycare Blood Product Booking Form*<br>o *Outpatient Antibiotic Therapy* |
| | • This is part of the VIHA stroke initiative.<br>• Patients that present with TIA symptoms which have resolved and are deemed lower risk i.e. can have outpatient risk stratification and investigations can be sent to this clinic.<br>• They will see patients in follow up within a week.<br>• If you feel the patient needs to be seen sooner then you should page and consult the neurologist on call.<br>• It is run in Victoria at VGH by the neurology group.<br>• Patients who can not arrange a ride to this clinic can be given the number for Wheels for Wellness which will transport them from their home to the appointment.<br>• Check with the Unit Clerk for the referral forms which include a patient information pamphlet on the clinic.<br>• See the following documents in the Physician Orientation Manual Appendices folder in the pdf portfolio for further information:<br>o *Stroke Rapid Assessment Unit*<br>o *Stroke Rapid Assessment Unit – Referral Form* |
| Rapid A. Fib Clinic | • Run through Victoria Cardiology group<br>• See patients in consultation to advise about things like anticoagulation, ablation and medications.<br>• They have a referral form and will likely see patients within a month.<br>• We are in the works to get a local rapid A. fib clinic.<br>• See the *Atrial Fibrillation Referral Form* document in the Physician Orientation Manual Appendices folder in the pdf portfolio for further information. |
| Heart Function Clinic | • Heart function clinic for follow up.<br>• For patients with CHF who do not need admission but may need a med review or more urgent consultation with an internist.<br>• Check with the Unit Clerk for the referral forms.<br>• This is a local clinic run through Dr. Baillie's office.<br>• See the *Heart Function Clinic Referral Form* document in the Physician Orientation Manual Appendices folder in the pdf portfolio for further information. |
| Hand Clinic | • A multidisciplinary clinic run by the plastics department, with OT and hand therapists.<br>• To refer a patient here they can see their family doctor or<br>• you can phone and chat with the plastics on call prior to sending someone to this clinic.<br>• As of this time there is no formal referral form and plastics wishes to screen these patients verbally or via their family doc. |
| Pediatrics Outpatient Clinic<br><br>(process under | • A daily pediatric outpatient clinic run on the second floor of the hospital.<br>• During daytime hours if you think a patient is appropriate to be seen in this clinic page the pediatrician on call.<br>• If in later hours you feel a peds patient could be discharged with close follow-up you can fax a referral to this clinic.<br>• Advise the patient's parents if they haven't heard from the clinic by 10 am |

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| review please check with another physician or Unit Clerk to confirm) | they should call or return back to the ED.<br>• If in doubt always err on the side of calling the pediatrician on call for recommendations. |
| Cast Clinic Follow-up<br><br>(process under review please check with another physician or Unit Clerk to confirm) | • Patients that would be best served by follow-up by an orthopedic surgeon will have an appointment with the cast clinic.<br>• Cast Technician organizes<br>• A copy of the chart with the designation of a follow-up indicated on the ED Record.<br>• The record should be placed in the file slot in the file marked 'Cast Clinic'.<br><br>**Another Ortho note** - if you require things like a Judet brace or other Orthotics advice BD Mitchell orthoticians are available during office hours to field calls. They are located across the street from the hospital and if called will fit patients in for fittings or come across to the hospital to fit patients for bracing prior to discharge. |
| Social Work Follow-up<br><br>(process under review please check with another physician or Unit Clerk to confirm) | • For things falling outside SW hours that are non imperative to the discharge of the patient. i.e. home dressing changes etc.<br>• A copy of your short stay and a note can be placed in the file slot marked "Social Work".<br>• Please clarify patient's contact information prior to discharge. |
| Geriatric Rapid Assessment Clinic | Arranged through Dr Kim King's office.<br>(process under review please check with another physician or Unit Clerk to confirm) |

# SECTION 8: Nanaimo Emergency Physicians Association (NEPA)

- Nanaimo Emergency Physicians Association (NEPA) is our business group responsible for:
  - shift allocation,
  - staffing,
  - scheduling,
  - negotiations and
  - payment etc.

Executive Assistant - Kim Meyer reached her via e-mail at kim-meyer@shaw.ca

- Currently, our executive group consists of the following people:
  - Chair – Dan Marwood
  - Vice Chair - ????
  - Past Chair – Carly Cooper
  - Scheduler - Marc Paris
  - Treasurer - John Grabher
  - Manpower Liaison - Kevin McMeel

## ***NEPA WEBSITE www.nepadocs.com***

- Scheduled shifts are tracked on the internet at www.nepadocs.com.
- You will be assigned a username and password to access this site,
  - it is different and independent from the VIHA password you have been assigned.
- The site is fairly self explanatory, when you sign on, you are presented with the option to look at
  - monthly Ed schedules or
  - Trauma Team Leader Schedules.
- Your email address and your telephone numbers should be correct in this site
  - These are the contact numbers used to reach you for trauma call
  - the program will also send you weekly shift reminders and invoice reminders if your email address is correct.
  - Use the 'Update Doctor Info' on the home page to ensure your email and phone numbers are correct.
- To swap a shift
  - click on the month name,
  - Select the blue number on the date of the switch in the next page
  - This will open a shift swap page.

    - Once a shift change has been agreed upon, you can make the changes here on this page.
    - At the bottom of the page, the shift changes are tracked for quality assurance.

- You must invoice NEPA for shift reimbursement.
  - The nepadocs site is the official schedule for shifts worked in the ED.
  - On the home page, you can click on 'Monthly Shift Summary' to review which shifts you worked that month.
  - Alternatively, you can use the email that the site sends out at the end of each pay period.