

令和 4 年 度
医 学 科
外 国 語(英語)

注意事項

1. 問題は 1 頁から 11 頁に掲載されています。
2. 解答に用いる言語(日本語あるいは英語)は各設問の指示にしたがって選びなさい。ただし、記号で答えるように求められている場合は記号で答えなさい。
3. 解答は解答用紙に記入しなさい。

次の英文を読んで、設問に日本語あるいは記号で答えなさい。

Earlier in the pandemic it was vital to see doctors over platforms like Zoom or FaceTime when in-person appointments ⁽¹⁾posed risks of coronavirus exposure. Insurers were forced — often for the first time — to *reimburse for all sorts of virtual medical visits and generally at the same price as in-person consultations.

By April 2020, one national study found, *telemedicine visits already accounted for 13 percent of all medical claims compared with 0.15 percent a year earlier. And *Covid hadn't seriously hit much of the country yet. By May, for example, Johns Hopkins's *neurology department was conducting 95 percent of patient visits virtually. There had been just 10 such visits weekly the year before.

*Covid-19 let virtual medicine out of the bottle. Now it's time to control it.
① If we don't, there is a danger that it will become a *mainstay of our medical care. Using it too widely or too quickly risks poorer care, unfairness and even more outrageous charges in a system already infamous for big bills.

The pandemic has ⁽²⁾demonstrated that virtual medicine is great for many simple visits. But many of the new types of telemedicine being promoted by *start-ups more clearly benefit providers' and investors' pockets, rather than yielding more convenient, high-quality and cost-effective medicine for patients.

“Right now there's a lot of focus on shiny objects — ideas that sound cool — rather than solving problems,” said Dr. Peter Pronovost, a national expert in medical innovation at University Hospitals Cleveland Medical Center, who has written about finding the value of virtual medicine. “We know precious little about its impact on quality.”

Even so, the financial world is excited about investment opportunities. In the first six months of 2020, telehealth companies raised record amounts of funding, with five start-ups each raising more than \$100 million.

There are now telehealth apps that target *niche markets like the mental health of pregnant women. Others provide medicines, like H.I.V. prevention pills, after a virtual consultation with their doctors. You can even do a digital eye appointment, meet with your dentist virtually to monitor your oral health and *orthodontic progress and send a *dermatologist a photo of a suspicious mole.

With telemedicine generously reimbursed, many practices are offering—even encouraging—patients to visit virtually. But, intentionally or not, that choice increases revenue, adding to patient expense.

When he noticed a curious skin rash, a relative was first directed to a practice's telemedicine portal and billed \$235 for a five-minute video appointment. Since rashes are often hard to evaluate in two-dimensions, he was told he needed to see a doctor in person for the diagnosis and then was charged \$460 more for that visit. I worry that pandemic-era reimbursement practices have taken traditionally free screening calls and rebranded them as billed visits, with no value added.

Going forward, some types of virtual visits will deserve insurance coverage. Think of follow-up appointments to check blood pressure or an *arrhythmia, where measurements can now be collected at a pharmacy or at home and transmitted to the physician digitally.

For most patients, in-person visits were required in large part because it was the only way a doctor could bill. But they require more time, and for people with disabilities they created hardship. After a head injury last April—when I couldn't yet drive—I was grateful for some insurance-reimbursed virtual visits with doctors and physical therapists.

But there are things that virtual medicine can miss, studies suggest.

One study showed that commercial telemedicine services were much more likely to prescribe *antibiotics for children's *respiratory infections than a *primary care doctor at an in-person visit. That's in part because if you can't see into the ear to observe a bulging *drum, for example, the safer course is to overtreat—even though that's contrary to prescribing guidelines intended to prevent antibiotic *resistance.

An *internist depresses the tongue and looks for pus on the tonsils to detect possible *strep throat. A *surgeon suspects *appendicitis by pushing on the belly to see if there's pain with rapid release.

Can *psychiatrists develop a therapeutic relationship with a new patient equally well over Zoom? In some cases, sure. But better diagnosing of my own post-injury problems required office visits with hands-on maneuvers, like checking my reflexes and feeling my joints move.

"There is still real value in being in the same room, in touch, in the laying on of hands," Dr. Pronovost said. Studies show that such interactions build trust, increasing the likelihood that patients will ⁽³⁾comply with treatment.

Telemedicine also raises new questions of fairness. Even though it promises improved access for people in rural and underserved areas, video visits require high-speed internet, which is less common among those same groups. Alternatively, will the poor get mostly telemedicine clinics (cheaper, since no front desk staff needed), while those with good insurance have easy access to doctors' offices?

Insurers are already ⁽⁴⁾rolling back their willingness from earlier in the pandemic to pay for telehealth visits. And providers and insurers are battling over reimbursement levels. Is a video call worth the same as an in-person doctor's visit? If a commercial telemedicine-only doctor determines a patient requires an in-person assessment, is the fee discounted or *waived? And how is a smart referral done if that telemedicine provider is thousands of miles away?

There is much to be resolved and fast, with scientific evidence and doctors, hopefully, driving the decisions. If we allow the market to make the choice, we risk preserving those telemedicine services that make money for business and providers — or save it for insurers — and lose those that most benefit patients.

Source (with changes)

Rosenthal, E. (2021). Telemedicine is a tool. Not a replacement for your doctor's touch. *The New York Times*.

<https://www.nytimes.com/2021/04/29/opinion/virtual-remote-medicine-covid.html>

Notes

reimburse : 返金する
telemedicine : 遠隔医療
Covid (-19) : 新型コロナウイルス感染症
neurology department : 脳神経内科
mainstay : 主力
start-up : スタートアップ[新興]企業
niche market : 隙間市場
orthodontic : 歯列矯正術の
dermatologist : 皮膚科医
arrhythmia : 不整脈
antibiotics : 抗生物質
respiratory infection : 呼吸器感染症
primary care doctor : かかりつけ医
drum : 鼓膜
resistance : 耐性
internist : 内科医
strep throat : 咽頭炎
surgeon : 外科医
appendicitis : 虫垂炎
psychiatrist : 精神科医
waive : 免除する

設問 1 次の語は、本文の文脈ではそれぞれどのような意味で使われているか、最も近いものを選んで記号で答えなさい。

- (1) posed
 - (a) cut
 - (b) raised
 - (c) implied
 - (d) weighed

- (2) demonstrated
 - (a) proved
 - (b) insisted
 - (c) concealed
 - (d) explained

- (3) comply with
 - (a) resist
 - (b) provide
 - (c) agree to
 - (d) amount to

- (4) rolling back
 - (a) keeping
 - (b) reducing
 - (c) expressing
 - (d) confirming

設問 2 下線部①で著者はどのようなことを意味しているか、本文の内容にしたがって説明しなさい。

設問 3 遠隔で診察を行って薬を処方した場合、どのようなことが起こる可能性があるのか、また、それはなぜか、本文の内容にしたがって説明しなさい。

設問 4 本文の内容と合致するものを3つ選んで記号で答えなさい。

- (a) The author's relative was charged \$460 more for his virtual visit.
- (b) The author considers video calls as worth the same as in-person visits.
- (c) The rate of telemedicine visits increased by more than 80% from April 2019 to April 2020.
- (d) Dr. Pronovost, who has written about virtual medicine, finds real value in a doctor's touch.
- (e) The author was happy with her virtual visits after she had a head injury, because she could not move yet.
- (f) Many of the new types of telemedicine benefit providers and investors rather than patients.
- (g) As much as 95 percent of patient visits were conducted virtually at John Hopkins's neurology department in May 2021.

Read the following passage and answer the questions that follow.

Gross Domestic Product (GDP) has always been a dependable tool for economic discussions, an index that is used to (①) the health of an economy and the wellbeing of a nation. GDP is a (②) of the value of finished goods and services within a country over a specific time frame. A nation's Gross Domestic Product can then be divided by its population to determine the GDP per capita. This is, in turn, used to make assumptions on *standards of living within that country, with the idea that the (③) the per capita amount, the better the standards are.

However, GDP has had mixed (④) when trying to illustrate the *welfare of the people. As an economic tool, it only makes assumptions about the basic standards of living, which can be different across the *socioeconomic spectrum of a nation. Additionally, better standards of living do not (⑤) equate to better welfare, with the latter affected by a range of factors including but not limited to mental wellbeing, cultural resilience, and environmental health.

The Kingdom of Bhutan (⑥) the first nation to test a Gross National Happiness Index in 2008. Bhutan started to measure factors (⑦) psychological health, living standards, community vitality as well as environmental and cultural resilience — which the government would then use to inform its policies. Creative accurate measurements for these factors that are easy to measure are often challenging, an excuse often (⑧) for avoiding them altogether.

New Zealand Prime Minister Jacinda Ardern is the latest leader to adopt the Happiness Index metric, announcing a new budget that focused on (⑨) the *prosperity of local communities. New Zealand's government explained that new spending must advance one of five government priorities: improving mental

health, (⑩) child *poverty, addressing the inequalities faced by indigenous Maori and Pacific island people, thriving in a digital age, and transitioning to a low-emission, sustainable economy. New Zealand's change in policy represents a shift that economists have long theorized could be a more (⑪) use of government spending.

The nation of 4.9-million people has a long (⑫) of progressive policymaking and defending its interests against international superpowers, and as Max Harris lays out in his book *The New Zealand Project*, it makes it the ideal nation to lead a (⑬) in global views. In his 2017 publication, Harris explains how the island nation would be better served working towards *integrating traditional community values focusing on collective welfare in order to tackle large issues such as climate change or social inequality. Harris' vision for a (⑭), happier and more cohesive New Zealand is now a step closer to being fulfilled, with Jacinda Ardern's new wellness budget.

As New Zealand Finance Minister Grant Robertson (⑮) out, the economic growth of a nation should not come at the cost of its citizens: "Sure, we had — and have — GDP growth rates that many other countries around the world envied, but for many New Zealanders, this GDP growth had not translated into higher living standards or better opportunities. How could we be a *rockstar, they asked, with homelessness, child poverty and inequality on the rise?"

Robertson's statement (⑯) the views of many governments worldwide, who are increasingly looking to create happier communities, "For me, wellbeing means people living lives of purpose, balance, and meaning to them, and having the capabilities to do so." From the United Kingdom to Bhutan, the Happiness Index has been (⑰) in various forms in order to improve the welfare of the general population, while also re-prioritizing the use of a nation's economic powers. New Zealand's decision to embrace it as a defining part of their national budget has (⑱) debates internationally to determine whether this new approach may be the most effective for both communities and their respective

economies.

As nations increasingly (19) towards *sustainable development and efficient energy policies and technologies, the use of the Happiness Index could help spur investment in projects that improve the community, the economy, and the environment. New Zealand has always been at the (20) of change throughout the ages, and it is poised to continue its ways by pioneering a community-centered economic plan.

Source (excerpt, with changes)

Ellsmoor, J. (2019). New Zealand ditches GDP for happiness and wellbeing. *Forbes*.

<https://www.forbes.com/sites/jamesellsmoor/2019/07/11/new-zealand-ditches-gdp-for-happiness-and-wellbeing/?sh=3ec036c01942>

Notes

standard of living: how much money and comfort someone has

welfare: health and happiness

socioeconomic: of the differences between groups of people related to their wealth

prosperity: the state of being successful and having a lot of money

poverty: the condition of being extremely poor

integrate: bringing two things together so they become more effective

rockstar: someone highly accomplished and well-regarded in a particular field

sustainable: able to continue over a period of time

設問 1 : Use the following words to best complete the text. Use each word once. Use a capital letter if necessary.

became	measurement	started	improving
determine	move	higher	including
history	results	points	reducing
forefront	summarizes	necessarily	change
effective	better	given	adopted

設問 2 : Answer the following questions in English in complete sentences and in your own words.

1. According to the article, what is Gross Domestic Product and why does it not adequately reflect the welfare of the people in a country?
2. New Zealand is focusing on five priorities to increase the Gross National Happiness of the country. Which of these priorities do you think is most important, and why?

Write paragraphs answering the following questions in English in your own words.

Question 1: What does diversity mean to you?

Question 2: Why do you believe diversity will or will not be important to the future success of Japan?

Your response should be written in your own words and:

1. be a total of approximately 100 words in English,
2. should be composed of two paragraphs,
3. the first paragraph is a response to the first question,
4. the second paragraph is a response to the second question,
5. leave a one-line space between each paragraph,
6. not double-spaced.

Note

diversity: including or involving people from a range of different social and ethnic backgrounds and of different genders, age, sexual orientation, disability, body type, personality, attitudes, and values.

