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Risk Management in Telemedicine Projects in Healthcare

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Risk Management in Telemedicine Projects in Healthcare

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GRAD 699 PGM

Abstract

Telemedicine could fundamentally change health care in the United States by delivering treatments using telecommunications platform. The primary purpose of the proposed study is to identify the various risks involved in Telemedicine projects in healthcare, find out their causes and explore the ways in which the risks can be mitigated. This approach has been a striking evolution in the current health care sector. Telemedicine is hugely successful in the operations of the organization. In spite of the huge success ratio, there are certain risks associated with Telemedicine which needs to be managed. The Literature review on Telemedicine was conducted in three core areas:

1. A review of the current trends and challenges in Telemedicine
2. A review of few of the risk mitigation techniques associated with Telemedicine
3. A review of the current practices of Telemedicine with adaptation to project risk management

This is viable because most of the issues regarding healthcare risks, including the most recent ones, have been documented by various researchers. Therefore, several relevant materials will be analyzed to come up with the appropriate solutions to the existing problems. According to some of the literature reviews, the interventions on the health care risks can be categorized into three: the detection, mitigation, and the action to reduce the risks. The preliminary studies indicate that the various healthcare risks result from medical errors, patient privacy breaches, diagnostic errors, and hazardous conditions, among others. Most of these risks involve the healthcare staff and the hospitals in general. It is therefore important for a program to be developed on how to mitigate the risks. Such programs have been initiated in the various hospitals across the world in the developing countries. What

has not been provided is the comprehensive information on the cause of the risks and how they can be mitigated appropriately.

Keywords: Risk Management, Telemedicine, Liability, Medical Negligence, Healthcare Facilities.

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Preface

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Introduction

Telemedicine is currently one of the most adored technologies in the healthcare sector. Telemedicine is a Service that allows healthcare professionals to evaluate, diagnose and treat patients at a distance using telecommunications technology. This approach has been a striking evolution in the current healthcare sector. The technology is concerned with the creation of proper mechanisms which are crucial in the establishment of quality medical processes. Currently, patients are busy and scheduling them for medical checkups has proved to be difficult. The quality of healthcare needed is high. In the current age, the rates of contracting diseases are constantly on the rise. The medical experts need to work within the schedules of the patients so that quality medication processes can be ensured. With this regard, the operations of the healthcare organizations need to include the requirements of the patients without compromising on the quality of medication. The introduction of telemedicine has been a success in the operations of the organizations. Even with these successes, there are certain risks that are connected to telemedicine which need to be managed. The management processes of these risks can only be established when the risks have been understood. The high-level risks in the field of Telemedicine as part of my thesis are categorized below:

- Risks associated with telemedicine
- Infrastructural development
- Risks linked to care continuity
- Reduced in-person Consultations
- Risks linked to reimbursement policies and rules
- The chances of reduced privacy, security and the confidentiality of the patients

- Technical hitches in using the technology

The American Telemedicine Association (2012) involves exchanging medical information from one site to another via electronic communication to enhance patient care. Telemedicine technology could bridge the gap between urban and rural areas with respect to health care accessibility barriers (Grawboski & O'Malley, 2014) and improve the business environment by reducing costs to providers. According to Broens and associates, both patient physical safety and patient information security are crucial to support the trust relationship between health care providers and patients and for acceptance of telemedicine implementations. This is one of the critical considerations in enabling telemedicine. Few research and journals recommend that security is not only the primary research of the telemedicine community, but this should be able to make few considerations if telemedicine is widely acceptable. Not reducing the risk issues in telemedicine service lowers the quality of care but may also have fatal consequences.

This paper will look at the possibilities to mitigate risks in the telemedicine service. As telemedicine is sustainable to transform and revolutionize the delivery of healthcare in the United States, the risks associated with it calls for a wide range of research. This thesis synthesizes the existing policy research on telemedicine barriers eradicating risks and making it possible in the rural and urban areas and aiming to provide affordable and available healthcare to numerous patients worldwide.

Problem Statement and Justification

Sophisticated technology, the current patient to doctor ratio have raised an alarming rate in the growing number of healthcare facilities to expand telemedicine services to patients in the healthcare facilities as well as in remote locations.

The problem associated with Telemedicine service is that it is constrained with infrastructure, care continuity, reimbursement and privacy issues. These issues raise an alarming risk to the wellbeing of the patient care. The various hospital acquired health risks are often experienced due to the clinically compromised state in the healthcare facilities. (Roberta, 2011) argues that the recipe for the risks include the high number of patients being admitted to the health care centers and many health transactions that take place throughout the stay of the patient in the hospital. Whenever investigations are done to unearth the cause of harmful incidents in the hospitals, human error and the designation of the health care practitioners are found to be the main causes. Given that the investigators may not want to expose some of the medical professionals for unknown reasons, hindsight bias plays forth and the problems continue to occur (Kavaler & Raymond, Risk Management in Health Care Institutions, 2012). This calls for the healthcare organizational leaders to come up and demand for in-depth analysis of the risks involved in the health care sector and proactively address their causes. This paper is meant to find out some of the risks experienced in the telemedicine facilities, examine their root causes, and suggest the way forward for the mitigation of the risks. This happens in full knowledge of the fact that various literature reviews have been developed on the same topic of study. This study will not oppose the findings that are already in existence but fill the gaps that are left by the studies.

Despite the various challenges, including project management methodologies helps to mitigate the risks in the field of telemedicine

1. Identifying and implement the accurate telemedicine practices, to stay ahead of any changes in the telemedicine regulations and standard of care
2. Ensuring the Telemedicine providers are licensed and credentialed
3. Developing patient selection facilities to make sure the service provider and the receiver understanding the regulatory terms to adore telemedicine.
4. Implementing standardized protocols helps to review and act on the standards of care

The patients in the health care facilities, the health care staff, and the whole facilities are predominant (Kavaler & Allen, Risk Management in Health Care Institutions: A Strategic Approach, 2003). Therefore, it is only necessary that the organizations should have the best strategies together with qualified health care risk managers to mitigate the risks. The health care risk mitigation involves the assessment, development, implementation, and monitoring of the plans put in place to minimize the exposure to the risks. The major health care risks, examine the recipes for the risks, identify the various ways in which the risks can be mitigated, and suggest the various individuals who should take the responsibilities. As such, the priorities of the home health care facilities which include patient care, finances, staff safety, and the organizational property will be risk-free.

Literature Review - Analysis of Related Work

Telemedicine is currently one of the most adored technologies in the healthcare sector. The technology is concerned with the creation of proper mechanisms which are crucial in the establishment of quality medical processes. Currently, patients are busy and scheduling them for medical checkups has proved to be difficult. The quality of healthcare needed is high. In the current age, the rates of contracting diseases are constantly in the rise. The medical experts need to work within the schedules of the patients so that quality medication processes can be ensured. With this regard, the operations of the healthcare organizations need to include the requirements of the patients without compromising on the quality of medication. The introduction of telemedicine has been a success in the operations of the organizations. Even with these successes, there are certain risks that are connected to telemedicine which need to be managed. The management processes of these risks can only be established when the risks have been understood.

Risks associated with telemedicine

Infrastructural development

According to Rufo, (2012), healthcare organizations are concerned with the development of telemedicine without taking into deeper considerations the required infrastructure for the development. Various studies have been previously directed towards the management of risks in the health sector. The risk management in healthcare involves the various practices and strategies meant to identify, analyze, evaluate, and mitigate the risks in healthcare facilities. As such, the top managers and indeed all the stakeholders in the healthcare sector are made to understand the ways in which they handle potential risks to improve the patient care. According to (Gary, 2000), risks in the healthcare sector involve the probability of damage, liability loss, or injury to the health of an individual. These risks are caused by the various vulnerabilities the person is exposed to.

Because the vices have not taken place, risks can be avoided through some specific pre-emptive actions. On his own account, (Charles, 2008) asserts that the interactions between patients with the various health systems may also pose health risks to them due to several reasons. The first of the reasons is that the health facilities might be using complex technology that they might not be fully conversant with. The use of the complex technology might also be having severe effects on the health of the patients. This will pose grave risks to the patients' health. Currently, there are several organizations that have embraced the use of technology in reaching millions of patients. The research conducted by Rho, young Choi & Lee (2014) established that nearly more than half of the healthcare organizations in the United States are concerned with the development of telemedicine to reach more patients. These healthcare organizations must acquire equipment that would be helpful in the technology. The restructuring of the information technology structure and getting the latest equipment to be used by the organizations come with high costs. The costs of operation are equally high, and this affects the normal chances of all the organizations to achieve them. Training is necessary in the building of the appropriate telemedicine programs. Currently, the healthcare organizations have not invested in training programs. The quality of telemedicine would be affected with the pace of the implementation process. When the training programs are effectively developed, the requirements of professionals would reduce. Most organizations would prefer working on the telemedicine that the actual contacts between the patients and the professionals would be reduced. The same system would prompt the healthcare professionals to focus more on the infrastructural developments which are linked to telemedicine technology. The partial infrastructural development would reduce the quality of healthcare provision on one sector as another sector would be stronger. The risks linked to the infrastructural developments have long

terms impacts especially on the future healthcare provision in the organizations (Hiratsuka et al., 2013).

Risks linked to care continuity

LeRouge, Garfield & Collins (2012) argues that the current development of telemedicine technology is linked to the risks lost continuities in healthcare provision. Currently, the telemedicine services relate to service providers that are allocated at random. Patients have different conditions and their information is with the healthcare organizations. When there are enquiries to be done, the patients will have to repeat themselves since the healthcare providers shall have changed. The constant changes of the healthcare provision reduce the chances of creating continuities of operation. There are certain data which the patients need to share. When there is continuity break, the quality of the healthcare provision would be lost. The research put forth by Rho, young Choi & Lee, (2014) confirmed that continuity in medical practice improves the quality of operations. When the operational continuity is ensured, the patients will focus on the conditions from which they suffer and through this means, it would be easy to come up with better solutions for the underlying problems. The healthcare provider that would be assisting a patient at a time may not have enough information that had been shared with the previous healthcare providers. From the continued changes made on the providers, the history of the patients would be lost. The patients would not be in position to maintain the desired continuity and coherence that would assist in improving the levels of healthcare quality to be desired. The future of the patients' health would be at risk. The constant shuffling of the providers would reduce the level of care given to the patients hence placing their health at risk.

Reduced in-person Consultations

Rufo, (2012) established that many doctors and other healthcare professionals are concerned with the risks of losing touch with the patients. telemedicine is good in increasing the chances of communication, but the quality of assessment would be reduced. Through the technology, the medical experts expect the patients to describe their feelings without having any means to read the emotions. The result of this consideration is that the medical professionals may not be able to establish the actual problems of the patients. For quality medical practice, doctors prefer to meet the patients for a one on one assessment. Without this relationship, the quality of healthcare provided to the patients would be reduced (Rufo, 2012). There is a high possibility of patient mismanagement in the process. The information received about the patient may not be the exact reality because of the limited understanding of the patients on the healthcare systems. The research conducted by Rufo, (2012) concluded that in the current age, many patients prefer to appreciate the personal touch between them and the healthcare experts. Through this touch, the patients would grow comfortable with the professionals and the through this relationship, the patients are more likely to share extra information about their health conditions. Telemedicine has increased the risks of creating a division between the patients and their doctors. The safety of the patient information cannot be secured and the chances of sharing more would be reduced. This risk would jeopardize the medication and diagnosis processes.

Risks linked to reimbursement policies and rules

In healthcare provision today, the state ensures that some of the healthcare organizations are reimbursed for their services done. The medical organizations share their records and the states ensure that all the bills are settled. While conducting a research on reimbursement and telemedicine, Hiratsuka et al., (2013) concluded that it is hard for healthcare organizations to come up with an effective means of ensuring reimbursement processes. The management of potential

risks in the health care setup is a very important practice aimed at promoting patient care, improve the safety of the staff, and protect the facility assets. Each organization do face peculiar challenges when it comes to the risk management (Kavaler & Allen, Risk Management in Health Care Institutions: A Strategic Approach, 2003). Therefore, there is no single strategy that can be a one-model-fits-all risk management remedy in the health care sector. However, the administrators in the health facilities do face common challenges that in the process of managing the risks exposed to them. Such challenges include the mandatory federal and state regulations, patient safety, the existing and future policy, potential medical errors, and the legislation that impact on the field of healthcare. The full and comprehensive identification, analysis, and mitigation of the potential health care risks begins with the preparation of a complete risk management plan (Roberta, 2011). This will have a clear roadmap on how to evaluate and measure the potential risks in terms of their potential negative effects. Based on this assessment, the various methods are developed, implemented, and monitored for effective risk management. The state and the relevant organizations may be willing to take care of the reimbursement processes but there is no conclusive means of creating an effective process of settling the necessary bills. There are no conclusive laws. The healthcare providers risk losing their resources in the process. In as much the healthcare systems have been improved by the development of this technology, the chances of maintaining the medication processes are challenged. Most healthcare organizations and service providers may not be in a position to take care of the processes for longer and as a result, the telemedicine would be of more harm than good. The technological development itself is still one of the biggest stumbling blocks in the operations of the healthcare providers. The future development of the technology is vague. The patients would have to cater for their services through this approach (Garingo et al., 2012).

The chances of reduced privacy, security and the confidentiality of the patients

According to LeRouge, Garfield & Collins (2012), telemedicine reduces the chances of ensuring the privacies of the patients. The researcher focused on the patients in trying to understand their perspectives on the application of the technology in the processes of healthcare. Telemedicine requires patients to keep in touch. The technology operates in such a way that it is the patients that are supposed to keep in touch with the healthcare organizations. The current technology does not show the identity of the patients on calls. Because of this, the healthcare providers receive the calls in random. The current healthcare organizations have ensured that the service providers are conversant with the medical processes so that any patient can find help with their conditions. The risk with this system is that the patients are not aware of the right method to use in approaching their conditions. Equally, the clients are not aware of whom to trust with the information and this would reduce their chances of opening up with their conditions. Some of the patients have very sensitive conditions. These conditions cannot be shared openly with all the professionals. The fact that the calls are received by random providers makes it hard for the patients to open up with their conditions. The patients do not feel free with their information. The providers could publicly share the information about the patients and it would be hard for the organizations to trace the source of information. If the healthcare organizations focus on one healthcare expert for specific patients, it would be hard for the information to be leaked. According to LeRouge, Garfield & Collins (2012), the healthcare organizations depend on the patients for their operations. If the data about the patients are not safe, the organizations would lose lot of clients. The aspect of confidentiality is very crucial for the establishment of proper medication processes. The security of the patients cannot be ensured this way. The risks of sharing the information could be fatal on both the patients and the future of the healthcare organizations.

Technical hitches in using the technology

Kowitlawakul, (2011) believes technology has been widely used in the world and the risks of technical issues have never been completely solved. There are a few issues which always come up when the organizations overly rely on the established technologies. Today, more than half of the healthcare organizations in the United States rely on the telemedicine for their operations today. Usually, there are certain hitches that affect the operations of the technology. For example, there are certain communication challenges that come in when the technology is used. The patients may not be able to express their conditions properly. The advantage that comes with face to face interactions could be easily lost. Some of the medical conditions require close assessment. The healthcare organizations are trying to ensure that quality medication processes are established even with the necessary programs. The research done by Kowitlawakul, (2011) further established that there are times when the systems fail, and the patients fail to get quality medical processes. Emergencies exist and through the emergencies, the patients expect prompt and quality medication processes. The technologies fail during the communication process and there is a high risk of losing the patients. The telemedicine technology can cause big problems when such problems occur.

According to LeRouge, Garfield & Collins (2012), there are millions of patients all over the world that are dependent on the technology for medication processes. These patients need medical attention when they develop certain challenges and because of the nature of the technology, there are chances that the providers may be busy with other patients. Because of the urgent needs of the patients, it becomes hard for the existing experts to attend to the needs of the people in need. Since it is necessary that the people get the medical attention when they are in need, the high patient population may make this aspect to be almost impossible. LeRouge, Garfield & Collins (2012) further established that the chances of ensuring quality in the healthcare provision

are slim to nil. The safety of the patients is not stable. It would be hard for the healthcare providers to take care of the needs of all the patients and as a result, the quality of healthcare provision could be reduced. The risks linked to communication problems have been experienced and, in most times, the patients are inconvenienced (Garingo et al., 2012).

The risks of reduced chances of physical credentialing

Zimmer-Galler, Kimura & Gupta, (2015) found out that physical credentialing is a crucial aspect in the healthcare provision processes. It is hard for the healthcare organizations to ensure that the providers are responding to the right claims. It is a code of ethic in the healthcare services that the professionals are only allowed to handle cases in the fields in which they have experience. Telemedicine technology works under the principle of randomization. Being healthcare experts, it becomes hard for these people to work on the cases in which they are experienced. The quality of healthcare provision could be jeopardized. The patients could be compromised and the risks of losing lives could be the result.

The Zimmer-Galler, Kimura & Gupta, (2015) concluded that most of the healthcare organizations cannot be able to tell if the providers are responding to the right conditions. The patients cannot verify the qualifications of the healthcare providers to handle their cases. Because of this difficulty, there is an assumption that the providers are professionals and can handle all the conditions. Zimmer-Galler, Kimura & Gupta, (2015) established that the organizations expect the professionals to consult before giving directions on the right courses of action. Because of this organization, the quality of operations is dependent on the planning of the healthcare providers. In many cases, the providers tend to get overwhelmed with work and this condition; it becomes hard for the establishment of proper planning. Some of the providers receive calls from several patients

and because of this; they find it hard to handle the pressure involved. As a result, some of the providers can easily give wrong directions without intending to do so.

A research done by Zimmer-Galler, Kimura & Gupta (2015) found out that most patients are not concerned with the credentials of the providers involved in their cases. The patients only work with the information given without understanding the context of application or whether the providers are qualified to handle their cases. The results of such actions are fatal to the patients. There are chances of misdiagnosis and the effects can cause worse conditions and at times, leading to death of the patients. It is hard to verify the people who attended to the patients and because of the high work volume, establishing the appropriate means of handling the patients has proved to be difficult. Verifying the physical credentials is salient in the establishment of quality medical processes. The patients are exposed to risks innocently.

Training of healthcare professionals

Zimmer-Galler, Kimura & Gupta, (2015) established that healthcare organizations spend very little time in the training of the healthcare professionals. Telemedicine is a technology that requires deep understanding and constant updates with quality training processes. Because of the need to maintain the standards of healthcare provision, organizations need to ensure that they work on the training processes of the providers so that there can be professionalism in handling healthcare issues. Currently, the number of trained professionals who can effectively use the technology is small. The number cannot sustain the high population of patients and for this reason; it becomes hard for the healthcare services to be provided with the required level of quality.

The implementation of the risk management plan varies from one health facility to another, but all of them puts the priority on the patient. As such, the plans must cover the potential risks exposed to the patients before addressing any other potential risks. The plans must also be documented and

made accessible to all professionals working with the patients. According to (Gary, 2000), many of the risks can be mitigated by the adequate training of the health care providers and the hospital staff. Further reduction of the risks can be ensured by giving encouragements for strong communication among the staff members, provision of the counselling services for those working with the patients, and the conduction of assessment tests (Charles, 2008). Other patient-specific risk management strategies include the following up on missing test results, not filling expired prescriptions, tracking missed appointments, prevention of falls and immobility, sufficient record retention, and the proper communication with the patients. (Roberta, 2011) asserts that the comprehensive risk management plans can also reduce readmissions in addition to the facilitation of patient safety.

According to the findings put forth by Tan & Lai (2012), healthcare organizations are not keen on checking the responses that the patients receive from the healthcare providers. The responses could be harmful to the patients but since there is no determined protocol of checking on the progress of the patients, it becomes hard for effective operational system to be established. As a result, the quality of services is affected as the training process is integral to the provision of quality healthcare processes.

Being that telemedicine reduces the interaction between the healthcare professionals and the patients; Kowitlawakul, Y. (2011) confirmed that it would be hard to realize the consequences making errors through the established technology. The consequences and the weight of the actions can only be established when there is a conclusive process of training. There are risks under which the patients are exposed. The healthcare organizations may understand the need to offer quality medical processes. When there are new employees involved, the culture of the healthcare organizations may not be of sense to them. The results of the actions are only realized when the

patients are beyond help and such processes reduce the trust between the healthcare organizations and the existing patients. Healthcare organizations need to remain in practice for long. The development of telemedicine technology is one of the ways of ensuring that there is proper healthcare system provision and the profitability of the operations is ensured. Losing patients will hurt the operations of these organizations hence higher likelihood of market loss.

In as much as most healthcare organizations are concerned with the quality of the services provided, Zailani, Gilani, Nikbin & Iranmanesh (2014) supports the opinion that most healthcare organizations are doing their quality checks for records and formality. The actual need to develop proper organizational quality has not been realized. This consequence is a risk of failing to train the professionals; especially the new employees on the right mechanisms of handling healthcare protocols. The sense of quality provision is lost. Quality improvement should be a continuous process so that the healthcare providers can be verified through the services which they provide. The organizations equally spend a lot of resources on the quality control because of poor training mechanisms.

Research Methodology

A Quantitative research method with research Questionnaire was conducted with a group of respondents. Questions are designed to validate the problem statement and the accumulation of Literature review. The survey was designed into 2 sets of Questionnaire: The survey was sent to the following two group sets:

1. Survey Questions to Health Care Providers
2. Survey Questions to Health Care Receivers

Survey Questions are targeted among the age group of 19-70. The Questions in the Survey included the following list of questions:

Questions related to Patient Experience:

1. Have you ever received Telemedicine service?
 - A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
2. Does Telemedicine services cater to your healthcare needs?
 - A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree

3. Can you access all the services of your healthcare program through Telemedicine service?

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

4. Can you access all the services of your healthcare program through Telemedicine service?

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

5. Do you think Telemedicine plays a vital role in emergency conditions?

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

6. Do you think Telemedicine plays a vital role in emergency conditions?

- A) Strongly agree
- B) Agree

C) Neither agree nor disagree

D) Disagree

E) Strongly disagree

7. Do you feel comfortable communicating with the physician using the tele medicine service?

A. Strongly agree

B. Agree

C. Neither agree nor disagree

D. Disagree

E. Strongly disagree

8. Do the physician allocate enough time on your appointment:

A) Strongly agree

B) Agree

C) Neither agree nor disagree

D) Disagree

E) Strongly disagree

9. Do you think the online sessions with the physician are as effective as in person sessions?

A. Strongly agree

B. Agree

C. Neither agree nor disagree

D. Disagree

E. Strongly disagree

10. Do you find any data breach issues using the telemedicine service?

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

11. Do you consider telemedicine is more likely prone to medical error?

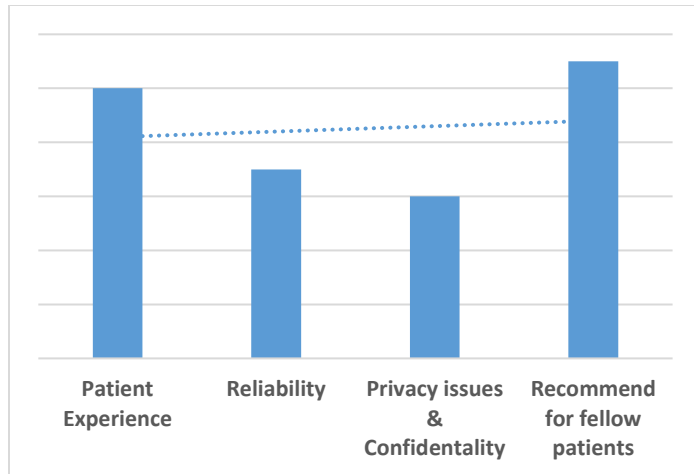
- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

Question 2: Based on your overall experience in telemedicine, would you recommend the service for fellow patients:

- A) YES
- B) NO

Question 3: Have you ever received Telemedicine service:

- C) YES
- D) NO



The second set of survey Questions was directed to the Health Care Givers including Physicians, Caseworkers and nurses which includes the following questions:

1. Does your practice engage in electronic communication with patients?

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

2. How many years of experience do you have in telemedicine service?

- A) 0-1
- B) 1-5
- C) 5-10
- D) 10-20

3. What kind of treatments do you often use Telemedicine service for?

- A) Acute Diseases

B) Nonacute Diseases

C) Follow-up

D) Treatment/Diagnosis

4. Are Credentialism and liability barriers to implement Telemedicine Service?

A) Strongly agree

B) Agree

C) Neither agree nor disagree

D) Disagree

E) Strongly disagree

5. Based on your experience in telemedicine service, which of the following risk mitigation techniques have you used, risk elements being Standard of care, Data Breaches, Inappropriate diagnosis, Fraud and abuse:

A) Risk Avoidance (Avoidance of Risks)

B) Risk Transfer (Transfer of Risks)

C) Risk Mitigation (Minimize the Risks)

D) Risk Acceptance (When A, B and C cannot be used)

6. Do you ask your patients to give out informed consent to receive the Telemedicine treatment?

A) Strongly agree

B) Agree

C) Neither agree nor disagree

D) Disagree

E) Strongly disagree

7. What patient population do you provide telemedicine service
 - A) Patients living in urban cities
 - B) Patients living in rural areas
 - C) Patients living in both urban and rural areas
 - D) Patients living neither in urban nor in rural areas

8. What kinds of risk do you find when providing Telemedicine service?
 - A) Privacy & Confidentiality
 - B) Continuity of Care
 - C) Data Breach
 - D) All of the above

9. Do you or your patients find any technical glitches while providing Telemedicine Service
 - A) Strongly agree
 - B) Agree
 - C) Neither agree nor disagree
 - D) Disagree
 - E) Strongly disagree

10. Do you think Telemedicine has a influence of perceived usefulness?
 - A) Strongly agree
 - B) Agree
 - C) Neither agree nor disagree
 - D) Disagree
 - E) Strongly disagree

Results from Survey:

Based on the survey, the survey respondents showed these factors are crucial for Telemedicine Service

1. Patient Experience
2. Reliability
3. Privacy issues and Confidentiality

All the respondents vouched to recommend Telemedicine for fellow patients



Risk Mitigation technique is chosen as the Risk management approach to identify risk tolerance and articulate organizations “appetite for risk” in telemedicine by the health care providers. Health care providers must look into crucial factor such as patient physical safety and patient information security, which are crucial to support the relationship between the care provider and the receiver which enhances continuity of care in the process and this is a long-term way of excellence approach in the acceptance of telemedicine implementations. The methods of patient severity and other patient related factors are not completely satisfactory from the survey, which likely remains a subject of disagreement, although by have strategic risk management practices telemedicine can be a rewarding experience to both the health care givers and the receivers

Discussions and Conclusions

1. Most patients irrespective of their risk tolerance level or risk appetite would prefer at least one direct face-face consultations before telemedicine.
2. Demand for telemedicine would continue to grow for non-acute cases as long as effective risk management practices are followed.
3. Risk Management practices would add value to the fields of Telemedicine and should be widely encouraged and put into practice

Risk management in health care home centers has received a lot of interest in the recent past, thanks to the decisions of courts that placed the liability of quality care on the hospital and the medical staff. This meant, that the hospital had to take the ultimate responsibility for any risks that a patient faced, and it formed the basis for risk management in Telemedicine services. Therefore, it is necessary for the healthcare stakeholders to learn on how to detect the risks, the mitigating factors, and the action to reduce the risks. In the current state of health care facilities, the process of risk management involves all the activities meant to reduce the effects of liability exposure to the various health risks. The various factors that can create health risks in health centers include the surgical or medical errors, hazardous conditions, patient privacy breaches, and the diagnostic errors. This is factual because most of the patients keenly take in the instructions given by the healthcare professionals. The arguments that health risks are caused outside the hospitals might not be accurate because the actual cases are negligible in number. It is therefore important for a program to be developed on how to mitigate the risks at the healthcare home centers. The focus has always been put on the offering superior quality health care to the patients, which is the integral purpose of hospital management. It is expected

that the provision of comprehensive knowledge about the risks will make it easy for their mitigation. More research is necessary to ensure that all the issues are identified and addressed. Healthcare organizations must look beyond short-term risks reimbursement and privacy issues to have a long-term effect on the service provided.

This thesis contributes information to the risk management practices in the field of telemedicine providing a greater insight to strengthen and rigor the field of telemedicine.

Recommendations

- The future studies should investigate the perception difference between patient experience and health care provider experience in Telemedicine. This helps to better understand the health care receiver
- A qualitative study is recommended to show the effect of Telemedicine in complex environments with rapidly changing technology
- From a risk management perspective, authentication protocols should be launched to handle the privacy and confidentiality issues of the patients.
- Integrating traditional risk management practices in telemedicine service ensures to create a better virtual healthcare facility
- Evaluating Quality, Access, Cost and Acceptance are the key factors in the field of Telemedicine for the continuity of care.

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