



Perinatal-Pediatrics

Bulletin

July/August '98

Notes from the Chair

by Katie Sabato, MS, RRT

The times are changing, and for us here at Children's Hospital Oakland, they are busy times. Our nursery had 32 ventilated neonates this week. Among them were a set of quadruplets and a set of triplets—perhaps a result of the increased options now available in the field of fertility. Our emergency room is still filling up daily with asthmatics, even though asthma season is generally over by this time of the year. Perhaps this is a reflection of the fact that asthma truly is on the rise. Our PICU has its share of motor vehicle accidents, and today three out of the five trauma cases we saw were near-drowners, no doubt a result of the swollen rivers and streams now ever-prevalent as the massive snow dumped by none other than El Niño melts.

In my conversations with other perinatal-pediatric centers around the nation, I have learned they remain just as busy. Whether this is the result of managed care gone wrong, or other factors, I am not sure. But one thing is certain. All this respiratory work means we need to keep abreast and informed. Perhaps this is why requests for everything from how to deliver continuous bronchodilator, to the new generation of neonatal-pediatric ventilators, to how to safely decrease the frequency of ventilator checks are on the rise.

A few years back, the AARC stated the following: "The AARC occasionally receives requests for specific topics in the area of neonatal pediatrics." From that statement came the development of a Perinatal-Pediatric Consultant Panel, the brain child of a past section chair, Mike Czervinske. Well, "occasionally" for me has turned into about ten requests a week. Some come in the form of e-mails, some via the Internet, and most via the phone. I keep a Consultant Panel roster next to my desk at work and at home, and often refer the requester to one of the panel members, because although I may be knowledgeable, I do not always have the answer the requester is seeking.

However, for one reason or the other—most likely because we're all so busy—it is not infrequent that the panel member is unable to be reached, does not respond, or is no longer working in the requested areas.

With the changing times and the increased need for efficient, instant resources, Mike and I are considering possible changes that could make the Consultant Panel more effective. One of the ideas is to limit the number of topics that each panelist could list their name under (perhaps a maximum of three). Once these topics were chosen, a consultant would then choose one of them to feature in a short written synopsis highlighting his or her recent experience in the that topic. This synopsis would be posted on our web page and published in the *Bulletin*. This written communication, Consultant Panel Directory would serve two purposes: (1) information sharing, and (2) assuring that we are all keeping in touch!

Here is an example of such a short synopsis –

Last week an asthmatic who is a frequent visitor to our ER arrived extremely short of breath, with a silent chest, tripodding, maximum retractions, and essentially unable to talk. It is generally our practice not to get arterial sticks on asthmatics, but owing to the severity of this teenager's status, we did. The arterial gas were as follows: 7.23-72-88 on 2 l/mm O₂.

Since there was not significant hypoxia, we delivered full strength albuterol via a circulaire nebulizer hooked up to an 80/20 mixture of helium. The circulaire was used for its recirculating bag and its tight fitting mask. It can also be run at high flows. Steroids and IV terbutiline were also started. Within two hours the teenager was conversing and air could be heard throughout her lung files. Though she was not out of the woods at that point, it was a remarkable turn around. We will continue to investi-

"Notes" continued on page 2

2
Our Readers Speak: the
Perinatal/Pediatric
Specialty Exam

3
Data Collection...Close
Scrutiny Required

5
Georgia Society for
Respiratory Care
Neonatal/Pediatric State
of Practice Survey
Results

8
The AARC and UCSD
Offer Patient Driven
Protocols Manual

FYI...

“Notes” continued from page 1

gate the use of Heliox and the circulaire nebulizer.

Short vignettes like the above would allow us all to share information about our practices and provide colleagues with insight and ideas that could be useful in their practices. I will keep you posted on our plans in this area, and hope that everyone listed on the Consultant Panel will support necessary changes to make the panel

more responsive.

In the meantime, have a great summer and don't let this busy, ever-challenging profession run your life. As the ending paragraphs go in the following poem...

Ever told your child, “We’ll do it tomorrow,”

and in you haste, not seen his sorrow?

Ever lost touch, let a good friendship die,

‘cause you never had time to call and say “hi?”

You better slow down, don’t dance so fast,

time is short, the music won’t last

When you run so fast to get somewhere,

you miss half the fun of getting there.

When you worry and hurry through your day,

it’s like an unopened gift thrown away.

Life is not a race, so take it slower,

hear the music before the song is over.

— Anonymous

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Our Readers Speak: the Perinatal/Pediatric Specialty Exam

by **Katie Sabato, MS, RRT**

In each of the *Bulletin*, I ask our readers to contribute their thoughts, ideas, and articles, usually with little or no response. I always hope this will change, and this issue I’ve gotten my wish. The article titled, “Should all RCPs be allowed to take the Perinatal/Pediatric Specialty Exam?” that was published in our Issue No. 1 this year elicited an array of responses.

Before I present some of the responses, however, I’d like to explain why the article was published in the first place. As the chair of our section, I am responsible for voicing the ideas, concerns, and questions associated with our section. I was asked by a fair number of members to investigate how the rest of our section felt about the fact that so many RCPs without experience in the field of perinatal-pediatrics were taking and passing the exam. This concern did not necessarily reflect my own opinions on the matter, but I wanted to raise the issue within the membership. Thus the article in Issue No. 1. Here are some of the responses I have received since its publication:

... Just read the section on non-perinatal-pediatrics RCPs taking and passing the exam, and I agree with the concerns raised in your article. While subject knowledge is one way to measure competency, and successful passage of a national exam certainly denotes that, actual work experience is a whole other arena—one which is considerably more difficult to determine through the written examination process. I’m sure we all can recall a

more highly credentialed practitioner who was less competent clinically than the lesser credentialed RCP. One could hope that the addition of the specialty exam passage on an applicant’s resume would serve to further open the employment door. But it should in no way be the only criteria used in the hiring process. The personal interview should be the arena where the actual determination of clinical expertise is ascertained. If not, then the clinical skills of the interviewer would seem to me to be highly suspect.

On a personal note, my ego feels that the inclusion among our ranks of non-perinatal-pediatrics practitioners does, in a way, dilute the achievement value of the credential, but my brain tells me that no credential, regardless of the title, can ever replace the skill and knowledge that the school of work experience has provided me. I was a good practitioner prior to the credential, and I am a better one today, primarily due to the passage of time. The credential would serve as the icing on the cake of my cumulative respiratory therapy career.

... In response to your question in the *Bulletin*: I do not think that we should advocate a change to the criteria for sitting for the Perinatal/Pediatrics Specialist Exam. I do feel that we, as a specialty section, should be active participants in making sure that the exam contents reflect real, current, and comprehensive knowledge in the area of pediatrics. I am not familiar

“Our Readers Speak” continued on page 3

"Our Readers Speak" continued from page 2

with the process for reviewing the exam questions. Are we, as a section, involved in that process?

(Yes, I, as well as other members, am contacted from time to time to write questions. In addition, last year the NBRC sent out a survey investigating the areas, tasks, and decision-making processes that perinatal/pediatric RCPs participate in the most.—K.S.)

If an individual (with or without current experience) passes a well-designed exam, it means that he or she possesses that knowledge. If an employer presumes that passing an exam (whether that be the specialty exam, the RPFT, RRT, or other) translates to actual clinical ability, then shame on the employer. Conversely, we all probably know someone who failed the RRT exam at least once but whom we would regard as an excellent clinician. As such, I think it would be presumptuous on our part to believe that a pediatric exam could any better indicate who is a good clinical or not.

I feel strongly that we should not limit the sitting criteria.

. . . In regards to the Perinatal/Pediatric Specialty Exam, I feel those who are willing to do the studying and pay the fee should be allowed to sit for the exam. I took the exam in my first couple of years in the profession, during which time I worked on our pediatric team for only a couple of months. I would venture to say that very few of our pediatric therapists have this credential, yet many have worked in the field for many years. Having the credential isn't a prerequi-

site for working in our 12-bed pediatric ICU.

A couple of years ago, I became a charge therapist. I cover the ER and float to help all other areas in our hospital. During the RSV season and peak asthma season, I see many kids in the ER and call upon the knowledge I've obtained from the exam, the *Bulletin*, other journals, and my fellow therapists. This accumulation of knowledge and experience has made me a better overall therapist.

If an employer can't tell an inexperienced therapist from an experienced therapist, then somebody else should be doing the hiring. If everybody hires just experienced therapists with X number of years, then your pool of candidates is going to be pretty small, and young eager therapists won't get a change to gain experience.

If you wanted me to work in your NICU, then I would require some mentoring. I would have to become familiar with your equipment, protocols, P&P's etc. I would have to prove myself over several months. By taking the exam, I have proven that I am willing to learn. After working in an NICU, I would probably sit for the exam again.

. . . The NBRC Perinatal/Pediatric Specialty Exam is a test of knowledge and understanding of the care needed for a very special group of patients. To think that only those individuals who are currently employed in the application of this knowledge and understanding should be permitted to take the exam is an arrogant, elitist, and repugnant attitude. On the contrary, I would champion that those who are not currently solely employed in this specialty

be encouraged to seek this body of knowledge and understanding and challenge themselves to this test.

I manage a department in a medical center that concentrates on adult cardiac surgery (over 1,100 open hearts per year). We have a small, five-bed Level II nursery. This is not our focus, but it is here. I must have all of my staff prepared to deal with any case that may present in the nursery at any time. Due to market factors and our small nursery, it is infrequent that we have a newborn on ventilatory support. However, this is all the more reason for my staff to be required to maintain NRP Certification, attend those few deliveries, and pass the Perinatal-Pediatric Specialty Exam. (A pay raise goes with a passing score.) My cardiac intensive care therapists can't give "Oh, I remember that from school" level of care when a baby arrives. They must give the care expected for any baby delivered anywhere. This should be true of all respiratory therapists.

Using a line from the *Bulletin*, I, as an employer, have a lot of experience with RRTs applying for jobs "without the clinical expertise to back up their credential." Does the fact that they have passed the Advanced Practitioner exam six months out of school mean they are perpetrating fraud? Or, as the article puts it, "falsely misleading employers into hiring . . ."? I don't think so.

If a few RCPs wish to develop and market a Clinical Skills Test, go for it. But the NBRC exists for the benefit of all RCPs and the patients we serve. Their exams are sound measures of the knowledge and understanding needed to perform in this profession. They do not exist for the purpose of creating "clubs." ■

Data Collection . . . Close Scrutiny Required

by Jeanette Asselin MS, RRT, manager of the Neonatal/Pulmonary Research Group at Children's Hospital of Oakland, Oakland, CA.

Hospitals everywhere are experiencing reorganization, and respiratory departments are frequently the first to make a change. These makeovers are having a tremendous impact on departmental function, demanding improved accountability. Not only have respiratory departments had to deal with cutbacks, respiratory staff are being asked to take on additional duties while giving up services which have been their "bread and butter." In addition, they are being asked to keep records to show what effects their therapies, procedures, or the "changes" are having on patient outcome.

This record keeping or data collection agenda requires increased sophistication and understanding of statistics and how to interpret data. Accurate representation of data is essential to this process and is key to interpretation of the results. Although many hospital administrators may not be "clued into" the science of data collection, as clinicians, we must be. I have seen experiential or anecdotal data presented at national meetings, often with information missing that would allow the audience to make an educated evaluation of the data's impact. To accentuate this point, let's review the

following example:

Dr. Smart from Do-Right Hospital is reporting the results of data collected over a three month period from 50 COPD patients presenting to his emergency room (ER). These patients were treated following Treatment Regimen A, which is a modification of standard therapy developed by Dr. Smart. Since use of this Regimen A may lead to lower hospital costs, it is strongly supported by hospital administration. At the end of three months, the data shows that only 5% of these patients

"Data Collection" continued on page 4

“Data Collection” continued from page 3

required hospitalization. This seems to be a surprisingly low admission rate for this population of patients, and everyone gets excited about using the new regimen!

Unfortunately, because the ER staff was so busy collecting information on Dr. Smart’s patients receiving Regimen A, they neglected to keep records of the patients presenting to the ER during this same time frame who did not receive Regimen A.

Subsequent evaluations of ER records revealed that an additional 92 COPD patients who presented to the ER during this time frame received standard treatment; of these, 6% required hospitalization. This additional information gives us a new perspective on Dr. Smart’s data: Regimen A doesn’t seem to be any better than standard treatment (5% versus 6%).

However, what if the 92 patients receiving standard therapy had a 23% admission rate? Would you think differently about Dr. Smart’s regimen? Some might immediately say, “yes, go with Regimen A and its lower admission rate!” But let’s add some additional information. What if further chart review showed that all the hospitalized patients (both standard therapy and Regimen A) also had cardiac conditions, whereas those who were not hospitalized did not. Does this information change your impressions again? It should.

In any situation where you are collecting data, confounding issues which may affect interpretation of your data need to be considered and collected (e.g., home treatment regimen, previous history, previous hospitalizations, other illness, disease severity). Before we can have a true picture of Dr. Smart’s data, he should probably continue reviewing patient charts. Unfortunately, because Dr. Smart has a busy clinical schedule, has recently had his nurse’s time cut in half, and has now wasted six months going back to review charts, he has lost interest in the project and shelved the whole idea of Regimen A.

Dr. Smart made a tactical error. He did not approach evaluation of his new regimen in a scientific way. A thorough evaluation requires *prospectively* identifying the patient population and the time frame, identifying patients who receive the treatment intervention as well as those who do not, collecting demographic and other patient data

which may affect the results, identifying how the intervention will be implemented, determining how data will be collected and by whom, and deciding how the data will be evaluated (analyzed). Had Dr. Smart followed this process, he could have reported a thorough evaluation of his regimen after only three months of data collection.

The take home message from this exercise is: don’t waste your time! Make certain you are collecting the appropriate data from the get-go. You may have to spend extra time setting up the project initially, but the data collection process will go smoother, and the results should be evaluable.

Key elements to data collection:

- **Timing.** Select a specific time period to complete your evaluation (e.g., June 1st through August 31st). If you are collecting data during a three month period this year and comparing it to previous years of data, you should select the comparative data from the same time period (e.g., June through August 1998 versus June through August 1997).

- **Understand Impact of Data.** Collect ALL the occurrences of the item of interest during the time of evaluation. This is the *denominator* used to evaluate the impact of your intervention.

- **Intervention.** If you are implementing a change in practice, make certain that clear protocols are outlined and staff are completely inserviced prior to start of the evaluation period.

- **Data Validity.** Look for factors, other than your intervention, which may affect the validity of your data. These can be *external* (e.g., referral patterns, secondary diseases, weather, time of year, patient’s ability to get to the hospital, patient education), or *internal* (e.g., staffing patterns, type of treatment, how treatment was provided, who provided the treatment, how data was collected).

- **Data Collection.**

- Identify data (measures) which clearly document the outcome of interest. Use *hard* data measures (objective assessments such as heart rate, respiratory rate) over *soft* data measures (subjective assessments such as patient’s self-reported impression of improvement) whenever possible. Although *soft* measures can be important, they add another potential level of bias

to your data.

- Data collected by staff can be inaccurate, incomplete, or randomly completed because their first priority is patient care. To improve consistency in data collection, identify a limited number of individuals to do the work and include these individuals in the design of the data collection; they often provide invaluable insight into the daily routine.

- Provide clear guidelines on how data will be collected.

- If research-quality clinical evaluations are being done, consider minimizing inter-rater variability by having raters compare their patient evaluations and complete a comparison such as the Kappa to score agreement between the raters.

- **How is data going to be analyzed?**

Do you require simple comparisons or more sophisticated analysis to document change?

- **Get and stay involved!** Outside organizations (management or insurance providers) are increasingly doing evaluations of your hospital and perhaps your department. If this is occurring, *get involved in the process!* This is important to insure that the assumptions outsiders are using are correct, and that they are considering all the departmental and patient issues which affect their outcome of interest.

- **Involve IRB and Research.** Communication and approval from your institution’s Research Committee or IRB is essential if you are changing practice because patient consent may be warranted. Your IRB and Research Committee members are also an invaluable resource from which you can draw much information. The chairs of these committees will not only be happy to instruct you on hospital policy, but will often offer you guidance in project design, helping you avoid problems such as those encountered by the aforementioned Dr. Smart.

- **Collaborative Data Collection.**

There is increasing interest in this type of data collection. The nearest example to this type of collaboration that I am aware of is the Vermont Oxford Neonatal Network. Unfortunately, given the diversity in medical and respiratory practice, and the diversity of our patient populations and diseases encountered, as well as the limited time available for this type of data col-

“Data Collection” continued on page 5

“Data Collection” continued from page 4

lection and the data propriety and confidentiality issues, I don’t see collaboration happening in a manner, or with

adequate patient numbers, to impact patient care. Since our institutions are uniquely diverse in their patients and their medical practice, this time might be better spent within institutions evaluating internal practice or researching

new therapies.

Questions or comments can be forwarded to Jeanette Asselin through e-mail to the AARC Neonatal/Pediatric web site or directly to AsselinJM@aol.com. ■

Georgia Society for Respiratory Care Neonatal/Pediatric State of Practice Survey Results

by Earl Fulcher, Jr. MAE, RRT, Perinatal/Pediatric Specialist

In August of 1997, the neonatal/pediatric committee of the Georgia Society for Respiratory Care (GSRC) conducted a survey of RCPs in Georgia to determine the current state of practice of neonatal and pediatric respiratory care in our state. The survey was formulated and reviewed by committee members. The purpose of the survey was to determine who is practicing pediatric respiratory care in our state, where they are working, and what procedures or therapies they are performing. This data will be used to provide improved continuing education and communication for neonatal and pediatric RCPs.

A total of 305 surveys were mailed or distributed throughout the state. Surveys were sent to the respiratory care departments of each tertiary care center in the state. The surveys were then mailed to a randomized set of Georgia hospitals who have a bed capacity of 90 or greater. Thirty (30) surveys were also distributed at the GSRC summer meeting in Savannah, GA. A total of 102 surveys were returned for a return rate of 33%.

The other purpose of this effort was to form a statewide Perinatal/ Pediatric Consultant Panel similar to the AARC Perinatal/Pediatric Specialty Section’s Consultant Panel. Currently, 30 RCPs are listed on the GSRC Perinatal/ Pediatric Consultant Panel.

I wish to express my sincere gratitude to the following GSRC neonatal/pediatric committee members for their assistance and patience: Clifton Dennis, RRT, D.J. Feather, RRT, Robert Harwood, MHA, RRT, and David Ellwanger, RRT. Without their support this data could not have been collected and published.

The results of the survey, including commentary on several of the questions, follow:

1. Which credential(s) do you hold? (check all that apply)

| | |
|--------------------------------------|--------------|
| CRTT..... | 18/102 (18%) |
| RRT | 84/102 (82%) |
| Perinatal/Pediatric Specialist | 26/102 (25%) |
| RN..... | 2/102 (2%) |
| LPN..... | 0/102 (0%) |
| PhysicianAssistant..... | 0/102(0%) |
| Other..... | 1/102 (1%) |

This listing of credentials is similar to that used on the AARC application for membership. Note that only 25% of the respondents hold the Perinatal/Pediatric Specialist credential.

2. How many years have you practiced neonatal and/or pediatric respiratory care?

| | |
|-----------------------|----------------|
| 0-2 years..... | 23/102 (22.5%) |
| 3-5 years | 14/102 (13.7%) |
| 6-10 years..... | 28/102 (27.5%) |
| 11-15 years..... | 24/102 (23.5%) |
| 16 years or more..... | 12/102 (11.8%) |

This listing of years of practice is the same as that used on the AARC application for membership.

3. What is your primary job responsibility? (check one only)

| | |
|---------------------------------|----------------|
| Department Director | 2/102 (2.0%) |
| Assistant Director..... | 3/102 (2.9%) |
| Clinical Coordinator..... | 8/102 (7.8%) |
| Instructor/Educator..... | 3/102 (2.9%) |
| Supervisor/Lead Therapist | 11/102 (10.8%) |
| Staff Therapist..... | 69/102 (67.6%) |
| Sales | 0/102 (0%) |
| Home Care Therapist..... | 3/102 (2.9%) |
| Other, specify..... | 3/102 (2.9%) |

The vast majority of respondents were staff respiratory therapists or supervisors with clinical responsibilities.

“Survey Results” continued on page 6

“Survey Results” continued from page 5

4. Which of the following best describes the type of facility in which you work? (check one only)

- Teaching/Academic Hospital.....38/102 (37.3%)
- Public, Non-teaching Hospital.....46/102 (45.1%)
- Private, For-Profit Hospital.....7/102 (6.9%)
- Home Care/DME Provider4/102 (3.9%)
- Other, specify.....4/102 (3.9%)

An overwhelming majority of respondents (82.4%) work in public, acute care hospitals. Surveys were also sent to four different home care companies in the state.

5. What percentage of your time in a typical work week is spent performing “hands-on” care with neonatal or pediatric patients?

- < 25%.....33/102 (32.4%)
- 25-50%.....17/102 (16.7%)
- 51-75%.....19/102 (18.6%)
- 100%.....33/102 (32.4%)

6. In which of the following areas do you work with pediatric or neonatal patients? (check all that apply)

- Normal Newborn Nursery48/102 (47.1%)
- Labor/Delivery.....69/102 (67.6%)
- Level II NICU.....24/102 (23.5%)
- Level III NICU.....52/102 (51.0%)
- Level IV NICU.....11/102 (10.8%)
- General Pediatric floor.....63/102 (61.8%)
- Pediatric ICU28/102 (27.5%)
- Home Setting5/102 (4.9%)
- Outpatient Clinics7/102 (6.9%)
- Other, please specify.....5/102 (4.9%)

A Level II NICU was described on the survey as one providing short-term mechanical ventilation and nasal CPAP. A Level III NICU was described as one providing high frequency ventilation or nitric oxide (NO) therapy. A Level IV NICU was defined as one which provided ECMO (there are only two such facilities in Georgia). The survey originally listed nitric oxide therapy as a characteristic of a Level IV NICU, but those respondents who listed this therapy as a service, but not ECMO, were recorded as Level III facilities since it was later learned that NO was being used by several Level III units under an FDA investigational license.

Finally, the Pediatric ICU was described on the survey as one in which only pediatric patients were admitted.

7. Are you a member of the AARC?

- YES.....67/102 (65.7%)
- NO.....34/102 (33.3%)

Listed below are the direct quotes of those who checked that they were not an AARC member.

If NO, why not?

- “Don’t see a benefit”
- “Costs too much”
- “Lapsed and I haven’t renewed it yet”
- “RT department will not pay for meetings/seminars even with AARC discount”
- “Getting ready to join”
- “Once was, but didn’t renew my membership”
- “Lack of interest”
- “Expired, have not renewed”
- “No benefits noted for members. The AARC has not promoted to me the advancement of the respiratory care profession nor tried to implement a plan to increase the demand of the respiratory care credential.”
- “Money”
- “Dues”
- “Financial reasons”

I believe the AARC has recently dealt with the financial issues listed by several respondents by making available less expensive options for membership in the organization. Hopefully, this will be emphasized to nonmembers at upcoming conferences and meetings.

8. Are you a member of the AARC Perinatal-Pediatric Specialty Section?

- YES.....21/67 (31.3%)
- NO.....46/67 (68.7%)

The denominator for this question is 67, as that was the number of respondents who stated that they were a member of the AARC. However, note that only 21/102 or (21%) of respondents to the survey are members of the specialty section. This brings up questions as to the effectiveness of our specialty section’s web site and newsletter in providing adequate communication and information to RCPs practicing neonatal and pediatric respiratory care.

9. Does your primary employer provide a financial incentive for passing the Perinatal/Pediatric Specialty Exam?

- YES.....11/102 (10.8%)
- NO.....89/102 (87.3%)

“Survey Results” continued on page 7

“Survey Results” continued from page 6

10. Which of the following procedures/therapies do you actually perform when practicing neonatal and /or pediatric respiratory care? (check all that apply)

| | <i>RRT</i> | <i>CRTT</i> |
|--|-------------|-------------|
| Arterial puncture | 73/84 (87%) | 12/18 (67%) |
| Arterial line draws..... | 56/84 (67%) | 11/18 (61%) |
| Arterial line insertion (peripheral)..... | 14/84 (17%) | 0/18 (0%) |
| Arterial line insertion (UAC) | 2/84 (2.4%) | 0/18 (0%) |
| ABG analysis | 71/84 (85%) | 13/18 (72%) |
| Electrolyte or glucose analysis..... | 20/84 (24%) | 2/18 (11%) |
| Endotracheal intubation | 74/84 (88%) | 11/18 (61%) |
| Ventilator management via protocols..... | 68/84 (81%) | 15/18 (83%) |
| Surfactant replacement therapy..... | 67/84 (80%) | 9/18 (50%) |
| Noninvasive ventilation | 54/84 (64%) | 11/18 (61%) |
| Nasal or mask CPAP..... | 76/84 (90%) | 14/18 (78%) |
| High-risk delivery attendance | 67/84 (80%) | 11/18 (61%) |
| High frequency ventilation | 57/84 (68%) | 6/18 (33%) |
| Nitric oxide..... | 21/84 (25%) | 3/18 (17%) |
| ECMO | 9/84 (11%) | 1/18 (5.5%) |
| Fiberoptic bronchoscopy assistance..... | 12/84 (14%) | 3/18 (17%) |
| PFTs (other than peak flow).. | 9/84 (11%) | 0/18 (0%) |
| Apnea monitoring (education) | 22/84 (26%) | 5/18 (28%) |
| Asthma education..... | 39/84 (46%) | 12/18 (67%) |
| Bronchial hygiene education..... | 36/84 (43%) | 9/18 (50%) |
| Respiratory equipment education..... | 47/84 (56%) | 11/18 (61%) |
| Transport (outside of hospital)... | 37/84 (44%) | 7/18 (39%) |
| Other, please specify | 0 | 0 |

The respondents to this question were separated by credential in order to determine if there were any significant differences between those holding the RRT or CRTT credential in the practice of neonatal and pediatric respiratory care. Two respondents listed themselves as registry-eligible and they were included in the CRTT category.

It was noted during tabulation of the results that several respondents stated that they only worked with children on a general pediatric floor, yet they checked that they perform

intubations and arterial line draws when practicing pediatric respiratory care. As is often the case with survey respondents, directions to a question may not be read or followed.

11. Does the facility in which you work incorporate the use of therapist- or patient-driven protocols for neonatal or pediatric respiratory care?

| | |
|----------|----------------|
| YES..... | 54/102 (52.9%) |
| NO..... | 49/102 (48.0%) |

It was noted during tabulation of the survey results that there seemed to be some confusion as to what therapist- or patient-driven protocols actually are. Respondents from the same institutions would answer this question differently. The answer which each respondent indicated on the survey was recorded despite the discrepancy.

Of those who answered YES to this question, 23/54 or 42.6% were from academic, teaching hospitals and 20/54 or 37% were from public, non-teaching institutions.

12. If you answered YES to question 11, what type of protocols are currently in place? (check all that apply)

| | |
|-------------------------------------|-------------|
| Ventilator management | 37/54 (69%) |
| Oxygen therapy..... | 40/54 (74%) |
| Bronchodilator therapy | 32/54 (59%) |
| Bronchial hygiene therapy(CPT)..... | 23/54 (43%) |
| Other, please specify | 6/54 (11%) |

Those listed in the “Other” category included a BPD pathway, asthma pathway, surfactant replacement, and high frequency ventilation protocols.

13. At your present place of employment, do respiratory therapists participate in clinical or equipment research for the purpose of publication in a peer-reviewed medical journal?

| | |
|----------|----------------|
| YES..... | 29/102 (28.4%) |
| NO..... | 70/102 (68.6%) |

Of those who answered YES to this question, 21/29 or 72.4% were from academic, teaching hospitals.

14. Do you feel that the establishment of a GSRC Perinatal/Pediatric forum on the Internet would be a worthwhile means of communication?

| | |
|----------|----------------|
| YES..... | 83/102 (81.4%) |
| NO..... | 14/102 (13.7%) |

This type of communication is currently available via the Perinatal-Pediatric Specialty Section home page on the AARC web site. However, as previously noted, only 21% of the respondents to this survey are members of that specialty section, which is required to access to this forum on the AARC web site.

15. Do you have access to the Internet either at home or work?

| | |
|----------|----------------|
| YES..... | 64/102 (62.8%) |
| NO..... | 37/102 (36.3%) |

The AARC is proud to partner with the University of

The AARC and UCSD Offer Patient Driven Protocols Manual

California San Diego (UCSD) in offering the university's Patient Driven Protocols Manual. UCSD's Respiratory Services developed the manual to serve as a resource for respiratory care providers in developing, implementing, or refining care plans which are implemented by bedside practitioners based on patient evaluations and responsive interventions.

The original protocol program was

developed at UCSD in 1993 and has expanded from 2 protocols to more than 25. Each of them has been successfully implemented at UCSD as part of a hospital-wide program. In fact, the manual serves as a daily reference for respiratory therapists, physicians, nurses, and other medical staff at the university's hospital.

This protocol manual includes guidelines for oxygen, secretion man-

agement, percussionnaire, autogenic drainage, extubation, and post-op laparotomy.

Cost of the manual (product # PA801) is \$85 for members and \$99 for nonmembers. Shipping cost is \$10. For more information or to order, contact the AARC at (972)243-2272. ■

Study gauges childhood disability

FYI...

Respiratory diseases were among the top causes of childhood disability identified by a telephone survey of 100,000 children younger than 18 that was conducted by University of California at San Francisco researchers.

According to the group, about 6.5 percent of the nation's children suffer from some type of disability. Together these disabilities cause 66 million days of restricted activity each year, including 24 million missed days of school. Children with disabilities also experience 26 million more physician contacts than their peers and spend about five million additional days in the hospital annually.

The study also found that socially and economically disadvantaged children suffer disproportionately from disabilities when compared to their better-off counterparts. (American Journal of Public Health 1998;88:610-617)

Goggles don't help preemies

Exposure to the harsh light of the neonatal nursery doesn't contribute to retinopathy, say researchers from Children's Hospital of Buffalo who studied a group of 409 preemies at high risk of developing the condition. They divided the infants into two groups and outfitted one group within 24 hours of birth with special goggles designed to reduce visible light exposure by about 97 percent. The other group was exposed to normal lighting. Infants in the treatment group wore the goggles for a median of 28 days. The incidence of retinopathy in the treatment group at follow-up was 54 percent, compared with 58 percent in the

control group. (New England Journal of Medicine 1998;338:1572-1576)

Children's asthma camps listed on AAAAI web site

The American Academy of Allergy, Asthma & Immunology (AAAAI) is featuring a new nationwide listing of 106 day and sleep-over camps for asthmatic children on its web site, <http://www.aaaai.org>. The camps combine typical camp activities with brief asthma education sessions to teach children better self-management techniques.

"These specialized camps can be real confidence boosters for children with asthma," says Children's Asthma Camp Consortium Chair Dr. Richard J. Sveum, an AAAAI member physician and asthma specialist from Minneapolis who has observed the benefits these camps can provide firsthand as a member of the medical staff at Camp Superkids in Minneapolis. "Campers can participate in the fun and activities associated with regular camps, but also learn how to better cope with and control their asthma. By improving their self-care and self-image, they can gain greater independence."

The camps featured on the AAAAI list are sponsored by several organizations, including local offices of the American Lung Association, the Asthma and Allergy Foundation of America, and other non-profit foundations and agencies. ■

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