Education Technology
Assignment # 2: Exploring your area
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Introduction

This has been a busy week, full of exploration on different websites, reading research papers abstracts, exploring websites related to patient safety and reading the material in the EdTech library. I also received and perused a good reference document from my mentor TA.

All the effort this week has help me to narrow the research area in which I would like to focus.

General Current Problems

There exists a general concern in patient safety. The Canadian Patient Safety Institute (CPSI) had identified four priority areas on patient safety: medication safety, surgical care safety, infection prevention and control, and home care safety [1].

Patient safety is commonly measured in the number of adverse events (AE) resulting in harm to the patient.

Most of the current proposed solutions to reduce AE are focus on training the healthcare professionals and staffs that interact with the patients and, to provide tools to reduce hospital AE (i.e.: medication reconciliation software). Only a limited number of proposed solutions focus on training the patient to take active part in reducing AE after been discharged.

Please note that, commonly, a new admission of the same patient before 30 days of been discharged is considered a readmission if it is related to the previous admission.

Focus Area

The patient safety area is wide. I'll focus my research in the utilization of Education Technology to reduce hospital readmission rates due to AE associated with medication interaction in elder patients.

Existing Tools, Theories and Communities

As stated before, most of the tools used to reduce AE consist in training the healthcare staff on the most common causes of AV, giving written action plan to the patient at the moment of discharge and making reinforcement call a few days after the discharge.

Most of the studies in this area use quantitative methods to identify the occurrence rate of AE and it cost. Etchells and al [2] estimate a cost of CAN$4,028 per AE. Murphy and al [3] conclude that medication reconciliation reduce medication errors in academic medical centers and propose handling patient a medication reconciliation report at the moment of discharge. Jack et al[4] conducted an experiment were, at the moment of discharge, a nurse performed patient education and handled personalized patient discharge plan including medication reconciliation; then, 2 to 4 days after discharge, a

pharmacist called the patient to reinforce the discharge plan and review medication; they experiment resulted in decrease of readmissions.

Most of the theories coincide that the patient must be involved in the action plan to reduce AE; but not much has been done to reinforce that theory using Education Technology.

The communities most involved on this area of research are medical and nursing schools and hospital searchers.

Mayor players in this area

So far I have identified the following mayor players in the area of Education on Patient Safety.

Agency for Healthcare Research and Quality
Canadian Patient Safety Institute (CPSI)
Ontario Hospital Association (OHA)

I expect to identify more specific players as I will advance in my research.

Related areas

How Education Technology is used to efficiently train elder people?

What are the best electronic devices to efficiently (and remotely) train elder people?

References

[1] http://www.patientsafetyinstitute.ca/en/Pages/default.aspx

[2] Etchells et al, 2012, Comparative economic analyses of patient safety improvement strategies in acute care: a systematic review. Retrieved from: http://qualitysafety.bmj.com/content/early/2012/04/20/bmjqs-2011-000585

[3] Murphy and al, 2009, Medication reconciliation at an academic medical center: implementation of a comprehensive program from admission to discharge. Retrieved from: http://qualitysafety.bmj.com/content/early/2012/04/20/bmjqs-2011-000585

[4] Jack et al, 2009, A reengineered hospital discharge program to decrease rehospitalisation: a randomized trial. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19189907

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3940674/

http://hitconsultant.net/2013/03/31/5-ways-healthcare-providers-can-reduce-costly-hospital-readmissions/

http://www.patientsafetyinstitute.ca/en/Pages/default.aspx