#### **General Questions:**

#### Q:

#### Why do we have these new directives?

**A**:

There are several reasons for this project – one – the Ministry actually mandated it some years ago and some programs did not comply and others made their own variations of the Ministry document are now expected to comply. Two – Medics and service providers have been asking for it for years. Three – the Physicans themselves are satisfied with a standardized document that allows for the core to be the same and then local variations to exist. Four – it puts the Base Hospital Physicians and paramedics in a stronger position should the care of a paramedic or the delegation by the physician be challenged in court.

Q:

# Can we credit the number of defibrillations a PAD site or a Fire department delivers on scene towards our total?

A:

Yes, provided you are comfortable with the service that has provided the defibrillations. Are they confident with the number of shocks they have delivered? (some PAD defibrillators do not have # shocks on the screen) Are the pads on properly? Right placement? No air? Etc...

#### Q:

# Trauma TOR – if no obvious signs but you have a strong incident history of trauma, can you implement the Trauma TOR?

**A**:

Yes you can, provided you can defend it and document it well.

#### If a patient has received nitroglycerine by an EMS crew in the past and that is their only prior nitroglycerine use, does that count as `previous use'?

#### A:

The above situation would warrant some further questioning. What were the effects of the nitroglycerine when given? What was the ultimate diagnosis? Why did the patient not end up with a prescription? But, if the patient has used nitroglycerine in the past, provided by a healthcare professional (i.e. paramedic, ER nurse or physician) then they meet the criteria of 'previous nitroglycerine use'.

#### Q:

# Are there any circumstances when a patch fails that we cannot go ahead and treat the patient? Do the old rules apply?

A:

The old rules apply. You can go ahead with the anticipated therapy except cessation or termination of a cardiac arrest. Should care be rendered in a failed patch situation, documentation on the ACR and a call to the Base Hospital will be expected.

#### Q:

# If a patient with an obstructed airway arrests in the presence of the EMS crew (witnessed), what should the sequence of action be?

The focus for any patient with an obstructed airway should be on clearing the obstruction. As time and resources permit the defibrillation pads should be applied and a rhythm interpretation (ACP) or analysis (PCP) completed as soon as reasonably possible.

# Is trauma TOR completely contraindicated for <16 years or can you patch?

#### A:

The medical directives outline when a patch is appropriate:

· When a medical directive contains a mandatory provincial patch point;

#### OR

• When a RBH introduces a mandatory BH patch point;

#### OR

• For situations that fall outside of these medical directives where the paramedic believes the patient may benefit from online medical direction that falls within the prescribed paramedic scope of practice;

#### OR

• When there is uncertainty about the appropriateness of a medical directive, either in whole or in part.

While possible, it is difficult to imagine a situation where a patient might 'benefit' from having resuscitation terminated.

Q:

# If a patient has a pulse but a GCS of 3, can a PCP insert a King LT under the direction of an ACP on scene?

**A**:

Yes.

Q:

### When re-evaluating your patient's need for salbutamol your time of 5-15 minutes between the next treatments starts when?

**A**:

It starts at the end of the last treatment.

#### Why 8 NTG down to 6 NTG?

#### A:

O:

In the greater scheme of things we were the deviants in the process as the rest of the province has always been at 6. While the AHA guidelines recommends 3 NTG, 6 does provide for 25 minutes of patient care and if additional is required after that, a patch to the BHP is required.

Q:

#### Why is nitroglycerine contraindicated for patients with a right ventricular MI in the cardiac ischemia medical directive but not in the acute pulmonary edema directive?

A:

Right ventricular MIs typically do not lead to acute pulmonary edema. In the very unusual circumstance that there is a right ventricular MI and pulmonary edema, a BHP patch would be a good option, but remember these particular patients will have slower heart rates and lower blood pressures and may be questionable for treatment with nitroglycerine anyways.

Q:

# Why does the medical cardiac arrest directive say $\geq$ 18 years old and the trauma arrest directive say $\geq$ 16?

A:

The age groupings were based on the specific research studies conducted.

Q:

# Resolved chest pain – can NTG be given from the top of the directive again in both the ACP and PCP directive?

**A**:

Yes, not ASA though. The initial SBP will now change to the new initial SBP for the new onset (when calculating the  $1/3^{rd}$  drop).

#### When treating a patient with NTG, the patient does not have a history of previous use, their blood pressure if above 140 mmHg and then they fall out of the range into below 140 mmHg can we still treat because we have established a history of use with them?

A:

No, it would still be considered high risk to administer nitroglycerine to this patient with a blood pressure less than 140 mmHg.

#### Q:

#### Post Arrest ETCO2 35-40mmHg, why?

**A**:

35-40 mmHg is a very mild hyperventilation suggested by AHA as a target post cardiac arrest.

Q:

#### The 30 minute transport time referred to in the trauma TOR, does that mean 30 minutes driving time or 30 minutes including packaging and loading the patient?

A:

The 30 minutes generally refer to driving time only unless there are major delays due to extrication etc. This should be confirmed by pending changes to the FTT guidelines that are coming.

Q:

# In the ECD probe removal directive it states "unaltered" in conditions, when they are "tazed" are they not usually altered? A:

If they are "altered" they cannot provide you with consent to remove the probes. They will need to be taken to the hospital for further assessment.

#### **PCP Specific Questions:**

Q:

Under the conditions "ascertain prior NTG use or establish IV access", is open to interpretation. This implies that you don't have to have a history.

A:

The purpose for the IV is to be able to administer a bolus in the event the patient has a post nitro drop in BP. If the medic with the patient is not certified to administer fluid boluses the IV is irrelevant. Remember, these directives have been written to address all paramedics in the province and as a result we have a directive with a statement that is not applicable to us.

Q:

#### Why does the ALS standard of Care package for PCP's say ALS? A:

ALS, or Advanced Life Support, is the generic title imposed by the Ministry of Health.

#### Q:

#### If a pulmonary edema patient has a BP greater than 140 mmHg but no history of nitroglycerine use, nitroglycerine administration is started, and the BP subsequently drops below 140 mmHg, does that mean that the patient now has 'prior use' and administration can continue?

A:

No, if the BP falls below 140 in the above situation nitroglycerine use must be discontinued.

Q:

If a patient in acute pulmonary edema has a history of nitroglycerine use and a BP greater than 140 mmHg so treatment has started at 0.8 mg (double sprays) and the BP drops below 140 mmHg but not more than 1/3 of the initial pressure, do I drop down to 0.4 mg doses or stop all together?

A: Drop down to 0.4 mg doses.

#### Do PAD and Fire shocks count towards the PCP's TOR?

A:

If any shocks have been delivered neither trauma nor medical TOR applies and the patient is to be transported.

Q:

#### If a cardiac arrest patient has return of spontaneous circulation prior to the completion of four analyses and then re-arrests, do I start the directive over and do four more analysis?

A:

No, complete the balance of the analysis to a total of four analyses prior to initiating transport.

#### Q:

# If a ROSC patient re-arrests en-route do I start over from the beginning?

A:

No, pull over and do one analysis then resume transport to the hospital with no more stops for analysis.

#### Q:

### Is it acceptable to use the same site for the Benadryl and Epinephrine?

A:

No, it is always preferred to 'rotate' sites so that the same muscle is not used for successive IM administrations. The same would apply for the repeat administration of glucagon should the situation arise.

# If I resolve a patient's airway obstruction after the analysis but the patient remains VSA do I start over or count the analysis towards the four? What do I do if I am already en route when it is resolved? A:

Once an airway obstruction is cleared you have a patient who is in a hypoxic cardiac arrest. The focus should be on good compressions, good airway management and timely defibrillations. You should count the initial analysis towards your four in total (so complete an additional three). If you are en route, pull over, get your partner to assist in performing good quality CPR for the additional three analyses, and then resume transport with no further stops.

#### Q:

#### If, after three analyses, two minutes transpire before the discussion with the BHP is concluded should a fourth analysis be completed? A:

The general rule of thumb is to continue treatment as per normal until the TOR has been granted. In this case the fourth analysis would not be completed until the patient was loaded in the ambulance. So, continue CPR, if the TOR is denied load the patient in the ambulance and complete the fourth analysis prior to initiating transport as usual.

#### **ACP Specific questions:**

#### **Points of clarification:**

- ACP's may still do external jugulars on VSA patients, even though it does not state it anywhere in the directive.
- If you can't get an IV or an ETT you will be falling back on the PCP medical cardiac arrest with 3 analyses on the floor and one at the door with a patch after the third analyses.
- No service within this base hospital is carrying Amiodarone at this time.
- If a patient has penetrating trauma and you want to use the FTT (Field Trauma Triage Guideline). You may as long as you remember the parameters within those guidelines. The time to trauma center is 30 minutes from patient contact to the hospital. If you are 20 minutes from a non-trauma hospital and 30 minutes from a trauma hospital, you may go provided the times in the guidelines are met.
- IN the directives, <30 minutes to ER means 30 minutes transport time ,not time from patient contact.

#### FAQ:

Q:

When a joule dose has been calculated in a pediatric arrest but the monitor does not have that exact setting, do we round up or down? A:

Round up.

#### Q:

# What should I do if when I patch to the BHP at the end of a cardiac arrest, the physician asks me to give Atropine?

A:

Inform the physician that this is no longer in *your* medical directives to treat a cardiac arrest and confirm that this is his/her wishes. If the physician confirms the order then it is appropriate to follow them.

# CVAD access is not to be accessed on patients younger than 12 years old. The Auxiliary CVAD Medical Directive (4-3) states there is no age restriction for accessing the CVAD.

A:

The age restriction is 12 years old in the cardiac arrest directive. Consider patching to BHP if CVAD is the only option left in a cardiac arrest.

Q:

# In one of the case studies used in CME, at the 10 minute mark the patient was in V-Fib, you would be shocking the patient at 40joules. The question is why not Lidocaine at this point?

**A**:

The V-Fib is not considered refractory at this point (since we don't know what rhythm the defibrillation resulted in). If after the shock and 2 minutes of CPR the patient remains in V-Fib then you may calculate and give the Lidocaine. Remember though you may only do ONE drug in that time frame. Your Epinephrine would come after the next 2 minutes of CPR.

Q:

### Why do they advocate fluid challenge before dopamine in post arrest hypotension?

**A**:

Priming the pump. Least aggressive method first.

Q:

#### What do I do if I have a patient who I feel would benefit from nitroglycerine but he is slightly bradycardic as a result of being prescribed a beta blocker?

A:

A BHP patch would be appropriate in that setting.

#### Why is there an age guideline (50 yrs) for the contraindication to ETT an asthmatic patient, is it not a bad idea at any age? A:

Over the age of 50 it is more likely a COPD issue which doesn't cause as much of a concern regarding ETT. It is still prudent to hold off on ETT in any asthma patient if the A/W can be managed through other means.

Q:

#### Is Valsalva manoeuvre an ACP Skill?

A:

Yes.

Q:

#### Do we have to patch for valsalva manoeuvre?

A:

No.

Q:

#### Why only 2 doses (6mg and 12mg) now from three?

**A**:

This is the current recommendation from AHA in Guidelines 2010. Most patients respond to the first or second dose and a third dose is seldom required.

Q:

#### May we use both midazolam under the Procedural Sedation Medical Directive and morphine under the Pain Management Medical Directive to manage the TCP patient?

A:

Yes, with caution. We suggest trying one first, probably midazolam because of its earlier peak effect. Remember, the patient need to be normotensive to receive either medication.

### Cardiac ischemia directive, if pain resolves then re-occurs, can we start NTG and morphine at 0 again?

A:

Yes

#### Q:

#### Why is there only one narcotic available for use by CEPCP?

**A**:

It is a matter of simplifying stocking, tracking and training.

Q:

### How does Atropine fit with treating Second Degree/Third Degree Blocks?

**A**:

There is not much recent research specifically evaluating the effect of atropine on high degree blocks. AHA states;

". . . Avoid relying on atropine in type II second-degree or third degree

AV block or in patients with third-degree AV block with a new wide-QRS complex where the location of block is likely to be in non-nodal tissue (such as in the bundle of His or more distal conduction system). These bradyarrhythmias are not likely to be responsive to reversal of cholinergic effects by atropine. . . "

Hence the recommendation to consider trying it while preparing for more definitive treatment or if the treatment is unsuccessful.