



Australian College of Neonatal Nurses Inc.

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www.acnn.org.au ABN 62 075 234 048

Newsletter

December 2021

About the newsletter

This newsletter is the official communication of the Australian College of Neonatal Nurses to its members, produced quarterly in March, June, September and December. It presents information on a range of professional issues and clinical topics of interest to neonatal nurses. Any member of ACNN may contribute.

Articles should be submitted by email as Word documents. Any images should be in jpg format. Referencing style should follow the Vancouver style. All content will be edited to newsletter standard.

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Please send correspondence to the newsletter team at newsletter@acnn.org.au

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Next deadline: 1 February 2022

ACNN National Executive 2021 – 2022

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From the President

December already, what happened, another year gone again. Many of you have faced challenges that you would not have imagined conceivable five years ago. A pandemic, though incredibly challenging and immensely sad, has invariably made our profession stronger and more resilient. Innovation and adaptation have been paramount in the way we have navigated through the pandemic, and I am proud to be part of such an amazing group of people. In Queensland we are preparing for what many of you have already experienced but this has not dampened our Christmas spirit. This week has seen many families and friends reunited across the country. I wait to see my daughter this week who I have not seen all year and can't wait to be reunited. I think this is what Christmas means to me this year.

Many of you know Karen New personally, our amazing and hard-working Executive Support Officer. I would like to acknowledge her recent appointment as Adjunct Associate Professor at Sunshine Coast University.

Thank you to all our members who have engaged in the College activities throughout the year; without your support and involvement we would not be able to offer so many opportunities to our members. I would like to acknowledge and thank the Branches, Special Interest Groups and Executive Committee for all their suggestions, innovation and work which often take place out of work hours.

May the spirit of Christmas bless your families and friends and I hope you all remain safe over the holiday period.

Anndrea Flint



Celebrating World Prematurity Day 2021

On 17 November the staff at the RBWH Grantley Stable Neonatal Unit held a morning tea to celebrate World Prematurity Day. All staff generously contributed to ensure each family and a baby were gifted with:

- Purple cuddle hearts, important to maintain contact and encourage maternal scent when mother and baby can't be together
- Purple beanie to help maintain body temperature (donated by Qld spinners and weavers)
- World Prematurity Day singlets
- Candles
- CARE brochure

The staff enjoyed making the gift bags and are confident that it brought joy and happiness to the GSNU families.

The tree of gratitude shone bright in the hospital atrium, raising awareness of preterm births. The addition of the preterm milestone cards was an eye-opener for many of the public who had absolutely no idea. "My feet are very little and the way is hard, but I do not walk alone."



Education SIG

After feedback from members of the ACNN Education SIG, the committee began to plan its second virtual event. With suggestions from respondents, this virtual seminar was titled 'Nutrition and Feeding' and was held on July 6 at 7pm AEST. This session was chaired by Priya Govindaswamy, Nurse Educator, Children's Hospital at Westmead.

Being slightly more educated on running a virtual event, things went a little more smoothly than our first virtual event! We were also able to record this seminar for members to access at a later date if they so wished.

The session began with Dr Eveline Staub who gave her presentation titled 'Standardised feeding protocols decrease complications in VLBW infants'. She discussed the fears clinicians have previously held on advancing feeds too quickly due to perceived risk of NEC. She showed that evidence demonstrates that early feeding, and continued advancement of feeds are safe, reduce the risk of infection, reduce intravenous line days and can lead to reduced length of stay for our patients. The guideline used at Royal North Shore Hospital is evidence-based and relies on commencing feeds as soon as possible after birth and advancing feed volumes consistently and perhaps more rapidly than clinicians have been used to. Donor milk has factored into their strategy, but without an impact on breastfeeding at discharge.

The discussion then segued beautifully into Dr Sheeja Perumbil's presentation on 'Gastric residual practices: need for an evidence-based clinical practice guideline'. Sheeja delved into understanding the reasons why clinicians have used the historical practice of measuring gastric residuals. She presented the evidence against this practice, and the resulting reduction in achieving full enteral feeds up to 6 days later than those patients where residuals were not measured.

Finally, I presented my talk on 'Pasteurised Donor Human Milk (PDHM): What are the issues?' outlining the benefits of using donor milk, and weighing up the challenges encountered. Donated milk does not have a baseline standard content – between expressions from the same woman, and between other lactating women. The content can be vastly different

with variable amounts of protein, energy and fat. Once the donated milk is processed by the Milk Bank, pasteurisation changes the composition of human milk, and can deplete the protein and fat content significantly. The evidence suggests that this is leading to challenges in growth for those babies being fed larger amounts of PDHM. Factoring this into our care, clinicians may be able to supplement with additives earlier and avoid malnutrition in this vulnerable population.

Feedback was sought regarding the virtual seminar and has been very positive, both during the seminar using the online 'chat' function for questions and afterwards on the QR coded survey. Many respondents commented that it was a great topic, was well planned and presented and that the format of virtual seminar with a live discussion was accessible and convenient.

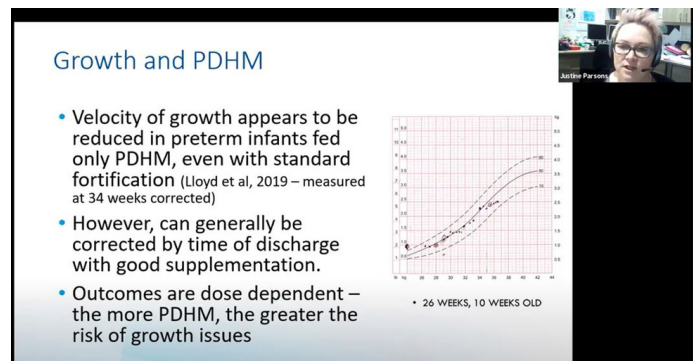
All in all, the Education SIG team was again very pleased with the planning, management and execution of our second virtual seminar. We look forward to presenting more seminars in this way for the future.

If any ACNN members have ideas for particular topics they would like to see the Education SIG present via this format, please email the SIG Secretary, Linda Ng, on educationsig@acnn.org.au

Justine Parsons

Nurse Educator, NICU

John Hunter Children's Hospital



Growth and PDHM

- Velocity of growth appears to be reduced in preterm infants fed only PDHM, even with standard fortification (Lloyd et al, 2019 – measured at 34 weeks corrected)
- However, can generally be corrected by time of discharge with good supplementation.
- Outcomes are dose dependent – the more PDHM, the greater the risk of growth issues

• 26 WEEKS, 10 WEEKS OLD

New South Wales Branch

The NSW Branch Committee held its annual meeting and formed the committee for next year. All members remained except Karen Walker, who has stepped down after several years on the committee. The annual report was drafted and will be ready for submission to the Executive no later than 28 February 2022.

Due to pandemic restrictions, the branch was unable to hold any face to face events. A country seminar at Port Macquarie

had been planned, and the committee will revisit this proposal in 2022.

The branch is pleased to welcome the Annual Conference to Coffs Harbour in 2022, thanks to funds awarded by the NSW Government. We recruited Cecelia Hackett from Coffs Harbour to lend her local knowledge and expertise to the conference organising committee.

Low Resource Countries SIG

For the LRC SIG, 2021 has continued from 2020 and presently we do not envisage that we will be returning to PNG in 2022. However, all has not been lost in 2021 as we continued our partnership with [Taking Paediatrics Abroad](#) (TPA) and have been able to deliver several presentations via Zoom with colleagues from Fiji, Solomon Islands, Tonga and Vanuatu.

As with all new adventures and building relationships it takes time and we do hope to gain more momentum, more interaction and requests for topics that they would like. So far, we have undertaken a Welcome to ACNN and COINN. We have offered membership support to COINN which was taken up by several people. Then we moved to presenting the basic building blocks: Pink, Warm, Sweet and Calm.

From this presentation, several questions arose around nesting. Thus the next month, Melissah Burnett gave a short presentation and then a lengthier demonstration on different nesting positions, use of towels and nappies to facilitate positioning etc. This was great as several on the call had towels and were engaged in replicating what Melissah was demonstrating. Melissah also showed them several photos of newborns in the nursery in Goroka – the first was of an un-positioned, unsupported baby in a wet nappy and then positioned and supported. One astute observer noticed the application of plastic across the open care system and asked what it was for. Thus, the first presentation in 2022 will discuss thermoregulation. Presently, it is from these limited questions or comments that we are picking up on what topics they might like. We hope this changes as the relationship builds and they

Research SIG

We would like to congratulate winners of the Research SIG Awards at the 2021 Virtual Conference. Nadine Griffiths was awarded best abstract, with Priya Govindaswamy and Jenna Rhodes awarded best oral presentations. We are excited to update ACNN members that the first stage of the Neonatal Nursing Outcome Measures (NNOM) project has commenced and we look forward to sharing our progress and results at next year's Annual Meeting.

It is difficult to believe 2021 is nearly over. Our committee would like to wish all ACNN Members a Merry Christmas, and we look forward to catching up in 2022. We would like to thank all the tremendous presenters who have joined our Experiencing Research sessions, the variety of topics has been both informative and provided opportunities to discuss research methodologies and the impact of projects on current clinical practice. Although almost all our events have been held via Zoom this year, we have been able to network with many of our SIG members and we hope to continue this both through Zoom and at face to face meetings in 2022.

On 21 October the Research SIG held our Annual Meeting. While our committee has maintained a strong foundation over

feel comfortable to ask for topics.

Another of the presentations was around Nurturing Care and the newly released thematic brief on this subject from the World Health Organization. The presentation focussed on 1 to 2 aspects of nurturing care (neurodevelopment, nutrition) in supporting cognitive development and thus early childhood development and outcomes.

So the plan for 2022 is to continue with the monthly Zoom sessions and to build relationships with colleagues in the Pacific islands. If any members are interested in delivering a presentation, please let us know. First Thursday of the month at 12MD ADST or 1PM AEDT. We hope that perhaps there might be an onsite education opportunity in one of these countries as an alternative to PNG in 2022.

The LRC SIG committee looks forward to offering several educational presentations to SIG members in 2022. The SIG meets via Zoom on the 2nd Monday of each month and members are welcome to join our meetings. If you would like more details and/or wish to go onto the email list and email us at lrcsig@acnn.org.au

We wish you and your families a safe and Merry Christmas and a bright 2022.



the past 5 years, 2022 will be a year of transition. Patricia Lowe will be mentored by Marg Broom to take up the chair position 2022/2023. Jeewan Jyoti will be mentored by Kim Psaila to take up the secretary position in 2022/2023. Renee Muirhead will remain on as Treasurer Liaison. Ordinary members will include Kaye Spence, Margo Pritchard, Suza Trajkovski, Jann Foster, Sheeja Perumbil, Linda Ng, Jesse Jensen and Amanda Seiboth. Denise Harrison, in her role as ACNN Professional Officer, will attend our meetings as representative for the Executive. I would like to thank our committee members for their past and future support of the Research SIG.

To start 2022 the Research SIG Committee will be holding a Planning Day in Sydney on Saturday 26 February. This will be face to face and virtual. As part of the Planning Day, we will be holding a virtual session with members. At this session we will be asking members what topics they think would be helpful at the 2022 'Experiencing Research Sessions', the Annual Meeting and other events for next year. Looking forward to 2022!

Marg Broom

Research SIG Chair

Neo-Skin SIG

The beauty of audits: lessons learnt

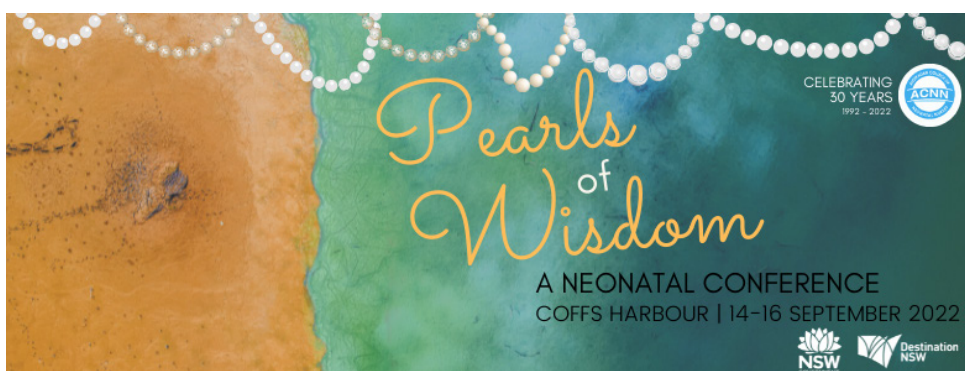
Kristin Hughes

Conducting an audit on a clinical process or practice can have unexpected benefits for clinicians and patients. As a part of my role in the Neo-skin SIG, treatments related to skin injury are discussed frequently. One of the areas that piqued my interest was the occurrence of peripheral intravenous catheter (PIVC) failure due to obstructive securement and injuries related to securement (adhesive) removal. Therefore, the nursing team at the Sunshine Coast University Hospital (SCUH) instigated an audit based on a number of staff concerns regarding peripheral intravenous catheters. Firstly, nurses felt there were delays in detecting complications related to the securement of PIVCs and/or arm boards. Secondly, there appeared to be an issue with the connection between the tubing and the cannula hub with many anecdotal accounts of loose, partially unscrewed connections, or complete disconnections of the tubing from the cannula hub. A quality improvement project was instigated to review practice and to identify current PIVC securement methods and the number of disconnections. Additionally, a trial of an arm board with soft elastic straps was undertaken to see if medical adhesive removal skin injuries (MARSIs) would be reduced or eliminated altogether.

This QI project used PDSA (Plan, Do, Study, Act) cycles to develop an audit tool that staff were comfortable using, and that yielded good information about PIVC securement and reasons for device failure including disconnection. The audit was registered with SCUH's Quality, Safety and Innovation service. An initial tool was piloted but proved onerous to complete, especially when the unit experienced increased activity. Therefore, a revised tool was developed which incorporated a simple 'tick-box' format allowing clinicians to quickly indicate options for securement and complications found. Options were formulated from information gained through the pilot and literature from similar audits for adult and paediatric PIVCs (Indarwati et al., 2020; Marsh et al., 2017; Ullman et al., 2020).¹⁻³ In addition, advice was sought from an experienced Neonatal Research Nurse to refine audit information and align with similar outcomes in the vascular access literature.

The project is still underway, but lessons learnt from the process and ongoing data collection include:

1. Interim audit data shows that primary securement is uniform: 2 sterile strips around the cannula hub and Teddy Tegaderm™ to cover.
2. Secondary securement to the arm board varies. Different adhesives are used, often placed over the wrist or ankle joint covering the view of the insertion and catheter tip site, impeding the ability to assess for complications.
3. The arm board trial (small sample due to limited number of arm boards provided by the company) demonstrated that while no occasions of MARSIs, there were issues with the elastic straps stretching and the securement system becoming unstable. Thus, use of these was discontinued and traditional arm board and adhesive was recommenced.
4. The Infusion Therapy Standards of Practice⁴ (Gorski et al., 2021) only partially informs our practice with many clinicians unaware of their existence, until now!
5. The Australian Commission on Safety and Quality in Health Care have produced clinical care standards for PIVCs after a systematic review of literature and guidelines (Australian Commission on Safety and Quality in Health Care, 2021; Keogh & Mathew, 2019).^{5,6} Expert panels who developed the standard revealed a distinct lack of quality evidence surrounding practices for PIVCs despite their common use. This standard will mandate the way documentation of PIVC insertion and management occurs in the future. Additionally, this review highlighted the lack of content for PIVC practice in neonatal populations.
6. Auditing is difficult! Keeping the momentum going requires energy and time but as more audits were completed, it became more routine and fewer were missed.
7. The 'Hawthorne Effect' where individuals alter aspects of their behaviour in response to an awareness of being observed, has influenced some practices – more connections are now being taped over to reduce the risk of the connection becoming loose or disconnected. Additionally, an alternative



NeoSkin SIG (cont.)

connection tubing has been sourced and will be introduced once this audit is complete.

8. Skin promotion and protection is growing in practice – more adhesives are double-backed or ‘fluffed’ with cotton wool to protect skin. This may have resulted from the form including skin protective options, leading practice decisions. The awareness of potential problems from removal of tapes has also meant that adhesive removal is undertaken using appropriate removal aids and techniques.

Thanks to the Neo-Skin SIG, understanding the challenges of immature and underdeveloped skin structures has led to improving practice with adhesives and their removal at SCUH. A PIVC is the most common vascular access device provided to hospitalised neonates, so understanding the effect securement and related practices on complications, especially those related to the skin is essential for improving practice for term and preterm babies.

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Queensland Branch

On Saturday 6 November, Caboolture Hospital hosted a workshop attended by 46 branch members. A fantastic group of speakers from local units and across the country informed and educated the group on current issues as well as new evidence and guidelines.

The morning session opened with a presentation on Neonatal Adaptation by Nicol Franz, who conducted a scoping review of poor neonatal adaptation syndrome and the symptoms of SSRI withdrawal. Following this Anndrea Flint presented on the new Queensland Clinical Guidelines for Neonatal Abstinence Syndrome and the problem of Finnegan scoring for babies suffering withdrawal from substances other than opioids. Anndrea discussed the Eat-Sleep-Console tool which provides an alternative to the NAS management pathway. The following presentations discussed admission rates in a regional metropolitan neonatal unit and the legislation for qualifying babies. As it stands, Queensland is currently governed by legislation from 1963 which stipulates babies can only be qualified as a patient when they are admitted to a nursery and separated from the mother. These presentations stimulated robust discussions and different viewpoints from delegates.

During the afternoon session the topic focus of several speakers was the nursing workforce issues facing many neonatal units. Karen Hose and Patricia Bromley both presented the results of their examination of local and national trends in neonatal nursing with both Karen and Katherine Lawlor discussing plans for addressing workforce shortages. Patrice Caramalis presented an update on the neonatal SWIM program which has supported the education and upskilling of neonatal nurses from peripheral hospitals across the state.

At the conclusion of the day the branch general meeting was held, and nominations were accepted for the committee in 2022. In addition to returning members the Queensland branch is happy to welcome Nicol Franz and Karen Hose who have joined as ordinary members.

Judy Macey was the lucky name drawn for the Queensland branch raffle supporting the low resource SIG and she has won \$1000 toward conference attendance in 2022. Branch plans for 2021-2022 were announced, including workshops in Rockhampton and Townsville, a repeat of last year’s successful selfie competition, and support from the Queensland branch for units hosting events for World Prematurity Day.

Neonatal Nurse Practitioner SIG

Celebrating Nurse Practitioners

Jane Langford

We celebrated Nurse Practitioner (NP) Week 6 – 12 December. This year NPs in Australia are celebrating their 21st year of practice with the first two NPs being endorsed in the year 2000. The role was originally established in the United States in 1965. During NP week, the Australian College of Nurse Practitioners (ACNP) challenged Australia's 2,250 plus NPs to instigate conversations about their specialities with anyone willing to engage. This is aimed to help educate others and recognise the value NPs bring to their clinical context as well as empowering them in their myriad roles. The Neonatal Nurse Practitioner Special Interest Group (NNP SIG) is just as passionate about promoting our profession.

NPs are registered nurses who have authority to practise independently and collaboratively in an expanded clinical role. The title 'Nurse Practitioner' is legally protected with the role supported by legislation at both state and national level. The title can only be used by a person who has been endorsed by the Nursing and Midwifery Board of Australia. This endorsement embodies extensive post-graduate clinical experience and the completion of mandatory prescribed education at Master's level.

NNPs embody a small percentage of the endorsed NPs across Australia but the NNP SIG strives to responsibly represent them all. There are practising NPs in each state and territory across Australia but NNPs are found only in Queensland, New South Wales, Victoria and South Australia. The NNP SIG membership encompasses all of these states. The NNP SIG maintains a roll call of our colleagues across the country and feels strongly about NPs being recognised by their individual specialities by the Australian Health Practitioner Regulation Agency.

The initial focus of the NP role was to increase access to care for marginalised and/or vulnerable populations, such as those living in rural and remote areas, persons experiencing homelessness, and the aged. NPs now practice in a wide variety of clinical settings, ranging from hospital to community and primary care settings. NNPs and Emergency NPs are the only acute clinical roles in an inpatient hospital setting, with the majority of NPs practicing in outpatient services. Despite sharing the same title, NP's 'scope of practice', describing the skills, knowledge and attributes of an area and context of practice in which they are competent, vary greatly. Even the roles, responsibilities and governance of NNPs in neonatal units around Australia vary immensely.

It is within an NP's ability to assess and diagnose health problems, order and interpret diagnostic investigations, formulate and assess response to treatment plans, prescribe medicines and refer to other health professionals within their individual areas of competence. NPs may also admit and

discharge consumers from health services. Since 2010, NPs have been eligible providers of care that is subsidised through the Medicare Benefits Schedule (MBS) and the Pharmaceutical Benefits Scheme (PBS). NPs are also required to hold professional indemnity insurance.

NPs combine advanced nursing knowledge and skills with advanced diagnostic reasoning and therapeutic knowledge to provide quality, holistic patient-centred care. As clinical leaders, they practise across healthcare settings to influence health service delivery and the wider profession. The NNP SIG strives to provide a collaborative network for current and future NNPs through supporting advanced neonatal clinical education and providing guidance for neonatal nursing clinicians interested in pursuing the NNP career pathway.

Earlier this year a Nurse Practitioner 10 Year Plan Steering Committee was formed following several Peak Nursing Organisations visiting The Minister for Health, the Hon. Greg Hunt. The Department of Health is now developing a 10 year plan for NPs which is to describe a set of actions that can be taken to address NP workforce issues of national significance and enhance the delivery of nursing care to the Australian community.

The Plan will include 1 to 3 year, 5 year and 10 year goals. It's development will occur concurrently with development of the National Nursing Strategy, due to the role NPs play in broader nursing career pathways and health care outcomes for patients.

All stakeholders are encouraged to share their perspectives and experience around issues impacting service delivery by NPs through the Nurse Practitioner 10 Year Plan Survey, in hope of raising awareness of the need to grow and enable this important workforce for the future.

<https://consultations.health.gov.au/health-workforce/nurse-practitioner-10-year-plan-survey/>



LET THE CHALLENGE BEGIN!