Research Strategy: < I am pursuing research on smart healthcare privacy from the perspective of ICT. Since the topic is broad, I chose to research how the use of information communication technologies in smart healthcare endangers patient’s privacy. There are a lot of sources that talk about this topic. However, not all are credible. So, I used Google Scholar and Objee search to find sources that were both scholarly and peer-reviewed. To get sources that are closely related to my topic I used advanced search features with keywords like “ICT”, “smart healthcare”, and “ privacy”. I got many sources, but to narrow it down I used web sources, journal articles, and research publications that were released from 1990-2021.>

Seckeler, M. D., Gordon, B. M., Williams, D. A., & Goldstein, B. H. (2015). Use of Smart Technology for Remote Consultation in the Pediatric Cardiac Catheterization Laboratory. *Congenital Heart Disease*, *10*(6), E288–E294. <https://doi.org/10.1111/chd.12308>

Done by researchers from the University of Arizona medical center, two online surveys were conducted to determine the use of smartphones and tablets in remote consultation between mentees and mentors of a pediatric cardiologist. In total, 40% of mentees and 48% of mentors responded. Around 85 percent indicated that patient privacy issues were the most common obstacle to the use of smart technology for consultations. The researchers concluded that as the use of smart technology for remote consultation increases, many technical and patient privacy concerns will need to be addressed. I selected this source because it provides information about how the use of smartphones and tablets in the healthcare environment threatens patient’s privacy.

The authors used the questionnaire to evaluate the use of smartphones and tablets in an online consultation. They did a great job with asking people who are in the field which provided them with credible and unbiased information. Besides this source being written by professionals in the healthcare environment, it was also cited by many other researchers working on the related topic.

Moreover, this article has a great connection with another study done by a head surgeon from the US National Library of Medicine where they both raise privacy concerns regarding sending medical images via smartphones. This source will provide me with more insight into how the use of smart technology endangers patient’s privacy.

Kaplan, A. (2012). Electronic health records and patient privacy--an oxymoron? *Psychiatric Times*, *29*(8), 6. <https://link.gale.com/apps/doc/A301776607/ITOF?u=23266&sid=ITOF&xid=d469d543>

 The increasing use of electronic health reports and health information exchanges, according to two psychiatrists from Michigan State University, has unintended and often severe consequences, including abuses of psychiatric patients' privacy and well-being. Scott Monteith, a clinical assistant professor, reported a story about a patient who had biweekly counseling sessions with a therapist at Massachusetts General Hospital for six years. Due to that, her sensitive information was put in electronic health reports, the patient was constantly judged by her new therapist which made her uncomfortable. As a result, the patient stopped seeking the help she needed. Further, health care facilities have reported 364 cases relating to the misuse or abuse of data on nearly 18 million people in recent years, extending from personal information to medical notes taken by doctors. I selected this source because it provided me the personal stories that will help me to define my research question.

I liked how the author provided the testimony of the patient, the arguments were straightforward and easy to understand. The author also brought the concerns regarding how people who are supposed to keep patients’ information safe are the ones that turn back and abuse them. I think this is especially important because it will help me to show that patients should also play role in protecting their privacy. though the article was so small and did not provide any advice on what can be done to solve the issue which I believe could have helped the research audience.

This source provided me with knowledge of how patient’s privacy exposure affects their mental health and wellbeing. Seeing that millions of patients fail to seek medical care each year out of privacy concerns is an issue that needs to be addressed.

Feng, C.-L., Cheng, Z.-C., & Huang, L.-J. (2019). An Investigation into Patient Privacy Disclosure in Online Medical Platforms. *IEEE Access*, *7*, 29085–29095. <https://doi.org/10.1109/access.2019.2899343>

Online healthcare services have evolved rapidly in recent years. Taken from the Institute of Electrical and Electronics Engineers publication, the study shows concerns of privacy may prevent patients from finding help from particular medical services such as sexual and mental health. According to a 2016 study released by the China Internet Society, 84 percent of people have directly encountered negative effects as a result of personal data leakage. The exposure of this sensitive information could result in not only huge financial losses for the healthcare companies but also significant psychological damage to the patients. According to a BBC story from 2016, 780 HIV-infected patients around the country received fraud calls as a result of medical data leakage. Moreover, some patients faced difficulties with telling their families that they were HIV infected.

 I chose this source because it will help me to define my research question. Specifically, I was born in a country with a high level of HIV stigma and on daily basis, people get judged and harassed for it. So, I understand the negative impact that this kind of exposure has on patients. This particular source will help me to show that of use ICT in the healthcare environment should be done with caution to mitigate the risk of patient’s privacy exposure.

The source is not common method biased even though the data used in the study was taken from similar participants. The authors used a structural modeling method to test their hypothesis which is great because their results were independent of just one single analysis.

These authors’ work was useful to me in different ways, such as better understanding of patient’s privacy disclosure behavior and measures to improve patient’s privacy and interests. Besides, it will help the research audience to formulate effective and reliable policies to guide healthcare professionals who use technology in their line of work.

 Wilson, S. (2021). A bigger threat to patient privacy when doctors use Facebook. *Jme.bmj.com*. <https://jme.bmj.com/content/bigger-threat-patient-privacy-when-doctors-use-facebook>

Taken from the journal of medical ethics, Stephen Wilson, a principal Consultant, argues that Residents and fellows often use Facebook and display personal information on their profiles which impacts the doctor-patient relationship and results in insufficient patient privacy protection. The author argues that the “find friends” feature which is on Facebook allows individuals to find patient’s information through a doctor’s web email book. This particular feature is not explained to the users and Facebook does not entirely mention that this feature can endanger the privacy of the users. To explain more how this works, the “find friends” feature allows Facebook users to see mutual friends or friends that are common to a certain individual. For doctors working in sexual health, substance abuse, and mental health environment having their patients' lists on the email book could lead to privacy exposure because anyone could see the names of people on their list.

I chose this source because it specifically relates to the event that led me to choose my research topic. Even though this source did not contain enough information and evidence, it will help me to explain to my audience why healthcare professionals should be extra warned against risks to patient privacy when they are using information communication technologies.

Hosek, S., & Straus, S. (2013). Privacy of Individual Health Information. In-Patient*Privacy, Consent, and Identity Management in Health Information Exchange: Issues for the Military Health System* (pp. 19-30). <http://www.jstor.org/stable/10.7249/j.ctt3fgzjz.10>

In the policy debate about the federal role in health information technology, concerns about the protection of patient’s medical information have been raised. Patient privacy is one of four main obstacles to the implementation of successful health IT services, according to a report by the President's Council of Advisors on Science and Technology (2010). It is noticeable that the change to electronic records from paper medical records poses new privacy issues. For instance, for some healthcare environments, access to paper documents is limited to authorized personnel only. Similar people may have access to a patient's electronic records. But electronic documents can be exposed in extremely significant capacities, unlike paper records. For example, through unintentional release or theft of data storage equipment. The report also found that patient’s privacy is abused for exploitive use of data for commercial interest, research...etc. As a result, patients face unfairness and discrimination in health care coverage and jobs based on their health conditions.

I chose this source because it helped me to know who has control of the medical data and some of the reasons behind endangering patient’s privacy. Besides, this source provided me with the public opinions survey regarding the issues related to the privacy of health information. A total of 1582 adults and 779 medical responders were surveyed. 80% responded showing that patients have concerns regarding who has access to the information and how they can know if an unauthorized user had access to the information.

 I liked how this source provided the audience with more than two surveys, studies within different focus groups, and different participants were involved. The points presented were self-explanatory and multiple pieces of evidence made it easier to understand the problem being defined.

 This source will help the research audience in deciding who gains access to health data and for what objectives, because as we have seen some healthcare workers use patient’s information for research purposes without them knowing.

Livsey, T. (2008). Post-it pitfalls: new technology makes it easy to breach patient privacy unwittingly. *Nursing Standard*, *23*(14), 26+. <https://link.gale.com/apps/doc/A191816954/HRCA?u=23266&sid=HRCA&xid=cf7871ab>

Taken from Royal College of Nursing Publishing Company, the Nursing and Midwifery Council pointed out that information communication technologies such as TikTok, Twitter, Facebook, Snapchat, and YouTube blogs have become increasingly popular for nurses to share details of their working lives, leading to a risk of breaching patient privacy by writing blogs that mention their personal information and taking their photos/videos without permission. The author shows that nurses take pictures of patient’s information with mobile phones and then post them on their social media platforms. Sometimes those operation pictures include sensitive information like notes and patient’s hospital number which make it easier for other people to identify the patients. This particular situation could contribute to mental health issues upon the patient whose information was exposed. The author concluded that nurses should be aware of how ICT can endanger patient privacy and apply rules such as avoiding photographing patients and posting videos and pictures of patients online without permission. I chose this source because it will help me to show the audience that it is easy to break healthcare privacy rules unthinkingly while using communication technologies.

The author is straightforward, and the court case presented is great to help the audience to understand the problem being identified, but the article is relatively small, and there is not enough evidence to support some arguments presented. Though, it will help me to develop arguments that show that the use of information communication technologies endangers patient’s privacy if there are no policies implemented to mitigate the risk exposure. This source also helped me to see that consent between patients and medical practitioners could help to minimize the problems that arise when the privacy rules do not adhere to standards.