

# FANNP NEWS



HIGHLIGHTED: 2014 NEONATAL NURSE PRACTITIONER WORKFORCE SURVEY EXECUTIVE SUMMARY

PLUS: POCKET NOTEBOOK • LEGISLATIVE NEWS • EDUCATIONAL OFFERINGS • BRING IT ON • LETTER FROM THE PRESIDENT • BRAG BOARD • CONFERENCE UPDATE

The Publication of the Florida Association of Neonatal Nurse Practitioners



Florida has seen more movement on key issues that effect advanced practice than ever before. The many twists and turns throughout this legislative session have been quite interesting. On April 28, 2015 the Florida House of Representatives declared the 2015 session over with their 'Sine Die' announcement. Sine Die is a Latin term which means, "without assigning a day for a further meeting or hearing". This means any bills that were in the House and had not been passed to the Senate are essentially dead, and any bills that had not passed to the House from the Senate are also dead, including SB 614, the DEA Licensure bill. The members of the House have not announced whether they will come back for a special session, but it seems that all bills pending are dead. Senate Democrats filed an emergency petition with the high court on April 30<sup>th</sup> stating that it finds the House move unconstitutional and ordered members to reconvene the session until its official end at midnight. The Justices ruled unanimously against the request, saying that ordering the House to come back into session would be "fruitless." But in a five to two opinion, led by Justice Barbara J. Pariente, the court found that the unilateral adjournment by the House "clearly violated the constitution."

The extreme political differences between the House and Senate in Florida caused many important bills to be left hanging, including our Committee Substitute (CS) "ordering" bill (HB281) and the Independent APRN bill (HB547). Fortunately, the Baker Act bill was passed by both the House & Senate, and is moving forward

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## *FANNP Conference Update*

Conference time is growing closer, and the Conference Planning Committee has been working diligently to bring you yet another great Clinical Update and Review! I am really looking forward to seeing old friends, meeting new ones, being exposed to new developments in neonatology, and enjoying the beautiful Sheraton Sand Key Resort in Clearwater Beach! The conference brochure is nearing completion and should be disseminated with the registration form beginning in mid-June. Keep your eyes on your mailbox and view our website, FANNP.org for developing information.

We have a wonderful group of advanced track speakers with interesting, innovative information to share. There are also many popular review track speakers returning for those of you preparing to take your board certification exam. As always, there will be plenty of opportunities for professional networking, learning, and of course visiting with others from our profession across the nation! We hope to see you there!

*Marylee Kraus, MSN, NNP-BC*



## Letter from the President

Hello FANNP members,

Summer is here and that means children are home from school, families are enjoying vacations and of course it's time to plan your trip to Clearwater Florida for FANNP's National Neonatal Nurse Practitioner Symposium: Clinical Update and Review, October 13-17<sup>th</sup>, 2015, at the beautiful Sheraton Sand Key Resort. This event promises to provide both novice and experienced attendees opportunities for attending engaging and thought provoking presentations, networking with other neonatal professionals and of course catching a few rays on the beautiful beaches of Clearwater Beach.



In addition, the conference offers the opportunity to discover the evidence based practice and research projects completed by your peers during our annual poster session. It is critical that we as NNPs each consider how we can improve practice both in our own NICU and in the larger neonatal community. Compared to other specialties, neonatology is still in its infancy and therefore fraught with aspects of care needing improvement. Look around your unit, consider all the practices which can be improved upon and all the practices that are not based on evidence

but continue because we've always done it that way. Think about the ways your unit has improved and consider sharing those practices with other neonatal professionals. It is not necessary to return to school to pursue these activities, many questions and concerns in neonatology are perfect for NNPs to address.

The future of our profession is dependent on replacing those of us that are retiring our nursing caps with newly graduated NNPs. Unfortunately, we are faced with a situation where only a very limited number of experienced NNPs are willing to share their expertise with a student. Without preceptors, it is impossible for colleges of nursing to graduate a sufficient number of NNPs to replace the growing number of "seasoned" NNPs. For those attending the conference, reach out to the new graduates and discuss their professional goals. After getting to know these bright individuals, you may become motivated to share your wisdom with the next batch of NNP students who comes through the doors of your NICU. For all of us, remember your days as a NNP student and think about the patience and wisdom your own preceptor shared with you. Many of us had extraordinary individuals who sacrificed their time, energy and knowledge to help mold us into the experts we are today. Precepting a student is one way to repay your preceptor for the wonderful job she/he did. Consider

giving back to your profession by sharing your knowledge with a student.

Additionally, FANNP will be holding elections this year and I strongly encourage all members to consider volunteering for our organization. Through my involvement with FANNP, I truly believe I have received more than I have given. I have made life-long friends, had a great time and have had the opportunity to network with important individuals in neonatology. Board members do not need experience or special talents. They just need to devote time to FANNP. New faces are needed on our Board of Directors and I strongly encourage you to nominate yourself or someone else for these important positions.

I look forward to seeing everyone in October!

Please do not hesitate to contact me for suggestions, questions, comments or concerns.

*Leslie Parker, PhD, NNP-BC  
President, FANNP*

## Call for Nominations for the Kim Nolan Spirit Award

The Kim Nolan Spirit Award was created to honor the memory of one of the founding members of FANNP.

To be eligible for the KNSA, the nominee should demonstrate a "can-do" attitude; service to family, work, and community and be a member of FANNP. A nominee may be a practicing NNP, a retired NNP, or a NNP student. The Award recipient receives complimentary registration and accommodations at the Annual NNP Symposium in October, plus other goodies!

See the FANNP website for more information. Contact Paula Timoney at [timoney@tampabay.rr.com](mailto:timoney@tampabay.rr.com) for an application. DEADLINE for nominations is August 1, 2015.

### THE FLORIDA ASSOCIATION OF NEONATAL NURSE PRACTITIONERS

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# 2014 Neonatal Nurse Practitioner Workforce Survey

## Executive Summary

*Susan Meier, DNP APRN NNP-BC, and Suzanne Staebler, DNP APRN NNP-BC FAANP*

The 2014 Neonatal Nurse Practitioner Workforce Survey was conducted by the National Association of Neonatal Nurse Practitioners (NANNP) in collaboration with the National Certification Corporation (NCC) in the spring of 2014. The study was commissioned in an ongoing attempt to collect data on the neonatal nurse practitioner (NNP) workforce population in the United States in accordance with the 2010 Institute of Medicine (IOM) recommendation that effective workforce planning and policy making require better data collection and improved information infrastructures.

The survey, funded through an unrestricted grant from Ikaria, was sent to nationally certified NNPs in the NCC database and to any noncertified NNPs who were members of NANNP. The results encompass data collected from 1,300 NNPs in an effort to examine workforce demographics, practice environments, and current and future workforce needs.

This executive summary highlights the survey's key findings in the areas of demographics, practice environment, scope of responsibility, work schedule and downtime, patient load, continuing education and other benefits, and practice staffing and training. The complete report on the 2014 Neonatal Nurse Practitioner Workforce Survey with statistical analyses will be made available to NANNP members in early 2015. Targeted, regional statistical analysis of individual items of interest to practices, recruiters, or institutions will also be available through the national NANNP office.

### Background and Significance

NNPs are the foundation for providing safe and effective care of critically ill neonates in neonatal intensive care units (NICUs) across the United States. As a leader of the interprofessional team, the NNP participates in a wide variety of complex patient care activities in settings that include, but are not limited to, all levels of neonatal inpatient care in both academic and community-based settings; transport, acute care, and chronic care settings; delivery rooms; and outpatient settings (American Association of Critical-Care Nurses, 2002; Haycraft & Voss, 2014).

In keeping with the IOM's mandate to collect nursing data needed for workforce planning, NANNP and NCC conducted a second NNP workforce survey (following a 2012 survey) to further describe the NNP workforce in the United States.

### Study Sample

The survey was conducted in March and April of 2014 over the course of 34 days by means of a 25-minute online survey that was accessed by links sent to individual NNPs from NCC. A total of 5,267 survey links were dispersed, and 1,300 NNPs participated; this represented a 24.7% response rate. Each electronic link was tied to an individual NNP in the database so that participants could complete the survey only once. Respondents were screened for the following inclusion criteria:

- Their primary work as an NNP is in one of the following roles:
  - NNP providing direct patient care in a newborn nursery; in a Level II, III, or IV NICU; or as part of primary care or outpatient follow-up
  - Transport NNP
  - Clinical nurse specialist (CNS) or educator
  - Faculty member, dean, or director
  - NNP or advanced practice registered nurse (APRN) coordinator, manager, or administrator.
- They carry out direct patient care practice in a NICU.
- They have been in practice for at least 1 year.

Data management was performed by Kantar Health, a market research firm. The data were aggregated and then analyzed. Mean data points and percentages were used for all data. Statistical significance was analyzed at a 90% confidence interval (CI) using a t-test. So that the data could be analyzed in more detail, hospital NICU levels were used as a covariate for statistical analysis.

## Results

### Demographics

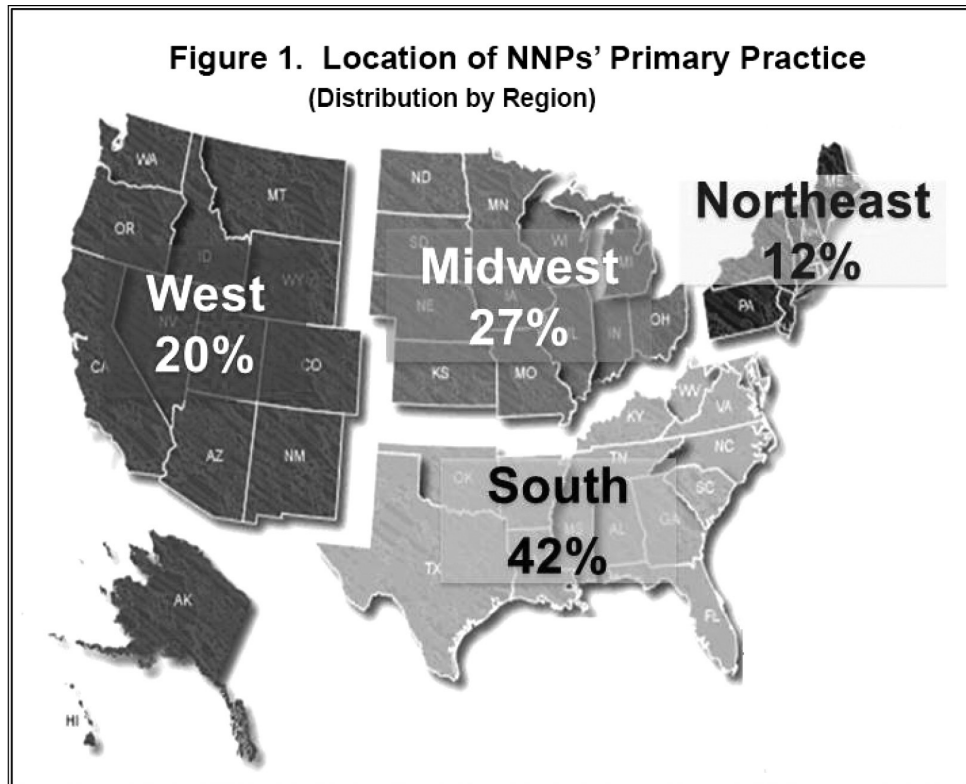
Ninety-seven percent of the NNP survey respondents were female, with an average age of 49 years. The average number of years of

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experiences as an NNP was 14. The majority, 81%, have a master's degree, and 7% are doctorally prepared. The vast majority, 92%, have direct patient care responsibility and spend 75% of their work time in a Level II–IV NICU. Only 47% of survey respondents were currently members of NANNP.

### Practice Environment

Almost half of the respondents, 42%, practice in the South, with the fewest number of respondents practicing in the Northeast (see Figure 1).



On average, NNP practices cover two sites and employ 14 NNPs per practice. About two-thirds of the respondents in a clinical practice are full-time employees. They most commonly provide service to Level III NICUs; about one-third provide services in Level II or Level IV NICUs.

### Scope of Responsibility

The primary role of most of the survey respondents is clinical practice. Almost half of the respondents have a secondary role, most commonly as a transport NNP, an educator, or a CNS. In addition to working in their clinical role, many also provide other services, such as coverage for deliveries, teaching, cross-coverage for house staff, and performance of well-baby consultations or delivery of well-baby services.

### Work Schedule and Downtime

The mean number of hours worked by survey respondents was 37 hours per week.

Forty-three percent worked more than 40 hours per week, 39% worked 35–40 hours/week, and 19% worked less than 35 hours/week. These findings did not differ according to NICU level. A discrepancy between scheduled hours and actual hours worked was noted: 22% of respondents reported that their actual hours worked exceeded the number of hours scheduled. This discrepancy rose to 47% for NNPs in Level IV NICUs (90% CI).

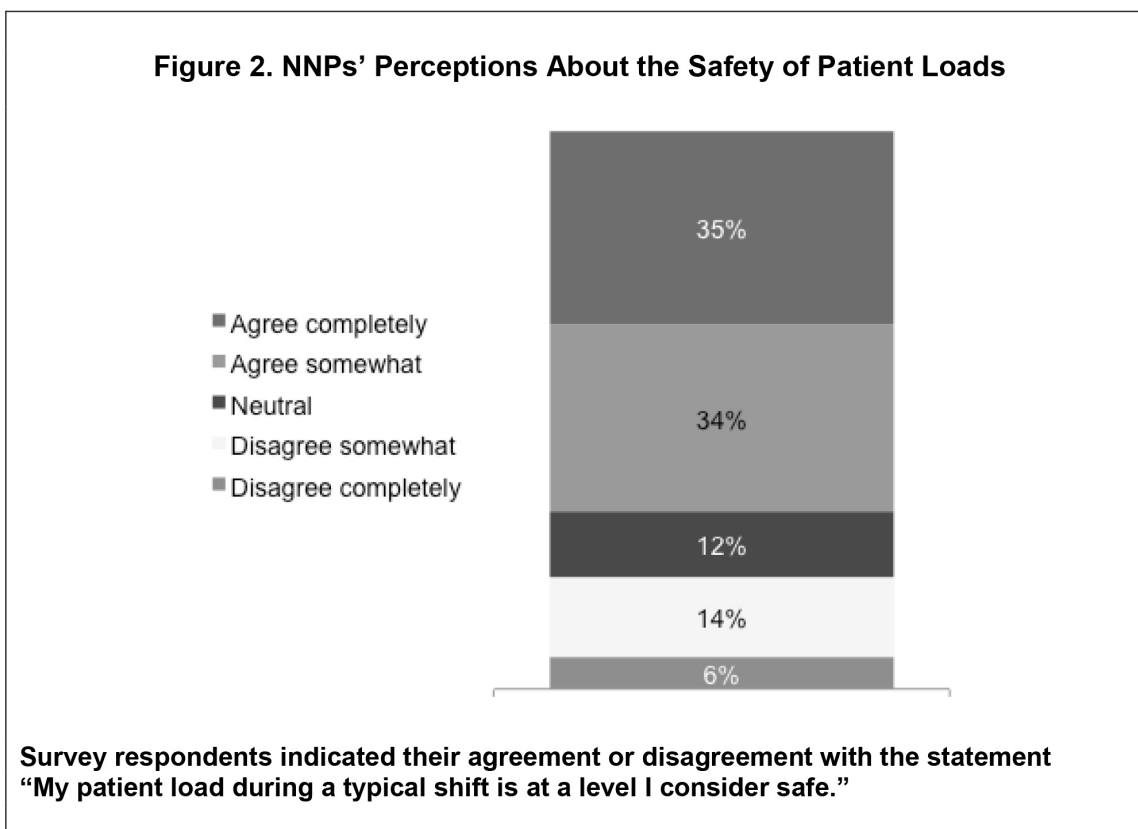
Most respondents who work 24-hour shifts (70%) are not guaranteed downtime. Of those who are guaranteed downtime, the average downtime is 3.6 hours. Although most NNPs will take downtime even if it is not guaranteed, only 88% of NNPs in Level IV



NICUs will take downtime if they are able. The overall average of downtime reported by those working 24-hour shifts was 3 hours per shift. Only 11% of those working exclusively during night shifts reported receiving any downtime.

### Patient Load

A sizable share of respondents (32%) report that their patient load exceeds the ideal (defined as “a level I consider safe” in the survey; see **Figure 2**). When data were analyzed by NICU level, 59% of those in Level IV NICUs “consider their patient loads during their shift unsafe.” Average patient loads considered by respondents to be “unsafe” were 8 in Level III NICUs and 6 in Level IV NICUs. Respondents’ perception of an “unsafe patient load” was less significant for those working the night shift in Level IV NICUs (25%). Because most NNPs have other duties during their shifts (as discussed above), issues related to patient load may pose a challenge in the provision of safe patient care.



### Continuing Education and Other Benefits

The survey respondents revealed that tuition assistance for pursuit of an advanced degree is not always available: only about half of employers provide some level of tuition assistance. However, most survey respondents (70%) report that their employers support their efforts to obtain continuing education and allocate funds for these activities for each NNP in the practice. Survey respondents indicated that although most are responsible for paying for their initial or renewal certification, association membership, and APRN licensure fees, the majority of employers pay malpractice insurance premiums and Drug Enforcement Agency fees.

### Practice Staffing and Training

Almost half of respondents believe that their practice is understaffed.

Level I–III NICUs average two vacancies, and Level IV NICUs average three vacancies.

Forty-six percent of respondents report that open NNP positions have been filled by other healthcare providers (mainly neonatologists [47%], followed by physician assistants and pediatric hospitalists).

Incentives to attract new NNPs were reported by 48% of respondents, although for those working in Level IV NICUs that number

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increased to 54%. Length of new graduate orientation programs can vary, depending on the level of the NICU, with Level III and IV NICUs offering longer programs. Mentoring and competency assessment programs are in place in only about half of practices, despite national recommendations to provide these programs and the availability of resources, such as tool kits, for that purpose. When asked to evaluate academic programs of study for NNP preparation, 69% of respondents did not believe that the number of faculty members available to lead academic programs was sufficient.

### Conclusions

Key areas of concern identified by the 2014 Neonatal Nurse Practitioner Workforce Survey were an aging workforce, the need for NNP faculty, inadequate staffing ratios, the lack of downtime during prolonged shifts, and the need to assist practices in developing competency and mentoring programs.

The survey data indicate that approximately 5% of the respondents plan to retire by 2020. The retirement of NNPs will only compound the severity of workforce issues and intensify the need to recruit nurses into the NNP role. NNPs who are satisfied with their career should be engaged in precepting students and mentoring novice NNPs. All NNPs must be actively engaged in these professional activities to help ensure the longevity of the role.

Expert clinicians need mentoring to prepare them to be expert educators in clinical faculty and full-time faculty roles. A national strategy, led by NANNP, to support NNP programs in partnerships with local practicing clinicians would enable programs to increase the number of NNP faculty and possibly increase the number of clinical placements for students. These partnerships would enable programs to expand the student cohort size and thus increase the numbers of graduate NNPs coming into the workforce.

NNP staffing ratios should be reasonable and should balance the needs of the unit with the provision of safe and effective patient care while providing NNPs with a high-quality work experience. Consideration of patient load (the number of patients per NNP) and acuity (the severity of illness for each patient) and recognition of the NNP's other expected duties (e.g., attendance at deliveries, house staff supervision) are critical to determining safe staffing ratios. In institutions and practices that maintain the scheduling of 24-hour shifts, guaranteed downtime for NNPs working prolonged shifts should be considered to ensure the provision of safe, competent care.

The implementation of ongoing competency assessment and mentoring programs can be used as a recruitment and retention strategy by both NNP practices and institutions. Furthermore, such implementation meets Joint Commission requirements for ongoing professional practice evaluation (OPPE) and focused professional practice evaluation (FPPE) for new providers.

Providing sustainable solutions to workforce issues while ensuring the continued delivery of high quality care is a complex challenge requiring attention to many details on a local and national level. We in the NNP profession must continue our efforts to draw attention to the vulnerability of NNP programs in the larger community of nurse practitioner programs and faculty. Currently, the most critical needs for NNPs in the United States are increased program funding, faculty development support, and student cohort size. Preservation of the current workforce using strategies like mentoring and maintaining more appropriate staffing ratios must also be considered. Shorter shift lengths may allow older NNPs to remain in clinical practice longer than now expected. These strategies, coupled with creative scheduling techniques, will foster better work-life balance and increase NNPs' satisfaction in their role.

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## LEGISLATIVE from page 1

to the Governor. As required by the constitution, a special session to implement a budget is anticipated. It is expected that Medicaid issues will be a large part of the budget negotiations. Florida legislators need to understand that the primary care physician shortage is already affecting the citizens of this state. Any budget negotiations should include allowing ARNPs to practice to the full extent of their education and training without supervision. Medicaid expansion in Florida is what is fueling the budget problems since 2013 when the Obama administration, through the Affordable Care Act, encouraged states to allow more people with low income to qualify for the health insurance program.

### Federal Legislation

#### March of Dimes Updates for 2015

The Children's Health Insurance Program (CHIP) addresses a critical gap in health coverage for children and pregnant women whose wages are too high to qualify for Medicaid but too low to afford private insurance. CHIP provides affordable, comprehensive health coverage to over 8 million children and 370,000 pregnant women. Congress passed a two-year CHIP extension bill, which is moving towards the President for signature and implementation into law!!

Originally passed in 1997 with strong bipartisan approval, the CHIP is a vital source of health care coverage for low-income children and pregnant women. CHIP plays a key role for those who earn too much to be eligible for Medicaid but cannot afford to purchase their own private coverage. Today, over 8 million children and 370,000 pregnant women receive care through CHIP on an annual basis.

Since the enactment of CHIP, some states have been able to design their own programs and provide coverage tailored to their local needs and preferences. CHIP, alongside Medicaid, has succeeded in cutting the rate of low-income uninsured children by more than 50 percent. CHIP



offers comprehensive benefits that are customized for children's health. In addition, eighteen states have opted to cover pregnant women through CHIP, with the goal of ensuring healthy pregnancies and healthy babies.

The March of Dimes has several top priorities for the 114th Congress (2015-2016), which include:

- Promotion of funding for key federal maternal and child health initiatives
- Centers for Disease Control and Prevention's (CDC) National Center for Birth Defects and Developmental Disabilities and Safe Motherhood efforts
- Child health research at the National Institution of Health's (NIH) National Institute for Child Health and Human Development
- Health Resources and Service Administration's (HRSA) Title V Maternal and Child Health Block Grant and newborn screening programs

#### Other Important Federal Legislation

The Registered Nurse Safe Staffing Act of 2015 requires hospitals participating in Medicare to implement thorough staffing plans for nursing services and establishes whistle-blower protections for patients and employees. The bill would step up protections for both nurses and patients by requiring hospitals to establish a hospital-wide staffing plan for nursing services. Plans would be required to include:

- An appropriate number of registered nurses for each unit on each shift
- A floor for the ratio of direct care

registered nurses to patients for each unit for each shift

- A staffing committee comprised of at least 55% direct-care nurses

The bill would also place limits on the practice of "floating" nurses, ensuring that nurses that don't have the education and experience in a particular specialty aren't forced to work in that particular unit. The bill also provides whistle-blower protections for individuals who filed a complaint about threats to safe care. Representatives David Joyce (R-OH) and Lois Capps (D-CA) also introduced companion legislation in the House. The U.S. is projected to experience a shortage of registered nurses that is expected to increase as baby boomers age and the need for health care grows. This legislation will help improve retention of registered nurses and ensure that patients receive quality care at hospitals. To date, seven states, including Oregon, have passed similar legislation to ensure safe staffing by utilizing a hospital-wide safe staffing committee. The American Nurses Association and the American Federation of Teachers have endorsed the new legislation.

In the 21st century, health care innovation is happening at lightning speed. From the mapping of the human genome to the rise of personalized medicines that are linked to advances in molecular medicine, we have seen constant breakthroughs that are changing how we treat, manage, and cure diseases. Health research is moving quickly, but the Federal drug and device approval apparatus is in many ways the relic of another era. There are dedicated scientists and bold leaders at agencies like the NIH and the Food & Drug Administration (FDA), but our laws must keep pace with innovation. Over the past year, the committee has solicited ideas from patients and experts across the country. The bipartisan discussion draft released in

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mid-April is the product of this yearlong, collaborative, and transparent process.

Dr. Janet Woodcock, Director of the Center for Drug Evaluation and Research, and Dr. Jeff Shuren, Director of the Centers for Devices and Radiological Health, testified on behalf of the FDA that they are, “pleased that [the Committee] has included provisions to help us incorporate patients’ voices into FDA decision-making regarding the benefits and risks of new products”.

Dr. Kathy Hudson, Deputy Director for Science, Outreach, and Policy at the National Institutes of Health, said, “All of us at NIH believe passionately in this mission, and are dedicated to the pursuit of knowledge and, ultimately, cures”. Dr. Hudson continued, “With your support, we can anticipate a bright future of accelerating discovery across NIH’s broad research landscape, from fundamental scientific inquiry to translational and clinical research”.

### Neonatal Abstinence Syndrome (NAS):

Majority Leader Mitch McConnell (R-KY) and Senator Bob Casey (D-PA) have introduced legislation that would address the rise of NAS in the U.S. Senate.

The bipartisan, Protecting Our Infants Act, would direct the Department of Health and Human Services to develop recommendations for preventing and treating prenatal opioid abuse, and for treating infants born dependent on opioids. It would also encourage the CDC to collaborate with states to assist them in improving surveillance and data collection activities.

The legislation comes amid a staggering 300 percent increase in the number of infants diagnosed with NAS since 2000, including a 3,000 percent increase in diagnoses in Kentucky alone. “Researchers estimate that more than one baby every hour is now born dependent on drugs and suffering from withdrawal.” Identical bipartisan

legislation was introduced in the House of Representatives by Congresswoman Katherine Clark (MA-5) and Congressman Steve Stivers (OH-15).

The Protecting Our Infants Act is supported by the March of Dimes, American Academy of Pediatrics and the American Congress of Obstetricians and Gynecologists. This is a topic of great concern throughout the country and one that we will be following closely together with the National Association of Neonatal Nurses (NANN) and National Association of Neonatal Nurse Practitioners (NANNP).

Additionally, the following statistics published by the March of Dimes Data Book for Policy Makers on infant health in the United States are noteworthy:

On an average day in the United States,

- 10,830 babies are born
- 1,249 babies are born prematurely (less than 37 completed weeks gestation)
- 865 babies are born at low birth weight (less than 2,500 grams, or 5 1/2 pounds)
- 329 babies are born with a birth defect
- 208 babies are born very premature (less than 32 completed weeks gestation)
- 154 babies are born at very low birth weight (less than 1,500 grams, or 3 1/3 pounds)
- 67 babies die before reaching their first birthday

*Ally Kayton, RN, MSN, APRN-BC*



## Brag Board

FANNP is very fortunate to be associated with and supported by a multitude of talented and professional Practitioners who continually grow and develop themselves. The purpose of the “Brag Board” is to call attention to achievements such as acceptance by a professional organization for poster presentations, completing an MSN, DNP or PhD program, passing the NCC exam, acceptance to be published in a professional publication, or even survival of one’s dissertation defense. The FANNP would like to recognize the following individuals for their recent accomplishments:

**Terri Marin, PhD, NNP-BC**, was selected as a 2015 American Association of Nurse Practitioners (FAANP) Fellow. As a Fellow, she will join a group of leaders whose scholarly and forward thinking contributions have led to meaningful improvements to healthcare and the Nurse Practitioner role.

**Allyson Kayton, MSN, NNP-BC**, was nominated by Ikaria and chosen as one of thirteen recipients of the “We Work for Health Champions” awards from Pharmaceutical Research and Manufacturers of America (PhRMA), for her extraordinary efforts in policy advocacy and community service. Ally has participated in meetings educating Members of Congress about the role of biopharmaceutical innovation in improving patient care. Her passionate message has made a strong impact on legislators and the patient and provider communities with whom she works.

Congratulations and strong work to Dr. Terri Marin, all of our recent graduates and Allyson Kayton!! Do YOU have an exciting professional accomplishment you would like to share with us? If so, please email Newsletter@FANNP.org with submissions. Thank you!



## POCKET NOTEBOOK

*Diane McNerney DNP, NNP-BC*

### Twin-to-Twin Transfusion Syndrome

- A. Definition: Twin-twin transfusion syndrome (TTTS) is a condition in which blood flows unequally between twins that share a common placenta. The smaller (donor) twin pumps blood to the larger (recipient) twin. Without intervention, the condition can be fatal for both twins. TTTS only occurs in monozygotic (identical) twins with a monochorionic placenta.
- B. Etiology: There is an anastomosis between placental vascular channels that connect the circulatory systems of each twin via the common placenta. The lower the gestational age at birth, the greater the risk for long-standing neurologic or pulmonary morbidity. Postnatal catch-up growth occurs in most donor twins.
- C. Clinical presentation: As a result of hypo-perfusion of the donor twin and hyper-perfusion of the recipient twin, the donor twin may develop oligohydramnios and poor fetal growth, while the recipient twin may develop polyhydramnios, heart failure, and hydrops fetalis. The donor twin may become hypovolemic and oliguric or anuric. Oligohydramnios develops in the amniotic sac of the donor twin. The recipient twin becomes hypervolemic and polyuric. Polyhydramnios develops in the amniotic sac of the recipient twin.
- D. Prenatal diagnostics: Ultrasound
- Significant discrepancy in size of same-sex fetuses
  - Monochorionic placenta
  - Low amniotic fluid between the fetuses with oligohydramnios in smaller twin
  - Smaller fetus with an absent stomach and bladder
  - At risk for preterm delivery
- E. Clinical complications:
- Donor twin features include the following:
    - SGA >20% smaller than recipient twin
    - Pallor, poor perfusion
  - Recipient twin features include the following:
    - Large for gestational age > than 20% larger than donor twin
    - Plethoric and ruddy
    - Jaundice
- Hydrops fetalis can be present in either twin in TTTS. These infants frequently present with subcutaneous edema, a distended abdomen, and respiratory distress.
- F. Diagnostics:
- Evaluation following delivery:
    - A CBC may confirm anemia (donor twin) and/or polycythemia (recipient twin)
    - A calcium level may confirm hypocalcemia (donor twin)
    - A glucose level may confirm hypoglycemia (one or both twins)
    - A creatinine level may confirm evidence of renal dysfunction (one or both twins)
    - A platelet count may confirm thrombocytopenia (one or both twins)
    - A bilirubin level may confirm hyperbilirubinemia, particularly in a polycythemic recipient twin
  - Cranial ultrasound: At risk for cerebral ischemia, intraventricular hemorrhage (IVH), periventricular leukomalacia (PVL)
  - Echocardiogram: At risk for myocardial dysfunction, myocardial hypertrophy, valvular insufficiency, and pericardial effusions
  - Renal ultrasound: At risk for hypoxic-ischemic cortical necrosis
- Abdominal ultrasound: Ascites may be present if hydrops fetalis occurs
- Chest x-ray: At risk for pleural effusions and cardiomegaly if hydrops fetalis occurs
- G. Medical management: Management is directed toward problems related to prematurity, anemia, polycythemia, and hydrops fetalis. A severely anemic donor twin may require packed red blood cell transfusions. A polycythemic recipient twin may require a partial exchange transfusion to lower serum hematocrit levels. Newborns with hydrops fetalis may require mechanical ventilation, thoracentesis, pericardiocentesis, and paracentesis.
- H. Prognosis: A good prognosis can be anticipated if the TTTS is mild; both twins often recover fully. Severe cases may result in death of one or both twins. Fetal surgery is sometimes necessary to save one or both infants. There is a better prognosis when the condition develops after 20 weeks gestation. Most TTTS twins who have appropriate treatment during pregnancy will survive, and the majority of survivors will be healthy. If TTTS is left untreated, the survival rate decreases significantly to approximately ten to fifteen percent.

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## ***FANNP National Neonatal Nurse Practitioner Symposium: Clinical Update and Review, 2016***

### **POSTER & PODIUM PRESENTATION CALL FOR SUBMISSIONS**

FANNP is seeking abstracts for posters and podium presentations for the annual FANNP National Neonatal Nurse Practitioner Symposium on October 11<sup>th</sup>-15<sup>th</sup>, 2016. The planning committee invites submissions from members as well as non-members. Participation is open to health professionals whose specialty has a focus on the Neonatal Population (this includes but is not limited to NNPs, RNs, Clinical Nurse Specialists, & Neonatologists). We invite colleagues to share their expertise in one of the following categories:

- Original Research
- Innovations in Practice or Education
- Patient Safety
- Quality Improvement and Benchmarking Initiatives
- Case Studies

#### **PODIUM & POSTER PRESENTATION PEER REVIEW PROCESS**

A panel of experts will choose the four best-developed abstracts for a podium presentation. These will be selected on the basis of overall quality, originality and appropriateness to NNP practice. Preference will be given to research with complete data available. Podium presentations are 10 minutes with 3 minutes for questions. \*Podium presenters will receive a \$75 honorarium. All other conference expenses are the responsibility of the podium or poster presenter.

#### **POSTER PRESENTATION**

Abstracts not chosen for podium presentation will be considered for poster presentation. Detailed instructions for the poster presentation will be provided to the primary author at the time of the notification of abstract acceptance.

#### **SUBMISSION REQUIREMENTS**

Abstracts must be submitted electronically. Abstracts should be no longer than 500 words, in 12-point font, with up to 2 additional bibliography pages. The content should be presented in the form of a structured abstract:

- |            |                             |
|------------|-----------------------------|
| ■ Purpose  | ■ Results                   |
| ■ Subjects | ■ Limitations               |
| ■ Design   | ■ Implications for Practice |
| ■ Methods  |                             |

A signed conflict of interest statement & CV (required for CE credits) must be submitted with the abstract. See the attached checklist for complete details. Abstracts that do not follow the submission guidelines will not be reviewed. Abstracts previously presented in other arenas are acceptable for submission.

**NOTE: Include the submission checklist with the abstract.**

**SUBMISSION DEADLINE: June 1<sup>st</sup>, 2016**

**NOTIFICATION OF ACCEPTANCE: July 1<sup>st</sup>, 2016**

**CONFERENCE EXPENSES:** All presenters chosen for the podium and poster presentation are responsible for conference registration fees, travel and all other expenses. Podium presenters will receive a \$75 honorarium.

## **EDUCATIONAL OFFERINGS**

### **Academy of Neonatal Nursing 15<sup>th</sup> National Neonatal Nurses Conference**

**September 17-19, 2015**

Walt Disney World Swan & Dolphin Resort  
Orlando, FL

[www.academyonline.org](http://www.academyonline.org)



### **The 26th FANNP Neonatal Nurse Practitioners Symposium: Clinical Update and Review**

**October 13-17, 2015**

Sheraton Sand Key Resort

[www.fannp.org](http://www.fannp.org)

### **National Association of Neonatal Nurses**

**30<sup>th</sup> Annual Education Conference**

**October 22-25, 2015**

Phoenix Convention Center

Phoenix, AZ

[www.nann.org](http://www.nann.org)

### **The Vermont Oxford Network Annual Quality Congress and Newborn Intensive Collaboration for Quality Symposium**

**October 1-4, 2015**

Sheraton Chicago Hotel & Towers

Chicago, IL

[www.vtoxford.org](http://www.vtoxford.org)



## BRING IT ON ANSWERS

from page 12

1. Answer is A;

- Oxygen delivery = (arterial O<sub>2</sub> content)(cardiac output)(10)
- Arterial O<sub>2</sub> content = (1.37 x Hgb x SaO<sub>2</sub>) + (0.003 x PaO<sub>2</sub>)
- 1.37 = mL of O<sub>2</sub> bound to 1 gm of Hgb at 100% saturation
- 0.003 = solubility of O<sub>2</sub> in plasma (volume % per mmHg)
- Arterial O<sub>2</sub> content = (1.37 mL O<sub>2</sub>/gm Hgb x 20 Hgb/mL x 1) = 26.8 mL O<sub>2</sub>/100 mL of blood
- Oxygen delivery = (26.8 mL O<sub>2</sub>/Liter)(1.2 Liters/minute)(10) = 320 mL O<sub>2</sub>/minute

2. Answer is A;

Herpes transmission to neonates via breastfeeding is low when the mother has genital herpes as long as good handwashing techniques are instituted. When a lesion is found on the breast, breastfeeding is contraindicated because it is the direct contact that is the primary method of transmission.

3. Answer is A;

Abundant oral secretions or saliva provides an early clue to esophageal atresia, particularly when a history of polyhydramnios has been reported.

## CLASSIFIEDS

**Linkous & Associates, LLC**  
800.738.NNPs (6677)

**Info@LinkousRecruiting.com**  
**www.LinkousRecruiting.com**

As a family-owned and operated specialty service for the neonatal health care industry, Linkous & Associates has specialized in the recruitment and placement of NNPs nationwide since 1991.

### Nationwide NNP Recruitment

ENSEARCH is widely regarded as the nation's preferred NNP recruitment firm, offering both Direct Hire as well as Locum Tenens staffing options. Call us to let us explain to you why you should be working with ENSEARCH rather than any other recruitment firm. (888) 667-5627 (NNP JOBS); [www.ensearch.com](http://www.ensearch.com).

### 2015-2016 Classified Advertising in the FANNP Newsletter

#### Acceptance of Advertising

- Classified ads only
- Link on website for direct submission
- All advertisements are subject to review and approval by the Editor

#### Ad Options

- May run ad in one newsletter or all year- 4 total newsletters, December, March, June, and September issues

#### Cost

- \$50.00/ad each newsletter or \$150.00 for all 4 newsletters. No cash discounts.
- Payment must be received in full prior to the scheduled close date for the quarterly issue.
- Payments can be made though the PayPal link on the FANNP website

#### Format

- The classified ad section of the newsletter: will be limited to 1 page only with approximately 30 ads per page
- Ads will be processed on a first come first serve basis

#### Closing Dates for Space and Advertising Materials is as Follows

- September, 2015-ads must be received by August 14, 2015, and paid in full
- December 2015-ads must be received by November 13, 2015, and paid in full
- March, 2016-ads must be received by February 13, 2016, and paid in full.
- June, 2016-ads must be received by May 13, 2016, and paid in full

## Are You or Is Someone You Know Eligible for a 2015 FANNP Scholarship?

FANNP members who attend an educational program leading to a degree related to the health care field between September 15, 2014 and September 15, 2015 are eligible for a 2015 scholarship.

#### FANNP Scholarship Eligibility Criteria:

1. Scholarship applicants must be FANNP members.

- All members, student members and associate members are eligible.
- Priority for scholarship award will be given to members, followed by student members and then associate members.
- Priority for scholarship award will be based

on length of membership and service to FANNP.

2. Scholarship applicants must be a licensed RN, ARNP, NNP or equivalent.

- Preference will be given to currently licensed certificate NNPs working towards a NNP degree.

3. Scholarship applicants must attend an educational program leading to a degree related to the health care field during the application period.

- Preference will be given to those working towards a degree in neonatal health care.
- The application period for the 2015 scholarship is September 15, 2014 to September 15, 2015. (i.e. To be eligible for a 2015 scholarship you must have attended classes sometime between

September 15, 2014 and September 15, 2015.)

- An applicant may receive a maximum of two scholarship awards for each degree sought.

Applicants are asked to include a 3-5 page submission for publication in the FANNP newsletter as part of the application process. The submission can be an original article, a paper you submitted for coursework, a case study, best practice clinical update or a literature review.

The completed scholarship application packet must be postmarked by September 15, 2015.

For questions, more information or to obtain an application please contact FANNP via email at: [scholarships@fannp.org](mailto:scholarships@fannp.org).



*Bring it On...*

**Practice Questions  
to Prepare  
for the NNP  
Certification Exam**

1. What is the oxygen delivery to the tissues of an infant with a saturation of 100%, hemoglobin of 20 gm/100 mL of blood and cardiac output of 1.2 liters/minute?
  - a. 320 mL O<sub>2</sub> per minute
  - b. 240 mL O<sub>2</sub> per minute
  - c. 32 mL O<sub>2</sub> per minute
  
2. A preterm neonate is to start oral feedings. The mother planned to breastfeed but she now has a recurrence of herpes and has a lesion on her breast. The nurse practitioner should advise:
  - a. Breastfeeding is contraindicated until the lesion heals
  - b. Feedings may be initiated using mother's pumped breast milk
  - c. Covering the lesion with an occlusive dressing while breastfeeding
  
3. History of polyhydramnios with neonatal excessive oral secretions may indicate:
  - a. Esophageal atresia
  - b. Diaphragmatic hernia
  - c. Renal obstruction

*Answers on page 11*

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