



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



PRIORITY:

1

**COST
(EXC. GST):
\$260,000**

**QUANTITY:
6 (2022/23)
4 (Annually)**

NETS Specialist Ambulance

NETS uses specialist ambulances to travel to hospitals to bring intensive care staff and equipment to the bedside of sick or injured babies and children. They are then transported to a specialist teaching hospital for continuing care. The ambulances have capacity, facilities and functionality not available in the fleet of the NSW Ambulance Service (NSWA). Ambulances travel from the Sydney base to hospitals in metropolitan Sydney and others to over 400km away (sometimes much more when air transport is not possible). Additional ambulances are based in regional centres to support satellite NETS operations from The Canberra Hospital and John Hunter Children's Hospital covering the ACT and Hunter respectively. Ambulances are also based in Wagga Wagga and Nowra covering the Riverina and Illawarra/South Coast respectively. Regional ambulances support Sydney-based teams travelling between airports or helipads and hospitals. The current fleet includes older models; some with in excess of 300,000 km in service to NETS and need urgent replacement.

The Mercedes Benz 416 long-wheel-base Sprinter is a longer vehicle than a traditional ambulance. It can accommodate two of the NETS life support systems; one loading from the rear like a regular ambulance and the other side-loading. Difficult manual handling challenges are solved in this design; permitting a 167kg neonatal life support system and its 121kg trolley to be loaded by one person into the ambulance. Such heavy equipment is required to make the life support safe in a moving vehicle. This key feature of the ambulance addresses occupational health and safety problems with stretcher-based loading and is compliant with the 20G crash-worthiness standard mandated by the Australian Design Rules.

Life support equipment for a baby or infant and an older child can be carried simultaneously; permitting a NETS' team to be diverted from one mission to another without returning to Base for a change of equipment. It also allows the transport of two patients simultaneously (e.g. twins).

NETS' ambulances carry medical air and are approved for delivery of iNO (inhaled Nitric Oxide); neither of which is possible in a 'normal' emergency ambulance.

The extra space and additional seating permit additional staff (e.g. for training or particularly complex cases requiring extra skills), larger supplies of medical oxygen and medical air and a guarantee that a parent can travel with their child; if desired. In a regular ambulance only a two person team (Dr + RN) can be accommodated without the ability to include training staff or a parent.

In-ambulance (mobile) Vision-for-Life video cameras provide support to teams dealing with a problem with the patient in transit. This is especially relevant considering the long duration of many missions.

NETS Ambulances are increasingly relevant in regional areas where they can transport of NETS teams from the city between airport/landing site and hospital as well as support the deployment of regional paediatric specialists and their nurses from regional base hospitals to a smaller hospitals within an hour or so. Some of these patients need urgent resuscitation and care and even though they may not be able to be cared for in the region, the advanced skills brought to the local hospital can make a big difference while awaiting a NETS city team. In other patients, the baby or child is appropriate to be transported by the regional team in the NETS Ambulance back to the regional base hospital.



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



NETS Operational Management System

The NETS clinical & operational electronic database is the heart of the clinical coordination centre and a crucial component in the delivery of NETS services. NETS uses a 35 year-old DOS-based database which needs replacing with a more sophisticated system with capacity to link to hospital Electronic Medical Record (EMR) systems at sending (eg FirstNet, eMaternity, etc) and receiving hospitals (eg Powerchart). This would avoid information about patients being verbally handed from referring hospital to NETS and from NETS to receiving hospitals as at present. The proposed new electronic medical and operational system would:

- Improve efficiency of tasking, communication & transport; for improved patient outcomes.
- Reduce duplication of information entry by referring hospital, NETS, Retrieval team and Receiving hospital resulting in less error and greater efficiency
- Accept information entered by referring staff manually via an electronic form
- Accept 'pushed' information from referring hospital systems such as Powerchart and ERIC
- 'Push' patient-specific information to referral hospital clinicians such as Powerchart and ERIC
- Streamline team tasking by avoiding delays awaiting paper documents to be completed pre-deployment
- Replace existing paper forms documenting operational and clinical information with electronic forms
- Be more user-friendly
- Integrate decision-support algorithms for both NETS teams and referring clinicians – making the existing NETS Calculator and Song Sheets redundant.
- Support critical decision-making by providing detailed information about capabilities and personnel at every hospital as well as comprehensive clinical information
- Enable teams to enter and access patient and operational information in transit (ground and air)
- Comply with Health and SCHN records strategies which aim to ensure a single patient view of records in a reliable and accessible electronic medical record throughout the patient journey.
- Provide appropriate safeguards to ensure security against unauthorised use, disclosure, loss or other misuse
- Provide an auditable tracking system of data entry, modification and view
- Include data types such as photo images & video in accordance with Health policies
- Improve reporting of data to hospitals using NETS; either referring or referral and their associated LHDs and Networks as agreed in any service level agreements which may be reached
- Document operational activity to provide data to raise charges
- Document service activity to provide data for Activity-based Funding; including time in consultation by NETS and referral clinicians
- Full-scale support around the clock, change management processes and version updates

PRIORITY:

2

**COST
(EXC. GST):**

**PROJECT
DEVELOPMENT
PHASE**

QUANTITY:

1

All prices subject to change

NETS Equipment Wish List (May 2022)



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



NETS Paediatric Life Support System

NETS and Total Aerospace Solutions

A NETS-designed system for mobile intensive care of older infants, children and teenagers. It is the first type of life support system designed to provide heated humidification of high flow non-invasive ventilator support as well as all the traditional forms of invasive ventilation. This has not been achieved anywhere else in the world. Non-invasive ventilator support is particularly useful in small children who would otherwise need unnecessarily invasive treatment

It incorporates a sophisticated physiological monitoring system with inbuilt communication 'back to base' allowing real time physiological parameters to be viewed at NETS' Clinical Coordination Centre. The system includes tele-ultrasound, tele-laryngoscopy and a compact defibrillator.

The extensively modified stretcher provides main power and gas supplies for uninterrupted operation – even when outside an ambulance or aircraft.

A plug-in ECMO unit can be added for patients needing Extra Corporeal Membrane Oxygenation in transport.

The first of type has been in operation for over a year. This new design will replace previously separate Bridge and Stretcher combinations.

Three more are required for NETS main Base at Bankstown and a fourth for NETS Hunter (based at the John Hunter Children's Hospital).

PRIORITY:

3

**COST
(EXC. GST):
\$253,000**

QUANTITY:

4



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



ECMO Transport Equipment

Extracorporeal Membrane Oxygenation takes the body's blood outside the body to a machine which adds oxygen and removes carbon dioxide from the blood and then returns the blood to the body. The lungs (and heart where necessary) are made redundant for a period sufficient for a failing lung or heart to recover.

Previously, this treatment was restricted to use in an ICU. Trying to move a patient receiving this care was fraught with risk and has only been attempted on an improvised basis.

NETS has designed a mobile version for 'ECMO Transport' which permits this treatment to be started in one hospital and then continued in transport to a children's hospital with an ECMO program. It is designed to make the job of the cannulation team much easier in the local hospital and is approved to work in road ambulances and air ambulances (both fixed wing and helicopter). A series of modular elements permits the equipment; filters, pump, heating system, system monitoring to be fixed to the NETS Life Support System in a fully integrated way.

As the result of a recent funding initiative by NSW Health, a Kids ECMO Referral Service is being established. It supports employment of clinicians to offer advice about suitability of patients for this treatment and to add supplementary team members to the NETS' Retrieval Team so that patients can be cannulated in a local hospital, ECMO initiated and the patient safely moved with this treatment added to the intensive care NETS normally offers such patients.

It is expected that the numbers of infants and children selected for this care will increase substantially now that a program is in place and this vital Transport Equipment is available.

PRIORITY:

4

**COST
(EXC. GST):**

\$100,000

QUANTITY:

1



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700

NETS Neonatal & Infant Special Care Transport Unit (Level 2)

- Drager incubator +
- Incubator modifications/restraint system
- Hissen interface
- Stryker stretcher
- Philips monitor
- Braun infusion pump (x2)
- Engineering and manufacturing costs

PRIORITY:

4

COST
(EXC. GST):
\$70,000

QUANTITY:
1



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



ALS-001 Neonatal Baby

Newborn advanced life support (ALS) manikin that provides all necessary features for realistic training of neonatal resuscitation. Scenario-based training for skills of neonatal advanced life support (NALS) can be demonstrated, practised and assessed on these simulators and range from the initial evaluation to advanced procedures like airway management, injections and infusions, and neonatal CPR.

NEONATAL Baby Male

Standard: White

European Skin Tone

Standard Specifications include:

- Step wise air management - Upper Airway Mouth, Bag Valve Mask Ventilation, Intubatable
- CPR
- Standard Weight 875g
- NG Insertion
- Reinforced Bag

PRIORITY:

4

**COST
(EXC. GST):**

\$7,183

QUANTITY:

1



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



NETS Neonatal Electric Trolley

A height adjustable trolley used to move neonatal life support systems outside of a vehicle; including within the sending and receiving hospitals. The trolley is able to be loaded with a neonatal system into a NETS ambulance using a side loading system with a single operator.

To assist the operator, this trolley has been redesigned to incorporate motorised wheels to reduce the manual handling risks associated with moving a neonatal system.

As the trolley is height adjustable, it also allows clinical teams to raise or lower the retrieval system to a desired height when preparing for the transfer of a neonatal patient.

PRIORITY:

5

COST

(EXC. GST):

\$20,000

QUANTITY:

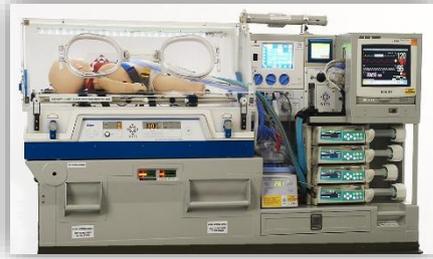
8



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



NETS Neonatal Life Support System

New model to replace 2012 series – NETS and Total Aerospace Solutions

- Includes incubator (as above)
- Upgrade physiological monitoring, infusion pumps (see below), better mechanical ventilator (as per coronial recommendation)
- Heated humidification
- Autonomous operation with Power and Medical Gas management system
- iNO treatment system
- Top-lift self-loading for aircraft and helicopter, electric trolley (see below) for NETS' ambulances
- Crashworthy in road and air ambulance transport (20G rated)

PRIORITY:

6

**COST
(EXC. GST):
\$300,000**

QUANTITY:

5



NETS EQUIPMENT WISH LIST

In order for NETS to obtain and periodically replace vital medical equipment and vehicles used in the emergency transport of sick babies and children NETS requires around \$650,000 per year. Through partial or full support of any of the wish list items you can help NETS provide kids in your community, and throughout NSW and the ACT, with the state-of-the-art emergency intensive care services they need.

For more information or to make a donation please contact NETS on 1800 10 NETS (6387) or (02) 9633 8700



C-MAC Video Laryngoscope

A portable airway management system that offers multiple visualisation options, specifically designed for younger patients.

Standard components:

- Monitor Set
- Charging Unit
- Carry bag

Laryngoscope Blades:

- A) MILLER C-MAC Video Laryngoscope #1
CMOS technology, with MILLER laryngoscope blade, size 1
- B) BERCI-KAPLAN C-MAC Video Laryngoscope MAC #2
CMOS technology, with MACINTOSH laryngoscope blade, size 2
- C) BERCI-KAPLAN C-MAC Video Laryngoscope MAC #3
CMOS technology, with MACINTOSH laryngoscope blade, size 3

- For paediatrics and neonatology
- Particularly flat model; anatomically optimised tip
- For direct and indirect laryngoscopy
- For routine clinical use and training

PRIORITY:

7

**COST
(EXC. GST):**

**STANDARD
COMPONENTS:**

\$8,345

BLADES:

A) \$6,750

B) \$5,570

C) \$5,570

QUANTITY:

1