Quality Improvement in the Neonatal Intensive Care Unit

April Felton, University of South Alabama, DNP

Bedside nurses are often initial responders to neonatal emergencies in the neonatal intensive care unit (NICU) and in the delivery room, necessitating the need for nurses with quick, organized, and competent neonatal resuscitation skills (Roh, Lee, Chung, & Park, 2013). Maintaining competency in neonatal resuscitation skills is a challenge because emergencies can occur infrequently, resulting in limited opportunities for practicing resuscitation skills and procedures (Rubio-Gurung et al., 2014). Clinicians in the NICU are recertified every two years in the neonatal resuscitation program (NRP); however, studies have shown that resuscitation skill proficiency begins to diminish after three to eight months if not practiced and refined (Bender, Kennally, Shields, & Overly, 2014). Simulation-based education may present a valuable resource for increasing retention of resuscitation skills and improving nurse’s competency and comfort level with neonatal resuscitations (Bender et al., 2014). This paper describes a quality improvement (QI) initiative to increase nursing competency and comfort level with neonatal resuscitation skills through the use of simulation-based education by examining theoretical foundations, utilizing QI models and tools, investigating resource requirements, and outlining evaluation methods.

Institute of Medicine Aims for Quality

The Institute of Medicine has established six specific aims for healthcare delivery to improve quality of care: (a) safe, (b) effective, (c) patient-centered, (d) timely, (e) ...
Letter from the President

Hello FANNP members,

We are so excited to have Fall just around the corner! Fall brings another opportunity for you to join us at the 28th FANNP Annual Neonatal Nurse Practitioner Symposium: Clinical Update and Review. Now is the time to submit your registration, plan your trip, and enjoy a little rest and relaxation alongside friends and colleagues. The 2017 conference speakers are spectacular; as a bonus, we have a fantastic presentation by previous NICU parents that is certain to influence the way we interact with our patients’ families.

Sheraton Sand Key at Clearwater Beach, our venue for the annual FANNP conference, hosts a majestic view of the white sands of the beach, great pool side service, and catering for the conference that is divine. Our conference brochure, which can be found on the FANNP website, also lists additional entertainment opportunities during the week of the conference. So grab a coworker, send in your registration, and start looking forward to a week of learning and networking with friends from all over the country!

Please enjoy the Newsletter as it is developed with all our NNPs in mind. The FANNP organization attempts to provide informative and up-to-date information as well as issues that pertain to NNPs and their practice. Please let us know if you, a coworker, or your unit has received praise or accolades; we would love to celebrate your accomplishments in the next edition of the Newsletter. We also encourage you to visit our Facebook page; the FANNP Board governs membership in the group and the pages should be utilized as a resource for information pertinent to NNP practice.

Thanks once again for your time and support for this outstanding organization. The Board of Directors and myself are here for each and every FANNP member. We hope to see you at the conference October 17-21st so we can personally hear from you. As always, you can email or call with questions or concerns.

Sincerely,
Diana Morgan-Fuchs, NNP-BC
President FANNP

Hi Everyone! We are counting down to the 28th National Neonatal Nurse Practitioner Symposium, Clinical Update and Review on October 17-21 in beautiful Clearwater Beach! I’m so excited for you to experience the wonderful group of speakers we have for you this year along with many chances for networking, meeting old friends and making new, and of course enjoying some beach time and the wonderful city of Clearwater!

Highlights of this year’s conference include a Tuesday evening poolside Welcome Reception, as well as the Wednesday Night Lights Beach Party, where you can showcase your favorite sports team while enjoying a buffet-style dinner complete with music, games, and dancing. Thursday evening, come share your peers’ hard work at the Poster Session and Cocktail Hour, a valuable networking experience.

Registration for the conference is available online at www.fannp.org. We can’t wait to see you there!

Marylee Kraus, MSN, NNP-BC
Conference Chair FANNP
efficient, and (f) equitable care (Institute of Medicine, 1999). During neonatal resuscitation emergencies, timeliness of evaluation, interventions, skills, and procedures is essential in minimizing adverse effects (Buckley & Gordon, 2011; Roh et al., 2013). In addition, clinicians must be competent and comfortable with neonatal resuscitation skills in order to perform efficiently to provide safe care during high-stress emergency situations (Roh et al., 2013). Safety and competency in clinical care is improved and maintained through education and practice, emphasizing the need for an educational program to enhance neonatal resuscitation skills (Lemoine & Daigle, 2010). Simulation-based education has been successfully utilized in the aviation and military industries to improve safety and quality and provides a viable option for the healthcare industry to improve patient safety, timeliness, and efficiency of care (Lemoine & Daigle, 2010).

**Theoretical Underpinning**

Utilizing a theoretical basis to facilitate change allows for clarification of the overall purpose, aids in organizing and empowering all individuals involved in the change, ensures a smooth transition, and promotes a successful outcome (Barnfather, 2013). John Kotter developed an eight step theoretical process for leading change in an organization (Kotter, 2012; Licina, 2012). Though there is no specific mention in the literature of the utilization of Kotter’s process in the NICU, this theoretical underpinning represents a plausible process for implementing change in the NICU. The initial step in the process involves creating a sense of urgency surrounding the change to engage all employees in striving for a common purpose (Kotter, 2012). The NICU at Golisano Children’s Hospital of Southwest Florida (GCHSWF) is preparing to move to a new and expanded facility, increasing the urgency to ensure all clinicians are competent and comfortable with neonatal resuscitation. The next steps involve formulating a group to guide the change, develop the vision, and communicate the transformation process to the staff (Kotter, 2012). In the NICU at GCHSWF, a neonatologist and neonatal nurse practitioner (NNP) will lead the change effort and engage staff in simulation scenarios to foster openness and engagement in the education efforts. The final steps involve empowering staff, generating short-term successes, promoting acceleration of the change process, and sustaining change (Kotter, 2012). The ultimate goal for the NICU at GCHSWF is a sustained simulation-based education program in which all staff participates in a simulation scenario and intense debriefing session following the scenario, at least once every four months. In addition, staff will participate in modifying and enhancing the program to refine the specific educational needs of the NICU.

**Quality Improvement Tool**

Improving patient safety and providing quality care on an organizational level is an ultimate goal of the current healthcare industry and recently quality improvement initiatives have utilized various analysis techniques to identify potential areas for failure or error (Shebl, Franklin, Barber, Burnett, & Parand, 2012). Failure mode and effects analysis (FMEA) is a proactive quality improvement tool designed to promote patient safety by utilizing systematic analysis, performed prospectively by a team, to identify potential failures or errors in care processes and preventing them before they occur (Shebl et al., 2012; Villafranca, Sanchez, Guindo, & Felipe, 2014). FMEA has been widely used in the health care environment to identify potential process failures that may impact patient outcomes and has been specifically utilized in the NICU to prevent medication errors and reduce line-related blood stream infections (Villafranca et al., 2014; Chandonnet et al., 2013). The initial step in FMEA is to define the topic, which is typically a high-risk process, such as neonatal resuscitation (Shebl et al., 2012). The next step is to assemble a multidisciplinary team to investigate the process (Shebl et al., 2012). In the NICU at GCHSWF, the multidisciplinary team includes neonatologists, NNPs, nurses, respiratory therapists, and educators. Flowcharts are then utilized to detail the process and identify potential failures, the causes of such failures, and the effects of these failures (Shebl et al., 2012). Once potential failures are identified, a risk priority number (RPN) is calculated for each failure, which takes into account the potential severity of each failure, the probability that the failure will occur, and the degree to which the failure is noticeable or discoverable (Shebl et al., 2012). Finally, the team makes recommendations for practice, such as simulation-based education focusing on specific skills or procedures, in order to minimize the risk of potential failures occurring (Shebl et al., 2012).

**Quality Improvement Model**

Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) is a program developed by a collaboration between the Agency for Healthcare Quality (AHRQ) and...
the Department of Defense’s Patient Safety Program to develop team dynamics and enhance team communication to improve clinical outcomes (Clapper & Kong, 2012; Sheppard, Williams, & Klein, 2013). The basis for this QI tool comes from the aviation industry, in which failures in communication, leadership, and decision-making were found to be significant causes of several airline accidents (Plonien & Williams, 2015). TeamSTEPPS is a modern, customizable, evidence-based tool that includes a curriculum based on improvement in four competencies including (a) situation monitoring, (b) communication, (c) mutual support, and (d) leadership (Clapper & Kong, 2012; Plonien & Williams, 2015). Situation monitoring is a critical skill in the NICU and involves diligent monitoring of the patient’s vital signs and physiological condition to quickly recognize and respond to any deterioration or other emergency (Plonien & Williams, 2015). In addition, situation monitoring may refer to obtaining a thorough maternal history and fetal status report prior to a preterm delivery to prepare for neonatal resuscitation if necessary. Communication during a neonatal resuscitation is essential and teamSTEPPS strategies to improve communication include application of verbal strategies such as call-out, check-back, hand-over, and situation, background, assessment, and recommendation (SBAR) (Plonien & Williams, 2015). Mutual support refers to recognition of other team member’s workload to divide the effort and ensure patient safety by preventing others from becoming overwhelmed (Plonien & Williams, 2015). In a neonatal resuscitation this may encompass assuming responsibility for chest compressions to relieve another team member or assuming the role of transcriber to help the team stay organized. Finally, leadership is crucial to ensuring successful collaboration and teamwork and three skills noted from successful leaders include briefing, huddling, and debriefing (Plonien & Williams, 2015). In neonatal resuscitation simulation, the debriefing session, in which all participants are given the opportunity to discuss and learn from the simulation scenario, is considered to be one of the most useful tools for improving competency and comfort level with neonatal resuscitation (Clapper & Kong, 2012; Plonien & Williams, 2015).

Evaluation Methods of Quality Measures

The outcomes measures for simulation-based neonatal resuscitation education are focused on competency and comfort level of NICU nurses. A quantitative outcome measure is to improve or maintain the number of NICU nurses competent in neonatal resuscitation after four months of simulation-based education occurring in the unit. The process measure to achieve this outcome includes unannounced mock code scenarios, occurring in the unit, over a four-month period. The mock codes will be videotaped to allow for debriefing with the staff and assessment of competency, determined by two observers and based on a skills based checklist adapted from the NRP guidelines. The results of the competency assessment will then be displayed in a histogram to allow for analysis of improvement in competency over time. A qualitative outcome measure is to increase nurse’s comfort level with neonatal resuscitation after four months of simulation-based education. The process measure to achieve this outcome includes a
pre-intervention questionnaire to assess confidence and comfort level, followed by four months of simulation-based mock codes occurring in the unit, with the questionnaire repeated post-intervention. These results will be displayed in a pie chart to easily illustrate the proportion of nurses reporting confidence and comfort with neonatal resuscitation. Nursing comfort level with neonatal resuscitation is important to assess as simulation-based education has been shown to develop confidence in self-performance and increased confidence and comfort level has been associated with better quality of resuscitations (Roh et al., 2013).

Conclusion

A QI initiative to increase competency and comfort level with neonatal resuscitation may improve patient care and increase nurse satisfaction in the NICU (Bender et al., 2014; Lemoine & Daigle, 2010; Roh et al., 2013). Simulation-based mock codes may provide the education necessary to enhance competency and increase comfort level with neonatal resuscitation (Buckley & Gordon, 2011; Roh et al., 2013; Rubio-Gurung et al., 2014). Utilizing John Kotter’s change theory to begin the development of the initiative allows for a systematic and detailed 8-step process to clearly define the purpose, organize all groups and individuals, and set well-defined and reasonable goals for quality improvement. Applying the FMEA QI tool provides a proactive approach to promoting patient safety and preventing errors or mistakes before they occur. Simulation education provides an outlet for FMEA by identifying mistakes or errors in resuscitation methods before performing the skills on actual patients. Finally, utilizing the TeamSTEPPS model of QI affords the opportunity to emphasize and perfect teamwork, communication, and leadership, as well as all critical aspects of successful resuscitation performance. The advanced practice nurse (APN) has the responsibility of acting as a change agent in complex healthcare systems to improve practice efficiency and promote quality improvement in patient care (Walker & Polancich, 2015). Utilizing the suggested theories, tools, and models may assist the APN in this role responsibility.

References

Clapper, T. C., & Kong, M. (2012). TeamSTEPPS: The patient safety tool that needs to be implemented. Clinical Simulation in Nursing, 8(8), e367-e373. doi:10.1016/j.cns.2011.03.002
Licina, D. (2012). Medical stability operations - One approach to transforming the Department of Defense military health system. Military Medicine, 177(10), 1119-1124. doi:10.7205/milmed-d-12-00119
ANTIBIOTIC from page 1

childhood obesity.

There is no doubt that infectious diseases remain a major cause of morbidity and mortality in neonates and that antibiotics are life-saving. Early-onset sepsis and nosocomial sepsis persist, despite the remarkable progress in prevention over the last decade.

Antibiotics are the most-prescribed medications in neonatal intensive care. These agents are begun empirically based on risk factors such as maternal chorioamnionitis or non-specific signs and symptoms of hospital-acquired infection. Some antibiotics (particularly antifungal agents) may be used prophylactically. Our ability to discern the need to initiate or terminate antibiotic use is limited. Results of blood cultures the most definitive of diagnostic tests for sepsis) may be negative due to previous antibiotic exposure, low colony count sepsis, and difficulty obtaining an adequate volume of blood for culturing. In the absence of positive culture results, continuation of antibiotics is often based on concern regarding the consequences of inadequate treatment, a judgment call that can easily lead to varied opinions among qualified neonatologists.

In this complex environment of uncertainty, variation in antibiotic use among NICUs is not surprising. Schuman et al have demonstrated that not only is variation present, but, in NICUs in California, there is a remarkable 40-fold variation in antibiotic use. This study represents the largest and most diverse examination of antibiotic use in neonatal intensive care, involving 127 NICUs, 52,601 infants, and almost three-quarters of a million patient-days. The median antibiotic exposure was close to one-quarter of all patient-days, with a range from 2.4% to 97%. At all levels of care, from intermediate to those units that provide the most critical care, antibiotic use was independent of proven infection, NEC, surgical volume, or mortality. These findings are similar to other reports in pediatric intensive care. In 40 children’s hospitals, antibiotic days ranged from 36.8% to 60.1%, a variation that could not be explained by patient- or hospital-level factors associated with antibiotic treatment.

It is hard to know what actions could be taken to reduce this extreme variation. Clearly, most of the antibiotic use is empirical, initiated for suspected infection rather than proven infection. The threshold, both for initiating or continuing antibiotics for suspected infection, needs to be evaluated further. In well-appearing term infants who have negative blood culture results, antibiotics can be discontinued after 48 to 72 hours even when their mothers are treated for chorioamnionitis. In 1 study, 24% of infants born to mothers with chorioamnionitis were treated with prolonged (>48-hour) antibiotics, but 84% of these infants received prolonged treatment based solely on abnormal data from laboratory tests, which are known to have poor specificity.

We can potentially curtail unnecessary use of antibiotics through improved diagnostic and clinical approaches. New bacterial gene identification methods may enhance our use of standard blood cultures, particularly in excluding systemic infection. More sophisticated approaches to identifying infants at risk for early-onset sepsis by using a Bayesian approach could decrease empirical antibiotic treatment in as many as one-quarter million newborns nationwide. Use of prophylactic antimicrobial agents (eg, fluconazole for prevention of candida sepsis) should be carefully considered and not serve as a replacement for other unit-based infection control strategies.

Given the huge variation in antibiotic use with little evidence of clinical benefit from liberal compared with conservative antibiotic use, this issue is ripe for major quality collaborative approaches. Sources of variation in the use of antibiotics need to be identified and understood, including unit culture and beliefs about infection, variation in thresholds for starting and stopping therapy and emphasizing the importance of using potentially harmful therapies only when there is clear benefit. There is great potential to substantially reduce both risk and cost for this vulnerable population through more judicious use of antibiotics.

References:

Calling for Research Proposals... FANNNP Grants Available

Each year FANNNP sets aside funds for the support of research projects. Applications for funding are reviewed by the Research Committee. The Research Committee makes recommendations to the Board of Directors on proposals received. Members of the Research Committee are appointed by the Board of Directors. The grant application period is rolling—there is no deadline for grant submission. Grants will be awarded within six weeks following submission, based on the Research committee and BOD decision.

Please visit www.fanpp.org for more details.
FALL LEGISLATIVE UPDATE
by Ally Kayton, MSN, APRN, NNP-BC

The 115th Congress and the Senate are off for Summer recess. Repeal and Replace? John McCain was the deciding vote to leave the Affordable Care Act (ACA) intact, at least for now. The shake-up in Washington continues daily. Despite all the uncertainty, health care reform will raise its head again when session returns.

In addition to trying to repeal and replace, the current administration is considering withholding cost-sharing reduction payments to insurance companies that participate in the ACA. The cost-sharing reduction (CSR) payments are intended to assist low-income individuals with income between 100% and 250% of the federal poverty level pay for co-pays, co-insurance, and deductibles. For example, if an individual has an annual income of $17,000, he/she might only have a $125 deductible, compared with a $2,500 deductible for someone with a $25,000 annual income under the same insurance plan. The federal government makes these payments to balance out the difference between what the individual pays and what the insurance company charges.

Also in relation to the ACA, the Office of Management and Budget decided to eliminate the mandatory implementation of the bundled payment models for things like cardiac care coordination and cardiac rehabilitation, as well as implement changes to the comprehensive care joint replacement model. These models promote care coordination with an emphasis on patient outcomes and quality of care, and their elimination would be detrimental to patients and nurse’s delivery of care.

Nurse-staffing ratios has also been on the forefront in the political arena. Medicare recently declined nurse-staffing measures in their 2018 budget. The American Nurses Association (ANA) has been continuing to fight for safe nursing staff ratios; they were able to generate over 1300 comments in support of safe staffing.

APRN UPDATE

In the last legislative session, Texas fought a hard fight for full practice authority. Those opposing this advancement used the excuse that patients have suffered due the care provided by APRNs. Similar events took place in Oklahoma. Yes, patients can be harmed during health care delivery, but the care provided by APRNs is safe and effective in comparison to other healthcare providers. The National Academy of Healthcare noted, “the contention that APRNs are less able than physicians to deliver care that is safe, effective, and efficient is not supported by decades of research that has eliminated this question.”

FLORIDA LEGISLATIVE UPDATES

HB 543 Signed by Governor
Update from the Board of Nursing
HB 543 Regulation of Health Care Practitioners
Effective Date: June 23, 2017
Summary: This bill requires that an established protocol be maintained at the location or locations at which the Advanced Registered Nurse Practitioner (ARNP) practices. It also removes the requirement that the Board of Nursing review protocols and submit uncompliant protocols to the Florida Department of Health.

So, effective immediately, ARNPs no longer need to file protocols with the Board of Nursing. ARNPs must maintain a signed protocol at the locations where the ARNP practices.

FLANP is proud to have worked together with Coalition nursing groups to bring about passage of this important bill. Thanks to our Lobbyist Chris Floyd, FLANP Board Chair Stan Whittaker and all Coalition lobbyists for working this legislation in Tallahassee.

Florida Board of Nursing

The Florida Board of Nursing now requires Advanced Registered Nurse Practitioners to complete a 2-hour Human Trafficking course every renewal cycle starting in 2019.

You must fulfill this requirement in your current cycle that ends in April of 2019.

The National Council State Board of Nursing has also partnered with the Advanced Practice Coalition in the State of Florida to push forward the APRN Consensus Model. The Consensus Model for APRN Regulation has been endorsed by 41 nursing organizations. The APRN Consensus Model defines advanced practice registered nurse practice, describes the APRN regulatory model, identifies the titles to be used, defines specialty, describes the emergence of new roles and population foci, and presents strategies for implementation. The Consensus Model provides guidance for states to adopt uniformity in the
regulation of APRN roles. Today, many states have adopted portions of the Model elements, but there still may be variation from state to state.

The proposal is to change the language within the Florida Statutes as it relates to Title and Scope of Practice, Licensure, Education, Maintenance of National Certification, Independent Practice and Independent Prescribing. NCSBN will also implement the full marketing and media campaign in Florida for the 2018 session, an effort that will help mobilize consumers and direct them to contact their lawmakers in Florida and gain publicity around the 2018 and future legislation.

American Association of Nurse Practitioners (AANP) Advocacy Center
Please take a moment to visit the Advocacy Center and send a letter to your members of Congress to help educate them on issues of importance to NP practice:

• Encourage your members of Congress to support NPs certifying Home Health orders.
• Ask your members of Congress to support improved Medicare patient access to needed diabetic shoes.
• Urge members of Congress to support legislation allowing patients of NPs to be counted in Accountable Care Organizations.
• Encourage members of Congress to support stable funding for nursing education programs.

FEDERAL LEGISLATION UPDATES
Bipartisan legislation introduced in the Senate called the Reach Every Mother and Child Act (S. 1730) would put the world on a path to end preventable deaths of moms and kids. The bill was introduced by Senators Susan Collins (R-ME), Chris Coons (D-DE), Johnny Isakson (R-GA), Jerry Moran (R-KS), Dick Durbin (D-IL), Jeanne Shaheen (D-NH), Marco Rubio (R-FL), Mike Enzi (R-WY), Chris Murphy (D-CT), and Richard Blumenthal (D-CT). This bill will soon be introduced in the House of Representatives.

The Reach Act would:

• Require a coordinated U.S. government strategy for how our country would contribute to ending preventable maternal, newborn and child deaths
• Establish rigorous reporting requirements to improve transparency, accountability, efficiency, and oversight of maternal and child health programs
• Ensure that the United States Agency for International Development scales up the most effective programs
• Encourage the use of innovative ways to pay for these programs, including public-private partnerships

2017 congressional calendar, September-October

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ASAP – Hurricane Harvey relief
President Trump is expected to ask for Congress to approve relief funding for Hurricane Harvey. This will likely come in the form of a bill to appropriate funds to FEMA as the current agency’s Federal Disaster Relief Fund only contained $2 billion in unallocated funds at the end of July.

Sept 29 – NFIP funding expires
The National Flood Insurance Program (NFIP) provides flood insurance to property owners and insures roughly 5 million homes at present. The current legislation is set to expire at the end of September.

Sept 29 – End of FY 17
Congress must pass budget and appropriations legislation before the new fiscal year begins on October 1 to avoid a government shutdown.

Sept 29 – FAAs authorization expires
Since talks to advance long-term authorization for the FAA failed in 2016, the Republican Congress will be forced to take up the issue again next year.

Sept 29 – CHIP funding expires
The Children’s Health Insurance Program (CHIP) expands health care coverage to uninsured children ineligible for Medicaid. CHIP funding is currently being considered in Republicans’ plan to replace Obamacare.

Sept 29 – US will reach debt ceiling
Since mid-March, the Treasury Department has been using special accounting measures to allow the government to continue borrowing as needed. The Congressional Budget Office has estimated that these special measures can only be used until mid-October and Secretary Mnuchin has said Congress needs to raise the ceiling by September 29th.
You Might Be Eligible For A FANNP Scholarship
Check It Out!

Please take advantage of this opportunity! FANNP would like to distribute scholarship money to qualified candidates.

Scholarship Application Eligibility

1. Applicants must be FANNP members.
   a. All members, student members and associate members are eligible.
   b. Priority for scholar award will be given to members, followed by student members and then associate members.
   c. Priority for scholarship award will be based on length of membership and service to FANNP.

2. Applicants must be a licensed RN, ARNP, NNP or equivalent.
   a. Preference will be given to currently licensed certificate NNPs working towards an advanced NNP degree.

3. Applicants must attend an educational program leading to a degree related to the health care field during the application period.
   a. The application period for the 2017 scholarship is September 15, 2016 to September 15, 2017 (i.e. to be eligible for a 2017 scholarship you must have attended classes sometime between September 15, 2016 and September 15, 2017).
   b. An applicant may receive a maximum of two scholarship awards for each degree sought.

4. Applicants will provide a short article, case study, practice pointer, evidenced-based practice update, or literature review to be published in the FANNP Newsletter.

FANNP was founded to support the educational advancement of Neonatal Nurse Practitioners and remains committed to promoting education for NNPs.

Each year on December 31st, a percentage of monies from the FANNP general operating budget are put in a scholarship fund.

FANNP is proud to be able to award scholarships to nurses and NNPs continuing their educational pursuits in the field of neonatal health care.

To obtain a scholarship application contact FANNP via email scholarships@fannp.org. COMPLETED applications must be postmarked by September 15th each year.
Guidelines for posting to FANNP Social Media sites

The use of FANNP social media sites is restricted to approved members by FANNP Board of Directors designee(s) who govern membership, content and all interactions of group members. The overall goal of our social media sites is to encourage peer networking, stimulate information sharing and discussion of current issues affecting neonatal health, and promotion of FANNP sponsored events and member success. These activities should be executed with professionalism at all times. The following items further explain behavior expectations of all who engage in communication via FANNP social media sites:

1. Confidentiality
   a. Do not post confidential information about any person(s). This includes but is not limited to patient information, member information, member family information, etc. However, if there is an extraordinary event regarding a life status change of a member (marriage, promotion, having a baby, certification passing, etc.), this information may be posted with either the FANNP member’s consent or family consent (e.g. death of a member).
   b. Use sound ethical judgment before posting. Please adhere to HIPAA and FERPA guidelines.
   c. Do not post photos of patients without obtaining written consent.

2. Respect others
   a. Please be careful when posting opinionated memos, articles, or commentary. FANNP does not align with any group regarding opinionated material including but not limited to political affiliation, other nursing organization views, other medical organization views, media bias, etc. Do not engage in disagreement or dispute over issues on FANNP social media sites. If information from another source is posted, please ensure the source of information accompanies post. If you feel there is a post that is inflammatory or promoting argumentative discourse, please notify FANNP leadership or site administrators immediately.

3. Liability
   a. Remain aware of liability issues, including copyright infringement, proprietary information, defamatory comments, libelous behavior. No business solicitation (selling of products) will be allowed. It is permissible to post NNP job openings or sharing links to recruitment opportunities, and these posts will be scrutinized by the social media site governance members.

4. Personal Responsibility
   a. Understand that all comments made by FANNP members or members of our social media sites directly reflects the reputation of FANNP organization. Absolutely no obscenity of any kind will be tolerated. Think before you post. Remember, comments can be copied and reposted. If you are unsure if your post is acceptable, please contact one of the site administrators for guidance prior to posting.

Non-adherence to these guidelines may result in removal from FANNP sites.

FANNP Newsletter Submission Calendar

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In addition to the core components of the newsletter, we would love to hear what you have to say! Please send in anything you would like to see added to the newsletter, whether it is an interesting article, a hot topic in the neonatal world, or even a shout out regarding a fellow FANNP member who is doing awesome things! We want to hear from you! Please submit following the above guidelines to newsletter@fannp.org
EDUCATIONAL OFFERINGS

National Association of Neonatal Nurses (NANN)
33rd Annual Educational Conference
October 11-14, 2017
Omni Hotel Rhode Island Convention Center
Providence, RI
www.nann.org

The 28th FANNP Neonatal Nurse Practitioners Symposium: Clinical Update and Review
October 17-21, 2017
Sheraton Sand Key Resort
Clearwater Beach, FL
www.fannp.org

MUSC Neonatal Pharmacology Conference 2017
November 8-10, 2017
Double Tree Guest Suites Hotel Charleston, SC
www.academicdepartments.musc.edu

Hot Topics in Neonatology
December 10-13, 2017
Marriott Marquis
Washington, DC
www.hottopicsinneonatology.org

Neo Conference
February 22-25, 2017
Orlando, FL

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Neonatal Nurse Practitioner Recruitment Specialists
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800.738.NNPs (6677)

Since 1991, we’ve worked to exceed the expectations of both the candidate and the client, while making the search process seemingly effortless. There are some great NNP positions available nationwide. Let us help you find the opportunity you’ve been searching for.

1. C - Thanatrophic dysplasia is a lethal skeletal dysplasia caused by a mutation in the microblast growth factor receptor 3 gene (FGFR 3). Essentially all the problems seen in this neonate are the result of abnormal bone growth secondary to mutation of this gene. This type of disorder is classified a dysplasia, which occurs when there is abnormal tissue formation.

2. A - When infused too rapidly, adverse effects, including bradycardia, hypotension, and cardiac arrhythmia may be seen. Although useful in the presence of hyperkalemia or severe hypocalcemia (not commonly present immediately after birth), there is no evidence of the usefulness of calcium gluconate in the acute phase of delivery room resuscitation.

3. C - Isoimmune thrombocytopenia results from placental transfer of maternal alloantibodies directed against paternally inherited antigens present of the fetal platelets but absent from maternal platelets. The most frequently implicated alloantigen is PIA1.

BRING IT ON from page 12

For information on Classified Advertising in the FANNP Newsletter, please refer to the guidelines and fees, which can be found at fannp.org under the Newsletters heading.
Bring it On...

Practice Questions to Prepare for the NNP Certification Exam

1. Thanatrophic dysplasia is characterized by which physical findings?
   A. Severe microcephaly, overlapping sutures
   B. Cleft lip, hypoplastic nose and ocular hypotelorism
   C. Midfacial hypoplasia, short limbs and small thorax

2. In relation to the administration of calcium gluconate, which of the following is true?
   A. Bradycardia, hypotension, and arrhythmias may be associated with rapid infusion
   B. Effective in the acute phase of neonatal resuscitation
   C. May be given to manage hypokalemia

3. Which of the following results from placental transfer of maternal alloantibodies directed against paternally inherited antigens present of the fetal platelets, but absent from maternal platelets?
   A. Autoimmune thrombocytopenia
   B. Kasabach-Merritt Syndrome
   C. Isoimmune thrombocytopenia

Answers on page 11

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