

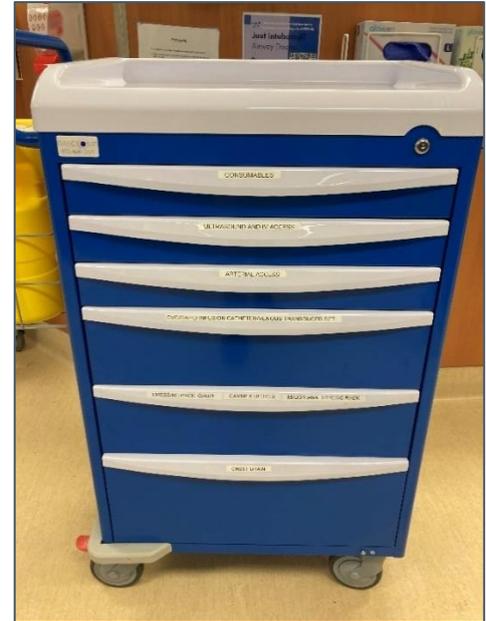
Sir Charles Gairdner Hospital Emergency Department (SCGH ED) Resus Procedural Cart



What is the most efficient way of accessing all the equipment required to perform time critical procedures in the emergency department (ED) resuscitation environment?

In designing our ED Resus Procedure Cart, the aim was to create an 'all in one' cart where the clinician or assistant can easily access all items required for common procedures performed in the resus room.

Many ED resus rooms use pre-made kits for Central Venous Access (CVC), arterial lines and chest drains but we found that these were often incorrectly packed, time consuming to make and did not offer the flexibility required for the more complex procedures performed. We found that during critical situations, staff members were frequently having to leave the resus room to find pieces of equipment kept in storage compactors.



Rather than create another cart with pre-made kits, we opted for a mobile storage unit approach. The functionality of the cart revolves around **Draw Number 1: Consumables**. This draw contains items that are frequently used in the majority of critical procedures such as local anaesthetic, sutures, needles and syringes. This gives the clinician or assistant the ability to use multiple items that are common to each procedure performed.

Draw number 2: Ultrasound contains probe covers, spare wires, long ultrasound cannulas, echogenic needles and vascular sheaths. Again, much of this equipment can be used for a range of procedures performed in the resus environment.

The remaining draws comprise of **Arterial Access, Venous Access, Gown/Gloves/Drapes** and **Chest Tubes**.

One of our goals as part of a larger improvement in resus care has been to achieve early central venous and arterial access in the crashing patient. The carts allow us to realise this goal. The 6 and 7 French vascular sheaths provide the ability to obtain large bore venous access in the haemorrhaging patient. The smaller 4 French vascular sheath provides a quick and effective way of accessing the femoral artery for invasive blood pressure monitoring. Furthermore, the placement of femoral arterial and venous access sheaths allows for re-wiring and conversion to Extra-Corporeal Membrane Oxygenation (ECMO) cannulae should the patient require it.

Since introducing the carts into the ED environment, we have been able to improve the speed and efficiency in which critical procedures are able to be performed in the ED. The carts are easy to restock and provide nursing and medical teams with a 'one stop shop' for procedural care.

Draw Contents

Drawer 1 – Consumables

5ml Syringe

10ml Luer Lock Syringe

20ml Luer Lock Syringe

#11 Scalpel

IV Tegaderm

J Loop

Size 0 Monofilament Suture

Micro Suture Pack

18g Drawing Up Needle

25g 1/12" Precision Glide Needle

1% Lignocaine

1% Xylocaine with 1:100000 Adrenaline

2% Chlorhexidine with 70% Ethanol 30 ml

10ml NaCl Vials



Drawer 2 – Ultrasound

Arrow Marked Spring-Wire Guide 0.032" x 26 3/4"

Ultrasound Probe Cover Kit

18g x 70mm SonoVascular Needle

14g x 1 3/4" Ultrasound Cannula

18g x 1.88" Ultrasound Cannula

20g x 1.88" Ultrasound Cannula

4fr Radiofocus Introducer (Red)

6fr RadioFocus Introducer (Green)

7fr RadioFocus Introducer (Orange)



Drawer 3 – Arterial Access

500ml NaCl

Pressure Bag

Radial Wrist Support

Arterial Line Transducer Cable

Arterial Line Transducer Set

Tegaderm CHG 7cm x 8.5cm

IV 3000 Dressings

Arrow QuickFlash Radial Artery Catheterization Set
20g

Femoral Artery Set 18g x 4 1/4"



Drawer 4 – Venous Access

4 Lumen CVC Set 8fr x 20cm

Positive Pressure IV Bung

Rapid Infusion Catheter (RIC Set) 7fr x 5cm

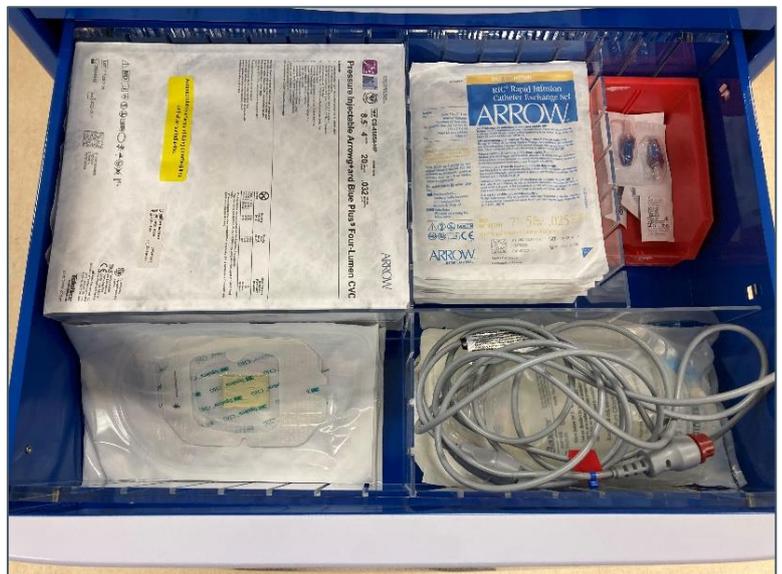
Tegaderm CHG 10cm x 12cm

Pressure Bag

Venous Line Transducer Set

Venous Line Transducer Cable

500ml NaCl



Drawer 5 – Gowns/Gloves/Drapes

Major Anaesthetic Pack

Bifemoral Angiography Drape

Gammex Gloves 6, 6 1/2, 7, 7 1/2, 8

Dressing Packs

Gauze



Drawer 6 – Chest Tubes

Rocket/Seldinger Chest Drain Kit 18fr

Rocket/Seldinger Chest Drain Kit 12fr

Surgical Chest Drain Pack 28fr

Rocket Chest Drain Tubing Set

Chest Drainage Bowl/Water Seal

500ml Water for Irrigation

24fr Thoracic Catheter

32fr Thoracic Catheter

Tubing clamps

