



This is a graded discussion: 4 points possible

Module 13 - Wednesday Discussion - March/April/May Discussion Group 2

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1. What are the potentials and challenges (legal, political, social, and economic) with the current push for the implementation of e-health?
2. What is to-date the evidence of Health Information Technology (HIT) (legal, political, social, and economic) on the health care delivery?
3. What business strategies can be used to manage the challenges and improve the positive impact of HIT?

Reminder: Formal writing; use APA style; cite your sources.

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Student #1



Wednesday Discussion

e-Health medical applications are being implemented by many organizations across the globe. These apps can help increase a patient's knowledge about a disease, provide a support mechanism, enhance communication between patient and provider, and improve overall coordination of care across multiple medical disciplines (Iribarren, Cato, Falzon, & Stone,

2017). The current push for rapid implementation of these products can produce benefits and challenges in legal, political, social, and economic environments.

For example, when electronic applications are created, compliancy with HIPAA will need to be ensured. Also, the providers who prescribe apps and developers who make them will need to watch out for potential liabilities if bad outcomes occur (Yang & Silverman, 2014). Currently, apps may struggle with legal aspects surrounding what kind of information is blocked from being used. The requirements for patient consent may continue to be a legal barrier during the progression of HIE implementation (Mello, Alder-Milstein, Ding, & Savage, 2018).

On the political forefront, privacy and security continues to be a large challenge for the development of e-health applications. Additionally, the unclear cost-effectiveness of mobile apps is a barrier in the limited investment of mHealth policy (Iribarren, Cato, Falzon, & Stone, 2017). An example of current policies surrounding the implementing of health exchanges include the following: utilizing stakeholders for identification of errors, maintain a catalog of current policies and procedures related to HIE, conduct reviews of workflows that can interfere with current policies, and ensure and manage patients' ability to opt in or out of decisions (American Health Information Management Association, 2015).

Social implications of e-health include how people are affected by the application and whether they help populations gain greater access to care. Are patients able to pay for the services? Do they feel educated from the products? Are healthcare providers feeling resentment towards using a new system of care with glitches and uncertainty? These are important questions to ask (Fölster, 2017). Current evidence suggests that a human-to-information relationship correlates positively with great self-management of health (Lin & Chang, 2018). Therefore, e-health be one of the best ways to help people with chronic diseases, mental health conditions, or obesity.

The economics of e-health are concerned with how cost-effective the applications are. The potentials of e-health include reducing transportation costs, increasing efficiency of delivering care, and decreasing the amount of time patients need to visit or stay in a hospital. Recent evidence shows that text messaging interventions are one of the most popular ways to exchange information because they can be utilized at the user's convenience, are inexpensive, and are compatible with all mobile devices. For example, text reminders can be sent to patients for appointments, which has encouraging economic results (Iribarren, Cato, Falzon, & Stone, 2017).

There are many business strategies that can be used to both challenge and improve the utilization of health information technology. First, it is important to ensure quality of the information exchanged. Health Quality Measure Format (HQMT), developed by HL7, is a standards-based way to assess quality measures, such as certain processes or outcomes performed, within healthcare entities (eCQI Resource Center, 2019b). Electronic Clinical Quality Measures (eCQMs) electronically extract data from EHRs to measure the quality of

care provided to patients and is used by CMS for quality reporting (eCQI Resource Center, 2019a). The use of HQMT and eCQMs ensure that data being exchanged is accurate and reliable. Additional business strategies include investing in applications that are ranked high in social value and utilizing social impact bonds to gain private investors who are willing to take a risk to make a potential difference in electronic healthcare delivery (Fölster, 2017).

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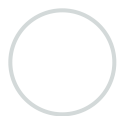
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Student #2



Wednesday Discussion

The major barrier to adoption of the e-health system, as identified by some studies, was a misalignment of cost and benefits or financial reimbursement. Other barriers that have been identified are technical issues, system interoperability, concerns about privacy and confidentiality, lack of health information data standards, lack of a well-trained clinician informatics workforce to lead the process, the number of vendors in the marketplace, and the transience of vendors (Kazmierczak.,2017). Previous research on the risks of the EHRs systems identified privacy and security as major concerns. Other risks identified were financial risk software systems becoming obsolete, software vendors going out of business, computer crashes, data capture anomalies, programming errors, automated process issues, and populating invalid information in the decision support system module of the EHRs systems. Some of the main benefits of the e-health systems that have been identified include reducing medical errors, improving quality of care, conserving physician time, sharing patient information among healthcare practitioners, and workflow efficiency (Iribarren et al.,2017). With the advent of information technology in health care, moving toward a new paradigm such as e-health has also begun. In this paradigm, Information is immediately accessible and electronic health record can also provide medical alerts and reminders. At first, it may be so expensive but it will save costs in the long term

US investment in health information technology (IT) has risen substantially since 2008 while the focus on the national deficit and rising healthcare costs has sharpened. Information management is fundamental to health care delivery. Given the fragmented nature of health care, the large volume of transactions in the system, the need to integrate new scientific evidence into practice, and other complex information management activities, the limitations of paper-based information management are intuitively apparent (Folster et al.,2017). Health IT does not represent an end in and of itself, but it can act as a tool for improving patient-centered healthcare access and patient engagement. Health IT issue reflects the range of these forces, emphasizes the practical importance of context and setting, and points to the breadth of exciting health IT opportunities through rich real-world evidence (Aggarwal et al.,2018).

Many business strategies can be used to improve the positive impact of health information technology. Health Quality Measure Format (HQMT) which is developed by HL7 is a kind of standards-based method to assess quality measures within healthcare entities (HQMF - Health Quality Measure Format.,2019). Electronic Clinical Quality Measures electronically extract data from EHRs to measure the quality of care provided to patients and is used by CMS for quality reporting. This use of HQMT and eCQMs ensure that data being exchanged is accurate and reliable. To say it is very important to ensure quality of the information exchanged (eCQI Resource Center.,2019).

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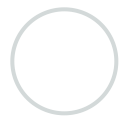
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Student #3



1. What are the potentials and challenges (legal, political, social, and economic) with the current push for the implementation of e-health?

The largest challenge legally with e-health is the protection of ePHI through security, privacy, and confidentiality (U.S., 2020). Politically it is well known that it takes time to pass policies and laws. This time plays a role in the adoption of e-health. Socially there is a potential to improve adoption by use of viral applications. Using the four criteria of zero cost to users, provider can recoup costs, demand can be handled, and not duplicate development effort can increase use of e-health (Fölster, 2017). Economic results can be difficult to evaluate at times because studies may “not report all recommended economic outcome items and [lack] in comprehensive analysis (Iribarren, Cato, Falzon, & Stone, 2017).

2. What is to-date the evidence of Health Information Technology (HIT) (legal, political, social, and economic) on the health care delivery?

A to-date example of legal HIT health care delivery is the passing of HITECH in 2009. This act protects health information used by all kinds of businesses (U.S., 2020). The presence of the European Union's (EU) General Data Protection Regulation (GDPR) has political impacts on

other countries security uses in HIT. GDPR has a set of definitions, regulations, and rules that other countries must abide by if they want to do trade with the EU (European, 2019). One current example of viral HIT is Babylon's creation of virtual assistants that perform screening for users (Fölster, 2017). Lastly, economic evidence that mHealth interventions are cost saving shows that "[i]n 29 studies (74.3%), researchers reported that mHealth intervention was cost effective, economically beneficial, or cost saving at base case" (Iribarren, Cato, Falzon, & Stone, 2017). This shows a positive correlation with e-health and the economic benefits.

3. What business strategies can be used to manage the challenges and improve the positive impact of HIT?

Business strategies such as electronic Clinical Quality Measures (eCQM) and Health Quality Measure Format (HQMF) can be used to manage challenges and improve positive impact of HIT. eCQM use "data electronically extracted from electronic health records...to measure the quality of health care provided". (eCQI, 2019a). These tools can prove that HIT have impacted care. HQMF is a standardized format created by HL7 that defines the data needed to calculate a quality measure (eCQI 2019b). Having these standards in place will improve validity of data gathered and used for calculations to determine impact of HIT.

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Student #4

1. What are the potentials and challenges (legal, political, social, and economic) with the current push for the implementation of e-health?
 - The use of cell phones has expanded significantly through the years, <1 billion users in 2000 worldwide to >7 billion in 2015 showing its social potential for widespread use (Iribarren et al., 2017, p. 2).
 - Mobile health (mHealth) can provide the opportunity of remote health service to underserved areas, improve communication between patients & healthcare providers pointing to its expected promising economic potential (Labrique et al., 2013, p. 160). Viral mHealth points to the widespread utilization of certain apps but not others, according to Fölster (2017), there were four main factors to promote it: no cost to the users, a positive financial impact to healthcare providers, can accommodate the increased demand, and not replicating other apps (Fölster, 2017, p. 20).
 - The ability to capture various quality measures can enhance the financial revenue by meeting the meaningful use criteria (eCQI, 2020a; eCQI, 2020b).
 - Challenges entail the risk of privacy breaches which can lead to legal issues when sensitive data were disclosed and lawsuits against the affected organization happened (Bhatti & Martin, 2015, p. 683). This can lead to significant financial and social consequences due to the compensation to be paid in these instances.

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1. What is to-date the evidence of Health Information Technology (HIT) (legal, political, social, and economic) on the health care delivery?
 - In a review article for mHealth involving 39 articles, there was a positive economic impact, more effective in the middle to lower-income countries (Iribarren et al., 2017, p. 9). This is pointing to its positive social, political, and economic impact where it is needed more, and its effects can go a further way.
2. What business strategies can be used to manage the challenges and improve the positive impact of HIT?
 - Business strategies are important to ensure the best utilization of healthcare information technology and addressing the obstacles and challenges. A proposed business framework by Acheampong & Vimarlund (2015) included having “unique benefits to create value, activity system to deliver value, and financial structure to capture value” (Acheampong & Vimarlund, 2015, p. 6).

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What is to-date the evidence of Health Information Technology (HIT) (legal, political, social and economic) on health care delivery?

Health information technology (HIT) is the field which is now frequently observed, practised and accepted by many health care sectors. HIT enables the professionals to value, take advantage or take action via the electrical operations for various purposes such as storage of data, scrutinizing the information, sharing and transferring the health information (Office for Civil Rights, 2019).

The various arrangements or systems that are adopted in health information technology are as follows

- Personal health care records
- Electronic health care records
- Electronic prescribing. HIT also ensure privacy and security.

In today's era of better quality and accuracy, the need of transaction of data or information is much required. These demands can be fulfilled by the use of electronic health records which can be shared with specialists within no time for their piece of guidance within their network or outside their network.

It has been seen that patients find themselves to be more connected , responsible and committed when their personal data such as vitals, their previous health conditions, medications being used, their previous visits etc.by using personal health records or healthcare portals or by various healthcare apps in their smart phones. (Office for Civil Rights, 2019).

The exertion and operation of electronic clinical quality measures (eCQMs) enables analyzing and scrutinizing the data from EHRs to evaluate the kind and amount of attention, responsibility and care given b the health care professionals to their patients. This initiative helps hospitals and clinics to look into their pit holes to improve quality measures. It also helps in visualizing newer opportunities and improved patient outcomes.

The perception and implementation of the quality measures are better given by Health Quality Measure Format (HQFM) which are considered to be more consistent and reliable.

What business strategies can be used to manage the challenges and improve the positive

impact of HIT?

Health information technology could be the center of health care system, if various strategies are planned and executed in an effective way for better quality and outcomes. The different strategies that can be undertaken to improve positive impact could be better access to health care, better knowledgeable healthcare consumers and better access to data and security.

BETTER ACCESS TO QUALITY HEALTH CARE- with the growing and alluring demands of effective and quality health care, investing in technology has become inevitable. The newer and efficient technology would provide us with convenient method of data of the patient which may be required for the patient, or the hospitals or the health care provider in order to render better services. This investment in efficient technology provides instantaneous information required either physical or fundamental or both. It also aids in better shipment ways. (Sena, 2019)

BETTER KNOWLEDGED HEALTHCARE CONSUMERS- it is very crucial to understand and determine the art of delivering information or data to the consumers in order to provide them with extended quality of data and performing briefed decisions. There is even burgeoning appeal for clear, transparent and crystalline procedures for rendering services and planning pricing (Sena. 2019)

BETTER ACCESS TO DATA- understanding and determining of the data or information is required and necessary either for the patient or the health care provider. Unfolding of the data helps us to estimate, evaluate and analyze the quality, cost and experience (Sena. 2019). This task can only be performed when good amount of investment is done in ensuring that high end and newer technologies are used. This data-based decisions helps the organization to walk towards a prosperous pathway.

SECURITY- last but not the least it is very important to have authorized privacy and security. With increasing technology, the threats for fiddling with the systems or hackers have also increased. Thus, there is a requirement for repeated and endless monitoring for threats, risks and security. This continuous evaluation helps to analyze the main cause of the issue and also aids us in providing a solution to it.

What are the potentials and challenges (legal, political, social, and economic) with the current push for the implementation of e-health?

Challenges

Political:

Healthcare policies in their respective states are often decided by their State governments and therefore, have huge influence on the adoption and implementation of eHealth

solutions. For example, Quill Pen laws which requires that providers maintain a paper

based patient records which discourages eHealth progress. Multi-State Licensing Requirements provide a barrier to the implementation of telemedicine solutions and systems (Barnes, G. 2000)

Economic:

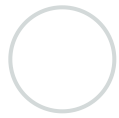
Competing industry incentives by independent providers and payers could also be a barrier (Barnes, G. 2000)

Social and Legal:

Protection of patient's privacy and confidentiality is a very important social issue to be taken note of in eHealth. Patient's concerns that their confidentiality and privacy is negatively affected by eHealth solutions must be addressed by the combined efforts of both the healthcare and IT companies when developing health IT systems. In a situation where the confidentiality of patients is affected, legal systems and procedures should be in place. (Barnes, G. 2000)

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My post



Wednesday Discussion

E-health is the integration of information and communication technologies (ICT) to deliver healthcare through enhanced internet and technology. There are legal, political, social, and economic potentials and challenges with the current push for the implementation of e-health. Possibilities of using e-health are: there is improved quality of patient care and safety. The use of e-health has led to improved adherence to clinical guidelines, therefore, leading to better care. There is also an increased ability to carry out research and satisfaction of the health workers in their duties (Menachemi & Collum, 2011).

Despite the potentials with the e-health, challenges do exist. First, the maintenance cost of e-health is high. This is because the software needs to be upgraded regularly. The price is also high due to maintenance, implementation, and adoption. Secondly, the use of e-health leads to disruption of the medical providers leading to reduced productivity and, therefore, losses. Another challenge with the use of e-health is that patient privacy can be violated due to the exchange of information online. The use of e-health can also lead to people being too over independent of technology, and it can also lead to increased medical errors (Menachemi & Collum, 2011).

To date, evidence of health information technology (HIT) on health care delivery is that it is leading to improved healthcare. First, patient records and management of data use IT. The other evidence is in the use of nursing informatics to provide care. This has led to so many lives being saved. The use of HIT has also led to improved relationships between the healthcare providers and the patients. Various business strategies can be used to manage the challenges and improve the positive impact of HIT. The first strategy involves developing social and organizational skills. These will help in curbing the problems that result in the use of technology while delivering healthcare to the patients. Secondly, improving communication in the organization will lead to improved care since services will be provided as required (Alsharif et al., 2018). Thirdly, to curb these challenges, the governance of the healthcare system should be improved so that healthcare workers can do as they are required.

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