Nepean Hospital Intensive Care Unit Orientation package for Undergraduate Nursing Students

Updated December 2020 – Jessica Muscat

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WELCOME

The staff of Nepean Intensive Care and High Dependency, would like to welcome you to our department.

Introduction

The Intensive Care Unit (ICU) is an integral part of Nepean Hospital. ICU provides high quality care for critically ill patients. Our services are available to patients within the Nepean Blue Mountain Local Health District (NBMLHD). ICU is the default facility for the following Hospitals; Hawkesbury, Blue Mountains, Lithgow, Ryleston and Oberon.

The Intensive Care Unit is a general ICU/HDU, compromising of 22 Intensive care beds with funding for 16 ventilated patients and 6 non-ventilated patients between 2 units ICU 1 & ICU 2. Staff work between the 2 units on a rotational allocation. The Intensive Care Team is a cohesive multidisciplinary group consisting of Doctors ICU & Medical Teams, Nurses & Allied Health, whose goal is to provide optimal care for varied patients such as:

- Victims of trauma
- Post-operative management of complex surgery
- Patient requiring respiratory support
- Complex medical problem such as acute renal failure, sepsis and DIC
- Obstetric emergencies
- Thoracic surgery
- Neurosurgery
- Facio-maxillary surgery

At times, our Intensive Care Unit admits paediatric patients, in collaboration with children's ward, ICU will support & assist in the stabilisation and treatment for a paediatric patient within our unit, until then transferred to a paediatric ICU facility.

Nurse to Patient Ratio

You work alongside a Registered Nurse on a 1: 1 basis with ventilated patient (Level 3) and 2: 1 OR 3:1 with Non-Ventilated patients.

PLACEMENT INFORMATION

CONTACT INFORMATION:

Facilitators:
Lorraine Frasa
Mhary Gacuma
Roshni Jas
Jessica Muscat

Intensive Care Unit (ICU): (02) 47 341166
Clinical NUM: (02) 47 344 519 (24/7)

External facilitator Name: _____
Contact Number: _____

Absent days:

Inform your facilitator & the ICU CNUM if you are unable to attend the department. If you are unwell/personal issues, please obtain evidentiary support for any days absent.

Make up hours: Every university is different, your facilitator will make contact with your university in regards to their procedures for makeup hours.

Uniform:

Be neatly presented with a clean, freshly laundered uniform. Hair must be placed into a bun and pinned neatly at all times. No jewellery to be worn except for a wedding band.

Leather shoes are a strict uniform requirement within NSW hospitals as per work, health & safety guidelines. If you turn up without the correct uniform, you will be provided one warning and then any repeat offense will be actioned immediately with yourself removed from clinical placement. No long sleeve items of clothing are to be visible outside their university clinical uniform.

Shifts:

Arrive at work on time. 15 mins prior to shift. Unit Handover commences at 0700/1330 & 1900hrs. Your bedside handover is immediately after unit handover is complete.

Morning shift: 8 hours **0700-1530**

Afternoon shift: 8 hours **1330-2200**

You must be allocated to a supervising RN by the CNUM. You can be allocated to specific staff member on request but for no more than 2 shifts within the placement.

University placement documentation:

It's your are responsibility for your sign off sheet & paperwork being completed on time, completed correctly, including your name, student number, unit number, required hours worked and required copies. If you are unsure, please contact your university to clarify any issues. Your facilitator will do their best to accommodate and assist you

where they can throughout your placement. Nil changes will be made to your placement paperwork once placement is completed at our facility.

Our Purpose

To assist Undergraduate Student Nurses (USN's) in safely and effectively assimilating into the ICU environment and providing appropriate support and guidance. To promote a workplace environment, which provides the USN with the opportunity to develop basic skills, involved in caring for a critically ill patient.

Expected outcomes

Throughout their clinical placement rotation in ICU, the Undergraduate Student Nurse (USN) will be given appropriate support and guidance to enable them to provide safe, effective, evidence based clinical care to patients in ICU. They will be exposed to various clinical issues, diagnosis, how to recognise a deteriorating patient and know how to escalate any concerns. USN will receive a 1 day blended orientation when commencing in ICU. This orientation will include an introduction of daily routines and the role of the multidisciplinary team working in the ICU.

SCOPE OF PRACTICE FOR STUDENTS PRACTICING IN ICU/HDU

Supervision of Practice:

Students will be working alongside an ICU trained Registered Nurse under **strict direct supervision**. This ensures that students work within their clinical scope of practice.

Students must adhere to the hospital and unit policies and procedures. Please ask your facilitator/Registered Nurse where these can be found.

Students are **allowed to access/remove** CVC, VASCATH or ARTLINES **ONLY UNDER STRICT SUPERVISION,** using the NBMLHD procedures.

You will be required to take full responsibility of a HDU patient with the supervising RN, within your shift with minimal input from your supervisor.

You are **not to work with a New Graduate Nurse within the unit**, unless approved by the Facilitator or Clinical Nurse Unit Manager (CNUM) deems appropriate.

Clinical day routine:

Morning shift: Starting at 0700hrs you will go for handover in the meeting room. Go to allocated bed area & obtain bedside handover. Perform patient assessment, emergency equipment & emergency alarms checks & plan your shift.

Afternoon shift: Starting at 1330hrs you will go for handover in the meeting room. You will be allocated to your nurse for allocated jobs before patient handover at the bedside @ 1500hrs. Go to allocated bed area & obtain bedside handover. Perform patient assessment, emergency equipment & emergency alarms checks & plan your shift.

You are allowed to utilise any planner/timetable to assist you in managing your clinical shift. If you do not have one and would like a planner/timetable, please ask your facilitator for a copy.

Breaks

Students are entitled to a **20 minute morning/afternoon tea break and a 30 minute lunch/dinner break.** Your assigned Registered Nurse will help you facilitate these breaks at appropriate times. Please utilise the ICU lunch room facilities including tea and coffee making facilities, fridge, sandwich press & microwaves. Please maintain lunch room etiquette by cleaning up after yourself.

Previous Experience

Please remember you are on student placement, so your background or any clinical experience you may have (e.g.: EEN, AIN) will be beneficial to you during your placement. However, you are here to learn, therefore, look, listen and engage with the many experienced clinicians within our unit who are all happy to help and answer any questions you would like to ask.

SUPPORT AND RESOURCES

You are part of our team; please contribute/question any queries/concerns you may have regarding your patient on the ICU medical round or with any of our medical/nursing team members. ICU nursing can be challenging emotionally and psychologically. If you need time out, clarification or support, please let us know. Often an explanation will assist you to put matters into context, provide clarification or simply to acknowledge a natural emotion. Never leave the ICU with unanswered questions.

All clinical documentation is completed via Intensys. Some documentation are completed in power chart whilst patients are admitted to ICU. Such as WLS, Falls risk etc. Your supervising RN will need to log into intensys to document patient's clinical documentation such as Observations, Inputs/outputs, ventilations obs etc. Please remember that all information within the ICU is strictly confidential and is not to leave the unit under any circumstances due to patient confidentiality and privacy laws.

The NSW Intranet has many helpful resources to help facilitate your placement such as CIAP which provides MIMS, AIJH, Micromedex (IV compatibility) and policy and procedure guidelines. You can find this by clicking on the Internet Explorer shortcut found on the desktop on all ICU computers. Please also refer to NSW Health Policy Directives and Nepean and Blue Mountain Local Health District guidelines.

Nepean ICU website: Nepeanicu.org. Under **staff only** tab there is a password (ask your supervising RN for access). You can obtain ICU drug and unit protocols to assist you when caring for a critically ill/high dependency patient.

Security within the ICU

Personal belongings can be secured in a locker, in the locker room (bring your own padlock) or placed on top of the lockers if none available. Please do not bring in personal belongings that are high risk of theft such as wallet & mobile phones.

Reporting of any incidents can be discussed with your Facilitator, Nurse Unit Manager, Educator or team leader. Please don't hesitate to contact any of the above mentioned to discuss any matters that come up.

Social Media

Social Media of any kind is **prohibited** for use to express, photograph and debrief about your experiences with Nepean Hospital or the ICU whilst on or off placement as per the NSW Code of Conduct.

PRACTICE INFORMATION FOR STUDENTS

The USN will be expected to care for overall stable patients requiring minimal haemodynamic support. USN will be expected to take an INITIATIVE to nurse a HDU patient themselves and only require the Registered Nurse/Facilitators assistance in medication administration and observation of the care of an HDU patient

Infection Control:
Students must practice the 5 steps of hand hygiene.

Personal protective equipment must be worn by the student when in contact with the patient in a single room requiring MRO precautions, look for the infection control sign on the patients room door; and practice in accordance with the NBMLHD infection control procedure.

No student is to nurse a patient that is under airborne isolation such as COVID 19.

Chemotherapy precautions (Purple Gowns & Orange Gloves) pregnant students are NOT to nurse a patient on CYTOTOXIC precautions. Please notify your facilitator is this applies to you.

Supervision of Ventilated patients:
The student is **NOT** to change any settings on the ventilator or Bi-PAP machines i.e. FiO2/PEEP/pressure support/ respiratory rate etc.

The student is **NOT** to be left alone with a ventilated patient at any time

Ventilated patients must always be in view and not be left unattended at any time, even if sedated and paralysed.

Bed sides must always be up.

The use of restraints may be utilised if a patient is a risk to themselves or staff and ordered by the medical team.

Non-ventilated Patients:

Patient is not to be left alone on NIV (Non-invasive ventilation)

Falls risk, please ensure your patient is safe & educated on mobilisation in ICU

Dialysis
The student is **NOT** to alter the dialysis prescription & the dialysis prescription must be checked by 2 Registered Nurses. Student nurses can perform dialysis observations under supervision by RN.

Emergency Information
Students are to check the cardiac arrest trolley and intubation trolley with the facilitator to become familiar with equipment utilised during emergencies.

MET CALLS- ARTIC Team
Team consists of a dedicated ICU senior Doctor & ICU Senior Nurse whom cover the Met calls & reviews 24/7.

If you are fortunate to attend an MET CALL with your designated RN, you are to OBSERVE ONLY whilst on the MET CALL. Please remember to stand away from the MET CALL area but in a place where you can observe the clinicians actions. If however your MET nurse asks for your help, please do assist in any way instructed.

PATIENT ASSESSMENT

At the beginning of each shift the nurse is to conduct a full comprehensive physical assessment and to monitor your patient's condition for any changes throughout the shift. Patient observations are to be conducted as per unit protocol:

- ICU Intubated & unstable patients – hourly observations
- HDU patients – second hourly observations
- Cleared for ward (CFW) patients – fourth hourly observations
- 4 hourly Temp & BSL unless clinically indicated- as per protocol or medical orders

Head to Toe Assessment:

Neurological & Neurovascular (Neuro):

- Asses GCS-Eye, verbal and motor
- Pupil size and reaction to light
- Limb strength, movement and sensation
- Sedation score (note use of sedatives, benzodiazapams, paralysing agents)
- Signs of delirium
- Pain level- At rest and on movement
- Temperature

Respiratory: (RESP)

- Patent airway- Breathing spontaneously or assisted
- Rate and depth of breathing, use of accessory muscles, symmetrical chest wall movement
- Mode of ventilation via Ventilator/BiPAP/ CPAP
- Oxygen, pressure support and PEEP requirements
- Auscultate chest- Is air entry equal or unequal decreased in bases
- Interpret C02 and Pa02 via blood gas with the RN/Facilitator for correlation to ventilation EtC02 & Saturations- are they being adequately oxygenated and ventilated with the required settings
- Compare chest x-ray. Is it improving or worsening?
- Suction PRN and document. Assess need for specimen collection
- Do they have a cough and gag reflex?
- Secure with white ribbon/brown tape
- Check ETT position at teeth and document
- Check Tracheostomy (trachae) position and ensure it is secured and document placement.
- Pressure area care of ETT placement

- Ensure cuff pressure is at 28-30cmh2O
- Co-ordinate with physiotherapy

Cardiovascular (CVS):

- Monitor and document rhythm and blood pressure
- Assess perfusion and warmth in peripheries
- Note any oedema in peripheries
- Capillary refill less than 2 seconds
- Assess radial and dorsalis Pedi's pulses
- Obtain and check ECG
- View bloods and electrolytes
- Obtain base line Arterial Blood Gas (ABG) on patients who are admitted to ICU already ventilated, when required

Gastrointestinal (GI):

- Visualise and palpate all four quadrants of abdomen- Is it soft, firm or distended?
- Does the patient experience pain on palpation?
- Auscultate abdomen- Are bowel sounds audible?
- What diet is patient on NBM, ND, Free fluids
- Confirm NG placement on X-ray
- Q4H NG aspirations and note drainage and aspirations, are they absorbing feed?
- Re tape NG if needed
- Pressure area care of NG tube
- When was the patient's last bowel motion?
- Check need for aperients
- Stoma care

Renal (RENAL):

- Check IDC- Urine output hourly and inform RN if less than 0.5m1/kg/hr for more than 2 consecutive hours
- Daily Urinalysis
- Note colour of urine and if sediments, blood or concentration is present

Metabolic (ENDO):

- Blood glucose monitoring per protocol- Is insulin running?
- Monitor-potassium and sodium regularly
- Total Parental Nutrition (TPN)- Change line every 24 hours

Skin Integrity (SKIN):

- Roll patient and assess skin
- Check all wounds and dressings

- Mark out cellulitis if applicable
- ICC Dressings and assessment for surgical emphysema
- Assess the need for a pressure mattress
- Document wound care

General Nursing Care:

- Pressure area care 2 hourly if patient is ventilated, 4 hourly turns for HDU patients
- Mouth and eye care 2-4 hourly or PRN
- Full bed linen change and sponge
- Hair wash, Shave, teeth brushed
- Peri and catheter care
- Check all dressings are intact and re dress if soiled or if ordered for daily dressings
- Prevalon and heel protectors
- Hovermatts

EMERGENCY AND SAFETY CHECKS

At the beginning of every shift in ICU there are checks to make sure the work environment is safe for staff, patient and visitors of the unit. Please be sure to go through these checks thoroughly with your assigned Registered Nurse

Bedside check:

Bed area clean, tidy and SAFE - cords off ground, damp dust area and remove excess clutter

Check Laerdal bag fully inflates, 02 tubing in-situ and PEEP valve is attached and set at 5 of PEEP and face masks available

Ventilator alarms- to be checked with the RN

Suction- high and low suction correctly set up and connected-test suction works- yanker sucker in-situ

O2 and air cylinder- Full and set up correctly on ventilator (ICU 1)

Monitor alarms- Check all monitor parameters and alarms are set at a suitable level

ADMINISTRATION OF MEDICATIONS

All students must be deemed competent by their University BEFORE preparing and administering medications within the ICU.

Students must attended the 5 Drug checks when preparing and administering ANY ROUTE of medication administered within the ICU

Students are to be **DIRECTLY supervised at all stages** of preparation and administration of any IV/IM/SC/NG/Oral/SL medication by Registered Nurse or clinical facilitator.

Students are **NOT** able to check or sign the register for S4 and S8 medications.

We expect all students to know the actions and indications for all medications they administer and utilise the Australian Injectable Drug Handbook and MIMS on the Intranet via CIAP.

Fluids/ lines/ drains and pump check:

Check all infusions against medical orders and rates per hour including PCA & Epidural

Check all lines from patient to pump/ emergency access port patent

Label all lines and note dates for line changes. Check when next infusion bag requires changing

CVAD's flushed/patent and heparin locked & labelled as per NBMLHD hospital policy

Check all CVAD/IV access sites for redness, swelling or infection. Note if dressings are intact or need changing.

Adequate pressure and normal saline in arterial line pressure bags. Zero arterial line transducers to tragus.

DRESSINGS

Assess all drains- Note amount, vacuum on and time for bag change & any dressing changes. Assess ICC insertion site. Check ICC canister for swing, bubble, and suction and drainage amount per hour. Ensure no kink/blockage in ICC drainage line. Check ICC connections are taped secure.

DOCUMENTATION

The student may write nursing progress notes on Intensys, which include date and time and it will be counter signed by the Registered Nurse

The students will document patient observations by the bedside on Intensys

The students cannot countersign medication charts with the Registered Nurse

Nursing progress note documentation should be attended throughout your shift in increments and as events or issues arise, such as change in medication, change in the patient's condition and any cares attended etc.

Written & Verbal Nursing Handover Template

Below is a summary to a nursing handover, this should be used as a guide only.

1. Brief patient statement:

Introduction of patient (name, age, gender), health history, condition and why they are being treated in ICU, condition improved, stable or deteriorating

2. Central Nervous System:

GCS, Sedation score, Delirium (if present), Pupil reaction and size, Limb strength and sensation, Analgesia, sedatives and paralysing agents, Temperature

3. Respiratory:

Airway, Ventilation, Air entry and breath sounds, Respiratory observations, Sputum including amount and colour, UWSD observations, swing, bubble, suction Chest x-ray

4. Cardiovascular:

Rhythm and rate, Blood pressure, CVP (Central Venous Pressure Monitoring), Circulation observations including pulses and capillary refill, Invasive lines, IVT and cardiac support drugs

5 Gastrointestinal:

NG tube- Aspirates, feed and flush rate, abdominal bowel sounds, pain, and last bowel motion Colostomy/stoma

6. Renal:

Urine amount and colour. Dialysis (e.g. CVVHDF, settings is the patient on a Neutral or Negative balance)

7. Metabolic:

Blood glucose protocol, Insulin, TPN

8. Musculoskeletal:

Skin integrity, pressure areas, wounds and dressings- Fractures

9. Drugs and Fluids:

Medication charts, PCA/Epidural, Fluid orders and infusions

10. Social:

Family dynamics, Discharge planning

11. Management plan:

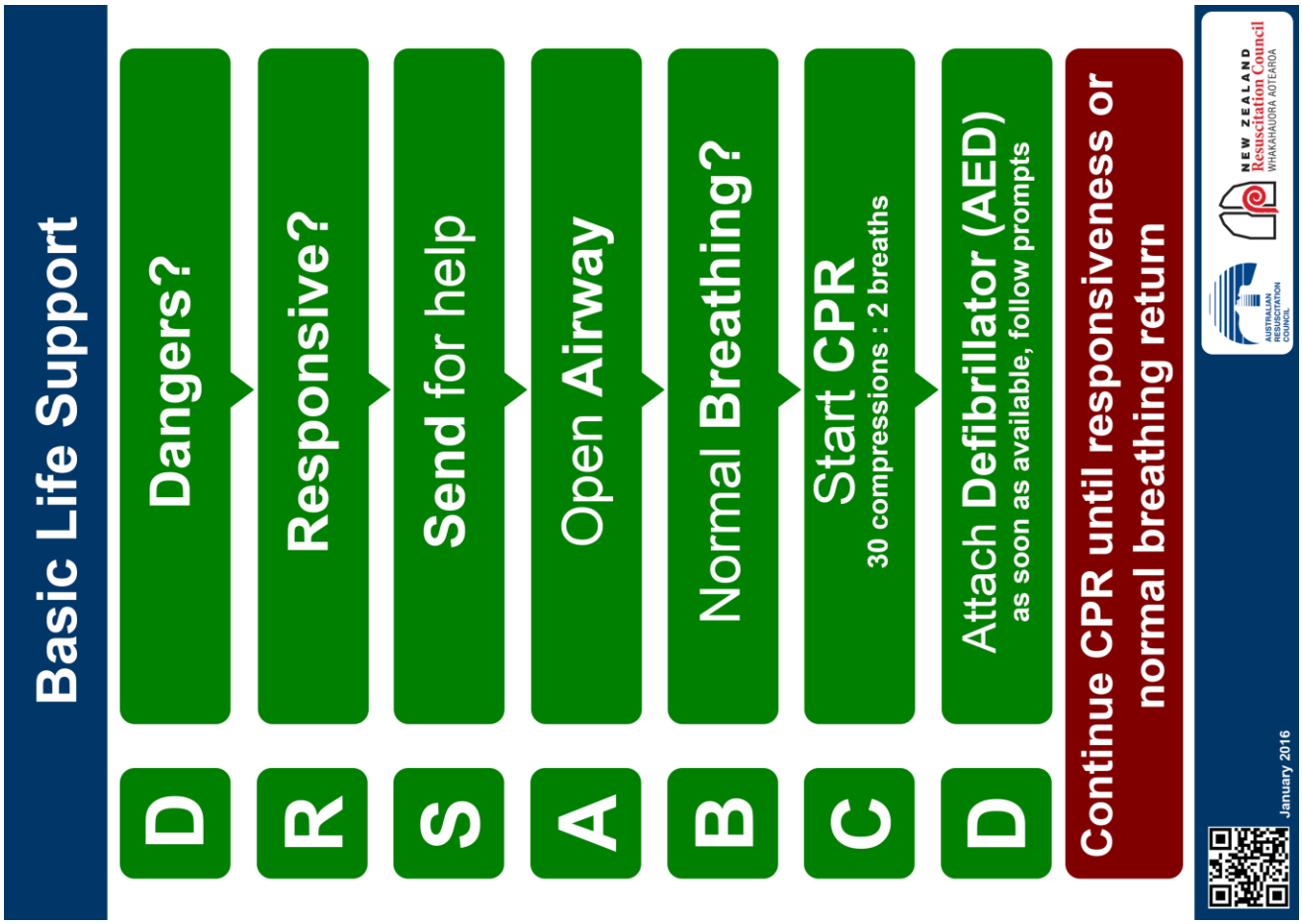
Plan for the shift and significant events

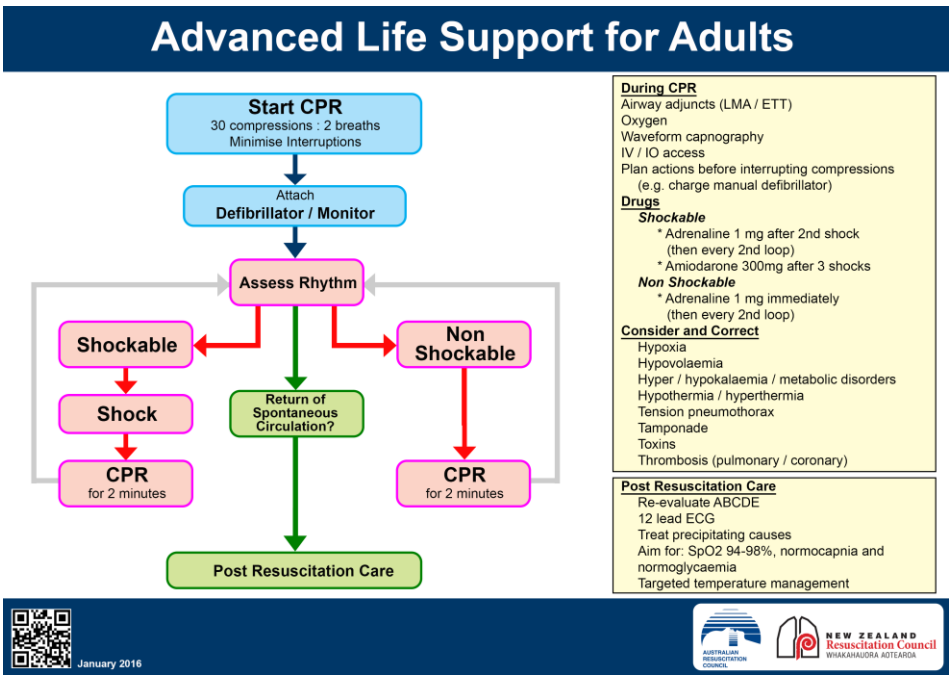
And most importantly:

Enjoy your time in the Nepean Intensive Care Unit as part of the team and help us deliver safe and professional care to critically ill patient and their families.

Lorraine Frasa, Mhary Gacuma, Roshni Jas & Jessica Muscat

Nepean ICU Undergraduate Clinical Facilitators


Basic Life Support
D
Dangers?
R
Responsive?
S
Send for help
A
Open Airway
B
Normal Breathing?
C
Start CPR
30 compressions : 2 breaths
D
Attach Defibrillator (AED)
as soon as available, follow prompts
Continue CPR until responsiveness or normal breathing return
NEW ZEALAND Resuscitation Council
WHAKAHAUORA AOTEAROA
AUSTRALIAN RESUSCITATION COUNCIL
January 2016


Advanced Life Support for Adults
Start CPR
30 compressions : 2 breaths
Minimise Interruptions
Attach
Defibrillator / Monitor
Assess Rhythm
Shockable
Shock
CPR
for 2 minutes
Return of Spontaneous Circulation?
Non Shockable
CPR
for 2 minutes
Post Resuscitation Care
During CPR
Airway adjuncts (LMA / ETT)
Oxygen
Waveform capnography
IV / IO access
Plan actions before interrupting compressions
(e.g. charge manual defibrillator)
Drugs
Shockable
* Adrenaline 1 mg after 2nd shock
(then every 2nd loop)
* Amiodarone 300mg after 3 shocks
Non Shockable
* Adrenaline 1 mg immediately
(then every 2nd loop)
Consider and Correct
Hypoxia
Hypovolaemia
Hyper / hypokalaemia / metabolic disorders
Hypothermia / hyperthermia
Tension pneumothorax
Tamponade
Toxins
Thrombosis (pulmonary / coronary)
Post Resuscitation Care
Re-evaluate ABCDE
12 lead ECG
Treat precipitating causes
Aim for: SpO2 94-98%, normocapnia and normoglycaemia
Targeted temperature management
January 2016
NEW ZEALAND Resuscitation Council
WHAKAHAUORA AOTEAROA

SEARCH & FIND

EQUIPMENT	LOCATION
1. How to enter/leave the unit for shift	
2. Where do you store your belongings	
3. Staff toilets & tea room	
4. How many Fire evacuation plans, fire exits & fire stations are in the ICU	
5. Policy & procedure, Infection control & disaster manuals	
6. Emergency buzzer & Nurse assist buzzer What colour are they? Location?	
7. MET Trolley & Lucas 2	
8. Emergency & intubation trolley What colour are they?	
9. ECG machine & bladder scanner	
10. Clinical equipment such as syringes, needles, dressing packs etc	
11. Infusion pumps & feed pumps	
12. Infusion giving sets & feed pump giving sets	
13. Ventilators Non Invasive Ventilators BiPAP/CPAP- Responsics HFNP- Airvo	
14. Equipment storerooms & how many are there	
15. ABG room & Pathology shoot	
16. Linen trolleys	
17. Thermometers Glucometers Stethoscopes	
18. Blueys	
19. Hovermats & Blower machines stations	
20. Ice/water machine, patient kitchen facilities	
21. What is the ward routine for: AM shift	

PM shift N Shift	
22. Medication rooms	
23. Pan Rooms	
24. ICU's main number	
25. Who is the Clinical NUM on this shift?	
26. Nursing handover rooms for which shift	
27. Visitors hours	
28. How many visitors allowed at the bedside at any one time?	
29. How do visitors enter the unit?	
30. Visitors toilets & tea/coffee making facilities	
31. What's the number to call switch?	
32. How do you page from the phone?	
33. How to use the TV & bedside call system	
34. Bed unit- How does it work?	
35. How do we record patient data in ICU?	
36. Infection control equipment, where is it stored on the clinical floor?	
37. Infection control stations including hand gels, sinks etc	
38. Patient charts- paper: old notes, stationary, clinical forms, obs charts	
39. How do you look for pathology results	

Once completed, please find your facilitator to check your answers