Patient Safety America Newsletter

March 2024 http://PatientSafetyAmerica.com John T. James, Ph.D.

Question: What portion of Medicare beneficiaries are in advantage plans? A) 40% B) 50% C) 60%

Serum Urate and Gout Predictions

Serum urate (uric acid) levels are not a routine part of annual physical exams. A team of investigators asked whether the measurement of serum urate can predict the risk of a subsequent occurrence of gout in people with a history of gout.[1] That disease affects about 12 million Americans and acute episodes elicit severe pain and an increased risk of vascular problems. My mom used to have these. The acute phase occurs when sodium urate crystals accumulate in joints once a serum 'saturation' level of about 7 mg/dL is reached. The question is whether the risk of an acute episode in gout patients with baseline serum urate levels below 7 mg/dL can be predicted.

The study used data from the UK Biobank and included more than 3,600 patient records. The average 'follow up' was 8.3 years in patients with a baseline urate measurement and a history of gout. The average age was 60 years. The table summarizes the clear association between baseline urate and risk of gout flare or gout hospitalization.

Baseline serum urate (mg/dL)	Risk of gout flare per 1000 person years	Risk of hospitalization per 1000 person years
Less than 6	11	0.18
6.0-6.9	40	0.97
7.0-7.9	82	1.8
8.0-8.9	108	2.2
9.0-9.9	125	6.7
10 or greater	133	9.7

The authors suggest that a baseline urate in patients diagnosed with gout is a good predictor of subsequent flares and hospitalization.

An editorial by an MD pertaining to the study and the general medical perspective on gout was concurrently published.[2] The editorialist's opinion was that there were important limitations to the study above, including its lack of racial balance and the use of a single urate measurement. The broader picture is that gout is more prevalent than rheumatoid arthritis or lupus yet it is less well studied than these diseases. The above study and a few others published suggest that a urate treatment target of below 6 mg/dL is reasonable in patients with gout. The author calls for clinicians to respect what matters most to their patients. In my opinion, what matters most is going to vary from patient to patient. The Mayo Clinic has a summary for patients on the diagnosis and treatment of gout.[3]

Hospital Acquired Pneumonia (HAP) and Brushing Teeth

A couple of MDs sought to know if daily brushing of teeth (2-4 times/day) in hospitalized patients would reduce the risk of HAP.[4] They sought insight through a thorough literature search and meta-analysis of the data they found. Fifteen studies met their inclusion criteria. Together, these involved more than 10,700 patients, about 2,000 of which were in the ICU. Tooth brushing was associated with

[1] https://pubmed.ncbi.nlm.nih.gov/38319333/

[2] https://jamanetwork.com/journals/jama/article-abstract/2814562

[3] https://www.mayoclinic.org/diseases-conditions/gout/diagnosis-treatment/drc-20372903

[4] https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2812938

a 1/3rd lowering of the risk of HAP and a 1/4th lowering of the risk of ending up in the ICU. Patients receiving mechanical ventilation had a 40% reduction in risk of HAP by daily tooth brushing, but this was not observed in patients not on mechanical ventilation.

The idea of brushing teeth to reduce pneumonia is that tooth brushing will reduce the bacteria present in the mouth, so that any aspirations into the upper respiratory tract will involve far less infectious bacteria. These data seem to settle the issue of tooth brushing in patients in the ICU with ventilator assist. It should be done. From a bystander point of view, I wonder how much of a nurses' work time would be necessary to brush a patient's teeth several times per day. If you are advocating for a person in an ICU who is on a ventilator, it would be wise to ask if their teeth are being brushed. Remember, in these days of private equity acquired hospitals, there is going to be a leaning out of support staff to increase the bottom line.

Artificial Intelligence (AI) and Patient Safety

A team of three experts expressed their views on the promise of AI improving patient safety, but concomitantly warn that the healthcare industry must be cautious to ensure that applications of AI do not do more harm than good.[5] Their list of examples where AI offers improvement included the following: detection of impending sepsis, prediction of pressure ulcers, hemorrhage after delivery of a baby, and adverse drug events.

They note that our president has ordered the Secretary of Health and Human Services to devise plans within a year to identify and track clinical errors resulting from use of AI, analyze the data and produce guidelines for AI use, and ensure that all care providers and stakeholders are aware of the guidelines. The authors expand on each of these three directives. For example, they note that the FDA should develop guidelines for AI application to safe use of medical devices. The Joint Commission must devise accreditation standards that involve how hospitals apply AI to their patient care. There must also be a system of traceability that supports understanding of how patient harm happened when a specific AI system is in use. I take the last comment to be a negative comment about how the FDA fails to monitor drug performance once a drug has been approved for marketing. It has been extremely slow to recognize and act on approved drugs that in clinical use prove to be more harmful than beneficial to patients.

The message to patients is that AI will become increasingly part of your care whether you like it or not. My hope is that decision aids for patients facing invasive medical care will be available to educate and guide patients to optimize their care while communicating with their clinicians.

The Patient-Clinician Encounter

The most important factor in finding optimal medical care is how well prepared you are for your encounter with your clinician. In anticipation of such an encounter, it may be helpful to know how the 'other side' views its encounter with you. To get a taste of what the other side thinks, I offer a summary of an article entitled 'Delivering effective messages in the patient-clinician encounter.' Interestingly, this was written by two PhD communications experts, not clinicians.[6] They view physicians as having four responsibilities to their patients: uncover what the patient understands and why, provide accurate and understandable information, emphasize the credibility of your information, and check for shared understanding.

Allow me to turn the coin over onto *your* side, dear patient. Here are your responsibilities to your clinician: tell your clinician what *you* know and how you know it, disclose all relevant information motivating your encounter, do not be content with incomplete answers to your questions, and verify that your clinician understands and aligns with *your* preferences and goals.

The authors make some key points for the clinician to address. In my opinion, it is consistent

[5] https://jamanetwork.com/journals/jama-health-forum/fullarticle/2815239

[6] https://jamanetwork.com/journals/jama/article-abstract/2814799

with shared decision making. Here are a few of the high points: What concerns bring you in today? Let's explore the benefits and harms [of each of your options] honestly. Please tell me what your understanding is [of your options for treatment and how these address your preferences]. I've added the parts in brackets.

Health Misinformation on Social Media

Most of us are aware of the promise and poison of social media. A couple of experts framed this conundrum in the context of effects on the health of adolescents, but their observations apply to all of us.[7] They suggest that targeted marketing may disproportionately affect females, minorities, and LGBTQ+ youth. These may include misleading marketing strategies, couched as a factual material. In contrast, social media may provide connectedness and social support that includes six domains as follows: happiness, meaning and purpose, physical and mental health, character, close social relationships, and financial responsibility.

The authors opine that there are four domains in which social media may be made a positive force in an adolescent's life: literacy skills that promote critical evaluation of information, parental involvement in social media discussions, parental engagement in discussions of the way the adolescent is using social media to find positive engagements, and advocacy to regulators on providing laws that protect adolescents from misinformation.

While much of the responsibility for appropriate use of social media falls on parents, I can envision a class in middle school that specifically helps adolescents discern misinformation of all types from legitimate information that comes from credible sources. This certainly matters in the health domains, but it also matters in all domains in which misinformation is becoming rampant: politics, religion, conspiracy theories, gun rights, personal image, etc. The looming shadow of artificial intelligence conveys an urgency to better protection for adolescents and all of us.

Beware of Hospitals with Low Volume Surgeries

A small group of experts digested a huge amount data to discern if patients treated in hospitals with a low volume of a specific surgery were more likely to suffer complications and mortality than patients given the same surgery in high-volume hospitals.[8] The records studied were for Medicare fee-for-service beneficiaries with an average age of 74 years. There were 950,000 patient records that contained 1,050,000 surgeries in almost 2,500 hospitals and 382 networks, most of which (380) had at least one low-volume procedure performed. Ten surgical procedures were assessed, the most common of which, in descending order, were as follows: knee replacement, hip replacement, carotid endarterectomy (remove built up fatty deposits), and lung cancer resection. Overall, the investigators found that the 30-day mortality was 8.1 % in low volume hospitals and 5.5% in high volume hospitals.

In secondary analyses, they found that 80% of the hospitals where a low volume procedure was performed had another hospital in the network and region that met adequate volume standards. Of those given a procedure in a low-volume hospital, the median distance to another hospital meeting volume standards was 29 miles from the patient's home. The authors suggest that avoidance of procedures being performed in low-volume hospitals should be a measure of quality in hospital networks. Here is the question if you are going to have some serious surgery: Does the hospital where my surgery will be performed meet adequate volume standards for performance of that surgery?

Interesting Links

Why doctors aren't prescribing Paxlovid: [Why Aren't More Doctors Prescribing Paxlovid to High-Risk Patients? | MedPage Today]

[7] https://jamanetwork.com/journals/jamapediatrics/article-abstract/2812569

[8] https://jamanetwork.com/journals/jamasurgery/article-abstract/2813213

Whistle blower alleges Medtronic put profits over patients with device: Whistleblower accuses medical tech giant Medtronic of putting 'profit before patients' - ICIJ

The dirty business of clean blood: https://www.thebignewsletter.com/p/the-dirty-business-of-clean-blood

CA physician is sanctioned by medical board for her January 6 actions: https://www.medpagetoday.com/special-reports/exclusives/108581?trw=no&fbclid=IwAR10uTAsNwql53h6wV90E0n9OmU_ahsaGRq5_jxcWXyby5UKXbPEiP5juXw

ER overcrowding worsens (NBC): NBC OVERCROWDING

It needs to stop: https://yourlocalepidemiologist.substack.com/p/emergency-rooms-are-not-okay?utm_campaign=email-post&r=3xu38&utm_source=substack&utm_medium=email

Victims of Columbia University doctor speaking out (NBC): https://www.nbcnews.com/now/video/survivors-of-sexual-assault-by-colombia-university-doctor-speak-out-203912773955

Lloyd Austin hospitalized for bladder problem (NBC): https://www.nbcnews.com/news/us-news/lloyd-austin-hospitalized-bladder-issue-rcna138299

What happens when private equity takes over a hospital (Harvard review): https://hms.harvard.edu/news/what-happens-when-private-equity-takes-over-hospital?utm_source=SFMC&utm_medium=Email&utm_campaign=tim&utm_content=2-13-2024

Racial discrimination against patients (Commonwealth Fund): Commonwealth fund

Access to CMS data to be made more difficult under new proposal: https://www.propublica.org/article/cms-proposal-will-increase-fees-access-medicare-medicaid-health-care-data

Fake science papers too common and growing in number: https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point

This may put the brakes on private equity in US healthcare: https://oneill.law.georgetown.edu/unpacking-recent-antitrust-challenges-to-private-equity-in-health-care/

Private equity causing near collapse of Massachusetts hospital system: https://www.nbcboston.com/news/local/mass-congress-members-have-growing-concerns-about-steward-health-crisis/3283119/?amp=1

Sexual abuse during medical care in Illinois is shocking: https://hoodline.com/2024/02/uncovered-abuse-scandal-rocks-illinois-health-systems-as-predatory-medics-prey-on-patients/?utm=newsbreak

Woman lied to by her doctor about the risks of Cipro (short video): https://www.youtube.com/watch?v=W2WU50Znq0w

Unstoppable: How is this doctor, sanctioned many times, allowed to continue practicing? https://www.propublica.org/article/pennsylvania-doctor-investigated-at-every-level-why-is-he-still-practicing?utm_campaign=trueanthem&utm_medium=social&utm_source=facebook

Disadvantages of Medicare Advantage (Commonwealth survey): Medicare survey

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Answer to the Question: B) 51% as of 2023. https://www.kff.org/medicare/issue-brief/medicare-advantage-in-2023-enrollment-update-and-key-trends/

Find past newsletters: **http://patientsafetyamerica.com/e-newsletter/**