

cc

School of Nursing and Health Sciences, Capella University

NURS-FPX4040 Managing Health Information and Technology

May 18, 2023

Evidence-Based Proposal and Annotated Bibliography on Technology in Nursing

Introduction

One possible explanation for the better results seen in modern healthcare is the widespread use of technological solutions. A nurse's duties include supporting patient autonomy in healthcare decision-making. Since patient participation is the bedrock of contemporary healthcare, it is not surprising that many institutions strive to get their patients more involved in their treatment. Patient engagement has been shown to improve health outcomes and satisfaction with care. Technology like email, mobile messaging, and internet portals have made patient engagement in healthcare easier. A patient portal is a private online area where patients may access at any time to see their medical data online. Patients need a special and secure password or login in order to access their health data, which may include information on their most recent medical visits. Patients may be more engaged in their treatment if they have easier access to their medical information online and can communicate with their doctors and other healthcare providers in a secure environment. Articles supporting the use of patient portals to enhance nursing quality and safety were sought out for this study. As a result, three articles were culled from PubMed Central, the gold standard for doctors searching for reliable research to back up their clinical decisions. Using the CRAAP criteria, we determined which journals and articles to use as our primary sources. The phrases "patient engagement," "patient portal," and "electronic personal health record" were utilized throughout my investigation.

Annotated bibliography

Han, H. R., Gleason, K. T., Sun, C. A., Miller, H. N., Kang, S. J., Chow, S., ... & Bauer, T. (2019). Using patient portals to improve patient outcomes: systematic review. *JMIR human factors*, 6(4), e15038. <https://doi.org/10.2196/15038>

In light of the information provided here, healthcare practitioners and patients alike may better assess the benefits and drawbacks of patient portals. Elkind and Higgins (2018) propose that giving patients access to their health records via a patient portal would increase the likelihood that they will follow their main preventative and tertiary treatment plans. Patient portals, the authors argue, may help patients because they provide them access to resources that will empower them to make informed decisions about their health and improve the quality of treatment they get. Patient portals, according to the authors enable clinicians to have more intimate conversations with patients and their loved ones. As a consequence, the interdisciplinary group may discuss treatment options and goals with the individual. Because the data entered in patient portals are reviewed for correctness and conformity with healthcare standards, the authors conclude that patient portals improve productivity and patient outcomes. The authors recommend increasing dialogue and participation around patient portals due to their association with improved healthcare outcomes. Patient portals have many potential benefits, and this article highlighted them. Furthermore, the article claim that patient portals are an effective technique of enabling communication between patients and their healthcare teams, which may result in improved health outcomes. After reading this study, I am certain that patient portals should be extensively used in healthcare settings because of the positive effects they have on both patients and doctors. Nursing workflows and the quality of care provided to patients may benefit from the use of patient portals.

Graham, T. A., Ali, S., Avdagovska, M., & Ballermann, M. (2020). Effects of a web-based patient portal on patient satisfaction and missed appointment rates: survey study. *Journal of medical Internet research*, 22(5), e17955. <https://doi.org/10.2196/17955>

This research provides compelling evidence that patient portals enhance the patient experience, reduce healthcare costs, and result in fewer missed visits. The authors state that patients may utilize the patient portal to have access to their own health data and schedule appointments online. People may securely contact with their healthcare providers and make appointments utilizing internet portals. If a patient's condition is not improving, nurses and other members of the interdisciplinary team may reevaluate the treatment plan. This study demonstrates that patient portals benefit patients by improving doctor-patient communication, accelerating medication refills, strengthening the doctor-patient relationship, and increasing patient satisfaction. The patient portal has been proven in this study to provide benefits beyond cost savings for the healthcare system. For example, staff time spent on the phone fielding appointment-related queries is reduced, and patient no-shows are reduced. In addition to other system benefits, patient portals may improve clinical workflow. Therefore, I recommend that medical centers implement patient portals to better serve their patients and advance medical progress. This study's findings provide credence to the idea that patient portals might improve nurse workflow and health outcomes throughout healthcare systems as a whole.

Grossman, L. V., Masterson Creber, R. M., Benda, N. C., Wright, D., Vawdrey, D. K., & Ancker, J. S. (2019). Interventions to increase patient portal use in vulnerable populations: a systematic review. *Journal of the American Medical Informatics Association*, 26(8-9), 855-870. <https://doi.org/10.1093/jamia/ocz023>

This article shows how patient portals may help underprivileged areas get better medical treatment. Patients with long-term conditions stand to gain the most from using patient portals. The authors argue that patient portals make it possible for patients to take charge of many aspects of their care from any device with an internet connection. Therefore, patient portals may improve coordination of care by facilitating communication between patients and their interdisciplinary care teams. According to the authors, many patient portals have recently been adopted across a variety of healthcare safety nets. According to the findings of the authors' study, low-income patients are showing an increased interest in using patient portals. The authors recommend that healthcare facilities adopt strategic initiatives to build patient portals in order to effectively provide treatment to marginalized groups. This article shows how nurse practitioners and other members of the interdisciplinary team may benefit from patient portals to better care for all patients, even those who need less intensive treatment. The authors have presented reliable data showing how using a patient portal may improve results by allowing for more regular contact between patients and their healthcare providers. To ensure that all patients have access to their health information and can have meaningful dialogues with their care teams, I believe healthcare providers should consider implementing patient portals into their system.

Reed, M. E., Huang, J., Brand, R. J., Neugebauer, R., Graetz, I., Hsu, J., ... & Grant, R. (2019).

Patients with complex chronic conditions: Health care use and clinical events associated with access to a patient portal. *PLoS One*, 14(6), e0217636.

<https://doi.org/10.1371/journal.pone.0217636>

The authors conducted an observational analysis in which they compared the visit rates of patients who had portal access to those who did not have portal access. In order to remove any potential bias brought on by attrition and confounding, the authors used marginal structural modeling in conjunction with inverse probability weighting estimations. Utilizing a patient portal may facilitate self-management and coordination of health care services for diabetic patients, many of whom also have numerous other complicated chronic diseases. This, in turn, may have an effect on the number of times diabetic patients need to see a doctor in person. This was done in order to investigate how having access to a gateway might affect the number of outpatient visits, emergency room visits, and unnecessary hospitalizations. They investigated the rates of outpatient office visits, trips to emergency rooms, and avoidable hospitalizations (for diseases amenable to ambulatory treatment). Access to a patient portal was shown to boost patient participation during outpatient visits, possibly addressing unmet clinical requirements, and reducing downstream health events that led to emergency and hospital treatment. This was especially true for patients who were dealing with several complicated diseases. This article is therefore relevant since it can be used to help healthcare facilities should use patient portals to improve patient treatment and outcomes.

Conclusion

The articles suggest that patient portals boost nursing quality and safety. Patient portals, as shown in the aforementioned studies, may improve both patient engagement and health outcomes. The available data shows that patient portals are gaining in popularity. As a result, medical institutions need to implement patient portals in order to enhance the quality of care that they provide and the results that they achieve. Several studies have shown that patient portals

enhance the quality of medical treatment provided to patients. Nurses may be able to instruct patients on how to use patient portals, which has the potential to improve healthcare outcomes.

Bibliography

- Graham, T. A., Ali, S., Avdagovska, M., & Ballermann, M. (2020). Effects of a web-based patient portal on patient satisfaction and missed appointment rates: survey study. *Journal of medical Internet research*, 22(5), e17955. <https://doi.org/10.2196/17955>
- Grossman, L. V., Masterson Creber, R. M., Benda, N. C., Wright, D., Vawdrey, D. K., & Ancker, J. S. (2019). Interventions to increase patient portal use in vulnerable populations: a systematic review. *Journal of the American Medical Informatics Association*, 26(8-9), 855-870. <https://doi.org/10.1093/jamia/ocz023>
- Han, H. R., Gleason, K. T., Sun, C. A., Miller, H. N., Kang, S. J., Chow, S., ... & Bauer, T. (2019). Using patient portals to improve patient outcomes: systematic review. *JMIR human factors*, 6(4), e15038. <https://doi.org/10.2196/15038>
- Reed, M. E., Huang, J., Brand, R. J., Neugebauer, R., Graetz, I., Hsu, J., ... & Grant, R. (2019). Patients with complex chronic conditions: Health care use and clinical events associated with access to a patient portal. *PLoS One*, 14(6), e0217636. <https://doi.org/10.1371/journal.pone.0217636>