A Discussion on Information Technology in Healthcare

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Institution
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**Strategic and Business Goals Achieved by the VHA**

The VHA has focused majorly on having fewer and fewer cases of hospital admissions by veterans. The institution is keen on being able to reduce the number of cases that occur as a result of patients being readmitted to the hospital due to persistent problems that affect them. This has been a major success for the VHA, as it entails providing the right services to these individuals, so as to ensure that the health of the people is well maintained. Going by the numbers, the year 2009 had a major improvement in the numbers, meaning many people were able to have fewer cases of readmission while under the VHA. At an average rate of about 12%, the VHA was able to limit this number to a minimum which means that the policies that had been introduced were working (Longman, 2012). The new changes could be attributed to the new technological developments that were adopted for the patients to ensure that they were able to get the most out of the system that VHA had in place. At these rates, the services in place were much better, therefore, the veterans were able to lead healthier lives in the long run (Longman, 2012).

The institution was able to move further afield and begin offering care to individuals in their own homes. This move was an important shift in the way things were done in the company, as it ensures better service delivery for the veterans who could now have the help at the comfort of their home. The VHA determined that this way is the most appropriate and relevant, considering the patients that they had to deal with. Through this policy, the institution successfully introduced self-management which enabled the patients to have much better control of their situation. With the home systems in place, various issues could now be addressed in time (United States, 2014). As such, symptoms and problems could now be quickly sorted in time and disease management was much better. Furthermore, negative behaviours and environments that could affect the patients were effectively dealt with to
maintain the wellbeing of the veterans. The overall outcome that was achieved was a relatively less dependence on the medical resources of the VHA by its members. This is possible through the home messaging technology that was designed and put in place for the homes of these individuals.

**Technology-Enabled Goals**

The VHA has benefitted a lot from the application of various technologies to many of its programs. One goal that they have been able to achieve is the implementation of the electronic patient record which serves an important role to the patients. The technology enabled the tool that has introduced the ability to have real-time decisions made on the spot which are very important, especially, since the institution is dealing with veterans. The tools have enabled the firm to be able to offer better support to patients, especially, those with pertinent medical problems. Moreover, the application with the home healthcare system means that decisions are made correctly despite the promptness of the situation (Fong B., Fong A., & Li, 2011).

The technology also has enabled the VHA to be able to serve more and more patients with the resources at hand. The workload has been lightened by the introduction of the home care and the electronic health information systems which avails patient details whenever required in a prompt manner. The reliability and user friendly system means that patients are comfortable with the services at hand. The numbers of technologies that have been used have enabled the business to have relevant technologies that are suitable for the patients with regards to their demands and needs depending on their medical issues.

**Models of Care for Veterans**

The institution of VH has made strides when it comes to making better models of care for its clients. The integration of several models of care means that veterans are now capable of accessing the medical help from different avenues and not just limited to a few service
providers. The models are such that the information can easily be shared between the relevant parties to ensure that the veterans can use other services whenever the need arises. The model that has been applied is one that maintains the priority of the patient and enables them to be treated effectively. At the top, the patient is able to gain access to what they need from the correct avenues without having to resort to long procedural processes stemming from a disorganised system (United States Government Accountability Office, 2011).

The coordination of the models of care and the health service providers improves the care management that they are able to access. With the home model, the patient’s needs are dealt with and VHA understands that this has to be upheld. With the models being rolled out on a national scale, the home telehealth system is synchronised to enable the caregivers have access to the necessary information as required for the patients. The VHA knows that since veterans have different access points, it may become complicated when handling the information for each and every one of them. However, with the implications of model care, the healthcare for veteran can be done successfully.

Staff Development

The members of staff that VHA relies on form an integral part of ensuring that the business is a success. This means that the firm has to equip them with the right knowledge to enable better service delivery. This means that the institute will be able to provide a robust workforce that can meet the demand of the veterans. VHA has done remarkably well in this sector by having training programs for hundreds of individuals drawn from various segments of the industry. The telehealth system can, thus, be further understood by more and more caregivers and sharpens their skills regarding how they handle the matter.

On the other hand, the OTC has been able to include graduate trainees who have been instrumental in spreading the word about the programs run. These individuals have created the ability to further expand on the scope of the home healthcare and sensitize the veterans on
the benefits of the systems and how they operate. Furthermore, it lessens the hard standpoint that some of the caregivers may have had towards the effectiveness of the home care program introduced for the veterans. This means that challenges that may be faced on the ground are now understood and can be sorted out in time by the caregivers beforehand.

**Standardization of VHA Program**

The VHA programs that are in place have over the years been adapted to the right technology which has led to the standard delivery of services. The company has been at hand to ensure that all the veterans receive equal care throughout regardless of their situation. Furthermore, technology has helped bridge the gap that exists between the procedures instituted of veteran health care. Through the use of similar clinical approaches, individuals are afforded much better healthcare which, in turn, is able to stay in line with the needs of the veterans in the system. The process, thus, ensures that the national medical service output given to the individual veterans is consistent with the right policies of the VHA.

The standardization process has meant that caregivers are able to offer the best quality services to those who need it. Through this program, the VHA has managed to ensure that there are fewer and fewer cases of veterans requiring hospitalization as a result. This, in turn, improves the health and well-being of the parties involved. Caregivers are able to monitor the health of each and every veteran who is in the system through the implemented business processes that ensure that support is always available to those who require it. Nevertheless, changes to the health status of the patients can be monitored to ensure that they do not get to dangerous levels.

**Successful Evidence Outcomes**

The home telehealth system has shown to be a success in more ways than one. Through the pilot program, the VHA has seen the possibility of the program being effective in the healthcare provision of the veterans (Department of Veterans Affairs, 2006). Moreover,
the evidence outcome is backed up by the availability of small scale tests and studies that showed how effective it could be to the members of the VHA. The program has ensured that the institution is able to meet its targeted programs as a result. This includes the reduction of serious health cases among veterans that require hospitalization.

The customers of VHA have also expressed the willingness to accept the new telehealth programs. Many of them are satisfied by the new program, as it has served them well. The program has been effective in ensuring that the customers do not experience more hospital visit and cases of recurrence have been kept to a minimum. The evidence presented has warranted the VHA to expand the scope of the program to a national scale, so as to serve more individual and have better delivery (VA Office of Inspector General (A), 2011). The system is, thus, useful in ensuring that patients do not become wholly dependent on the VHA, but have some degree of self-dependency.

**VHA Opportunity and Challenge**

**Adapting to New Technologies**

The application of new technology to the medical services that VHA offers has opened up a whole new world for the parties involved. This has created numerous opportunities where the veterans are able to access a whole diverse array of medical care. There are new and emerging technologies that are coming up frequently on a daily basis. This means that medical care is being improved significantly which, in turn, improves the welfare of the patients. The growth of social media is one avenue that VHA is really interested in. It presents a useful tool that can be used to stay in touch and, also, learn more about patients. On the other hand, it can be a great source of information and a vital communication tool that can be applied to use by patients. The possibilities that social media create means that the workload experienced by staff members of the VHA is significantly dropped to sustain a brilliant care system for the institution.
Mobile devices are also revolutionizing the way VHA implements its programs. The platform has been able to introduce new ways of handling cases and communication with nearly all veterans in the program having access to such a device. The technology does come with its complications, stemming from legal, privacy, and limitations of such instruments. In a way, there is a lot to be done to effectively manage these technologies. There are several risks that come with it that have to be addressed prior to rolling out the programs. The maintenance of the technologies comes into mind and further how to regulate and organize the programs to be applicable to the individual persons in the VHA.

**Steps Taken by VHA**

The VHA has had several steps in place that ensure its service delivery is top-notch and stays updated with the times. The institute has been at the forefront of adapting the emerging technologies to further its mandate for those who rely on it for medical services. This has meant that the company has to maintain the latest technology when it comes to the veterans’ health. Through the adoption of modern technology, the institute is able to come up with new innovative and better health care for those who need it. Moreover, the quality of service delivery is assured and a safe and sound database for patients’ health records can be maintained.

The VHA has managed to successfully introduce new system health protocols that have led the way in patient care in the industry. The institute has pioneered new medical practices through studies and research which made a significant progress in offering the best quality service for the general public. Moreover, they have been at the forefront of applying the relevant theories and studies that show promise to the public in order to offer better quality services to their clients. These pioneered methods and health services have led the way in developing the goal oriented institute to align its mandate with what it should be. The sustainability of future services and challenges combined with remote health services ensure
the business services are up to par with the expectations of the general public paying for the programs.

The VHA is working hard to ensure that it is able to achieve the right economies of scale for the resources it is allocated; it is imperative that the institute is able to arrive to the best healthcare options for the veterans under its care without overreaching its budget. The economic value to the programs must be evident to the company in order to achieve the best overall outcome. With lower marginal costs, the VHA have been able to introduce new elements to the programs, since the addition will not be too much. The institution has been able to extend the scope of its care further to other chronically ill patients who are in dire need of these medical services to cater for their situations.

**VHA Technology Overview**

The VHA has specialized its home telehealth model to cater for all cases that veteran are prone to. In this case, the top priority has been on the chronic diseases that are common among them. These diseases include hypertension, diabetes, and trauma, but are not necessarily limited to these few. The care is designed such that it is best applicable in the home setting, meaning that they will be comfortable enough. This is done so in the most appropriate manner, meaning serious cases have to be taken to the hospital to ensure safety in the long run (Smith & Maeder, 2010).

The VHA has been interested in having the veterans be able to take better control of their situation. This entails having them taking a centre role in the management of the diseases that affected them. This is done for those members who can have some control over their situation. For serious cases, the telehealth is inclusive to include caregivers who form the basis of service delivery. The VHA has worked towards giving the caregivers the right support such that they can deliver better to the people they serve. The cases of chronic
diseases have been given enough support that will enable them to lead a comfortable life and manage the disease without much pain and suffering.

The telehealth program by the VHA is ideally a standard product that serves all the veterans and encompasses their needs. The implementation of the program has meant that the institution has to offer secure and reliable systems that can be depended upon and also safeguard the interests of the veterans. The equipment in use has to meet certain standards for it to qualify and be used in the program. There is a need to protect the personal data of the individual veterans when the telehealth systems collect medical information on them. The collection of data and its transmission has to be ensured for the equipment in use by the company (Smith, Armfield, & Eikelboom, 2012).

The VHA can, hence, use the information collected to monitor the health of all veterans from one central position. Furthermore, there is the possibility of doing this without having the veterans check into medical centres on a regular basis to have their information collected. The acquisition of the equipment required by the veterans can be done as they please, thereafter the systems rely on telephone and other networks to communicate with the systems at the VHA servers. The VHA provides contracts that govern which equipment are up to their standards and are suitable for use in their systems.

**Technological Requirements**

There are several included equipment that are required to complete the formation of the telehealth system as desired by the VHA. One device is the interactive voice response (IVR). The IVR is a communication tool that enables the user to interact with the system and input the required information based on their health status at the moment. The device can be accessed through normal mobile phones or fixed telephone lines depending on the preference. There is also a messaging service that can maintain the communication channels as desired to maintain contact using Disease Management Protocol (Frayne et al., 2010).
A video telemonitor is a vital part, if the communication happens on the telehealth. It is able to provide an audio and video link that can be used by the veteran to relay information either way. The device can be used for both telephone line technology or internet protocols depending on the setup (Smith, & Maeder, 2010). They can be inclusive of other medical equipment which assists a great deal to monitor the health situations for the veterans. It can have stethoscopes or additional periphery to help in medical information collection.

An in-home messaging device also features prominently in the telehealth system. It is used in communication and, in this case, provides questions that the veterans are expected to fill and complete. On the other hand, it has tools for education and training to help the persons deal with management of the diseases that affect them. The answers provided are then assessed and analysed to understand the situation and enable the staff to offer the best services possible for the individuals affected (Fong B. et al., 2011). The disease management protocol governs how the system will handle the situation at hand.

The final devices are the home telehealth periphery devices. These are the equipment that is used in combination with the rest of the devices to provide an all-round care for the patients. They, generally, work in conjunction with the rest of devices to provide an inclusive health care package suitable for the veterans. These devices include stethoscopes, heart rate monitors, glucometers, blood pressure monitors among others. They are mostly used for clinical purposes for the telehealth program to collect the necessary details required by the system.

**Recommendation for a Solution**

**Increasing Health System Capacity of VHA**

The current methods that VHA has applied have worked tremendously to help veterans live a comfortable lifestyle. However, there is a need to expand the scope of the operations to cover all existing members, so as to offer the best services at hand. The current
capacity of the technology at hand needs to be expanded to other markets for an all-out program for veterans. The telehealth system shows much promise which, otherwise, compels the need to further increase its capacity for all healthcare needs. The demand of these systems has to be met in order to achieve a reliable health program for all individuals involved in the programs.

In order to achieve the recommendation of more system capacity, the VHA will be expected to expand its current members who act as care providers. These people will increase the manpower and resources that are required in order to move ahead with the program. The providers can, thus, be able to effectively serve the rest of the veterans depending on their situation at the moment. The current nurses in the system can have their roles expanded much further to be inclusive. This means that the nurses will have full practice authority as agreed by the VHA. This protocol will, thus, be applicable for advanced practice nurses.

The expansion of virtual care will be useful in achieving the targets required for the institute. The virtual care through the application of telehealth services will maintain an open and quick channel of communication between health care providers and veterans who rely on it. It serves to be a strategic option for care that the veterans can use from the comfort of their homes. The use of purchased care can also be made possible through the increased capacity of the institute.

There is a need to collect more information on all the veterans under the VHA and their current situation. It would be imperative for the VHA to gather all the relevant information on the situation on the ground meaning their health needs would be better understand and planned for. The telehealth program and the other technologies being applied can be a starting point for gathering all that is required for the database to be complete. From a certain perspective, this is a major task, since it will involve a lot of manpower and effort to
complete. As such, the VHA would require help to make this achievable in the long run. This will be a stepping stone to assist in planning and organizing for the future if needed.

There is a necessity for the individuals in authority to change the way the VHA is run and funded due to the expected increase in the coming years. There is obviously going to be a definite increase in the number of veterans who will need help from the VHA which means that their systems will have to be able to accommodate them. By enacting laws and implementing changes that are required, those in positions of authority can oversee the implementation of structural changes that would, otherwise, accommodate the new increase in veterans who seek help from the VHA with regards to their own situation. This would form a key component in ensuring that the needs of all the individuals are met accordingly.

Conclusion

The program of the telehealth by the VHA is an important one, as it serves the greater good for most of the veterans in the United States. Furthermore, it sets precedence and maintains the health and wellbeing of these individuals for the long run. The application of new technologies has made the VHA leap in strides to become a foremost healthcare provider for many veterans that are reliant on it. Evidently, the programs that VHA has introduced have helped a great deal in securing the future of many of the veterans in the program (VA Office of Inspector General (B), 2011).

The VHA has an important role to play in the healthcare sector for veterans. It has been lauded for the tremendous efforts that it has made in safeguarding the health of many of the individuals who are under it. With the advent and spread of technology, the telehealth care system has been instrumental, despite the challenges that have been felt along the way. On the one hand, it has taken a significant amount of resources in order to implement. Nevertheless, the telehealth has great promise in it as seen from the achievements that have
been made from it with regards to the health and well-being of veterans. The system has been successfully implemented in its entirety.

The use of emerging technologies, such as mobile phones, telephones, and video chats, have helped solve the problem and ensured that telehealth has become a success for the VHA. Furthermore, the use of information technology in the healthcare industry shows a great deal of promise for all the parties involved. In this case, it forms a vital component of the VHA and can, thus, be expected to be a basic feature that will help the millions of veterans who enrol to the program and require consistent medical care. For those with chronic medical conditions, the use of telehealth and information technology has given them a new lease of life with which they can carry on living much more comfortable lives.
References


