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The Impact of Patient Portals on Release of Information Requests

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University of Tennessee Health Science Center

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The Impact of Patient Portals on Release of Information Requests

April Insco

University of Tennessee Health Science Center
IMPACT OF PATIENT PORTALS ON ROI REQUESTS

Abstract

Patient portals are no longer a thing of the past. The government has issued a mandate that all covered entities who are reimbursed under Medicare payments must implement patient portals as a part of the Meaningful Use initiative or suffer penalties. The objective of this study is to review the data to see if there is a decrease in the number of release of information (ROI) requests at facilities that have implemented patient portals. A survey was conducted to determine if there was any change in the number of ROI requests that facilities received prior to implementation of patient portal compared to ROI requests received after the implementation of patient portal. The response rate for the survey was very low, however, the information will still be valuable to the ROI professionals.
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The basic concept of release of information (ROI) is that a patient goes to a medical records department and requests copies of their medical records. It may be something as simple as a lab result for a test they just had or a copy of the entire chart from a previous hospital stay. The patient has to sign an authorization and then the release of information professional will make/print copies of the information the patient has requested. Prior to releasing the information, the release of information professional must ensure the validity of the authorization and the authority of the person requesting the information if the person requesting information is asking for information on a patient other than themselves.

Patient portals are electronic databases that allow patients to access their own information from any computer. Generally, while still at the facility, a facility representative will assist patients in setting up their patient portal access. Once a patient has been granted access to a facilities patient portal system, the patient could “then access clinical data, read and print it, or integrate it into any (electronic or paper-based) type of patient-owned record” (Ammenwerth, Schnell-Inderst, & Hoerbst, 2012). Patients can do this anywhere they have access to a computer with internet.

Background

Meaningful Use was derived from the “Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act of 2009” (U.S. Department of Health and Human Services, 2014). As a part of the HITECH Act, Meaningful Use was divided into three stages. There are different requirements within each
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stage that facilities must meet to prevent being penalized by the government for those Medicare dollars. Stage 2 is where the electronic health records (EHR) and the patient portals exist as a requirement. According the CMS.gov, facilities must have started demonstrating stage 2 for Meaningful Use in 2014.

Facilities will not want to lose those Medicare dollars that are attached to Meaningful Use Stage 2. Due to that fact, most facilities will be implementing patient portals if they have not done so already. With the implementation of patient portals, will that reduce the number of ROI requests? How will that affect the ROI professional? Will the ROI professional be out of a job or will their job responsibilities shift somewhere else? Since patients can readily access their information at home, will patients still go to the facility to get copies?

**Purpose of the Study**

Since the implementation of patient portals, has the number of ROI requests decreased? This study was designed to show if there was a decline in the number of requests, if the ROI requests were about the same, or if there was an increase in the number of requests. If there was a correlation between the patient portal and ROI requests, how will it affect the employees in the department? The patient portal was not developed to decrease ROI requests, it was initiated to improve quality of care and improve patient knowledge about their information among other things. But, did it have an effect on it anyway?

**Significance of the Study**

This study was important to the Health Information Management (HIM) profession because it provided important information on where the ROI professionals are going in the future. If the number of ROI requests were shown to decrease due to the implementation of the patient portal, the HIM professional would need to adjust their specialty and shift their priorities
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and responsibilities. It may be that the ROI professional needs to be knowledgeable about the patient portal as they may need to assist in that area in addition to ROI requests.

It may also be necessary for the ROI professional to go back to school to obtain more education on information technology (IT) and patient portals. The implementation of patient portals is in the early stages and completing this study was beneficial for the ROI professional to be able to better prepare for what lies ahead.

Research Questions

With the implementation of patient portal, have facilities that have patient portal seen a reduction in the number of ROI requests since the implementation. Have the number or ROI requests been about the same, or have they increased? If the number of ROI requests has decreased, has it been a significant decrease?

Definitions of Key Terms

- EHR – Electronic health record – “a digital version of a patient’s paper chart” (HealthIT.gov, 2014)

- Patient portal – an online website that allows patients to access their health information from any computer that has internet access. (HealthIT.gov, 2014)

- ROI – Release of Information – the process of a patient signing an authorization to allow a health care provider the ability to release the patient’s health information.
A review was conducted of the PubMed database to locate articles that would identify whether or not there was a correlation between the implementation of the patient portal with the number of requests for ROI at hospitals with patient portals. Keywords were identified and searched throughout the PubMed database.

Keywords used: Hospital, medical center, health care center, acute care facility, patient portal, patient gateway, computerized patient information, computerized patient record access, ROI, release of information, patient access to medical records, and access to health records.

The review was conducted utilizing all of the key terms above. The review yielded 1,023 journal articles throughout the PubMed database. The review was further limited to only the human species and journal articles from within the past five years. This limited review decreased the number of articles available within the University of Tennessee Health Science Center (UTHSC) database to 166. Of those 166, only nine were pertinent to this review. See Figure 1 for Literature review flow sheet.

According to a survey referenced in the Journal of Medical Internet Research, “A Markle Foundation survey of 1580 US adults in 2008 found that nearly half were interested in using an online patient portal and among those not interested, concern for privacy was the main deterrent to adoption” (Vodicka, E; Mejilla, R; Leveille, SG; Ralston, JD; Darer, JD; Delbanco, T; Walker, J; Elmore, JG;, 2013). Among the articles reviewed, consistently patients are concerned with the protection of their privacy when it comes to their health information.

Other deterrents from utilization of the patient portal is that the lack of knowledge about the patient portals’ usefulness. “Personal health records have great potential to improve care, but
this potential will go unrealized unless patients adopt PHRs and then use them with some frequency, making evaluation of both adoption and use important” (Yamin, CK; Emani, S; Williams, DH; Lipsitz, SR; Karson, AS; Wald, JS; Bates, DW; , 2011). Based on information obtained from the Journal of Medical Internet Research, most patients feel better informed when they are able to obtain information from the personal health records. Patients don’t feel as dependent on physicians because they are able to obtain the needed information on their own. (Woods, SS; Schwartz, E; Tuepker, A; Press, NA; Nazi, KM; Turvey, CL; Nichol, WP, 2013) Based on the articles reviewed, it appears that patient usage of the patient portal may improve with increased knowledge about the usefulness of the patient portal.

**Findings**

The information obtained includes valuable information about the patient portal, its’ usefulness and hindrances to using it. What was not included within the information is that if the implementation of patient portals had any effect on the number of ROI requests at hospitals. The expectation would be that the number of ROI requests at facilities with patient portals should decrease since patients would now be able to access their information on their own. This literature review did not provide any information as to whether the affect was an increase, decrease, or no change. There does not appear to be any research that explicitly answers that question and for that reason, further investigation needs to be completed.
Chapter 3

Methodology

Research Design

A survey questionnaire (Figure 2) was created in Survey Monkey to collect information to determine what impact, if any, there was on the release of information requests due to the implementation of the patient portal. The data collection tool contained the following:

1. Has a patient portal been implemented?
2. Date of implementation (Figure 3)
3. How current is the information populated into the patient portal?
4. Are patients able to access patient portal information from any computer with internet access?
5. Types of information that can be accessed through patient portal
6. Can patients print the information found in patient portal?
7. Is someone available to assist patients with setting up their patient portal access?
8. Job title of person that assists patients with patient portal access
9. Job requirements of person that assists patients with patient portal access, such as education or health related credentials
10. In the six months prior to patient portal implementation, what were the number of requests received in the HIM department by request type?
11. In the six months prior to patient portal implementation, what were the number of pages included in those requests?
12. In the six months after patient portal implementation, what were the number of requests received in the HIM department by request type?
13. In the six months after patient portal implementation, what were the number of pages
included in those requests?

Variables and Rationale

**Has a patient portal been implemented?** Survey choices were: (a) Yes, (b) No, (c) date
of implementation if “yes” was selected.

Rationale: Whether or not the facility had implemented a patient portal was critical to the
survey. If they facility had not implemented a patient portal, their survey results would not be
beneficial to the data collected in this research study.

**How current is the information populated into the patient portal?** Survey choices
were: (a) Instantly, (b) daily, (c) Weekly, (d) Other (please specify).

Rationale: How current the information available in patient portal could be a key factor
in the number of requests that patients make even if they have access to patient portal. If the
information if not available fairly quickly, patients may request the information from eh HIM
department instead of waiting on the information to become available to them.

**Are patients able to access patient portal information from any computer with
internet access?** Survey choices were: (a) Yes, (b) No.

Rationale: The thought was that if patients were only able to access the information at
the hospital in which the patient portal resided, then the patients might be more apt to just go to
the HIM department and request the information instead of having to obtain the information on
their own.

**Types of information that can be accessed through patient portal.** Survey choices
were: (a) Labs, (b) X-rays, (c) MARS (Medication administration records), (d) ER Record, (e)
Dictated reports (such as H&P, op report, etc.), (f) Physician notes, (g) Physician orders, (h) Nurses documentation, (I) Patient Instructions, (j) Other.

Rationale: If patients cannot see all types of information, that might affect whether or not they were able to see the information they needed or if the patient would have to request access to the information through the HIM department.

**Can patients print the information found in patient portal?** Survey choices were: (a) Labs, (b) X-rays, (c) MARS (Medication administration records), (d) ER Record, (e) Dictated reports (such as H&P, op report, etc.), (f) Physician notes, (g) Physician orders, (h) Nurses documentation, (I) Patient Instructions, (j) Other, (k) there was also a place for the respondent to reply that the patients did not have the option to print.

Rationale: If patients needed copies of their information, but were not able print the necessary reports through patient portal, they may need to request the information from the HIM department.

**Is someone available to assist patients with patient portal access?** Survey choices were: (a) Yes, (b) No

Rationale: The Literature review revealed that patients may not utilize the patient portal due to lack of knowledge about the portal’s usefulness.

**Job title of person that assists patients with patient portal access.** Survey choice was a blank for the respondent to fill in the job title.

**Job requirements of person that assists patients with patient portal access, such as education or health related credentials.** Survey choices were (a) High School Diploma, (b) College Graduate, (c) Previous job experience, (d) RHIA (Registered Health Information
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Administrator, (e) RHIT (Registered Health Information Technician), (f) Nothing required, (g) Other, please specify.

Rationale: A baseline for the job requirements to assist patients with patient portal access was being set with this question.

In the six months prior to patient portal implementation, what were the number of requests received in the HIM department by request type? Survey instructed respondent to enter the total number of requests, total disability requests, total insurance requests, total physician requests, total attorney requests, and total of other requests.

In the six months prior to patient portal implementation, what were the number of pages included in those requests? Survey instructed respondent to enter the total number of pages for all requests, total number of pages for disability requests, total number of pages for insurance requests, total number of pages for attorney requests, total number of pages for patient requests, and total number of pages for other types of requests.

In the six months after patient portal implementation, what were the number of requests received in the HIM department by request type? Survey instructed patient to enter the total number of requests, total disability requests, total insurance requests, total physician requests, total attorney requests, and total of other requests.

In the six months after patient portal implementation, what were the number of pages included in those requests? Survey instructed respondent to enter the total number of pages for all requests, total number of pages for disability requests, total number of pages for insurance requests, total number of pages for patient requests, and total number of pages for other requests.
Approval

For a review of reliability and validity, a draft of the survey was submitted to Dr. Rebecca Reynolds, Professor and Chair of the Health Informatics and Information Management Department at the University of Tennessee’s Health Science Center. Approval was given by Dr. Reynolds.

Data Collection Instrument

A data collection instrument was created using Survey Monkey that included the variables as mentioned above. This survey was administered through Survey Monkey utilizing a link that provided access to the survey tool.

Population and Sample Design

The survey was sent to the Health Information Management Director at 18 Tennessee hospitals in which the researcher thought would respond to the questions. This sample size was chosen to provide enough information to adequately answer the questions proposed, but to prevent duplication from participating hospitals.

Data Collection Procedures

An email was sent to the convenience sample with a link to the survey through Survey Monkey. The survey was first sent on May 10, 2015 via e-mail with a deadline of May 29, 2015. As of May 25, 2015 there had only been two responses, so a second reminder email was sent on May 25, 2015. On May 29, 2015 an additional third reminder was sent to the recipients with an extended deadline until June 17, 2015.
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Data Analysis

After the deadline, the results were analyzed through Survey Monkey’s analysis tool as well as exporting the information into Excel. It was determined that due to the low response rate, that an additional statistical software would not be necessary.
Response rate of population

Out of 18 surveys sent, only 4 responses were received, while an additional respondent opted out of the survey. The initial survey request yielded two respondents. The second request yielded one respondent. The third and final request yielded one additional respondent. The overall response rate was 22.2%.

Frequency Tables

Tables 1 through 10 summarize the counts and percentages of the responses to each of the survey questions.
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Table 1

Has a patient portal been implemented?

<table>
<thead>
<tr>
<th></th>
<th>No. of Respondents</th>
<th>Percent of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2

How current is the information populated into the patient portal?

<table>
<thead>
<tr>
<th></th>
<th>No of Respondents</th>
<th>Percent of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instantly</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Daily</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Weekly</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3

Are patient’s able to access patient portal information from any computer with internet access?

<table>
<thead>
<tr>
<th></th>
<th>No. of Respondents</th>
<th>Percent of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 4

Types of Information that can be accessed and printed through patient portal.

<table>
<thead>
<tr>
<th>Information Type</th>
<th>Access</th>
<th>Print</th>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs</td>
<td>100.00%</td>
<td>75.00%</td>
<td>4</td>
</tr>
<tr>
<td>X-rays</td>
<td>100.00%</td>
<td>75.00%</td>
<td>4</td>
</tr>
<tr>
<td>MARS (Medication Administration records)</td>
<td>100.00%</td>
<td>33.33%</td>
<td>2</td>
</tr>
<tr>
<td>Dictated reports (such as H&amp;P, OP report, etc.)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Physician notes</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Physician orders</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Nurses documentation</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Patient instructions</td>
<td>100.00%</td>
<td>100.00%</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>100.00%</td>
<td>100.00%</td>
<td>2</td>
</tr>
<tr>
<td>Comments</td>
<td>100.00%</td>
<td>100.00%</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5

Is someone available to assist patients with patient portal access?

<table>
<thead>
<tr>
<th></th>
<th>No. of Respondents</th>
<th>Percent of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 6

Job requirements of person that assists patient with patient portal access, such as education or health related credentials.

<table>
<thead>
<tr>
<th>No of respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Diploma</td>
<td>3</td>
</tr>
<tr>
<td>College Graduate</td>
<td>1</td>
</tr>
<tr>
<td>Previous job experience</td>
<td>0</td>
</tr>
<tr>
<td>RHIA (Registered Health Information Administrator)</td>
<td>0</td>
</tr>
<tr>
<td>RHIT (Registered Health Information Technician)</td>
<td>0</td>
</tr>
<tr>
<td>Nothing required</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
</tr>
</tbody>
</table>
### Table 7

In the six months prior to patient portal implementation, what were the number of requests received in the HIM department by request type?

<table>
<thead>
<tr>
<th></th>
<th>Respondent 1</th>
<th>Respondent 2</th>
<th>Respondent 3</th>
<th>Respondent 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Requests</td>
<td>*</td>
<td>19,670</td>
<td>**</td>
<td>120</td>
</tr>
<tr>
<td>Disability Requests</td>
<td>1,371</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Requests</td>
<td>324</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Requests</td>
<td>8,475</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attorney Requests</td>
<td>1,197</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Requests</td>
<td>872</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td></td>
<td>2,297</td>
<td></td>
</tr>
</tbody>
</table>

*Respondent one indicated that their requests are received through outside source

**Respondent 3 skipped this question.
### Table 8

In the six months prior to patient portal implementation, what were the number of pages included in those requests?

<table>
<thead>
<tr>
<th></th>
<th>Respondent 1</th>
<th>Respondent 2</th>
<th>Respondent 3</th>
<th>Respondent 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Requests</td>
<td>*</td>
<td>**</td>
<td>**</td>
<td>300</td>
</tr>
<tr>
<td>Disability Requests</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Requests</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Requests</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attorney Requests</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Requests</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

*Respondent one indicated that their requests are received through outside source  
** Respondent 2 and 3 skipped this question.

Note: The number of pages for physician requests was inadvertently left off the survey tool for the number of pages.
Table 9

In the six months after patient portal implementation, what were the number of requests received in the HIM department by request type?

<table>
<thead>
<tr>
<th>Request Type</th>
<th>Respondent 1</th>
<th>Respondent 2</th>
<th>Respondent 3</th>
<th>Respondent 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Requests</td>
<td>*</td>
<td>22,412</td>
<td>**</td>
<td>100</td>
</tr>
<tr>
<td>Disability Requests</td>
<td>1,885</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Requests</td>
<td>371</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Requests</td>
<td>3,629</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attorney Requests</td>
<td>1,210</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Requests</td>
<td>887</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1,181</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Respondent 1 indicated that they could not see any change in the number of requests.
**Respondent 3 skipped this question.
Table 10

In the six months after patient portal implementation, what were the number of pages included in those requests?

<table>
<thead>
<tr>
<th></th>
<th>Respondent 1</th>
<th>Respondent 2</th>
<th>Respondent 3</th>
<th>Respondent 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Requests</td>
<td>*</td>
<td>**</td>
<td>**</td>
<td>200</td>
</tr>
<tr>
<td>Disability Requests</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Requests</td>
<td></td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attorney Requests</td>
<td></td>
<td></td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Patient Requests</td>
<td></td>
<td></td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Respondent 1 indicated there was no change.
** Respondent 2 and 3 skipped this question.

Note: The number of pages for physician requests was inadvertently left off the survey tool for the number of pages.
Chapter 5

Analysis and Discussion

There were 18 surveys sent out through Survey Monkey. Of those 18, there were 4 respondents and one participant opted out of the survey; the response rate was twenty-two percent (22%). One-hundred percent (100%) of the respondents had implemented a patient portal (Table 1).

Fifty percent (50%) of the respondents indicated that the information is populated into the patient portal instantly, while the other fifty percent (50%) indicated their information populated into their patient portal daily (Table 2).

One-hundred percent (100%) of the respondents indicated that patients were able to access patient portal information from any computer with internet access (Table 3).

One-hundred percent (100%) of the respondents indicated that patients were able to access labs and x-rays through the patient portal, but only seventy-five percent (75%) indicated the patients could print those labs and x-rays. There were only two respondents for the availability to access and/or print MARS (medication administration records). Fifty percent (50%) indicated the ability to both access and print. There were only three respondents to the ability to access and/or print dictated reports (such as History and Physicals, Operative reports, etc.). One-hundred percent (100%) indicated the ability to access, while only thirty-three percent had the ability to print those reports. Neither of the respondents indicated the ability to access and/or print ER (emergency room) records, physician notes, physician orders, nurse’s documentation or patient instructions. There were two respondents that did indicate in the “other” category that patients have the ability to access and print those types of documents giving the response rate one-hundred percent (100%) for this portion of the question (Table 4).
IMPACT OF PATIENT PORTALS ON ROI REQUESTS

One-hundred percent (100%) of the respondents have someone available to assist patients with their patient portal access (Table 5).

Seventy-five percent (75%) of the respondents only required a high school diploma while the other 25% required a college graduate to assist patients with patient portal access (Table 6).

In the six months prior to patient portal implementation, the number of requests received in the HIM department by request type only received two numerical responses by request. Respondent one indicated that their requests were received through an outside source and respondent three skipped this question (Table 7).

In the six months prior to patient portal implementation, what were the number of pages in those requests only received numerical data from one respondent. Respondent one indicated that their requests were received through an outside source. Respondent two and three skipped this question (Table 8).

In the six months after patient portal implementation, what were the number of requests received in the HIM department by request type only receive two numerical responses by request. Respondent one indicated that they could not see any change in the number of ROI requests. Respondent three skipped this question (Table 9).

In the six months after patient portal implementation, what were the number of pages included in those requests only received numerical data from one respondent. Respondent one indicated there was no change. Respondent two and three skipped this question (Table 10).

A bar graph was created to show the comparison of ROI requests from before patient portal implementation with after patient portal implementation for Respondent 2 (Figure 5) and Respondent 4 (Figure 6). A bar graph was also created to reflect the comparison of the number of pages for each type of request before and after the implementation of the patient portal.
Limitations

There are important limitations to be considered for this study.

- The literature review revealed that no other studies have been conducted for this type of research at this time.
- A convenience sample was used for this study with only 18 participants. A larger sample size could have yielded more responses.
- Some of the respondents did not answer all questions. Due to the small response rate, this did not allow for statistical significance to be determined.
- Survey Monkey only allowed for ten questions on the survey tool.
Summary of findings

Each of the respondents has implemented a patient portal. The accessibility of information and printing capability varied by facility. All four respondents indicated that the information contained within their patient portal was accessible anywhere that a computer had access to the internet. The information was also available either instantly or daily. This allows for patients to be able to obtain their information fairly quickly. Patients only had the capability to print at three of the facilities, but only certain documents. The majority of the patient chart, including the ER record, physician notes, physician orders, nursing documentation and patient instructions are not yet available in the patient portal. Each individual number of requests does not add up to the total number of requests for respondent 2 therefore creating doubt that the numbers are accurate.

Conclusion

As stated earlier, the research questions for this study are:

- With the implementation of patient portal, have facilities that have patient portal seen a reduction in the number of ROI requests since the implementation?
- Have the number of ROI requests been about the same, or have they increased?
- If the number of ROI requests has decreased, has it been a significant decrease?
IMPACT OF PATIENT PORTALS ON ROI REQUESTS

The patient portal and ROI survey did not provide enough data to be able to accurately answer those questions. The responses were limited and provided minimal information about each type of requests both prior to and after implementation.

Implications of the Study

HIM professionals cannot get an accurate picture of the impact of the patient portal on the ROI professional from this study due to the lack of data. However, response from the participants did indicate that three out of four facilities only require a high school diploma to assist patients with obtaining access to the patient portal. This would allow the release of information professional to transition into the role of assisting patients with patient portal setup if the number of ROI requests did decrease in the future.

Recommendations

The survey conducted was very limited due to the convenience sampling and the poor response rate. The data did not provide enough information to accurately determine if there had been an increase, decrease or if number of requests was about the same. Implementation of patient portals is a fairly new concept and not all facilities have a patient portal implemented at this time. A subsequent survey with a larger sample size could provide additional information as to the effect of patient portals on ROI requests.
References


Vodicka, E; Mejilla, R; Leveille, SG; Ralston, JD; Darer, JD; Delbanco, T; Walker, J; Elmore, JG:. (2013). Online access to doctors' notes: patient concerns about privacy. *Journal of Medical Internet Research*, 15-24. doi:10.2196/jmir.2670

Woods, SS; Schwartz, E; Tuepker, A; Press, NA; Nazi, KM; Turvey, CL; Nichol, WP. (2013). Patient experiences with full electronic access to health records and clinical notes through the My HealtheVet Personal Health Record Pilot: qualitative study. *Journal of Medical Internet Research*, 15-18. doi:10.2196/jmir.2356

Figure 1:

Flow Chart of Articles used in Review Selection

Articles Identified through Pub Med Database
1,023

Number of articles with abstracts reviewed
166 in UTHSC Library

Records not reviewed due to not accessible via UTHSC Library
857

Full-Text articles reviewed for eligibility
19

Full-Text articles excluded from review
147 – Did not reference topic of review

Full-Text articles used for Literature review due to some reference of topic
9

Full-Text articles not included in final review due to not referencing topic
10
Figure 2:

Patient Portal and ROI Survey

Name: __________________________________________________________
Facility: _________________________________________________________

The above information is only used to prevent duplication of survey information.

**Question 1:**

Has your facility implemented a patient portal in which patients can access their own health information electronically? If yes, please provide the month, date and year of implementation in the space provided below.

_____Yes
_____No

Date of implementation

**Question 2:**

How current is the information populated into the patient portal?

_____Instantly
_____Daily
_____Weekly
_____Other, please specify

**Question 3:**

Can patients access the information on the portal from any computer with internet access?

_____Yes
_____No
Question 4:

What type(s) of information can the patient access and print through the patient portal? Please check all that apply.

- Labs
  - Access
  - Print
- X-rays
  - Access
  - Print
- MARS (medication administration records)
  - Access
  - Print
- ER Record
  - Access
  - Print
- Dictated reports (such as H&P, OP report, etc.)
  - Access
  - Print
- Physicians Notes
  - Access
  - Print
- Physician Orders
  - Access
  - Print
- Nurses documentation
  - Access
  - Print
- Patient Instructions
  - Access
  - Print
- Other
  - Access
  - Print

If patients DO NOT have the option to print, please indicate that here.

____________________________________________________________________

Question 5:

Is there someone available at your facility to assist patients with setting up their account access for the patient portal? If you select yes, please provide the persons job title in the space below.

- Yes
- No

Job Title

____________________________________________________________________
Question 6:
Are there any specific job requirements, such as education or health related credentials required for the person described in the previous question?

_____ High school diploma
_____ College graduate
_____ Previous job experience
_____ RHIA (Registered Health Information Administrator)
_____ RHIT (Registered Health Information Technician)
_____ Nothing required

Other (please specify)

Question 7:
In the six months PRIOR to implementation of your patient portal, how many of each of the following types of requests did your facility receive?

_____ Total requests
_____ Disability requests
_____ Insurance requests
_____ Physician requests
_____ Attorney requests
_____ Patient requests
_____ Other
Question 8:

In the six months PRIOR to implementation of your patient portal, how many total number of pages were included in those specific requests?

____ Total number of pages for all requests
____ Total number of pages for disability requests
____ Total number of pages for Insurance requests
____ Total number of pages for Attorney requests
____ Total number of pages for Patient requests
____ Total number of pages for other types of requests

Question 9:

In the six months AFTER implementation of your patient portal, how many of each of the following types of requests did your facility receive?

____ Total requests
____ Disability requests
____ Insurance requests
____ Physician requests
____ Attorney requests
____ Patient requests
____ Other
Question 10:

In the six months AFTER implementation of your patient portal, how many total number of pages were included in those specific requests?

_____Total number of pages for all requests

_____Total number of pages for disability requests

_____Total number of pages for Insurance requests

_____Total number of pages for Attorney requests

_____Total number of pages for patient requests

_____Total number of pages for other types of requests
Figure 3

<table>
<thead>
<tr>
<th>Respondent 1</th>
<th>Date of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 2</td>
<td>April 1, 2014</td>
</tr>
<tr>
<td>Respondent 3</td>
<td>April 2014</td>
</tr>
<tr>
<td>Respondent 4</td>
<td>January 2015</td>
</tr>
</tbody>
</table>

Figure 4

<table>
<thead>
<tr>
<th>Respondent 1</th>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 2</td>
<td>Patient Advocate</td>
</tr>
<tr>
<td>Respondent 3</td>
<td>Patient Portal Coordinator</td>
</tr>
<tr>
<td>Respondent 4</td>
<td>Online Wellness Coordinator</td>
</tr>
<tr>
<td>Respondent 4</td>
<td>Registration Clerk</td>
</tr>
</tbody>
</table>
Figure 5

Respondent 2 - Comparison: Before - After Patient Portal Implementation

![Chart showing comparison of request types before and after patient portal implementation for Respondent 2.]

Figure 6

Respondent 4 - Comparison: Before - After Patient Portal Implementation

![Chart showing comparison of request types before and after patient portal implementation for Respondent 4.]

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Of note, the physician request was inadvertently left out of the survey for number of pages and is therefore not an accurate reflection of the facility’s physician requests.