推薦

小論文2

（医学部医学科）

注 意 事 項

1. 試験開始の合図があるまで、この問題冊子を開いてはいけません。

2. 問題冊子は1冊（5頁）、解答用紙は4枚、下書用紙は3枚です。落丁、乱丁、印刷不鮮明の箇所等があった場合には申し出てください。

3. 氏名と受験番号は解答用紙の所定の欄に記入してください。

4. 解答は指定の解答用紙に記入してください。

 （1）文字はわかりやすく、横書きで、はっきりと記入してください。

 （2）回答の字数の制限がある場合は、それを守ってください。

 （3）ローマ字、または数字を使用するときは、マス目にとらわれなくてもかまいません。

5. 解答用紙は持ち帰ってはいけません。

6. 問題冊子と下書用紙は持ち帰ってください。

以下の文章は、これまで手書きで記録されていた診療録（いわゆるカルテ）を電子化することと、それを用いた遠隔医療（telemedicine）の意義等について解説したものである。文章を読んで、以下の問 1-4 に日本語で答えなさい。

　（*のついた単語には文末に注釈があります）

Patient Participation in Electronic Medical Records

　　　Electronic medical records (EMRs) hold great promise for improving the practice of medicine by facilitating* communication between members of the health care team. The most profound influence of EMRs may lie in their ability to encourage patients' involvement in their own care. Potentially, patients could use EMRs to access their medical records online, learn about their health conditions, communicate with physicians, and even contribute to the chart* itself. Certain hurdles to such access have yet to be overcome, such as ensuring privacy of personal medical data and determining the ways in which patients should be able to influence their charts; once these challenges are met, patients can look forward to a future of increased participation in and control over their own care.

　　　Prior innovations in telemedicine provide the foundation for interactive EMR projects. Telemedicine uses remote transmission of video, audio, and text data to provide subspecialist care or consultation to patients who might not otherwise have access to it. In teleradiology, for example, a neuroradiologist* working remotely can diagnose brain pathology by looking at a digital image. Telemedicine has been used to provide medical care to underserved rural communities, disaster areas, and military operations.

　　　Interactive EMR builds on the telemedicine framework by making the medical chart, traditionally the province* of the healthcare provider*, a shared document that patients can access and update themselves. Numerous projects already allow patients to read specified portions of their charts online, manually enter data, and verify their medication dosages or track what doses they have taken. The Patient Clinical Information System (PATCIS) project provides patients with the ability to view laboratory results* and text reports through a Web interface and to enter data such as vital signs*. The Patient Centered Access to Secure

Systems Online (PCASSO) project focuses on developing a robust security architecture for direct patient access to an EMR.

The largest project combining telemedicine with patient access to an EMR is the Informatics for Diabetes* Education And Telemedicine project (IDEATel). This randomized clinical trial was designed to maximize Medicare* patients' control of their diabetes by providing them with a computerized link to their caregivers. Patients use a home telemedicine unit (HTU) that allows them to interact in multiple ways with their online charts. When patients measure blood pressure or finger-stick glucose with devices connected directly to the HTU, the results are automatically encrypted* and transmitted securely over the Internet into the Columbia University Web-based Clinical Information System (WebCIS) and to customized case management software. Patients can also view and enter other data including diet, medication, and exercise information through the EMR. Patients and diabetes case managers can communicate through a secure clinical email system as well as via video-conferencing; case managers also receive alerts when patients' transmitted values exceed set thresholds. By allowing direct patient interaction with the EMR, case managers and physicians have much more accurate and up-to-date information for managing therapy. Patients learn to monitor their own condition by receiving immediate feedback after finger sticks and comparing blood glucose values over time.

No new health care technique will be implemented* unless it is demonstrated to be cost-effective, whether by improving health outcomes, or decreasing costs, or both. Several studies have suggested that telemedicine is able to decrease costs while maintaining quality in the management of congestive heart failure, chronic obstructive pulmonary disease, cerebral vascular accident, cancer, diabetes, and anxiety.

Patient interaction with EMRs has the potential to reduce the frequency of clinical visits and improve health outcomes. Yet, one concern is that telemedicine interactions will replace clinical encounters, thus deteriorating* the patient-physician relationship. It remains to be seen whether the face-to-face clinical encounters that supplement interactive EMR will be more productive and satisfying because of the long-term connection between physician and patient

that can be provided by the EMR system.

　　As telemedicine becomes incorporated into chronic disease management across the United States, patient-oriented EMRs may become a part of the standard of care of outpatient* management in all medical specialties.

（Tsai CC, Starren J. Patient Participation in Electronic Medical Records. JAMA. 2001; 285(13):1765.より一部改変）

facilitate　促進する

chart　診療録（medical record と同義）

neuroradiologist　神経疾患の画像診断を専門とする放射線科医

province　領域

healthcare provider　医療従事者

laboratory results 検体検査（血液検査など）の結果

vital signs　バイタルサイン（血圧、心拍数などのデータ）

diabetes　糖尿病

Medicare　米国における高齢者向け医療保険制度

encrypt　暗号化する

implement　実行する

deteriorate　悪化させる

outpatient　外来患者

問 1　本文中には、診療録の電子化や遠隔医療によって、患者が得られる利益について解説されている。それらの中からあなたが重要と考える点を３つ挙げ、それぞれの内容について８０字以内でまとめなさい。

問 2　診療録の電子化や遠隔医療を実現するにあたって、本文中にはいくつもの課題が挙げられている。それらの中からあなたが重要と考える課題を３つ挙げ、それぞれの内容について６０字以内でまとめなさい。

問 3　本文中に述べられている問題点のほかに、診療録の電子化や遠隔医療を実現するにあたって、どのような課題が想定されるか。あなたの考える課題２つと、それらに対する解決策を提案し、全体を３００字以内でまとめなさい。

問 4　新型コロナウイルス感染症が大きな社会問題となっている昨今において、遠隔医療の新たな価値にはどのようなものが考えられるか。本文には述べられていない価値について、あなたの考えを３００字以内でまとめなさい。

<div align="center">（以下　余白）</div>