

# Forum for Evidence-Based Medicine

May/June | 2020

## Click here to receive the Forum for Evidence-Based Medicine newsletters via email every two months.

ADD ME TO THE LIST>

Listen to Dr. Cohen's Forum for Evidence-Based Medicine podcast here.



## Earn up to 1.00 CNE/CME credit per issue.

credit	CME/CNE credit is available. For more information, visit optumhealtheducation.com/ebm- forum
Activity description	Practicing evidence-based medicine (EBM) is important in today's health care environment because this model of care offers clinicians a way to enrich quality, provide patient satisfaction, reduce costs and improve outcomes. A common implementation of EBM involves the use of clinical practice algorithms during medical decision-making to encourage optimal care. This widely recognized practice is designed to address the persistent problem of clinical practice variation with the help of actionable information at the point of care. These E-newsletters will enable health care professionals (HCPs) to put new EBM into practice.
Target audience	This activity is designed to meet the educational needs of physicians, PAs, nurses, nurse practitioners and other HCPs who have an interest in EBM.
Learning objectives	<ul> <li>At the end of this educational activity, participants should be able to:</li> <li>Utilize the five-step, "PLACE" process in order to better communicate with individuals and enhance the shared-decision making process.</li> <li>Review pharmaceutical recommendations for dual antiplatelet therapy following a percutaneous coronary intervention (PCI) and management of acute gout.</li> <li>Apply a shared-decision making process that includes the low benefit/ harm calculus when considering mammography, especially for women ≥75 years.</li> <li>Assess non-invasive testing, including Wells rule and D-dimer testing, when evaluating individuals for pulmonary embolus.</li> </ul>

#### **Accreditation statement**



JOINTLY ACCREDITED PROVIDER™

In support of improving patient care, this activity has been planned and implemented by OptumHealth Education. OptumHealth Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC) to provide continuing education for the health care team.

#### Credit designation statements

#### Nurses

The participant will be awarded up to 1.00 contact hour(s) of credit for attendance and completion of supplemental materials.

#### **Nurse practitioners**

The American Academy of Nurse Practitioners Certification Program (AANPCP) accepts credit from organizations accredited by the ACCME and ANCC.

#### Physicians

OptumHealth Education designates this enduring activity for a maximum of 1.00 AMA *PRA Category 1 Credit(s)*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **American Board of Internal Medicine**

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 1.0 Medical Knowledge MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit. Please note, by claiming ABIM points, you authorize OptumHealth Education to share your attendance information with the ABIM.

#### PAs

The American Academy of Physician Assistants (AAPA) accepts credit from organizations accredited by the ACCME.

#### Attendance

A certificate of attendance will be provided to learners upon completion of activity requirements, enabling participants to register with licensing boards or associations that have not been pre-approved for credits. To apply for credit types not listed above, participants should use the procedure established by the specific organization with which they wish to obtain credit.

#### Provided by

This activity is provided by OptumHealth Education.

#### **Commercial support**

This activity is supported by OptumCare.

# Improving the clinical encounter by fostering presence and connection with patients

This article differs from prior Forum articles which have been focused on optimizing the quality and efficiency of our care through the use of evidence-based medicine. However, there is a burgeoning literature on the value of connection and compassion in improving patient outcomes and clinician wellbeing. A JAMA "Special Communication"<sup>1</sup> summarized this literature and presented it as a five-step process. The article was comprehensive in scope and therefore this review will be a summary of the article and its attached references to all of the below-mentioned studies.

## Step 1 – Prepare with intention.

There are two components to this process.

First, we intuitively understand that the quality of our visit is improved when we enter an exam room armed with a quick review of our patient's chart. A brief glance at the problem list, medication list, and when important, the most recent labs and the last note's assessment/plan will generally suffice for the majority of patient interactions. This process can be done in about one minute and improves the efficiency of the visit. Thus, it may often be time-saving while simultaneously improving the clinical outcome and the patient's perception of the value of the visit. This can be supplemented by any new significant information gleaned by our medical assistants following their rooming of the patient. Additionally, many of us document important social context (family, sports, hobbies and interests, etc.) within the EHR and, particularly in the setting of the comprehensive exam, reviewing this information just before the visit can foster the social connection necessary to maximize the visit experience for both patient and clinician.

The second component involves taking a moment to set the intention for the visit. It is easy to overlook this step during a hectic clinic session but it serves an important function for both the patient and the clinician. The stress level of a clinic session often escalates as the competing pressures of time and work volume build up. A momentary pause prior to entering the exam room can help deescalate this pressure in real time. Two practices that have been shown to be beneficial are setting the visit intention during hand washing and/or pausing for three deep breaths prior to entering the exam room. These techniques fall into the realm of mindfulness-based stress reduction (MBSR) and a recent review of 81 studies has shown that they improve clinician anxiety, depression and stress. Our patients are acutely aware of the energy we bring with us into the exam room. These



techniques require no training, take very little time, and help to create a holding environment for the visit that is palpable to patients.

#### **Step 2 – Listen intently and completely.** This also has two components.

The first is known to all of us — avoiding interruptions. This has been well studied and when uninterrupted, patients complete their opening monologs more quickly. Nonetheless, studies have also shown that the average time until a physician interrupts a patient is 11 seconds. Uninterrupted patients provide more medical information, have reduced anxiety, and greater satisfaction with the encounter. One study had the MA hand the provider a reminder note not to interrupt the patient just before entering the room, and this improved provider listening skills.

The second component of this is more subtle but equally important. It is listening with one's whole body. This involves receptive body language in which the provider uses nonverbal behaviors that facilitate communication. The most important of these is sitting down. Data shows that this conveys to patients that the provider is not rushed. It can also increase the perception of visit length and attentiveness of the provider. In addition, the patient and provider are at the same height removing much of the hierarchy that can dampen effective patient/physician communication. Another component of this is maintaining an open body position and orienting oneself towards the patient. Careful positioning of the screen and keyboard so that the patient may see the screen has shown to enhance the quality of the visit.

## Step 3 – Agree on what matters most.

This begins with an open-ended question asking the patient what brings them to the clinic for the visit. Understanding this from the patient's perspective is at the core of patientcentered care and sets the stage for a meaningful patient/ provider interaction. It allows the provider to incorporate the patient's concerns into their narrative, and helps set the

(continued on page 2)

## Improving the clinical encounter by fostering presence and connection with patients

(continued from page 1)

agenda for the visit (unless they tell you they are here to review their list of 10 immediate concerns!). Collaborative agenda-setting helps remove the last minute, "Oh, by the way," and can improve the efficiency of the visit. There are data that show using pre-visit questionnaires done in the waiting room, can also improve the efficiency of the visit and the patient's perceived value of the interaction.

#### Step 4 – Connect with the patient's story.

This involves forging a connection by asking a patient about their sociocultural background and life circumstances. This step is often unnecessary with established patients, and this ongoing connection may account for the observed phenomenon that providers with long-established patient panels usually fare better in patient satisfaction surveys than newer providers. This shared connection also improves provider satisfaction with the encounter and helps prevent burnout. When medical students are asked to look at the world through the patient's eyes and walk through the world in the patient's shoes, they receive higher satisfaction ratings from standardized patients. There is a highly recommended short video produced by the Cleveland Clinic that brings light to the importance of this aspect of care.



#### <u>Video:</u> The Heart of Compassion

This practice also includes acknowledging patients' efforts in self-management in a genuine and positive manner. Provider positivity has been associated with positive patient health outcomes, including improved medication adherence, successful weight loss and tobacco cessation. A study conducted in the United Kingdom showed that this practice of connection with a patient's story, can reduce the number of clinic visits in high-utilizing patients.

## Step 5 – Explore emotional cues.

This practice is innate in some individuals and improves with experience in others. It involves being sensitive to a patient's voice, facial expression and body language. It also includes actively eliciting patient emotions through specific questions such as "How are you feeling about this?", as well as reflecting perceptions of a patient's emotions with comments such as, "I can see that this is affecting you deeply." There is a large body of evidence correlating a clinician's ability to perceive a patient's emotions with positive patient outcomes; including shorter, less severe illness, adherence to the treatment regimen and improved patient satisfaction. For some individuals, these skills are innate or learned from earlier life experiences. For others, it may be somewhat more difficult to master and thus require mentoring, shadowing or patient role-play to effect changes in practice style and patient interaction. There are self-administered learning formats which have shown efficacy. Other patient interactions of demonstrated benefit include humor and vulnerability, connecting with family members in the exam room, taking a moment to establish a social connection prior to addressing the medical issues, and good use of eye contact.

We are all challenged daily by time pressures and work volume; and while all of the above may appear to extend the visit, this has not proven to be the case. Most of us have had the experience of working with both a calm, centered provider and a more frenetic and less focused provider. Most resonate with the improved patient interactions in the former scenario. The challenge is being mindful of the difference and willing to work to implement these straightforward changes in our day-to-day practice.

**Call to action**: Thinking about your patient interactions and focusing on one or two of the above would be a good place to start.





# PHARMACY

## Dual antiplatelet therapy following a percutaneous coronary intervention (PCI) for an acute coronary syndrome – clopidogrel versus ticagrelor (Brilinta)

Dual antiplatelet therapy (DAPT) is recommended for up to one year following an acute coronary syndrome (ACS). Since publication of the PLATO trial,<sup>2</sup> some guidelines have recommended ticagrelor over clopidogrel based on a small improvement in outcomes seen in that trial. Ticagrelor showed a 1.1% reduction in myocardial infarction and vascular death, compared to clopidogrel. There was no difference in stent thrombosis. Ticagrelor had a higher risk of major bleeding, and a higher risk of intracranial bleeding, with overall bleeding 1.5% above that seen with clopidogrel.

A recent study in JAMA IM<sup>3</sup> looked at all discharges following PCI for an ACS from one Canadian province over a 4 year period, encompassing over 11,000 patients. The comparison was between clopidogrel which was prescribed in 7100 patients and ticagrelor which was prescribed in 3100 patients. After multivariable adjustment, there were no significant differences in major cardiovascular events, recurrent ACS, or revascularization between the two groups. The major bleeding rate following multivariable adjustment was 1.5 times as high with ticagrelor compared to clopidogrel (7% vs. 4.9%), driven by a gastrointestinal bleeding rate which was twice as high. Dyspnea, a common side effect with ticagrelor use, resulted in a higher rate of ER evaluation (3.1 vs 1.2%).

It is possible that the lower rates of stent thrombosis with the second generation stents may have negated the benefits seen in the PLATO trial, where patients received bare metal or first generation drug eluting stents. However, as would be expected, the increased bleeding risk of ticagrelor over clopidogrel persisted in this trial, as did the higher incidence of dyspnea, which resulted in twice the number of ER evaluations for this complaint. The current yearly cost of ticagrelor is \$5500, compared to \$600 for clopidogrel.

# Management of acute gout – naproxen versus colchicine

Many of the trials evaluating NSAID therapy for acute gout used either indomethacin or diclofenac, two of the most toxic NSAID's. Whereas high dose colchicine is effective for acute gout, it is poorly tolerated due to diarrhea. Low dose colchicine is better tolerated but not well studied. Naproxen, one of the safest NSAID's has never been directly compared to low dose colchicine in the management of acute gout. A randomized pragmatic trial enrolling 400 patients from primary care practices across England compared the two drugs.<sup>4</sup> Patients were randomized to colchicine 0.5 mg three times daily for 4 days or naproxen, 750 mg initial dose followed by 250 mg three times daily for up to one week. As seen below, the magnitude of pain relief was identical for both treatment arms, however the temporal relief curves favored naproxen for slightly earlier pain relief. In each treatment arm, 67% of patients had complete pain resolution at 7 days and 75% of patients had complete pain relief at 4 weeks. In the colchicine arm there was a 5% higher recurrence rate and a 6% higher rate of return visits to the PCP. Additionally, in the colchicine group, 20% more patients required additional analgesia, split equally between acetaminophen and codeine. Even with low dose colchicine, 46% of patients had diarrhea. Overall, in the absence of a contraindication to NSAID therapy, naproxen should be preferred over colchicine for acute gout based on a moderate benefit beyond that conferred by colchicine with a better safety profile. A prior study<sup>5</sup> compared prednisone 35 mg daily for 5 days to naproxen 500 mg twice daily for 5 days and showed equivalence. Initial therapy for acute gout should therefore be either prednisone or naproxen, with colchicine considered a second tier therapy.



1. Zulman DM, Haverfield MC, Shaw JG, et al. Practices to foster physician presence and connection with patients in the clinical encounter. JAMA. https://www.ncbi.nlm.nih.gov/ pubmed/31910284. Published January 7, 2020. Accessed March 16, 2020.

Wallentin L, RC Becker, A Budaj, et al. Ticagrelor versus clopidogrel in patients with acute coronary syndromes: NEIM. DOI: 10.1056/NEJMoa0904327. Published September 10, 2009. Accessed April 8, 2020.

Turgeon RD, Koshman SL, Youngson E, et al. Association of ticagrelor vs. clopidogrel with major adverse coronary events in patients with acute coronary syndrome undergoing percutaneous coronary intervention. JAMA Intern Med. DOI: 10.1001/jamainternmed.2019.6447. Published January 13, 2020. Accessed April 8, 2020.

<sup>4.</sup> Roddy E, Clarkson K, Blagojevic-Bucknall M, et al. Open-label randomised pragmatic trial (CONTACT) comparing naproxen and low-dose colchicine for the treatment of gout flares in primary care. Ann Rheum Dis. doi: 10.1136/annrheumdis-2019-21615. Published February 1, 2020. Accessed April 8, 2020.

Janssens HJ, Janssen M, Lisdonk EHVD, Riel PLV, Weel CV. Use of oral prednisolone or naproxen for the treatment of gout arthritis: a double-blind, randomised equivalence trial. The Lancet. 2008;371(9627):1854-1860. doi:10.1016/s0140-6736(08)607990.



## Should women continue screening mammography beyond 75 years of age?

Clinical trials have demonstrated that screening mammography reduces mortality from breast cancer among women who begin screening between 50–69 years of age and continue for 10 years or more.<sup>6</sup> Unfortunately, few women over 70 years of age were included in these trials. An estimated 52% of women  $\geq$ 75 years have had mammography within the past two years,<sup>7</sup> yet it is not known whether screening mammography in older women effectively reduces breast cancer mortality.

Since a randomized trial of screening mammography is not feasible, investigators conducted a population-based cohort study to estimate the effect of breast cancer screening in Medicare beneficiaries aged 70–84 years.<sup>8</sup> Women were included if they met age criteria, had a life expectancy of at least 10 years, had no previous breast cancer diagnosis, and underwent screening mammography. Based on Medicare data from 2000 to 2008, women were categorized as either "stop screening" (no further screening after baseline) or "continue screening," and these cohorts were compared for breast cancer mortality.

Among women aged 70–74 years, the estimated 8-year risk of breast cancer death was 2.7 (CI, 1.8-3.7) deaths per 1,000 women in the "continue screening" cohort and 3.7 (CI, 2.7-5) deaths per 1,000 women in the "stop screening" cohort, with an estimated difference of 1 death per 1,000 women, favoring screening. In contrast, no differences in breast cancer mortality were seen between cohorts aged 75–84 years. An estimated 3.8 (CI, 2.7-5.1) cancer deaths per 1,000 were seen in the "continue screening" cohort, and an estimated 3.7 (CI, 3-4.6) deaths per 1,000 were seen in the "stop screening" cohort.

Based on these results, continuing screening mammography past age 75 years does not appear to change cancerspecific mortality over the following 8-year period. The authors reasonably hypothesize that the lack of benefit from screening stems from the multiple competing causes of death that overtake breast cancer mortality as age increases.<sup>9</sup> Since screening mammography is not without potential harms (e.g., discomfort from testing, distress from positive results, overdiagnosis and overtreatment), clinicians should use shared-decision making that includes the low benefit/harm calculus before recommending screening mammography in women  $\geq$ 75 years of age.

## Wells Rule and D-dimer testing to r/o pulmonary embolus

Non-invasive testing is underutilized in the evaluation of suspected pulmonary embolus. Since only about 20% of patients presenting with possible PE actually have the diagnosis, CTA as the first diagnostic step is often inappropriate in patients who are at low risk. 61% of all CTAs ordered for the evaluation of possible PE are done in low-risk patients and therefore could have been avoided. Reliance on CTA often results in unnecessary radiation and dye exposure, ER utilization and downstream procedures and costs related to incidental findings on the CTA. The Wells score was devised to guickly categorize the risk in any given patient based on their presenting symptoms. The "dichotomized," or simplified Wells score reduced the categories to only two: a score of 4 or less, or a score of greater than 4.

To increase the sensitivity of the Wells score, the D-dimer level is added to further triage the low-risk group. The normal level of D-dimer increases with age and there is a new algorithm using age-dependent D-dimer.<sup>10</sup> Imaging can be safely withheld in an additional 5% of patients by applying an age-adjusted D-dimer positivity threshold, defined as a patient's age multiplied by 10 µg L–1 for those aged >50 years. This age adjustment increases the specificity of D-dimer testing in elderly patients. The age adjustment is simple to use and is now fully described in the text that accompanies the report from the commercial laboratories. The combination of a "dichotomized" Wells score of 4 or less and a negative age adjusted D-dimer excludes PE with a high reliability of 99.1%.11

The algorithm using the "dichotomized" Wells rule and age-adjusted D-dimer should be used prior to considering a CTA to evaluate for suspected pulmonary embolism.



<sup>6.</sup> Zulman DM, Haverfield MC, Shaw JG, et al. Practices to foster physician presence and connection with patients in the clinical encounter. JAMA. ncbi.nlm.nih.gov/pubmed/31910284. Published January 7, 2020. Accessed March 16, 2020.

10. Righini M, Es JV, Exter PD. Age-adjusted D-dimer cutoff levels to rule out pulmonary embolism: The ADJUST-PE Study. J Vasc Surg. 2014;59(5):1469. doi:10.1016/j.jvs.2014.03.260. 11. Es NV, Kraaijpoel N, Klok FA, et al. The original and simplified Wells rules and age-adjusted D-dimer testing to rule out pulmonary embolism: an individual patient data meta-analysis. J Thromb Haemost. 2017;15(4):678-684. doi:10.1111/jth.13630.

<sup>7.</sup> Nelson HD, Fu R, Cantor A, et al. Effectiveness of breast cancer screening: systematic review and meta-analysis to update the 2009 U.S. Preventive Services Task Force Recommendation. Ann Intern Med 2016:164:244-255

<sup>8.</sup> National Center for Health Statistics. Health, United States, 2018. Hyattsville, MD: Centers for Disease Control and Prevention; 2019. cdc.gov/nchs/data/hus/hus18.pdf. Accessed February 28, 2020

<sup>9.</sup> García-Albéniz X, Hernán MA, Logan RW, et al. Continuation of annual screening mammography and breast cancer mortality in women older than 70 years. Ann Intern Med. 2020 Feb 25. doi: 10.7326/M18-1199



## Kenneth Roy Cohen, MD, FACP | Chief Medical Officer

Dr. Kenneth Cohen is an experienced physician leader, practicing internist, and researcher who has attained national recognition for health care quality improvement. He has successfully developed and reported numerous clinical quality studies in primary care, including tobacco cessation, osteoporosis, asthma, diabetes, hypertension, and ischemic vascular disease. He was one of the founding physicians of New West Physicians, which is the largest primary care group practice in Colorado and now part of OptumCare. He has served as Chief Medical Officer since 1995. Dr. Cohen has received awards of recognition and distinction for teaching, including the Lutheran Medical Center Physician of the Year award in 2011. Under his stewardship New West Physicians was awarded the AMGA Acclaim award in 2015 and the Million Hearts Hypertension Champion Award in 2017. He is a Clinical Associate Professor of Medicine and Pharmacy at the University of Colorado School of Medicine. Dr. Cohen holds degrees from Dickinson College and Hahnemann University. He is a Fellow of the American College of Physicians and a member of the Phi Beta Kappa and Alpha Omega Alpha honor societies.



## John Hitt, MD, MBA | Senior Medical Director

Dr. Hitt has been a physician executive for more than 25 years. Most recently he was the CMO of Ativa Medical a medical device startup company and an independent health care consultant. Previously, he was CMO at Maricopa Integrated Health System (MIHS) and a key member of the senior leadership team having responsibility for Medical Staff Services, Grants and Research, Academic Affairs, Risk Management, physician contracted services and the activity of Residency Program Directors, Clinical Department Chairs, and Medical Staff.

Dr. Hitt has over 25 years of experience in quality and performance improvement, clinical integration, academic and medical staff affairs. He served as the Chief Medical Quality Officer for Hennepin Health System, a premier Level 1 Adult and Pediatric Trauma Center. He was a physician leader for VHA (now Vizient). He was the national Medical Director for Disease Management at Caremark International and the VP of Medical Affairs at the University of Minnesota Hospital.

Dr. Hitt is a graduate of the University of Virginia where he played Division 1 soccer. He received his Medical Doctorate from the Medical College of Georgia in 1984 (AOA honors) and completed his Internal Medicine and Infectious Disease Fellowship training at the University of Minnesota Hospital and Clinics. Dr. Hitt completed his MBA at the Carlson School of Management at the University of Minnesota in 2003. He is the proud father of seven children.



## Geoffrey Heyer, MD | Senior Clinical Practice Performance Consultant

Dr. Heyer is board certified in neurology with special certification in child neurology and in headache medicine. Prior to joining our team, Dr. Heyer was an associate professor of neurology and pediatrics at The Ohio State University and Columbia University Medical Center, specializing in autonomic disorders, headache, and pain management. He has published over 50 peer-reviewed research papers and numerous editorials, clinical reviews, and textbook chapters. He also co-authored a textbook on childhood stroke and cerebrovascular disorders.

Dr. Heyer received his medical degree from Columbia University, College of Physicians and Surgeons. He completed his neurology and child neurology residencies at Columbia-Presbyterian Medical Center. He has additional research training from the Mailman School of Public Health, Columbia University.

## Click here to receive the Forum for Evidence-Based Medicine newsletters via email every two months.

#### ADD ME TO THE LIST>

This information is for informational purposes and should only be used by trained clinicians to aid in improving diagnosis, detection and/or clinically appropriate treatment; this information is not a substitute for clinical decision-making and should not be used to make individualized diagnostic or treatment decisions for specific patients.