AUSTRALIAN RETRIEVAL NEWS

December 2007 Edition

Photo: Drew Peter on the Helipad at Royal Adelaide Hospital with the Bell 412

All retrieval articles, pictures & educational cases are welcome. Submit electronically to ARNA.
Welcome to the first edition of ARNA NEWS. 2007 has been an eventful year. In a few short months we transformed a retrieval nurse interest group into a National Incorporated Association.

There are many people to thank for their invaluable assistance, advice and hard work to get this far. A big thank you to Lee Thomas, ANF Branch Secretary for providing professional advice, venue and teleconference facilities. The Executive Committee (Jacqui, Nat, Sue, Ian, David, Faye, Kevin, Jo & Shane) has worked hard behind the scenes to establish this organisation and ensure we fulfil our legal responsibilities. Special thanks go to Jo Murphy (our Treasurer) who has had the arduous task of looking after membership applications & finances. Also I would like to express my appreciation to all our retrieval nurses who have supported the formation of the ARNA providing encouragement and enthusiasm.

The ARNA NEWS is preliminary edition and will develop with guidance from members. Do you have any ideas as to what you would like to see included in future editions? Perhaps you have a great idea for a name for the ARNA NEWS? You could win a $50 gift voucher (see below).

This edition includes a snapshot look at some of the retrieval services around Australia. Ian Gill reports on the John Hunter Hospital with some great photos. Pauline Lowe has given us an interesting history of the Neonate service in Adelaide. Jacqui Hyslop gives a brief look at the retrieval service in Gosford. Our Member In Profile is our own Executive member Nat Cook from Flinders Medical Centre. The Education Page contains a few courses relevant for retrieval nurses. We would like to include more in the future to keep us all up to date.

Controversy Corner contains an extract of a brilliant essay from retrieval nurse Marie Maddox. If you would like the full copy – contact us at ARNA. It was included to invite debate – feel free to respond and have your say in the next edition. It is a relevant topic as nurses struggle to maintain a place in retrieval services throughout Australia. This is evident in South Australian where retrieval nurses have been in limbo awaiting the arrival and direction from the newly appointed Medical Director of the Statewide Retrieval Service, Dr. Matt Hooper. New South Wales retrieval nurses have expressed similar encounters in the past. We are fortunate to have a cohesive and active group of nurses to ensure the future of retrieval nursing in Australia.

I would like to take this opportunity to wish you all a very Merry Christmas & Happy New Year.
Treasurer Report

Registered Interest members  54
Active Membership               32
Associate Membership           1

Funds

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We are actively looking for financial sponsors with the possibility of providing them with advertising space on the news letter or web site. I encourage all of you to help recruit new members to our organisation, please contact Debbie for more forms if required.

Cheers and happy Christmas,

Joanna Murphy

How to contact us

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Royal Adelaide Hospital
North Terrace
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Hi everyone, my name is Ian Gill and my role is to help coordinate medical retrieval services within the southern sector of the Hunter New England Area Health Service, NSW.

The Hunter New England Retrieval Service (HNERS) is based within the ICU at John Hunter Hospital, Newcastle (and operates out of my office unfortunately). The JHH is a level 6 Trauma Centre with the busiest ED in NSW. We also are one of only 3 Paediatric ICU’s in NSW which give us a diverse case mix. The level of significant trauma we manage, particularly neuro, is escalating and now statistically recognized by the NSW DOH and associated medical faculties. The HNE Retrieval Service specializes in adult and paediatric critical care and we move these patients primarily to the John Hunter Hospital Trauma Centre or to a Sydney Trauma Centre for further specialist treatment. It has done so now for 28 years continuously, always based out of the ICU.

We utilize ambulances, helicopters and fixed wing aircraft for these missions and will conduct approximately 600 of those missions this year. The realistic primary mission response in this area, conducted by the ambulance service paramedics, would be approx 400. We only do secondary missions, moving these patients from smaller hospitals within (and increasingly beyond) our area health service. These transfers are made once a medical referral has been made via our 1800 (463 777) number or via the MRU/NETS in Sydney. Since our 2005 restructure and integration within the other state wide retrieval networks, also in combination with the introduction of our 1800 referral number, our work has escalated dramatically within this period.

This whole referral process is managed via the retrieval nurse. They carry the retrieval DECT phone with them at all times (24hrs/day). These nurses are all critical care certificated and are then trained operationally for retrieval work either by myself or Janet Maher (my partner in crime). We coordinate this retrieval service from within the JHH ICU, JHH, and Newcastle. There are 38 nurses and 16 doctors on the roster and they average nearly 2 jobs a day.
We only have one team (Dr/Nurse), 24hrs/day, 7 days a week and the funding to provide this comes from the NSW DOH. We utilize both 12, 10 and 8 hr shifts to make it work and attempt to address the big problem in this industry, fatigue. We are increasingly covering larger distances for a small outfit, especially after dark when even smaller services remain VFR. We have noted also on our recent audits that increasingly we are being tasked after 12 midday? Working together with other state wide services to provide a retrieval solution is a characteristic of our retrieval service.

The retrieval staff are utilized on the floor once all the daily requirements of the position are met, on a shift by shift basis. They are 'uniformed' and ready to go once tasked by the ICU Staff Specialist 'on' for retrieval calls. They never 'have a patient load', and are considered, what we call, 'access nurses', who assist the unit where ever needed. This includes the General ICU, Paediatric ICU, Cardiac ICU and HDU areas. If there is a call they move out to the retrieval office to commence the coordination process through the 'conference call' procedure. This is very similar to NETS but a much cheaper version utilizing DECT phones. Recently we now have 3 web cameras in smaller hospital resuscitation rooms, which the retrieval nurse activates. They help coordinate the ICU Staff Specialists at home 'on call', utilizing the hospitals broadband intranet service. This aspect has become a very important function which we cannot speak more highly of. Again we use the cheaper more reliable type as opposed to the NSW DOH's $$ trial, utilized at St George, RNSH and Tamworth hospitals which are used infrequently! We utilize our cameras now at least once a week. It’s important to note, that by not sending the team once, we have paid for the camera, its installation and education immediately (approx $3000).

Our transport is coordinated by the retrieval nurse to pick the team up from the JHH helicopter pad or ambulance bay. We use a Bell 412(x1), BK117's(x2) and B407(x1) Helos, Mercedes Sprinter Ambulances and King Air Fixed Wing Aircraft from Williamtown Airport, Newcastle.

The service really sounds very much like Mediflight except,
1. We don’t do pre-hospital work (unless re tasked on route by ambulance supervisor)
2. We do paediatrics (you probably do paediatrics as a primary though)
3. The nurse here ‘coords’ everything, similar to NETS, and I mean the lot!
4. we are always available within our ICU for utilization when not required for retrieval work (Dr’s & Nurses). This is also the same for the ambulance paramedics (2 teams) who remain available for general duties.
5. This inherent flexibility has helped maintain our currency of practice. This aspect also helps address the very broad range of clinical requirements we see and manage, and is reflected in the continuous high level of service we provide to our community.
6. Interest in our retrieval model from ACT Health Critical Care recently, has been positive.

Ian Gill
HNE Retrieval Service Coordinator / ICU Equipment Manager
ICU, John Hunter Hospital, Newcastle, NSW
Dr Geoffrey Dahlenburg founded the Neonatal Emergency Transport Service in South Australia in 1976 at the Queen Victoria Hospital. The service covered South Australia, Alice Springs, Darwin, Mildura and Broken Hill.

Today with the exception of Darwin the service covers the same areas. In addition neonates requiring cardiac surgery are transferred by the service to Melbourne.

The retrieval service is shared on a roster between the Women’s and Children’s Hospital (WCH) and Flinders Medical Centre (FMC) with a mobile retrieval unit located in both Neonatal Intensive Care Units (NICU). The retrieval units and their equipment cases are the same, enabling either WCH or FMC teams to use the others unit and equipment if necessary. Neonates from 23 weeks to 40 weeks gestation are retrieved using a purpose built mobile intensive care unit. Where possible we also transfer the mother with their baby.

Numbers of retrievals per annum are 150-180 and each year approximately 30 neonates are transferred from NICU or PICU at the WCH to Melbourne for cardiac surgery.

Nurses undertaking retrievals have a Neonatal Intensive Care Certificate and are educated and orientated to the retrieval unit, ambulance, fixed and rotary wing aircraft and undergo an annual re-accreditation.

The retrieval team usually consists of a doctor/nurse, nurse practitioner/nurse or nurse only.

**RETRIEVAL UNITS**

Assembled at The Queen Victoria Hospital and contained an isolette with an inbuilt ventilator (using oxygen only), cardio-respiratory monitor on top of a large heavy battery, one infusion pump, and used in ambulance and fixed wing aircraft. A fishing tackle box carried all the necessary equipment/drugs to intubate, insert intravenous and central lines and under water seal drains

*NORRIS MK 1 1976-1981 (Neonatal Retrieval Intensive Care Service)*
Designed at the Department of Science and Technology in collaboration with BME at the QVH and was the recipient of an Australian Design Award and contained an isolette with an inbuilt ventilator (using air and oxygen), oxygen analyser, transcutaneous monitor, cardio-respiratory monitor, two infusion pumps and used in ambulance, fixed and rotary wing aircraft. The same fishing tackle box used for the necessary equipment.

**NORRIS MK 2 1981-1994**

Designed at Australian Flight Test Services in collaboration with BME at QVH and contained isolette, ventilator (using air and oxygen), oxygen analysers, cardio-respiratory monitor, two infusion pumps and used in ambulance, fixed and rotary wing aircraft. A new fishing tackle box was used with this unit which had individual boxes carrying the appropriate equipment for e.g. umbilical catheterisation.

**NEOTRAN 1994-2003**

Designed at the University of Southern Queensland and built by Mansell Transport in Queensland and contains isolette, ventilator, cardio-respiratory monitor, infusions pumps

This unit is automated for ease of loading into and out of transport vehicles. The isolette with the attached ventilator, monitor and pumps can be removed in its entirety from the sled to accommodate differing barouches interstate. The isolette etc. can also be rotated to slide in from the opposite end to facilitate different side loading ambulances. This retrieval unit is used by Queensland, Victoria, South Australia and Western Australia in ambulance, fixed and rotary wing. The equipment cases we now use were custom made to suit our needs.

**MANSELL RETRIEVAL UNIT 2003-**

Pauline Lowe
Neonatal Intensive Care Unit
Women’s and Children’s Hospital
GOSFORD GOSSIP

The Central Coast Regional Retrieval Service has only recently been officially recognised and funded for the transfer of critically ill patients within the Central Coast Sector of Northern Sydney Central Coast Area Health Service. We are a regional service situated between Sydney and Newcastle. We provide a road based service with dedicated equipment and highly skilled and trained staff, undertaking only secondary transfers.

Gosford Hospital is the only Level 5 ICU in the region and Wyong Hospital (our primary referral hospital) currently has limited critical care and OT facilities.

We retrieve between 15 to 25 patients per month to Gosford ICU from Wyong, the majority of whom are intubated. Additional to this we retrieve critically ill patients to Gosford CCU/CAU and OT when requested.

Our primary tertiary referral hospital is Royal North Shore. For tertiary transfers the Aeromedical Medical Retrieval Service (AMRS) in Sydney is contacted and patients are transported by helicopter. John Hunter Hospital in Newcastle, will usually provide their own transport and retrieval team if the patient requires transfer north.

When requested, due to weather or in time critical cases (where helicopters are unavailable) we also undertake transfers of critically ill patients to tertiary facilities from Wyong and Gosford Hospitals, including patients with IABP.

We are a growing dynamic and highly skilled team. We are working toward the future following more than 20 years of unfunded and unrecognized service.

By Jacquie Hyslop
I'm 38 and have been nursing for more than 21 years. Initially I trained at The Queen Elizabeth Hospital and have since completed a Bachelor of Nursing, High Dependency, Critical Care and Retrieval certificates at a variety of universities. I have worked at Flinders Medical Centre since 2002 where there is a fantastic group of talented and committed nurses. The diversity and constant rewards of Intensive Care and Retrieval Nursing is something I haven't come across in any other setting. Teaching undergraduates and hospital coordination keeps my mind busy also! The upcoming challenges of the new statewide retrieval service is something to look forward to and embrace in a positive way and I look forward to doing that with like-minded colleagues in our association.

Nat Cook

ISAS Wellington 2007 Report by Jo Murphy

Four RAH Mediflight staff members attended ISAS 2007 in Wellington NZ. Wellington sure lived up to its name as the windy city. I felt lucky not to be flying in those conditions. There were several interesting presentations of note;

**NZ ECMO retrieval team** consists of Retrieval Consultant, Perfusionist and Retrieval Nurse. The team receive a retrieval consult, after extensive consultation they mobilise to the referring hospital and commence ECMO. Once the patient has stabilised they then load and go. Fixed wing, ground and rotary wing transport have been utilised with success.

**The effects of altitude on Oxylog Portable Ventilators**

An excellent talk that looked at the tidal volumes and resp rates of the oxylog 1000, 2000, and 3000 at altitude, simulated in an hypobarian unit at Edinburgh Air Force base. The results were rather interesting (contact Kevin if interested in results).

Remember ISAS 2008 Adelaide see you there!
COURSES OF INTEREST:


International Society Aeromedical Services (ISAS) 2-4 Oct 2008 Convention Centre Adelaide (see next page)

Extreme Prehospital Care Colchester UK 12 July 2008 E: info@pre-hospitalcare.co.uk

ANZICS/ACCCN ASM, Darling Harbour Sydney 30th Oct – 2nd Nov 2008
Adelaide, South Australia welcomes the ISAS/FNA Conference, 2-5 October 2008

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a brilliant blend
What is the role of the Retrieval RN in caring for patients who have sustained traumatic injury?

A retrieval team (consisting of a senior doctor and critical care nurse) at the Royal Adelaide Hospital was asked to respond by the Ambulance Service to a multiple casualty incident. Two victims were trapped in a car. Their extrication was thought to be protracted and as such a retrieval team was required. A weight limit issue on the helicopter however ensured that the pilot would only take off with a paramedic or retrieval nurse but not both. After much deliberation with the helicopter sitting on the tarmac for over an hour, the retrieval nurse reluctantly left the scene and the helicopter took off.

It is a well known fact that if trauma patients receive definitive care soon after injury they have a much higher survival rate than when care is delayed. Definitive care includes three phases 1) rapid response to the patient, 2) provision of efficient and prompt care to establish ventilation, oxygenation and adequate perfusion for organ preservation and 3) rapid transport of the patient to the most appropriate facility (Salomone, Pons and McSwaine 2007).

Unfortunately these patient’s chances of survival were severely reduced because professional boundary issues were being debated in the wrong place at the wrong time. Pre-hospital trauma care is in a state of flux currently in South Australia but a helicopter is not a place to try and solve these issues. Further many of the basic tenets of pre-hospital trauma care, that up until now have been accepted and promoted, are being challenged in the research literature. Such issues include Rapid Sequence Induction (RSI) and intravenous fluid therapy (Mattox 1989; Bickell 1994; Davis 2003). Indeed Eckstein (2004) argues that the most basic mantra of all which is ‘First do no harm’ is being contravened because ambulance workers are still performing past practices despite evidence to the contrary.

In this essay the above high risk practices will be highlighted as the care of a trauma patient is detailed and discussed from a retrieval perspective. This essay will demonstrate that the role of the retrieval nurse in caring for trauma patients is evidenced based, appropriately performed in conjunction with senior physicians and grounded in critical care medicine.

*Extract of an article written by Marie Maddox RN, (RGN) - England, Bachelor of Arts (BaSc), Grad Dip of Critical Care, Masters of Nursing,, Grad Cert Retrieval Nursing*

If you would like to read more – contact ARNA and we will send the article in full, or perhaps you would like to respond – send us your opinion & we will include it in the next issue.
Membership Application:

Title: _______________________________
Surname: ___________________________
First Name: __________________________
Mailing Address: _____________________
____________________________________State:________________PCode:_________
Phone (W): ___________ (H):___________
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Workplace: __________________________

I apply for:
Active Membership: ☐ $50
Associate Membership: ☐ $30

Signature: ____________________________
Date: _______________

ACTIVE MEMBERSHIP:
Registered Nurse/Midwife who actively participate as a clinician, educator or administrator for a Retrieval Service in Australia. Fee $50 pa.

ASSOCIATE MEMBERSHIP:
An individual who has an interest in Retrieval Nursing. Fee $30 pa

Payment Details:
Cheque: ☐ Money order: ☐
Make money order or cheque payable to: Australian Retrieval Nurse Association Inc

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