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INTRODUCTION

Effective communication between the Primary Care Provider and other doctors caring for the same veteran is vital for proper medical care concerning the Veterans. Dictionary.com defines Computer Mediated Communications (CMC) as Communication that takes place through, or is facilitated by, computers. Examples include Usenet and e-mail, but CMC also covers real-time chat tools like Internet Relay Chat, Skype and even video conferencing. According to Robson (2015), “Particular attention is given to the Universal Exchange Language for healthcare as requested by the US President's Council of Advisors on Science and Technology (PCAST) released in December 2010, especially in regard to disaggregation of the patient record on the Internet.” This was implanted to help providers use one record for one patient, thus allowing them to share information.

The communication issue here is to find out whether or not that the Primary Care Providers (PCP) and other Specialty Care Providers (SCP) are using Computer Mediated Communications in an effective manner and is the result helping or hindering the veteran patients. The research objectives are to determine the use of CMC and to find out the satisfaction of veterans who are in the Veterans Administration Medical Center (VAMC) system.

REVIEW OF LITERATURE

Computer Mediated Communication is defined as any human communication that occurs through the use of two or more electronic devices (Wikipedia). Computer Mediated Communication is where the trend of correspondence is headed in our world today and has become a part of everyday life and is prevalent in the health field. Through this research it is noted that there are a lot of recent studies of CMC regarding education in classroom, education via distance learning, marketing, social

psychology and interaction. There is little or no research on CMC between Primary Care Providers and Specialty Care Providers for the same patient. There is one current study now saying communication failures between physicians and nurses are one of the most common causes of adverse events for hospitalized patients, as well as a major root cause of all sentinel events (Manojlovich, M., Adler-Milstein, J., Harrod, M., Sales, A., Hofer, T. P., Saint, S., & Krein, S. L., 2015). This is a four-year study, which is on going at the time of this review.

COMPUTER MEDIATED COMMUNICATION

Computer Mediated Communication can be generally divided into two forms synchronous communication and asynchronous communication (Chin, 2016). Synchronous communication happens in real-time and asynchronous communication does not happen in real time. Examples of synchronous communication include phone call, video call, Face Time, Skype where the communicants are engaged with each other. In asynchronous communication the communicators are not engaged and respond at their convenience, examples include email, instant messaging, Facebook (social media), and text messaging. Most CMC are asynchronous. This poses a real concern in the medical field where effective communication is vital to the well being of the patient. There are several advantages and disadvantages of CMC in general. One advantage being that businesses do most of their communicating through the computer: Many businesses rely heavily on email for their communication medium so they can share documents and information quickly (Dee 2014). Another advantage being one of the biggest benefits of the virtual office is the ability to join together the best resources to accomplish a task irrespective of their location (Crum, 2012). The downside is losing basic communication skills: With the advancement of computers people are starting to only communicate through the computer and not face to face. Basic communication skills are essential for jobs and everyday life (Dee, 2014). A drawback, which should come as no surprise that one of the biggest risks faced amongst virtual teams is miscommunication (Crum 2012). While there exists good in technological advances, the human factor remains and there are

bound to be errors. CMC serves as a continual documentation of a patient's medical records as each PCP and SCP writes in their findings. This is to help facilitate the knowledge each doctor shares with the others. Since this CMC is asynchronous, the other physicians are held responsible to follow up with the new findings before an appointment with the common patient.

EFFECTIVE COMMUNICATION

Effective communication is, "A two way information sharing process which involves one party sending a message that is easily understood by the receiving party. Effective communication by business managers facilitates information sharing between company employees and can substantially contribute to its commercial success." (businessdictionary.com). In the Medical field it is important that the exchange of information from a group of physician, namely a Primary Care Provider and other Health Specialists, be accurate and effective between them. Effective communication between doctors, providers and others in the health field is critical to a patients well being. In order to succeed in establishing effective health interventions using communication, the intended beneficiaries should participate in setting objectives, selecting activities as well as monitoring of the effectiveness of the activities and participate in the planning and implementation of standards for communication (Munodawafa, 2008). The purpose of this research is to determine if the use Computer Mediated Communication is effective enough to give their patient the proper care. The question remains, "How effective is Computer Mediated Communication between a Veteran's Primary Care Provider and a Specialty Care Provider in Durham VAMC?"

METHOD

The purpose of this research is to understand how effective information is communicated between a veteran's Primary Care Physicians and Specialty Care Providers within the Veterans

Administration Medical Center (VAMC) located in Durham, North Carolina. This study used a quantitative design.

PARTICIPANTS

All participants were chosen from the Durham Veterans Administration Medical Center. From a list of the Primary Care Providers and Specialty Care Providers provided by the Durham VAMC, 25 PCP and 25 SCP names along with their email addresses were randomly chosen. A total of 34% of participants responded to the survey, 41% were PCP and 52% were SCP. 65% of the participants are male, 30% are female and No response 5%. The age ranges were divided in five sets consisting of 24-35 (6%), 36-45 (35%), 46-55 (24%), 56-65 (24%) and 65 or older (6%); No respond (6%).

DATA COLLECTION

The data was collected via the online survey program showing the number of respondents and the percentage results of the answers. Using a quantitative research design an online survey was created with nine questions regarding Computer Mediated Communications at the Durham VAMC. A total of 50 emails were sent with a link and a note stating the focus of the research and advised that their information and responses will be treated confidentially and anonymity. Follow up emails were sent on the 4th and 8th day after initial email. The survey ended on the 15th day in order to gather data.

ANALYSIS

The participants were asked a series of questions related to their experience with CMC. On a Likert-type scale (with 1 never and 5 always) participants were asked how often do you use CMC? On another Likert-type scale (with 1 completely unsatisfied and 5 completely satisfied) participants were asked how satisfied they were using CMC. On a closed ended question participants were asked if they believed that CMC improves or impedes effective communication. Considering the demographics and

the responses it appears that the median age of the participants to be 55-56. Keeping this in mind, it was surprising to find that there were 41% almost always and 30% always used CMC to communicate. Furthermore 59% were satisfied with CMC and 60% thought favorable towards CMC compared with face-to-face communication. With 65% giving CMC the seal of approval that and only 35% saying it hinders communication.

RESULTS

All participants see between 6 to 20 patients per day. 70% of the participants believe that CMC facilitates communication between PCP and SCP. Approximately 70% always or almost always use Computer Mediated Communication and are satisfied or completely satisfied. 60% are favorable towards the use of CMC as compared to face-to-face. 65% say that CMC improves communication between the providers.

DISCUSSION

With these results one can argue that Computer Mediated Communication between a veterans Primary Care Provider and their Specialty Care Providers are for the most part favorable towards the wellness of the veteran. That being said, it is the providers that are satisfied using CMC to give a veteran the best care while using one record per patient in order to facilitate dialogue between the different providers while sharing information.

LIMITATIONS

As a result of scheduling demands for the doctors, one-on-one interviews via phone or in person were not possible to coordinate as originally intended. Due to restrictions on some positions at the Durham VAMC, some of the participants that were contacted may not have responded, thus the sample size was compromised. The limitations of this research are directly related to the low number of

responses. In order to have better response from participants contacted, it would help if this study were done internally within the Durham VAMC. Given this opportunity, the study would be improved through observation in supplement to the survey. Additionally, the limit of this research was the participants only involved the providers. Future research should gather information from the veteran patients as well and have them give feedback from their experiences involved with the Primary Care Providers as well as the Specialty Care Providers.

References

- Computer-mediated communication. (2016, September 7). Retrieved October 12, 2016, from https://en.wikipedia.org/wiki/Computer-mediated_communication
- Computer mediated communication. (n.d.). The Free On-line Dictionary of Computing. Retrieved October 14, 2016 from Dictionary.com website
<http://www.dictionary.com/browse/computer-mediated-communication>
- Crum, J. (2012, November 30). Advantages and Disadvantages of Computer Mediated Communication. Retrieved October 12, 2016, from
<http://denvertechnology.blogspot.com/2012/11/advantages-and-disadvantages-of.html>
- Manojlovich, M., Adler-Milstein, J., Harrod, M., Sales, A., Hofer, T. P., Saint, S., & Krein, S. L. (2015, June 11). The Effect of Health Information Technology on Health Care Provider Communication: A Mixed-Method Protocol. Retrieved October 13, 2016, from
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4526935/>
- Chin, L. (2016, March 05). Advantages and Disadvantages of Computer Mediated Communication in the Context of UNIMAS Students and Staff. Retrieved October 13, 2016, from
<https://newtechnocomm.wordpress.com/2016/03/05/advantages-and-disadvantages-of-computer-mediated-communication-in-the-context-of-unimas-students-and-staff/>
- Sherblom, J. C. (2010, December). Can Computer-Mediated Communication (CMC) Really Facilitate Learning? Retrieved October 13, 2016, from
<https://www.natcom.org/CommCurrentsArticle.aspx?id=1001>
- Dee, K. (2015, April). Pros and Cons of Computer-Mediated Communication. Retrieved October 13, 2016, from <https://storify.com/kayladee1/computers-are-eliminating>
- Effective Communication. (n.d.). Retrieved October 14, 2016, from
<http://www.businessdictionary.com/definition/effective-communication.html>
- Munodawafa, D. (2008). Communication: Concepts, practice and challenges†. Retrieved November 25, 2016, from <http://her.oxfordjournals.org/content/23/3/369.full>
- Breen, G., & Matusitz, J. (2010). An Evolutionary Examination of Telemedicine: A Health and Computer-Mediated Communication Perspective. *Social Work in Public Health*, 25(1), 59-71. doi:10.1080/19371910902911206

APPENDIX

1. I am a _____ at Durham VAMC

☐ Primary Care Provider

☐ Specialty Care Provider

2. Do you believe that using Computer Mediated Communication facilitates communication between Primary Care Providers and Specialty Care Providers?

☐ Yes

☐ No

3. 3) How often to you use Computer Mediated Communication?

☐ Never ☐ Almost Never ☐ Sometimes ☐ Almost Always ☐ Always

4. How satisfied are you with Computer Mediated Communication?

☐ Completely Unsatisfied ☐ Unsatisfied ☐ Neutral ☐ Satisfied ☐ Completely Satisfied

5. On a scale of 1-5 where 1 is worse and 5 is better: Compared to Face-to-Face Communication how would you rate Computer Mediated Communication?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

6. Do you believe that Computer Mediated Communication improves or impedes communication effectiveness?

☐ Improves

☐ Impedes

7. How many patients do you see on a daily basis?

☐ 0-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25

8. Are you male or female?

☐ Male

☐ Female

☐ Prefer not to answer

9. What is your age?

☐ 24-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66 or older ☐ prefer not to answer