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Bridging Communication Disparities between Medical Vendors and Healthcare Value Analysis Projects

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Consultancy Project Executive Summary

Organization:	Gardner-Webb University School of Education
Project Title:	BRIDGING COMMUNICATION DISPARITIES BETWEEN MEDICAL VENDORS AND HEALTHCARE VALUE ANALYSIS PROJECTS
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Defense Date:	June 30, 2021
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Approval

This consultancy project was submitted by Rose Rickrode under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

Dr. Jeffrey Hamilton, Faculty Advisor
Gardner-Webb University

Date

Scarlett K. Skiba, Site Advisor
President, Scarlett's Web Incorporated

Date

Acknowledgements

Einstein stated, “In the middle of difficulty, lies opportunity.” When reviewing the troubled history and experiencing the complexities that are inherent within healthcare buyer-vendor relationships, it is apparent that his statement applies today, for this situation, and is oh so very true. Once the condition is fully understood, thinking does a turnabout, and the interactions become golden for those who will become informed and involved.

A gracious “Thank You” to Scarlett’s Web for accepting the challenge.

Abstract

BRIDGING COMMUNICATION DISPARITIES BETWEEN MEDICAL VENDORS AND HEALTHCARE VALUE ANALYSIS PROJECTS. Rickrode, Rose, 2021: Consultancy Project, Gardner-Webb University.

Vendor Value Analysis Consulting (Vendor-VAC) is represented by an online website created programmatically by Scarlett's Web, Inc., at <https://vendor-vac>. This site has been developed to assist healthcare vendors who are seeking to properly market and present their products and/or services in a healthcare environment. Although vendors obtain personal visitation certifications in order to frequent a medical facility, their products and/or services must also be reviewed and technically certified via a defined criteria to be eligible for purchase. These standards are varied but specific to each organization and include assessment routes that fluctuate according to location and management. These diverse evaluation processes, policies, and procedures are the ones Vendor-VAC was designed to address. With information and recommendations offered to vendors, clinicians, and facilities, it also extends possibilities for standardizations and cost savings within healthcare supply expenses. By participants accessing the available website information, all interested parties can examine possible solutions and data on a specific topic and/or medical product/service they are seeking to have reviewed.

Keywords: vendor, value analysis, supply chain, supplies, healthcare savings

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1 Introduction

1.1 Project Purpose

The main purpose of this project was to build an interactive website for easier communication with medical vendors seeking to do business with healthcare facilities. The problem identified was that many vendors, although certified personally for medical facility entrance, did not have all the product and/or service information necessary to accompany them in their quest for sales. They also could not identify specifically with whom they needed to speak or visit to promote or institute those particular sales.

Vendors tasked with establishing business and obtaining sales to medical facilities must first navigate through many variables pertaining to accreditation and certification. These include personal background verifications, along with additional acceptance and approvals from a facility for any products and/or services the vendors want to introduce to an institution for consideration and/or purchase.

Vendor Value Analysis Consulting (“Vendor-VAC”) is an online resource offered to assist and improve upon vendor knowledge of the many healthcare-related regulations and requirements inherent in selling a product and/or service to medical and healthcare organizations. It is the establishment of an informative service beneficial to the vendor(s) by delineating the information necessary for ratifying a medical facility’s purchase processes as it relates to their specific product/service offerings.

Vendor-VAC not only defines the entry and product introduction procedures vendors encounter within medical facilities, but it also helps to initiate, refine, and further incorporate an ongoing standard model for the methodical review of medical purchases within a vendor’s targeted healthcare organization. Those facilities benefit from savings in both time and money, having the proposed products/services presented from the vendors correctly as their organization has described and thus ready for faster product/service reviews and approvals.

Since requirements are often non-standardized, the challenges lie in identifying the many variables and processes inherent within healthcare facilities’ purchasing policies and procedures and then communicating them efficiently to the vendor(s). Naturally, excess data and confusion are created for both vendors and institutions with mixed messages. By providing a platform to consolidate specified factors in requirements and regulations, involved parties can join forces to overcome these inherent obstacles.

As wide-spread variation represents the true barrier to a sales vendor’s entry, it hampers healthcare economies in accomplishing efficient overall spending. The evolution of buying practices, policies, and procedures grew within each

individual facility as their businesses expanded. They developed and instituted their individual buying policies and procedures according to local regions and guidance from leadership factions. Often, any changes in corporate ownership contribute to the confusion and skew the correct methodologies to utilize in preferred purchasing methods. Therefore, besides leadership, many requirements and barriers can vary as per region, type of facility, personnel involved, and category of documents to be completed.

As a web-based program, Vendor-VAC better defines important variables inherent within the acceptance process to support both vendors in their sales-entry quests and medical institutions in their buying tasks. For example, some of the main questions vendors ask are, “How do I get an appointment with the correct department(s)? What are the right words to say, and to whom? What specific forms and certifications do I have to present?” They want the overall processes to be easier to achieve, so they can eliminate the barriers. Vendor-VAC.com stands ready to offer a magical “Open-Sales-To-Me” approach to assist in answering these types of questions.

“Vendor credentialing is typically managed by the organization’s supply chain department, and is driven by directors of supply chain or materials management” (Walker, 2019, p. 1). This process is necessary to assure vendors and products/services acquire the necessary reviews and purchasing verifications before reaching the clinicians within the healthcare environments. Vendors must have registered with a vendor credentialing service beforehand and sign in on the hospital’s visitor log before being allowed to venture further into the establishment. They are typically given a badge to identify who they are, their company, and what department they may have access to visit.



By partnering with an accomplished web-design company, Scarlett’s Web, Incorporated, Vendor-VAC.com is developing an Internet interactive product. This combined effort creates an information package that realistically defines the necessary material for desired vendor entry. By definition and categorization

of the materials, the program assists in compiling a compliant sales bundle, one that will be more easily accepted and recognized at the Supply Chain purchasing entry points.

The challenges to creating the program and applications are seen in the many facets inherent within the healthcare requirements themselves. When you couple these factors with the numerous types of products and/or services, the data begins to expand exponentially. The information must align with the various healthcare facility types, their admittance standards, governmental values, and industry hallmarks. The variables must be clearly defined so a feasible choice can be made by both the vendor and the healthcare entity on whether to pursue a customer-client relationship. Success, in the long term, is when valuable time and energy are mutually saved, with improved communications and efficiencies by all parties affected.

The biggest accomplishment will be progress seen in the movement towards standardization in this arena of the healthcare field. As new processes are proven in worth and intricated into the existing policies and procedures, the net effect will result in a redeemable change, and thus improvement, in the overall products and/or services offered by the organizations. These enhancements benefit the vendor-facility relationships and ultimately the quality of patient care.

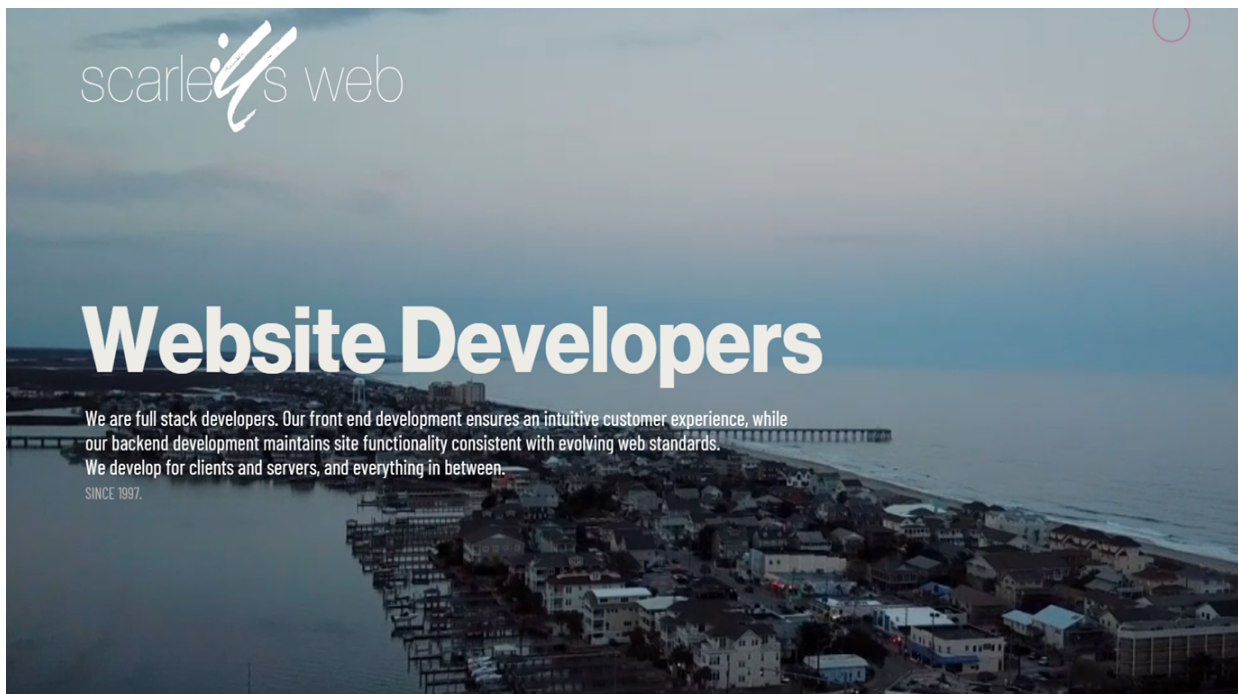
Scarlett's Web, Incorporated, the partnering organization, has been in business since 1995. The founder, Scarlett K. Skiba, began as a graphic designer and IT/LAN Engineer and Microsoft® Application Support Consultant. While it remains that LANs (Local-Area Networks) are limited in scope as opposed to Wide-Area Networks (WAN), in those first development years any limitation to a business's expansion was not apparent in exclusively utilizing only a LAN. [*WLAN will be referenced as Wireless Area Networks in purposes for this discussion.]

The simple facts were (a) very few businesses or people had any regular computer use as compared to the usual daily utilization of today, and (b) websites were not even considered for general use. Most people had a pre-Windows OS PCS system if they owned a computer at all and were not connected to the Internet as we now know it. (The first version of Windows was released in 1985.) Instead, various historical offerings included LAN programs such as ARCNET (AppleTalk), Token Ring, or Econet. It has been estimated of the 80% of small businesses that had a personal computer system, only about 20% operated within a computer network.

By making business adjustments and combining graphic design with IT, programming, and boutique web hosting packages, her enterprise progressed rapidly. Graphic design is known as a process to visually communicate and use

for problem-solving via various types of pictures. Scarlett's Web has developed innumerable enhanced, visual websites since the original founding and has been recognized with several awards over the years. Three were from Microsoft, and a most recent recognition was from Clutch, a B2B Ratings and Review Platform located in Washington, D.C., which placed Scarlett's Web as one of the top mobile app developers in the United States for 2018.

Presently, Scarlett's Web has approximately 80+ active clients and adds an additional 10-12 new customers annually. Historically, over 150 sites have been originated. Once the sites are designed, the websites must be continually managed for content, security, and updates. An internal subdivision is also subcontracting for a few "design houses" ongoing. The business's main target is focused on the small to mid-size entity, but clients include FOX News, Topps Inc., ULTA Beauty, the U.S. Census Bureau, and JCPenney. Bigger sites are comprised of the companies for Hyundai America and Hunts Point Produce Market. With Scarlett's Web being both a designer and full-stack development firm, their partnership is invaluable for developing a viable Internet interactive healthcare product. Their mission statement is in keeping with the entrepreneurial spirit seen with the new Vendor-VAC.com product model now being introduced. [<https://scarletts-web.com/>]



The first and foremost activities for the development of the site include (a) gathering as much applicable and appropriate marketing materials and data for the overall web project as possible and (b) compiling research that pertains to and supports the main ideal. This establishes a data baseline and shores up

feasibility for further development. With content, a look into the historical practice helps to explain the whys of current modalities in practice today with regard to vendors and their roles in healthcare.

Demographically, there are two types, or categories, of vendors entering the healthcare facilities. The first type is a “regular” salesman, toting the normal-type products, or those without specific clinical item placement criteria, as would be seen within areas like the operating room or specialty care services. They have the bandages, tapes, thermometers, etc., general medical supplies commonly known as commodities. They can also be called Level 1 or on-site representatives. Usually, vendors are known as any non-employed individual(s) coming into the building who is representing an outside organization. They are there to sell their products to the hospital or healthcare facility as best they can.

The second type of vendors are the HCIR (Health Care Industry Representative) vendors. They have to complete more involved training in safety and other policy and procedure certifications than regular salesmen would be required to do. The movement towards specified vendor certifications and registration peaked in 2009 when the Association of Healthcare Resource and Materials Management (AHRMM) Conference in Texas established guidelines for future vendor access programs via their Strategic Marketplace Initiatives. This was not a task taken lightly, for there was pushback citing many factors both from the healthcare entities and the vendor companies. Priority concerns were in privacy, for both vendors and patients, versus the overall costs and liabilities with the establishment of such comprehensive monitoring plans. The initiative has since become a wide-ranging, involved process, one that has evolved into several governmental vendor credentialing businesses, besides detailed regulation facets from the government. By 2013, 53% of hospitals and healthcare systems had a formal vendor credentialing program. Now there are annually published criteria each healthcare facility must closely follow or risk their own certification awards. Some of these standards are from The Joint Commission and specifically address vendor visitations.



Originally, the changes in process were proposed to assure HCIR vendors were closely monitored. They were going into areas, such as operating rooms, that inherently had patient information. There, they were presenting their products and services to various medical personnel, usually physicians, and thus influenced what was purchased to coincide with specific patient care. The wares were termed “medical devices,” and most of those devices must have Food and Drug Administration (FDA) clearances before use. The FDA platform has been clearing such devices for use since 1976. One criticism, however, is that currently, most medical devices just have to illustrate they are similar to items already on the market, which differs from the process of approving new pharmaceuticals. The latter are instead tested via patient studies. Lately, many have evaluated possibilities for the most efficient way one can compare and review healthcare products and services.

When Dale Carnegie published his book in 1936, *How to Win Friends and Influence People*, he set off a marketing explosion for salesmen (Van Edwards, n.d.). The known sales forces went into action everywhere, including healthcare; however, unlike other company types, vendors are still constantly a presenting force “knocking” on hospital doors even today. Where the Filler Brush salesmen stopped coming about personally to America’s homes (they were established in 1903), this direct sales marketing did not cease for hospitals.

Within the business world, the 1970s had sales and marketing classes promoting theologies known as “SPIN” selling (Situation-Problem-Implication-Need). In the 1980s, there was “solution” selling (i.e., align the solution with the customer need then demonstrate why it is better than the competitor’s). In the 1990s, “partnerships” were formed. These sales methods were radically changed with

the introduction of routine computer use in the 2000s. The age of the informed consumer was born, with buyer empowerment; except in healthcare. Due to the separation of departments, budgets, employees, and function types, most purchasing in hospitals is performed in individual “silos,” and the vendors are still trying to get into all the feed lines any way they can. Add to this the mandated restrictions inherent in computer access to any networks or purchasing methods within the healthcare facilities themselves, and the issue grows larger in scope. Until the last few years, most “outside” contact for staff personnel by “outsiders” was prohibited.

The introduction of vendor credentialing companies has been instrumental in reducing “cold calls” by vendors since appointments are strongly encouraged. The programs also offer the benefits of tighter access in control and increased compliance due to the inherent registration and policy uploads. They save the vendors time and make them more efficient in their jobs, as long as they can obtain “face time” with the appropriate hospital staff necessary to promote their products or services. However, one of the newest trends affecting healthcare is that of big data and analytics within the supply chain. Cost efficiencies mandated by administrations make the vendors go to the materials (or sometimes called supply chain) loading docks and/or purchasing areas first, to see if their items are or can be contracted before being explored any further.

Usually, an appointed value analysis manager (or other assigned material/supply chain person) first interviews and maintains the vendors’ relationships to evaluate and control the overall sales situation. This “funneling” of vendors, coupled with a variety of methodologies for meetings with the sales personnel presenting into the healthcare facilities, has created a larger variance on how these situations are realistically resolved. Confusion is apparent in both the facilities and with the several types of vendor products/services being offered. Vendors must be specific on exactly what information they will need to present during that important first meeting within the facility. They may have the necessary individual vendor credentialing, but that packet does not include the specifics about their unique products/services. Also, one vendor can be representing several items and/or companies. On the facility side, the items must be approved through several venues before they can be placed on the supply shelves. These disparaging, conflicting aspects are what Vendor-VAC.com has been developed to address. With the Vendor-VAC information sources and coherent idea introductions, more vendor efforts will flow to the persons whose ideas promoting standardization and savings are in the best traditions of value analysis principles—the hospital’s representative for value analysis teams (VATs).

At present, there is a national organization, Association of Healthcare Value Analysis Professionals (AHVAP), that offers a value analysis certification. Their information promotes several of the ideals and varying protocols for

achieving product savings and/or efficiencies but is limited in authority for overall national compliance. They do suggest and discuss, on their Internet platform and within discussion/blog groups, the various methodologies for evaluating and, if necessary, curtailing any undesired vendor promotions. They are not standardized; and in sales, these factors change regularly. They do lead professionally as a resource, especially in instructing ways to generally respond. However, healthcare has many different healthcare business models and numerous possibilities on exactly who would/should be interacting with the salespersons within the institutions. It is another example of the non-standardization dilemma, amplified by many facilities not having a designated value analysis person to begin with, or often, if they do, they combine those assignments with more than one location.

One of the top five challenges presented for health system value analysis is stated by the ECRI Institute (nonprofit, with 5000+ organization members). They discuss the antiquated workflow process, ranking second only to C-Suite (Administration) buy-in. Ironically, the number one key to enhancing physician and C-Suite acceptance was found to be information and data, so the problems could be more easily overcome by looking at the methodology in gathering the facts and then properly presenting them to begin with. Both obstacles would be systematically reduced. AHVAP has a value analysis maturity curve that evolves from “no process” (no formal protocols, purchases driven by demand, minimum criteria, many brands/duplication for same line) to a “value analysis novice” and beyond. Vendor-VAC could enhance this recommended movement forward.

The vendors realize there are information reviews ongoing but have no clue of how or what they need to bring with them to develop an individual sales-facility relationship. That question is frequently raised and poses a unique situation unless a vendor has been in business for a number of years. If they know how to manipulate the inside staff contacts they have, fine; but as departmental budgets tighten, they may not move on to the next step. The true goal is to get into the value analysis process and/or meetings.

There is one other major caveat involved. That barrier is with the fast evolution of group purchasing organizations (GPOs) into the product introductions, with influence very much amplified during the pandemic. These companies have been developing their own manufacturers for the commodities they place “on contract” and “data-mine” the spend data of the healthcare entities with which they are involved. This then automatically limits the purchasing possibilities presented to the facilities before the independent product/services vendors even come by.

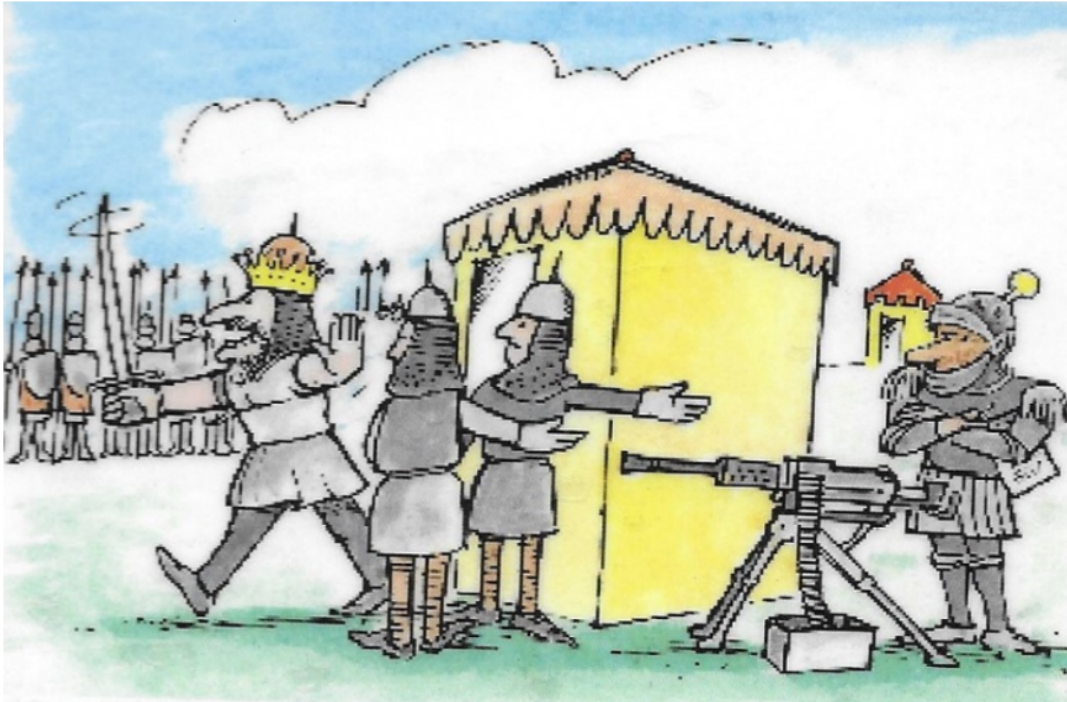
On November 28, 2018, Amazon announced they would be doing a big data project with the electronic healthcare information that was gleaned from all the electronic health record EPIC conversions. Although they stated they would

focus on the electric health records of patients, there is no reason to believe products and services are not going to be included.

Competitors have not developed a program that addresses the products specifically in this manner, though, at this point. There is a value analysis “guru” of sorts, who has been instrumental in increasing the education and communication about the subject. In addition to a newsletter, he attends the AHVAP events and encourages cost savings. He has developed a program to “certify vendors” by instructing them on what the basics of value analysis entail, then issuing a label pin for \$279.00 each.

Vendors are curious and have questioned any new requirements, wondering what the right answer is. To start with Vendor-VAC, a list of possible inquiries that could be made to them about their products and services begins but quickly grows as more information is compiled. The questions are sorted into categories:

- General information
- Safety considerations
- Unique benefits for clinical outcomes
- IT implications
- Reimbursements
- Expenses
- Marketing
- Purchasing options



No! I can't be bothered to see any crazy salesman-We've got a battle to fight!

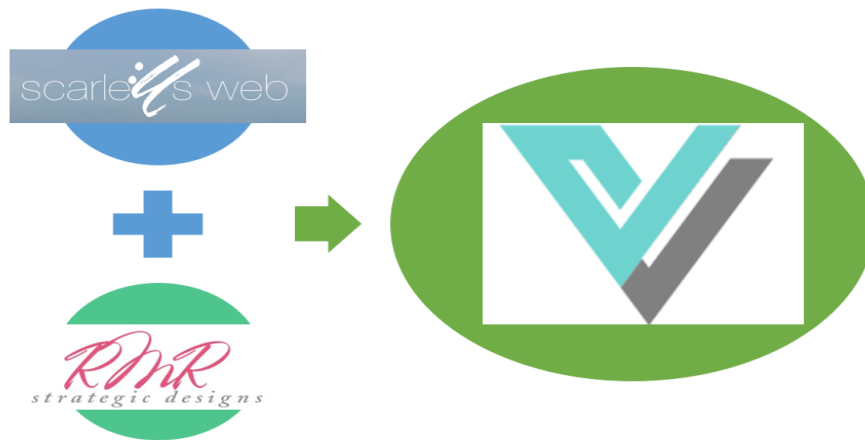
1.2 Associated Documents

- Appendix A: Vendor-VAC Product VAT Question Listing
- Appendix B: Vendor Survey
- Appendix C: Article Written to Incorporate Vendor Interest Questions
- Appendix D: Professional Literature Review

1.3 Project Plan Maintenance

The Project Plan has been revised and updated regularly, with communications via email and teleconferencing between Scarlett's Web and Vendor-VAC. Because of a virtual platform setup, it was easier to discuss any changes and modifications deemed necessary from either party by utilizing those given parameters.

The developer would provide content strategies, calls to action, along with programmatical changes and researched solutions along with the history of the project based on new content ideas, asset acquisition, and platform updates.



2 Project Scope

As the idea originator, the objectives are clear: find a way to make it easier for healthcare vendors to communicate with the healthcare facility and do it the correct manner. The problem has been a lingering one for most vendors and their client facilities for years now. However, the dilemma of entities conveying the wrong messages to each other is not new. Within healthcare, it just appears to be a deeper matter.

Upon closer examination, the evidence points to several other layers of information being interspersed upon the message, causing disruption and the obstruction of clear ideas. In facilities, before any commerce concepts are delivered to various parties, confusion reigns on who should indeed be involved. There have always been numerous external and internal regulations, policies, and procedures to consider with medical supplies and services. There are probably just as many rules, if not more, when purchasing them.

On the vendor presentation side, there is chaos on even how to get inside to deliver a message. Being fortunate enough to experience issues facing both the clinical and the supply chain factions within a facility, the obvious culprit first appears to be a lack of clear communication internally between the medical and support departments. Clinicians rightly focused on direct patient care versus the supply side, with a concentration on issuing to them their necessary “tools” of the trade. However, both departments internally speak a different language.

One illustrates the dilemmas with an example of a nurse hoarding supplies for care in a Neonatal Intensive Care Unit, truly believing there will not be enough product left in the storage area for tiny patients’ needs. On the flip side is a supply chain director questioning the increase in costs within the pediatric department, when the census has not risen. An apparent lack of trust begins to creep in from both angles.

Add to the uncertainties seen when clinicians search online for care products or believe what a product salesperson said from the latest care seminar, stating the new desired product was simply the best. It does not help the situation for them to then hear from purchasing that it is impossible to acquire, since it would be arriving from an unauthorized foreign vendor.

Success is achieved when the communication gaps close internally within the medical facilities and externally with the product/service vendors. These last few years have seen a system develop to help lay ground rules and give a foundation to better institute sales and commerce to healthcare. It is based on “value analysis.” and the formation of committees (VATs) to evaluate medical supplies and services. As those ideas grow, however, the vendors are excluded from knowing all the “rules” and elements involved. They can and do vary from facility to facility and/or from healthcare organizations to other healthcare establishments. The vendors are external

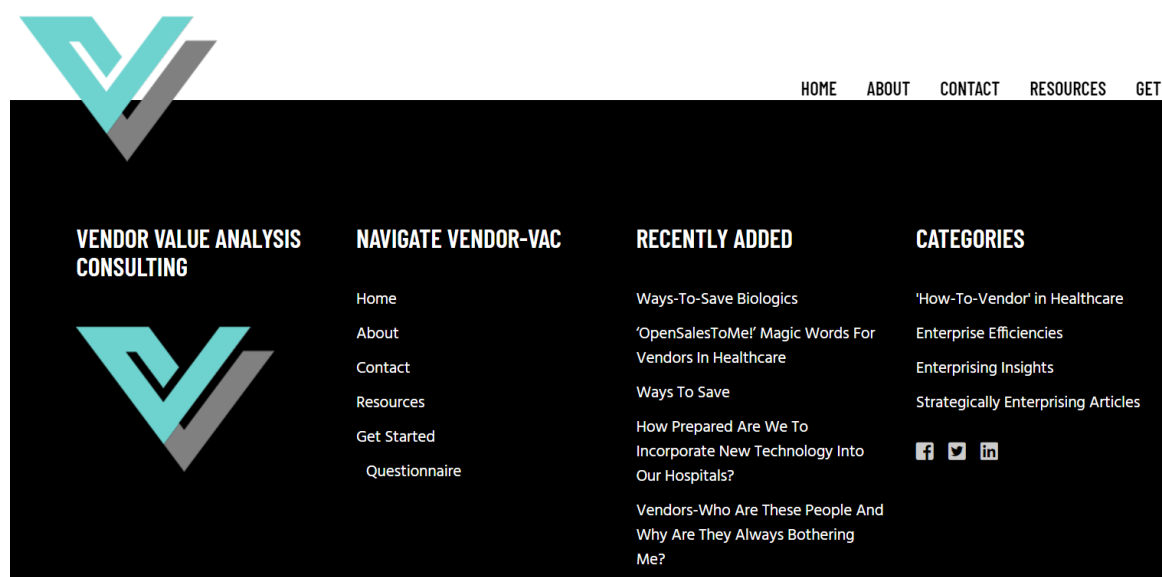
to that interwoven circle of knowledge, as unorganized as it may be; therefore, the situation remains unresolved.

Vendor-VAC is offered as an alternative for vendors and a methodology for them to utilize in closing the communication gaps between VATs and their product(s)/service(s) offerings. They can review the possible questions they will need to answer for their products and services before those submissions are posed before VAT teams, improving their chances of success with a sale(s). Vendor-VAC is thus functioning as an online research service for vendors.

The beginning for Vendor-VAC is acquiring vendor clients and working with them to standardize their product/service approval processes, with possible growth to then having them join in offering new possible contractual saving ideas. That collaboration would spark more efficiencies in healthcare. A true victory. For example, who knew that the pediatric hospitals in California were not aware that they did not have to pay for baby formula? It is all in proper communication.

The risks lie in not making an effort to help resolve problems when you can do so.

The conclusion is that in partnering with Scarlett's Web, Vendor-VAC can achieve progress towards mending the broken business model still present in healthcare facility/vendor market relationships. It will be interesting to hear what the vendors have to say.



2.1 Outline of Partnering Organization's Objectives

2.1.1 Objectives

The partner, Scarlett's Web, has as its objective in this project a completed, viable website. This site functions as the primary platform for Vendor-VAC to specifically house its information base.

2.1.2 Success Criteria

Success criteria has already been demonstrated, with more details and functions added into the website platform on a regular basis. These positive achievements build with further successes seen as time progresses.

2.1.3 Risks

The inherent risk, and the one most worrisome to both parties in this endeavor is that there will be no Internet traffic interested in this project or the information it contains.

2.2 Outline of Student's Objectives

2.2.1 Objectives

The main objective is to make a sustainable working reference arena for consulting with healthcare vendors. This will expand in scope as ideas and information are exchanged and the website presence grows.

2.2.2 Success Criteria

It is noted by many that knowledge is power, and this concept is an example of how that ideal can expand out into bigger and better things. The benefits have such remarkable ramifications as realistic healthcare supply savings with improved vendor communications.

2.2.3 Risks

As noted above, risks must be carefully addressed to assure business success.

2.3 Definitive Scope Statement

Vendor-VAC was an idea, translated into a virtual internet marketing concept, to improve and assist medical and healthcare industry vendors who present for sales entry into various healthcare facilities. Their desire to sell their products and/or services to these organizations is often unsuccessful due to their inability to obtain, or have the correct access to, appropriate information. Vendor-VAC offers insightful material and learning resources about the various processes and procedures required to enhance that engagement, thereby advancing and progressing vendors towards their wanted goals.

3 Deliverables

3.1 To Partnering Organization

Assuring the data and information are gathered and categorized in an acceptable manner necessary to incorporate into a workable website presence is the main priority with this overall project.

3.2 From Student

The deliverables for the Vendor-VAC idea are focused on having continued, viable web and data content, responsive to client demand. The production of saleable “products” (ideas and forms) needs to be evenly structured so that workflow for both parties proceeds without undue pressures pertaining to time. Avoidance of unrealistic burdens or demands for delivery agendas is desired. Both Scarlett’s Web and Vendor-VAC have constructed the main website to attract clientele and welcome customer interest. Once a connection is established with a client, the business pivots to refine and focus on their exact specifications for individualized data requirements and reports.

At the start, a domain and shared multiuser operating system (UNIX) hosting platform with database, content managed solution, and various provisioning was set up with applicable documentation and the necessary administration credentialing. Within the first 3 to 4 months, there were website wireframes in place and ongoing revisions being made monthly. Also during this timeframe, devices were reviewed for responsive testing, and that process will be continuing throughout the project.

Along with content additions and revisions, monthly maintenance has been performed. These have included WordPress and plug-in updates and any server provisions as needed during development. At times, there was testing and research on various jQuery sliders for responsiveness and performance for the primary hero slider. Additionally, design compositions required purchase order sign-offs on various stock photos and video fonts and other assets. Lately, the vendor product multi-step online questionnaire forms have been developed along with a new newsletter mailing list function, to collect potential client sign-ups with their contact information.

4 Project Approach

4.1 Project Lifecycle Processes

The mission statement for RMR Strategic Enterprises, LLC, which owns Vendor-VAC, states,

Don't Think Of It Tomorrow, Instead, Imagine It Today!

The timeline for completing Vendor-VAC is open-ended, for it will never be complete; it will forever be in a constant state of flux, to remain fluid and always open to new ideas at any time. Within project development, the majority of the focus is on information about vendor options and product/service choices that can be utilized to build into working site documents. Once any data obstacles are overcome, the path clears to create dynamic and conditional forms, and any job timeframe will constrict appropriately with experience obtained. Managerial focus shifts more towards the overall research and necessary informational builds for the concept ideas. While it is true the “storefront” must be artfully intact, the product being sold continually faces polishing to make it worth purchase to the interested customers.

The idea behind Vendor-VAC never has changed. It remains a web-based program being built to assist any healthcare facilities, vendors, and clinicians who are seeking to economize with their products and/or services consumption in the healthcare environment. However, how these three different groups view those functions is as varied as they are. Facilities are searching for answers to decrease their spending, vendors are looking for ways to enter in and sell to those same facilities, and clinicians are interested in how to function within the limitations and restrictions of obtaining the resources they want and need to provide their services.

It helps to better understand the basic ideas if you place a “face” onto each of these three groups, as a simile of who they would be if they were physical persons. For the facilities, they are as an interested browser, one who may have their help pick up a few things but then look to either develop it or to copy it to make those ideas into their own storefronts. The clinicians are like the serious, focused shoppers who know what they are looking for but do not spend money on items they know can be obtained elsewhere for little to no expense if the price is high. The vendors are the customer you want in an arena such as Vendor-VAC. They come in looking for what is being sold and have some cash to do it. They are the prime consumers. The trick is to make the product desirable and have an easy process for them to achieve it.

These quantifications help define the value and pricing structure for the final products offered. If you place the characterizations into levels of serious buyers,

the rest follows to reason. Websites utilize “content drips,” whereby a site’s content is visible based on the developer’s permissions. Ours works best with a responsive design via memberships. Level 1 is best for a browser, Level 2 for a shopper, and then a premium Level 3 for a true consumer. Having the varied levels matches with the revenue streams expected from each of the memberships. These definitions then assist to define and concentrate the income flow.

The first level, Level 1, which is for the browser, is free. It is primarily to develop interest and give a “window” for the consumer to have a limited look at what is inside. A small quantity of specialized information is offered, much like the beginnings of developing a policy/procedure, mainly for the “This-Is-Done-To” crowd. It will highlight the success that can be obtained by practicing cost-saving measures as an ongoing process and inherent mindset for the total organization. Recent news articles of healthcare efficiencies in the headlines, assorted white papers verifying the practice, and choice products that have proven cost savings when implemented are featured.

As mentioned, the whole website has a continual responsive design and is updated regularly. Levels of membership will always have production needs, but this level will have the least amount of intellectual upkeep once in place. The cost inherent in developing and maintaining this level will be included in the total site maintenance expenses.

In the browser, the customer will have the ability to view all three areas of the website, be it the organizational, vendor, or clinician area, but have limited access to any of the more in-depth discussions or values placed within those spaces. Only front page content will be extended, but with offers to enhance the viewing by the purchase of a Level 2 or Level 3 membership. Oftentimes the clinicians will do their own research on specific product lines, in an effort to sway management to those items. They can also be a marketing force to get the various vendor offerings for a more in-depth review, which the vendors desire.

This starts the revenue streamflow. It is contingent upon the browser becoming a shopper and increasing their level of interest in the content presented. They want to know more and become further involved in the processes they are learning about. With this level, more refined and defined information is passed to the consumer. They are also able to request limited additional material and content; for example, up to two product evaluations or a research case study qualification in addition to the focused newsletter content.

It makes it inclusive for the rationale of development of the website’s first goal, that of defining and refining saving ideas for healthcare. It is what is being offered as Vendor-VAC’s company products, per se. Just as a purchased item at a regular retail store, the purchased idea can be utilized to help shape the cost-

savings initiatives being developed within healthcare. Many seek such information, either as new ideas or support for them. Bottom line, Vendor-VAC's true value is in the cost-saving ideas themselves. Those are the key, for many do not even know where to begin. We believe that the customer gets the benefit, knowledge, of the various ways a facility can cut down on the expenses, and Vendor-VAC receives a fee for providing that service.

As a special side offering, Vendor-VAC could do an all-inclusive study of possible savings for an organization. The fees would be collected as a percentage of the total savings ideas presented at the study's end.

The real consumer of the website is interested in value analysis concepts and how they can get their products and services in the healthcare facility's door. It is the product the vendors want and why the website was developed to begin with. There are presently too many variances in the processes everyone utilizes to get a product introduced into the healthcare system for anyone to be efficient in the entry. With the utilization of a unique, detailed product form and discussions on value analysis procedures, many will increase their successes. Someone has to do the front-end work, so why not have it be Vendor-VAC?

Utilizing the benefits of SED search engine optimization and responsive designs from the web developers at Scarlett's Web, Inc., several ways to view top product production became apparent. The forms are formatted to include dynamic and conditional extras. By having an option for sponsorships and advertising, the investment elements grow to make Vendor-VAC a high-quality site.

It is apparent a "pandemic factor" must be considered within business development going forward. An all-encompassing change rapidly occurred within healthcare facilities pertaining to facility entry privileges, and organizations remain cautious with future visitation growth. The exact ramifications remain unknown, but the medical business remains hopeful that any shifts in policies and procedures that take place generate positive connotations with general outcomes.

The pandemic and the mitigative actions that took place were so very unusual, no one would have assumed they were possible. Schein (2017) addressed change and how "learning something new always begins with some kind of pain or dissatisfaction" (p. 322), but the COVID-19 pandemic seemed to have many panic over pain or death that was unrealistic. It was as if someone had thrown an invisible bomb and people started running but could not find cover. The more reaction there was, the worse it became, and quickly. Usually, Schein wrote, change programs start when there is motivation; it does seem like fear of getting a flu-like disease did motivate, but should it have resulted in such a panic response? History will view this differently than the present time does.

There are business assumptions that are made daily throughout the country that involve finances, be it resources or possible profits, customers, and management. There are nice summary tables available from internet sites, such as the Ivey Business Journal that list key accounting assumptions for that type of assistance and/or information. The key assumptions made for Vendor-VAC came from historical observations and practice procedures over a number of years and employment within healthcare facilities.

This led to the development of the following vision and main rationale for the Vendor-VAC idea:

There is no true process agreed upon for the monitoring of vendor entries into a healthcare facility. This creates chaos within the purchasing procedures, despite the various vendor certifications and registering programs utilized by hospitals. The vendors do not know exactly whom to contact, or what specific information they need to present, and to whom, to get their products and/or services into the system. Their 'wandering' around to catch an interested eye is an expensive event that is not being properly monitored by the facilities. This dysfunctional practice leads to "impulse" buying, non-contractual purchases, and the inability to control organizational expenses. This can be due to various, and mixed, internal rationales, but should be addressed by the healthcare facility to control costs.

A key assumption is that this is a common occurrence within hospitals, and this behavior practice has indeed been seen in every facility worked or visited. Also, there is a national organization of similar persuasion that often voices comments about these practice pitfalls. Even though there is ongoing discussion, there still has yet to be a solid policy or procedure that has standardized vendor information submissions to a VAT team. Even though this does not seem to be a financial assumption, bottom line it is. Any non-contracted or specially ordered product or service increases costs. Vendor-VAC is assuming there is a cost-saving benefit for healthcare facilities in having its service.

This aligns and makes a goal: define and refine saving ideas. There is true value in the cost-saving ideas themselves, for many do not know where to begin. Vendor-VAC will need to get behind the ideas and push them with the vendors. The vendors are the ones who supply the products and information about those items and want to sell them to healthcare. Vendor-VAC gets them in the door and to the VAT teams, so everyone wins.

One caveat is the problematic implications of protecting the saving ideas. There is a consistent increase in saving goals once implemented and requests for additional and continual information. Vendor-VAC information must be proprietary in nature and that includes the template for vendor product

questionnaires (see Appendix A). The information that has to be obtained for surgical/procedural use of a product/service is quite comprehensive and varies across facilities as the vendor entry does.

Another goal is developing and researching how the vendors will literally buy in to the project. There are several interest questions on their end for how to get in the door, but now competition has railroaded some of those factors, as in the national group AHVAP, and with the very large growth of GPOs during the recent pandemic. There has been a suspension of facilities purchasing items other than what is available from their GPO. A recent company even had a practice VAT meeting setup during a vendor fair gathering, with other competition constructing vendor value analysis certification awards.

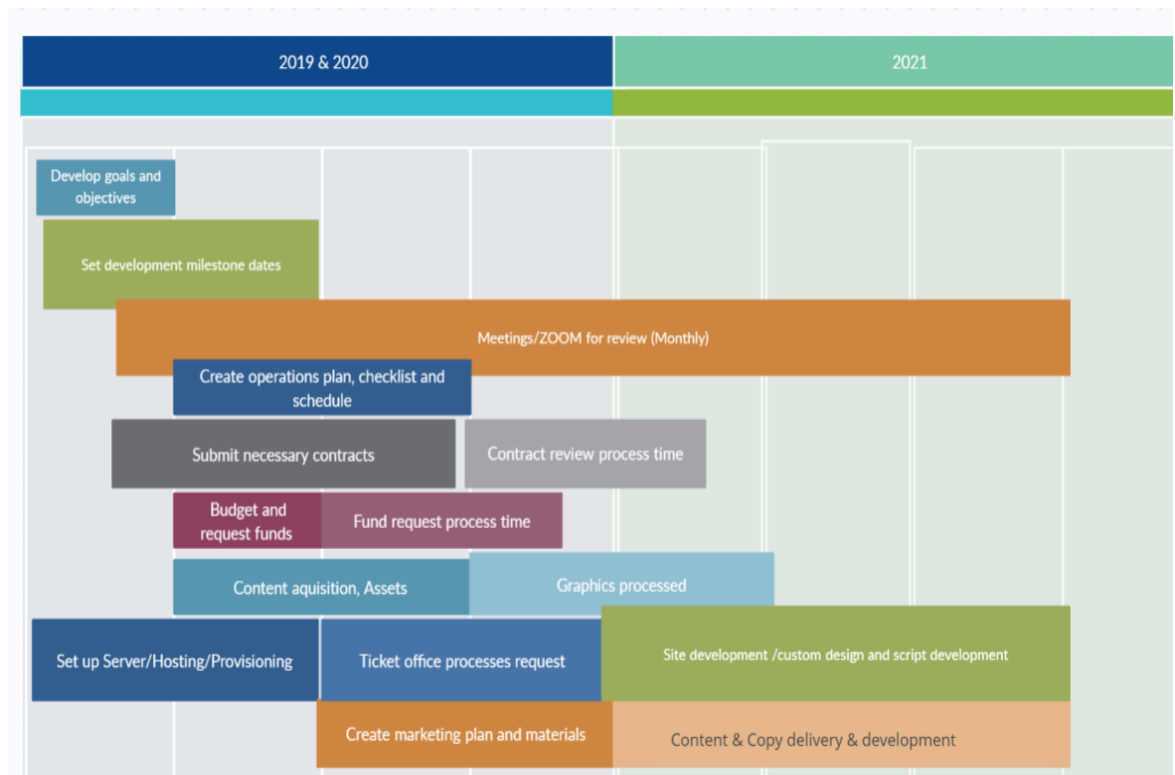
The main point is, vendors should not be included in any value analysis meetings, for that meeting is not a place to sell products. There can be side meetings for that sort of presentation and to refine what information the VAT team receives. The main question has always been how they get to the main value analysis point person to get their product introduced in the VAT team meeting. The ideas stated have been convoluted by some potential rivals in the buyer-vendor relationship field.

Developing more articles and information on the VAT team processes overall adds to Vendor-VAC's value. Often, publications and those who get their word out first get recognition when their new ideas come forth. An example is seen with the AHVAP members putting out their procedures to the membership groups, as those concepts are the ones to be followed. No other alternatives are offered. It stands to reason that Vendor-VAC presents itself and projects to where any buyer will want to spend their money wisely with them. That focus on the saving ideas, and in that arena, will have the best route to follow since there is pristine encryption and coding done.

Success can be measured in many ways, but the true proof is easily seen in the financial gains on both sides of the equation. The customer receives the benefit of the various ways the facility can cut down on the expenses, and Vendor-VAC collects a set fee or a percentage of the savings obtained.

4.2 Project Management Processes

The project plan has been revised and updated regularly, with communications via email and teleconferencing between Scarlett's Web and Vendor-VAC. Because of a virtual platform setup, it was easier to discuss any changes and modifications deemed necessary from either party by utilizing those given parameters. The developer would provide content strategies, calls to action along with programmatical changes, and researched solutions along with the history of the project based on new content ideas, asset acquisition, and platform updates.



4.3 Project Support Processes

Innumeros support has been seen with every aspect and stage of this growing enterprise and from everyone involved.

4.4 Organization

The main business corporation is RMR Strategic Enterprises, comprising the Vendor-VAC component, with Scarlett's-Web comprising the website development.

4.4.1 Project Team

The Project Team consists of the student originator and the web developer.

4.4.2 Mapping Between Organization and Student

All work was divided according to the project's needs and requirements for growth, ranging from data gathering to site data input. As information was deemed appropriate for site inclusion, discussions centered around working applications to make the materials function accordingly.

5 Communications Plan

Vendor-VAC's internal positioning statement for the communications plan states many needs for the online services provided. The focus is to drive company resources towards individuals and corporations seeking to implement cost savings in healthcare. Site information must coincide with the various ideals derived from healthcare facility policies, their individual admittance standards, governmental criteria, and values, along with any medical industry hallmarks. The first and foremost activities include (a) gathering as much applicable and appropriate marketing materials and data for the overall website project as possible, (b) completing research that pertains to those main ideas, and finally (c) presenting and communicating that information to the clientele. These activities then result in all interested parties achieving the efficiencies they desire within their healthcare cost-saving endeavors.

Vendor-VAC's online communication objectives highlight several distinguishing factors. They include

- ✓ Building a virtual business presence.
- ✓ Grabbing attention to the service lines offered.
- ✓ Developing and maintaining a viable client database.
- ✓ Enabling an ideal growth platform for future projects.
- ✓ Helping establish cost-saving principles within healthcare.
- ✓ Education on cost-saving measures for healthcare products and services.
- ✓ Establishing feasible business standards for practicing professionals.
- ✓ Communicating effectively with present and future clientele.
- ✓ Attracting investors.

In addition to the items mentioned above, efforts will move to target the following audiences:

- ❖ Healthcare facilities—to have their involvement in service and practice engagements as offered.
- ❖ Healthcare vendors—to incorporate their products and offer discounts for their products in a mutually beneficial manner.
- ❖ Healthcare professionals—for acceptance and assistance with savings ideas.
- ❖ Investors—to encourage and acquire investment possibilities.

Website capabilities will be composed of

- Quickly identifiable areas for client-based categories: includes facilities, vendors, and clinicians.
- Online forms to acquire information for seller/buyer future communications and analysis.
- Calls to Action content areas, for piquing interest and targeting the visitor's curiosity.
- Access to newsletters and upcoming project conferences.
- Links to membership subscriptions, purchase options, and/or programs.
- Section for Blog post-type resources.
- Links to supportive sites such as AHVAP or AHRMM.

- Links to follow on social media (i.e., Twitter, Facebook, LinkedIn, etc.).

There are various types of communication channels for use and different ways to target the audience and stagger the message frequency. For example,

- ✓ **Website Articles**
 - New articles published in support of savings ideas and product deals obtained from vendors
- ✓ **Email Marketing**
 - Tailored newsletters generated and distributed regularly once prototype is developed
 - Periodically distributed focus-related articles
 - Target audiences include all interested parties signed up for distribution lists
- ✓ **Facebook**
 - Developer will generate “push” content to automatically post new article feed when published to the site or e-newsletters
 - Share buttons on-site content
 - Periodic promoted posts for free resources or important messages
 - Target audience includes all interested parties on site
- ✓ **Twitter/Parler/CloutHub**
 - Updates coinciding with newsletter information
 - Tweet buttons on-site content
 - Periodically promoted posts for free resources or important messages
 - Target audience includes all interested parties on site
- ✓ **YouTube**
 - Videos/updates coinciding with newsletter information
 - Periodic promoted posts for free resources or important messages
 - Target audience includes all interested parties on site
- ✓ **Professional Organization Sites**
 - Once every few months, around compelling and strategic issues
 - Petition created to target a key decision-maker

{To date, there has not been any use of social media for Vendor-VAC, but concepts explored.}

The percentages and priorities for the topics would generally range as follows:

(50%) Product Information Results

(25%) Vendor Information and Saving Options

(15%) Healthcare News
(10%) Clinical Comradery

General Topics to Address:

- General product information
- Safety considerations for products
- Unique benefits from products for improved clinical outcomes
- Saving implications
- Reimbursement informatics
- Expenses from not evaluating saving options
- ‘Marketing’ ideas for clients to ideas implemented

Campaigns are an option and would be launched across all platforms simultaneously. They articulate with clear start and end dates, select engaging photo or video opportunities, and create a sense of urgency. They convey ideas of someone taking action. Some articles and works on the topics below:

✓ **General ‘Why Save?’ and Encouragements**

- ❖ “Ways to Save” Series
 - a. Ways to Save Biologics
 - b. NCAHRMM Value Analysis Presentation
 - c. Product Team Builds
- ❖ Value Analysis “How To”

✓ **Understanding Value Analysis and VAT Teams Are**

- ❖ What New Technology Means for Hospitals
- ❖ People or a Program?

✓ **For Vendors**

- ❖ “Open Sales to Me”
- ❖ Hospital Vendors One-Oh-One
- ❖ Who Are These People?

✓ **For Hospitals**

- ❖ Heartbreak of Expiredness
- ❖ Expiration Dates Explained

✓ **For Clinicians**

- ❖ How To Help Patients By Using Power of the Force

6 Work Plan

6.1 Work Breakdown Structure

As mentioned, the Project Team consists of the student originator and the web developer. Work accomplished was between those involved parties and performed according to individual skill levels.

6.2 Resources

The composition of the Vendor-VAC website and the overall project is unique in that the work undertaken is inherently different for each party involved. The tasks of establishing the website presence, along with the website setup, were accomplished by Scarlett's Web. The content for vendor and healthcare information is in the purview of Vendor-VAC. The majority of efforts go towards either one of those two main pathways.

The coordination and joining of the two endeavors have been rewarding and educational in and of itself. Survival within the virtual world has many challenges. It is cumbersome to write and develop informative articles and information for the website content but gratifying to see others' opinions.

Financial needs and investments have been resolved internally by both parties, and some expenses will continue to present regardless of if monies are made. There are site permissions and fees, along with other costs that hinder reckless disregard of limited available resources. Cautionary expensing for now.

Continual monitoring and research are the keynotes for successful future progress. Noting any influential changes to the VAT team processes overall, modifying the purchasing and distribution of healthcare products, and assuring outreach is persistent and recurrent to the clients are paramount for growth. Often, publications and articles are published first, with their ideas and suggestions on ways to proceed with a problematic concept or procedure. These articles are followed more than those published later on. A visionary goal is to be one of those innovators with good ideas others will want to follow.

As recent events have shown, assumptions made about how a business will be able to proceed and profit can be upended from the strangest things. Historically, although hospitals have always had emergency supplies and backup lists readily available in case of a disaster, presently, assurance of product availability from suppliers is no longer a given fact. Unexplained human behaviors and/or the types of disasters that could similarly affect the healthcare business, such as this pandemic, remain an unforeseen peril going forward.

It has been frustrating to see such events play out, like the toilet paper shortage; never quite understood, except in the psychological aspect of people hoarding.

A data analytic firm published an article about how the production has remained stable--no shortage--except for in the consumer-driven condition due to virus fears. These have all led to restrictions and constraints that will need to be overcome in the future development of healthcare vendor relationships and saving ideas.

7 Milestones

Vendor-VAC is a web-based program built to assist healthcare vendors seeking to present their products and/or services in the healthcare environment. This is mainly due to vendors not knowing exactly whom to contact or what specific information they need to present or to whom to get their products and/or services into the hospital system. They usually wander around trying to catch an interested eye, which is an expensive event when not being properly monitored within the facilities. First, vendors are influencing those who must then seek approval for purchases; second, vendors can utilize that wandering to gather information about the facility's use of other products. Once they know what is being utilized, they can more efficiently make a comparative case for switching to their company's products.

Having lived through and having had ramifications from the vendor wandering events during healthcare employments, it was easy to see and define what was occurring. It became important to look at solutions and to find a cure for the underlying causes. That process took place before Vendor-VAC was developed, but it continues. All involved would like to have the issue corrected, for it is not good to have chaos within the purchasing of healthcare products. It leads to waste and misuse of funds and does not benefit anyone, not even the vendor(s). Hence, the first milestone within Vendor-VAC was recognition of this underlying problem.

Next, there was the realization that the situation was not unique to just the local areas or facilities. Regional and national meeting groups had pertinent discussions, along with others, specific to supply chain management, and had questions seeking to find a workable solution. Vendors influenced the internal personnel by going throughout the medical areas, and that influence led to staff wanting to purchase the vendor wares. The staff did not question if the products or services were contracted or reasonably priced or if other areas were buying similar items. They just called purchasing or the supply chain and requested the items. No worries were given to the implications in that purchase and certainly were not offered up by the vendors themselves.

A fortunate series of events helped to change the focus into a more productive state. Ironically, it was in the search for information to utilize in a product's overall virtual build for another company that brought about the new gratuitous proceedings. Within a short period of time, a different view of the possibilities inherent within commercial value to such research resulted in new planning and numerous revisions in goals. These modifications and realizations of scope enhanced the process for compiling future and necessary information and data build in the Vendor-VAC business overall format.

A more comprehensive study must review how healthcare companies behave in varying geographical locations. How far are they willing to compromise on their pricing and contracts depending on their locations or their visiting sales personnel? How do they project their regional supply growths? Do they want to enter some markets, or pull back on others, depending on the facility? For vendors, is the

interaction they receive from the healthcare organization the main driving factor to sales success? Or do they prefer to leave it all to national contracting teams and wait to see how the sales force fares afterward? All of these questions need further review.

The biggest lesson learned with accumulating all the data thus far is that the true value is in the cost-saving ideas themselves. That is the key, for many do not even know where to begin. That will need to be the main goal for Vendor-VAC and in future data builds; get behind the ideas and push them with the vendors. The vendors are the ones who supply the products and want to sell them. Vendor-VAC will help them get in the door to the VAT teams, and everyone wins. It is deemed best to continue the research, keep building in features and data into the website, and work to establish more bonds with those who can help this happen.

Vendor-VAC Major Milestone Progress		
Milestone	Project Task	Status
Business Set-Up	<input checked="" type="checkbox"/> RMR Strategic Enterprises LLC formed-Legal Zoom	5/15/2018
	Amazon Business Account for Supplies	
	PayPal to Capture Payments/Expenses	
Idea Development	Refinement to Business Concepts/Research Feasibilities	Ongoing
Site Build	Internet Web Worksite Acquired	Start 9/21/2018
	http://vendor-vac.com/ [viable web presence]	11/15/2018
	First Comprehensive Idea Documentation	12/3/2018
Data Builds	Structure Layouts and Article Postings	
Vendor Surveys	Vendor Questions to Verify Sales Situation	2/20/2020
Vendor Product Data	Vendor Materials for VAT Product Submissions	

8 Metrics and Results

The introduction of vendor credentialing companies has been instrumental in reducing cold calls by vendors since appointments are strongly encouraged. The programs also offer the benefits of tighter access in control and increased compliance due to the inherent registration and policy uploads. For example, vendors must take a standard test after they review a facility's policy and procedure statements.

Historically, the issue has been vendors bringing in their newer products directly to the hospital marketplace and into the nursing units. The purchasing department, the purveyor of all things purchased and who must review new products, is often bypassed. They are frequently located in an off-site area, where they are missing vendor(s) entry completely. There are several regulatory standards and informational pieces necessary to have a new product/service introduced into the healthcare systems. Vendor ID badges are oftentimes utilized as an entry "watch" mechanism, but appointments can be made with unit directors and managers, which is a vendor purchasing/step bypass too. It perhaps is considered as a waste of time for the vendor(s) to sell to the hospital staff, since the clinicians do not build the new product(s) into the system, as purchasing does. Or is it? Once a clinician sees or hears of a newer widget or way to do a patient-care procedure, it is hard for purchasing to deny a clinician's request. This can be seen as a vendor trick. These are among the ongoing, common problems.

Ironically, the number one key to enhancing physician and C-suite acceptance for cost savings was found to be information and data. The problems could be easier to overcome by looking at the practiced methodologies and gather the facts about the vendor issues for them to be properly addressed by all involved parties.

It is very difficult to undo a relationship--for that is what the mentioned sales technique has become--a relationship. Most clinicians are not aware of current contracts or obligations the healthcare organization may already have in place. To save money in a healthcare organization, the buying patterns have to be changed. Most value analysis programs recognize the largest expenses overall are in personnel, with the supplies utilization seen as a big piece of operating costs. Administrations everywhere across the country want to decrease that spend metric, and many of the GPOs, who have had spending data handed to them over the last few years, are more than happy to assist in saying what spend needs go where.

However, communicating and convincing the clinicians that those expenses are to be downsized is a different story. Many have opted for the VAT option: VATs. They use the teams to tell the staff what savings should occur and often give them savings goals to help them along in their quests.

VATs consist of various department directors and managers and are usually chaired by the supply chain. The purchasing department, distribution, and receiving all fall under the supply chain, a/k/a materials management. Not all materials directors are

knowledgeable with the clinical products, because they are not clinicians; the communication gaps between the two areas are striking. They also use a fallback to address such matters, known as the value analysis nurse. Bottom line, they are to talk with the nurses and VAT and document savings. Sounds like it should all run smoothly. But what if the savings are not welcomed? Sometimes, people resist change. It can be for a number of reasons, like a relationship mentioned before, felt to be had with the company of a currently used product. Or perhaps, it can be practice and habits in certain types of use. It could be the way a product's material feels or how it has consistently been successful with patient care, or the whole policy and procedure pertaining to its use would have to be redone, or all of the staff would need a few hours of in-service before even trialing the new product, etc. and so on. If you ever want to set up a melodrama, bring up a controversial product in a VAT meeting.

The value analysis professional needs to have a strong product team in place to approve changing products or to begin any cost-saving measure. Any ideas on how to improve their feelings as a group and as a functioning administrative body will need to be researched and cataloged for future assistance in accomplishing any savings goals the organization desires.

Then too, getting the products approved for being changed is just one step in an often convoluted process of building the new product into the system(s) to be ordered and the old one replaced and phased out or donated or exchanged or however it can be maneuvered to complete the purchasing cycles, let alone who will use it, what periodic automatic replacements (PARs) will it be stocked on, how will it be delivered or shipped and distributed to outer areas, and so on. It is a very involved system. Those costs all need to be considered in the savings calculations. All of this equals the metrics for the system and how to gauge the successes when achieved.

Vendor-VAC is a new concept, a unique venture that undoubtedly needs to utilize every available tool offered within the analytical toolbox. Vendor interviews have been ongoing, as they have been a necessary part of the work environment pertaining to spend discussions. Observations and feedback have been performed during those interactive times, and various documents have been developed to help manage the influx of information derived from these aforementioned processes. Recently, a survey was sent out to vendors. Therefore, many tools are being utilized to assist in the expansion and the growth of the current Vendor-VAC business theory.

Quantitatively shifting to the numerical and data evidence to derive information applies to the Vendor-VAC product(s) performance within the healthcare marketplace and brings attention to the "how many" and "how much." The noted vendor survey taken was not able to sample but a few in the many of the vast vendor population, so for now it is mainly an exercise to gauge and document interest. One needs to address the reality of vendors and their entry into healthcare facilities. Bottom line, do they know what they are doing and who they need to see?



Enterprising Insights

VALUE ANALYSIS-HOW DO YOU DO THAT?

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Enterprise Efficiencies

OH, THE HEARTBREAK OF EXPIRED-NESS

Expired products can take a toll on your expense lines, eating away at those cost-savings like so much bad stomach acid.more to

Vendor-VAC hypothesizes that there is no true process agreed upon for the monitoring of vendor entries with their product/service offerings into a healthcare facility. Within this system is created chaos of the purchasing procedures, despite the various vendor certifications and registering programs utilized by hospitals. The vendors do not know exactly who to contact or what specific information they need to present, and to whom, to get their products and/or services into the system. Their wandering around to catch an interested eye is an expensive event that is not being properly monitored by the facilities. This can be due to various and mixed rationales but should be addressed by all of healthcare to control costs.

As stated, although healthcare facilities use security personnel and badged entries to enter, those systems do not capture all of the entry points. For one, most facilities are very large and have several doors. One interesting area is within the loading docks, where supplies are delivered often several times a day and usually 7 days a week.

There are several vendor credentialing services. They gather the information about the vendor and their companies, the vendor and their companies pay a fee(s), and they are then able to print a paper badge, stating they can enter the facility in question for that day. It is a lucrative business. What could possibly be going wrong?

Several things. First, there are so many requirements that often vendors have not met them, or at least a qualifying condition or two. Second, since they may not be able to print a badge, they utilize mock-ups or do not go by the areas that would readily monitor the badges closely. Third, they have associations they have developed within the hospital that will let them enter without the badges. These incidents are commonplace.

Why then do vendors bother with or have to have certification and badges in the first place? There is a history, going back to the 1960s, rooted in the liability of the hospital systems themselves. *Darling v. Charleston Community Memorial Hospital* (1965) stated that hospitals had a responsibility, an obligation, to verify that persons involved in the care of patients were qualified to do so. Of course, like every other governmental program, it has grown to include not only the direct caregivers' education, qualifications, licensing, health histories, experiences, backgrounds, and such, but also personnel like the vendors, even though they are not employed by the facilities. As mentioned, the ideal has ballooned into the system it is today.

The only vendors who are in the procedural areas are the HCIR vendors. Vendor-VAC's core category is, of course, all the vendors. They are the basis, or the grounding element; but as mentioned, they are of all types and promote all sorts of products, and they are technically divided into two main categories: the regular vendor salesperson and the HCIR vendor, who is allowed to go into the restricted procedure areas, usually the operating room and the Cath labs. Occasionally, there are specially certified vendors for interventional radiology, too.

HCIR vendors can go into those areas but DO NOT do patient care. They are there to advise the physicians of their medical products the physician will be using, while it is the doctors who will do the real patient care. For example, a hip replacement can involve many different sizes and types of instruments, bolts, and screws—they can (and do!) fill up several toolboxes, sometimes for even just one complicated procedure. The vendor, who has been trained by their own companies, advises the physician on what pieces/parts would work best for that specific case. It is difficult to control the process, except by monitoring contracts with the companies, knowing the individual vendors, and continually checking surgical expenses for noncontracted purchases. Even then, speaking with the vendor is done before addressing the matter with a physician, although the last few years have seen the issues better resolved by incorporating the physicians into the purchasing process, telling them of less-expensive options, hoping they will listen.

These items in question are known as physician preference, and to go against the grain of what a doctor prefers to perform surgery is very difficult and not advised. The physicians have trained and are practiced in their techniques, with disruption of that flow of innate skill very possibly inhibiting the outcome. Their qualifications are closely monitored by a Board of Medicine, with credentialing and certifications, the key to the real-time monitoring for the quality within of services of healthcare organizations. This is the heart of a hospital's credentialing management and is an essential function for hospitals for obtaining coverage by any insurance carrier.

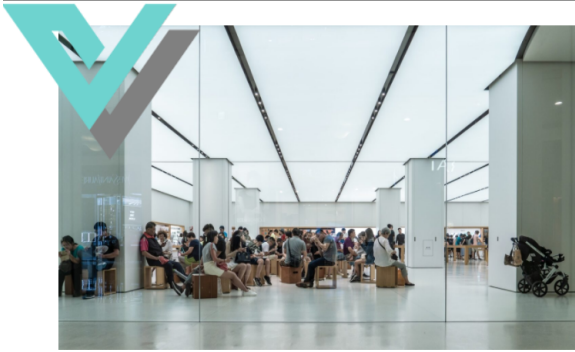
Therefore, the vendors need to have complicated entities within the healthcare facilities. Vendors are not employed by them, but the facilities try to influence their behaviors by restricting entry, controlling purchases, and utilizing vendor credentialing services.

The Leapfrog Group, a nonprofit organization that publishes information for the public view, focuses on healthcare organizations. They state they are trying to make a positive change with American healthcare per their website advertisements. In the course of their information gathering, they send hospitals surveys and then post the results during that attempt to educate the public about their options for care. Interestingly, they have a data table summarizing the minimum hospital volume and the minimum surgeon volume for physician credentialing. Medical administrations follow the information closely. Then, too, purchasing should monitor the vendor credentialing information. They are right there with the physicians in surgery.

The implications of not having solid information and understanding of the business intricacies involved with Vendor-VAC are huge--the difference between success and failure. However, the future has been so disrupted due to the COVID-19 virus, it is hard to imagine all of those ramifications. Our hospitals have not been performing elective surgeries--those types of surgeries were 48% of the total for revenues back in 2011, let alone in the present day. What other type of horrible backlash will come from the interruptions to care that have occurred just in the past year?

Two hundred nine hospitals laid off employees as of April 7, 2020. Mayo Clinic, a gigantic healthcare system, had a record revenue year in 2019 of \$13.5 billion, but the virus cost them \$3 billion in 1 month alone, with no additional revenue coming in. According to Becker's CFO Healthcare newsletter for April 28, 2020, Mayo instituted reductions in salary for executives, furloughs, temporary benefit reductions, a hiring freeze, and canceling or delaying any capital projects. They say it is still unknown of all the virus's effects. Although everyone is saluting the hero healthcare workers right now, there will be future hell to pay for all the ramifications from other patient types not coming into the hospitals during the country's mitigation efforts.

How it will affect Vendor-VAC is rooted in the monies companies will be willing to spend for cost-saving ideas. Value analysis was a newer concept within the not-for-profit facilities (for-profit started the idea 10 years prior with their clinical resources program). Being fortunate to have been involved in the beginnings of both ideals, Vendor-VAC will be able to apply the lessons learned from the first to the latter successfully to derive savings concepts. Healthcare executives like seeing the savings on paper but are slow to support when faced with any disputes with purchases or contracts, especially if they involve physician-preferred items. Besides, the savings are seen as "funny money," like the savings tallies at the end of a store receipt. You have still spent the money; perhaps not as much as you would have, but it was expensed nonetheless.



'How-To-Vendor' in Healthcare

VENDORS-WHO ARE THESE PEOPLE AND WHY ARE THEY ALWAYS BOTHERING ME?

Probably no one remembers the days when a Fuller Brush man would come calling, ready to sell his wares. Why would we be bothered with someone busting into our office nowadays? In the real, modern world



'How-To-Vendor' in Healthcare

HOSPITAL VENDORS ONE-OH-ONE

Hospital Vendors One-Oh-One Don't miss out!Subscribe To NewsletterReceive top education news, lesson ideas, teaching tips and more!Invalid email address Give it a try. You can unsubscribe at any time.

9 Risks, Constraints, Assumptions

9.1 Risks

Risk is inherent in everything one does, and that is true of this company concept as well. The biggest fear is no one viewing the site, and if they do, not wanting to learn more on how to comply with vendor facility entry factors to obtain medical sales. Or, even worse, what if no one wanted to save healthcare dollars? These are all scenarios to keep in mind and therefore to be monitored regularly.

9.2 Constraints

As with any business, Vendor-VAC undoubtedly faces risk factors that threaten the company's very survival. Some are perils that perhaps befall any business venture, but others are more specific, most notably due to the type of business environment within which Vendor-VAC lives. Despite the assumption of these possible adverse elements, where is the energy to pursue? Why bother? It comes down to a question of "Oomph" (Knowing our **O**utlook, seeing **O**pportunities, strive for good **M**arketing, develop **P**roduct for web-sales, and remember our **H**andiness is a skill). Vendor-VAC had to get the whole idea beyond the "dream on" part. We remembered to define, develop, and keep positive. "Oomph" allowed us to begin and now to continue.

9.3 Assumptions

Generally, business enterprises need to worry about matters such as finances (Is there ever enough money?), their operations (to produce their product or service), their personnel (doing the work), and their marketing (to get someone to purchase their goods and/or services). All of those factors can be influenced either positively or negatively and also either internally or externally.

Vendor-VAC's business model has the modern slant, that of being without the traditional brick and mortar structure to contain it. However, web-based companies have several other issues just as costly and structurally abhorrent as a big physical building to keep solvent and maintained.

Due to the flowing nature of the World Wide Web and all that it encompasses, the Internet remains a wonder in and of itself. The many facets of connecting and then thriving out there among the other various coded, innumerable entities and realistically comprising a sustainable substance are quite scary. However, thankfully, there are skilled professionals such as Scarlett's-Web who navigated the oceans of data points efficiently in order to develop a strong virtual presence.

Within the development of the Vendor-VAC concepts, there were several benefits for both the idea originator and Scarlett's Web, Incorporated. However, being realistic, this joint collaboration continually evolves. It focuses on the advancement of a new concept, which generates risk factors just from being

new to begin with. There are various web and marketing strategies for any startup business during the first round of work-ups. Virtual ideas include methodologies in research strategies, global statistics of any competitors, and ongoing web traffic scanning to glean competitive advantage in the web/design build.

In order to realistically exam other risk elements, a strengths, weaknesses, opportunities, and threats (SWOT) review organized the relevant factors. To begin, being a web-based company and with the utilization of knowledge and skillsets of both an experienced web developer and a healthcare professional, top content for the platform was created; a strong strength since content basics are known as a desired commodity within focused market targets.


Unfortunately, long hours worked daily by both parties along with other obligations interfered with any full-time commitments to the Vendor-VAC venture. Limited funding and investments also hampered quicker expansions, which fall into the weakness arena.

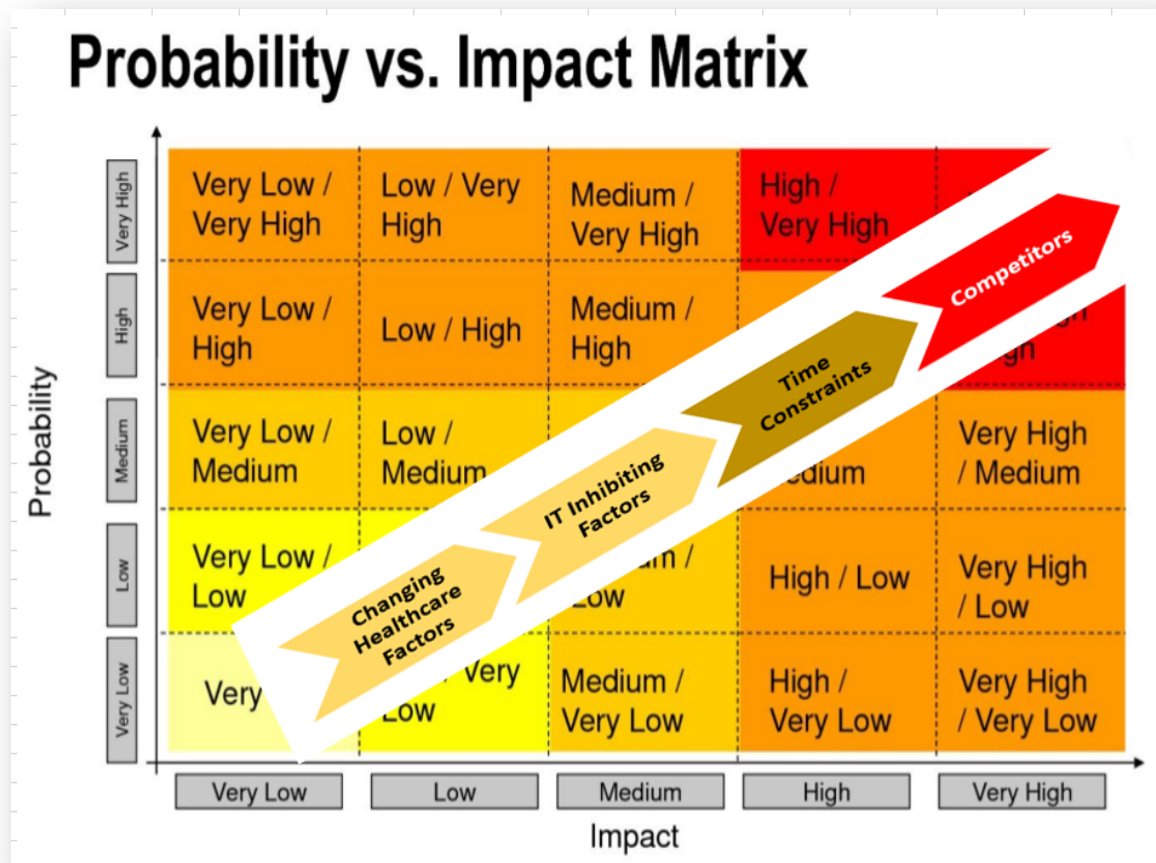
Opportunities abound with the expansion of programs via increased awareness of Vendor-VAC's presence. When you add in the ability to incorporate more developers and professionals into the fold as time goes on, due to the flexibility of web structure, outlooks improve. Of course, other competitors are growing within the overall field while business is being set up, giving a threat to the SWOT structure. Also, challenges of too many variances developed within healthcare facilities to have any practical working standardization models developed will remain an overhanging menace.

At this point in time, the criteria for assessing the levels of risk remain just assumptions since the business is not fully functioning. The projections are for future income, without guarantees. With that defined, the risks narrow down to those involving time constraints, competition, IT inhibiting developments, and the ever-evolving standards within the healthcare field in general.



Another way to characterize the risk factors identified is with a spreadsheet developed to categorize their status. The listing clearly identifies four specific risks and varied ways to keep informed about their status to decrease the chance of risks becoming a business loss. It additionally gives an advantage by illustrating the risk level of seriousness within the overall business model in terms of probability and impact.

			Risk Assessment	
Known and Potential Risks	Evidence	Criteria	Mitigation Plan	Contingency Plan
Competitors Developing Sites	Similar service websites already on-line	Visual, with internet searches done	Keep up-to-date on industry line growth and developments	Become integrated into system to keep abreast of latest industry growth factors; identify industry leaders in field
Time Constraints	Two employees who are working full-time jobs with site as second priority	Measured output and contribution to 'build'	Realize experience and field interaction is elevating knowledge base	As above, and continue to 'grow' with the time given as best can
Unknown IT Inhibiting Factors	Noted connection and web-site issues could surface at any point in site development	Continual checklists and site criteria reviewed for full functionality	Keep current with IT and site development technologies	Research and always check communications pertaining to technology updates
Continually Changing Healthcare Influencing Factors	Many policies and procedures developed and discussed within healthcare facilities and professional groups	Logs and records kept of changes that would influence site material and development	Keep current with appropriate healthcare matters for site development validity	Research and always check communications pertaining to healthcare updates



Competitor site fields and idea development grow fast, so action before a viable rival site for Vendor-VAC becomes relevant on the World Wide Web, is the highest priority. The risk is mitigated to a certain point by closely observing a competition's work. All of the relevant business influences were paused during the pandemic since products were hard to acquire and GPOs controlled the buying fields. Status updates are not difficult to monitor if professional memberships are maintained to note of any new content and/or actions if and when they are established. Time constraints remain worrisome; however, for all time passes quickly, especially when remembered it is limited. It has been beneficial to scrutinize perspectives and views of other healthcare facilities and their value system solutions, especially via the national professional group webinars.

The vulnerability with possible IT difficulties is present for everyone, with the government issuing risk assessments for just about every factor in any technology field. Cyber-attacks and malware are the norm instead of the exception. An example of an ongoing site checklist is shown to be closely monitored for any fallibilities before they can occur. It remains a priority to always note the probability of threats to the virtual business model developed

and to keep vigilant to them, despite the noted limitations inherent in the uncertainties of today. Things can only get better (Jones, 2006).

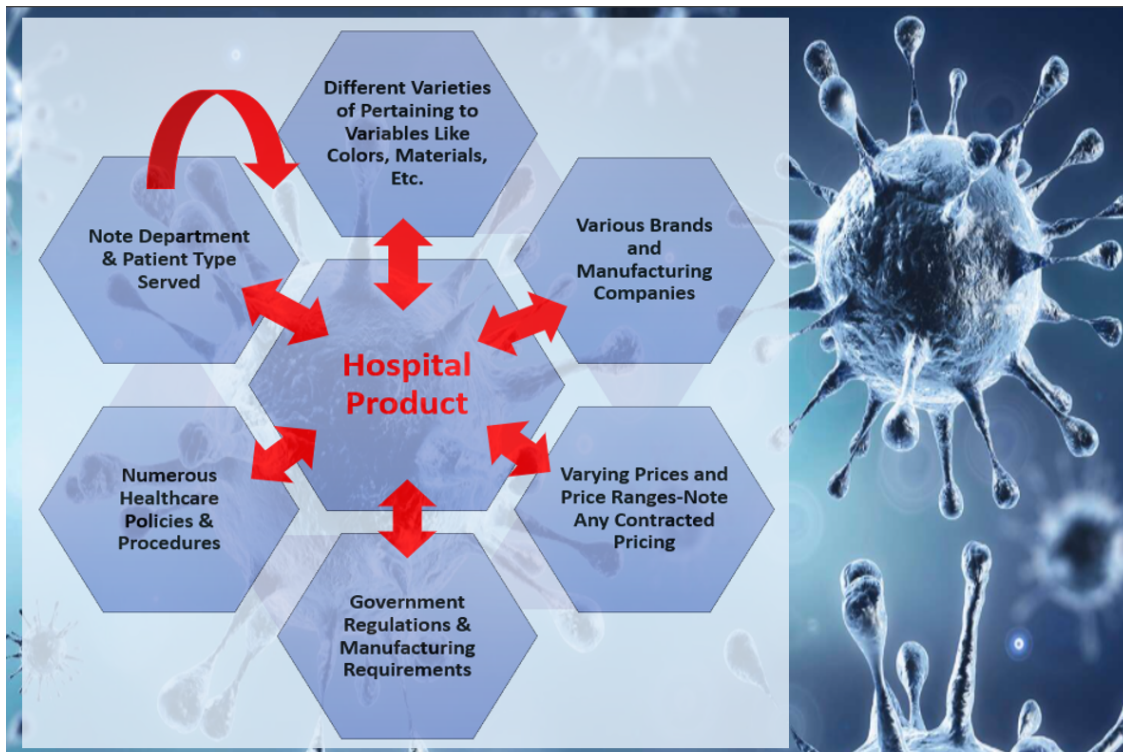
		Objective Conclusion			Report Page
Objective	Description	Met	Met WR	Not Met	
P02 - Define the Information Architecture					
	PO2.1 Enterprise Information Architecture Model		X		3
	PO2.2 Enterprise Data Dictionary and Data Syntax Rules			X	3
	PO2.3 Data Classification Scheme			X	4
	PO2.4 Integrity Management			X	5
AI3 - Acquire and Maintain Technology Infrastructure					
	AI3.1 Technological Infrastructure Acquisition Plan			X	6
	AI3.2 Infrastructure Resource Protection and Availability			X	6
	AI3.3 Infrastructure Maintenance	X			7
	AI3.4 Feasibility Test Environment			X	7
DS12 Manage the Physical Environment					
		Objective Conclusion			Report Page
Objective	Description	Met	Met WR	Not Met	
	DS12.1 Site Selection and Layout	X			8
	DS12.2 Physical Security Measures	X			8
	DS12.3 Physical Access	X			8
	DS12.4 Protection Against Environment Factors	X			9
	DS12.5 Physical facilities Management	X			9
Objective Conclusion Summary	Total by Objective Conclusion (of the 13 Objectives Reviewed)	6	1	6	
	% by Objective Conclusion (of the 13 Objectives Reviewed)	46%	8%	46%	

Strategic positioning of elements on pages and sections completed within the new site allows for maximizing of search engine optimization and improvements to user experience. Vendor-VAC benefits from the ability to develop innovative technologies for data handling and in producing continual, procedural online forms with additional new branding elements. Ultimately, the finished product(s) is included on the company website for corporate portfolio references. The ability to have backlinks to other developer/organizational websites produces an overall elevation to search engine ranking results.

The ability for Vendor-VAC to work within an established development and design house provides an intellectual connection uniting the research and historical data collection into making a dynamic web presence. The training and education give post-launch maintenance and site tasks immeasurable value. The new, improved focus towards the inclusion of any additional educational concepts and techniques pertaining to a hospital's infection control products is ongoing and now being reevaluated. This is in keeping with insight into various items and processes adapted to ensure healthcare's business survival with the COVID 2019-2020 pandemic. During that year, incident response modifications influenced how products were purchased, vendors were introduced, contracting terms were reviewed, and other general processes were completed. The perceptions with hospital clinicians pertaining to product use also changed. Therefore, the best option for Vendor-VAC going

forward is to heed the altered product and modifications to vendor privileges and include any effects in evaluations of a product/service status to what effect the virus has had on those relationships overall.

Risk Assessment										
Purpose of Risk Assessment:		Evaluate Viability of Vendor-Vac Inc.								
Department/Unit Name:		Research Analysis								
Administrative Structure:		Management								
Completed By:		RRickrode								
Date Completed:		7/7/2019								
Date of Next Risk Assessment:		9/7/2019								
What is the risk?	Describe the identified risk	How is the risk currently managed?	Comments/Concerns	Impact	Likelihood	Risk Calculation			Additional steps needed to mitigate risk	Responsible Person/Job Title
						Impact	Likelihood	Risk Score		
Low visibility of site by consumers	Loss of revenue with no sales	Building exceptional data bank of information to entice viewers and utilizing top data flagging techniques	Time spent in start-up could allow competition to pull off possible consumers	High	Medium	4	4	8	Increase workload in research arena for faster completion	RRickrode
Continued disregard for facility entry for sales by vendors	Vendors do not wish to comply with product entry requirements by ignoring policy & procedures	Supporting facility efforts to monitor sales personnel; support vendor-entry monitoring efforts	Can negate some company compliance by developing contacts within major commodity areas	Medium	Medium	3	3	6	Author articles and support publications that decry those vendors who are not registering for entry	RRickrode
Facilities do not welcome consulting cost-saving evaluations	Going against the current trend, healthcare entities no longer want to project cost-saving measures	Keeping up with the industry news and informational flows on trends in healthcare	Time constraints make research completions hard to quantify; competitors taking information	Medium	Low	3	2	2	Continued effort to focus work and research	RRickrode



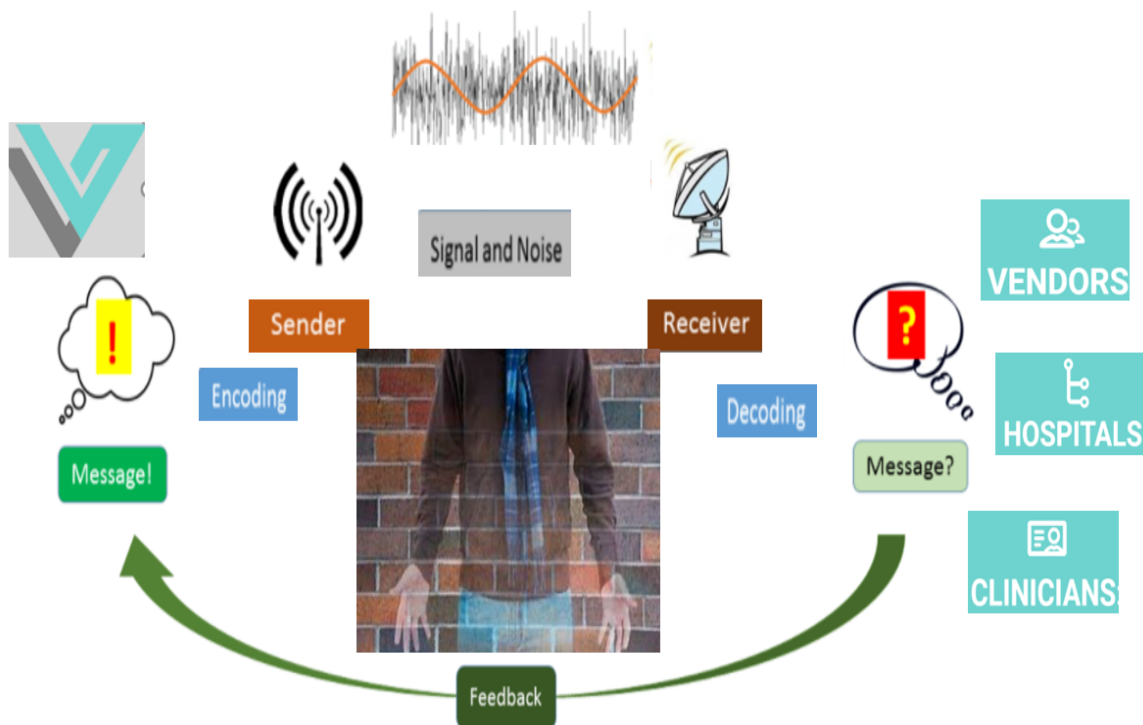
As the above graphic shows, the pandemic underlies all the aspects involved and that inherently reside within the many factors that influence a hospital product's choice and utilization. And, more important to note, these are just some of the considerations undertaken with a product's review process. As several news articles and information streams are starting to point out, it is unknown how long this trend will continue. If history is any gauge to the chronology, it will be continued for many years, for the healthcare industry has been transformed as a result. Previously, infection control standards were brutal to new product implementations, and the pandemic effects will undoubtedly overwhelm the evaluations and costs of any new items going forward.

Another adjustment to be considered is with the presentations of any new products and vendors to medical staff. Educational webinars and discussion virtual calls are numerous within the product evaluation circles now. All but direct care personnel were considered nonessential or were to work from home. Vendor-VAC can acclimate to these restrictions by including the information on products and/or vendor opportunities as a virtual experience, albeit an on-demand type of capacity instead of any set meeting times. This enhances customer satisfaction by providing new, remote, and flexible evaluation schedules.

Organizational benefits for Vendor-VAC are so far in the non-monetary arena. Learning about becoming a virtual presence is invaluable, though, and has only had positive outcomes. It is gratuitous for the project host to be forthcoming on the essential "How-Tos" for the item site builds, and they cannot be thanked enough. The design skillset offered is unique in and of itself.

The major issue with the project is the continued chaotic situations within healthcare and the instability within that market. As mentioned, access to facilities is very limited, so the restrictions on vendors have been increased. Options for bringing in any new products are minimal, along with the fact that GPOs are controlling most commodity purchases. At first, product sourcing was scrutinized, but over this past year, the outlook for those types of matters has changed to simply taking advantage of what is readily available due to increased demand; besides, the major distributors mostly bore the brunt of routine purchases anyway, with their PARs set up via automated ordering systems. It is just that the volume of items GPOs now carry has shifted more towards them and bulk buying, with fewer special orders placed.

Another issue is having decreased personal interaction with the primary players for the Vendor-VAC concepts. A cold reality fact is that without presence, financial persuasion, and a solid purchasing influence within the supply chain realm, it is difficult to broker deals with some companies. The site offers help to the vendors via building their products for VAT analytics, with the caveats that they offer discounts and saving packages in return for their wares. Those discounts are then presented as savings ideas to the hospitals. The clinicians will be given access to their product's information and education that results in helping the vendors with their communication quests. It sounds like a good plan on paper, but interactive sales is key to selling those ideas.



Budgetary matters remain at a limited capacity, as stated, but professional credentialing maintained to present solid footing among national groups such as AHRMM and AHVAP. As a matter of course, work is being done on two committees

for AHVAP--education and certification. These organizations are networking vessels but will include experience and learning opportunities to their service arenas in building future Vendor-VAC value-adds.

The project's tasks had ups and downs but provided a valued journey. Besides polishing up the overall presentation and references, the immediate work of building the ideas and products remains to be further refined within the site. There continues to be a mountain of information to condense into a dynamic format via the "shopping cart" data, with a solemn wish for better typing skills. As they said in California during an engagement there, No Worries! Vendor-VAC adjusts as needed.

As time goes on, the website and concepts will exponentially grow, especially with further research and the hope of improved funding. In the vision seen, like a smaller version of world peace, is that healthcare costs can decrease from utilizing saving ideas and efficiencies. For example, in California, at a pediatric hospital, they did not know that infant formula was free to them; or questions still come across from discussion groups on AHRMM with members inquiring for a cardboard handling policy. (Cardboard harbors bugs and should never be in clinical supply areas--no discussion, a rule. One just has to take the time to unpack the items from the box before putting them onto any patient care storeroom shelves. The root cause for this inquiry is usually labor expense priorities within management.)

These are just two quick examples. Many of these concepts are learned over time, or by having a good mentor/orientor/teacher to help resolve them. Vendor-VAC is to be viewed as a resource, a trusted website that can be relied upon to give good ideas to save facilities money, connect the vendors with the right communication methods for providing their wares, and a place clinicians can look to when they seek answers for the right products for their patient care; however, perhaps world peace would be easier.

10 Financial Plan



Within the business setups, enrollment was done in the PayPal system for utilization with the Vendor-VAC's accounts. PayPal can be inserted along with other payment card options for effortless payment inflow. By inviting discounts for members of special interest groups such as AHVAP and AHRMM, more professional credibility can be obtained. Opinions will be welcomed.

Along with these potential revenue in-flows, some expenses must be considered. There are licensing and site fees, not to mention the costs associated with the site development and maintenance. Registration has been accomplished for business incorporation, and legal matters must always be evaluated. Bookkeeping expenses, along with regular business costs are a given, not to mention taxes that would be levied on any income. These tasks must remain in line.

Even if the company grows at 5% per year, it will continue to have expenses. Those expenses may present themselves as the same as they are or grow at a larger percentage than the income stream than they were when the business started. Either way, because the liability and expenses are only about 33% of the revenue expectations at start up, the business should experience no negative effects from a small out-going increase. The biggest problem may be in finding qualified employee help as the workload grows.

The approximate cash outflow for employees, office necessities, computers per year would be \$96,000. In 5 years that would be calculated as \$122,524.80 per year.

$$-\$96,000(1 + .05)^5 = -\$96,000 * 1.2763 = -\$122,524.80$$

An estimated revenue flow and expense report has been developed, with the private hope that the estimates on possible income are very low and will go beyond given expectations.

For example, if 25 vendors pay \$149.99 for their product to have a VAT evaluation questionnaire review, that would make \$3,749.75 in income. Add in 10 shoppers for \$49.99 for various product queries, for a total of \$499.90, to make \$4,249.65 possible within the first few months. A steady flow of customers paying onsite for the services, with encouraged interaction, will bring further steady growth. Additional monies would be an income from obtaining two facility supply chain value analysis evaluations per year, for a savings projection of \$1,000,000. Charging a 10% fee (plus expenses) for that service results in \$200,000 collected.

Many aspects of the financial end are to be regularly reviewed. Keeping up with the matter is paramount. As those issues present themselves, the data will have to be studied and approached with the care and caution it deserves. At this time, it does not appear that loans would be offered for services or taken to give them. One can only hope there is financial stability for all investments and a stable monetary future for everyone involved.

11 Quality Assurance Plan

The fundamental purpose of Vendor-VAC's quality assurance plan is to define and give deference to underlying company principles. A roadmap for implementation began with a checklist, detailing the responsibility assignments, resource allocations, results reporting standards, and the requirements for various periodic process reviews. They are all-inclusive and within the comprehensive strategic planning.

The PDSA (Plan-Do-Study-Act) model for process improvement started after Edward W. Deming, along with others, including J. M. Juran, went into Japan following the destructive aftermath of World War II. From there, the development of the four repetitive, logical steps emerged and are utilized for continuous improvement in businesses today.

Within healthcare, the PDSA helps the supply chain assure there are sufficient supplies needed for daily operations. They have also been utilizing the lean Six Sigma methodologies for some time now. Vendor-VAC will not vary from this tradition within its model structure and will adhere to these practices since they have been so successful in the past.

To begin, exactly who is responsible within Vendor-VAC for the quality assurance plan? Intended for all due purposes, quality assurance lies in the scope of everyone involved in the company, with the overview of compliance in quality assurance spear-headed by leadership. Any additional resources necessary to guarantee continued peak performance within a department and pertaining to the quality assurance plan are ear-marked, with a notation within the spend, and for budget allocations. As a sign of the quality assurance plan's top priority status, additional requisitions requested for compliance matters are to be forwarded to management once identified.

The company standard is for all quality assurance results to be compiled into a quarterly report and submitted for review by the leadership team. A summarized annual report is developed from quarterly accountings, along with any recommendations for improvements and/or additional funds needed for budgets, insuring departments remain within quality assurance compliance levels. All departments have quality assurance representatives to review activity and regularly monitor and routinely maintain logs of all matters pertaining to continued quality assurance measures.

The quality assurance plan preserves and keeps the company on track with the compliance necessary and vital within our fellow industry community, especially those seen in a healthcare website presence. Vendor-VAC is committed to the market of saving ideas and vendor relationship building. Without a keen eye on site schematics and/or idea maintenance, the business would fail to succeed in its endeavor for success. Quality assurance is necessary for successful operations to flow smoothly, avoiding the pitfalls of neglect or complacency.

The cataloging and how big data are approached have been specifically defined. With large amounts of information, the manner in which the company manages the volume of data increases in importance. Not only can the sheer amount influence endeavors, but interpretation can be biased. Vendor-VAC will continually monitor system analytics to gauge impact. Storage factors need to always be considered, along with all system securities.

The next factor considered specifically for Vendor-VAC data addresses variety in several ways. Paramount is separating the data types, as in structured, semi-structured, and unstructured. Newer structured data comes from various sites, files, graphics, etc., whereas unstructured voice files can mean undue complications beyond the defined scope.

Velocity is the measure of a temporary value to the data and is realized when data are streaming in real time. Considerations lie with a continual watch for how fast Vendor-VAC will want processes to run, structure to be modified, and content adjusted to maintain good quality output for the customer base. Vendor-VAC recognizes that veracity is “the heart and soul” of the data, noting not only quality but origin. Paramount too is the value of the data. It is the soul of what Vendor-VAC is all about. Watching variability will help in the monitoring of how fast the data are changing from what was originally conceived.

These concepts are known as the “Vs” (volume/variety/velocity/veracity/value/variability) within the defining characteristics of big data, and Vendor-VAC needs to continually monitor the factors stated within the quality analysis and incorporate them into the overall quality assurance plan. Exact specifics on the numerical values of the site data platform will be contingent upon system operations and web-based criteria obtained from the Internet and hosting components. Some of these elements are unknown at this point in time, but once acquired, they also will be set up into the specific quality assurance quarterly and annual reports. Quality assurance measures will be built to enhance review of areas such as customer service or financial accounting as the company expands into a bigger enterprise.

Appendix A

Vendor-VAC Product VAT Question Listing

Is utilized to gather information on products/services presented by vendor for sales to healthcare facility.

Product/Service Overview-General Information:

- Company Name:
- Address:
- Point of Contact:
- Title:
- Phone:
- Website:
- E-Mail:
- Product Name:

Is this a new product/service? ☐ Yes ☐ No ☐ NA

Describe product/service and its primary function:

Explain objective of product/service introduction:

improve quality, reduce costs, facilitate standard of care, etc.

What are unique, differentiating features from other products/services?

Explanation of how this product/service is an improvement over current technology.

Manufacturer/Supplier names:

List companies involved in developing, producing and/or distributing the requested product:

Projected annual usage (per item)

Cost (per item)

Total annual cost

Has the utilizing department(s)/section(s) reviewed this request before this introduction?

Do they recommend approval?

Is there comparable product/service technology currently used in healthcare?

If yes, identify other users and provide product/manufacture information:

List companies that may be major competitors with the requested product/service:

If current comparable product/service technology is utilized within healthcare, will it be replaced with the requested product?

Which objective is this device expected to achieve?

☐ Cost Reduction ☐ Improved Clinical Outcomes ☐ Strategic Direction

Does this new product/service require new instruments or new equipment?

Is this product/service part of a procedure already being performed, or will it need to be added to one?

Is special training needed for use?

Is this provided at no cost?

Is there a Physician sponsor?

Note: Medical Staff Office Protocols

- *Does a Physician need to be credentialed to use device?*
- *Conflicts of Interest?*

Safety Considerations:

-

Please provide detailed explanation of how your product/service improves safety for patient or/and healthcare provider over currently available products.

What government or/and professional agency regulates your technology (FDA, EPA, HMIS, NSF, etc.)?

What is the classification/rating assigned to your technology by the regulating agencies (Class I, Class II, Class III, D1, D2, E2, HMIS Hazard rating, etc.)?

Please list all regulating agencies registrations/approvals on record (FDA 510K, PMA, NDC, etc.) and include dates for all registrations/approvals.

When was this technology first available for sale in the US?

Where is this device manufactured?

Are you the manufacturer of this device or an exclusive distributor in the US?

Intellectual Property/Patent Status

Does this product contain PVC Plastic Latex?

Does the product use or produce a hazardous chemical?

(Conversion assistance, education assistance, technical/customer assistance, clinical guidelines, implementation tools, in-service program, risk-share program, recycle program/green initiative, etc.

Non-clinical Operational process improvements and outcomes (Health Care Organization operational savings, economic advantages). [™] Cost Savings (Direct and Indirect Medical Costs, Self-Care Costs, and Lost Productivity Costs at the workplace)

Clinical Evidence It is crucial to the process of formal Innovative Technology reviews to include clinical evidence. Please include available evidence to substantiate your primary clinical claims of benefits for this technology. These may include published peer reviewed studies, other published clinical studies, in-hospital trials, poster-boards, case studies, etc.

Unique Benefits to Clinical Outcomes-

Is a trial best to define clinical acceptance?

- *Have clinical outcomes been researched?*
- *Sufficient data on clinical outcomes and/or adverse events?*

- *Clinician incentives understood?*
- *Training/credentialing addressed?*
- *Staffing impact?*
- *Staff efficiency addressed?*
- *Patient convenience impact addressed?*

IT implications addressed?

- Does the product require a wireless connection? ☐ Yes ☐ No ☐ NA
- Does/will the device transmit data? ☒ Yes ☐ No ☐ NA
- Does the product require integration into Epic? ☐ Yes ☐ No ☐ NA
- Are there any additional expenses that might be incurred with use of this device?
☐ Yes ☐ No

If yes, please comment: [Click here to enter text.](#)

Reimbursement

- *Has reimbursement been addressed for all payors?*
- *Are there Medicare coverage guidelines for this product/service?*
- **Reimbursement/Financial Consideration** • *Has reimbursement been established for this technology itself or as part of the typical billable care costs?*
- • *What are the ICD codes a health care organization may use to request reimbursement?*
- • *If reimbursement for this technology is not yet available, list steps you have taken to assist health care organizations to absorb the cost of this technology.*
- • *Does your product reduce out-of-pocket costs to patients, if so how?*

please provide description, price, Relative Value Unit, (RVU), CPT/HCPCS and revenue code

Expenses

- *Expense impact addressed?*
- *Technology acquisition costs?*
- *Do new charges need to be developed in connection with the device? (need description, price, Relative Value Unit, (RVU), CPT and revenue code.)*

Marketing

- *Should marketing be informed?*
- *Device unique or new to region?*
- *Differentiator?*

Product life cycle addressed?

Purchasing

- *Priced lower than current product(s)/services?*
- *Trial use agreement?*
- *Trial pricing only? Post-trial pricing established?*

Is consignment of this device an option? ☐ Yes ☐ No

Is this product line covered by a GPO agreement? ☐ Yes ☐ No

What is cost of a service contract?

Where does service originate from?

Does the vendor offer a recycling or exchange program for this product?

Appendix B

Vendor Survey

Questions to vendors to gauge interest/situation of facility entry.

QUESTIONS:

“Did you have trouble entering the facility?”

☐ Yes ☐ No

“Did you know specifically who to speak with in the facility?”

☐ Yes ☐ No

“Are clients able to discuss your products at a knowledgeable level when you begin a meeting?”

☐ Yes ☐ No

“Do you come to meetings with a set ‘value-add’ or savings’ option?”

☐ Yes ☐ No

“Do you wait for the client to inquire about the possibility of discounts?”

☐ Yes ☐ No

“Did you know who to specifically speak to within the organization to advance your product or service sales?”

☐ Yes ☐ No

“Do you call ahead for possible appointments?”

☐ Yes ☐ No

“Do you research the business you are attempting to have sales with?”

☐ Yes ☐ No

“Do you have prepared documentation for your products or services that list basic supply purchasing information?”

☐ Yes ☐ No

“Does your company supply a pre-completed form about your product(s) or service(s) for utilization with a facilities’ Value Analysis Committee?”

☐ Yes ☐ No

Appendix C

Article Written to Incorporate Vendor Interest Questions

“How to Think Like a Spaghetti Vendor in the Supply Chain of Life”

I am not much of a cook, but I have heard that you can check to see if spaghetti is done cooking by throwing it up against the wall to see if it sticks. Even if this is not true, the thought of tossing food around in the kitchen sounds like more fun if you can legitimately go around doing such things.

This same concept can also apply to work. I have heard that you can check to see if your Supply Chain is getting the most in savings if you throw a vendor up against the wall to see if he discounts. Even if this is not true, the thought of...

Oh my goodness! See what just happened? I am so silly. I know better. I know that vendors don't stick to walls. But they can give you discounts, and it is well worth your time to explore those options.

How to start? Just as I stare vacantly into a cavernous kitchen, wondering if anyone would notice the lingering taste of Chef Boyardee in my final product, I could absently flip through spend data and settle on tried-and-true saving ideas. Not the best option if I want a noteworthy product. Plain old spaghetti on a plate is, by its' very nature, downright boring. You need to spice it up. Same goes for that report.

The fun continues! Perhaps that standard commodity you have used for years is bland. It's now a new decade. Toss out the old and go for something new. Are there any new innovations? I know salt use has changed, from just conveniently shaking it onto your food to grinding a dose onto the plate with an artistic flair, or blatantly throwing it onto the food by using a practiced pinch from an open dish next to the stove. I have witnessed these techniques on the Food Networks, so I know them to be true.

OK, so there “seems” to be more work involved, but just like with spaghetti-throwing, creative-spicing looks to continue along that downright fun angle. Go for it. Research. See what's new out there. Any different techniques or innovative ideas for the same old processes? Once found, they'll need to be verified, but when you are hungry for savings, you'll taste just about anything. Who knew there was pink salt, birch-smoked salt, pickle salt, truffle salt, bacon salt, Celtic sea salt, lava salt, popcorn salt, chili-lime salt, nu-salt, and so many others? So many choices, so little time.

Who would know which one to use, which one would be best? I could sample a few on a strand or two, or, one devious option, talk a fellow-starving friend into sampling some culinary experiments for me, especially the chili-lime option. But first, I need to gather my products before starting that trial process. Off to the grocery I go!

Contacting vendors and having them come and talk to you about their products is a true process, just like firing up the stove preparing to boil up spaghetti. And, like salt, there are so many different kinds! But having spoken to hundreds of vendors over the years, I have only seen a few bad ones. They want success in the project as much as you do. Hence options, and the discount possibilities. One needs to find the right ones for your dish, and try all the various flavors until you get the culinary perfection you are striving for.

However, remember there are many in your proverbial healthcare family, so you must keep the goal of economizing front and center, thinking of everyone. You can't spend all of your time and energy at the store perfecting one meal-there's also breakfast and lunch. That is, unless you plan on making lots, or making them dine on spaghetti for those times, too. Hey, we're all busy, right?

The politically-correct term for working with the vendors is called 'negotiating'. I believe in cooking 'simmering' is for when a slow, kinda marinating technique is wanted. The food is kept below boiling. It can also insinuate an emotional state, but I digress.

Good negotiating occurs when both parties are aware of what the other party is wanting as their concession. Too much heat, and your food will burn. Too little, and your food remains uncooked. Not the best for your hungry, waiting crowd to give them gastronomic issues, unless you are a big fan of salmonella, botulism, or pink slips from poor job performance. It's the same in these bargaining discussions.

When cooking spaghetti, I've *heard* you have the water boiling *first*. Well, I didn't really 'hear' it, per se, I looked it up on the Internet. I'm not much of a cook. In getting ready to negotiate with a vendor, I know you should look into the product line they represent *first*. I am experienced in talking to vendors, so I didn't have to look that up, but I did wonder about the technique in general. I've seen that if this step is not done, time and money is wasted. How much is out there on the Internet for an answer to this question? Not much. Some sites offer ideas on negotiating, but specifics are harder to come by. They were pretty specific on the spaghetti recipes.

So, a few opening questions I wanted to clarify with vendors is:

"Did you have trouble entering the facility?"

"Did you know specifically who to speak with in the facility?"

"Are clients able to discuss your products at a knowledgeable level when you begin meeting?"

In a way, it's like finding out how hungry you both are before starting the dinner. If one's starving and the other is just being a polite guest, you're all set and can eat most of the food. If you have both starving, at some point the knives will inevitably come out.

Next, one needs to know how much is going to be cooked. How many are going to eat? Are you just going to have the spaghetti, or go all out and toss in salad, bread, and possibly a desert after? Will there be drinking? (Which is like questioning if there would be talking and chewing.) All options should be on the table, or openly discussed, until the menu is clarified.

"Do you come to meetings with a set 'value-add' or savings' option?"

This is the golden question, the one with the shiny value inherent in it, and the one all strategic sourcing persons need to know the vendor's answer to. It's like "You brought my favorite wine? How gratuitous!" (but I wouldn't have expected anything less...). There are ways to save that don't involve only getting a discounted price. Some include non-charged trial product, free continuing- educational credits, included hardware and/or accessories, or other types of value-adds vendors can offer to their clients.

"Do you wait for the client to inquire about the possibility of discounts?"

I am wondering if the wine could be left in the car, and only brought in if I am not already staggering across the kitchen tile? If I am fat and happy, not worried about the main beverage, you may think I do not want or need any more. Most probably I will look

searchingly into your eyes, seemingly dehydrated and in need of sustenance. Usually that is the case. Hey, it is well worth it if there is more wine involved, right?

Preparation is the name of the game for something as important as a hearty meal. If you are prepared, you can savor those moments when the spaghetti is finally put through its paces. You can even add in a toss or two just because it *is* fun. Preparation for vendor meetings is paramount to cooking up relationships that are productive, satisfying your basic hunger for savings in your supply expense.

“Did you know who to specifically speak to within the organization to advance your product or service sales?”

All the meal preparation is for naught if there is no one else to help you consume it. Of course, you could eat all the goodness by yourself, but over a short time there could be problems that develop, like the one involved in making it difficult to waddle out of your kitchen to get more supplies.

Plus, there is that all important consideration of how will more supplies be paid for if the cost just keeps increasing? Do you have an unlimited food delivery account? Will you be forced to just use plain salt, with no further hopes of trying that new pickle salt? A basic rule to note about life: People always want what they can't have. Don't want for savings. Make the efforts to go out and get them. Let others know the vendors should call *you*. Your waist will thank you for your energetic decision.

“Do you call ahead for possible appointments?”

So, you have stopped your spaghetti from wandering around, and told that food stuff to just accept their fate. It is time to be placed into the pot. It flails around, you watch the back and forth, until you decide to test it for doneness. Ah, the fun moment is set to occur! You grab a strand and fling it toward the wall. But darn, that thing slides down the wall instead, leaving a gooey streak.

What?!?!

It isn't done? You have followed the cooking directions and you now are facing culinary disaster big-time? You mean to tell me that what was thought to be a tried and true truth isn't? Back to verify via the Internet, the purveyor of all things knowledgeable.

According to Microsoft Online:

“If your pasta sticks to the wall it simply means it is **sticky**. When you boil pasta, it cooks from the outside in. The outer surface of the pasta can start to get sticky before the inner part is tender enough. So, your spaghetti or other pasta can stick to the wall but still be too crunchy. Apr 17, 2019”

“Do you research the business you are attempting to have sales with?”

Did you plan on that caveat? That the spaghetti would perhaps stick but still not be done? Things could be seen entirely differently from both sides in any negotiation. It is recommended knowing how your vendors see you and how they are seen, from a business perspective. They have probably covered that territory and researched you, haven't they? What do you think?

“Do you have prepared documentation for your products or services that list basic supply purchasing information?”

So, throughout this whole process, it looks like things are not as easy as they may seem. Wouldn't you know it, you also find there is a bill attached. But you thought you

were the guest!?!? Well, looking at the whole picture, someone will have to pay up. It's a standoff, with both parties needing to pony up to cover the expenses.

“Does your company supply a completed form for utilization within a facilities’ Value Analysis meeting?”

No worries! You can always get the fundage from your parents, right?

Appendix D

Professional Literature Review

This paper summarizes the literature review undertaken for Vendor Value Analysis Consulting (Vendor-VAC). It is an online website, <http://vendor-vac.com/>, being constructed to assist healthcare vendors who are seeking to present their products and/or services into the healthcare environment. The challenge is to define for vendors some of the many variables inherent within healthcare facilities' acceptance processes (Phillbotte, 2018). Although there are already several standards and strict certifications necessary for vendor access and acceptance, the correct combination of such information continues to be nonprioritized, non-standardized, and ill-defined across most of the healthcare field, especially when in combination with the product/service the vendor is promoting. Many requirements and barriers can vary as per region, types of facility, staff involvement, and categories of documents to be completed. The main questions vendors ask are, "How do I get an appointment with the correct persons and/or department(s)? What are the right words to say, and to whom? What specific forms and certifications do I have to present?" They want the overall process to be better defined and easier to achieve so they can eliminate those entry barriers (Cornwall, 2013). Vendor-VAC will offer a magical "open-sales-to-me" approach. There are no other partnering organizations associated with this company. The task at hand is to clearly define those vendor needs, verify them with the best of practice guidelines, communicate those requirements to the vendors, and have a viable plan ready for them on how to progress forward (Graham, 2020).

Additional challenges are seen in creating the program and applications reflecting

the many facets inherent within the healthcare requirements themselves. When you couple these factors with numerous types of products and/or services, the data begin to expand exponentially. The information must align with various healthcare facility types, their individual admittance standards, governmental values, and industry hallmarks (Yokl, 2016). The variables must be clearly defined so a feasible choice can be made by both the vendor and the healthcare entity on whether to pursue a customer-client relationship (Williams & Hall, 2017). In the long run, valuable time and energy can be mutually saved, with improved communications and efficiencies by all parties affected.

The biggest accomplishment will be in the movement towards further standardization in the healthcare field. As new processes are introduced into the existing policies and procedures, the net effect results in a redeemable change and improvement to the overall products and/or services offered by organizations. Enhancements benefit the vendor-facility relationships and ultimately the quality of patient care (Hanson, 2015).

The reviewed literature ranged from specific topics, such as vendor representation within the hospitals and regulatory information pertaining to their entries, to what possible competitors within the value analysis vendor field have penned in their ideas. These various topics have been sorted into groupings and categorized to derive the different themes described within this submission.

To begin, the first major theme, vendors, is an examination of the current vendor entry procedures. How have they developed? What is the influence of commercial companies who offer vendors their certification services? Are the certification processes they promote effective at the facility level (Lively, 2020)?

Therefore, an important subcategory to examine within the vendors theme is

vendor certifications along with their current statuses. This review is done for specific compliance with governmental and regulatory policies and procedures. Policies drive the vendor entry allowance. Do internal cultures and norms within healthcare organizations add to confusion on ways to manage these policies? Why do vendors state concerns over the processes to access the correct person(s) within healthcare facilities? There are articles reviewing the way vendors can sell to hospitals, and others that state they may not have a place within specific areas, such as the operating room (O'Connor et al., 2016).

Within any government regulations, it would be misleading not to address possible federal constraints or applicable guidelines seen within such a practice structure. Many vendor certification programs, like Vendormate and RepTrak, focus on assuring the vendors have their vaccinations, education, and personal information for general entry purposes.

It is a relatively new concept to deny even orthopedic vendors into surgery, with advocates citing patient privacy and decreased surgical expenses. (These are vendors who assist surgeons with their surgical implant choices.) However, the opposing view cites the difficulty in finding technicians within an operating room staff who would be able to keep up with the latest technology. Some implants can have hundreds of screws or wires to choose from, especially given the different patient sizes and weight factors involved. Physicians and surgeons have relied upon the implant product vendors for the past several years (Farmer, 2018).

The next theme is Vendor-VAC's look at business competition. So far, the examination of this idea has few others with any ideas similar to those of Vendor-VAC. There is a gentleman who sends out a value analysis newsletter (Yokl, 2016). A few other

healthcare professionals offer consulting services to vendors. They will evaluate and review the vendor(s) products and/or services from the aspect of a value analysis standpoint for the inquiring vendor company. Certified value analysis professionals and members of the organization AHVAP are the ones who can perform these tasks, and there are only a few hundred nationally. Many in the group are employed by large healthcare facilities. Pertinent information on the Internet, as it relates to value analysis, is analytical in financial terms but lacking in utilization and product performance issues. No one seen yet offers specific vendor assistance or information to the vendor(s) on entry or how to address the value analysis professionals or committees within the hospital systems (Graham, 2020).

The value analysis theme encompasses research into the many caveats necessary to have a new product or service approved for purchase in a healthcare facility. These entail the FDA approvals, previous testings and clinical trials, and all facets of use variables. The constraints not only apply to new technologies but must also be summarized for older product/service introductions if new to that particular facility.

One of the top five challenges recently presented for health system value analysis by the ECRI Institute (nonprofit, with 5000+ organization members) is the antiquated workflow process, ranking second only to C-Suite (administration) buy-in.

By partnering with a web design company, Scarlett's Web, Incorporated, Vendor-VAC is developing an Internet interactive product. Scarlett's Web is a leading mobile application developer, as reviewed by Clutch (Phillbotte, 2018). This combined effort creates an information package that will realistically define the necessary material for the desired vendor entry. By definition and categorization of the materials, the program

assists in compiling a compliant sales bundle, one that will be more easily accepted and recognized at supply chain entry points (Scarlett's Web, 2021).

Finally, a comprehensive review must be made of potential customers and vendor demand for our services offered. The examination of potential customers and pinpointing exact needs will address areas for future growth.

In conclusion, although more inquiry is implicated, the Vendor-VAC idea remains strong. It needs more refinement within the site, the shopping cart completed, and various tasks as mandated to round out information offerings. The research itself, though, will remain ongoing throughout the project.

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