New England College of Occupational and Environmental Medicine

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NECOEM *Reporter*

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EVENTS

November 29 and 30
NECOEM/MaAOHN
ANNUAL CONFERENCE

registration, raffle, survey, etc at

WWW.NECOEM.ORG

ID, Mental Health, Upper Extremity Injuries, Lumbar Degenerative Disk Disease, Fit for Duty, ADA, Problematic Pre-Placement, Lung Disease, Spirometry, Nanotechnology, Global Warming Problems and Solutions, Divisions in OH, Pain Management Program Pitfalls, Physical Treatments for Low Back Pain, Heart Disease among Firefighters, Fish, Mercury, Child Development, Phthalates and Male Health

Downeast Association of Physician Assistants

18th Annual Winter CME Conference
January 30 - February 2, 2008
Bethel, Maine

Contact: Linda Roberts
linda.roberts@deapa.com
(207) 564-2828

AMA Guides

Fourth Edition Web-based Seminar
www.impairment.com/4thEditionWebinar.htm
Or
www.AMAGuides4.com.

PHYSICIAN EXTENDERS, A MORE RECENT PHENOMENON

By Craig Curtis, MD

In this issue of the NECOM newsletter we feature several articles by physician extenders, also known as mid-level providers. The first is a narrative by physician assistant David Kuhn, PA-C. in which he summarizes his experience hosting an international delegation from Ireland to receive an overview of the roles of physician assistants in the Maine healthcare system.

The second article is a comprehensive review, focused on the role a nurse practitioner can provide in the practice of occupational medicine . This article written by Linda Willard, OHN/FNP comes from her extensive experience in occupational health over several decades and gives good insight to how an experienced mid-level could be an asset to the practice as well as the industrial community.

In general, mid-level providers are used in many roles in the practice of medicine throughout New England, with a presence in many different fields and types of practice delivery. Internationally, this trend is also becoming more common. That said, the utilization of these providers is not to the extent that it is seen in the United States.

In addition to these two interesting presentations, I took the opportunity to survey the NECOM membership about the utiliza-

(Continued on page 2)

The Role of the Nurse Practitioner in Occupational Health

By Linda Willard, F.N.P.

Since the inception in the 1960's of the midlevel providers, physician assistants and nurse practitioners, the roles and utilization of these valuable health care providers has expanded. The modern nurse practitioner receives advanced formal education most commonly on the master level for today's health care industry. Specialty certifications are available in such categories as occupational medicine.

Nurse practice acts in each state determines the depth and scope of practice. In the field of occupational medicine the nurse practitioner is a valuable asset to companies, employees, and clinics. NP's can be the chameleon of the health care

(Continued on page 4)

Dear NECOEM Member,
In the President's 2006 Annual Report, Tom Gassert stated: *"This year I propose that among our other activities, we consider a simple survey to track the kinds of things our members are doing to further our mission to help preserve the health of not just local workplaces and the community environment, but our precious Earth and global community, for all time..."*

The NECOEM Board of Directors has decided to launch an annual voluntary survey of our membership for the simple purpose of sharing among us awareness of some of the diverse talent and kinds of activities to which we devote our time and energy. Many of our members are engaged in local, national and international activities for the purpose of improving life, health and the wellbeing of the planet. Some of us are engaged in scientific, social, political, business, health and environmental projects and programs.

Aside from employment, many members are involved in unpaid or volunteer activities. We are particularly interested to hear about these avocational activities. Sharing of this kind of information should serve to inspire and to perhaps open up opportunities for members to connect on issues of personal interest. There is no other purpose than this.

This survey is intended to be strictly voluntary. All current NECOEM members, approximately 200 of us, are invited to participate. The results will be tabulated, pooled and summarized . Results will not be posted, but will instead be mailed or emailed to all members whether you participate or not.

Some topics might be of interest for our newsletter, the NECOEM Reporter. If so, I may contact one or more of those who participate for a possible interview and story, again, voluntary.

Instructions for completion:

1. The survey is on page 7 of this newsletter, and also available on www.necoem.org to download.
2. Note only those activities that are current, periodic, or recent within the last 2 years.
3. Name and contact information is optional.

Email, fax or mail to Dianne Plantamura, NECOEM Executive Director at: NECOEM, 22 Mill Street, Groveland, MA 01834, voice/fax 978-373-5597 email: necoem@comcast.net.

It would be great to hear from you. I look forward to your participation.
Craig Curtis, MD

(Continued from page 1) ***MD Extenders***
tion of mid-levels. I would like to summarize that information here.

In general, the utilization of mid-level level practitioners both, physician assistants and nurse practitioners, is well accepted by our NECOM membership . We had approximately 28 responses to the survey, and an overwhelming majority (24 out of 28) did utilize either PAs or NPs. Twenty two of those who did utilize midlevel providers have done so for greater than five years; utilizing them in various functions including seeing same day patients in the office, attending on-site or work setting clinics; and seven had their mid-level provider practice independently.

Of the 28 surveys, 5 responded that these midlevel providers were members of NECOM, 5 were members of ACEOM and 13 others were members of other occupational medicine organizations, not identified. A majority of the respondents to the survey (23 out of 28) stated that their client companies looked favorably on the use of the midlevel providers although a few insisted on physicians seeing their employees. Twenty of the 28 responded also that they had no difficulty in marketing the services of these midlevel providers.

In summary, it seems that of the respondents to the midlevel provider utilization questionnaire do utilize mid-level providers, and do so with good results and good oversight.

There were a number of comments made as well. In general, the respondents looked favorably on the use of NPs and PAs in most aspects of screening physical examinations, less complex injury cases, onsite company based clinics. The comments reflected also that oversight was considered very important , involving chart and case review, and direct physician involvement.

Several comments pointed to the need for more specific physician intervention with the more complex injury and exposure cases and also in

(Continued on page 3)

Irish VIPs come to Maine to see PAs in action

With towns and cities named Newry, Belfast, Limerick and Bangor, Maine has historically been tied to the "Auld Sod". That tie was recently renewed when, on August 15 & 16, two distinguished visitors from Ireland arrived in Maine. They were here at my invitation to see how the Physician Assistant profession is integrated into the healthcare system in Maine.

To give some background, I was invited to a conference in Feb 07 in Dublin, Ireland, to speak about how PAs are trained and utilized in the USA. At the conclusion of my talk I suggested that if there was real interest on their part then they should come to Maine to see PAs first hand. To my surprise they took me up on my offer.

There is growing international interest in PAs, especially after the success of the pilot programs in the United Kingdom where there are presently about 30 American-trained PAs in England and another 20 in Scotland. The Royal College of Surgeons in Ireland (RCSI) has also been considering the PA model after many of their members returned from their fellowship training in the US where they had been exposed to the concept. The next step toward that goal was to get 'buy in' from their government.

So after a brief visit to the Hahnemann/Drexel PA program in Philadelphia our visitors, Professor Gerald O'Sullivan, President, Royal College of Surgeons in Ireland, and Mr. Tommie Martin, National Director, Office of the CEO, Health Service Executive, (The number two man in Irish national department of health office.) journeyed on to Maine last month. When they left, less than 48 hours later, they were a bit weary but full of positive comments about PAs and Maine. (There was even time for a quick side trip to L. L Bean's mother ship for a brief shopping foray, as well!)

During their Maine stay they met with ten PAs, along with several of their supervising physicians in variety of clinical practices, ranging from a rural two-provider primary care setting to the multiple surgical specialties located at the largest hospital in Maine. The breadth of experience for the PAs spanned from the new graduate to seasoned veterans with 30 years in the field.

I was able to participate in most of these interviews and I must report that it made me quite proud to be a PA. One after another each PA came in and in a calm and professional manner described what their roles were and why they liked being PAs. Then I was surprised when, unsolicited, some of their supervising physicians came in and spoke to the benefit that PAs have on their practice.

No definite outcomes to report yet but, according to Professor O'Sullivan, already a believer in the PA profession, he was pleased with the whole experience, and Mr. Martin went away a convert. Both spoke of the warm hospitality and looked forward to a return trip.

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(Continued from page 2)

evaluation of workplace occupational health problems of more complexity. Others stated that there are specific areas that the physicians are requested for by companies or by standard. Additionally, most of the comments reflected that the midlevel providers were good team players and were excellent for working on an occ med team to deliver care to companies in various settings.

Finally, there was some concern expressed about the general training experience of the midlevel physician extensor providers in the area of occupational medicine. There is a concern expressed that many of the graduates get very little occupational medical training with most of the providers receiving on-the-job training through physician oversight and continuing medical education through ACOEM or NECOM annual conferences or other occupational medical venues.

In today's fast paced and competitive world of delivering occupational health care, cost can become an issue. The utilization of these providers can be a cost-effective, and well received, means of delivering healthcare, particularly with the increasing difficulty in recruiting occupational medicine physicians.

Thank you to all who responded to the survey.

(Continued from page 1) ***Role of NP***

team.

PHYSICAL EXAMINATIONS: Providing exams of all types is one service he/she can deliver. The pre-employment exam, DOT, bus driver, medical surveillance, return to work physicals, fitness for duty, and executive physicals are the most common needed in an occupational setting. Performing the examination inherently requires the knowledge of applicable rules, laws, and policies as well as the subtly of confidentiality and ethical issues around these procedures. After the pre-employment exam has been performed limitations on physical activity may need to be prescribed. The NP will prescribe the limitations and help the company accommodate as possible under the ADA and any state human rights laws.

WORKERS COMPENSATION CARE: Evaluating employees for illness/injury and determining work relatedness is essential in occupational medicine. After making the diagnosis care and treatment continue. When a case become complex, she will contribute to the case management process and guide the parties involved to the cases ultimate resolution. Patient care in the workers compensation arena may need collaborative practice with specialty physicians. When these circumstances occur I recommend the nurse practitioner remain in charge of the return to work time table and the prescription for light duty transitioning to full duty. The NP uniquely understands the specifics of each job and can supervise or co-ordinate the reentry process with all participants. She may supervise the onsite nurses for implementation of the return to work prescriptions and guide the expanding physical activities as the worker improves. These procedures are vital for smooth reentry of the patient into the work force with the specific eye on preventing new injury and rehabilitating the employee at an appropriate pace.

EDUCATION: The role of the NP can be collaborative, designing, delivery, implementation, or consultative. Employee education is an ongoing process at the time of visits or perhaps by departments or other appropriate groups. Educating management about cost containment measures could be included.

ERGONOMICS: The NP's role may be to design, edit, manage, supervise, deliver, train the trainer, or participate in these programs. If the business is large enough to have industrial hygienists and safety professionals, the roles of each individual needs to be clarified. Flexibility is key to have a team that is functional and not duplicating tasks. When the onsite nurse or other safety officer has problems with worksite safety, job analysis, or hazard issues the NP can serve as the next level of management support to problem solve the hazard. The NP brings the medical expertise to individualize ergonomics for a specific person and job.

SUPERVISION/MANAGEMENT: Employers need to look at the most cost effective way to utilize the NP. It may be helpful to have the provider in an informal consultative role, or more formally delivering supervision and management of people or a department. NP's can implement all levels of management including entrepreneurial levels of business ownership.

MEDICAL SURVEILLANCE: Beyond the physical exams, the NP orders and reviews the diagnostic test data and prescribes appropriate follow up and treatment when needed.

IMMUNIZATION PROGRAMS: Most commonly the NP provides a supervisory and planning function.

CONSULTATIVE: This role can be as limited as a specific hazard that needs resolution, with the NP doing all of the tasks necessary. She may on the other hand, serve with a team to analyze, problem solve and implement the plan results, coordinating the factors needed to negotiate implementation.

SAFETY: NP's commonly contribute to safety programs. A recent statistic I found report that nearly 56,000 U. S. employees die secondary to work injures or illness. Serving to design, market internally and implement programs are more likely the role of the onsite nurse and the NP's will help craft and supervise this process. She might deliver a "safety session" to employees. In the course of treating an employee she may identify hazard trends that need to be addressed. Proactive approaches for change prevents disabling events. Prioritizing company resources and providing guidance to implement change is a vital function. Hazard assessment can be incorporated as part of a team approach.

INFECTIOUS DISEASE: Review of Policies and implementing the care of employees with infectious disease is appropriate NP level of care. Designing a screening program for exposed coworkers in the arena of infectious disease could also be provided. The NP may deliver education in this field as well.

EMPLOYEE HEATH SERVICES: Acute and in some cases chronic illness / injury care can be developed

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(Continued from page 4) ***NP***
as part of the occupational services on site or at a clinic. The NP evaluates and treats medical conditions as outlined in company policy. These services will include care and treatment of medical conditions, prescription of drugs, referrals for rehabilitation services and ordering diagnostic testing. Caution should be taken to be clearly outlining the relationships with local primary care offices and define well the limits of long term care. Chronic care is not usual in the occupational care setting.

MARKETING: As an organization goes out in the field to help companies understand the specialty of occupational medicine the provider is delivering marketing services. The role of the NP is best done as the manager and supervisor of the day to day marketer for the organization. She can craft material, edit for accuracy, assist with client complaints and provide feedback to senior management.

REGULATORY COMPLIANCE: The nurse practitioner must be familiar with regulatory bodies and the practical implementation for the work environment. Compliance on the detail level often falls to the onsite nurses or safety officer but the NP will serve as the consultant, advisor or supervisor of these functions.

SUMMARY: The nurse practitioner brings to occupational health the medical skill level and mid level management abilities to function as a co-coordinator, mid level manager, deliverer of medical care at the same time incorporating legal and ethical issues into the world of business. She can integrate OSHA standards in the real world. Her expertise in medicine enables productive interface with the rest of the medical community. The role can be fluid and confidential positively impacting the bottom line for local companies.

Linda Willard, OHN/FNP

Linda Willard completed the Family Nurse Practitioner Certificate Program at the University of Southern Maine and her Registered Nursing Degree at Hahnemann Hospital Nursing School. She joined Sunbury's HealthWORKS division in 1998 and specializes in Health and Occupational Medicine. She has practiced occupational medicine in Maine for over 20 years.

Volume 2 Issue 21

Knee Osteoarthritis – Impairment Evaluation Tips

Christopher R. Brigham, MD [mailto:Cbrigham@brighamassociates.com]

Knee osteoarthritis is a very common problem discussed in the March – April 2005 issue of the Guides Newsletter. Osteoarthritis ("OA", more correctly reference as "osteoarthrois" and as referred to as "degenerative joint disease") is a prevalent rheumatic disease characterized by the progressive breakdown of articular cartilage, resulting in pain, deformity, and decreased function of affected joints.

Nearly all persons aged 65 to 74 have been shown to have radiographic evidence of osteoarthritis in their hands. Risk factors include advanced age, female gender, genetic predisposition, obesity, and joint injury. Osteoarthritis can develop as a secondary consequence of congenital or developmental joint disorders and of metabolic or endocrine diseases. The cause is unclear and our understanding of its origin is evolving. The development of osteoarthritis reflects a complex interplay of many factors, with a greater recognition of inflammatory, biochemical and genetic factors. In performing an impairment evaluation of osteoarthritis it is imperative to determine the etiology of the osteoarthritis. For extremity evaluations it is important to compare findings on the "injured' side to the opposite "uninjured" side. Consider issues of age, gender, weight and genetics, in addition to history of trauma – these are factors we all need to assess in causation and apportionment analysis.

The AMA Guides bases arthritis impairment in the lower extremity on determined cartilage intervals. For the knee joint space widths (cartilage intervals) of both knees must be measured carefully on AP films obtained standing with a film-to-camera distance of 90 cm (36 in) and the beam at the level of and parallel to the joint surface. The examiner should measure both medial and lateral joint line widths on a standing AP radiograph but use the narrower (smaller) of the two cartilage intervals for rating. For example, if the medial compartment has a 1-mm cartilage interval, and that in lateral compartment is 2 mm, the 1-mm cartilage interval is used in the Fifth Edition in Table 17-31 (5th ed, 544) and in the Fourth Edition in Table 62 (4th ed, 83) to obtain a rating of 10% whole person (25% lower extremity) impairment. The text does not provide specific instructions, but these tables list the patellofemoral joint separately from the "knee," so presumably reduced cartilage intervals in both patellofemoral and femorotibial joints could be rated separately and the impairments combined.

In the Fifth Edition Section 1.2a, Impairment, the Guides advise rating physicians to "consider the individual's healthy preinjury or preillness state or the condition of the unaffected side as 'normal' for the individual if this is known" (5th ed, 2). Hence, if aggravation of pre-existing OA is claimed, it is important to compare cartilage interval on the involved side to that in the contralateral, hopefully uninvolved, joint. For the knee, 4 mm of joint space is considered normal. Anything less constitutes permanent impairment. A 3-mm cartilage interval warrants 3% whole person impairment (WPI), 2-mm 8% WPI, 1-mm 10% WPI, and 0-mm 20% WPI. The impairment for 0-mm, "bone on bone," is the same as for a total knee replacement with "fair results".

Knee osteoarthritis is common, particularly in older patients and especially if obese. Knee injury, depending on the severity and type, can increase the risk of developing and the rate of progression of OA. In assessing impairment for knee OA, the evaluator must obtain a thorough history and physical examination and identify all potential risk factors. Taking into account all of the data (history, physical findings, and radiographic measurements from both the involved and contralateral joint), the rating physician can assess causation, estimate impairment, and apportion the latter to one or more etiologies.

(Useful causation references: Sinkov V., Cymet T., Osteoarthritis: understanding the pathophysiology, genetics, and treatments. J Natl Med Assoc (2003) 95 : pp 475-482, Fife R., Osteoarthritis: A. Epidemiology, pathology and pathogenesis. Klippel J.H. Primer on the rheumatic diseases 11th edition. 1997 Atlanta: The Arthritis Foundation : pp 216-217, Martel-Pelletier J., Pathophysiology of osteoarthritis. Osteoarthritis Cartilage (2004) 12 : pp S31-S33, We, CW, Kalunian KC, New Developments in Osteoarthritis, Clinics in Geriatric Medicine, 21(3), August 2005)

2007 NECOEM Member Survey of Paid and Voluntary Activities (please cut page and fax or mail)

Gender ☐ Female ☐ Male

Location/State ☐-VT ☐-RI ☐-NH ☐-ME ☐-MA ☐-CT ☐-Other: ______

EMPLOYMENT (Paid activities)
Check “YES” or “NO” to any below to describe your current practice or employment:

Academic/Educational institution...............................	☐-Yes	☐-No
Do you have an academic or teaching appointment?....	☐-Yes	☐-No
Hospital inpatient clinical practice..............................	☐-Yes	☐-No
Teaching hospital..	☐-Yes	☐-No
Outpatient clinical practice.......................................	☐-Yes	☐-No
Teach medical residents..	☐-Yes	☐-No
Teach nurses, NPs, PAs..	☐-Yes	☐-No
Specialist consultant..	☐-Yes	☐-No
Expert witness testifying...	☐-Yes	☐-No
Editing or publishing work......................................	☐-Yes	☐-No
Corporation/Company executive...............................	☐-Yes	☐-No
Medical director or executive...................................	☐-Yes	☐-No
Paid committee or board appointment.........................	☐-Yes	☐-No

Other (describe): ____

Percent of your paid work time spent on:	None	< 25%	25-50%	50-75%	>75%
Patient care...........................	☐	☐	☐	☐	☐
Teaching..............................	☐	☐	☐	☐	☐
Research..............................	☐	☐	☐	☐	☐
Writing/Editing/Publishing..........	☐	☐	☐	☐	☐
Consulting............................	☐	☐	☐	☐	☐
Business management................	☐	☐	☐	☐	☐
Other (describe): __________________	☐	☐	☐	☐	☐

Percent of your paid work time spent on:					
Occupational and Env. Health........	☐	☐	☐	☐	☐

Please list your professional degree(s) and briefly note paid work that is not directly related to medicine or nursing, for example: industrial hygiene, engineering, law, spiritual ministry, etc.

____

Please list foreign countries and international organizations where you practice, consult, teach, or do research in public health, occupational/environmental health (list only paid or reimbursed activities):

____

VOLUNTEER ACTIVITIES
Please list foreign countries and international organizations where you practice, consult, teach, or do research in public health, occupational/environmental health (list <u>only unpaid or un-reimbursed</u> activities):

____

____

____

MEMBERSHIPS
Please list local, national and international memberships in organizations that are not-for-profit and that promote health, the environment, education, human rights, service for others, etc.

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NECOEM

NECOEM is a not-for-profit, regional component society of the American College of Occupational and Environmental Medicine, the pre-eminent organization of occupational and environmental physicians, associate and affiliate clinicians.

NECOEM has over 200 physician, associate and affiliate members and is dedicated to preventing and treating occupational injuries and illnesses. NECOEM provides continuing medical education for its members and other clinicians in order to enhance the care that they provide to men and women in the workplace. NECOEM is an advocate for workplace safety, occupational health research, raising public awareness of occupational and environmental health issues, providing guidance on public health policy, and recognizing outstanding achievement by individuals in occupational and environmental health.

The editorial board welcomes letters to the editor. Write or email to NECOEM at the above address. The editor reserves the right to edit letters for publication purposes.

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ADDITIONAL COMMENTS ABOUT YOUR AVOCATIONAL ACTIVITIES

YOUR THOUGHTS ABOUT PRIORITY AREAS FOR OEM WORK

Locally:

Globally:

CONTACT INFORMATION (VOLUNTARY):
Name: ____date:_______________
Address: ____
____
Telephone: (______)______________ Email: ___________________________