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EDITOR Ally Hale

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## MISSION STATEMENT

A commitment to excellence in  
Infusion Practice



IVNNZ Inc. is proud to be an international affiliate of the Infusion Nurse Society (INS) of America

## EDITORIAL Resilience in the Face of Adversity

Health professionals have become more resilient to survive the ever-changing face of healthcare. Nursing is an inherently stressful occupation with a plethora of associated psychosocial stressors. Advanced technologies, cost efficiencies, increased workloads, fatigue, skill-mix imbalances, bullying, poor pay, restructuring and a lack of organisational support all come into the equation.



The recent New Zealand nurses' strike July 12th 2018 can attest to escalating stress levels and concerns. At some point in our careers, most nurses identify with some or all of these psychosocial stressors. A disconnect between a corporate marketing model and the philosophy of nursing creates an ethical dilemma (Roberts, Grubb, Grosch 2012). There is no overnight fix and concentrated efforts are needed to resolve these issues before nursing succumbs to further burnout and occupational attrition. A psychosocial band aid with simple strategies to reduce stress and mitigate risk can begin at the point of care.

Policies and procedures in infusion therapies are there to protect everyone. Boynton (2013) questions why do we do it wrong if we know how to do it right? In response to organisational pressure to 'do more with less' many health practitioners, as a survival





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mechanism, adapt by taking short cuts to get the job done. Medication administration and infusion practices are just two of these casualties.

Doing something the wrong way, many times, without any bad consequences becomes normalization of deviance (Boynton 2013). Boynton suggests shortcuts are secrets withheld by shame, inadequacy and fear and how often these shortcuts occur is unknown because they are taboo to talk about. A slippery slope of shortcuts, in any context, puts the practitioner, patients and colleagues at risk. Shortcuts invariably backfire. Always take that second checker to the bedside, scrub that hub and be guided by policy. Consider adherence to policy as your 'get out of jail free' card.

Nurture and advocate for each other, particularly our young entering the profession untarnished by adversity and with high hopes of making a difference. Educators and clinical facilitators can make a difference by identifying psychosocial stressors and providing colleagues and young nurses with tools, mentorship and coping strategies to overcome these in the clinical environment.

Appreciate and value your colleagues. If your day has been less than optimal, consider you are not alone. A smile and a simple thank you can go a very long way when faced with adversity!

Finally, value yourself and the contribution you make as a nurse in a challenging health system. Wear the title with pride. The impact you make, however brief, will be remembered.

**Ally Hale**

**Nurse Educator Bidwill Trust Hospital, South Canterbury**

**IVNNZ Inc. Editor & Private Sector Representative**

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## President's Message

### Introductions from the President "I Have a Dream"

*Lynette Lennox RN PG DHC, Clinical Nurse Specialist, Infusion & Related therapies, Waikato District Health and elected representative of the IVNNZ Inc. Executive Committee in the role of President*

My name is Lynette Lennox and I have a dream. First, I would like to introduce myself as the newly elected President of Intravenous Nursing New Zealand Incorporated (IVNNZ Inc.). Thank you to those members who attended the Annual General Meeting (AGM) and supported my nomination and election for the next term of two years.

### Professional History

I graduated from Manawatu Polytechnic in Palmerston North (North Island of New Zealand) as a registered nurse in 1987. In the first three years post-graduation, I worked in a number of specialties including cardio-thoracic / vascular surgery, respiratory



medicine, stroke rehabilitation and post-natal care. I also spent time in the United Kingdom and Canada working in intensive care, occupational health, palliative and community-based nursing. I returned to the mighty Waikato, NZ after five years overseas to



work as a pool nurse across all clinical areas at Waikato Hospital. After some time, I settled in general surgery for 16 years as a registered nurse and Acting Charge Nurse Manager.

In 2006, I began the role as a Clinical Nurse Specialist (CNS) for Medicines Management and Infusion Therapy. My role has evolved over the years with various job descriptions and title changes but always with an infusion focus.

In my capacity as CNS, I consult and advise on all aspects of infusion therapy including vascular access and medicines management. The role includes leadership, consultation and providing advice on research, development, implementation and evaluation of standards of infusion practice and medicines management. Additionally, it involves the facilitation and development of pathways, procedures, protocols, guidelines and product evaluation for all disciplines and PICC insertion using ECG morphology and ultrasound, one half day a week.

In 2014, I achieved my Post Graduate Diploma in Health Care from Victoria University, Wellington and am presently enrolled to complete my master's degree.

#### IVNNZ History

I was first a member and involved in IVNNZ Inc. in 1995 at the Nelson conference where Annie Gohns (first president of IVNNZ Inc.) encouraged me to facilitate a Total Parenteral Nutrition (TPN) workshop. After having children, my membership lapsed.

I re-joined in 2007 and have been an active member since. I have been on IVNNZ Inc. Executive Committee since 2010, initially elected as secretary for two terms and then as educator.

The first part of my dream as the new IVNNZ Inc. President is to bring all the new and ongoing executive members together by building a productive and effective team. I hope that the executive will come to trust my leadership and judgement through honesty and transparency.

Learning more about each executive member, understanding their skill set and what motivates them will enable their strengths for specific problem solving to be utilized to increase our productivity. With this understanding, I hope to foster ongoing teamwork, communication and cooperation resulting in better outcomes for all the membership.

As president, I have co-opted both Catharine O'Hara and Rachel Wilson to the executive. Catharine will be leading a project to complete the work started by our Immediate Past President Kate Laidlow to update our Incorporated Society Rules. Rachel will be providing consultation and advice from a national perspective to keep the executive current with paediatric haematology and oncology infusion therapy practice.

The focus for the executive this year is the update of organisational templates, specifically those relating to conference planning and implementation. Please read the minutes from our July and upcoming November meetings to be informed of the work the executive committee are undertaking.

Nurses and midwives around New Zealand (NZ) are a mobile workforce moving from town-to-town, city-to-city and organisation-to-organisation. With them, they bring skills, experience and knowledge.

The second part of my dream is to continue the work started with the certification framework by IVNNZ Inc. and bring it into this decade with health professionals having a passport to transfer skills from place to place within NZ.

I envision this process will complete the work started by Kate Laidlow to have a national agreement for standards of infusion practice.

Please do not hesitate to contact me with any thoughts, comments and ideas for IVNNZ Inc. on [president@ivnnz.co.nz](mailto:president@ivnnz.co.nz)

## Education

*Jenny Heretini, Clinical Nurse Specialist, Infusion & Related Therapies employed at Waikato District Health Board and elected representative of the IVNNZ Inc. Executive committee, in the role of Educator.*

### **Fact or fallacy - the filter needle debate continues to simmer?**

The discussion around filter needle use for the safe drawing up and administration of parenteral medication from glass ampoules has simmered for many decades, with a paucity of literature to support or refute the effectiveness of their use. This in turn may well be the reason for non-compliance of health professionals with the use of filter needles in the workplace today. Health care professionals are educated to be advocates for the safe delivery of patient care and included in this education is the safe preparation and delivery of medications and infusions.

Many nurses and midwives in New Zealand utilise the Lippincott Procedures ("IV solution preparation, adding fluid to a container", 2018) for guidance when drawing up from glass ampoules, which recommends the use of a 5 micron filter needle. Intravenous Nursing New Zealand (IVNNZ Inc.) endorses the Infusion Nurses Society (INS) Infusion Therapy Standards of Practice (2016), which also states to "use a filter needle or filter straw to withdraw any medication from glass ampoules" (INS, 2016, p. S35). Despite the fact that nursing procedure references, standards of practice and policies advocate for the use of filter needles, there needs to be a greater understanding and comparison of the risk versus benefits of making international usage and standards compulsory. This decision however needs to be based on high level evidence in human trials which in probability would not be ethically approved, due to potential or actual patient harm.

Types of studies would be classified as intervention studies and must maintain the principles of beneficence and non-maleficence. The definition of intervention study as cited by National Ethics Advisory Committee (2012) states:

"An intervention study is a study in which the investigator controls and studies the intervention(s) provided to participants for the purpose of adding to knowledge of the health effects of the intervention(s). The term

'intervention study' is often used interchangeably with 'experimental study'. Many intervention studies are clinical trials."

To undertake a study of this nature within the range of minimal risk, the potential participants would need to be informed that the probability and degree of possible or potential harm from being an active participant should be no greater than what would be experienced in everyday life (e.g. discomfort).

Glass ampoules in a variety of sizes have been used in varied clinical settings for many decades. Glass provides many important characteristics as a vessel for holding medication which include, a high fusion point with the ability to tolerate the sterilization process, thereby providing microbial control, an inert substance with limited or no interaction with its contents, it is rigid, smooth and impermeable, which is important in the decontamination process (Carracetto, A., Curi, E., de Almeida, C., Abatti, R, 2011). These ampoules are broken manually or using an ampoule breaking device with nurses, midwives and anaesthetists representing the majority of healthcare workers that routinely manipulate these materials. It is important to understand that the size and the number of glass particles that potentially contaminate a medication can vary depending on the opening modality and the size of the ampoule opening.

As far back as 1947, studies have been carried out to investigate the effect of glass particulate on animals. Results showed evidence of glass fragments becoming lodged in the vascular system, which in turn can trigger organic reactions that may give rise to hazardous health risks such as end organ granuloma, phlebitis, pulmonary thrombi, micro emboli, pain, and inflammation. These early studies laid the foundation that harm may occur, and this has been backed up in further studies in the neonatal population, where glass particles were found in the lungs of neonates post mortem (Puntis, Wilkins, Ball, Rushton & Booth, 1992). Although the literature details traumatic entry of foreign bodies into joint cavities, there appears to be little or no evidence of such non traumatic injuries caused by glass particles in the adult population.

However, one such case study documented by Hafez and Al-Dars (2012) found minute glass particulate in the knee joint of an elderly patient during arthroscopic washout for osteoarthritis. The patient had denied any history of

trauma or penetrating injury to his knee, but mentioned in passing that he had previously had a steroid injection into his knee joint to help with the pain of osteoarthritis. They concluded that the glass fragments withdrawn unnoticed from the glass ampoule and injected into the knee joint may have been the culprit and contributed to this gentleman's worsening osteoarthritis.

Preston and Hegadoren (2004), concur in literature that glass contamination is evident when opening glass ampoules, and that administering glass particles via the intravenous system can lead to complications. They also wished to make the connection that using smaller needle gauge was more protective to glass contamination. Little is currently understood about the potential injurious effects of repeated exposure to glass particles in muscle tissue. This is of significance and importance when considering the clinical environment where health professionals' work and the complexity of patient care. If, for example, a patient was being delivered monthly intramuscular antipsychotic medications whereby the medication was drawn from a glass ampoule, the likelihood of cumulative glass particulate administration increases, dependent on the drawing up method and equipment used. It is reasonable to presume the same could be said about neonates who have a greater risk of contaminant damage due to their tiny vasculature.

The biggest challenge amongst health professionals is whether there is sufficient evidence to justify usage as a universal practice standard. There is anecdotal evidence that members of the health sector have reservations about the use of filter needles, purely based on cost and the paucity of evidence for associated risk and harm to patients.

However, what is known from other implementation projects (Harmon, 2014), is that if products are made available to all staff in all clinical environments, education is provided, promotion of the evidence that is currently available, as well as presenting staff with the content of known organisations that endorse these evidence based-practice standards for filter needle use with glass ampoules, this inevitably can enhance patient outcomes and improve the safety of patients.

Nursing and midwifery colleagues at undergraduate level and post registration are educated in the use of policies and procedures related to infusion practice, whereby

blunt fill filter needle use is advocated as best practice when drawing up from glass ampoules. However, it has been more difficult to ensure consistent use by other health professionals within the hospital of the author. What is anecdotally apparent is that non-compliance, despite policies and guidelines which supports filter needle use, appears to be purely based on projected cost, not patient safety.

There is no dispute that the financial cost to any organisation which chooses to mandate use of a blunt fill filter drawing up needle, priced at \$0.57 is just over double that of a blunt fill needle at \$0.23. What is not clearly quantifiable is the actual or potential cost of any harm caused to patients from inadvertent injection of glass contaminants. Discovery of potentially related health issues may not be easily traced to the actual glass particulate being injected. In 2001, New Zealand's total estimated cost of adverse events in the health sector was somewhere in the region of \$870 million (Brown et al., 2002). It is difficult to surmise what the true cost related to patient harm is. It is not just the cost to the health system, but other costs which may include time off work leading to lost productivity, the cost of lost time with loved ones due to hospitalisation, the burden of care from family members and in the worst possible outcome, death. Why would health professionals consider that a product worth \$0.57 is not worth using, when there is evidence that filter needles do filter out glass particulate that could potentially cause harm?

Despite there being only a small amount of literature documenting harm caused by the administration of glass particulate in the adult population, laboratory studies using particular technology has proven that there is the possibility of fragment of glass being drawn up and administered without the use of a filter needle. If this has been quantified, then why do some practitioners still make a conscious decision not to use filter needles? Medical staff for many centuries have upheld the phrase to "first do no harm", said to have come from the Hippocratic Oath and New Zealand nurses and midwives are bound by a Code of Conduct and Code of Ethics in which staff are to honour our commitment to deliver safe and competent care to our patients.

So putting that into the context of whether to use a filter needle or not when drawing up from glass ampoules, until

future studies are undertaken which clearly reveal that glass particulate from glass ampoules will cause no harm to patients, do we not all have a responsibility and commitment to err on the side of caution. What is your practice? What is your organisation promoting as best practice? What options and processes do you have to influence within your organisation towards use of filter needles to support best practice?

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## Transfusion Therapy

*Christopher Corkery, Transfusion Nurse Specialist, New Zealand Blood Service*

### Haemovigilance ...or...

### What has Haemovigilance ever done for patients!

#### Introduction

Haemovigilance is the reporting and monitoring of adverse events associated with the collection and administration of blood products and components. The New Zealand Blood Service (NZBS) has adopted the Council of Europe's definition of Haemovigilance:

*"...the organised surveillance procedures related to serious adverse or unexpected reactions in donors, or recipients and the epidemiological follow up of donors..."<sup>1</sup>*

NZBS formally introduced its National Haemovigilance programme on 1<sup>st</sup> May 2005. The scheme is modelled on similar systems in the United Kingdom and Ireland. Participation is voluntary and data from all of the 21 District Health Boards (DHBs) has been submitted to the National Haemovigilance Office. A unique characteristic of the New Zealand scheme is that all staff are encouraged to report all adverse events to the Haemovigilance Office via their blood banks, regardless of severity or frequency.

The goal of a Haemovigilance programme is to provide an opportunity to identify trends in transfusion practice as well as determining the frequency and causes of adverse events with the aim of safer transfusion. The left side of Figure 1 shows that the majority of transfusion recipients (55.3%) are in the 65 plus age group. This would suggest that as New Zealand's population ages our demand for blood components will increase. This may occur over the long term but Figure 2 shows that in the short term red cell usage has declined by almost 10% per year since 2010

despite a growing population. This has been attributed to a more conservative approach to prescribing blood.<sup>2</sup>

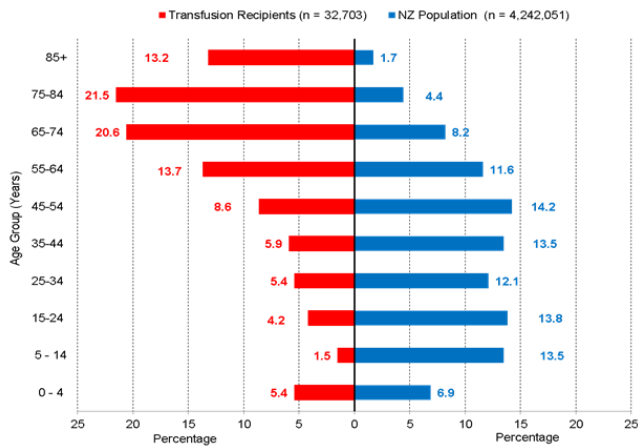


Figure 1: Blood transfusion recipients by age group compared to NZ population.<sup>2</sup>

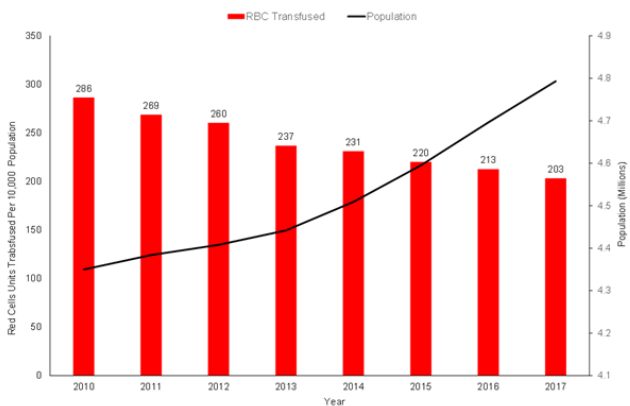


Figure 2: Red cell transfusions per 10,000 units and NZ population growth.

Despite the international downward trend in transfusion, the number of adverse events reported in New Zealand have remained steady at 34 per 10,000 components. This may be due to raised awareness from clinical staff of the importance to report all adverse events to the blood service via their blood banks. From a haemovigilance stand point this is the preferred state.

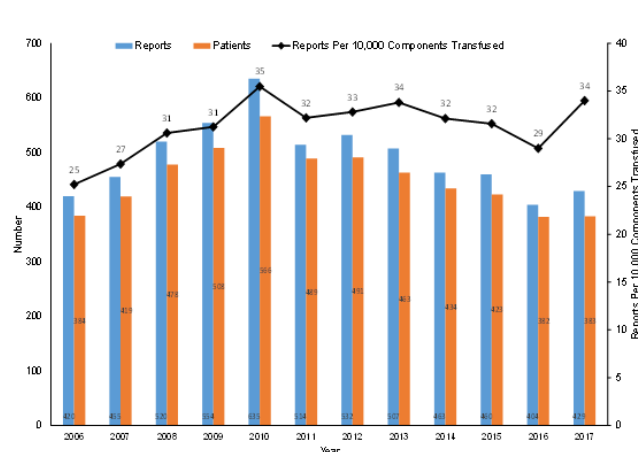


Figure 3: Annual number of adverse events reported (2006-17)<sup>2</sup>

### Why Report Adverse Events?

Despite the improvements in the processing, testing and storage of blood components and products over the last forty years, blood transfusion is not a benign medical intervention. There have been seven deaths in New Zealand in the last 11 years that can be directly attributed to a blood transfusion. Reporting of all adverse events can lead to a safer transfusion practice.

For example, New Zealand was one of the first countries to adopt leucodepletion of donated blood during processing rather than at the bedside. This was introduced in 2002 ostensibly to reduce the risk of variant Creutzfeldt-Jakob disease (vCJD). An added advantage associated with leucodepletion was the reduced risk from cell mediated viruses (e.g. hepatitis C) and the reduced number of reported febrile non-haemolytic reactions from red cell transfusions.

Another example is the intervention that the NZ Blood Service has undertaken to reduce the risk from Transfusion Related Acute Lung Injury (TRALI). This is a serious adverse event which is a result of antibodies in the plasma from donors that elicits a reaction in the lungs of susceptible patients. There is a 10% mortality associated with TRALI. Figure 4 below shows the incidence of TRALI decreasing after each step that the NZ Blood Service introduced to reduce the volume of at risk plasma from blood components. The reporting of such events ensured that the blood service was made aware of the issue and was able to make changes to improve the safety of blood transfusions. The initial step (male only plasma for FFP) was introduced because females have a higher risk of forming antibodies due to pregnancy.

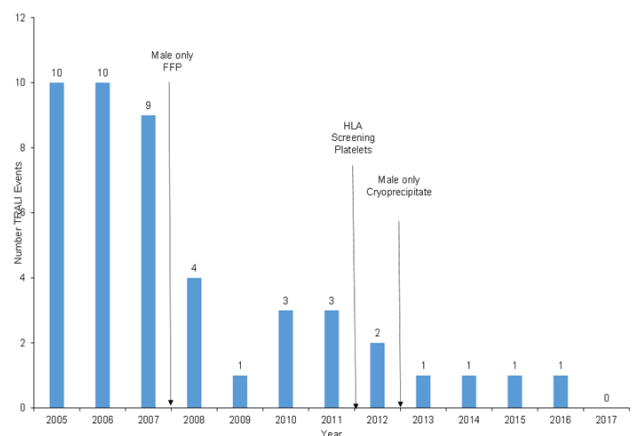


Figure 4: TRALI events from 2005 to 2017.

Adverse events don't just include febrile and allergic



reactions although the majority of adverse events (n=429) in 2017 belong to this category. There is a significant group of adverse events that are due to human error. These include labelling, prescription, issuing, collection, administration errors and near miss events.

#### Case 1

*A 19 year old female patient with acute lymphocytic leukaemia (ALL) was requiring frequent blood product support. The patient's blood result showed that her antithrombin III (ATIII) level was below 50% which according to protocol required an infusion of Thrombotrol (antithrombin III). The prescription was clear but the nurse was unfamiliar with the product and after writing Antithrombin III on the request form sought advice from a senior nurse. The senior nurse was distracted at the time and stated (incorrectly) that the product required was Prothrombinex. Both products were then requested. As suggested by the names of the products they are required for different reasons (antithrombin to stop coagulation and Prothrombinex to promote coagulation). The request was received in blood bank and despite initial trepidation both products were issued. Fortunately the Prothrombinex was returned unused and the patient received the correct product of antithrombin III.*

This case highlights several issues: a lack of knowledge by one staff member, distraction for another staff member and a reluctance to question an order by others. No harm came to the patient but staff and management can learn from these reports. For example, the patient had been in the ward for several weeks and ATIII had been tested frequently, therefore a need for Thrombotrol could have been anticipated. Training sessions for the staff could have been planned before the need to administer the product occurred. Distractions are often a part of hospital life but management and staff need to work to ensure that the environment doesn't contribute to errors. Finally, a culture that encourages questioning is important in a complex health system. The blood bankers were aware that the request was unusual but were reluctant to contact the ward. This was as a result of previous negative communication with the consultant involved. Although these issues were addressed with the people directly involved, there was no adequate system of spreading the learning wider.

#### Case 2

*A 54 year old female post-transplant for acute myeloid leukaemia (AML). Haemoglobin was 76g. The patient was transfused with one unit of pooled PAS suspended platelets at 1030hrs, one unit of red cells at 1330hrs and another at*

*1630hrs. Eight hours after the start of the transfusion, she was found to be wheezy with a cough, dyspnea, hypoxaemia, pulmonary oedema and had developed a tachycardia of 115 (74 at baseline), tachypnea of 40 (18 at baseline) and hypertension of 220/100 (112/70 at baseline), hypoxia 90% (98% at baseline). A chest x-ray performed showed pulmonary oedema. Post-transfusion NT-proBNP was 1607 pmol/L. She was given furosemide intravenously and gradually improved over the next 24 hours. The event was classified as Transfusion Associated Circulatory Overload (TACO).*

TACO is often not viewed as a transfusion reaction but Case 2 demonstrates that adverse events are a broad classification. Any transfusion event that is unexpected, detrimental or potentially so to the patient needs to be reported and investigated to enable repeat episodes to be avoided. Previous reports have shown that TACO is particularly prevalent among older patients, (although 54 isn't particularly old) and that considered use of diuretics is useful prior to blood transfusions for at risk patients. Another issue in Case 2 was the prescribing of two units of red cells. One unit may have been enough to raise the patient's haemoglobin from 76 to 86 and theoretically she may not have needed a second unit. The phrase "why give two when one will do" is pertinent here.

The New Zealand Haemovigilance Scheme is dependent upon clinical staff reporting adverse events and the NZBS is very appreciative of the time and effort that these individuals have given to ensure that the scheme is successful. Blood transfusion involves a complex chain of events. Any failure in this chain has the potential to cause significant harm or even death for patients. All personnel involved in the transfusion process must be encouraged to be vigilant and report any untoward events, actual or near miss, which they may observe.

**Remember: Report all adverse events regardless of severity or frequency.**

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#### Acknowledgements to:

John Dagger Clinical Technical Advisor

## Consumer Perspective

Karen Winterbourne, President of Parenteral Nutrition Down Under (PNDU) presented a consumer perspective at our Rotorua conference 2018. Such was the overwhelming positive feedback from delegates, we are delighted to be able to publish Karen's story in this month's newsletter for our members who were unable to attend conference and for those wanting to revisit her compelling message on being a consumer on the receiving end of infusion therapy.

### On the receiving end! Infusion therapy from a different perspective.

Thank you IVNNZ for this opportunity and privilege! In the hope it's both interesting and helpful to hear from a consumer 'living with a drip', I'll share some challenges of Home Parenteral Nutrition (HPN) and vascular access for the consumer, and some ideas on how we might work together towards improved consumer experiences. But first, let me briefly tell you my story.

#### My Story

There are lots of causes of Intestinal Failure requiring HPN, but for me the journey began in 1990 when I was diagnosed with Crohn's disease (CD) in my early 20s. My first small bowel resection was following diagnosis. In the early 2000s I had two more small bowel resections, including emergency surgery for a volvulus (and the start of Short Bowel Syndrome), and in early 2006, surgery for a permanent colostomy. My CD had become increasingly aggressive and I was fighting an uphill battle against pain, malnutrition and weight loss. Things were spiraling out of control.

While I was recovering from the colostomy surgery, CD returned with a vengeance in my small intestines. I was a legal secretary and had moved to part-time work several years earlier, but had to stop completely. I dropped to my lowest weight – 34kg (losing over a third of my normal body weight) and within 6 months of the colostomy, needed another small bowel resection. It was then that I was introduced to Parenteral Nutrition (PN) in order to build up for surgery.

I had that surgery, but the result was Intestinal Failure (IF) – I don't have enough small intestines left to absorb enough nutrients to live. I can still eat, but food goes through the remaining 20-35cm of small intestine at a rate of knots.

I was given a permanent Central Venous Access Device

(CVAD) and intense training in how to manage PN myself so I could continue at home. There was no choice – it was HPN or die. Not many expected me to be around much longer because the CD was so aggressive, but I still intended to give HPN my best efforts. I chose an implantable port and was taught to insert a new needle every night (a sterile medical procedure, taking about 30 minutes), removing it the following morning. And that's what I've been doing every single night for the last 11½ years.

Photo: Connecting up - "preparing to insert an implantable port needle - a sterile procedure taking 30 minutes each day"



HPN dictates my life. I infuse 2.6L of PN over 13-14 hours overnight.

As I don't infuse PN during the day, I can completely run out of energy by day's end – just when I need energy and concentration to connect up again. I need to vigilantly adhere to significant routines and restrictions, and can never simply have a night off or get slack. And there are lots of associated medical problems that can accompany HPN – for me, dehydration, kidney stones, two DVTs and bone problems. Despite how all this may sound, my quality of life (QoL) is immensely better now than living with extremely aggressive CD, which by God's grace has remained very quiet since I started on HPN! It's not the same for others, however, because PN isn't a cure. So as well as the challenges of HPN, everyone still lives with the underlying cause of their Intestinal Failure (IF).

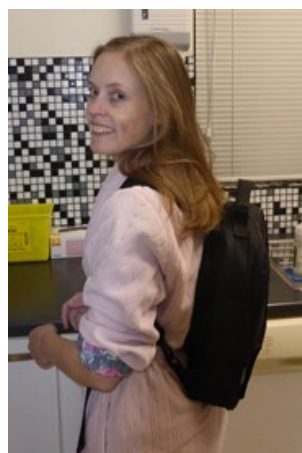


Photo: PN in backpack - "PN in portable backpack ready for connection"

### Parenteral Nutrition Down Under (PNDU)

Soon after it started in 2009, I joined Parenteral Nutrition Down Under (PNDU [www.pndu.org](http://www.pndu.org)), and am the current President. PNDU is a vital organisation enabling contact and support for New Zealand and Australian HPNers (those on HPN) and carers, and providing resources, including newsletters, travel information booklets, restaurant and toilet cards. We also provide representation on committees and at conferences, member surveys, and are the go-to contact point for the HPNer and carer perspective 'down under'. We assist members, hospitals and industry to celebrate HPN Awareness Week annually in October, and recognise great work through our annual PNDU Awards. And loads more!



Photo: Exhibiting for PNDU at a clinical conference"

### So what are the challenges of HPN for the consumer?

Rare, complex, with life-threatening risks, but I look normal!

With under 300 HPNers (adults and kids) across New Zealand and Australia, HPN is rare. Living with a life-long CVAD is rare. The general community has no idea what HPN/IF is and struggles to understand even with explanation.

Add to that the clinical complexities of IF/HPN, and the life-threatening risks of sepsis and loss of central venous access. And yet, after a crash course, I'm caring and responsible for a CVAD for PN 24/7, despite not having any medical qualifications! The risks mean I simply cannot afford mistakes or recklessness with my veins or ignorance by anyone involved in my care of the long term consequences.

And while I love looking well now, it can be one of the biggest challenges as sufficient calories mask the reality, disguising all that's involved for me to remain well. No-one would know by looking at me that I'm kept alive by complex life support therapy due to organ failure.

### At the start

Initially HPN is incredibly daunting. My life now depends on my very new medical skills, and this creates huge stress. On top of that my HPN/CVAD nurse is not available after hours when I connect up, meaning I can feel very much on my own. And when I do meet other HPNers and carers and/or experience various hospitals, it's very unsettling to discover the multitude of different techniques for CVAD care.

### Going to ED

I look well, HPN is rare and complex with life-threatening risks. Can you imagine how stressful it can be arriving at Emergency Department? Will the clinician know any of the complexities of HPN? Am I going to be believed, or simply dismissed and sent home, as some PNDU members have been? And if a CLABSI is suspected, will they try (as has happened too often for others) to simply pull my CVAD straight away without first trying to save it (considering my need for lifelong CVAD use)? Stressful!

Photo: In hospital-"Riding the Crohn's disease rollercoaster"



### Inpatient are

Staying in hospital can be even worse! I was taught a very strict and thorough sterile technique to care for my CVAD (my only medical training), and yet in hospital, clinicians often use a far less rigorous no-touch technique. This can create real anxiety. How will my CVAD ever remain safe? Anxiety is exacerbated by concern whether clinicians fully understand the possible consequences of CLABSIs for me. This is my lifeline for the rest of my life. I seriously need to know everyone understands this and is dedicated to keeping my CVAD and veins safe. Hospital isn't relaxing!

Thankfully, most hospitals now allow the HPNer or carer to care for their CVAD in hospital. But what if I'm too unwell, or my carer isn't available? During office hours, I know my CVAD/HPN nurse is within reach, but what about after hours and over the weekend? That's when I feel particularly vulnerable.

My only CLABSI was in hospital before I started HPN. My CVAD has remained infection-free for over 11½ years now. And I want it to stay that way. HPNers and carers sincerely appreciate the many nurses passionate about good CVAD care, and most understand the time constraints nurses



face. But sadly, a bad experience confirms our fears.

For me, this was five years ago, following another bowel resection, and, of course – on a weekend! I genuinely feared for my life due to a nurse's very sloppy CVAD



technique. Having been taught to intervene should I ever feel unsafe, I took over my CVAD care then and there. But I was still unwell, in pain, exhausted, scared of the consequences and terribly upset. It was traumatic. While I know it was my right and in my best interests to intervene, I also know that in the real world there can be negative consequences, including a change in a nurse's attentiveness to my needs whilst an inpatient. It can be really difficult and stressful as a consumer to know where to draw the line and intervene.

#### The little things

Many with chronic health problems have terrible peripheral veins. Obviously it's not my fault and it can be really discouraging if it's implied it is. Moreover, my veins aren't a challenge to conquer. I do, however, know my veins well! So if I say I need a specialist to insert a cannula, there will be good reason and if we work together, we can hopefully avoid problems.

When it comes to central veins, it's a sad fact that most HPNers carry a heavy weight of responsibility regarding our CVAD care. This can translate to guilt and shame when a CLABSI is detected. While never denying that bad CVAD care and mistakes by HPNers and carers can cause CLABSI, being blamed and shamed upfront for CLABSI can be soul-destroying. At such a stressful time, support and care are key.

And lastly, while I'm obviously very grateful not to be a cancer patient, I do need my implantable port positioned

where I can clearly see it and access it myself – its long term, and I access my own CVAD. It's simply pointless placing it up near my shoulder or near my armpit. And purely for quality of life (QoL) reasons, if possible, can I please not have it placed where it's really obvious with summer clothing?!

#### So how can we improve the consumer experience?

The fact you're reading this magazine indicates a passion for infusion therapy, best practice in vascular access and patient outcomes – an HPNer's best friend! So maybe consider the following ideas as affirmation of what you already do, as well as encouragement to help colleagues and staff consider the consumer perspective. And while recognising some of these suggestions may add to a clinician's ever-increasing time pressures, ultimately improved consumer experience will benefit clinicians too. It must be recognised however that no two HPNers or carers are the same and all will respond to situations differently.

#### Building confidence and knowledge

As with any teaching – children or adults, HPNers or nursing staff – building confidence and knowledge produces better outcomes than simply shaming and blaming after an event. So please:

- before I end up back in hospital, why not prepare me for what an HPNer can expect in hospital? Help me understand the principles of good CVAD care, but that actual techniques may vary.
- provide something to assist me in Emergency Department – a letter with at least a brief explanation and contact details.
- help me to know how best to deal with situations before they happen, for example, how should I raise a concern?
- but also, please encourage staff to give me permission and confidence to question or intervene if I feel unsafe, and assist staff to handle this well, so I don't worry about or suffer consequences.

#### Positive and open two-way communication

Stress and difficult situations can be avoided or calmed with good communication.

With CVAD care or peripheral vein use, I suggest encouraging staff to talk with me beforehand, letting me know they understand how vital good care of my veins is (and obviously mean it). Those few words can make a big difference to my stress levels.

While I don't pretend to be a nurse, I've been on HPN for



over 11 years now, and it's really encouraging to be given some credit for the knowledge I've gained, and more informed communication with clinicians regarding my health. Please always keep me in the loop and discuss my treatment with me. This may also assist in avoiding mistakes.

Trust developed through good communication will assist should things get rocky. We may face some tricky issues, but if there's established trust and good communication, together we can better deal with matters. But should an HPNer or carer get really ugly, please remember that my life with IF/HPN can be scary and precarious; I can feel completely powerless and frustrated in the hospital system. Add to this possible pain and sleep-deprivation, and it's not good. I suggest helping staff to remain calm and empathetic; listening behind the words, and understanding my bigger long-term picture.

#### Education, training and re-training... for everyone

##### For HPNers and carers:

When starting HPN, I possibly needed simple steps to follow. However, over time, I encourage you to continue educating and training HPNers and carers, and not assume that because I was competent at the start that I don't need, can't or don't want to learn more. It's paramount that I understand the 'whys' because over time, corners may be cut, creating risk. For example, if I don't know or I've forgotten why drying time is necessary, it can be very tempting not to wait. Over time, there's also more chance I'll need to trouble-shoot when situations occur.

I suggest initially an annual review or re-training in CVAD care, and then two yearly. It's a great opportunity to encourage good work and build relationships, and importantly, ensure I don't miss out on evidence-based updates of techniques and procedures. If I'm well and capable, I encourage you to trust me with medical knowledge, and work together with me as a team for the same goals.

##### For all staff:

Please ensure regular in-service training and re-training for everyone in CVAD care includes the long term picture and consequences for those of us with lifelong CVADs, and the vascular access needs of the chronically ill.

If I'm hospitalised, yet feeling well enough, why not ask if I'm willing to answer questions or do a 'show and tell', especially if I'm doing my own connecting/disconnecting in hospital, and get new doctors, student nurses and anyone who hasn't seen a long term CVAD to come and speak with

me. Or for more formal staff training, with some encouragement and guidance, most HPNers and carers will be very happy to talk to staff about living with a CVAD.

And don't miss the opportunity to use HPN Awareness Week in October each year. Contact us (contactpndu@gmail.com) for resources and ideas on how to use this week to your hospital's benefit.

#### The Value of Research

PNDU and HPNers love research! Some HPNers and carers will do their own hunting. Why not guide us to reputable resources and share with us interesting research. If I come to you with research, by all means help me to understand any reservations and challenges, but please also understand my intentions – I want to know as much as possible for now and for future hope. Please don't be put off by this, but embrace it!

#### To finish...

As HPNers and carers, we are brave, strong, proud to be alive, proud of what we achieve each day despite not having any medical qualifications, and proud of the medical knowledge we've gained. We also recognise that IT'S YOU WHO HELP US STAY STRONG AND READY TO FIGHT FOR LIFE. If not for my HPN/CVAD nurse and HPN team, I wouldn't be here today, and I'm incredibly grateful for their work and dedication to best practice, as well as their care for me as a person.

Thank you all for your passion, your work and care for consumers.



Photo: On bike with ET - "living and loving life!"

## Avatar Research

### Congratulations AVATAR!

The One Million Global (OMG) study has been published in the Journal of Hospital Medicine as the 'Editor's Pick'.

Gillian Ray-Barruel would like to extend a huge thank you once more to everyone who contributed in any way. This has been a great journey and created a lot of opportunities for networking partnerships.

Hyperlinks below

<https://www.journalofhospitalmedicine.com/jhospmed/article/166494/hospital-medicine/use-short-peripheral-intravenous-catheters-characteristics>

<https://www.journalofhospitalmedicine.com/jhospmed/article/166494/hospital-medicine/use-short-peripheral-intravenous-catheters-characteristics#article-files>

If you have any questions, Gillian is available to answer them.

**Gillian Ray-Barruel** [g.ray-barruel@griffith.edu.au](mailto:g.ray-barruel@griffith.edu.au)

## News: Chat room

### Congratulations to the following IVNNZ Inc. Members



IVNNZ Inc. would like to acknowledge Tracey Kunac's achievement in being selected as Waikato DHB's Nurse of the Year 2018 for her hugely positive impact on her patients and colleagues as a clinical nurse specialist within the Infectious Diseases team. Tracey manages patients in hospital who require transition to home intravenous antibiotics under the supervision of a district nurse through the OPIVA (outpatient intravenous antibiotic) service. Tracey has been a long –standing member of IVNNZ Inc. and a past executive committee member (Treasurer) with an extraordinary talent for web-site management and conference organisation. Tracey has been convener for many IVNNZ conferences, inclusive of that held in Rotorua this year.



Professor Claire Rickard was honored with Queen's baton relay for the 2018 Commonwealth Games for her contribution to nursing and establishing the AVATAR Group. Professor Rickard's research focuses on the prevention of complications in catheters inserted in the veins and arteries for medical treatment. Claire is globally renowned and has also presented as keynote and invited speaker for IVNNZ conference and forums. Claire's contribution to vascular access and infusion therapy practice in New Zealand is greatly appreciated.

In the June newsletter the 'IVNNZ Inc. Conference Best Poster winner was incorrectly reported.

Best Poster was awarded to Nicole Gavin. Our apologies Nicole and our warmest congratulations!

Congratulations to Joy Alcantara for winning the IVNNZ Inc. quiz in the June newsletter.

A pressie card has been sent to Joy in the mail.

*If you know of any member that that we can celebrate in their achievements, please let us know!*

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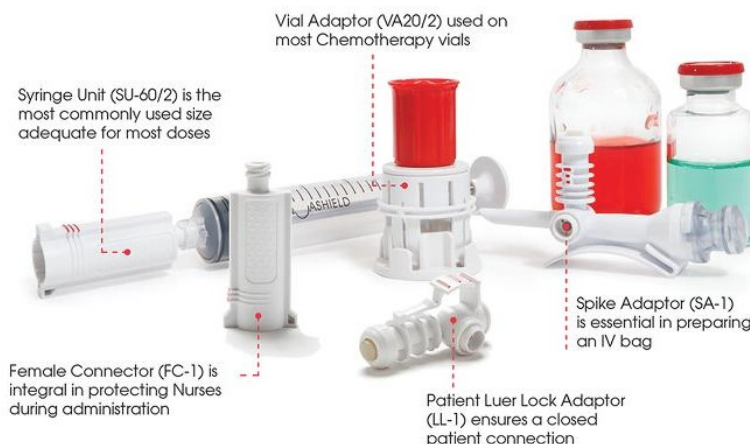
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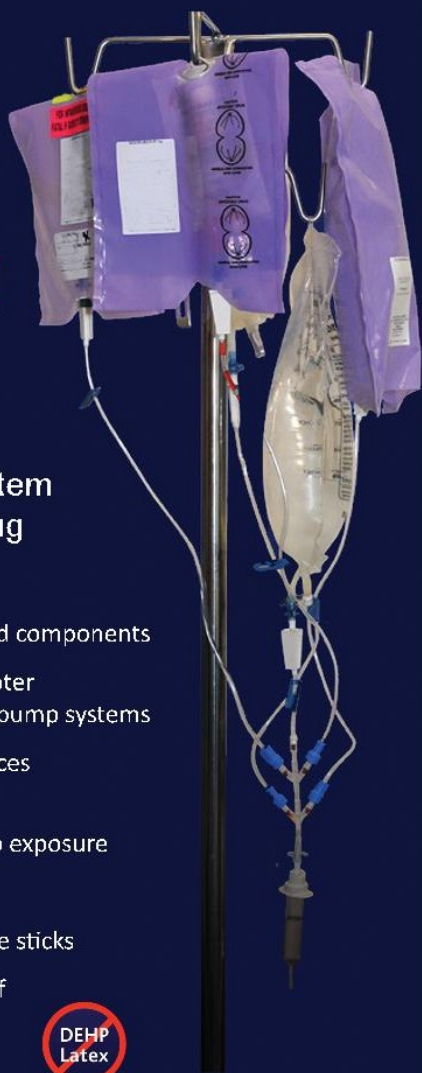
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## Meetings

**IVNNZ Inc. Executive Committee minutes:**  
available on the website for members

### IVNNZ INC. EXECUTIVE COMMITTEE MEETINGS

**When** 2 November 2018  
**Where** Wellington

IVNNZ Inc. encourages members to apply for educational assistance in the form of Scholarship or Grants. You are eligible to apply for a Grant every three years to attend conference. The successful applicant receives up to \$3000 and \$5000 to attend Australasian and European/American conferences respectively.

IVNNZ Inc. Education, Study and Research Grants details for members are available on the website.

## Educational Events

### National

#### CVAD WORKSHOP

**When** 9 November 2018  
**Where** Auckland

### International

#### AVA 2017 ANNUAL SCIENTIFIC MEETING

**When** 15-18 September 2018  
**Where** Columbus Convention Centre  
Columbus, Ohio USA

#### 11TH CONGRESS OF THE VASCULAR ACCESS SOCIETY

**When** 11-13 April 2019  
**Where** Rotterdam, The Netherlands

#### 44TH ANNUAL CVAA CEONFERENCE

**When** 24-26 April 2019  
**Where** Quebec City, QC Canada

### IVNNZ Inc. Welcomes New Members



### Membership application form - IVNNZ Inc. invites you to join

If you have a passion for Infusion Therapy and your practice is important to you, we need you to be part of this organisation.

Your membership application can be completed online or download an application form and send by e-mail.

The Membership application process and rules are available via the website:

<https://www.ivnnz.co.nz/product/individual-member/>

<https://ivnnz.co.nz/wp-content/uploads/2017/08/IVNNZ-Incorporated-society-Rules-FINAL-June-2012.pdf>

#### AVAS SCIENTIFIC MEETING 'WALK THE LINE'

**When** 12-14 May 2019  
**Where** Parkroyal, Parramatta, Sydney  
Australia

#### INS CONFERENCE

<https://www.ins1.org/default.aspx>

**When** 18-21 May 2019  
**Where** Baltimore Convention Centre,  
Baltimore, MD USA

#### WOCOVA

**When** 17-19 June 2019  
**Where** Athens, Greece



# IVNNZ Inc. CVAD Workshop

Covering all aspects of Anatomy, Insertion, Care, Maintenance, Complications, and Clinical Workstations

**Friday 9<sup>th</sup> November**

**0830-1530hrs**

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**THERE ARE STILL PLACES AVAILABLE!**

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## COPY DEADLINE

We welcome your input into the newsletter. Please forward articles, correspondence or ideas to the Editor prior to **20th November 2018**.

Any comments made in the newsletter are not necessarily the view of the IVNNZ Inc. Executive.

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