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Providing Grants for Venous Thromboembolism Prevention

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ABSTRACT

Venous Thromboembolism (VTE) is a condition involving two types of abnormal blood clot formations. Deep vein thrombosis (DVT) occur when blood clots form in in deep veins. If a clot travels to the lungs it becomes a pulmonary embolism (PE). (John Hopkins Medicine, 2014). Venous Thromboembolism (VTE) have contribute to high cost in healthcare, especially in surgical procedures. This article address the importance of monitoring Venous Thromboembolism care, and a way to provide grants as an avenue to eliminate Venous Thromboembolism cases. A step by step plan that can be executed by the CFO of a health care organization is also presented. Hospitals can resolve Acquired Venous Thromboembolism disorders by purchasing better surgical equipment, establishing a validation protocol for risk assessment, and by providing an educational program aligned with the measures of the National Quality Forum (NQF) and Centers for Medicare & Medicaid Services (CMS). The overall goal would be to create an environment that provides indicators to monitor VTE. First, health care management need to decide what type of healthcare model will offer the patient the best care. Integrated delivery model provides the best way to monitor accountability, and can serve as the best health care indicator for health care business networks. In this project we used the integrated delivery model to form a network of healthcare professionals to operate a VTE grant organization. Their performance is monitored each month by the various indicators such as laboratory results, nurse performance, and patient mortality rates. On a larger business scale integrated delivery systems are a group of businesses coming together. With this grant organization only the integrated delivery model concept is used to contract independent doctors, nurses, and other healthcare professionals to form a network. This team of professionals are called quality assurance team, and the manager is called a quality assurance practitioner (Q.A.P).

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The Integrated Delivery Model

The integrated delivery model operates within a healthcare organization catering specifically for the prevention of acquired Venous Thromboembolism. The project will be controlled by a quality assurance team made up of contract healthcare professionals. The project will use a small amount of capital to organize a grant center on campus of the health care organization. The indicators are used within a step by step process that will start at patient admissions until the patient is discharged from the facility. Utilization and Coordinating are two very important concepts for managed care and healthcare managers in this project. Our organization quality assurance team will be charge to provide these services. The organization operates a specialized hematology laboratory that serve as a way to track VTE, by performing platelet function testing, PT/PTT, CBC and D-DIMER testing. Also we incorporated a method to insure prophylaxis is within place after first 24 hours after patient admissions. By resolving Venous Thromboembolism problems will reduce cost and risk factors. Hospitals nationwide are experiencing high cost, and patient need quality care. By creating and providing grants to purchase capital will provide a way to eliminate Venous

Thromboembolism. The overall project will provide methods to monitor and eliminate Venous Thromboembolism. The next goal will be to use the integrated delivery model on a larger scale with other healthcare organizations. Acquired Venous Thromboembolism is preventable, and due to it is acquired CMS and some healthcare insurance are considering that it not be covered. This is why important to educate and inform our patient and healthcare organizations about the risk factors involved with VTE.

The Venous Thromboembolism (VTE) problems

The problems faced by hospitals is a lack of a Venous Thromboembolism (VTE) monitoring protocol. Most healthcare organizations have the facts on how serious blood clots can kill patients and the mortality rates are very high, but the focus is on current changes by new healthcare reform. VTE incidence is associated to the high cost in a fragmented health systems. There are several problems that can be solved concerning VTE. In order to resolve the problems with VTE and decrease cost is to monitor and coordinate VTE treatment from the time of admissions to the time of patient discharge. Quality improvement strategies, just like medical interventions, need to rest on a strong evidence base. (Shojania & Grimshaw, 2005). A step by step coordination plan is setup in our VTE Project provide evidence of improvement.

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Quality can only be measured by the evidence documented throughout each patient's admissions process. The VTE project divided the patient's admissions process into steps and evaluated by monitoring each procedure they patient encounters during admissions. The quality assurance practitioners reviews the patient's case through the following steps and offer the patient the following:

1. Improve the admissions process – In order to resolve problems with VTE the patient care must be monitored first at patient's admissions. Most VTE cases start off in the emergency room. The emergency rooms most of the time have been over crowded with patients with cases that are not really serious illnesses. Also, this has caused a problem due to most of these patients are uninsured. This problem alone caused an outcry in this country for better health reforms. Patients with more serious problems like Venous Thromboembolism spend long hours in the emergency rooms before admissions. The emergency rooms are crowded, and the doctors most of the time wait on patients in a certain order based on arrival of the patient. The VTE project is setup to remove these patient from the usual emergency room setting. Most patient may appear alert and with little evidence of having a VTE incident emerge. By separating these patients and performing diagnostic lab testing stat, can hinder a VTE event from occurring. The VTE project also have quality assurance members from the billing department to gather the proper health insurance information. After gathering all information concerning billing the process continue to the next step, to take care of the patient. In cases the patient is not covered, the VTE project receive grants to cover uninsured to a certain limit and based on qualifications by the grant being issued.

2. A Integrated Delivery Model - Most hospitals have cardiac teams in case of heart attacks and emergencies. The VTE project utilizes the skills of healthcare professionals by contracting individuals from the various treatment specializations from the initial treatment process of VTE to patient discharge. The Quality assurance Practitioners are doctors that work close with Managed care. Managed care and doctors are organized to be accountable for monitoring VTE. The project include a team of doctors to coordinate the VTE project as a surgical-hospital organization. In order to better coordinate care, many hospitals have initiated physician-hospital organizations, joint ventures capable of contracting with managed care organizations. (Nowicki, 2011). In the ER most of the time nurses and doctors are distracted by other patients with minor illnesses. Venous Thromboembolism can cause hospitals high mortality rates and high healthcare cost if no one manage the problem. Clinicians and Researchers have interviewed healthcare workers and evaluated the cultures that treat VTE. Even though healthcare workers do their jobs, no one is held accountable for the occurrence of a VTE. Most interviews reflect that everyone share the responsibility, but no one in particular is responsible. (BMC Health Services Research, 2011). Creating a specialized team will reduce the VTE occurrence rates or even eliminate them with healthcare workers focused on the issue. During admissions the patient suspected can be directed to a cardiologist or some educated to diagnose VTE cases properly. The doctor can be assisted by medical office managers to gather proper patient information quickly. The hematology department perform

stat testing such as D-Dimer testing, and other coagulation testing. Nurses and other healthcare worker play a role in separating these patients to a special area of the hospital until they are diagnosed. The team starts off a process of preventive medicine. The quality assurance team work close together through an integrated delivery model to prevent for VTE.

3. An Educational Environment for the VTE Patient- Stress and distraction has added to the problem of VTE occurrences. When the patient becomes ill, they go through stressful times where they have to depend on others to care for them. In the cases of VTE the patient and family members must remain alert and follow doctors' orders carefully. After an admission or post-surgical procedures the anti-coagulate of choice for VTE patient is called Prophylaxis. According to a research up to 15% of clinician-ordered doses of injectable prophylaxis is not administrated. (AJM, 2012).

The VTE project team provides education in their next step after a patient is admitted to the hospital. Providing a less stressful environment and education is the best rehab to patient in VTE cases. Researches have concluded that by educating patients about prophylaxis and the risk associated with VTE more patients are following the doctor's orders and there is a decreases in mortality rates. The 2008 U.S Surgeon General Reports reveals there is an estimated 100,000 to 180,000 deaths associated with deep vein thrombosis. VTE is the most preventable cause of deep vein thrombosis. (AJM, 2012).

4. Align with CMS and Quality Protocols- Hospital have well educated staff, but need extra education in this area. The NQF and CMS have already established measures that will be implemented later in 2015. To prepare for these measures and to align with CMS and NQF regulation funding is needed. The VTE project provides grants as an avenue to combat the high cost associated with VTE problems. There are a few government programs available, but this is not the best way to obtain capital for funding a good VTE monitoring program. Most government programs available reward hospitals for achieving high quality and providing good healthcare first. Most hospitals don't have the extra capital to invest on ideas that may generate more revenue and make their system better. Their next strategy after reviewing the ideal of monitoring their VTE problems is to establish a way to acquire grants. Grants from the government or outside sources can be acquired by hospitals creating their own grant centers for VTE research. The VTE project centers receive donations from the community and the government. First they needed evidence to prove they can deliver a quality health care protocol to eliminate acquired VTE. Their goal is to provide an innovative idea that will benefit the community and show progress. Several health care organization have been successful creating grant centers. UCLA has created a grant center on their own campus for various reasons. In this final step in organizing our VTE program the healthcare organization raised capital through setting up on-campus VTE grant centers. The money is to be used strictly to combat the VTE cost for patient and the healthcare organization.

Benefits for Providing a VTE Program

In the past the study about acquired VTE reveal they occur due to the delegation of preventing them was ignored. Other studies on more generalized healthcare problems included VTE issues in their research. Multi-purpose models were devised to detect the problems with the generalized healthcare system. These models provided little detail for preventing VTE. Many studies had methods of weaknesses, and reporting of this kind of research is generally poor, making the generalizability of study findings frequently uncertain. (JCEHP, 2004). A better specific study provided by a quality assurance team will provide specific evidence of what problems need to be solved. By correcting the problems caused during the admissions process of the patient, and providing corrective actions new benefits could arise to promote the overall healthcare community may include:

- Providing a quicker patient discharge turn-around time. This can cut cost for the patient and healthcare organization. Creating a good protocol such as educating the patient before release of the use of the drugs they are prescribed also will be a good benefit to the patient. If the patient is discharged early, this eliminates high hospital cost, and if the patient receives valuable information to promote good health their case becomes a win-win situation for the health facility and the patient. With no complications after a surgery and no VTE, the cost of hospital lab service, housekeeping, human resources, and admissions cost are reduced for the patient. (Nowicki, 2011).
- Reduce the re-occurrence of mortality rate for patients after post venous thromboembolism.
- Increases in hospital revenue due to the quality provided to patients. By providing quality the hospital is promoted in advertisement as a high performance organization. Some facilities currently advertise that they have a good cardiac and wellness programs is one example of how quality increases revenue by attracting new patients.
- Resources to share information to other hospitals on how to create grant centers for whatever healthcare problem that needs solving. After having success preventing VTE healthcare organizations will be able to educate and help other hospitals.
- The hospitals can pass quality inspection by Health Insurance Portability and Accountability Act (HIPAA).
- By passing compliance inspections will make healthcare organizations more eligible to receive additional funding and more reimbursement coverage from CMS.

Conclusion

Grants centers like the one created by UC's Center for Health Quality has paid off for the financial department of the University of California. The management innovation team reported increases in revenue and patients receive their post-surgery medication on time now. This is a good strategy to use for a CFO to raise funds from grants and at the same time save lives. A good VTE prevention program can reduce mortality rates, increase revenue, decrease cost and provide quality to the healthcare community. VTE appear as a small problem at first, but cause millions of dollars for patients and healthcare organizations. An integrated delivery system supported by its own grant center can deliver a full range of clinical services to prevent VTE. Eliminating cost is the role of every CFO of healthcare organizations. The cost can be eliminated by solving problems and saving lives. The occurrences of Acquired

Venous Thromboembolism is composed of risk factors that cause high cost. High cost is found throughout the current healthcare system. Some strategies used by healthcare Chief Financial Officers include reorganizing their healthcare infrastructures into a more flexible system. Systems like integrated delivery systems have become healthcare rescue systems to consolidate value resources and to share cost. Accountable care organizations have been setup with the aid of managed care to cut cost and to utilize human resources and finances more appropriately. The high health care cost has skyrocketed over the years. CFO's can't just eat this cost. It won't just go away with the present system. How to eat an elephant? One teaspoon at a time I would propose. By tackling one cost at a time, savings generated can be used in a snowball effect to combat other cost. By eliminating healthcare issues such as Venous Thromboembolism first by creating a system using good human resources to form a team at a healthcare organization, then financing the project with grants created within the organization.

References

1. Chapman, N.H., Lazar, S.T., Fry, M., Lassere, M.N., Chong, B.H. (2011). Clinicians Adopting Evidence Based Guidelines: A Case Study With Thromboprophylaxis. *BMC Health Services Research*. 11(240).
2. Grimshaw, J., Eccles, M., Tetroe, J. (2004). Implementing Clinical Guidelines: Current Evidence and Future Implications. *J. Contin. Educ. Health Prof.* 2004 24(1). P.531-537.
3. Nowicki, M. (2011). *Managing Revenue Cycle: The Financial Management of Hospitals and Healthcare Organizations*. Health Administration Press. 5, p. 46
- Nowicki, M. (2011). *Managing Revenue Cycle: The Financial Management of Hospitals and Healthcare Organizations*. Health Administration Press. 5, p. 47-48.
5. Piazza, G., Nguyen, T.N., Morrison, R., Cios, D., Hohlfelder, B., Fanikos, J., Paterno, M.D., Goldhaber, S.Z. (2012). Patient Education Program for Venous Thromboembolism Prevention In hospitalized Patients: *AMJ*. 125, (3). P.258-264.
6. Retrieved from Rosenberg, A (2014). Health Innovations Pays off in Cost Savings, Better Patient Care: *UCLA Newsroom*. <http://newsroom.ucla.edu/stories/investment-in-health-innovations-pays-off-in-cost-savings-better-patient-care.on05/24/2015>.
7. Retrieved from John Hopkins Medicine Deep Vein Thrombosis/Venous Thromboembolism on 05/24/2015.
8. Shojania, K.G. & Grimshaw, J.M. (2005). Evidence-Based Quality Improvement: The State of the Science. *Health Aff.* 24(1): 138-150.