From the President
Fernando L. Soto-Torres, MD, FACEP

They say it takes a village to raise a child. Actually, it takes a village to...well, do anything. As social beings, we need each other. One of the most important advances during our evolution is the ability to unite in larger numbers and work together. This ability to create a vision through a common language is one of the most distinctive aspects of our biology. We create common goals, we share ideas that only exist in the realm of our imaginations; concepts that only us humans can understand, value, and share.

We are our village. I have always felt that when I chose emergency medicine I was choosing a new way of life; a new family, so to speak. The fact that a married a fellow emergency physician might have some influence in the matter; an example of either cause or effect of this concept. No one but us knows what happens in our ED's. No one but ourselves can hope to align what we need to effectuate change. Only within our village can we decide which ideas, concepts, philosophies to share, cherish and work for.
The Puerto Rico Chapter is your village. It is where you can reach out and speak to others in your same situation - those who speak the same language as you and share your passions and interests. It is through this sharing of ideas that we can hope to improve our work environments and our patients' well-being. We are thriving to gather all of your concerns and drive them towards completion. I am inviting you to reach out. Contact us. Tell us what we can do and let's do it together. If you believe we could work out reimbursement issues, let us know and work with us. If you are concerned with specialty recognition, send us an email and organize with us to promote our specialty through education. Let's share this vision and change the practice of emergency medicine in our workplace, our homes, and our village.

ACEP16 News

If you were not able to attend ACEP16 in Las Vegas, please contact the chapter or click on the chapter Facebook page to get information about the event.

Thank you to Dra. Velez and Dr. Serrano for traveling to Las Vegas for ACEP16 and representing the Puerto Rico ACEP Chapter at the Council Meeting.

Resident's Corner
Thaer Abukhalil, MD
The use of Ultrasound in the Emergency Setting

Ultrasound (US) in the emergency department has long been recognized as a powerful screening and diagnostic tool. Over the years, it has gained several advantages over other modalities because of its non-ionizing radiation, portability, accessibility, non-invasive method and simpler learning curve. It is a radiation free technique that provides rapid answers to critical questions and provides invaluable information for the care of critical patients. It also provides an undoubted advantage in the pediatric population in which serious concerns about radiation exposure have been raised. After having pioneered its use at the bedside, The American Board of Emergency Physicians also incorporated Emergency Ultrasound into their training curriculum and has made training and proficiency mandatory. In the emergency department, since time is of the essence, it becomes a critical tool in triaging patients.

Typically, the highest quality ultrasound machines used by radiology departments that have the most advanced technology with the most ability to fine tune the image were also very heavy and large; thus, not very portable or well suited for ED bedside evaluation. Most emergency physicians are now inundated with advertisements and mailings from a variety of ultrasound manufacturers. As the indications and wide-spread use of emergency ultrasound has expanded, so have the number of options for equipment. As a result, ultrasound has become one of the most frequently used diagnostic tools in the emergency department by non-radiologists. The value of ultrasound is implemented in many acute ailments in the emergency department such as trauma, acute abdomen, acute pelvic pain, acute scrotal pain, appendicitis and acute deep venous thrombosis. Our objective is to discuss the benefits of using ultrasound as the primary modality for each of these diseases.

A complete ultrasound exam is one that attempts to visualize and diagnostically evaluate all of the major structures within the anatomic region. However, a bedside US has a specific goal and it focuses on answering specific questions. Case in point: A 51-year-old woman brought by EMS to the emergency department (Level 3 Trauma) with multiple stab wounds to the thoracic area and unstable vital signs, primary and secondary survey of ATLS were performed respectively, bedside extended FAST was performed and she was found to have a pneumothorax and pericardial tamponade. Patient underwent Chest tube thoracostomy and a pericardiocentesis was performed. Patient V/S normalizes, and then she was transferred to level 1 trauma center. The patient underwent surgery (Pericardial Window), with an uneventful postoperative course.

Emergency physicians often rely on technology such as portable ultrasound (US) to assist in decision making when treating patients in critical condition. Portable US devices also referred to as point-of-care US (POCUS), mobile US, bedside US, and encompassing specific procedures such as focused-assessment with sonography for trauma (FAST), comprise a range of technologies including handheld devices, conventional mobile bedside devices and other devices with mobility. Examples include PRIMEDIC Handy Scan, V-scan (GE Healthcare), and SonoSite devices. Diagnostic accuracy, reliability, and feasibility of portable US has been well demonstrated in the out-of-hospital setting. Despite the proposed utility of these devices, only
4.1% of emergency medical services directors surveyed in Canada and the United States (30% response rate) reported using portable US in the pre-hospital setting. Of the respondents, 21.7% stated that they would consider implementing the technology (Prehospital ultrasound thoracic examination to improve decision making, triage, and care in blunt trauma. Am J Emerg Med 2014).

Major barriers to adoption of this technology include cost, training requirements, and lack of evidence for improvement in patient-related outcomes (e.g., morbidity and mortality). The clinical effectiveness of portable US in the pre-hospital setting was evaluated by two systematic reviews, and one non-randomized study. This is akin to an earlier report that portable US lands within the top five research priorities in pre-hospital care in Europe. The future applications of this technology could include house calls, i.e., going to patients within the community. With wireless connectivity, images could be sent to the hospital’s radiologist and interpreted in minutes, just as is now done in the hospital. Further investigation of the costs of inpatient care versus using the new technology in the community setting needs to be done.

Portable ultrasound is less expensive, more convenient and does not involve radiation like CT scans and X-rays. From a cost and radiation standpoint, a physician cannot order a CT scan every time he or she needs further information on a patient's internal state, the portable ultrasound is safe to use repeatedly. We can get better exam results right at the bedside, which allows us to get to correct answers and the appropriate treatments more quickly. When we can treat patients faster and more accurately, they improve faster, and it helps the hospital and the ED, as well. There are many steps and hurdles to bringing bedside emergency ultrasound to your department, but also many benefits to patient care and pediatric emergency department function. No two departments or institutions are the same and each will have different needs for emergency ultrasound.

It is high time to consider ultrasound the best stethoscope in our hands. It is high time to include lung ultrasound in the international guidelines and in our clinical practice.

In conclusion, despite evidence to support the feasibility, accuracy, and reliability of these devices, as there is no high-quality empirical evidence to support a role for these devices in improving direct patient outcomes. The use of ultrasound is extremely advantageous and should be promoted for all nurses to use as one of these many tools. Emergency US is portable, fast, noninvasive, safe and inexpensive. It provides a wealth of anatomic and functional information in a variety of conditions. Widespread use of limited bedside ultrasonography by emergency physicians will improve diagnostic accuracy and efficiency; increase the quality of care and probably a cost-effective technique for the practice of emergency medicine. With patience, persistence, and the interest to use the ultrasound as much as possible to increase comfort and experience, most physicians find it to be an invaluable extension of their clinical evaluation.
**Fellow Recognition!**

We would like to recognize the following members for receiving the designation of *Fellow* at *ACEP16*:

- Edil Josue Agosto Diaz, MD
- Cesar I. Andino-Colon, MD
- Eric R. Lopez, MD
- Joanna Mercado, MD, FACEP
- Ivonne Velez-Acevedo, MD, FACEP

**Adriana's Corner**

Please don’t forget about **sharing** your interesting cases, an article recognizing your fellow colleagues or any photos you’d like posted on the chapter website.

I'd love to post the information on the chapter website or on the next chapter e-newsletter.
Endovascular Therapy May be Effective for Strokes from More Distal Occlusions

Endovascular therapy (EVT) may be effective for acute ischemic stroke caused by occlusion of the middle cerebral artery M2 segment, suggests a multicenter retrospective study.

Read More

Pain Scales Often Fail to Capture What ED Patients Feel

Asking patients in the emergency department to rate their pain on a visual scale or to rank it from zero to 10 doesn’t really convey what the patient is feeling, suggests a study from Sweden.

Read more

Researchers Find First U.S. Bacteria With Worrisome Superbug Genes

New Jersey researchers say they have identified perhaps the first strain of E. Coli bacteria in the United States with mobile genes that make it resistant to two types of antibiotics now
News from National ACEP

New Epinephrine Labeling
There has been a change to the labeling of epinephrine. Epi 1:1000 used for anaphylaxis and asthma is now labeled 1.0mg/ml. Epi 1:10,000 used for cardiac arrests is now labeled 0.1 mg/ml. There has been concern that the current labeling caused confusion and inappropriate dosing.

New Crowding Solutions Resource
A new information paper on the causes, impacts and solutions to the crowding and boarding problem has been approved by the Board of Directors. Members are encouraged to distribute this reader-friendly paper to their hospital administrators or local policymakers who may benefit from a better understanding of why they must, and how they can, address this vexing and dangerous problem. A link to the new paper entitled “Emergency Department Crowding: High Impact Solutions” is available.

Blood Clot Information for Patients Developed
ACEP (through an educational grant from Bristol Myers Squibb) is providing UNBRANDED resources to patients with newly diagnosed VTE/PE. The program provides text messages to connect patients to video based education which discusses the importance of taking medication and getting follow up. No product name is mentioned or implied. The program is called Know Blood Clots, and is explained on the website. Patients can also text CLOTWEB to 412-652-3744 to sign up for the Know Blood Clots program. If you have questions, feel free to email Sandy Schneider and I will try to supply further details.

For your convenience, we have created a smart phrase (dot phrase) that you can copy and paste into your electronic medical record then add to the discharge paperwork, which will provide your patients with this information:

“You have been diagnosed with a blood clot. You and your family/caretakers will likely have a lot of questions over the next few weeks. There is a program that that might help. It provides text messages to connect you to videos and other education. In addition the messages will remind you to make a doctor’s appointment and get your medicine. Please go to www.knowbloodclots.com or text CLOTWEB to 412-652-3744. If you don't have a smart phone, perhaps a family member can enroll you. Normal text message charges may apply.”

New Sections at ACEP
A sufficient number of members have come together to officially form three new Sections in the College. The Pain Management Section was formed earlier this year and is now being followed
by the creation of the Medical Directors Section and the Event Medicine Section. The new Sections will meet at **ACEP16** for the first time. Members interested in any of these topics are invited to attend the Section meetings and/or join the new Sections.

**Welcome New Members!**

Virgilio Rodriguez Santana, MD  
Naomi R. Rebollo  
Beatriz I. Sanchez-Rodriguez  
Michelle I. Surillo-Gonzalez, MD  
Armando Sarasua