Illinois EPIC
Emergency Physicians Interim Communique

Illinois College of Emergency Physicians
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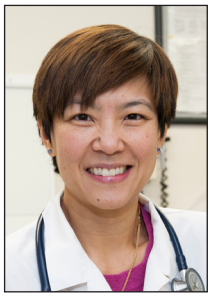
PRESIDENT'S LETTER

Participate: A Member Call to Action



Janet Lin, MD, MPH, FACEP

"Do more than belong: participate. Do more than care: help. Do more than believe: practice. Do more than be fair: be kind. Do more than forgive: forget. Do more than dream: work." – William Arthur Ward

This is my second to last newsletter update for EPIC. As I reflect on several of the efforts made this year, I wanted to take the opportunity to write about the importance of participation and share some of the ways in which you can get involved with ICEP through committee membership. It is the active participation of the members on these committees that is at the root of our achievements.

Participation is social. It builds camaraderie amongst providers from different academic programs, community practices, and levels of training.

Participation is powerful. As a collective, membership affords us the ability to do more than any one person or program could do alone.

This is an invitation to you to do more than belong, care, believe…so that you can participate, help, practice and improve our specialty of emergency care.

We have seven committees that draw upon people's unique interests and areas of expertise. These committees have helped to shape the ICEP activities for which we have been recognized. Outside of Illinois, we are respected for developing national leaders and educational programs. Each of these committees is briefly described in the following paragraphs with the hope of stimulating ideas of ways in which you can participate.

We will be opening up our new committee membership process in May just after Spring Symposium on April 25 and invite you to apply. We are hoping to get better representation from all levels of training, i.e. students, residents, and attendings, to create pipelines for continued engagement. We also seek representation from community, rural, urban, and academic programs to better reflect the needs of providers throughout the state. This is a great opportunity to get involved and have a role in shaping the future of emergency care.

Education
This committee leverages education needs, **innovative teaching** techniques and the expertise of members to create and maintain high-quality continuing medical education programs. Our Oral Board Review Course is unique as the only course that offers hands-on practice in the actual testing environment. Other courses include targeted education for contemporary issues (opioids/MAT, pediatrics, trauma, etc.), procedure-based courses through simulation and ultrasound, as well as educational offerings through different medium, i.e. podcasts, webinars.

EMS
This committee oversees ICEP positions on

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Participate: A Member Call to Action

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EMS issues including paramedic licensure, medical control, trauma center designation, and leadership in EMS systems. The committee coordinates the activities of the Illinois EMS Forum. ICEP is a **key stakeholder** in the state's EMS system. In fact, the current medical director of Illinois EMS Program at the Illinois Department of Public Health, Dr. Jason Kegg, is one of our Board members.

Membership
This committee works to identify and articulate the **value of ICEP membership**. Redefining the role of organized medicine is extremely important in ensuring its relevance. The members of ICEP strongly believe that a collective voice is stronger than any one individual. But it is imperative that ICEP serves the needs of individual members and potential members as well. Recent efforts focus on building a pipeline for engagement, including the creation of an ICEP Medical Student Council and the development of an Advocacy Fund.

Patient and Physician Advocacy
This committee focuses on key legislative issues that affect our practice environment and ability to provide quality care for our patients. We want to ensure that **'life-saving emergency care is there when it's needed'** for all patients. Current issues ICEP is engaged with include maintaining the prudent layperson's definition of emergency, ensuring that out-of-network payment does not impede a patient's ability to seek emergency care, general and mental health-related boarding issues, prompt payment, as well as supporting opioid crisis legislation.

Practice Management
This committee concentrates on issues related to **operations** important to ED medical directors throughout the state. It is a forum to share best practices related to the **optimal function** of our emergency departments. Emergency departments face increased scrutiny of the care we provide, especially within an environment of diverse priorities including patient safety, reimbursement, cost-effective and community-based care. It is increasingly important to identify and create strategies and resources for directors, like hosting Leadership Academies.

Research
This committee ensures the **dissemination of cutting-edge discoveries** related to the provision of emergency care. Emergency medicine research in Illinois is rich with innovations and the committee conducts a scientific papers and poster presentation at ICEP's annual Spring Symposium to highlight work done throughout the state. More ways to engage the scientific community are always encouraged.

Social Emergency Medicine
Our newest committee reflects the evolution of emergency care. This committee aims to foster awareness of the **social determinants of health**, with an emphasis on advocacy and policy change, education, and research. Committee members focus on **decreasing health disparities** in emergency care through systematic interventions that address the social context of patients in urban, rural and international settings.

I hope that these descriptions help you better understand our work and inspire you to join. As always, please feel free to reach out to me or our staff if you have any inquiries, concerns, or suggestions. Otherwise, I look forward to your participation now and in the future.

In solidarity,

— Janet Lin, MD, MPH, FACEP
ICEP President

Last Call for Comment on ACEP Clinical Policy on Adults with Acute Headache

The Clinical Policies Committee of ACEP has completed a draft "Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the ED With Acute Headache."

The deadline for comment by ACEP members on this policy is approaching. The draft is open for comments until Monday, April 1, 2019.

To view the draft policy and comment form, go to: https://acep.org/patient-care/clinical-policies/comment-forms/cp-commentform-acuteheadache/

All comments will be carefully reviewed by the ACEP's Clinical Policies Committee and used to further refine and enhance the draft when evidence supports the changes. Comments should focus on clinical content only.

For questions, please contact Travis Schulz, MLA, AHIP, Clinical Practice Manager, at tschulz@acep.org.

EPIC

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ICEP Board of Directors Elections Open Online Now for Voting Through April 10

Four active members and one resident member will be elected to the ICEP Board of Directors this spring for the 2019-2020 term. Voting opened online on March 11 and closes on April 10.

Results of the elections will be announced at the Annual Business Meeting that will be held during the Spring Symposium on April 25, 2019, at Northwestern Memorial Hospital in Chicago.

Board of Directors Candidates:

- Sobia Ansari, MD
- Erik Frost, DO
- Michael Gottlieb, MD
- David Hassard, MD, FACEP
- Dallas Holladay, DO
- Napoleon Knight, MD, MBA, FACEP, FAAPL
- Joseph Palter, MD

Resident Member Candidates:

- Tehreem Rehman, MD, MPH
- Regina Royan, MD, MPH

Note: The Candidate members of ICEP (residents and medical students) elect the Resident Board member and are not eligible to elect the regular Board members. The Regular members of ICEP (including attendings, retired, and life members) elect the Board of Directors and are not eligible to elect the Resident Member. Members only vote in 1 category.

ICEP's online voting process makes it quick and easy to cast your ballot. Visit http://vote.associationvoting.com/icep to vote now.

All current ICEP members in good standing have received an email with instructions for voting. The email contains the link to the voting platform and their personalized login details.

To log in and cast your ballot, you will use your ACEP Member number (beginning with A) and your last name (as recorded by ACEP).

If you did not receive an email with voting instructions, please contact Kate Blackwelder at kateb@icep.org or 630-495-6400, ext. 205, for assistance. Your email server may block the email as spam.

Each candidate has completed a short profile as well as a personal statement in response to the following question:
What is the biggest challenge facing emergency physicians in Illinois and what should ICEP do to help address it?


Sobia Ansari, MD


Erik Frost, DO


Michael Gottlieb, MD


David Hassard, MD, FACEP


Dallas Holladay, DO


Napoleon Knight, MD, MBA, FACEP, FAAPL


Joseph Palter, MD


Tehreem Rehman, MD, MPH


Regina Royan, MD, MPH

The candidate profiles were included with the email you received on March 11 and can also be viewed directly in the voting portal.

Spring Symposium Focuses on Social EM, Population Health

Registration is open online now for the Spring Symposium and Annual Business Meeting on Thursday, April 25, 2019 at Northwestern Memorial Hospital. The program spotlights social emergency medicine and population health.

ICEP is excited to welcome back Past President John Lumpkin, MD, MPH, FACEP, to lead a panel discussion on what it means to incorporate social EM into your daily practice. Dr. Lumpkin will start with the "why" of incoporating social EM in your practice and strategies for building trust with your patients. Panelists Christopher Barsotti, MD, FACEP, founder of AFFIRM, and ACEP Board member Aisha T. Liferidge, MD, MPH, FACEP will focus on the "how": their struggles and successes in the real world, with takeaways to improve your job satisfaction and help your patients simultaneously.

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Concussion in the ED: New Guidelines and Accurate Diagnoses

Submitted by: Ernest Wang, MD,
with Nicole Reams, MD,
NorthShore University HealthSystem

It may come as no surprise, given our experiences each day in Emergency Departments (ED) across the country, that the most recent data from the CDC reports visits to the ED due to traumatic brain injury (TBI) have increased by more than 50% between 2007-20131, and the numbers continue to rise.

Even further:

- Emergency department visits for brain injuries among adults age 65+ more than doubled; hospitalizations and deaths increased by more than 30 percent.
- Nearly a third (29.9 %) of all concussions were sports-related, and of those, over two-thirds (70%) of concussions among high school athletes result from colliding with another athlete.

Last year, the CDC released new guidelines on diagnosing and managing children with concussion2, recognizing the increase in injuries and the lack of consistency in treatment and management. Given this remarkable increase in ED visits for TBI and concussion, I recently spoke with Nicole Reams, MD, Section Head for the Department of Neurology's Concussion Program at NorthShore University HealthSystem, to discuss details of the new guidelines for concussion care, and to identify signs and symptoms that may mask an accurate concussion diagnosis.

Q: In the Emergency Department, the most common type of concussion cases we see are patients who have fallen, and hit their heads. We can recognize those patients who immediately need a CT scan (i.e., significant loss of consciousness, amnesia, confusion, seizure, focal neurologic deficits, external signs of trauma), but what about those that are more subtle? Often times patients come in a day or two after the injury, due to continued symptoms. They may not have lost consciousness but feel dizzy or nauseous. Do we need to be aware of other symptoms or signs of concussed patients that may be overlooked?

A: Certainly the red flag signs of brain injury are those you highlighted: progressive decline in cognition or awareness, new focal signs like weakness or numbness, recurrent vomiting, asymmetric pupils, or significantly worsening course over time.

Most patients with concussion will not have these symptoms and will experience a varied presentation from patient to patient of headaches, dizziness, imbalance, photophobia, phonophobia, cognitive change (ranging from disorientation to subtle "fogginess" or trouble with concentration), nausea with or without vomiting, sleep and/or mood dysfunction. Some individuals experience all of these symptoms and some present with just a few. The most helpful parts of the examination are cervical range of motion, high cervical palpation (to see if there is additional cervical strain contributing to headaches), eye movement testing to look for conjugate movements, nystagmus, saccades, convergence, and vestibulo-ocular reflex, as well as patient tolerance of these maneuvers, and lastly, balance: I typically test Romberg, tandem gait, and single leg stance.

Q: One of the biggest challenges we as emergency physicians face with concussed patients is deciding whether or not to perform a CT scan in both adults and children. The American College of Emergency Physicians, as part of the Choosing Wisely initiative, has disseminated a Clinical Policy on neuroimaging and decision making in adult mild traumatic brain injury in the acute setting. In addition validated decision rules such as PECARN can assist with avoidance of CT scans of the head in low risk pediatric patients who present less than 24 hours after the event. Are there any red flags in patients who present in delayed fashion with non-focal concussive symptoms as you describe above that increase their risk of a significant bleed? Should they be imaged? If so, which modality is preferred?

A: There are no validated guidelines for signs or symptoms of delayed bleed. My advice would be that if a patient is presenting with a significantly worsening or altered course (sudden change in severity of headaches, new lethargy) or new focal neurologic signs, that imaging should be done. CT remains the imaging tool of choice to screen for bleed, even when delayed by a few days.

Q: When a child comes into the ED with potential concussion, our first concern is to make sure they don't have a significant head injury. But once they leave our care, my concern is that they receive appropriate follow-up to be evaluated for any residual effects. What are your recommendations on protocol for follow-up care for pediatric patients?

A: There are no published guidelines regarding timing of follow-up for pediatric patients but my recommendation is that pediatric patients with suspected or confirmed concussion be seen by either their primary care physician or the concussion clinic (by a specialist with expertise in concussion, typically a neurologist) within 2-3 days of discharge from the ED. Concussion is an evolving injury and symptoms can change in this short time window for many individuals so expedited follow-up is important.

Q: Once patients are diagnosed with concussion, they have many questions about the after care and necessary precautions (especially given recent news and updates on guidelines, as covered by mainstream media.) Conflicting information can be confusing, especially after they conduct a quick Google search while they are in my care. Can you please clarify the guidelines for adult post-concussion care, including resources or sites you find valuable to direct patients?

A: Early concussion management is relative rest, which means scaling down one's activity from normal, taking breaks as needed, and avoidance of intense physical exertion. In regards to cognitive exertion (homework, reading, screen time) and light physical exertion (household chores, walking the dog, going up the stairs), patients are encouraged to do these activities from the very beginning of the injury, but to do so in short increments (i.e. 10 minutes at first) and take a break so as not to exacerbate symptoms. The patient is likely to tolerate longer time intervals over time and he should increase cognitive exertion as tolerated. Once the patient can tolerate at least one normal day of school or work without symptoms (24+ hours), then beginning a gradual return to physical exercise can be considered.

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Spring Symposium on April 25 Focuses on Social EM, Population Health

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Dr. Liferidge will present a keynote address on health equity and its impact on emergency medicine, focusing on diversity and inclusion as related to clinical practice and the medical workforce. Her eye-opening session frames diversity and inclusion goals through the lens of health disparities, particularly in emergency medicine, to recommend a policy-based action plan for closing gaps and improving health.

A lunch-and-learn seminar on reduction in the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation will be presented with support of Bristol-Myers Squibb and Pfizer Alliance. Lunch will be provided for all participants who stay for this seminar.

The Spring Symposium will also feature favorite annual activities that include:

- An update on ACEP activities presented by Dr. Liferidge
- The Resident Speaker Forum competition
- The Statewide Research Showcase, with oral research abstracts presented in a morning session and poster research abstracts on display in the exhibit area
- The Annual Business Meeting, including the results of ICEP's Board of Directors elections (see Page 3 for details)
- The presentation of ICEP's annual awards (see Page 8 for details)
- The announcements of the winners of the ICEP EM on Tap Podcast Competition

Christopher Barsotti, MD, MPH, FACEP

Aisha T. Liferidge, MD, MPH, FACEP

John Lumpkin, MD, MPH, FACEP

Register online at ICEP.org. The cost to attend is $119 for ICEP/ACEP members, $149 for non-member physicians, $25 for residents, and free for medical students. The program has been approved for a maximum of 3.25 *AMA PRA Category 1 Credits™*.

Concussion in the ED: New Guidelines and Accurate Diagnoses

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Q: The American Academy of Pediatrics recently updated their guidelines on returning to activities post-concussion. Can you give us some details on those updates, and what we need to share with our patients?

A: The American Academy of Pediatrics (AAP) recently published new guidelines for Sport-Related Concussion in Adolescents in Children in December 2018 as an update to guidelines they published in 2010. In this article, they review scientific evidence regarding the pathophysiology, epidemiology, signs and symptoms, acute assessment, neuroimaging, neurocognitive testing, acute management, return to play, prolonged symptoms, potential long-term effects, and prevention of concussion. The most notable updates come in the area of the acute post-concussion management. The previous clinical report emphasized the role of cognitive rest. More recent research has revealed that there may be negative consequences from strict rest resulting in increased symptom burden and longer recovery times. In light of this, the AAP is still recommending removal from play following concussion, but recommending avoiding complete inactivity. Light cardiovascular activity which is subsymptom threshold can be beneficial. AAP also endorsed returning to school with academic accommodations but avoiding prolonged school absence as well as continued use of electronics and social media with adjustments or breaks as needed. 5

Q: Is there anything else you'd like us to consider when caring for concussion patients in the ED, to better improve their outcomes once they see their neurologist for follow-up care?

A: Patients with severe symptoms, atypical presenting symptoms, complicated past medical history that may predispose to prolonged recovery (ie migraine, ADHD, depression or anxiety), prolonged loss of consciousness (>1 minute), seizure at impact, history of multiple concussions, or those returning to athletics should be considered more specifically for referral to a specialty concussion clinic for assessment and treatment by a neurologist with expertise in concussion, if your institution has one available. Also keep in mind that although most concussions are self-limiting injuries and resolve quickly, some individuals have an extended course with concussion recovery and there may be patients that present to the ED with multiple neurologic symptoms such as headaches, dizziness, nausea, and confusion several weeks or even months after a head injury, so it may be prudent to search for a history of head injury and ensure there is proper work-up and referral follow-up for this potential diagnosis.

Additional resources, including helpful links, chart, and references, are available at ICEP.org.

Ernest Wang, MD, FACEP
ICEP President-Elect

Nicole Reams, MD
Section Head, Concussion Program, Department of Neurology, NorthShore University HealthSystem, Evanston

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ICEP Awards Recipients to Be Honored at Spring Symposium on April 25 in Chicago

Join your colleagues at the Spring Symposium on Thursday, April 25 at Northwestern Memorial Hospital to honor three dedicated longtime ICEP members for their contributions to the college and emergency medicine.

Dino P. Rumoro, DO, FACEP, Stewart Reingold, MD, MS, FACEP, and David Griffen, MD, PhD, FACEP, will be recognized with ICEP's annual awards at the Symposium.

Dino Rumoro, DO, FACEP

Stewart Reingold, MD, MS, FACEP

David Griffen, MD, PhD, FACEP

Drs. Reingold and Griffen's awards will be presented at 7:35 a.m. Dr. Rumoro's award will be presented at 9:40 a.m.

Bill. B. Smiley Award

Dr. Rumoro is the recipient of the Bill B. Smiley Meritorious Service Award, which honors individuals who have made significant contributions to the advancement of emergency medicine in Illinois. The Bill B. Smiley award is ICEP's highest honor.

Dr. Rumoro is an ICEP Past President and served on the Board of Directors from 2002 to 2007. He was re-elected to the Board in 2009 and served a second term of service. He has also served as chair of several ICEP committees and as faculty for ICEP's flagship board review courses.

Dr. Rumoro is President of the Rush Medical Staff and Vice Dean for Rush University Medical Center Office of Integrated Education and Clinical Faculty Operations. He is also Chairperson and Associate Professor in the Department of Emergency Medicine at Rush.

At Rush, Dr. Rumoro developed the Advanced Trauma Training Program which focuses on pre-deployment advanced medical training for the military. In 2005, Dr. Rumoro was named a Clinical Transformation Officer to assist with the planning and building of Rush's Tower and a state-of-the-art emergency department designed to be the first chemical, biological and radio-nuclear civilian-based response facility to augment the existing trauma system.

Dr. Rumoro completed his emergency medicine residency at John H. Stroger, Jr. Hospital of Cook County and attended medical school at Midwestern University's Chicago College of Osteopathic Medicine.

ICEP Meritorious Service Award

Dr. Reingold, of Chicago, is the recipient of the ICEP Meritorious Service Award, honoring his significant contributions to the advancement of emergency medicine by exemplary service.

Dr. Reingold served on ICEP's Board of Directors from 1995 to 1998 and has been an ACEP member since 1988. He has served on numerous ICEP committees over the past three decades, presented the Pediatric Emergency Medicine lecture at ICEP's Written Board Review Course for 10 years, and continues to teach Oral Board Review Courses.

Dr. Reingold has a long history of patient advocacy and service. He designed and implemented revised State of Illinois Sexual Assault Evidence Kits with the Illinois State Police in the mid-1990s. He was truly ahead of his time on this important issue, and the changes he made have a lasting impact today.

Dr. Reingold is an attending physician at Loyola University Medical Center in Maywood and Co-Director of Vertical Curriculum in Quality and Patient Safety at Loyola's Stritch School of Medicine.

He graduated from Case Western Reserve University Medical School in Cleveland, Ohio, and completed his residency in emergency medicine at Christ Hospital and Medical Center in Oak Lawn.

Downstate Member Service Award

Dr. Griffen, of Springfield, is the recipient of the Downstate Member Service Award, which recognizes an ICEP member from outside the metropolitan Chicago area who has made a consistent effort to advance emergency medicine in Illinois despite lengthy travel.

Dr. Griffen is a Past President who served on the Board of Directors on two separate occasions: once from 1994 to 1997 and again from 2010 to 2016. He distinguished himself on the Board with his analytical, solutions-oriented innovations that resulted from his Lean Six Sigma Green Belt certification.

Dr. Griffen continues to remain involved as a Councillor and on a wide variety of committees, including Awards/Nominating, Bylaws, Finance, Membership, and Patient and Physician Advocacy.

He has been an active advocate at all of ICEP's Advocacy Days in Springfield and has encouraged all of his staff and residents from Springfield to do the same. He received the the Bill B. Smiley Award in 2017.

Dr. Griffen is Associate Professor and Chair of the Division of Emergency Medicine at the Southern Illinois School of Medicine in Springfield. He was the first residency director for the EM residency program that started at SIU School of Medicine in 2008.

For more details about the Spring Symposium, see story on Page 3. Registration is open online at ICEP.org. We hope you'll join us to help us recognize the contributions of Drs. Rumoro, Reingold, and Griffen.

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'Tips and Pitfalls in Emergency Medicine Research' Series

How Much Literature Review Is Enough?

Submitted by: Neeraj Chhabra, MD
ICEP Research Committee

Taking a research project from a simple question to a completed and published project is a time-intensive and exhausting experience for even the most seasoned researchers. That is what makes it so emotionally taxing if you receive the dreaded rejection email. It can be even more draining if the reason for rejection is something that was completely preventable.

Like running a marathon, taking a test, or performing a complex procedure in the ED, your success in performing a research project will be determined by your preparation. A big part of that preparation is a thorough literature review, and it should be done well in advance of any thought of enrolling subjects.

By definition, a literature review is an objective, thorough summary and critical analysis of the relevant available research. In order to determine how thorough a literature review to perform, you need to know your goals of conducting a review. Generally speaking, the goals for a literature review are as follows:

- Become an expert
- Refine your study question and hypothesis
- Identify and refine your outcome measurements
- Improve your methodology
- Create a list to use when compiling your manuscript references

Become an Expert

A detailed literature review, while initially time-consuming, will eventually save you at least the same amount of time later in the process and likely much more. From a basic standpoint, a good review allows one to become a subject-matter expert. If you plan to undertake a meaningful research project, one that can change or validate practice, it is essential that you become an expert. Becoming an expert means learning what's already been done in your subject-area of interest and, just as importantly, what has yet to be done. This can save you time and heartache by avoiding spending time conducting a study only to later have difficulty getting your work published because it's been done multiple times before. Additionally, if external funding is being sought, the literature review can help identify potential external funding sources that have already expressed interest in your area of study.

Refine Your Study Question and Hypothesis

Knowing the literature can help you refine your question. For example, if you want to determine whether early steroid administration can decrease admission rates for patients with asthma, you will discover that this has already been done. By discovering this, you can refine your research question to determine whether different types of steroids, routes of administration, or different doses will affect admission rates. There is no shortage of questions in clinical medicine that need to be answered and an in-depth understanding of the relevant literature will help identify key questions that can improve patient care.

Identify and Refine Your Outcome Measurements

When it comes to actually planning your study design, arguably the most challenging part of conducting a research study, a good review will save you time here as well. By determining if there is a "standard" methodology for your study type or an outcome measure which has already been validated, you can add additional rigor to your study. For example, if you want to determine whether a particular medication will help patients with back pain return to their daily activities sooner, a validated scale which has already been used is far more attractive to a journal editor than an unvalidated survey designed by the author that has only been used for that particular study. There is no reason to spend the effort forging your own path when one already exists. A literature review will help you determine if any validated outcome measures exist, and if not, provide a rationale to a journal editor for why the authors designed their own.

Improve Your Methodology

What type of study is best suited to your question? What is the best way to recruit subjects? How can you retain them? How many subjects do you need? All these questions must be answered prior to receiving IRB approval to conduct a study and a literature review will help you answer them. Noting the methods of previous studies, you can anticipate and plan for many of the roadblocks that pop up during subject enrollment. You may discover that rather than conducting a time-intensive prospective trial, a retrospective review may be adequate. Additionally, by noting the effect size of your primary outcome from the literature and the expected "lost to follow-up" rate, you can calculate your own necessary sample size. Identification of the proper statistical tests to eventually perform on your own data can also be accomplished.

Create a List to Use When Compiling Your Manuscript References

When writing your manuscript, your initial literature review will serve as the basis for your citations. It is an easy place to look to describe the background of your project, the rationale, and the reasons for your chosen outcomes. Journal reviewers routinely review a manuscript's references for completeness. A poorly sourced references section may point to a poorly researched subject matter and will affect the overall perceived quality of a manuscript.

Conducting Your Review

In order to conduct a good literature review, especially when multiple investigators are participating, organization is key. Using a spreadsheet that catalogs key information (authors, journal, year of publication) as well as methodology, setting, pertinent conclusions, and outcomes measured is an easy way to stay organized. Multiple online programs exist (i.e. Google Sheets, Microsoft Outlook) so that this spreadsheet can be edited and read by multiple investigators at the same time, making task delegation and collaborative work easier than it has been in the past.

By entering the literature review phase of your research project, it is vital to have these goals in mind. Often times the difference between a published study and a project that never finds an ultimate home in a published journal is merely a review of the literature. Taking the time early to conduct a proper literature review will save time, add rigor to your study, and ultimately may determine whether your study shapes patient care in the future.

Articles of Interest in Winter *Annals of EM*

By Sam Shahid, MBBS, MPH
Practice Management Manager, ACEP

American College of Emergency Physicians®
ADVANCING EMERGENCY CARE

ACEP would like to provide you with very brief synopses of the latest articles in Annals of Emergency Medicine. Some of these have not appeared in print. These synopses are not meant to be thorough analyses of the articles, simply brief introductions. Before incorporating into your practice, you should read the entire articles and interpret them for your specific patient population.

Derivation and Validation of SWAP Score for Very Early Prediction of Neurological Outcome in Patients with Out-of-Hospital Cardiac Arrest. *Shih HM, Chen YC, Chen CY, Huang FW, Chang SS, Yu SH, Wu SY, Chen WK.*
The aim of this study was to establish a simple and useful assessment tool for rapidly estimating the prognosis of patients with out-of-hospital cardiac arrest (OHCA) after their arrival at an emergency department (ED). A total of 852 patients admitted from January 1, 2015 to June 30, 2017 were prospectively registered and enrolled into the derivation cohort. Multivariate logistic regression on this cohort identified four independent factors associated with unfavorable outcomes: initial nonshockable rhythm, no witness of collapse, age >60 years, and pH ≤7.00. The shockable rhythm–witness–age–pH (SWAP) score was developed and one point was assigned to each predictor. For a SWAP score of 4, the specificity was 97.14% for unfavorable outcomes in the derivation cohort. The study concluded that the SWAP score is a simple and useful predictive model that may provide information for the very early estimation of prognosis for patients with OHCA.

Randomized Trial of Intravenous Lidocaine versus Hydromorphone for Acute Abdominal Pain in the Emergency Department. *Chinn E, Friedman BW, Naeem F, Irizarry E, Afrifa F, Zias E, Jones MP, Pearlman S, Chertoff A, Wollowitz A, Gallagher EJ.*
This randomized, double blind clinical trial compared the efficacy and safety of intravenous lidocaine to that of hydromorphone for the treatment of acute abdominal pain in two emergency department (ED) in the Bronx, NY. Adults weighing 60-120 kg were randomized to receive 120 mg of IV lidocaine or 1 mg of IV hydromorphone. 30 minutes after administration of the first dose of study drug, participants were asked if they needed a second dose of the investigational medication to which they were randomized. The primary outcome was improvement in 0-10 pain scores between baseline and 90 minutes. Out of the 154 patients enrolled, 77 received lidocaine and 77 received hydromorphone and by 90 minutes, patients randomized to lidocaine improved by a mean of 3.8 points on the 0-10 scale, while those randomized to hydromorphone improved by a mean of 5.0 points. The study concluded that IV hydromorphone was superior to IV lidocaine, both for general abdominal pain and a subset with nephrolithiasis.

Implementation of a Clinical Decision Support System for Children with Minor Blunt Head Trauma at Non-negligible Risk for Traumatic Brain Injuries. *Ballard DW, Kuppermann N, Vinson DR, Tham E, Hoffman JM, Swietlik M, Davies SJD, Alessandrini EA, Tzimenatos L, Bajaj L, Mark DG, Offerman SR, Uli K. Chettipally UK, Paterno MD, Schaeffer MH, Richards R, Casper TC, Goldberg HS, Grundmeier RW and Dayan PS, for the Pediatric Emergency Care Applied Research Network (PECARN), Clinical Research on Emergency Services and Treatment (CREST) Network, and Partners HealthCare.*
This study utilized a secondary analysis of a non-randomized clinical trial with concurrent controls conducted at 5 pediatric and 8 general EDs between 11/2011 and 6/2014, enrolling patients <18 years-old with minor blunt head trauma. After a baseline period, intervention sites received electronic clinical decision support (CDS) providing patient-level ciTBI risk estimates and management recommendations. The following primary outcomes in patients with 1 intermediate PECARN risk factor were compared pre- and post-CDS: (1) ED computed tomography (CT) proportion adjusting for age, time trend, and site and (2) prevalence of ciTBI. The results showed that providing specific risks of ciTBI via electronic CDS was associated with a modest and safe decrease in ED CT use in children at non-negligible risk of ciTBI.

Premedication with Midazolam or Haloperidol to Prevent Recovery Agitation in Adults Undergoing Procedural Sedation with Ketamine: A Randomized Double-Blind Clinical Trial. *Akhlaghi N, Payandemehr P, Yaseri M, Akhlaghi AA Abdolrazaghnejad A.*
This study evaluated the effect of midazolam and haloperidol premedication for reducing ketamine-induced recovery agitation in adult patients undergoing procedural sedation. They randomized emergency department patients older than 18 years who needed procedural sedation to receive one of the following three interventions in double-blind fashion 5 minutes prior to receiving ketamine 1 mg/kg IV: distilled water IV, midazolam 0.05 mg/kg IV, or haloperidol 5 mg IV. The main study outcomes were recovery agitation as assessed by the maximum observed Pittsburgh Agitation Scale (PAS), and by the Richmond Agitation-Sedation Scale (RASS) at 5, 15, and 30 minutes after ketamine administration. For the 185 patients undergoing adult procedural sedation, premedication with either midazolam 0.05 mg/kg or haloperidol 5 mg IV was shown to significantly reduce ketamine-induced recovery agitation while simultaneously delaying recovery.

Pediatric Readiness in the Emergency Department. *Remick K, Gausche-Hill M, Joseph MM, Brown K, Snow SK, Wright JL, AAP Committee on Pediatric Emergency Medicine and Section on Surgery, ACEP Pediatric Emergency Medicine Committee, ENA Pediatric Committee.*
The American Academy of Pediatrics (AAP), the American College of Emergency Physicians (ACEP) and the Emergency Nurses Association (ENA) published updated joint guidelines, "Pediatric Readiness in the Emergency Department," that recommend ways health care providers can make sure every injured or critically ill child receives the best care possible. The joint policy statement, published in the November 2018, represents a revision of the 2009 policy statement and highlights recent advances in pediatric emergency care that may be incorporated into all emergency departments that care for children. The statement emphasizes the importance of evidence-based guidelines and includes additional recommendations for quality improvement plans focusing on children and disaster preparedness.

ICEP Calendar *of* Events 2019

April 10, 2019
ICEP Board of Directors Election Closes Online

April 11-12, 2019
Oral Board Review Courses
Chicago O'Hare Marriott
Chicago

April 25, 2019
Spring Symposium & Annual Business Meeting
Northwestern Memorial Hospital, Chicago

April 26, 2019
Emergent Procedures Simulation Skills Lab
NorthShore University HealthCare Evanston Hospital, Evanston

April 26, 2019
ITLS Illinois Advisory Committee Meeting
10:00 AM - 12:00 PM
ICEP Board Room
Downers Grove

May 20, 2019
Educational Programs Committee Webconference
12:00 PM - 2:00 PM
via Zoom

May 21, 2019
EM4LIFE 2018 LLSA Article Review Course
ICEP Conference Center
Downers Grove

May 27, 2019
Memorial Day Holiday
ICEP Office Closed

June 10, 2019
Finance Committee Meeting
9:30 AM - 10:30 AM
ICEP Board Room
Downers Grove

June 10, 2019
Board of Directors Meeting
10:30 AM - 2:30 PM
ICEP Board Room
Downers Grove

June 13, 2019
EMS Committee Meeting
11:00 AM - 1:00 PM
ICEP Board Room
Downers Grove

June 13, 2019
EMS Forum
1:15 PM - 3:00 PM
ICEP Conference Center
Downers Grove

July 4, 2019
Independence Day Holiday
ICEP Office Closed

August 13-16, 2019
EM Board Review Intensive
ICEP Conference Center
Downers Grove

August 26, 2019
Educational Programs Committee Meeting
12:00 PM - 2:00 PM
ICEP Board Room
Downers Grove

August 29, 2019
Resident Career Day
Northwestern Memorial Hospital, Chicago

September 2, 2019
Labor Day Holiday
ICEP Office Closed

Register for all courses online at ICEP.org!

Illinois EPIC

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