Patient Electronic Portal Use:

Literature Review

Abby Erickson

Lakeview College of Nursing

Patient Electronic Portal Use

Technological advancements have made accessing health information easier for patients through online applications referred to as patient portals. "Electronic health records (HER) are now the standard method of storing and communicating health information for health systems across the United States" (McCleary et al., 2018, para 1). The resources available to patients include the ability to schedule appointments, refill prescriptions, make payments, request referrals, and view test results (Medline Plus, 2018). Users need a computer and internet access to make an account and utilize the online application. Electronic patient portals are beneficial because they give patients 24-hour access to their health records. Also, electronic patient portals allow patients to view health information from multiple providers at one central location (Medline Plus, 2018).

Oncology Nursing Perceptions of Patient Electronic Portal Use: A Qualitative Analysis

In March of 2017, a study was conducted using qualitative research. Thirteen nurses with a range of credentials and experience were chosen as the subjects for this study. The object of the study was to, "Identify nursing staff reactions to and perceptions of electronic portal use in a cancer setting" (Gerber, Beg, Duncan, Gill, & Craddock Lee, 2017, para. 1). The location of the study was an outpatient clinic at the Harold C. Simmons Comprehensive Cancer Center in Dallas, Texas. This study was performed using two focus groups. A focus group is an, "in-depth qualitative interview with a small group of people who have been specifically selected to represent a target audience" (Houser, 2018, pg. 214). A thematic analysis was then performed on the gathered data (Gerber et al., 2017).

PATIENT ELECTRONIC PORTAL USE

Key Points

Key themes that were considered during this study include work volume and flow, patient

expectations and safety, variation in the use of communication technologies, and education and

management (Gerber et al., 2017). The subjects were provided with a moderator guide at the

beginning of the study. This questionnaire was created by the investigators for this purpose.

Topics included: past experiences with electronic patient portals, preferred communication

channel, level of comfort using technology, and how their patients have adapted to the electronic

patient portal (Gerber, 2017). Participants were given time to compare and contrast answers with

each other. After all moderator guides were complete, the results were analyzed.

Assumptions

Research cannot be conducted without assumptions. For this study, some of the investigators

assumptions include: physicians and patients are willing to utilize the application, patients have

the means and knowledge to access the electronic patient portal from home, healthcare

professionals have additional time during the day to answer questions or return calls, and that

patients will understand the test results and medical terminology used.

Deficit/Conclusion

The article states, "Electronic patient portals appear to have a major impact on outpatient

oncology nursing in the authors' setting" (Gerber et al., 2017, para. 15). An analysis of the

moderator guide resulted in mixed reviews. The subjects main concern on implementing an

electronic patient portal was the effect it would have on work volume and flow. It was their

opinion that staffing would need to be increased to meet the demands of the electronic charting

and return phone calls required for a patient portal (Gerber et al., 2017). Another concern that

was expressed by the subjects was regarding patient expectations and safety. A majority of the

nurses were worried that patients would expect immediate results or worse, report medical

emergencies to the patient portal (Gerber et al., 2017). Likewise, many of the subjects cited

several benefits that an electronic patient portal could provide. The results of the study stated,

"although a study of this nature is not definitive, the findings suggest that oncology practices and

cancer centers may wish to address portal implementation and function among clinical staff on a

regular basis to deal with emerging concerns" (Gerber et al., 2017, para. 15).

Increase in Cancer Center Staff Effort Related to Electronic Patient Portal Use

In December of 2016, a research study was published using qualitative analysis. Two

hundred and eighty-nine healthcare professionals at the Simmons Cancer Center were observed

from 2009-2014 for the conduction of this study. Nurses, ancillary staff, clerical partners,

physicians, and advanced practice providers were among the participants (Laccetti et al., 2016).

The purpose of the study was to determine the impact of electronic patient portals on healthcare

staff effort (Lacetti et al., 2016).

Key Points

"Given the disease severity, longitudinal course, and data intensive practice of oncology,

understanding how patients and providers use electronic portals is key to practice quality and

safety" (Laccetti et al., 2016, para. 4). Although electronic patient portals were implemented over

a decade ago, research on its impact is limited. Researchers monitored all messages sent and

received through the patient portal "MyChart". Data was categorized by the time of day, mean

and median action/message counts, and the recipient/senders title (Laccetti et al., 2016).

PATIENT ELECTRONIC PORTAL USE

Assumptions

For this study, the researchers inferred that all subjects utilized the electronic patient portal, participants responded to patient's messages in a timely manner, participants solved the patient's issue/answered questions electronically, and that patients used the patient portal correctly. The purpose of the study was to determine the impact of electronic patient portals on staff effort (Laccetti et al., 2016). To conduct the research, all of these statements had to be assumed true.

Deficit/Conclusion

The article states, "In the present analysis, we identified a dramatic and sustained increase in staff use of an electronic patient portal at an NCI- designated comprehensive cancer center" (Laccetti et al., 2016, para. 16). The results indicated that nurses had the greatest rates of MyChart use. 77% of MyChart actions were performed by nurses. In addition, 31% of MyChart messages were sent or answered by nurses between the hours of 5:00 pm and 8:00 am. Lastly, the data results showed that over 60% of all MyChart actions and messages were patient-initiated (Lacetti et al., 2016). The statistics of this analysis proves the hypothesis that electronic patient portals have impacted staff effort.

Oncology Patient Portal Enrollment at a Comprehensive Cancer Center: A Quality Improvement Initiative

"Qualitative research is a naturalistic approach to research in which the focus is on understanding the meaning of an experience from the individual's perspective" (Houser, 2018, pg. 486). In October of 2015, a study was conducted using qualitative research. The research question of the study was to, "What is the best approach to optimize oncology patients'

enrollment in an institutional patient portal?" (McCleary et al., 2018, para 1). The subjects of the

study were cancer patients presenting at ambulatory clinics, including: breast oncology,

gynecology, melanoma, sarcoma, and other cancer-related practices (McCleary et al., 2018).

Key Points

The key points of this study are, "understanding the willingness of patients with cancer to use

patient portals, identifying barriers with patient portals, and improving patient portal

accessibility" (McCleary et al., 2018, para 3). 1, 178 patients were given a ten question survey

over a three day period. The questionnaire asked questions regarding patient status, age,

computer access, computer use, and willingness to communicate electronically (McCleary et al.,

2018). A statistical analysis was compiled using the data from the survey results (McCleary et al.,

2018).

Assumptions

Some assumptions of this research study include: survey participants were enrolled in a

patient portal, survey participants had computer access, all of the ambulatory clinics utilized

patient portals, and all patients that received a questionnaire will complete it. To conduct the

study, all of these statements were assumed true.

Deficit/Conclusion

The study states, "Patients with cancer want to communicate with their team through the

patient portal, but barriers to enrollment impede use. Further work is necessary to ascertain the

degree to which patient portals enrollment leads to greater engagement and better outcomes"

(McCleary et al., 2018, para. 5). 87% of the 1, 178 eligible patients completed the survey

questionnaire. Lack of computer access, lack of awareness, and concern about sharing personal

data electronically posed as barriers for the participants (McCleary et al., 2018). In addition,

most respondents stated that electronic/computer methods was their least preferred method of

communication (McCleary et al., 2018).

Conclusion

Electronic patient portals are used as a method for patients to have 24-hour access to their

health records, communicate with their doctors, and have access to support care after hours or

between appointments (The Office of the National Coordinator for Health Information

Technology, 2017). Patient portals were implemented over a decade ago, but very little research

has been conducted on their impact. The compiled studies shown above have provided some

insight on this topic. Each study has resulted in mixed reviews on implementing patient portals.

Patient compliance and lack of knowledge are barriers for success (McCleary, 2018). Also, the

associated increase on nurses' workload and volume pose a serious concern (Gerber et al., 2017).

With some improvements patient portals could allow patients more autonomy in their care and

be a good resource to access patient health information (PHI) anywhere, at any time.

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