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http://PatientSafetyAmerica.com

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Question: What is the average annual income of a US neurosurgeon aged 40-55 years old?

A) \$500,000 B) \$1,000,000 C) \$1,500,000 D) \$2,000,000 E) \$2,500,000

Artificial Intelligence and Medical Care

An expert from Harvard in the department of economics and government expressed his opinion on the coming impact of artificial intelligence (AI) on medical care.1 He described five areas where one may expect improvements. The first one was a reduction in administrative staff that handle billing, appointments, and facility management. recognizes that this will create job loss but suggests that this will be a gradual process. The second impact will be on support of clinicians by complementing their responsibilities. For example, AI cannot assess the subjective presentation of a patient, but it can reinforce diagnoses.



The third improvement will happen with monitoring of patients, especially using remote technology. AI might be able to integrate all the patient's symptoms and limited clinical findings to make a diagnosis without expensive further testing. The fourth potential gain is with objectivity. Human clinicians are always biased, but AI, when well educated, will be able to render unbiased opinions. The fifth 'change' will be to acknowledge what AI does not do well. It can handle huge data sets, but these will always be imbalanced by the means of acquisition of that data. The author suggests that AI may be better at formulating hypotheses than proving points. I might have added something about patient safety. Perhaps AI could inspect a patient's medical records for harmful mistakes — no bias and no excuses.

Artificial Intelligence and Eye Questions

A team of curious investigators wondered how well a large-language model like ChatGPT could answer 200 patient questions when compared to answers from ophthalmologists from the American Academy of Ophthalmology.² The answers were assessed by a 'masked' panel of board-certified ophthalmologists. The answers were compared for absence of inappropriate material, probability of a harmful answer, and degree of potential harm. Statistically, there were no differences in the grading assigned to the answers.

This is further evidence that AI is likely to soon enter the mainstream processes of patient care related to their questions about eye care. Obviously, this will grow exponentially in other areas of patient care.

¹ https://pubmed.ncbi.nlm.nih.gov/37410474/

²https://jamanetwork.com/journals/jamanetworkopen/fullart icle/2808557

Shared Decision Making for Aortic Stenosis

Most of us older folks know of someone who has had an aortic valve replaced. This is necessary when that valve fails to open and close as necessary to move blood pumped from the heart. A cardiologist from a hospital in Tennessee wrote about the complexity of engaging patients in Shared Decision-Making (SDM) when the need for valve replacement becomes apparent.³ The process is complex, but I think it is a template for many serious conditions that have multiple treatments, a well understood life expectancy for the replacement 'device,' and a general idea of the life expectancy of the patient.

The situation as described by the cardiologist is as follows: there are several worthwhile treatments and these are evolving quickly, there is a limit of 10-15 years for valve life that may be far less than the patient's life expectancy, in the past many patients have felt that they were not given SDM, physician training in SDM is often inadequate, there are well vetted guidelines and decision aids available, and in a large hospital setting a SDM process is best implemented using a team approach. The clear message from the writer is that the patient must be well informed and placed at the center of decisions that involve their body.

These principles may apply to your situation outside the arena of cardiology. In a well administered SDM, you should be given decision aids before the SDM process begins. Doing your homework about the various options is also wise.

Food Is Medicine (FIM)

Three experts wrote in the JAMA Health Forum on the status of FIM in the US.⁴ They cite the view that poor health from poor nutrition costs our economy more than a trillion dollars per year. In general, FIM programs are imbedded in healthcare when a specific disease warrants that form of treatment. Some insurers allow vouchers for purchase of fruits and vegetables when these are part of a patient's health plan that includes medically

tailored meals (MTMs). The experts call for research to identify the causes of poor nutrition. Many programs under the FIM umbrella exist at the federal and state government levels. A hybrid arrangement between the Rockefeller Foundation, the American Heart Association, and Kroger plans to 'mobilize' \$250 million for FIM research.

In this regard, at a recent gathering of us old guys we were studying 'The Fruits of Holy Spirit.' The ninth of these is self-control. When asked where we lose self-control, our answers included cherry pie, donuts, Butterfinger candy bars, tender steak, and ice cream cake. I have noticed as I work at a food bank in Houston, that we are giving far more fruits and vegetables than prior to the pandemic. Individuals have got to encourage each other to eat healthily. That means 'leading us not into temptation.'

Slow Medicare Coverage after FDA Approval

Once the FDA approves a new technology for marketing, one might suppose that Medicare would expedite its decision to approve the new technology for reimbursement. Wrong. A team of investigators explored the time lag between FDA approval and Medicare endorsement.⁵ They looked at 281 new technologies, of which 64 were deemed to be novel, which means there must be a new reimbursement pathway established by the CMS (Medicare). The median time to 'nominal coverage' by Medicare was 5.7 years when the new pathway was needed. The conclusion seems obvious. The CMS must establish a better process to enable novel technologies to be reimbursed when needed by patients after FDA approval.

Liver Disease and Sugary Drinks

A huge group of investigators sought to discern if women 50 to 79 years old were more likely to have liver cancer or die of liver disease if they had consumed sugar sweetened drinks or if they had consumed artificially sweetened drinks.⁶

³ https://pubmed.ncbi.nlm.nih.gov/37314799/

⁴ https://pubmed.ncbi.nlm.nih.gov/37561480/

⁵ <u>https://jamanetwork.com/journals/jama-health-forum/fullarticle/2807906</u>

⁶ https://pubmed.ncbi.nlm.nih.gov/37552302/

The study involved follow up of 99,000 women enrolled in the Women's Health Initiative in the 1990's until 2020. During that time, 207 women died of liver cancer and 148 died of chronic liver disease.

The odds of dying of liver cancer were 1.8 times higher in women having consumed sugarsweetened drinks (1 sugar-sweetened drink per day) compared to controls (3 or less sugar sweetened drinks per month). Likewise, they were 1.7 times as likely to die of chronic liver disease. Women consuming high amounts of artificially sweetened drinks were not found to be different than those consuming a small amount in their risk of developing liver cancer or dying of chronic liver disease. The authors offered seven possible mechanisms for the association between consumption of sugar sweetened drinks and liver cancer or disease. They did not offer a single most likely mechanism.

The absolute number of women dying of liver cancer or chronic liver disease over the average follow-up of 21 years seems small to me: (207+148)/99,000 = 0.36%. None-the less, reducing one's consumption of sugar-ladened drinks seems to be smart.

Cognitive Impaired Drivers

A study reported in the *Journal of the American Geriatrics Society* uncovered concerning data about who may be driving after they should not be. The investigators assessed the cognitive ability of 635 older adults of an average age of 77 years living in south Texas. The participants scored less than 26 points on the Montreal Cognitive Assessment, indicating likely cognitive impairment. Their mean score was 17 points. Of the 635 participants, 360 were current drivers. Those with more severe cognitive impairment were less likely to be drivers. Roughly one third of the caregivers of those driving had concerns about their being able to drive safely.

Many who have taken away an elderly person's driver's license or vehicle know that this can be a traumatic experience. I recall that my family realized that my father should not be driving, but no one had the courage to take away his license or his Taurus. We persuaded his physician to make a strong recommendation to him that he does not drive any more. My father never forgave that doctor for doing this 'dirty deed.' The driving force here is that an unsafe driver on the road may seriously harm someone else due to bad driving. The family has the *responsibility* to cease allowing a risky driver on the road.

Deprescribing – A Patient Page

Normally, I would not write about a patient page, but I found one about describing medications to be highly informative. In my opinion, it could be shown to a primary care physician by a patient taking 5 or more medications to express concerns about taking too much medicine. There are several reasons for deprescribing including the following: the medication is no longer effective, it should not be taken for a long duration, its inherent risks outweigh the benefits, it might save you money, there may be a risk from medication interactions, and you are likely to feel better with fewer pills.

Some medications may be stopped without gradual decrease in dose and others require a gradual decrease until the medication is no longer needed. For some medications, a decrease in dose may be appropriate but not to total elimination. Deprescribing may include over-the-counter supplements and medicines that you take without any prescription.

Interesting Links

Some big money is going after hospitals:

https://www.statnews.com/2023/05/25/billionaires-campaign-against-hospitals-fat-joe/

Bad news on Alzheimer drugs:

https://www.thenation.com/article/society/alzheimers-drugs/

⁷https://agsjournals.onlinelibrary.wiley.com/doi/10.1111/jgs. 18493

⁸https://jamanetwork.com/journals/jamainternalmedicine/ful larticle/2805583

Medical mishaps are shockingly common:

https://www.sandiegouniontribune.com/opinion/commentary/story/2023-08-03/opinion-medical-mishaps-patient-advocate-hospital-malpractice

How much do doctors really make:

https://www.washingtonpost.com/business/2023/08/04/doct or-pay-shortag

Patients dying while waiting in the ER:

https://www.medpagetoday.com/opinion/second-opinions/103166?xid=nl_secondopinion_2023-08-06&eun=g403075d0r

Maternal death in an 'A' rated California hospital:

https://www.beckershospitalreview.com/hospital-physician-relationships/california-hospital-fined-after-investigation-intopatient-

death.html?utm_medium=email&utm_content=newsletter

Dangerous doctor in Pennsylvania still practicing medicine: https://www.propublica.org/article/pennsylvania-doctor-investigated-at-every-level-why-is-he-still-practicing

Blame monopolies for high cost of medical care: https://washingtonmonthly.com/2023/06/19/dont-blame-medicare-for-rising-medical-bills-blame-monopolies/

Seniors owe \$54 billion in medical debt:

https://thehill.com/policy/healthcare/4146137-seniors-owe-54-billion-unpaid-medical-bills/

If you are COVID vaccinated, you may want to test your magnetic profile (according to an MD):

https://www.cleveland.com/open/2023/08/this-doctor-said-vaccines-magnetize-people-ohio-suspended-her-medical-license.html

Ranking of state medical boards (Public Citizen):

https://www.citizen.org/news/new-public-citizen-analysis-finds-continued-major-differences-among-states-in-rates-of-serious-physician-disciplinary-actions/

https://www.citizen.org/wp-

content/uploads/230816 StateMedicalDisciplinaryReport.pdf

Letter requesting control of 'confirming' data from a new Alzheimer drug approved by the FDA:

https://kffhealthnews.org/wp-

<u>content/uploads/sites/2/2023/07/Data-Sharing-Letter-from-</u> Experts-re-Registries-for-Leqembi-to-CMS-and-HHS.pdf Update and opinions on the National Patient Safety Board:

https://www.beckershospitalreview.com/patient-safetyoutcomes/calls-grow-for-national-patient-safety-board-3leaders-weigh-

in.html?utm medium=email&utm content=newsletter

Body-building supplement may mitigate Alzheimer Risk: https://www.sciencedaily.com/releases/2023/07/2307220046
22.htm

One way to deal with medical debt in Minnesota:

https://www.startribune.com/minnesotas-future-how-to-make-ours-the-first-medical-debt-free-state/600296024/

Improve health equity through the way we pay for it (Commonwealth Fund):

https://www.commonwealthfund.org/blog/2023

Disease advocacy groups have deep ties to Pharma: https://kffhealthnews.org/patient-advocacy/#

CMS says safe nursing home staffing levels are unclear: https://kffhealthnews.org/news/article/cms-study-nursing-home-staffing-levels/

And from the CDC:

https://www.forbes.com/sites/judystone/2023/08/25/public-pushes-back-on-cdcs-plan-to-weaken-infection-control/?sh=1d621e3e7179

If you think medical boards protect patients from dangerous doctors you are dreaming:

https://www.cbsnews.com/colorado/news/medical-board-allows-doctor-emmalyn-nguyen-case-keep-practicing-criminal-conviction/



Find past newsletters:

http://patientsafetyamerica.com/e-newsletter/

Answer to Question: (B) \$920,000, #4 Link