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Revenue Base Budgeting at VA Northern California Health Care System: A Model for Financially Aligning Organizational Incentives and Operations

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14. ABSTRACT
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In the Sierra-Pacific integrated service network (VISN 21), facility budgets are created in a similar fashion to the national VERA model. Facilities are given a budget each year based upon the number of unique patients treated from within a defined geographic patient service area (PSA). This gives hospital directors the same incentives as the chief executive officers of any managed care capitated system (to increase the number of patients, and to reduce the cost per patient). Unfortunately, if internal departmental budgets are based upon historical cost rather than revenue, organizational conflict arises. In order for organizational incentives to align, VA facility or product line managers must be given budgets based upon revenue producing behavior rather than historical cost. The VA Northern California Health Care System (VANCHCS) revenue based budget system accomplishes this goal.

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Introduction

Radical changes have taken place in healthcare over the last decade. Managed care has grown while profit margins for healthcare organizations have shrunk. Ambulatory care and preventative health have increased, while average lengths of stay (ALOS) and hospital care have decreased.

Government has also been in a state of transition over the past several years. ‘Spend less’ has been the mantra of the people during a time of increasing social responsibility for the poor and aged in America. The federal workforce has been downsizing as more work has shifted to the private sector. Federal agencies are tasked to ‘do more with less’ to compensate for smaller appropriations. If this has been seen anywhere, it is in government healthcare. The Veterans Healthcare Administration (VHA) responded to these two dynamic environments by creating a new funding allocation system that distributes a flat line national VHA budget to twenty-two health networks. The money is allocated to each network based upon several factors, but the primary premise is that the number of unique patients treated within a fiscal year will determine the budget allocation for each network in the following year. Networks then disperse the budget in several different manners to each health care facility, product line, or site. The site then further distributes the budget down to departments or fund control points to be used for current year obligations. The goals of this new funding system are twofold: (1) the system wishes to equitably distribute dollars across the entire system based upon the number of patients treated, and (2) the system hopes to encourage efficiency and ‘managed care’ by reimbursing medical facilities on a ‘per member per year’ basis rather than a fee-for-service basis. The facility budget allocation process needs to incorporate these same two goals in order to be successful.
Conditions which prompted the study

The Department of Veterans Affairs Northern California Health Care System (VANCHCS) receives its budget each year based on a congressional appropriation bill, a national budget model called the Veterans Equitable Resource Allocation (VERA) model, the Sierra-Pacific network transfer price and resource allocation system, and other external resources (insurance, contracts with other healthcare providers, TRICARE, etc.). What is the best method to divide the facility budget among departments and health care sites? The VANCHCS is made up of seven outpatient clinics, one 120 bed Center for Rehabilitation and Extended Care, three stand alone mental health clinics, one VA/DoD inpatient facility, and one sixty-five bed hospital (beds opened in February 1999). The farthest clinics are over two hundred miles apart. Tradition and economies of scale have led to the use of departmental budgets based upon historical consumption. Staffing costs are not included in departmental budgets, but are tracked by authorized ceiling levels and charged to a single account. Departmental managers do not see these costs.

Statement of Problem or Question

What is a health care facility, funded by a fixed retrospective capitated system, to do when allocating each year’s budget? The departmental managers controlling the existing budgets are cost center managers, not revenue producing managers. Revenue is only gained in the system through increased patient paneling, more efficient throughput by healthcare providers (clinic capacity and ability to get external contracts), and more effective insurance billing. How can cost center managers be expected to ‘produce’ more income, or how can revenue center managers be expected to reduce expenses (without controlling costs)?

In order to find a solution to this problem, I propose a budgetary system for VANCHCS
that aligns control of both revenue and expenses with a specific manager. This individual will have the ability to attract new patients, to create capacity for external sharing agreements (like TRICARE), to improve insurance coding/billing information, and to control staffing and expenses needed in the entire process. Budgets will not be given out by department, but by care site. These budgets will be based upon actual contributions to the system that provides funding to the facility (aligning organizational incentives), and they will be global (all-inclusive). The new budget process will need to keep the benefits of economies of scale, system-wide standardization, and functional specialization of staff. The new system will also work within the current VA wide cost accounting computer programs.

The new revenue based budget model, in order to be successful, must accomplish the following goals: (1) the organizational incentives placed on the VANCHCS from VHA and the network must be passed on to lower levels of the organization so that we work together towards better access, quality, and cost in delivering healthcare to veterans, and (2) the new system must empower managers and hold them accountable for desired outcomes.

Communication is a key ingredient in the success of the new system. Managers must be given good information in a timely manner to oversee the financial responsibilities placed upon them. This information must include key cost elements such as pharmacy, contract hospitalization rates, staffing costs, maintenance and repair, laboratory expenses, referral patterns, and overhead. In addition, the VANCHCS information systems must be able to provide accurate and timely enrollment and external revenue numbers to each manager.

**Literature Review**

The literature review for this project was a three-fold effort. First, I looked within the VA for existing budget techniques and alternatives. Second, I searched other healthcare systems for examples of decentralized budgeting or organizational incentive alignment. Finally, I reviewed basic budgeting and organizational development literature from a macro perspective.
These three tasks provided a solid foundation for development of the project.

The first task was to gather as much current literature as I could regarding current VA budget initiatives. The system used by the VA to distribute its 17.6 billion-dollar medical care appropriation is called the Veterans Equitable Resource Allocation (VERA) model. This system has been used since halfway through the 1997 fiscal year (Department of Veteran Affairs, 1998). The new national budget allocation model accomplishes several goals listed in the VHA strategic planning trilogy *Vision for Change* (Kizer, 1995), *Prescription for Change* (Kizer, 1996), and *Journey of Change* (Kizer, 1997) published by Dr. Kenneth Kizer, Undersecretary for Health. First of all, it allows funds to be distributed to each network not based on historical costs, but rather based on actual patients treated during the previous year. The funding is not based upon the fee-for-service concept of dollars per procedure performed, but uses a managed care concept of enrolled lives. Secondly, the funding allows facilities that follow the national strategic planning efforts of VHA to be rewarded under the allocation system. For example, networks which can reduce the global cost of care per enrolled life, in a given year, by shifting care to more appropriate settings (ambulatory vs. inpatient), by implementing clinical practice guidelines, or by reducing fixed costs per patient (more enrollees or more efficient business practices) will win under the new system (Department of Veterans Affairs, 1998).

Each network must decide how to distribute the dollars received from the national resource allocation model throughout its infrastructure. In the Sierra-Pacific network (Veterans Integrated Service Network or VISN 21), the dollars are distributed using global capitation rates and transfer prices (Carroll, personal contact, 1998). Each facility within the network is assigned a geographical region of responsibility, and that facility must pay for all care provided to patients living within the assigned region, regardless of where care is delivered. If a facility provides care to a patient located within another facility’s catchment area, then a transfer price is paid.

Most VA facilities have kept historical budget structures due to cost-accounting constraints. However, the upstate New York network (VISN 2) has developed a shadow budget
that allows costs to be tracked the traditional way while managing budgets using a network-wide product line approach (VA Healthcare Network Upstate New York, 1998). Product line managers are provided monthly updates for expenses used within the entire product line. These managers are held accountable for overall expenses. The Tucson VAMC is using single facility product lines to budget and track personnel costs, but other expenses are tracked using the traditional departmental method (VAMC Tucson, 1998)(Korn, personal contact, 1998). Unfortunately, most VA facility budgets are still dominated by the large hospital model of delivering healthcare. Departments that reside within the hospital infrastructure fund clinics. Those facilities that have gone to some sort of product-line management structure have eliminated or combined traditional departments, but still distribute resources without giving managers complete control over both the revenue and cost portion of their respective areas. The largest VA facility in the country, located in Southern California, has yet to determine the best approach to dividing its budget amongst several integrated health care facilities (Pasquale, 1998).

The second task in the literature review required a look at other healthcare organizations. The comparison of VA to outside healthcare organizations is difficult, because most organizations use some sort of volume metric in distributing budgets, the VA on the other hand has a set budget each year regardless of volume. Non-governmental healthcare institutions earn revenue in the same year that budgets are consumed. However, some goals of the budgeting process are comparable. UCSF-Stanford Health Care System financial manager Terry Long states that two key elements of any budget process are to integrate strategic planning into the process, and to allow managers to see how cost/revenues of their decisions effect the organization (Long, personal contact, 1998). UCSF-Stanford uses a departmental budget system that links expected charges to cost. The budget system utilizes seven steps to arrive at a departmental budget: (1) Verification of Data Integrity, (2) Definition of roll-up structure (cost allocation methodology), (3) Utilization of an activity model that summarizes patient cost data over a specified period of time, (4) Creation of assumptions for anticipated changes, (5) Linkage of costs to charges, (6) Creation of a draft departmental budget, and (7) Effectuation of
utilization and efficiency changes to match model with available resources. Similarly, the Cleveland Clinic Health System uses activity based budgeting and regular managerial feedback to create and monitor its annual division budgets (Fisher, personal contact, 1998). While most health care facilities use control units, or departments, as budget-holding entities, problems can occur when the responsibility structure is not identical to the program structure (Cleverly, 1997).

On the international front, both New Zealand and Israel have shown the effectiveness of giving global budget authority to autonomous primary care clinics. In 1990, the Kupat Holim Clalit (KHC), Israel’s largest health insurance fund, initiated a demonstration project that transformed nine primary care clinics into autonomous budget holding units (Gross, et al., 1996). The result was more cost consciousness, greater understanding and discussion of monthly expenditure reports, and improved per capita expenses in real terms compared with other non budget holding primary care clinics (1996). In New Zealand, primary care clinics are experimenting with budget holding responsibility for laboratory, pharmacy, and secondary care services (Healthcare Review - Online, 1996). Both of these countries’ experiences more closely align with VHA budgeting strategies since both countries use public funding for health care financing. It is almost a uniquely governmental challenge to administer a fixed annual healthcare budget regardless of volume (either fee-for-service OR capitated by enrollment).

While budget distribution is radically different between private and public healthcare facilities, the need to align physician incentives with organizational incentives is seen across the healthcare delivery system. Several techniques used to accomplish this task include (1) performance based payment arrangements on cost and quality through the withholding of risk pool funds, (2) percent of premium or capitation agreements (based upon amount of risk assumed by provider), and (3) inpatient case rates (Griffith, 1995). Newer models include specialty-population global capitation, reverse capitation, specialty capitation, and global case rates (Darves, 1998). The revenue based budget system for VANCHCS must be designed as a system that aligns physician practice decisions with organizational objectives.

The final section of the literature review outlined basic principles of budgeting and
organizational development. The new budgeting system needs to account for the four phases of management control: programming, budgeting, accounting, and reporting (Anthony & Young, 1988). The budget process needs to give reality to the organizations objectives and strategies. In the book, *Powerful Budgeting for Better Planning and Management*, the budget is considered the most important planning document of the company (Finney, 1993). The new budget process also needs to use responsibility centers as budget holding entities. A responsibility center is defined as a segment of the company in which a manager has responsibility, authority, and control (Rachlin, 1991). While VANCHCS needs a budgeting mechanism that satisfies the basic goals outlined in this proposal, a perfect budgetary solution may not be operational for several years. The need to execute a budget cycle under the new model next year will require a significant change in organizational behavior, and possibly a significant shift of resources. In order to implement quickly, the model may only offer an ‘eighty percent’ solution in the first year. The book, *Total Business Budgeting*, highlights the need to remember Pareto’s Law when creating budget systems. Eighty percent of the output comes from twenty percent of the input (1991).

A new budgeting process for VANCHCS has profound organizational impacts. In order to use this project as a tool for a learning organization, I reviewed some organization development techniques found in current literature. In his book, *Managing at the Speed of Change*, Conner outlines seven forces for change that have contributed to the need for organizational development practices. They are: (1) faster communication and knowledge acquisition, (2) growing worldwide perspective, (3) increasing interdependence and competition, (4) limited resources, (5) diversifying political and religious ideologies, (6) constant transitions of power, and (7) ecological distress. He views change as a process rather than a binary event, and cautions against changing either too rapidly or slowly. Too rapid change, he argues, will cause “future shock”, or that point when humans can no longer assimilate change without displaying dysfunctional behavior. A slow a reaction to change will prevent one from adapting quickly enough for survival.

Another current author, John Kotter, identifies eight critical steps needed to transform any
organization, in his book, *Leading Change*. The first three steps in the process are (1) establishing a sense of urgency, (2) forming a powerful guiding coalition, and (3) creating a vision. These steps are needed in the development of a new budget process for VANCHCS in order to communicate the need for change and to get corporate ‘buy-in’. The next three steps identified by Kotter include, (4) communicating the vision, (5) empowering others to act on the vision, and (6) planning for and creating short-term wins. These steps can be used by VANCHCS to phase in the new budget process over the next two years. The final two steps in Kotter's model for organizational development include, (7) consolidating improvements and producing still more change, and (8) institutionalizing new approaches (Kotter, 1996). These last two steps can be used at the completion of the project to improve upon the model.

**Purpose**

The purpose of this study is to provide VANCHCS with a revenue based budget model that creates a greater awareness and sensitivity to financial realities throughout all layers of the organization. In addition, the model will align organizational incentives throughout VANCHCS to optimize the care provided to our beneficiaries. Although the project deals with budgets and numbers, it is really a qualitative study. The hypothesis is that a new budget allocation methodology based upon capitated geographical catchment areas will improve the organizational performance of VANCHCS. Since budgets are annualized, and organizational performance is measured in the context of the facility strategic plan, it will be difficult to quantify the success of the project. The goal of this project is to design the model.

**Methods and Procedures**

In order to develop a new revenue based budget model for VANCHCS the following tasks needed to be completed:
(1) To decide upon the appropriate number and type of discrete budget holding units. Should every primary care site receive a global budget? Should the mental health product line be considered a ‘carve-out’ before distribution of a capitated amount?

(2) To decide what method should be used to assign, enroll, or empanel patients to specific budget holding units. Several possibilities exist to distribute patients or dollars out to clinic sites. How can the VANCHCS system mirror the national and network allocation models? What databases are available? What information is needed, and in what detail?

(3) To decide how to allocate overhead costs to each clinic. Should all overhead costs be considered a carve-out? What methodology should be used to allocate system costs? What specifically should be considered overhead? What incentives can be placed upon managers of overhead accounts to insure organizational efficiency?

(4) To decide how to align budget control and responsibility for managers. Should clinic managers have line authority over all clinic employees? How should traditional department heads operate in the new organization? Is a matrix organizational structure needed? How can the system keep functional expertise and authority in a decentralized budget model? What areas exist in which fragmented budgets offer less efficiency to the system as a whole (Biomedical maintenance risk pool)? What safeguards need to be put into place within the system to prevent disastrous financial results?

(5) To decide what method should be used to measure workload at each site. Should the number of enrolled lives be used? How can the system reward quality healthcare delivery through the budgeting process? Should only certain categories of patients be considered in the allocation methodology (Non-service connected high income veterans are not ‘funded’ in national model)? Should capitated rates be uniform for all sites? Should cost of labor force variations alter geographic rates? Should patient acuity levels or historical costs alter capitated rates?

(6) To decide an equitable and appropriate way to buy services from one VANCHCS site to another. Should transfer pricing be used to purchase care from other sites? Should transfer
pricing be used to purchase administrative services or support? How can the budget be set-up to encourage non-duplicative specialty program referral centers within VANCHCS? If transfer prices are used, what rates should be used? Medicare rates? Marginal costs? Total costs? Should the rate be discounted? Are transfer prices mandatory? Can each autonomous site perform an internal make-buy decision? What data is needed and available within the various computer databases? How are follow up referral costs paid? By whom? Who decides upon referral patterns? What about out of facility referrals to other VA sites? How difficult will the new transfer price mechanism be to administer? Will historical data be used to lump sum transfer budget dollars at the beginning of the budget cycle, or will real-time budget transfers take place?

(7) To decide what information each budget manager needs. What metrics will be used to measure budget compliance? How will managers be given information in order to make immediate operational decisions? What information is currently available within the VANCHCS computer systems? What benchmarks should be used?

(8) To decide method for linking the current accounting system to new budget process. How will Fiscal fund control points be funded? Who will actually spend money? Who will give authority for purchases? What training is needed to re-align the budget execution jobs? Will the new system duplicate actual purchase requests from discrete sites? Who will coordinate and approve all existing contracts, supply purchases, and other expenses? How will the new clinic budgets be accounted for within VANCHCS?

(9) To decide how to distribute external sharing dollars into new budget model. Currently, the third party insurance collections, the dollars earned through external healthcare contracts (TRICARE) and co-payments are not kept under the control of site managers. What incentives are needed to maximize alternate revenue streams? Should the money collected fold into the capitated rate or be given directly to the site who treated the patient? Should the entire amount earned be given to the clinic, or should the system ‘tax’ these dollars?

After each of the above issues was resolved through analysis, group meetings and discussion, managerial consensus, and employee support, then a model was created. The
reliability and validity of the model then needed to be tested. Reliability of the model was tested by generating ‘mock’ budgets from historical data to see how the new system would have allocated resources in previous years. The validity of data used within the process may turn out to be a great concern for top level and clinic managers. If the cost data within our computer systems, the patient demographic data, or the allocation of costs to specific sites or procedures is inaccurate, then the budget will not be valid. In order to ensure validity, the cost mapping system of the entire VANCHCS must be reviewed in light of the new budget numbers to make them correct and consistent (reliable). Reliability can also be tested by comparing costs, workload, and budgets of like sized clinics (they should be comparable).

The model implementation needs to be phased over time to measure the success of the new system. The original goals of the new model are to align organizational incentives with lower levels of the facility, and empower managers (hold them accountable) to achieve higher levels of success.

Findings and Results

The above analysis produced a twenty-three-step model or budget cycle process that allows VANCHCS to execute revenue based budgets starting in fiscal year 2000. Before looking at the model itself, it is important to review a little history of the VANCHCS healthcare system, and to address each of the nine objectives identified in the preceding section. The VANCHCS is not a ‘normal’ VA hospital. The Martinez VAMC closed its doors in 1991 due to seismic deficiencies. In the years since that time, the VANCHCS has operated as a series of outpatient clinics linked together by a common administration. Without an inpatient facility, the healthcare system used a variety of methods, including contract hospitalization, VA/DoD contracts, and other VA hospitals, to treat inpatients. The facility was on the cutting edge of ambulatory surgery delivery, focused outpatient care, and reduced bed days of care. A congressionally mandated 1996 study endorsed this distributed model of health care delivery, recommending that
VANCHCS only replace the Martinez hospital with a small inpatient facility in Sacramento, while continuing to use community contracts in dispersed geographic locations for inpatient care. This dispersed geographic strategy of healthcare delivery will allow VANCHCS the unique opportunity to internally budget at the clinic level based upon revenue rather than cost.

The first issued that needed to be resolved in the creation of the revenue based budget model involved the identification of budget holding units. Although geography needed to play a role in the identification of each budget holding unit, it didn’t necessarily eliminate other factors from consideration. In addition, the size of geographical groupings to create was uncertain. VANCHCS currently has seven discrete locations where primary care is provided to veteran patients. Five different site managers manage those seven locations. The locations include Redding, Chico, Sacramento, Fairfield, Vallejo, Martinez, and Oakland. In addition to those seven sites, three other locations have stand alone mental health clinics, and one other location has a stand alone 120 bed rehabilitation and extended care facility. Someone manages each of the additional locations other than one of the five site managers. In order to align organizational incentives with national and network incentives, it was not feasible to provide revenue-generated budgets for non-primary care. In a major shift in thinking, the VANCHCS must recognize that mental health centers, extended care facilities, and even inpatient hospitalization sites are cost centers rather than revenue producers. Since we only get appropriated revenue based upon the number of enrolled lives within our system, we cannot create appropriated revenue for anything other than enrollment. With that in mind, and in order to match the current organizational management structure, the decision was made to create five distinct catchment areas that would become autonomous budget holding units. The Fairfield and Vallejo clinics (seventeen miles apart) would be combined into one market area, while the Chico and Redding Clinics (seventy miles apart but co-managed) would be combined into another market area. The Oakland, Martinez, and Sacramento clinics would all become budget-holding units. Neither mental health nor extended care would be ‘carved-out’ of the capitated budget provided to each site, but would rather be funded through transfer price payments as services are provided to patients living in
each catchment area.

The second decision involved the assignment of patients to each market area. The VA uses an enrollment system to register patients with primary care doctors and primary care clinics, but provides revenues each year based upon the postal zip code in which each patient resides. Not all patients are enrolled (they started receiving care at a VA facility prior to enrollment process being established) with a primary care manager. In order to mirror the national funding methods within the VANCHCS revenue based budget model, the decision was made to use residential zip codes to assign patients to each market area. The 1998 patient visit file for the 33,015 veterans seen within VANCHCS was sorted by zip code. The number of unique patients receiving primary care services from VANCHCS from each zip code was then broken down by location of clinic providing the services. A particular zip code was assigned to a particular market area based upon the number of patients receiving primary care at that site. Each market area then consisted of a grouping of zip codes for which each budget holding clinic would be responsible for all care provided to patients originating from within the assigned area. No market areas were assigned a discontinuous grouping of zip codes. For example, a small zip code in rural Solano County may have had only three patients utilizing VA services in 1998. If all the surrounding zip codes were assigned to the Fairfield/Vallejo market area, then even if all three patients went to the Sacramento clinic last year, the zip code would be assigned to the Fairfield/Vallejo market area. Once each market area was defined, the number of patients for which the site manager would receive a capitated budget was defined. If primary care utilization patterns changed over the course of each year, then zip codes could be reassigned before the next budget cycle. This is especially important when new clinics are opened during the course of a year.

The following numbers of patients were assigned to each market area: Martinez (4062), Fairfield/Vallejo (3292), Oakland (5483), Sacramento (10,570), and Redding (6079). The remaining patients treated by VANCHCS during 1998 lived outside of the entire facility catchment area. Patient care provided to these patients is funded under a national transfer price (fee-for-service) method that is passed through to the site providing the care.
The third decision point in the creation of a revenue based budget system dealt with overhead cost accounting. The model needed to create an environment in which managers of overhead expense accounts would feel the need to operate in a cost conscious manner. The best way to measure overhead efficiency is to use a benchmark measurement from like sized healthcare institutions. However, the VA acts as both the insurer and provider of services in our healthcare system. The idea of measuring efficiency of overhead expenses based upon administrative loss ratios published by managed care companies can be misleading if all overhead is considered the same. Overhead can really be broken up into three different types: 1) system overhead, 2) facility overhead, and 3) departmental overhead. System overhead can be compared to administrative loss ratios as long as no healthcare related costs are considered as overhead. In the revenue based budget model, the following items are considered system overhead: human resources, finance, engineering (except on-site maintenance staff), executive staff, information management, corporate licenses, business office staff and supplies (except those located at clinic sites), training and education staff, corporate level leases and utilities, and the biomedical equipment risk pool. The only item that is not comparable to other managed care companies is the biomedical risk pool, since it would normally be funded by the provider institution rather than the insurer. The decision was made to ‘carve-out’ overhead expenses in the first year of the revenue based budget model rather than utilizing activity based costing to allocate expenses. In essence, that means that each enrolled patient capitation rate is taxed an equal amount to fund overhead expenses. In future years, activity based costing will be used to more accurately expense overhead to the consumers of specific services. The model will ensure some level of corporate ‘belt-tightening’ by purposefully underfunding projected corporate expense during the first year of operation. This will force the corporate account managers to seek efficiencies of operations to reduce projected expenses to the budgeted level.

Departmental overhead will be funded through transfer price payments made for services rendered. For example, the Director of Pharmacy Services does not usually fill prescriptions himself, but his oversight and management of other professionals benefits the entire
organization. The cost of his position would be considered system overhead and his salary would be paid through the above taxing method of each capitated premium. However, the pharmacy supervisor at the Oakland clinic may not provide much direct labor either, but his salary costs are shared only by those who utilize the Oakland pharmacy. The Oakland clinic would pay his entire salary, then the clinic would be reimbursed through transfer payments an incremental amount of the pharmacy supervisors salary for each script filled for a patient residing within another market area. The incentives here are two-fold, first, the Oakland site manager wants to reduce costs whenever possible to stretch the capitated payments received as far as possible, secondly, the Oakland pharmacy want to remain efficient so that transfer payments received will cover the direct variable and departmental fixed costs incurred with each script.

Facility overhead consists of expenses incurred by a particular site that are not directly linked to patient care. The revenue based budget model treats site specific expenses for utilities, leases, clinic management staff, copiers, office supplies, computers, quality management, local business office staff, and miscellaneous clinic expenses as facility overhead. Each site manager will be responsible for tracking and funding these expenses out of the capitated patient dollar amount received at the beginning of each fiscal year.

The fourth decision criteria in the design model reviews organizational responsibility and control issues. In the past, departmental managers had control of supply budgets and authorized staffing levels, while clinic, or site managers, had no control over budget or personnel decisions. The new budget model requires that site managers be given responsibility and control over resources used to provide patient care. Some purchases of supplies are done for the entire facility, and then distributed to various clinic sites. The model needed to keep the benefits of system-wide operation, while decentralizing the financial control to each site. Additionally, clinic managers needed to have authority over staffing decisions, but cannot recruit, review, or technically manage specialized employees. The site manager needed control of the resources, without losing the specialized oversight of the traditional program manager. The solution to this
dilemma was a matrix organizational chart that provides line and budget authority to site managers, and functional/technical responsibility to program managers. Under the revenue based budget model, site managers will direct funds at the beginning of each budget cycle to each of the expense accounts. Program managers will receive the aggregate amount of funds allocated by each of the site managers as a departmental budget. This budget can be used to consolidate purchases, capitalize on economies of scale or committed volumes, and can be tracked using the existing VA accounting systems. Utilization of the existing accounting system prevents duplication of effort (creation of separate accounts for each site). Site managers will then be provided monthly updates on the status of each expense account. Site managers can shift funds from one account to another to cover deficits or redirect efforts. Program managers will be held accountable for keeping the overall expenditures by site at budgeted levels, and to ensure that the difference between purchases and consumption (turnover) remains relatively consistent. The corporate level expenses taxed to each patient capitation rate are tracked each month, but site managers do not have the latitude to shift these funds to other accounts. In addition, certain high dollar accounts, like high cost medical equipment and construction dollars, will continue to be managed at the corporate level.

Although site managers have a lot more authority and responsibility under the new revenue based budget model, safeguards must exist to prevent drastic financial or qualitative results. The organization needs to develop standard care practice guidelines that ensure a minimal standard of care required at each clinic site. For example, a site manager could not opt to eliminate radiology services from the scope of care provided to patients in order to reduce budget deficits. Similarly, a site manager cannot be allowed to overspend an assigned budget amount during a given budget cycle. A deficit reduction plan must be submitted by each site manager for corporate approval that identifies methods and strategies to end the fiscal year within budget constraints. The facility may opt to withhold a small amount of money each year in corporate reserve to 'bail-out' clinics that do not meet budget requirements. However, the bailout money must come at a price to the site managers to provide the proper incentive to meet budget
requirements. I have included several examples to demonstrate the budget control/responsibility responsibilities shared between site managers and program managers:

Site A receives an initial revenue based budget of $10 million dollars.
Site B receives an initial revenue based budget of $25 million dollars

Site A manager looks at last year’s expense report and makes the following observations:
Salary projection: $7 million
Pharmaceutical cost projection: $1.5 million
Lab cost projection: $200,000
Fee/contract hospitalization: $1 million
Med supplies projection: $300,000
Prosthetics expense: $300,000
Site specific contracts: $500,000
Total projected expense: $10.8 million dollars

The site manager needs to make an immediate deficit reduction plan to reduce projected expenses by $800,000.

Let’s say they decide to freeze hiring of staff to reduce salary projections down to $6.5 million, and they intend to tighten the pharmacy Utilization Review (UR) program to reduce the pharmaceutical cost projection to $1.2 million.

Now projected expenses match the revenue based budget, so each expense account management official is given a starting balance.

As the year progresses, the site manager notices that the pharmaceutical UR program has done better than expected, and that the new projected expense for the year is only $1 million dollars. The site manager would inform the pharmacy that the $200,000 originally identified for pharmaceutical expenses is being moved to another account. The site manager may want to ‘unfreeze’ hiring at this point and raise the salary expense projection by $200,000. The site manager does not need approval of the program manager for such a shift.
The pharmacy cannot use the $200,000 to cover deficit spending at Site B.

For Site B, let's say the $25 million was allocated as follows:

Salary projection: $16 million
Pharmaceutical cost projection: $4 million
Lab cost projection: $400,000
Fee/contract hospitalization: $3 million
Med supplies projection: $900,000
Prosthetics expense: $900,000
Site specific contracts: $1 million
Total projected expense: $26.2 million dollars

Site B opts to increase salary allotment to $17 million, decrease the fee account to $1 million, and save $200,000 from efficiencies in the prosthetic program.

As the year rolls along and expense reports are coming in, it shows that the prosthetic expense projection has grown to an estimated $1.1 million. This creates a $400,000 overall 'deficit' for Site B.

The program manager for Medical Service realizes that the GI program at Site B is less than 100% productive, and wishes to add GI services at Site C.

Site C cannot afford a contract for GI, does not wish to refer within the community (too expensive), but cannot afford to hire the staff. The Medical Service program manager can broker a deal between the two site managers to share FTEE costs for staff to split time between both sites. The site managers can approve the deal, refuse to 'give-up' current resources, or negotiate a counter proposal. The program manager does not have the authority to unilaterally make the staffing change, but can recommend win-win proposals for site managers to approve.
In this example, Site B may reduce staff expense by $400,000 to cover their deficit by 'selling' underutilized staff to another clinic.

The fifth decision point in the development of the revenue based budget model dealt with the identification of workload measurements. If each site is supposed to receive a budget based upon the number of capitated lives treated by VANCHCS within a specified geographical area, should all patients be considered in the equation, or only those patients for which no other revenue stream is available? In order to answer this question, a brief discussion about VA eligibility is required. Veteran eligibility falls into two broad categories, those who are entitled or eligible for free healthcare based upon service connected disabilities or financial hardship, and those that may receive care at VA facilities, but who are required to pay co-payments for care received (CAT C). The first category of patients (commonly called CAT A) may have insurance companies billed for certain care, but they are never required to pay directly for their own healthcare. Under the national budget allocation model, only those patients falling into this category are funded at a capitated rate. Under the national model, patients are divided into two different capitation groups, Basic Care patients, and Complex Care patients. The national model uses a 3-5 year retrospective look at patients to determine numbers of patients enrolled in each capitation group within each network. In order to use more current and accurate information, the VANCHCS revenue based model looks only at the previous years' workload to determine capitation quantities. Like the national model, the local budget system only considers patients falling into the CAT A status when allocating funds. Under the local model, patients are not divided into two distinct categories, but all patients earn the same capitated amount.

The local budget model does not provide a capitated dollar amount to distribute to each site for non-CAT A patients. The only revenue stream available to each site manager for these patients is third party insurance claims. Although these insurance claims only constitute one to two percent of the overall VANCHCS budget in FY98, they are expected to grow at a rate of ten to twenty percent per year until they constitute ten percent of the overall budget. In 1999, the total amount of money collected from third party insurance companies is set to grow by twelve
percent. By not providing a capitated rate for these patients, the incentives for site managers are threefold, 1) to do a better job collecting insurance information from veterans, 2) to ensure that coding and collection of insurance claims are done accurately and promptly, and 3) to ensure that non-insurance carrying veterans are not preferentially given appointment slots before those without insurance (the site is paid the capitated rate for those without insurance, but only collections for those with insurance).

Other workload measurements used within the VANCHCS revenue based budget model include those that measure the research and education components of the VA mission. The VANCHCS has an academic mission in conjunction with its affiliation with the University of California at Davis Medical School. The national VA budget model encourages the educational mission of the VA by offering funds over and above the capitated rate to networks that teach medical residents. In order to mirror the national model, the local revenue based budget model funds each site within VANCHCS a specific amount of operating dollars ($43,193 per resident in FY99) for each resident receiving training within a specified site. The following table demonstrates the market area, medical specialty, and full time equivalent employee allocation for VANCHCS during the 1998/9 academic year.

<table>
<thead>
<tr>
<th>MEDICAL SPECIALTY</th>
<th>FTEE ALLOCATION</th>
<th>MARKET AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergy and Immunology</td>
<td>0.9</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>0.2</td>
<td>Martinez</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>2.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Dermatology</td>
<td>2.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>1.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>2.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>General Internal Medicine</td>
<td>11.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>General Surgery</td>
<td>1.0</td>
<td>Martinez</td>
</tr>
<tr>
<td>Hematology/Oncology</td>
<td>3.0</td>
<td>Sacramento/Martinez</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>0.5</td>
<td>Fairfield/Vallejo</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
<td>------------------</td>
</tr>
<tr>
<td>Nephrology</td>
<td>2.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Neurology</td>
<td>4.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Opthamology</td>
<td>2.0</td>
<td>Sacramento/Martinez</td>
</tr>
<tr>
<td>Pathology</td>
<td>2.5</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>4.0</td>
<td>Sacramento</td>
</tr>
<tr>
<td>Pulmonary/Critical Care</td>
<td>2.9</td>
<td>Sacramento</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>41</strong></td>
<td></td>
</tr>
</tbody>
</table>

Each site manager will receive operating dollars in direct correlation to the number of residents at the site. In 1998, that would have meant that $1,795,693 would have been distributed across VANCHCS based upon the number of residents at each site. This money is over and above the capitated amount received by each site based upon patient enrollment.

In addition to the educational mission of the VA, the research component of VA is also funded over and above the basic capitated dollar amount per patient. On a national basis, the VA provided $366,703,000 in research support dollars in FY99. This money is over and above the research grant money provided for specific projects. The national model distributes the available research support dollars based upon a two-year retrospective look at actual research performed within each network. The model weights the research projects by applying the following weights: 100 percent for VA administered research; 75 percent for non-VA, peer reviewed research; and 25 percent for non-peer reviewed research. The available funds are then distributed on a prorated basis to networks where research actually took place. For 1999, the allocation rate was 78 cents per dollar of weighted research reported. The local revenue based budget model mirrors the national model in the distribution of research support dollars. Site managers are given research support dollars to add into their respective operational budgets based upon the weighted dollar amount of research activity reported from a specific site. In 1998, VANCHCS received $3,230,065 in research support dollars.
The capitated rate provided to each site manager per patient residing within a specified geographical region is identical. However, a certain portion of the funds provided to each network within the national model allows for a labor cost adjustment. Funds are shifted around the country based upon the differing labor costs encountered in each market. In the VANCHCS catchment area, a significant labor cost discrepancy exists between rural sites and those closest to the San Francisco Bay area. In order to compensate for these differing labor costs, the amount of money provided to VANCHCS through the network model included $5,319,012 in FY 99 for labor adjustments. In the local revenue based budget model, this money was not included within the capitated rate. Instead, the total network provided labor adjustment funds were allocated to each site budget based upon the following formula: \(((\text{total site direct labor} \times \text{locality pay})/\text{total facility direct labor}) \times \text{total facility labor adjustment}\). This adjustment provides a level playing field for all site managers since the varying costs of labor do not negatively impact one site versus another.

The only element impacting the capitated rate is the number of CAT A patients treated that reside within a given geographic region. Patient acuity, historical costs of treatment, site of treatment, or site capability have NO impact on the capitated rate. The risk of higher costs for more acute care, the risk of patients seeking care at other sites, as well as the reward for attracting and keeping healthy a group of veterans is born by the site manager. In this sense, the new revenue based budget model accomplishes its goal of aligning organizational incentives AND sensitizing managers throughout the organization to financial realities.

A sixth issue surrounding the new revenue based budget model is transfer pricing. Transfer pricing refers to the practice of one site (or part of a corporation) buying services internally from another site within an organization, and paying an established internal fee for the service provided. In the case of VANCHCS, with site based budgets, when any patient is referred for care from one site to another, a transfer price will be paid. The transfer pricing mechanism to be used in the revenue based budget process is going to be evolutionary by nature. In the long run, corporate administrative services will be purchased through transfer prices, real-time accounting
will allow for transfer prices to take affect in the year the service is rendered, and transfer price rates will be set at external benchmark standards. Transfer prices allow for the site managers to compare the cost of services provided internally, with prices in the marketplace. If segments of the organization are not run efficiently, then other managers will eventually opt to purchase services in the marketplace, effectively outsourcing the requirements. Transfer prices also allow for make-buy decisions to be made more accurately. If, for example, a certain site manager wishes to begin GI services within a market area, he could compare the internal transfer price of buying referral care to the marketplace cost of buying the service or the cost of providing the specialized service directly. In order for the new revenue based budget model to work, the transfer price needed to provide incentives for both the buyer and seller of services. For the buyer to 'feel good' about an internal transfer price, he would expect a lower rate than available elsewhere. For the provider of service to feel good, the rate must be high enough to cover variable cost. For the corporation as a whole to 'feel good' about a transfer price rate, the variable cost of providing the service needs to be as low as possible within specified quality constraints. The revenue based budget model accomplishes these three goals using an external (Champus Maximum Allowable Charge or CMAC) rate discounted at seventy percent for the transfer price. This rate is high enough to cover variable cost (since overhead and profit are not part of the equation), lower than can be bought anywhere else, and low enough to discourage duplication of services without warranted volume. Ancillary services like pharmacy re-fills, reference lab tests, prosthetic device mail-outs, and home health visits would not be paid on a transfer price basis, but rather as direct expenses in the year in which they occur. For all other care provided at one site, for a patient residing within another market area, a transfer price equal to seventy percent of the CMAC rate applicable for the Current Procedural Terminology (CPT) or Diagnosite Related Group (DRG) codes assigned to the encounter will be paid. The transfer price will be paid for all patients, not just for those referred, and not just for those that are CAT A patients.

Several limitations prohibit the pure application of the transfer price method described
above in the FY 2000 budget cycle. First of all, the inability to timely capture information
requires that transfer payments be made on a retrospective basis. The starting balance budget
given to a site manager will have already been debited the current year transfer price for all care
provided in the previous year. The current year transfers will not be paid until the following
year's budget cycle. In addition, the lack of quality coding of records within VANCHCS
prohibits the use of CPT codes as a transfer price mechanism during the first year of operation.
Until the coding can be improved (we are awarding a contract to train/improve all medical and
clerical staff during this fiscal year), an alternate transfer-pricing scheme will be employed. The
alternate scheme will use an average clinic-stop variable cost, plus departmental fixed costs as a
transfer price. This alternative does not capture the required incentives for buyers, sellers, and
managers as does the preferred method, but allows for a one-year transition and training period
before full implementation of the model.

The transfer pricing model used in the revenue based budget model is very similar to that
used in managed care contracts whereby the primary care manager is held at risk by a capitated
payment, but specialists are paid on a fee-for-service basis. Site managers will have incentives
to utilize primary care managers as gatekeepers for referrals to the rest of the healthcare system.
This practice may better utilize specialist time, making waiting times shorter, capacity for
external revenue greater, and costs lower. Managers will be forced to view hospitals, specialty
treatment, and long-term care facilities as expenses rather than revenue centers.

The seventh decision point in the construction of the revenue based budget model dealt
with the identification and reporting of expenses. Each site manager needs timely feedback in
order to match budget objectives. Other program managers need timely feedback in order to
monitor expenses by site, or to ensure certain benchmark levels are attained. The corporation as
a whole needs to be able to monitor site compliance to assigned budgets. All managers need the
ability to make timely operational adjustments based upon financial realities. The following
expense report was developed as a monthly report to track expenses, budgets, workload, and
variance by site. The report is reproduced for each site manager, as well as from the corporate
or overall perspective.

<table>
<thead>
<tr>
<th>Expense accounts</th>
<th>Budget</th>
<th>Actual</th>
<th>Projected</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>salaries</strong></td>
<td>$20,800,000</td>
<td>$ 7,511,567</td>
<td>$22,534,700</td>
<td>($1,734,700)</td>
</tr>
<tr>
<td><strong>pharmaceuticals</strong></td>
<td>$5,250,000</td>
<td>$ 1,800,004</td>
<td>$5,400,012</td>
<td>($150,012)</td>
</tr>
<tr>
<td><strong>laboratory</strong></td>
<td>$430,000</td>
<td>$ 140,000</td>
<td>$420,000</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>utilities</strong></td>
<td>$47,000</td>
<td>$ 15,633</td>
<td>$46,900</td>
<td>$100</td>
</tr>
<tr>
<td><strong>medical supplies</strong></td>
<td>$428,000</td>
<td>$ 170,667</td>
<td>$512,000</td>
<td>($84,000)</td>
</tr>
<tr>
<td><strong>prosthetics</strong></td>
<td>$1,005,000</td>
<td>$ 371,771</td>
<td>$1,115,314</td>
<td>($110,314)</td>
</tr>
<tr>
<td><strong>housekeeping supplies</strong></td>
<td>$13,000</td>
<td>$ 4,333</td>
<td>$13,000</td>
<td>$0</td>
</tr>
<tr>
<td><strong>security supplies</strong></td>
<td>$700</td>
<td>$ 205</td>
<td>$615</td>
<td>$85</td>
</tr>
<tr>
<td><strong>office supplies</strong></td>
<td>$19,000</td>
<td>$ 7,333</td>
<td>$22,000</td>
<td>($3,000)</td>
</tr>
<tr>
<td><strong>facility maintenance</strong></td>
<td>$45,000</td>
<td>$ 15,000</td>
<td>$45,000</td>
<td>$0</td>
</tr>
<tr>
<td><strong>ground maintenance</strong></td>
<td>$12,000</td>
<td>$ 4,000</td>
<td>$12,000</td>
<td>$0</td>
</tr>
<tr>
<td><strong>contract hospitalization</strong></td>
<td>$4,100,000</td>
<td>$1,266,707</td>
<td>$3,800,122</td>
<td>$299,878</td>
</tr>
<tr>
<td><strong>community Nursing</strong></td>
<td>$716,000</td>
<td>$ 236,667</td>
<td>$710,000</td>
<td>$6,000</td>
</tr>
<tr>
<td><strong>Homes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>inpatient sharing</strong></td>
<td>$1,000,000</td>
<td>$ 329,000</td>
<td>$987,000</td>
<td>$13,000</td>
</tr>
<tr>
<td><strong>rehabilitation supplies</strong></td>
<td>$35,000</td>
<td>$ 12,033</td>
<td>$36,100</td>
<td>($1,100)</td>
</tr>
<tr>
<td><strong>radiological supplies</strong></td>
<td>$40,000</td>
<td>$ 13,041</td>
<td>$39,123</td>
<td>$877</td>
</tr>
<tr>
<td><strong>nuclear medicine supplies</strong></td>
<td>$8,000</td>
<td>$ 2,632</td>
<td>$7,897</td>
<td>$103</td>
</tr>
<tr>
<td><strong>ambulance service</strong></td>
<td>$12,000</td>
<td>$ 1,371</td>
<td>$4,112</td>
<td>$7,888</td>
</tr>
<tr>
<td><strong>beneficiary travel</strong></td>
<td>$2,000</td>
<td>$ 418</td>
<td>$1,255</td>
<td>$745</td>
</tr>
<tr>
<td><strong>medical specialist contracts</strong></td>
<td>$75,000</td>
<td>$ 28,000</td>
<td>$84,000</td>
<td>($9,000)</td>
</tr>
<tr>
<td><strong>site specific support</strong></td>
<td>$29,000</td>
<td>$ 9,848</td>
<td>$29,543</td>
<td>($543)</td>
</tr>
<tr>
<td><strong>contracts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Transportation expenses</td>
<td>$15,000</td>
<td>$4,867</td>
<td>$14,600</td>
<td>$400</td>
</tr>
<tr>
<td>Employee education</td>
<td>$9,000</td>
<td>$5,000</td>
<td>$15,000</td>
<td>($6,000)</td>
</tr>
<tr>
<td>Leased equipment</td>
<td>$13,500</td>
<td>$4,700</td>
<td>$14,100</td>
<td>($600)</td>
</tr>
<tr>
<td>Computer support</td>
<td>$80,000</td>
<td>$30,667</td>
<td>$92,000</td>
<td>($12,000)</td>
</tr>
<tr>
<td>Fee medical</td>
<td>$35,000</td>
<td>$11,667</td>
<td>$35,000</td>
<td>$0</td>
</tr>
<tr>
<td>Fee dental</td>
<td>$2,500</td>
<td>$710</td>
<td>$2,130</td>
<td>$370</td>
</tr>
<tr>
<td>Dietetics support</td>
<td>$710,000</td>
<td>$236,000</td>
<td>$708,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Incentive awards</td>
<td>$40,000</td>
<td>$13,333</td>
<td>$40,000</td>
<td>$0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$40,000</td>
<td>$17,000</td>
<td>$51,000</td>
<td>($11,000)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$35,011,700</td>
<td>$12,264,174</td>
<td>$36,792,523</td>
<td>($1,780,823)</td>
</tr>
</tbody>
</table>

**Revenue projections**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload (CAT A uniques)</td>
<td>4062</td>
<td>1,215</td>
<td>4860</td>
<td>798</td>
</tr>
<tr>
<td>TRICARE</td>
<td>0</td>
<td>$3,415</td>
<td>$13,660</td>
<td>$13,660</td>
</tr>
<tr>
<td>MCCF</td>
<td>$234,000</td>
<td>$46,800</td>
<td>$187,200</td>
<td>($46,800)</td>
</tr>
<tr>
<td>SHARING</td>
<td>$600,000</td>
<td>$312,000</td>
<td>$1,248,000</td>
<td>$648,000</td>
</tr>
<tr>
<td>RESEARCH</td>
<td>$2,230,065</td>
<td>$595,000</td>
<td>$2,380,000</td>
<td>$149,935</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>$718,277</td>
<td>$135,000</td>
<td>$540,000</td>
<td>($178,277)</td>
</tr>
<tr>
<td><strong>Projected 2000 budget</strong></td>
<td></td>
<td></td>
<td></td>
<td>$39,060,740</td>
</tr>
</tbody>
</table>

This report is needed to provide timely information to managers. Although the corporate report changes the names of expense accounts to reflect overhead expense accounts, the format is
the same. Site managers will have the authority to move resources allocated in the budget process from one expense account to another to cover overages, to alter strategic direction, or to ameliorate a deficiency. Deficit reduction plans will be required for any site manager not meeting overall budget requirements. The deficit reduction plan must coincide with standards of practice, quality assurance, and corporately approved reductions in service.

The eighth area of analysis in the creation of the new budget model addressed the use and overlay of the existing VA accounting system. The national VA accounting system is standardized across the country, and uses a departmental approach to tracking costs. In order to use the existing system, the new budget model must superimpose the geographically based budget system onto the existing structure. By tracking site-based expenses by account, and by combining the site based revenue budgets into singularly derived departmental budgets, the new model works in conjunction with the accounting system. Financial managers must read reports generated by the accounting system with a new frame of reference. The accounting system will provided the status of funds related to individual departments. These numbers must be separated by market area and reworked to reflect site-based totals. The expense report will provide this reference point shift. Departmental managers will still be monitored using the existing accounting system for purchases that are made but not consumed. The difference between the status of funds in the accounting system and the status of funds on the expense report is the amount of purchases made, but not yet consumed, ceteris paribus.

The ninth and final area of discussion regarding the revenue based budget model dealt with the distribution of external revenue stream dollars. The decision was made to keep these funds out of the capitated model in order to provide direct incentive to site managers to maximize these funds. This approach mirrors the national model in that insurance collections, sharing agreement collections, and TRICARE collections remain outside the national budget model. In fact, these funds can be carried over from one year to the next unlike appropriated dollars. In order to maximize the incentive for these alternative revenue streams, the decision was made to not tax these revenues to fund corporate overhead.
The new revenue based budget system uses a 23-step process during each budget cycle to allocate and track system funds within five market areas. The first 16 steps involve allocating a budget to each site based upon the guidelines provided in earlier sections of this report. Steps 17 through 23 involve tracking of expenses, at both the site and corporate levels. The attached (Table 1) spreadsheet and PowerPoint presentation (Attachment A) demonstrate from top to bottom how site budgets are created and monitored.

Several major system changes will result from the new revenue based budget system. First, individual services will no longer be required to submit staffing adjustment requests to the corporate Personnel Management and Incentive awards Committee (PMIC). This elimination of this committee reduces the response time and flattens the approval process for staffing adjustments. Second, the new budget model will eliminate annual departmental budget hearings within the organization. Departments are not given budgets based upon historical cost, but rather are funded by fact-based decisions of site managers when they allocate their revenue based budgets. Third, the use of the Decision Support System to track expenditures by market area, by diagnosis, by patient, or by provider should allow VANCHCS to improve the efficiency of operations.

Of course, efficiencies can only be gained if organizational incentives align the goals of managers at every level with overall system goals. The new revenue based budget process improves this relationship by creating incentives whereby site managers will only consume resources in efforts to attract greater resources. This is a complete reversal of the current process whereby managers attempt to get as much of the budget as they can regardless of what is earned. Under the new model, services at each site will need to be as efficient as possible to reduce the cost per patient (achieve overall costs less than capitated amount per patient). Unnecessary referrals will be discouraged under a managed care reimbursement scheme. The incentive to improve data collection and capture increase under the new system because managers will be allowed to retain third party insurance collections and transfer prices for work provided to beneficiaries of other market areas. Additionally, research and educational efforts at local VA
sites will be encouraged by funding for these efforts with increases to operating budgets.

The overarching goal of the new revenue based budget system is to not only align organizational incentives, but also to make local managers more aware of the financial realities of the VA system. Just like the family bookkeeper with his or her checkbook, local managers will be getting monthly 'statements' showing expenses and reporting remaining balances. When expenses go over budget, special notifications will be given requiring payment plans and options. The new system puts the responsibility of financial management into the hands of the managers writing the checks. If outgoing expenses need to be reduced, the site manager has the ability to reduce specific practice patterns, programs, or people. If additional revenue is needed to support existing programs, the site manager has the ability to enter into sharing agreements, improve insurance collections, and/or market services to increase enrollment. With the new revenue based budget system, VANCHCS may be able to keep pace with the changing landscape of healthcare delivery. And maybe, just maybe, we really will be able to 'do more with less'.
# Site Budget Model

**Demonstration**

<table>
<thead>
<tr>
<th></th>
<th>Martinez</th>
<th>Oakland</th>
<th>Merced/Travis</th>
<th>Sacramento</th>
<th>Redding</th>
<th>Corporate Overhead</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Workload Dollars to Sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$24,000,000</td>
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<tr>
<td>94 VERA Uniques (Cat A pts)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Market Area Uniques</td>
<td>4,062</td>
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<td>3,292</td>
<td>10,570</td>
<td>6,079</td>
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<tr>
<td>x Cap Rate</td>
<td>4,333</td>
<td>4,339</td>
<td>4,339</td>
<td>4,339</td>
<td>4,339</td>
<td>$127,934,494</td>
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<tr>
<td><strong>Plus Imports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$13,834,732</td>
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<tr>
<td>Import distribution to sites</td>
<td>5,980,003</td>
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<td><strong>Less Exports</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,746,081</td>
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<tr>
<td>Export PRPs</td>
<td>857</td>
<td>1,992</td>
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<td><strong>CAT A Bonus</strong></td>
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<td><strong>Adjusted Site Starting Balance</strong></td>
<td>13,352,03</td>
<td>5,371,983</td>
<td>9,106,398</td>
<td>32,677,035</td>
<td>19,047,610</td>
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<td>103,555,229</td>
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<tr>
<td><strong>Transfer Ins</strong></td>
<td>17,950,000</td>
<td>1,000,000</td>
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<td>3,000,000</td>
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<td><strong>Transfer Outs</strong></td>
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<td>2,000,000</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>$24,000,000</td>
<td></td>
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<tr>
<td><strong>Site Adjusted Balance</strong></td>
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<td>3,371,983</td>
<td>6,106,398</td>
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<td><strong>Labor weighted by site</strong></td>
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<td>-</td>
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<td></td>
<td></td>
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<td>Education</td>
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<td>MCCR (based on collections)</td>
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<td>320,000</td>
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<td>700,000</td>
<td>700,000</td>
<td>$729,000</td>
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<tr>
<td>Sharing (based on site earned)</td>
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<td>60,000</td>
<td>60,000</td>
<td>60,000</td>
<td>60,000</td>
<td>$729,000</td>
<td></td>
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<tr>
<td>Tncare (based on site earned)</td>
<td>109,000</td>
<td></td>
<td>109,000</td>
<td></td>
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<td>$729,000</td>
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<tr>
<td><strong>Total Site Budget</strong></td>
<td>33,250,548</td>
<td>3,691,883</td>
<td>6,605,967</td>
<td>39,533,882</td>
<td>16,218,610</td>
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Revenue Based Budgeting at VANCHCS
ATTACHMENT A

Revenue Based Budgeting Process for VANCHCS

- The following 23 steps outline the annual process for allocating the VANCHCS budget into five Market Areas. The idea behind revenue based budgets is to allow managers within the organization to have the same incentives for attracting and keeping patients as the organization at large. Since 1996, the VA healthcare system has used a budget model called VERA that funds networks based upon the numbers of veteran patients treated (as opposed to historical cost or fee for service workload). VANCHCS has attempted several budgeting strategies over the past few years, including site based budgeting (the Redding Model), and product line budgeting (the Mental Health product line and CREC). Both models were based upon historical cost methods, rather than revenue. The new model attempts to bring the VERA model farther down into the organization by funding current and future year operations for each Market area based upon actual revenue, thus aligning organizational incentives with network and national goals.

How were the Market Areas defined?

Market Areas were defined by grouping patients around our five main outpatient clinics. Each zip-code within the facility defined catchment area was analyzed to determine where patients within the area were currently receiving the predominance of their primary care. Each zip-code was then assigned to one of the five following Market Areas:

- Martinez
- Oakland
- Mare Island/Travis
- Sacramento
- Redding/Chico

* The number of actual patients VANCHCS 1998 patients living within each Market Area was then used to determine starting budgets for each site manager.
ANNUAL 23 STEP BUDGET PROCESS

1) Receive pre-transfer workload VERA $ total from Sierra Pacific network

2) Fund corporate overhead and reserve from total received: This includes all system level staff and admin expenses, as well as functions that retain economies of scale at the corporate level

3) Calculate capitated rate for all CAT A patients by dividing the remaining workload dollars by the total facility category A patients. Fund a starting balance for each Market area based upon number of CAT A patients residing within its assigned zip-code range

4) Calculate 'export' tax rate per unique by dividing total export $ by number of exports, then apply $ to Market areas.

5) Calculate imported patient capitation rate by dividing import $ with the number of CAT A imports. Fund each market area based upon who provided the care, not where the patient lives

6) Allocate any additional VISN dollars to appropriate market area (CAT A bonus, specific activation)
7) Pay other market areas within VANCHCS for care provided during the previous year on a retrospective fee-for-service basis at 70% Champus Maximum allowable Charge (CMAC) rate.

8) Get paid for care provided to other market area patients at 70% CMAC rate.

9) Add VERA calculated labor adjustment to each market area based upon adjusted starting balance and differential labor costs at distinct points of service.

10) Add NRM (building maintenance/construction) dollars provided by network into corporate budget.

11) Add equipment dollars funded by network into corporate budget.

12) Add research dollars to market area budgets based upon location of research activities.
13) Add VERA driven education dollars to each market area budget based upon actual location of residents.

14) Add MCCF (insurance) dollars to each market area budget based upon site generated portion of actual collections.

15) Add sharing agreement dollars received to each market area budget based upon actual services rendered.

16) Add TRICARE dollars earned to each market area budget on a pure $ for $ basis.

17) Each market area manager will then allocate $ from the site budget for each of the following subcategories:

Salaries, Pharmaceuticals, Lab supplies, utilities, medical supplies, prosthetics, housekeeping, security, maintenance, inpatient sharing at AF hospital, Community Nursing Homes, fee medical/dental, contract hospitalization, rehabilitation supplies, radiology supplies, nuclear medicine supplies, vehicles, computers, office supplies, copiers, special or site specific contracts (ambulance contracts, etc.), dietetics support contracts, and misc. site level purchases.
ANNUAL 23 STEP BUDGET PROCESS

18) Fiscal Service will fund each established account based upon Market area manager specifications. No new accounts will be established, but existing accounts will be funded based upon collaborative agreements between Market area managers and program officials.

19) Items remaining in system overhead will be allocated to departmental level by functional specialists using historical cost principles AND benchmarked efficiency measures.

ANNUAL 23 STEP BUDGET PROCESS

20) Market area managers will develop deficit reduction plans as needed, and all accounts will be given a starting balance. Expenses will be tracked by site using the Decision Support System (DSS) program.

21) Monthly reports will now be generated to track all expenses (and revenue earning ventures) by Market area. The reports will come from a mix of functional experts (services), Fiscal Service, and DSS.
ANNUAL 23 STEP BUDGET PROCESS

22) The Status of Funds report will be used at the corporate level to monitor overall system compliance with budget requirements. If problems exist, then Market area level reports can be used to zero in on problem areas.

23) Market area managers may shift funds each month between accounts to meet needs as required. These shifts will be coordinated and communicated with program officials as required. In addition, each market area manager will detail efforts/plans to comply with any noted budget shortfalls.
References


http://www.enigma.co.nz/hcrol_articles/9604/vol1no1_001.htm


Korn, Larry (September 1998). Individual interview with CFO, Tucson VA Medical Center.


