CARES Contracts and Reports

Request 3: VA documents given to PwC/ MicroTech & documents generated by PwC/ MicroTech

Documents Produced by Contractors

[redacted]

Documents produced by PricewaterhouseCoopers

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Capital Asset Realignment for Enhanced Services (CARES) Business Plan Studies

Study Methodologies

Revised

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EXECUTIVE SUMMARY OF METHODOLOGY

Project Scope and Organization of this Document

Team PwC is assisting the VA to identify the optimal approach to provide current and projected veterans with health care equal to or better than is currently provided in terms of access, quality, and cost effectiveness, while maximizing any potential reuse of all or portions of the current real property inventory at the study sites. This work relies on three principal teams to undertake healthcare planning, capital planning, and reuse planning. In addition, four supporting work streams, or functional teams, will contribute to the Business Plan Studies: Stakeholder Engagement, Implementation and Risk Management, Decision Support and Business Planning, and Financial Analysis. All these work streams are guided and supported by the following groups: an overall national project manager, a Program Management Office, an Advisory Panel and a Quality Assurance Group. In addition, eighteen site teams are in the field to oversee activities at the individual study sites. The 18 study sites have been grouped geographically into seven clusters, with one Site Team Lead assigned to each cluster who is responsible for on-the-ground activities.

Each of the functional team methodologies is presented as a chapter of this document to explain in appropriate detail the data required and approach proposed to carrying out the agreed-upon work.

The studies are being performed in three stages; an initial planning phase and two subsequent phases centered on option development and selection. The work that Team PwC will complete in each stage involves the following:

- **Planning Phase**: Develop and agree on methodologies and study plans for each site
- **Stage I:** Consistent with the Secretary's Decision, Team PwC develops and assesses a broad range of potentially viable Business Planning Options (BPOs) that meet the forecast healthcare needs for the study sites, and provide suggestions to the VA as to which (up to 6) should be taken forward into more detailed development and assessment in Stage II. The VA decides which options are to be studied further.
- **Stage II:** Conduct more detailed development and assessment of the potentially viable options selected by the VA from Stage I and provide a recommendation to the VA of which option offers the optimal solution

Team PwC encourages stakeholder engagement through both Stages I and II, and will work with the Local Advisory Panels (LAP) to ensure issues and concerns are heard.

There are five steps that Team PwC will take for sites requiring health care provision decisions:

1. Team PwC conducts a healthcare provision study to determine the range of potential healthcare delivery options that could be used meet the VA's current and projected workloads: what services, where, and how they can be provided.
2. Team PwC develops optimal implementable physical solutions to reflect the healthcare provision options (utilize existing facilities, expand, re-footprint, acquire/rent alternative

space, contract for care etc.) and assesses the reuse potential of any surplus VA space/land in the study area.
3. Team PwC conducts a financial analysis and assessment against defined criteria.
4. Team PwC solicits feedback from the Local Advisory Panel and stakeholders on the range of options and potential effects if implemented.
5. Team PwC provides VA with report on the health care need, options developed, and results of assessment, feedback received.

In Stage I Team PwC will suggest which BPOs should be analyzed further, and in Stage II Team PwC will recommend which solution should be implemented. The remaining sites (those with healthcare provision decisions) will require steps 2 – 5 only.

Project Timing

As previously described, the timing of the project consists of three major stages; an initial planning phase and two subsequent phases revolving around option development and selection.

During the planning phase Team PwC will focus its efforts reading all Government Furnished Information (GFI), augmenting GFI with Team PwC proprietary or commercially available data as required and approved by the VA, and developing and confirming with VA the detailed site by site schedule, methodologies, tools, and procedures.

Stage I focuses on the options development and assessment, and is scheduled to range from 8 to 12 weeks, depending on each particular Study Site. To develop and assess proposed options during this phase PwC will complete an initial healthcare, capital planning, reuse study, as well as an initial assessment and screening.

Stage II focuses on option refinement, assessment and selection of PwC's ultimate option recommendation, and will take from 30 to 33 weeks depending on the site. The process of refining the options will involve more detailed healthcare, capital planning, and reuse planning studies, as well as financial analysis, implementation planning and assessment. Team PwC then plans to rank the options against CARES objectives, and ultimately select which option will be recommended to the Secretary for implementation. Stage II will also involve the drafting and refinement of the business case.

Major Deliverables

At the end of Stage I, Team PwC will provide the VA with option definitions, assessments, scorings and our recommendations. The VA selects the BPOs to be studied further in Stage II for each Study Site.

At the end of Stage I and II, Team PwC offers the Local Advisory Panels the opportunity to review the scores given to each factor and option and to provide comments.

Approximately midway through Stage II, Team PwC provides the VA and Local Area Panels with the results of additional and more detailed assessments, and recommended options for selection

PwC will submit a draft business plan with up to six options at each Study Site that describes the location of services, capital infrastructure required, and reuse potential:

- Incorporates financial, economic, healthcare workload trends
- Data in the development of business plans
- Includes stakeholder input
- Includes strategies for managing the transition of care
- Includes the feasibility, cost effectiveness, quality, location, and best use for property

Technical Approach

Healthcare Delivery Studies

The objective of the Healthcare Delivery Study is to identify the optimal approach to provide current and projected veterans with healthcare equal to or better than is currently provided in terms of access, quality, and cost effectiveness. The Healthcare Study will assess VA data to determine the type and volume of services needed currently and for 2013 and 2023 and the best location for these services. The assessment will balance several factors, such as patient access healthcare quality, overall cost effectiveness, and stakeholder input. The healthcare delivery studies are to be conducted for Boston, Brooklyn/Manhattan, Louisville, Waco, Big Spring, Walla Walla, Montgomery, and Muskogee.

In Stage I, Team PwC will develop a broad range of potential BPOs that could be used to meet the VA's current and projected workloads. The options will include what services, where, and how can they be provided. At this point, the Capital/Reuse Planning Team will use these options to begin their respective studies. Next, the initial Quality & Access Assessment will be used to begin Financial Analysis. The healthcare team will also facilitate presentation of options to Local Advisory Panels and stakeholders.

In Stage II, Team PwC will refine and develop the VA-selected options from Stage I. To do this, it will conduct agreed upon interviews and site visits and complete specific assessments such as operating and configuration effectiveness, cost considerations, human resource analysis, research and education analysis, local healthcare impact, and detailed quality & access assessment. The data collected through these assessments will be shared with the Capital/Reuse Planning teams and then with the Financial Analysis team. Stage II will also involve a presentation of business plan options to Local Advisory Panels and stakeholders, and the completion of all study documentation.

Capital Planning Studies

The objective of the Capital Planning Study is to provide the best configuration of capital assets for modern healthcare delivery, while maximizing the potential reuse of all or portions of the

current real property inventory. Team PwC will be executing two types of Capital Plans. The first is the General Capital Plan, which will be completed on sites where Team PwC is conducting a Healthcare Delivery Study. The other is a more detailed Comprehensive Capital Plan, to be completed on sites where the Secretary's Decision determines Healthcare Delivery Solution to be provided.

The overall Capital Planning process begins with a review of existing facilities and reviewing VA data and a site and building analysis. The site analysis will consider factors such as zoning restrictions and easements, site circulation, parking capacity, and site utilities. The building analysis will evaluate the building's physical condition, structural systems, mechanical systems, plumbing/fire protection systems seismic condition and patient/staff safety issues. The team will then determine space requirements based on healthcare delivery study options and Secretary's Decision. The facilities assessment and determination of space requirements will feed into the options generation, which will include a potential range of physical solutions, assumption and priorities, and implementation choices and risks. In the final phases of the Capital Planning process the team will assess cost implications, and provide inputs to overall study assessment and communication processes.

Reuse Planning Studies

The objective of the Reuse Planning Study is to identify options that maximize the potential reuse of all or portions of the current real property inventory, while providing the best configuration of capital assets for modern health care delivery. As with the Capital Plans, Team PwC will be executing two types of Reuse Plans. The first is the General Reuse Plan, which will be completed on sites where Team PwC is conducting a Healthcare Delivery Study. The other is a more detailed Comprehensive Reuse Plan, to be completed on sites where the Secretary's Decision determines Health care Delivery Solution to be provided.

The Reuse work stream will deliver an assessment of asset reuse options, strategies, and achievable values to feed into option development and financial analysis. Reuse benefits the VA by reducing operating costs / generating revenues that increase available budgets and, potentially, offers break-point solutions to long-standing capital and site concerns.

The General Reuse Plans for six sites will provide a clear understanding of the real estate potential of each property, including Enhanced Use opportunities and suggestion of alternative locations where appropriate. The Reuse team will use a process consistent with the overall two-stage process. The Comprehensive Reuse Plans for nine sites will be more detailed than general plans and potentially involving market testing. The Reuse Planners and Capital Planning teams will work closely together to ensure overall cost effectiveness of the physical solution is maximized. Reuse outputs and assessment form an integral input to the financial and quality assessment.

During the Planning Stage the Reuse team will complete a Real Property Baseline Report involving existing conditions, current leasing history, opportunities and constraints. Based on existing data, the team will also complete an Environmental Base Line Report. During the planning stage the reuse team will also strive to gain a clear understanding of VA's authorities

and ability to implement real estate transactions. In Stage I, the Reuse team will contribute to option development through a preliminary highest and best use (market context, site visits), a desktop valuation analysis and preliminary General Property Reuse Plan. Not until Stage II will the completion of the General Property Reuse Plan occur, along with more detailed research, and completion of multi-year cash flow inputs. Stage II will also involve the consideration of alternative funding/financing options, and implementation strategies and risk analysis.

Stakeholder Engagement

The purpose of the Team PwC Stakeholder Engagement Team's work stream is to provide an overall framework for managing and coordinating the wide variety of communications that take place, directly or indirectly, as part of the VA CARES Business Plan Studies. The stakeholder engagement methodology addresses communication, training, capturing stakeholder input, and orchestrating public meetings.

The Team PwC Stakeholder Engagement Team will:

- Assist the VA in establishing credibility and engendering trust
- Minimize project risks by providing timely and useful information to stakeholders, the VA, Local Advisory Panels, and Team PwC
- Develop tools and templates to support communication within the internal team and to external stakeholders
- Obtain, analyze and incorporate stakeholder input into the overall option development process
- Provide support to Local Advisory Panels, local VA staff and PwC Site Team Leads in coordinating and preparing for administrative and public meetings
- Devise a coordinated and straightforward communication plan that ensures that the internal team (VA, Team PwC, Local Advisory Panels) and external stakeholders are clear about what needs to be communicated, how frequently, by whom, to whom, and how.

Local Advisory Panel Meetings Throughout the course of the project, there will be four public meetings facilitated by the Local Advisory Panels at each site. The opportunities for stakeholder engagement are driven by the Local Advisory Panel public meeting schedule. All communication, stakeholder input capture and analysis, and meeting support requirements described in the approach section revolve around these public meetings.

The topics of the four public meetings will generally be as follows:

1. Stakeholders input mechanisms, timeframes, procedures
2. Share stakeholders input and preliminary options
3. Share Secretary's decision of which options are to be studied in Stage II
4. Present draft business plan options

Prior to each public meeting, the PwC Site Leaders will attend an administrative and preparatory meeting with Local Advisory Panels. The PwC Stakeholder Engagement Team is a centrally located resource, serving as advisors to the Team PwC Site Team Leaders at each study site and

other functional teams. The PwC Stakeholder Engagement Team is responsible for establishing and maintaining the public meeting-based communication structure that allows Team PwC to communicate effectively and contribute to the CARES Business Case Study process.

Implementation and Risk Management

Team PwC will provide a high level implementation plan for the recommended BPOs at each study site. This plan will take account of the need for the VA to provide uninterrupted care to its veterans.

Team PwC will also conduct a risk assessment to identify key risks that may adversely affect the implementation of the recommended option and achievement of the objectives of the CARES process. The ultimate goal of applying this approach is to create implementation plans informed by risk assessments that improve the likelihood of success for the options developed.

Financial Analysis

The purpose of the Financial Analysis work stream is to ensure that a Life Cycle Cost Effectiveness (or Financial) Analysis ("CEA") will be completed for each Study Site. The methodology contained in this chapter provides details of the structure, assumptions, calculations and expected outputs of the financial analysis tools developed to analyze the financial flows resulting from the Healthcare, Capital and Reuse studies at the multiple Study Sites.

The purpose of the CEA is to clearly describe and assess the life-cycle cost and revenues associated with Business Plan Options ("BPO"). These will be compared to the equivalent life-cycle costs and revenues of the Baseline Business Plan Option to determine if the Business Plan Option has the potential to offer a more cost effective solution than the Baseline Business Plan Option.

The tools developed by the Financial Analysis team are to be used to develop a detailed cost effectiveness analysis for each Business Plan Option developed for each Study Site. Inputs to the BPO Financial Analysis Tool include the effects of both operating and capital expenditures and receipts on each BPO. The tools include a set of Microsoft Excel spreadsheets to facilitate the analysis at each of the healthcare and non-healthcare Study Sites. Members of the Healthcare, Capital and Reuse teams will complete a unique single spreadsheet model for each of the analysis scenarios.

Decision Support and Business Planning

The objective of the Decision Support and Business Planning work stream is to support the study processes with robust methodology and tools that will be applied consistently at each Study Site. During Stage I, individual Team PwC Site Team Leaders will summarize health-care needs and trends as well as the current provision of care and gaps resulting from health-care need projections. They will also provide details of a "broad range of credible options" along with a "high level" assessment using the template provided of each option's potential to meet or exceed

the CARES objectives. From this "broad range of credible options" Team PwC will suggest which options should be studied in Stage II.

Stage II will involve a more detailed development and analysis of options, including more engagement with Local Advisory Panels and Stakeholders to ensure concerns are identified and addressed in refinement and completion of option development. There will be further consideration of specific issues such as:

- Location and grouping of services to optimize service delivery
- Capital Planning / Reuse utilization of sites/facilities
- Alternative delivery options
- Transition and Implementation Issues and Risks
- Impact on VA Human Resources
- Impact on VA Research & Education
- Impact on Local Communities and Stakeholder reaction

Stage II will also involve a more detailed and complete financial assessment, including sensitivity analysis, using outputs from more detailed health care, capital planning and reuse planning studies, as well as more engagement with Local Advisory Panels and Stakeholders to ensure remaining concerns are identified and included in the option assessment. The team will apply standard techniques to compare and rank options, and use this comparison ultimately to recommend the best option to the Secretary.

INTRODUCTION AND BACKGROUND

When the Veterans Administration was established in 1930, it took over the operation of 54 hospitals, including hospitals at a number of soldiers' homes that were opened after the Civil War. Since that date, VA has built or taken over more than 100 additional hospitals, and has opened more than a thousand smaller facilities providing ambulatory care or readjustment counseling to combat veterans. After World War II, the VA continued to expand its hospital system to care for hundreds of thousands of World War II veterans. At the same time, VA's leadership made a conscious decision to establish affiliations with medical schools throughout the United States to improve the quality of VA care and gain access to leading care providers.

When the Department of Veterans Affairs was established in 1989, it administered 172 medical centers with inpatient hospitals, and almost every medical school in the country was affiliated with one or more of these hospitals. Since then, the VA has undergone a profound transformation in the delivery of health care, moving from a hospital driven health care system to an integrated delivery system that emphasizes a full continuum of care. New technology and treatment modalities have changed how and where care is provided, with a significant shift from inpatient to outpatient services. The Veterans Health Administration's (VHA) infrastructure was designed and built decades ago, under a different concept of health care delivery, (i.e., hospital-centered inpatient care, long admissions for diagnosis and treatment, and different geographic concentrations of eligible veterans). As a result, VHA's capital assets often do not align with current health care needs for optimal efficiency and access.

A March 1999 Government Accountability Office (GAO) report concluded that VHA could significantly reduce the funds used to operate and maintain its capital infrastructure by developing and implementing market-based plans for restructuring assets. At the time of this GAO report, more than 4,700 buildings in various states of repair were contained in VHA's inventory, but only 1,200 of these buildings were actually used to deliver health care. GAO estimated that more than 40% of VHA's buildings were more than 50 years old (and thus beyond their useful life), and VHA was spending approximately 25% of its annual operating funds to operate and maintain its buildings, even though more than 5 million square feet of this space was vacant. GAO said that "it seems likely that VHA could take many years to decide on, much less accomplish, system wide asset realignment. The daily cost of unduly delayed decisions is unacceptably high, given that VA could be spending $1 million or more a day to operate and maintain unneeded assets."

In response to the GAO report and subsequent Congressional hearings, VHA initiated development of the Capital Asset Realignment for Enhanced Services (CARES) Program. VA outlined the original goal of the CARES process as follows:

> "[A]ssess veterans' health care needs in each VISN, identify service delivery options to meet those needs, promote corresponding strategic realignment of capital assets linked to those needs, and thereby improve VA's access, quality and delivery of health care in the most accessible and cost-effective manner, while mitigating impacts on staffing and communities and on other Department of Veterans Affairs' missions."

After its own initial efforts to develop alternative "service delivery options" led to unsatisfactory results in the VA's Great Lakes Health Care System (Veterans Integrated Service Network (VISN) 12, parts of Illinois, Wisconsin, and Michigan), VA employed a contractor to pilot the CARES process in the same network. The pilot concluded in 2001 and recommended options were presented to the Secretary of Veteran Affairs. In February, 2002, the Secretary announced his decision, which among other things required substantial consolidation of two VA facilities in Chicago. The implementation process has begun in VISN 12.

CARES Phase 2 extended the CARES Program to all 21 Networks within VHA. The design of CARES Phase 2 benefited from valuable lessons learned in the CARES Pilot. CARES Phase 2 relied primarily upon VA Central Office (VACO) and Network staff to develop the Network CARES Market Plans. VACO identified Planning Initiatives for Networks that include specific areas where capital asset realignment opportunities appeared to be significant. The national approach to CARES Phase 2 used standardized methodologies and processes including: forecasts of future enrollment and service needs, and methodologies for developing Network CARES Market Plans. Proposed realignments in the Network CARES Market Plans considered sharing and collaboration with internal VA components such as VBA and external partners such as the Department of Defense. The Undersecretary for Health used the Networks CARES Market Plans to prepare a Draft National CARES Plan (DNCP) with recommendations to the Secretary.

The Secretary appointed a National Commission of non-VA executives to review the Undersecretary for Health's (USH) draft plan. The final DNCP was submitted to the CARES Commission in August 2003. The purpose of establishing the CARES Commission was to provide an objective and external perspective to the recommendations contained within the DNCP. The Commission made site visits and conducted 38 hearings to gather stakeholder input. The Commission reviewed and analyzed the data gathered from all sources, made recommendations to the Secretary to consider in his review of the Draft National CARES Plan. The final report of the CARES Commission was submitted in February 2004, and the Secretary announced his decision in May, 2004.

The Secretary's CARES Decision has been adopted as VA's road map for bringing VA's health care system's facilities in line with the needs of 21st century veterans. The CARES analysis process focused on answering the following question: "What is the optimal approach to provide current and projected veterans with equal to or better health

care than is currently provided in terms of access, quality, and cost effectiveness, while maximizing any potential reuse of all or portions of the current real property inventory?"

The Secretary's Decision also included a number of national strategic and planning initiatives which will have important policy ramifications for the Veterans Health Administration, and which guide present and future studies. The highlights of those policy initiatives are as follows:

1. The VA will continue to improve the methodologies and data used in the CARES model to project enrollment (and associated workload).
2. The VA will define the appropriate scope of services to be provided at small and rural hospitals in the VA (Veterans Rural Access Hospitals Policy).
3. VA will continue to revise its standards for the establishment of new community-based outpatient clinics to improve access to services, including mental health services, especially in rural areas.
4. The VA will revise projections for outpatient mental health services and acute psychiatric inpatient care workload utilizing corrected VA data, and VISNs will identify or revise plans to address gaps in service, which should be integrated into the ongoing CARES process.
5. VA will develop a model for the deployment of long term care beds across VA, and will develop a long-term care strategic plan which addresses consistency of access to long term care services.
6. VA will continue to seek improvements in its authority to dispose of excess property through the enhanced use leasing process, and will refine its focus on the management of this process and these assets.
7. VA will develop a national strategy to improve its ability to contract for clinical care of veterans that is of high quality and appropriately priced.
8. VA will seek necessary funds to address critical life safety needs in its existing infrastructure.
9. VA will ensure coordination among VISNs with regard to the placement of special disability centers to optimize access to care for veterans. Additionally, VA will examine other opportunities to provide blind rehabilitation in settings close to veterans' homes. In addition, VA will conduct an assessment of acute and long term bed needs for SCI centers to provide the proper balance of beds to best serve veterans and reduce wait times.

Team PwC

The Secretary's CARES Decision calls for additional studies to refine or supplement the analyses developed in the CARES planning and decision-making process. These studies are the basis of the contract awarded to PricewaterhouseCoopers LLP and its subcontractors (jointly referred to as Team PwC). Team PwC consists of the following firms, each of which possesses outstanding qualifications and have formed a unique partnership which will work as an integrated team.

PricewaterhouseCoopers LLP	Overall program management and quality assurance Health care studies Financial analysis / business planning Stakeholder engagement
Perkins and Will	Capital planning
Economics Research Associates	Reuse planning on six Study Sites
Davis Langdon	Capital cost estimates
Widmeyer Communications	Communications
Hoare Engineering	Environmental assessment on six Study Sites

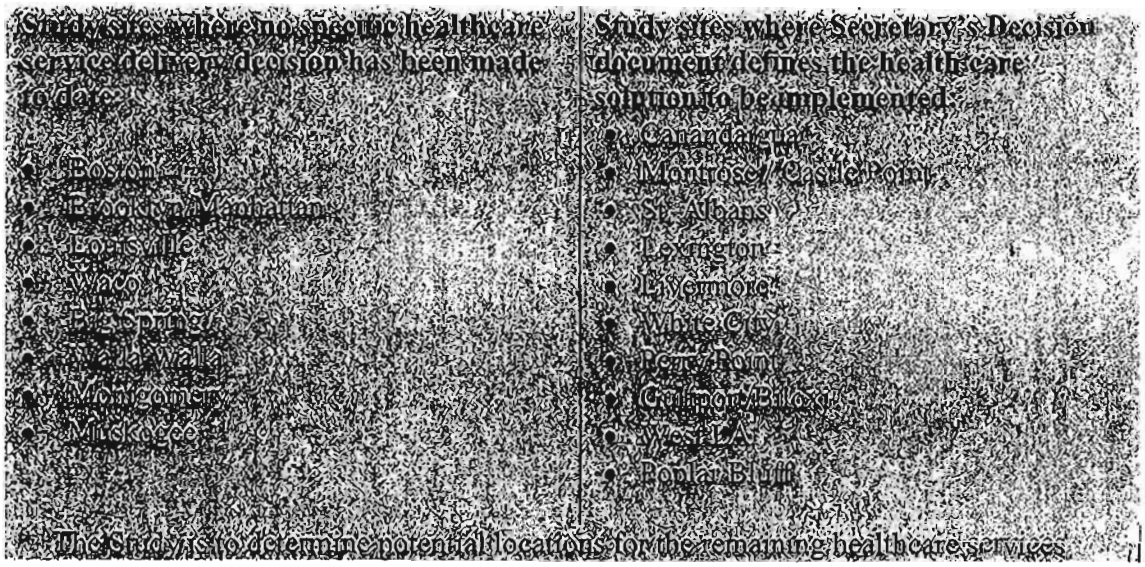
Eighteen VA Study Sites have been identified as in need of reorganization or renovation. Some common issues at these sites are: aging buildings, vacant or under-utilized facilities, facilities that require upgrades or modernization, and declining patient populations. In order to better serve the veterans and their communities in the most cost-effective way, detailed studies will be performed at each site. Studies are divided into three elements: Healthcare Delivery Studies, Capital Plans and Reuse Plans. Not every study will be performed at each site.

The purpose of these studies is to develop a set of options for the type, size and location and reuse potential of VA health care resources for each site. The options take into consideration the following objectives:

- **Maintains or improves quality**
- **Maintains or improves access**
- **Maximizes reuse potential of VA owned sites**
- **Results in a modernized, safe health care delivery environment**
- **Results in a cost effective physical and operational configuration of VA resources**

In addition to the assembly of significant amounts of date required to complete each study and analysis type, the contract calls for the use of Local Advisory Panels (LAPs) to solicit the views of veterans, employees and other stakeholders who may be affected by any proposed change at the site. The stakeholder engagement process is designed to elicit meaningful input on potential options considered by the Local Advisory Panels.

Team PwC's Scope of Work is based on the Secretary's Decision, which separates the study sites into two broad categories:



The remainder of this document sets out the methodology which Team PwC proposes to follow in carrying out the required studies. This proposed methodology reflects not only the subject matter expertise of Team PwC, but also extensive interaction with subject matter experts in the Department of Veterans Affairs, who have provided very helpful explanations about the previous CARES analysis and insight into the Department and its data that will provide the basis for much of this work. Team PwC will continue to examine its methodology throughout the study process to assure that it produces the most reliable and practical results for the VA as it strives to provide the highest quality healthcare to veterans.

Following completion of Team PwC's work, the VA will select the Business Plan Option that it wishes to move forward with at each Study Site and these decisions will be fed into the Department's normal Capital Investment budgeting and prioritization processes. The ultimate timing of the implementation of a CARES program at a Study Site will most likely be dependent on the priority the program receives against the Department's many other competing priorities and the availability of appropriated funds.

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2.1. SCOPE AND PURPOSE

Team PwC is required to develop a business plan consisting of a comprehensive Healthcare Delivery study and/or Capital and Re-use Plans which has considered at least three options and no more than six to be analyzed at each Study Site. The business plan will assess the feasibility, cost-effectiveness, quality, location, highest and best use determination of property for services to be provided, and impact of any realignment. PwC is required to provide an objective independent analysis and formulation of the primary recommended option for each site. The business plan will include an indicative implementation plan, strategies for managing the transition of care, ensuring no interruption of services and minimizing any impact on patients, employees and the community.

Team PwC is required to elicit stakeholder input from the Local Advisory Panel and will be responsible for all communication activities, including those required in conjunction with the Capital plans and Re-use plans, some of which will be developed by other VA contractors.

The focus of each site-specific study will be on the development of quality healthcare delivery, modern state of the art facilities, and access to cost effective care. The primary option recommended is based upon how well the business analysis for the option meets VA objectives in comparison to other options (and the Baseline, see below).

The analyses are divided into three main categories – Healthcare delivery studies, Capital plans and Re-use plans, for each site's study configuration.

2.2. METHODOLOGY

The SoW requires these processes to be both:

- ***independent*** – that is not to involve any bias towards any particular solution; and
- ***objective*** –the decision making process is based on the application of objective criteria and a selection process that ties directly back to the potential of particular BPOs to achieve the VA's objectives for these studies, namely that the recommended option should:
  - Maintain or improve quality
  - Maintain or improve access
  - Maximize the Re-use potential of VA owned sites
  - Result in a modernized, safe healthcare delivery environment
  - Result in a cost effective physical and operational configuration of VA resources

Each of these objectives and the criteria developed for use by Team PwC in assessing options is discussed further below.

The assessment and decision methodology is designed to determine how well BPOs meet the VA objectives that are the basis for a recommended BPO. This approach is similar to the approach the VA currently uses to manage its capital investment processes, more details are set-out below. However, this approach relies on the VA providing explicit statements about the relative importance of each of its objectives for this decision (and specifically the relative importance of the criteria that Team PwC will use in its assessments). Team PwC is being provided guidance from the VA about the relative importance of these objectives and will assist the VA CARES team during Stage I to establish the relative importance of the specific criteria to be used in the Stage II assessment and selection processes.

Towards the end of Stage II, this process involves the following key work elements:

- Team PwC's site study teams will complete their refinement and assessment of the Secretary-selected BPOs for their study site. The assessments to be completed are described in Appendix 2.A.
- The results of these assessments will be deliberated by a panel of Team PwC experts. The experts will form the Team PwC Scoring Panel who will evaluate all BPOs on a common basis and score the options on a pairwise basis using a series of predefined assessment criteria (i.e. the discriminating criteria described below).
- The scores for each BPO will be input into the Team PwC Decision Support Tool (described in Appendix 2.C), which uses these scores and the nationally defined relative weightings discussed above to determine a total score for each BPO at each study site. The BPO with the highest total score would most likely selected by Team PwC as its recommended option.
- Team PwC documents the more detailed option development process and findings and presents the results to the Local Advisory Panel (Meeting 4), during which the Local Advisory Panels are to elicit stakeholder feedback on the options developed and assessments made.
- Team PwC completes its final assessment and documentation of BPOs, incorporating Stakeholder feedback as elicited from the Local Advisory Panel, to complete the draft Business Plan for each study site (see Appendix 2.D).
- **A draft Business Plan for each study site is provided to the COTR** for review and, as refined, submitted to the VA/CIB for their input and refinement prior to it becoming the final Business Plan for each study site.

Since Team PwC's work at each study site is sequenced based on the complexity of the needs of the study site, some study sites are expected to complete Stage I and also Stage II significantly earlier than other sites.

2.2.1. Stage I – Assessment and Short-Listing of Potential BPOs

Stage I involves each of the Team PwC study teams completing their initial BPO development and assessment processes. As indicated in Figure 2.2, this involves the flow of information and selections from study team to study team and the integration of their findings into the Implementation Planning and Risk Analysis; the Life-cycle Cost Effectiveness Analysis; Stakeholder and Local Advisory Panel meetings and Decision Support and Business Planning Processes. Each of these interfaces is described in the relevant study team methodologies (Chapters 3-8).

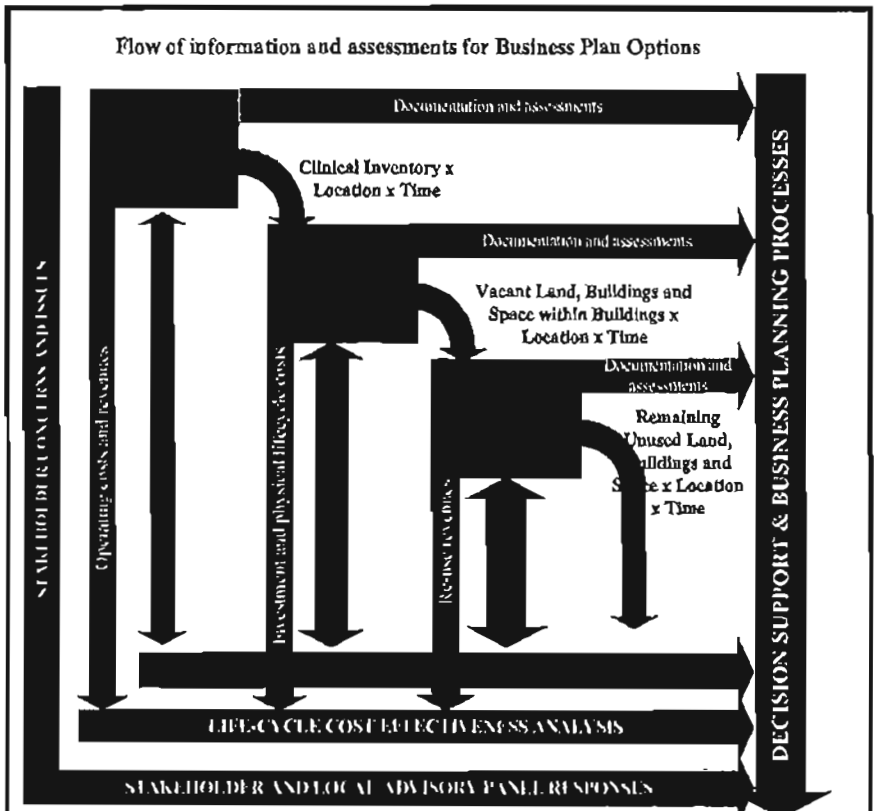


FIGURE 2.2 - Integration of study inputs

Towards the end of Stage I, Team PwC will assess options generated by against a series of pre-defined assessment criteria (see below). This assessment will be provided to the VA/CIB with suggestions as to which of the BPOs generated Team PwC considers should be subject to further study in Stage II.

This process involves the following key work elements:

- Team PwC develops and assesses a broad range of potentially viable BPOs to meet the healthcare demand forecast provided by the VA and the decisions made by the Secretary in the Secretary's May 2004 Decision Document – this work involves the inputs of Healthcare team, Capital Planning team, Re-use Planning team[1] for each Study Site and inputs from Team PwC's National Implementation and Risk Management and Financial Analysis teams:

[1] The re-use planning teams at non-healthcare study sites are OGCs, please refer to Chapter 5.

For Healthcare study sites:

- Team PwC assessment of healthcare demand forecasts and trends at the study site
- Team PwC assessment of the impact of these trends on healthcare provision as of today (the Baseline BPO) and those potential changes to maintain or enhance healthcare quality and access in a cost efficient, safe and secure manner
- Team PwC development of a broad range of alternative BPOs for meeting the healthcare requirements at the study site.
- At some of the study sites the SoW directs Team PwC to consider specific BPOs. For example:
  - For the Boston study site, one of the BPOs is to include determining the feasibility of consolidating acute care services at one tertiary care medical center to meet future demand. This center would serve as the hub of a system of primary care and multi specialty clinics located throughout the Boston area
  - For the Brooklyn/Manhattan study site, three BPOs are to be developed to provide options for health care delivery in the NYC area. The options will include the feasibility of consolidating the Manhattan and Brooklyn campuses into one site. The site could be an entirely new site or located at either the existing Manhattan or Brooklyn sites.

For Non-Healthcare study sites:

- The VA provides Team PwC with the VA's projected space requirements by department by site and associated healthcare demand forecasts and trends at the study site for the healthcare provision solution chosen by the Secretary of the VA for the study site (refer to the Secretary's Decision)
- Team PwC assesses the impact of the Secretary's Decision on the healthcare facilities as of today and the minimum required investments to occur (Baseline BPO) to maintain healthcare provision in a cost efficient, safe and secure manner
- Team PwC develops a broad range of Alternative Capital and Re-use BPOs that are compatible with the Secretary's Decision for meeting the healthcare requirements at the study site. At some of the study sites the SoW directs Team PwC to consider specific BPOs. For example:
  - For the Canandaigua study site, the study is to determine whether the existing campus or another location in the Canandaigua area is the best location for the services currently offered on the Canandaigua campus
  - For the Livermore study site, BPOs for the Livermore campus are to be developed with and without a Nursing home presence on campus. The outpatient primary and specialty care and sub-acute inpatient services will be transferred from the campus. The study's scope is only on the question of the best way to retain a nursing home presence in the Livermore area (i.e., whether to retain a Nursing Home on the Livermore campus or on another site in the community).

In general, the assessment and reporting of the Baseline and Alternative BPOs will occur as follows:

- Initial high-level assessment of the Baseline and Alternative BPOs against the Initial Screening Criteria (described in Section 2.3.3); completion of the Stage I Assessment of BPOs that pass the initial screening using the Assessment process and criteria set out in Section 2.3.3 (and in more detail in Appendix 2.A); and development of the Stage I outputs as defined in Section 2.3.4 (and by Example presented in Appendix 2.B)
- Gather input and feedback from the Local Advisory Panels at each site on the Baseline and Alternative BPOs developed. The Local Advisory Panels, considering public comment, may suggest additional or refinements to BPOs to be considered
- Assessment and documentation of BPOs incorporating Stakeholder feedback as secured from the Local Advisory Panels and other sources.

At the end of Stage I, Team PwC will provide the VA with report containing details of all the BPOs considered by Team PwC (including those suggested by Local Advisory Panels) an assessment of the relative merits of the various BPOs presented and suggestions as to which BPOs are most likely to meet the VA's objectives for CARES (further details of the likely contents of this report are provided in Appendix 2). Team PwC presents a summary of the report to the Secretary and the Cares Implementation; following which the Secretary decides which of BPOs (up to 6) are to be studied in Stage II.

2.2.2. Stage II - Assessment of Selected Stage I BPOs, Selection of a Recommended BPO

Stage II involves the study teams completing a more detailed development and assessment of the BPOs selected by the Secretary of the VA for further study, including additional consultation with stakeholders and the Local Advisory Panels and consideration of additional issues as described below.

As with Stage I, this involves the flow of information from study team to study team and the integration of their findings into the Implementation Planning and Risk Analysis; the Life-cycle Cost Effectiveness Analysis; Stakeholder and Local Advisory Panel meetings and decision support and business planning processes. Each of these interfaces is described in the relevant study team methodologies (Chapters 3-8).

Stage II involves a significantly more detailed assessment of BPOs. The results are used to rank BPOs and ultimately to support the selection of a recommended BPO for each study site.

2.3. APPROACH

2.3.1. The Baseline BPO

Team PwC's assessment methodology commences with the creation of a Baseline BPO, which is the BPO under which the VA would not significantly change either the location or type of services provided in the study site, unless directed otherwise by the Secretary's May 2004 Decision. All other BPOs are compared to this Baseline BPO.

The Secretary's Decision and long-term healthcare demand forecasts and trends, as indicated by the demand forecast, are applied to the current healthcare provision solution for the study site and it is assumed that under the Baseline BPO:

- Subject to the Secretary's Decision, healthcare would continue to be provided as currently delivered; except to the extent healthcare volumes for particular procedures fall below key quality or cost effectiveness threshold levels. At this point, it is assumed that such healthcare procedures would be transferred to other VA facilities or other providers in the community and current facilities, or portion thereof, mothballed, unless they can be re-used
- Capital planning costs will allow for current facilities to receive such investment as is required to rectify any material deficiencies (e.g. in safety or security) such that they would provide a safe healthcare delivery environment as required in the Secretary's Decision. Such investment is assumed to occur when necessary and include investments to make facilities seismically secure and to rectify all weaknesses identified in the facilities condition assessments
- Life Cycle capital planning costs will allow for on-going preventative maintenance and life-cycle maintenance of major and minor building elements. In the event that a particular structure or key building element whose useful life is expired, it is assumed that the structure or key building element is replaced when the remaining economic life of the structure or key building element expires. Transition planning will consider the need to continue to provide veterans with access to care during any capital investment (replacement) works
- Re-use plans will be developed to use such vacant space in buildings and/or vacant land or buildings as emerge as a result of the changes in demand for services and the facilities in which they sit.

Other business rules and studies applicable to this BPO are detailed in each of the specific study team chapters of this methodology.

An implementation plan and risk analysis and qualitative assessments are completed, together with a 30-year life-cycle cost model for the Baseline BPO.

The Baseline and Alternative BPOs, described below, are constrained by the decisions made by the Secretary in the Secretary's May 2004 Decision.

2.3.2. Development of Alternative BPOs

As noted above, Team PwC is tasked to both analyze and assess the Baseline BPO and develop a broad range of Alternative BPOs for meeting the healthcare requirements of veterans at the study site. An overview of the process is shown in Figure 2.2

Team PwC's BPO development process is set out in detail in each of the Healthcare study, Capital Planning study and Re-use Planning study methodologies. In summary, however, a BPO development involves the following process:

- For Healthcare sites, Team PwC assesses healthcare demand and trends at the study site. For Non-Healthcare study sites, the VA provides Team PwC with the VA's projected space requirements by department by site and associated healthcare demand forecasts and trends at the study site for the healthcare provision solution chosen by the Secretary of the VA for the study site (refer to the Secretary's Decision). The mechanics for these space considerations are setout in Chapter 4.
- Team PwC assesses the impact these trends and the Secretary's Decision have on healthcare provision today and the management decisions that would need to occur (Baseline BPO) to maintain healthcare quality and access in a cost efficient manner
- The SoW, as noted, also directs Team PwC to consider specific BPOs at some of the study sites. These requirements drive the generation of some alternative BPOs at impacted study sites
- The consideration will also identify:

    - ***Gaps in healthcare service provision*** - for example that the minimum healthcare access standards are not met or that there is insufficient capacity at existing sites. Such gaps could lead to the development of Alternative BPOs that add additional sites or increase the capacity of current sites
    - ***Surplus healthcare service provision*** – for example site may already contain surplus services or projects a significant decline in the demand for a particular healthcare service resulting in a future surplus in healthcare service supply. Such surplus could lead to the development of Alternative BPOs that reduce or realign the capacity of current sites, consolidating healthcare provision to a reduced number of sites or placing increased reliance on community, DoD or affiliated healthcare providers to provide healthcare that historically has been provided by the VA.
    - ***The need for the VA to invest in new/upgraded facilities*** – for example the layout/condition of current facilities and their future investment needs may warrant consolidation on a site or investment in new facilities. Such investment requirements could lead to the development of Alternative BPOs that involve realignment of facilities on existing sites, investment in new facilities, leasing new facilities (like CBOCs), sharing facilities with the DoD or affiliated organization, creation of new sites with new facilities; and or/the demolition of surplus facilities on sites if they cannot be utilized productively by the VA or Re-used by other parties.

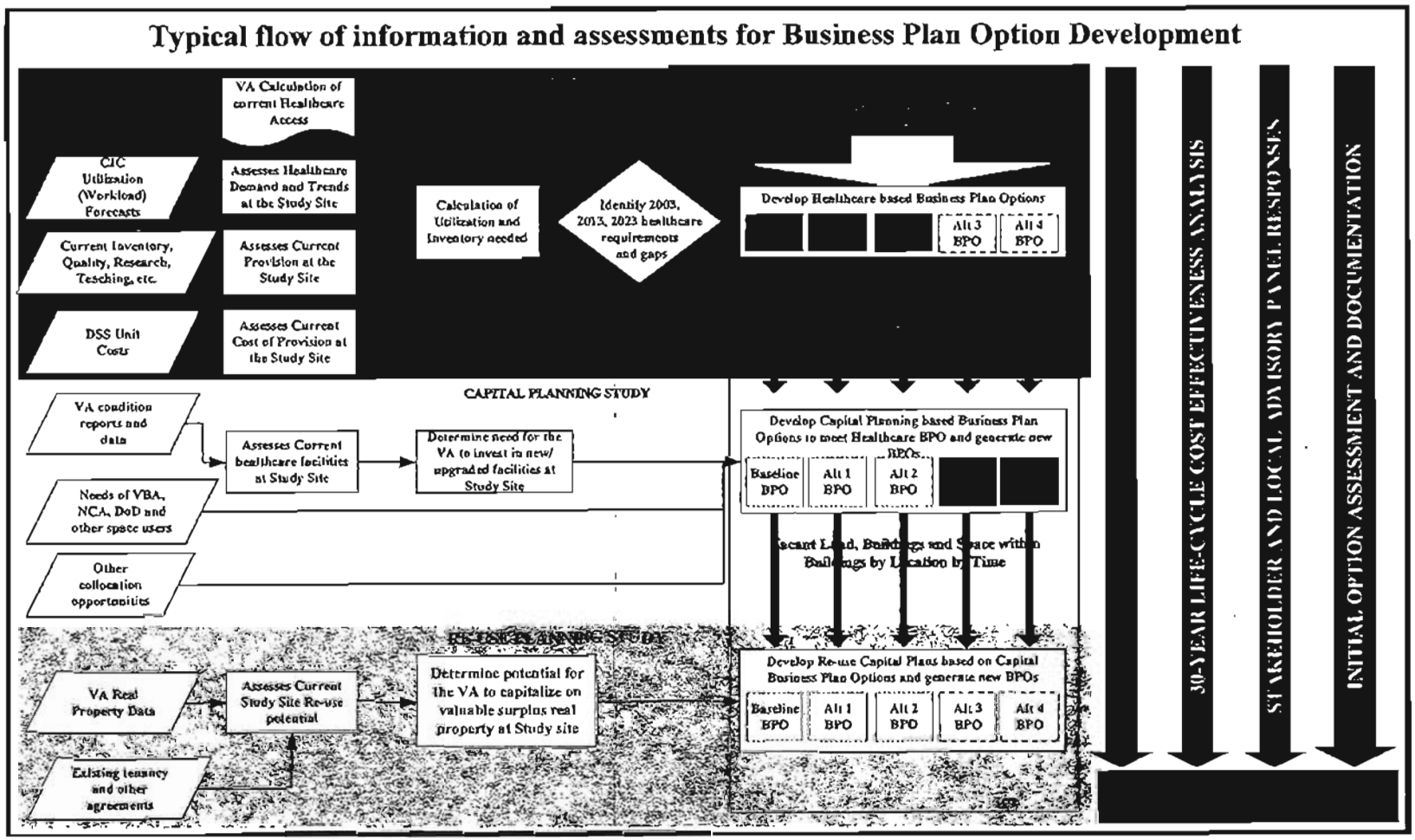
- ***The potential for the VA to capitalize on valuable surplus real property*** – for example if the VA has or is forecast to have significant vacant space or land potential options to Re-use surplus land, buildings and space within buildings must be considered. BPOs developed are also to ensure that the VA is able to optimize its use and ownership of real property. BPOs are will be developed that include plans to re-utilize and surplus space or land to the maximum extent economically possible.
- ***Local Advisory Panel and Stakeholder input.*** As directed by the Local Advisory Panel, options, or portions thereof, reflecting the unique considerations of stakeholders will be reflected.

Alternative BPOs are discussed between the Healthcare, Capital Planning and Re-use study teams at each site and also with the Local Advisory Panels to ensure they take account, to the maximum extent possible, of the needs and concerns expressed by stakeholders. This process becomes particularly important following Local Advisory Panel meetings, when the study teams will have received guidance from the Local Advisory Panels of the key issues and concerns of the stakeholders.

As part of the CARES Phase II studies the VA's CARES program office issued planning guidance[2] to aid VISN teams responsible for the development of Alternative BPOs. It is Team PwC's assumption that much of this guidance is directly relevant to these Studies, unless modified by the Secretary's Decision, the SoW or these methodologies.

[2] For example CARES Guide Book Phase – II (2nd Edition June 2002) and the Handbook for Market Plan development (January 2003)

Figure 2.2 - Overview of Team PwC's BPO Development Process



2.3.3. Assessment Criteria

VA Objectives for the Business Plan Studies

Team PwC's assessment and decision methodology is designed to determine how well BPOs meet the VA's overall objectives for these studies. These objectives require that the recommended BPO is to:

- Maintain or improve quality
- Maintain or improve access
- Maximize Re-use/re-development potential of VA owned sites
- Result in a modernized, safe healthcare delivery environment
- Result in a cost effective physical and operational configuration of VA resources

Team PwC's assessment process utilizes a series of **Initial Screening Criteria** and **Discriminating Criteria**, detailed later in this section, as part of its assessment. These objectives form the basis of the assessment criteria used by Team PwC throughout these studies. In addition, the VA listed a number of other assessment factors in the SoW, for example the assessment of the impact of particular BPOs on the community, that also require consideration and have been included in the assessment process, but typically as secondary criteria or sub-factors. These are also detailed later in this section.

Team PwC and the VA have agreed a process by which these criteria will be confirmed and their relative importance determined. This process should be completed before option assessments need to be completed for the 2nd Local Advisory Panel meeting at each site. All criteria setout in the remainder of this Chapter and Appendix 2 are subject to acceptance or amendment by this process.

Initial Screening Criteria

Team PwC is required to generate a broad range of potential BPOs for each study site during Stage I and it is the purpose of the Stage I assessment to determine which of these options are potentially viable and worthy of further consideration in Stage II.

A series of Initial Screening Criteria will be used to assess whether or not a particular BPO has the potential to meet or exceed the CARES objectives. Team PwC considers that BPOs must have the potential to meet or exceed key initial screening criteria for the BPOs to be considered by Team PwC as suitable for Stage II. If BPOs fail to pass these criteria then they would be deemed to not be viable by Team PwC. They would not form part of the set of BPOs the Team PwC suggests be considered for further study. This does not mean that the VA may not require any such BPO to be considered further in Stage II.

Team PwC has selected the following Initial Screening Criteria based on the relevant performance-based objectives set for the program, namely:

- ***Would maintain or improve the overall quality[3] of healthcare***
  This is assessed by consideration of:
  - The specific discrete indicators listed in the healthcare methodology;
  - The sufficiency of healthcare provision; the size of **any** gaps between supply and demand for healthcare; and the overall impact on weighting times in a Study Site;
  - The level of workload at any facility compared to workload thresholds. Quality concerns may also occur if it is assumed that the VA would contract with a non-VA provider for particular types of healthcare and there is no current proven healthcare provider of the required services within a particular location. In this case assumptions may need to be made about the likelihood of such a provider emerging. Any BPO that relies upon patient care being provided by third parties, where no such provision currently exists would fail this test unless there is a compelling reason for Team PwC to consider that there is a **high probability** that such services will be provided when they are required.

- ***Would maintain or improve overall access to healthcare***
  This is assessed based on the access to healthcare assessments healthcare. Any BPO that results in a significant increase in average access times for either primary, tertiary or acute healthcare or cause a access to fall outside VA access guidelines would fail this test.

- ***Would result in a modernized, safe and secure healthcare delivery environment that is compliant with existing laws, regulations, and VA requirements***
  This is assessed by consideration of the physical environment proposed in the BPO and any material weaknesses identified in the VA's space and functional surveys, facilities condition assessments, security assessments and seismic assessments for existing facilities and application of a similar process to any alternative facilities proposed. Any BPO that does not have the potential to achieve and sustain an overall weighted facility assessment score of at least 4.0[4] would fail this test.

- ***Has the potential to offer a cost effective use of VA resources***
  This is assessed as part of Team PwC's initial cost effectiveness analysis. Any BPO that does not have the potential to provide a net present cost of 110 per cent [5] or less than the net present cost of the baseline option would fail this test.

BPOs that pass these tests are then subjected to a more detailed assessment.

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[3] Quality includes clinical proficiency across the spectrum of care, safe environment and appropriate facilities

[4] Team PwC view is that this should be at least 4.0 as a long term objective, but we understand 3.0 was the level used in CARES Phase II.

[5] This banding is designed to take account of the level of accuracy of the Stage I cost estimates In addition, there may be occasions where additional costs are acceptable, for example to ensure access and quality continues at an acceptable level, VA please advise.

Discriminating Criteria

Team PwC will utilize evaluation criteria called "Discriminating Criteria", to discriminate among BPOs that pass the Initial Screening test described above.

Team PwC has reviewed these criteria and based on discussions with the VA HQ Cares team proposes to use the primary criteria and sub-criteria Discriminating Criteria set out in Figure 2.3.

Discriminating Criteria	
Primary Criteria	**Sub-criteria**
Healthcare Quality	▪ Quality of medical services ▪ Meeting need (size of gap) ▪ Modernized safe healthcare delivery environment
Healthcare Access	▪ Primary care services ▪ Acute hospital services ▪ Tertiary care services
Making best use of VA resources	▪ Cost effective physical and operational configuration / net present life cycle cost ▪ Level of Investment Required ▪ Maximizes Re-use potential of VA owned sites
Ease of Implementation*	▪ Ability to maintain uninterrupted care ▪ Riskiness of BPO implementation
Ability to Support wider VA programs	▪ DoD sharing ▪ One-VA Integration (VHA/VBA/NCA use of locations) ▪ Special Considerations

Figure 2.3 Discriminating Criteria

In addition, Team PwC will provide the VA with a commentary of the inputs received from the Local Advisory Panels and Stakeholders during Stage I on their support for or concerns with particular BPOs. Team PwC understands that such inputs will be used to inform the Secretary in his process to reduce the number of BPOs to the final up to 6 BPO to be studied in Stage II.

Appendix 2.1 provides further details of these criteria and Sections 2.3.4 and 2.3.5 provide details of the assessments to be made on BPOs during Stages I and II respectively.

2.3.4. Stage I Assessment, Selection of Suggested BPOs and Key Outputs

The purpose of the Stage I assessments is to provide the VA leadership with sufficient analysis to enable them to select up to six BPOs that will be studied in more detail. This section sets out how the relevant inputs of Team PwC study teams and stakeholders will be integrated into a single assessment and report of options developed for each study site.

Stage I BPO Assessment and Documentation process

Under the direction of the Team PwC study site Leader, Team PwC members will complete Stage I Option Development and Assessment activities at each study site as follows (additional detail is provided in subsequent chapters).

As indicated in Figure 2.4, Team PwC study teams will integrate their study work into:

a) the initial implementation planning & risk analysis; and

b) the initial life-cycle cost analysis.

These analyses will be completed for each BPO developed by Team PwC and for any Alternative BPOs requested by the Local Advisory Panels.

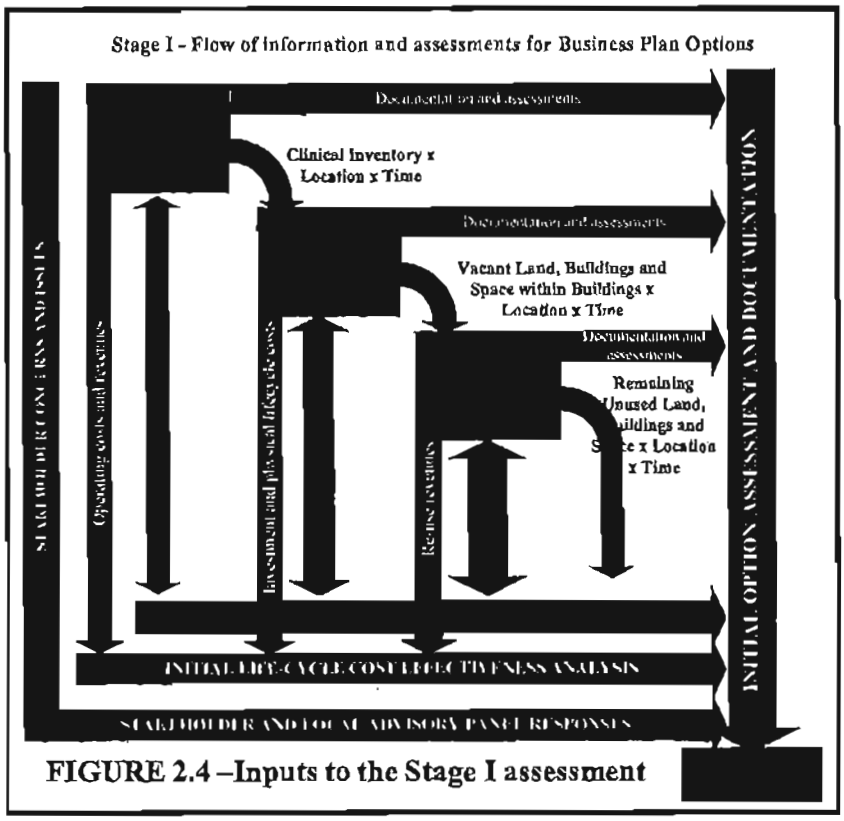

FIGURE 2.4 –Inputs to the Stage I assessment

The results of the study team analyses will be consolidated with the results of the initial Stage I assessment, described below, into a single document that describes the Baseline and Alternative BPOs developed and summarizes the results of the Stage I assessment.

A summary of the BPOs considered and the results of the Team PwC Stage I assessment is to be provided to the Local Advisory Panels for discussion with Stakeholders at the second Local Advisory Panel meeting. Issues and concerns raised by Stakeholders at this meeting are to be analyzed by Team PwC and summarized for public record. At the request of the Local Advisory Panel additional BPOs may be developed and analyzed by Team PwC following the meeting. The results of these analyses will be combined together with a summary of Stakeholder feedback received into a single document together with the results

of the finalized Stage I assessment. Appendix 2.B provides an example of the output expected from this Stage I integration for a study site.

The Stage I assessment follows all the steps setout below and is completed prior to the Second Local Advisory Panel meeting. The Final Stage I Assessment modifies the Initial Stage I Assessment to take account of feedback received from Stakeholders and any additional BPOs analyzed.

Team PwC site teams will conduct the Stage I assessment of all the BPOs developed, that pass the Initial Screening, against the criteria listed in Appendix 2.A and in accordance with the methodology set out below. This assessment will be reviewed by the Team PwC Scoring Panel and the relative merits of each BPO at 2013 and 2023 compared to both current performance and the Baseline BPO.

The following grading system will be used for the Stage I assessment:

- Better — The BPO has the potential to provide a slightly improved quality of healthcare or better access than the Baseline BPO
- Same — The BPO has the potential to provide materially the same quality of healthcare or level of access as the Baseline BPO
- Worse — The BPO has the potential to provide a slightly lower quality of healthcare or reduced access than the Baseline BPO

It will be for the Team PwC site team leaders to facilitate the discussions with the Team PwC Scoring Panel regarding what Significantly Better and Significantly Worse means at their particular study site.

The results of Team PwC's financial and cost effectiveness analysis will be converted into graphical form, utilizing the following grading system:

Operating cost effectiveness (based on results of initial healthcare operating costs)	
↑↑↑	The BPO has the potential to provide significant recurring operating cost savings compared to the Baseline BPO (>15%)
↑↑	The BPO has the potential to provide significant recurring operating cost savings compared to the Baseline BPO (10%-15%)
↑	The BPO has the potential to provide some recurring operating cost savings compared to the Baseline BPO (5%-10%)
-	The BPO has the potential to require materially the same operating costs as the Baseline BPO (+/- 5%)
↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (5%-10%)
↓↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (10%-15%)
↓↓↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (>15%)

Level of expenditure anticipated (based on results of initial capital planning costs)	
↓↓↓↓	Very significant investment required relative to the Baseline BPO (e.g. >200 percent)
↓↓	Significant investment required relative to the Baseline BPO (e.g. 120 – 200 percent)
-	Similar level of investment required relative to the Baseline BPO (+/- 20% of Baseline)
↑↑	Reduced level of investment required relative to the Baseline BPO (40-80% of Baseline)
↑↑↑↑	Almost no investment required

Level of Re-use proceeds relative to Baseline BPO (based on results of initial Re-use Study)	
↓↓	High demolition/clean-up costs, with little return anticipated from Re-use
-	No material Re-use proceeds available
↑	Similar level of Re-use proceeds compared to Baseline (+/- 20% of Baseline)
↑↑	Higher level of Re-use proceeds compared to Baseline (e.g. 120 – 200 percent)
↑↑↑	Significantly higher level of Re-use proceeds compared to Baseline (e.g. >200 percent)

Cost avoidance (based on comparison to Baseline BPO)	
-	No cost avoidance opportunity
↑↑	Significant savings in necessary capital investment in the Baseline BPO
↑↑↑↑	Very significant savings in essential capital investment in the Baseline BPO
Overall Cost-effectiveness (based on initial NPC calculations)	
↓↓↓↓	Very significantly higher Net Present Cost relative to the Baseline BPO (>1.15 times)
↓↓	Significantly higher Net Present Cost relative to the Baseline BPO (110 – 115 percent)
↓	Higher Net Present Cost relative to the Baseline BPO (105 – 109 percent)
-	Similar level of Net Present Cost compared to the baseline (+/- 5% of Baseline)
↑	Lower Net Present Cost relative to the baseline (90-95% of Baseline)
↑↑	Significantly lower Net Present Cost relative to the Baseline BPO (85-90% of Baseline)
↑↑↑↑	Very significantly lower Net Present Cost relative to the Baseline BPO (<85% of Baseline)

Team PwC anticipates also providing a commentary on each of the qualitative and quantitative factors, drawing attention to particular facets of the particular assessment that Team PwC considers material to the selection of the short-listed BPOs for study in Stage II.

Based on this initial assessment, Team PwC is required to provide the VA with its suggestions as to which of the BPOs developed during Stage I, are considered the more likely to achieve the VA objectives for the program and the reasons for their selection.

Team PwC will base this decision on the results of the following measures:

- Does the BPO maintain or improve overall healthcare quality and access to care; if no then the BPO would most likely not be selected.
- Remaining BPOs would then be assessed based on their relative potential to provide overall cost effectiveness over the 30-year assessment horizon.
- BPOs with the highest potential and lowest overall 30-year cost would be the BPOs most likely to be one of the up to 6 BPO suggested by Team PwC for further study.

In rendering the suggested options, Team PwC will consider "ease of implementation" of particular BPOs (e.g., the ability of the VA to continue to provide uninterrupted care, riskiness of the BPO and its implementation and the accuracy of the costs and other assessments) and their overall credibility, given Local Advisory Panel reactions and wider stakeholder concerns.

Team PwC anticipates providing each BPO presented a grading as follows:

Overall Attractiveness of the BPO Compared to the Baseline	
↑↑↑↑	Very "attractive" – highly likely to offer a solution that improves quality and/or access compared to the baseline while appearing significantly more cost effective than the baseline
↑↑	"Attractive" - likely to offer a solution that at least maintains quality and access compared to the baseline while appearing more cost effective than the baseline
-	Generally similar to the Baseline
↓↓	Less "attractive" than the baseline - likely to offer a solution that while maintaining quality and access compared to the baseline and appearing less cost effective than the baseline
↓↓↓↓	Significantly less "attractive" – highly likely to offer a solution that may adversely impact quality and access compared to the baseline and appearing less (or much less) cost effective than the baseline

Team PwC anticipates not recommending any BPO for further study that is graded worse overall than the Baseline BPO.

Appendix 2.B provides an example of a Stage I report outline for a study site. This report will be supplemented by outputs from the relevant study teams' findings (Healthcare, Capital Planning, Re-use) as appropriate.

2.3.5. Stage II Assessment, Selection of a Recommended BPO and Key Outputs

The objective of Stage II is to provide VA senior leadership with a recommended BPO identified by Team PwC based on an objective analysis and comparison of the selected BPOs applied consistently across BPOs at each site.

The Stage II Assessment involves a more detailed development and analysis of BPOs against the criteria listed in Appendix 2.A, including more engagement with Local Advisory Panels and Stakeholders to ensure concerns are identified and addressed in refinement and completion of BPO development.

Further consideration of specific issues include:

- Location and/or grouping of services to optimize service delivery
- Refinement of BPOs to address specific access concerns
- Refinement of BPOs to address specific quality issues
- Capital planning / Re-use utilization of sites/facilities
- Transition and implementation issues, risks and mitigation strategies
- Impact on VA human resources and mitigation strategies
- Impact on VA research & education and mitigation strategies
- Impact on local communities
- More detailed/more complete financial assessment, including sensitivity analysis, using outputs from more detailed healthcare, capital planning and Re-use planning studies
- Continued engagement with Local Advisory Panels and Stakeholders to ensure remaining concerns are identified and considered in the refinement of each BPO.
- Application of uniform mathematical techniques to compare and evaluate BPOs.
- Identification of recommended BPO and documentation.

The Stage II BPO assessment will follow a similar process to the Stage I assessment, except it would be conducted at a more detailed level and with more factors considered. Appendix 2.A provides a full listing of the criteria to be used in this assessment. Appendix 2.D provides details of the anticipated Stage II Assessment outputs.

Application of Standard Techniques to Compare and Evaluate BPOs and Selection of Recommended BPO

Overview

Stage II ultimately involves Team PwC providing the VA with a recommended BPO and a business plan to support it. The selection of a recommended BPO by Team PwC involves the use of an approved scoring and evaluation process. This process involves:

- The assessment of each BPO by Team PwC site Teams against the assessment criteria listed in Appendix 2.A. Such assessments are likely to involve consideration and

scoring of a range of sub-factors using quantitative assessments where possible to reduce subjectivity.

- The results of these assessments to the Team PwC Scoring Panel who will evaluate all BPOs on a common basis and score the options on a pairwise basis for each of Discriminating Criteria listed in Section 2.3.3).
- The results of these scores will be input into the Team PwC Decision Support Tool (described in Appendix 2.C), which utilizes these scores and the nationally defined relative weightings discussed below to determine a total score for each BPO at each study site. As noted above, the BPO with the highest total score as the BPO would most likely be the BPO that Team PwC will select as recommended BPO for the Study Site.
- Team PwC documents the scoring procedure and presents the results to the Local Advisory Panel (Meeting 4), during which the Local Advisory Panels are to secure Stakeholder feedback on the options developed and assessments made.
- Team PwC completes its final assessment and documentation of BPOs, incorporating Stakeholder feedback as secured from the Local Advisory Panels, to complete the draft Business Plan for each study site (see Appendix 2.D).
- A draft Business Plan for each study site is provided to the COTR for review and ultimately submission and presentation to the VA/CIB for acceptance and refinement to be the final Business Plan for each study site.

Establishing relative weightings for Discriminating Criteria

Team PwC's technique to compare BPOs involves the use of weighted criteria and pairwise scoring of a range of assessment criteria (These are described in Appendix 2.C.) A key stage in this process is the establishment of relative weightings for both the Primary Discriminating Criteria and the Sub-Criteria listed that are used for the comparison of options.

Team PwC are to use the following Primary Discriminating Criteria for comparing BPOs:

- Healthcare Quality
- Healthcare Access
- Use of VA resources
- Ease of Implementation
- Ability to support VA programs
- Impact on VA and the community

Under each of these Primary Discriminating Criteria are sub-categories to ensure that the assessment can be broken down into various components to better define key components in decision making. Examples of these subcategories are modernization, safe and secure healthcare delivery environment; access to acute hospital services; level of investment required; ability to provide uninterrupted care; impact on VA human resources; one-VA integration; concerns of subgroups of stakeholders. As also indicated in Figure 2.3, each Primary criterion will have at least 3 sub-categories.

Team PwC is aware that the VA utilizes Expert Choice™ in its Capital Investment planning decision-making processes and has established criteria and weightings between them as well as a scoring methodology for prioritizing and ranking its capital investments. In discussions with the VA it has become clear that the weightings used by the VA in its capital planning processes may not be appropriate for these studies.

As with the process used for the creation of the Capital Investment Weightings, VA decision makers will need to be walked through a set of pairwise comparisons where they will be asked to compare the Discriminating Criteria for their relative importance to the VA[6]. For example, leaders may be asked to compare a goal (one of the Discriminating Criteria) to "improve cost effectiveness" to a goal for "improving access" to determine which contributes more to the achievement of the CARES objectives. As with the Capital Investment Weightings process, decision makers would then be asked to discuss their positions with others; sharing what they do and do not know and their stakeholder priorities. After discussing the priorities, decision makers could change their votes. Subsequently, they may be asked to compare Net Present Cost ("NPC") to "Quality" and then Quality to Access. The VA's Expert Choice software (or the Team PwC Decision Support Tool) could then be used to establish weights for each of the Discriminating Criteria. These weighted criteria are then used to rate BPOs for their relative contributions to achieving the CARES Objectives.

The VA is providing Team PwC with guidance on the relative importance of criteria that will be utilized by Team PwC in assessing 'trade off' decisions as they evaluate credible Business Plan Options. The following process is being utilized:

a) A panel of VA Senior Leaders drawn from representatives of the CIB and augmented by field clinical senior executives is charged with reviewing the Primary Discriminating Criteria and will utilize a tool developed by Team PwC (Refer to Figure 2.3) to compare the relative importance of the criteria (A versus B). The panel's recommendations will be sent to the Secretary as chair of the CIB for confirmation.

    1. The collective responses of the VA panel will be utilized to establish the relative importance of each criterion to one another.

    2. The results of these comparisons will determine the relative weighting assigned to each criterion.

b) The panel's second task will be to evaluate the proposed assignment of subcategories (Refer to Figure 2.3) and determine if Team PwC's listing encompasses all areas to be considered.

    1. The collective recommendation of the panel will be utilized to assign the subcategories.

[6] This approach has drawn heavily on case study prepared by Expert Choice, Inc. (see http://www.expertchoice.com/customers/va/va-automatic_consensus.htm)

2. The VA Panel will then utilize a Team PwC developed tool to establish the relative importance of one subcategory over another subcategory. Thus establishing the relative importance of the various elements within the discriminating criteria.

c) The panel's final task will be to establish guidance regarding trade off decisions when the final Business Options are considered.

1. Team PwC has developed and provided the VA with a suitable array of pair wise of choices.

2. VA's results will be taken into consideration by the PwC Scoring Panel, but the panel may or may not choose to adhere precisely to the VA's guidance thus allowing for an independently derived decision.

d) Simultaneous review by Team PwC Scoring Panel

1. Team PwC has established an Advisory panel that will assist them in evaluating the various options. This Advisory Panel will also independently complete the steps in c)2. above, utilizing their industry expertise for the subcategories only. The relative importance of the discriminating criteria c)1. above will remain with VA.

2. The variation if any, in the inclusion of subcategories and the relative weighting of these between the two panels of experts will be identified by PwC and brought to the VA panel for consideration. This provides the VA the ability to consider an outside and independent objective opinion based on industry practice. The VA panel then will make the final determination of appropriate weights.

Once the relative importance of each discriminating criteria is identified a relative weighting system will be utilized by PwC in the BPO comparison and selection process. It is Team PwC's assumption that the VA will provide such guidance and relative weights before the commencement of Stage II. Team PwC therefore requests that the VA provides clear guidance on the relative importance of the assessment criteria and the trade-offs that can be made between criteria. It is not possible for Team PwC to complete its Stage II BPO comparison methodology until this guidance is completed. Team PwC will work with the VA CARES team to establish appropriate guidance for its study teams on the relative importance and trade-offs between these criteria, with a goal to have these agreed before the end of Stage I.

Examples of potential trade-offs include:

- If BPO A offers the same quality and significantly better cost effectiveness than BPO B, but marginally worse overall access than BPO B, does it rank higher than BPO B?
- If BPO A offers the same access and significantly better cost effectiveness than BPO B, but marginally worse overall quality than BPO B, does it rank higher than BPO B?
- If BPO A offers the same access, quality and greatly improved overall cost effectiveness as BPO B, but requires a substantial investment in a new facility in early

years - does the need for this significant investment in early years affect the comparison of BPOs?

- If BPO A involves the consolidation of two facilities into a single facility and each of the current facilities have long standing relationships with Affiliated Medical Schools, leading to it only being possible to continue with one of the Affiliated Medical Schools if the BPO is implemented; whereas BPO B retains both facilities, however at a much higher overall cost, which BPO ranks higher all other things being equal?

Team PwC will utilize the Team PwC Decision Support Tool to conduct a scoring process **similar** to that used by the VA in its Expert Choice™ tool to score BPOs against key criteria, then rank BPOs based on allocated weighting factors.

Team PwC proposes to score the BPOs using the Team PwC Scoring Panel, which is a facilitating panel drawn from a combination of SMEs across Team PwC's national team leadership and advisors. The panel's score for a criterion becomes the score used for the BPO with any dissenting panel votes noted.

To test the robustness of the BPO comparison completed, Team PwC assesses the sensitivity of the BPO comparison to key assumptions (like the volume of utilization) used.

Meeting four with the Local Advisory Panel occurs towards the end of Stage II. This meeting offers the Local Advisory Panel and Stakeholders the opportunity to review Team PwC's detailed BPO assessments and the basis for Team PwC's selection of a recommended BPO. This meeting provides the Local Advisory Panel and stakeholders with the opportunity to provide comments as they consider fit. Any such comments will be faithfully recorded and included in the Draft Business Plan.

2.4. OVERALL STUDY RESULTS

Team PwC will provide a Stage I interim report and presentation that:

- Summarizes 2003, 2013 and 2023 healthcare workload (demand) and trends
- Summarizes current provision of care and gap or surplus of capacity and space resulting from health-care need projections
- Provides details of a "broad range of credible BPOs"
- Provides "high level" assessment of each BPO as to potential to meet or exceed the screening criteria and relative merits of BPOs
- Summary feedback received from Local Advisory Panel and Stakeholders about the BPOs developed
- Summary of Team PwC's views on the "pros" and "cons" with implementing BPOs (including any particular trade-offs that need to be or could be made)
- Provide Team PwC's suggestions on the BPOs that should be studied in Stage II

Appendix 2.B provides an example of the type of output anticipated.

In Stage II, Team PwC will provide the VA with the outputs listed in this and the other methodology Chapters. Many of these outputs will be condensed into a single Business Plan for each site. Appendix 2.E contains an example contents page for one such business plan.

In addition, Team PwC will conduct briefings and provide briefing materials for both VA's and Local Advisory Panel's use and for presentation of BPOs at stakeholder and/or Local Advisory Panel meetings.

Team PwC's key deliverable in Stage II is a business plan with up to six BPOs at each site that describes the location of services, capital infrastructure required, and Re-use potential. Team PwC's business plans provide an objective independent external analysis and BPO formulation process. Team PwC's business planning process incorporates financial, economic, healthcare trends and data in the development of business plans. Moreover, we include stakeholder input in the development of business plans. Another key aspect of the Team PwC business plans is the inclusion of strategies for managing the transition of care, if applicable. The business plans assess the feasibility, cost effectiveness, quality, location, and best use for property. As CARES has a wide array of stakeholders, Team PwC's stakeholder management methodology provides a mechanism to incorporate the views of the various and diverse stakeholder groups. For instance, while developing the plans, we evaluate and consider the impact on VA employees while assessing the impact of another stakeholder group.

Each Business Plan and site specific presentation is prepared under the direction of the Team PwC Site Leader with direct inputs from the relevant technical study teams and coordination with VACO, VISN staff, and Team PwC national resources.

The business plans and presentations are designed to effectively communicate the findings of the study work to a wide range of audiences. As such business plans and presentations will be prepared in a standardized format, provided by Team PwC's communications experts and will be reviewed prior to issue by the same communications experts. Team PwC anticipates being required to condense complex ideas and difficult issues into relatively simple messages.

Table of Contents

3.1. SCOPE AND PURPOSE

The objective of the Healthcare Delivery Study is an assessment that will result in the determination of the type and volume of services needed for 2013 and 2023 and the best location for these services balancing access, cost, quality, reuse potential and considers the stakeholder input. This assessment includes the currently available health care services in the study area, emerging practice and technology trends, and the current and projected enrolled veteran population characteristics and utilization impact on future service needs. This assessment will lead to the determination of the array of services needed and the best location for these services based upon a technical analysis of access, quality, maximized re-use potential of the site, cost effectiveness, and the consideration of stakeholder input.

Starting with the previous CARES planning assessment, the Secretary's CARES Decision, the updated health care utilization and enrollment projections, and additional expertise Team PwC brings, the Healthcare Delivery Study will examine the study site's population current and projected service utilization pattern which includes patient origin data, geographic locations and current clinical inventory. Local community and neighboring VHA facility service inventories will be considered as well as factors that do and will impact service needs and future availability.

Once this in-depth assessment of capability, need and availability is done, Team PwC will determine the volume and mix of services needed, and where to place those services balancing cost, quality, and re-use potential of VA owned sites. The VA has identified the clinical service categories. i.e., CARES Implementation Categories (CICs), which will be used for analysis.

An overview of the healthcare delivery study is shown in Figure 3.1. Each study will be performed in two primary stages. Stage I will result in the presentation to the VA of a multitude of feasible options. The VA will then select between three and six options for further refinement in Stage II. Stage II will then focus on further refinement and development of those selected options. The study will take into account the needs of the enrolled veterans in terms of ease of access, quality of care, and costs of services, facilities, and equipment. Concerns and input of stakeholders will occur with public comment during the Local Advisory Panels process and through other written and electronic communication channels. Significant collaboration across stakeholders, the VA, and Team PwC members focused on Capital Planning, Financial Analysis and Re-use will occur in developing the options.

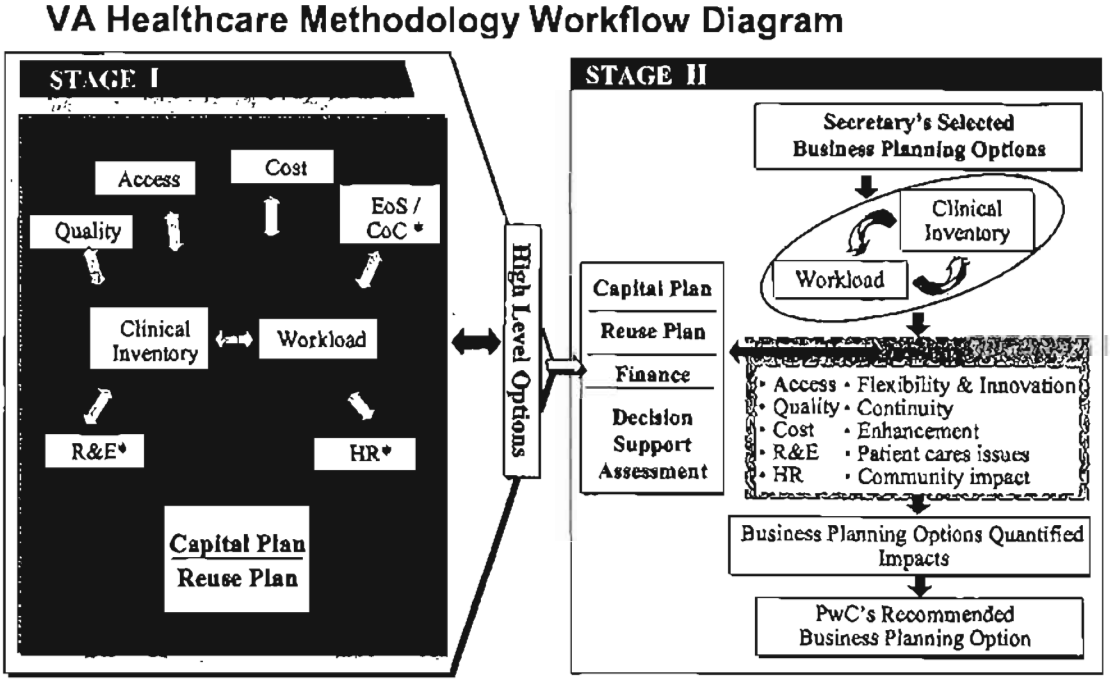

Figure 3.1 – VA Healthcare Methodology Workflow Diagram

EOS = Enhancement of Services
CoC = Continuity of Care
R&E = Research and Education
HR = Human Resources

3.1.1. Stage I & II Option Development Overview

Stage I and II analyses involve collecting and analyzing information as described in this Section. This input will support the analysis and development of options and focus on the following areas:

- Clinical Analysis – healthcare workload (utilization), enrollment projections, patient origin, clinical inventory, quality of care, enhancement of services; continuity of care; impact of neighboring VA facilities and community health; and, patient care issues
- Research and Education – potential detrimental impacts to existing research and education programs
- Human Resources – potential impacts to VA employees and contractors
- Operating Costs – changes to the operating costs of providing the needed care including efficiencies, cost transfers, etc.

Stakeholder input received through the Local Advisory Panel process will be documented and reviewed. In collaboration across Team PwC (Capital Planning, Re-use, Financial Analysis and Decision-Making Teams), potential options for the delivery of care will be identified and presented to the VA. The goal is to develop options that either maintain or

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improve the care delivery to the enrolled veterans. The Secretary of the VA will select three to six options for further refinement from the Stage I and Stage II analyses.

Stage II will involve in-depth refinement of the selected options. The refinement will involve a more thorough investigation of clinical considerations and assessments of the impact of changes. This refinement will support the development of a specific recommendation regarding the delivery of care for each healthcare study site. This will be done in collaboration with the Capital Planning, Re-use, Financial Analysis and Decision-Making Study Teams. The final selection of the option to be implemented remains with the Secretary.

In Stages I and II, qualitative and quantitative information will be provided for each of the above analyses. Where appropriate, the importance of each of these factors will be identified through a weighting measure. Quantitative information that has a direct financial impact will be included in the financial and decision-making analyses. Qualitative information will also be incorporated in the decision making analysis.

3.1.2. Healthcare Options Development

There are several objectives in the development of healthcare options. Ultimately, the options development process will provide the Secretary with sufficient information to thoughtfully consider any impacts to the delivery of VA healthcare as part of the decision-making process during both Stages I and II.

Stage I: Options Development

During Stage I, conceivable and credible options for meeting the required workload and clinical inventory levels will be developed. This includes input from the Local Advisory Panel and stakeholders (for public comment) without limitation on the number of potential options. Stage I options will be sufficiently detailed to meet the workload and clinical inventory requirements should the option be carried forward into detailed business planning in Stage II. A Stage I Option is defined as at least one of the following:

- One or more CIC's workload is moved to a new location
- One or more CIC's workload is contracted
- The existing VA facilities are replaced, either on the existing site or a new site
- A **Baseline** Business Plan Option where no change to services is contemplated and the site is "right sized" to align with future needs and best use of buildings and land

The intent of the Stage I format is to have a format that can be reproduced consistently across all study sites and clearly demonstrates the nature of change to the location and size of clinical services indicated by the option. Figure 3.2 is the graphical presentation format that will be used. Supporting detailed data will be available, but during Stage I in particular, the graphic presentation will be the principal discussion method.

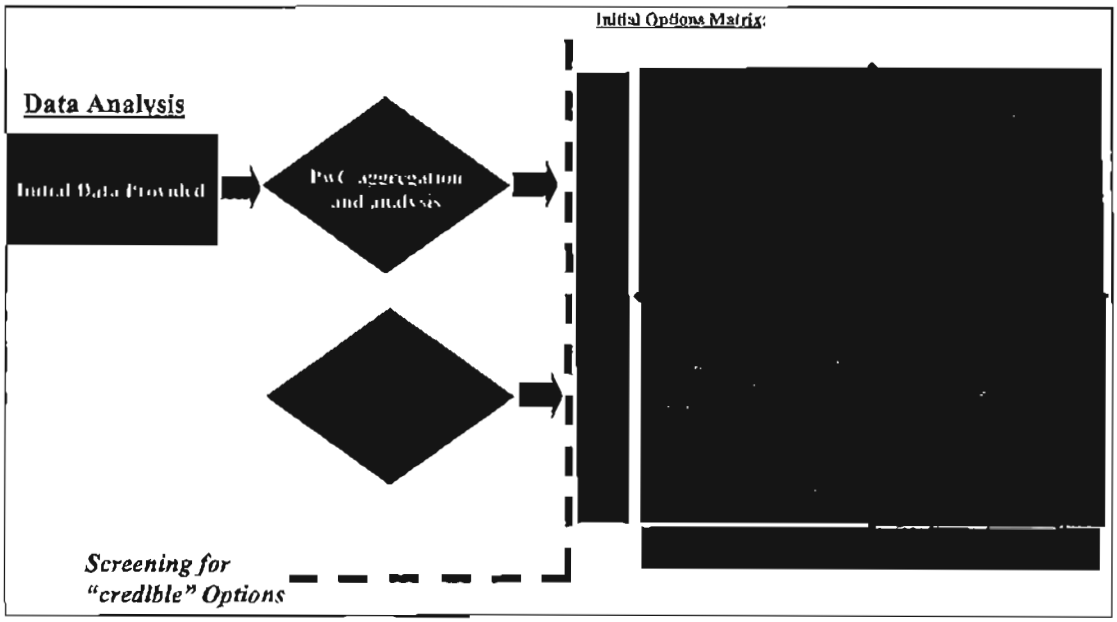

Figure 3.2 – Option Development Overview

Figure 3.2.A depicts how this development matrix will be used to develop option *Q* in Stage I.

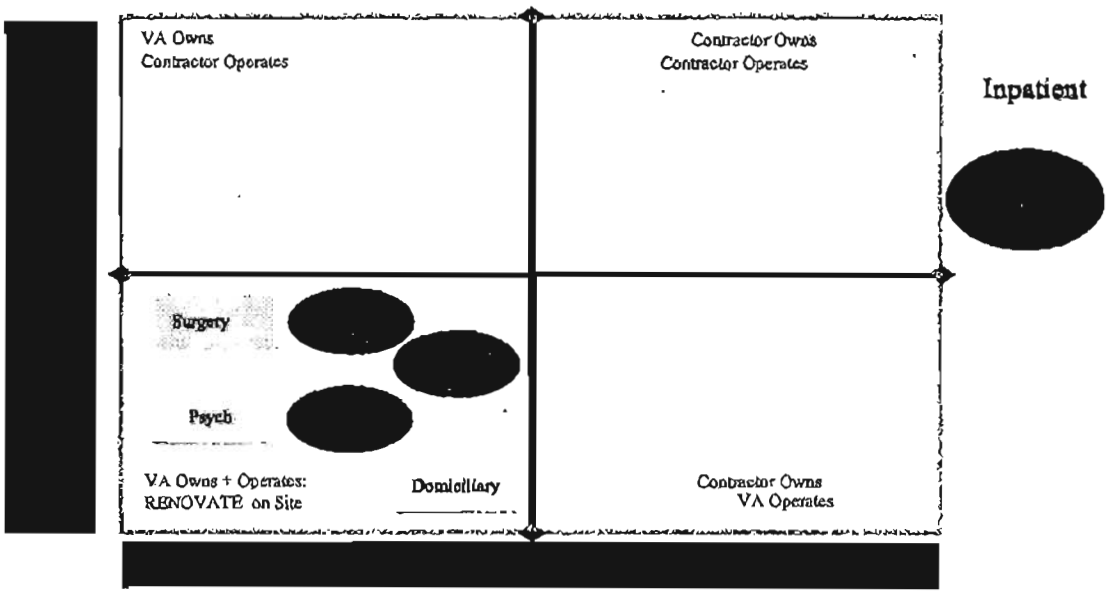

Figure 3.2.A – Example - Option Development

Figure 3.2.B depicts how this development matrix will be used to develop option *Z* in Stage I.

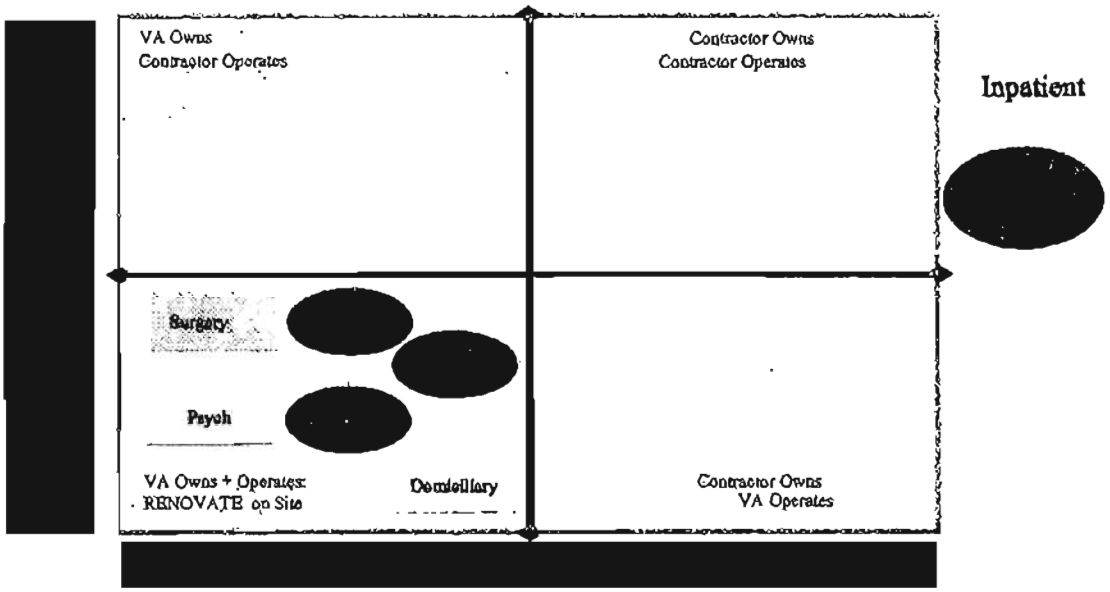

Figure 3.2.B – Example - Option Development

The Stage I options will be created considering several sources:

- Direction from the Secretary as stated in the Statement of Work. The Secretary has clear intentions to explore certain options at each site, and these will be created based on that direction
- Input from public comment during the first Local Advisory Panel meeting
- Analyses from the Healthcare Studies. Based on the initial workload and inventory data work in Stage I, additional ideas may be identified from any of the following opportunities:

    - Consolidation of services, particularly those that fall below VA clinical and/or space thresholds
    - Relocation of services to improve access (drive time)
    - Relocation of services to enhance continuity of care (quality medical care)
    - Contracting or otherwise jointly providing care with other Federal and municipal agencies
    - Contracting or otherwise jointly providing care with private entities

Significant time will be provided for the public to provide ideas or suggestions. These ideas will be documented and considered for inclusion in the options inventory.

Transmittal of Stage I Options to Capital Planning, Finance, and Re-use Study Teams

Capital Planning, Finance, and Re-use Study Teams will be provided the following inputs during Stage I, approximately one week after completion of the workload and clinical inventory analyses:

- A summary graphic as illustrated in Figure 3.3
- A supplementary data appendix illustrating the allocation of workload and inventory per option

HEALTHCARE METHODOLOGY - Stage I Option Workload Allocations

This table shows the distribution of workload by site

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC #2, Ambulatory: Cardiology	Correlated VA DSS Stop Codes	Key Space Driver	2023 Stops from Planning Cube	2023 Planning Data: Factored Stops	WORKLOAD ALLOCATIONS BY LOCATION: VAMC A	VAMC B	CBOC A	CONTRACT	Sharing *	Total Allocated Workload	All Workload Met?
	TOTAL	ALL CIC STOPS	[redacted]	[redacted]	-	8,340	5,036		-	13,376	Yes

Assumptions:
[A] VAMC B continues to provide invasive cardiology (stop codes 311, 333) and associated non-invasive testing (107, 303, 334).
[B] CBOC A is a new CBOC to address patient wait time issues. Location to be determined.
Portion of stop codes 107, 334 to follow reallocation of stop code 303 workload.
* - including DoD

Figure 3.3 – Example of Workload Allocation by Site

Assembly and Presentation of Stage I Options

In preparation for the second Local Advisory Panel meeting, Team PwC will aggregate the options into a single presentation document. For each option the following will be presented in the document:

- A summary graphic of the options, by CIC, if appropriate
- A supplementary data appendix illustrating the allocation of workload and inventory per option
- A concise narrative summary (see Illustration 1 below) of considerations for each option as developed by each of the Stage I healthcare analyses including, but not limited to:
  - Access
  - Quality
  - Cost
  - Research & Education.

Illustration 1: Sample Narrative Summary of Stage I Options

Evaluative Measure	Summary Comments on Option A
Access	Option A will likely improve drive time access for primary and acute care. Access for tertiary care is not likely to be impacted. Specific quantitative proof of these findings will be made during Stage II if Option A selected for further analysis.
Quality	Option A maintains or improves quality for all Stage I measures.
Cost	Option A is significantly more expensive than the **Baseline** in capital cost. However, operating costs should be significantly improved. These factors will be further quantified during Stage II should Option A be selected for further analysis.
Research & Education	Option A does not appear to have significant impacts on research. However, the teaching relationship with Affiliate School "B" will be impacted as the Option requires relocation of teaching clinics. Mitigation strategies for this impact will be articulated in Stage II should the option be selected for further analysis.
Continuity of Care	Option A improves the co-location of comparable services and should improve continuity of care for enrollees.

Team PwC will receive and document all public comments as submitted during Local Advisory Panel meetings. Significant interaction with the findings related to the Healthcare Study, Capital Planning and Re-use will occur to develop the potential options.

Stage II: Detailed Option Development

In Stage II, the VA Secretary will select three to six options for further development. Team PwC will update and enhance the healthcare methodologies as described in each section of this document for each option that has healthcare delivery implications.

3.2. APPROACH

3.2.1. Workload Analysis

The purpose of the Workload Analysis is to document the amount of healthcare services required by the enrolled veterans and allocate that workload to existing or new facilities

or locations. The workload analysis will be a key input for the costing, access, quality, human resources, and capital planning and re-use work.

Methodology

Using current and forecasted workload, Team PwC will determine the array of services and quantity of workload to be recommended at reorganized sites based on VA and industry standards for safety, quality and cost effective delivery of care. The options presented will include an appropriate method to provide care for each option, at each site – such as in-house delivery, contracting or sharing agreements.

The units of measure used to define workload for the VA list of CARES Implementation Categories (CICs) are as follows:

- Inpatient services. Inpatient service workload shall be measured by beds. Beds are calculated by:
  - Dividing Bed Days of Care (BDOC) by 365 to yield Average Daily Census (ADC)
  - Dividing ADC by the appropriate occupancy factor (generally 85% or higher) to yield bed need

- Ambulatory Services. These are services delivered to enrolled veterans in a clinic setting or outpatient setting (which may or may not be located at the hospital) such as a Cardiology Clinic. The workload measure for these services is "stops". A stop is a visit to a clinic or service rendered to a patient

In assembling the workload data, Team PwC, with support from the VISN and VSSC, will complete five sequential tasks.

Task 1 – Team PwC and the VISN site team will pull relevant market data using VA data resources (VA Planning Data Cube). In all cases, we assume the data will be pulled at the Market level, sorted by station (VAMC) and sub-station.

Task 2 – Team PwC and the VISN site team will each pull 2003-2023 workload data from VA data sources:

- For most CICs this is the VA Planning Data Cube
- Some special needs services workload (Spinal Cord Injury, Blind Rehabilitation Center, Domiciliary, and Traumatic Brain Injury) workload will be supplied by the VSSC
- Nursing Home Services workload will be provided by the VSSC

Task 3 – Team PwC and the VISN site team will pull the data for each station in the study area. For example, in Boston, there are four VAMCs in consideration. Workload

will be looked at on a site-specific (each Boston VAMC) and site-aggregate basis (total Boston healthcare study).

Task 4 – As needed, Team PwC will disaggregate 2003 workload by DSS stop code – utilizing the mapping of CICs to DSS stop codes provided by the VSSC.

Task 5 – Team PwC will verify data sets with VA Team Leader(s) and site-specific data coordinators. Where the site-specific VA staff find the centrally compiled data significantly varies from the local data, Team PwC will forward those discrepancies to the COTR for resolution as to which data point to use.

Figure 3.4 shows the CICs. Thus, for each healthcare site, a total of 25 CICs will have workload data based on approximately 360 stop codes.

CIC Listing

	CARES Implementation Category
Service Type	Name
Inpatient	Medicine and Observation
	Psychiatry and Substance Abuse
	Surgery
	Nursing Home
	Spinal Cord Injury
	Blind Rehabilitation Center
	Domiciliary[Note A]
	Other Mental Health Inpatient
Ambulatory	Cardiology
	Eye Clinic
	Non-Surgical Specialties
	Orthopedics
	Pathology
	Primary Care & Related Specialties
	Radiology & Related Specialties
	Rehab Medicine
	Surgical & Related Specialties
	Urology
	Behavioral Health
Outpatient	Mental Health Program: Day Treatment
	Mental Health Program: Homeless
	Mental Health Program: Methadone Treatment
	Mental Health Program: Mental Health Intensive Case Management (MHICM)
	Mental Health Program: Work Therapy
	Mental Health Program: Community MH Residential Care

Note A: Domiciliary workload projections are based on a separate forecast model using the at risk population and is only forecasted at the VISN level.

Figure 3.4 – CARES Implementation Categories

Figure 3.5 illustrates an example of how workload at the CIC level will be collected. "Factored Stops" means the planning assumption to be used based on reconciliation of any differences in the planning cube data compared to local VISN data.

HEALTHCARE METHODOLOGY - Workload

This table shows the distribution of workload by code assuming the proportion of volume by DSS Stop Code remains constant

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC ID, Ambulatory: Cardiology	Correlated VA DSS Stop Codes	Key Space Driver	2003 Stops from DSS Cube	2003 Stops from Planning Cube	2003 Planning Data: Factored Stops	2013 Stops from Planning Cube	2013 Planning Data: Factored Stops	2023 Stops from Planning Cube	2023 Planning Data: Factored Stops	Growth Rate 2003-2023
	TOTAL	ALL CIC STOPS	[redacted]							
	107	EKG		N/A		N/A		N/A		
	126	EVOKED POTENTIAL		N/A		N/A		N/A		
	303	CARDIOLOGY		N/A		N/A		N/A		
	311	PACEMAKER		N/A		N/A		N/A		
	333	CARDIAC CATH		N/A		N/A		N/A		
	334	CARDIAC STRESS TEST		N/A		N/A		N/A		

Sources: [redacted]
Calculated by PwC.
N/A = Not Applicable.
Note: Intermediate years (2004, 2005, etc.) will be available in full table. Not shown here for simplicity

Figure 3.5 – Workload data collection tool

The workload illustrated in Figure 3.5 forms the baseline condition for workload. This baseline is the workload that the VA stations would experience barring any other changes. In other words, if "nothing changed," how would workload increase or decline over the next 20 years based on the demand projections?

The inclusion of DSS level data in 2003 is exclusively for the purpose of supporting the costing analysis (as described in Chapter 6). Workload by stop code is not and will not be projected beyond 2003.

Once the baseline workload is established, Team PwC will analyze and determine if some changes in the 2023 values should be made to reflect:

- Changes in clinical practice (e.g., treating some renal failure patients at home with low dose Dopamine versus as an inpatient)
- Changes in technology (e.g., fewer open heart by-pass surgery due to increase in less invasive procedures such as stent placement)
- Changes in access to care (as measured by wait time; e.g., if for a given service wait times are not meeting VA standards due to facility capacity constraints, the supply of service will need to be increased, thus resulting in an additional increase in workload)

These refinements are illustrated for one service in Figure 3.6. All assumptions will be documented for COTR review and either approval, rejection or modification. Note that these changes are independent of any question of location. It is simply a refinement of the projected workload considering clinical practice, technology, and wait times. All

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changes will be forwarded to VACO for approval prior to inclusion in Team PwC's planning data set.

HEALTHCARE METHODOLOGY - Workload change based on options

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC, Ambulatory: Cardiology	Correlated VA DSS Stop Codes		2003 Stops from DSS Cube	2003 Stops from Planning Cube	2003 Planning Data: Factored Stops	2013 Stops from Planning Cube	2013 Planning Data: Factored Stops	2023 Stops from Planning Cube	2023 PwC Suggested Alternate Workload	Growth Rate 03-23	Adjusted Growth Rate 03-23
	TOTAL	ALL CIC STOPS	[redacted]			[redacted]		[redacted]		[redacted]	294%
	107	EKG	[redacted]	N/A		N/A		N/A		[redacted]	
	126	EVOKED POTENTIAL	[redacted]	N/A		N/A		N/A		[redacted]	
	303	CARDIOLOGY	[redacted]	N/A		N/A		N/A		[redacted]	
	311	PACEMAKER	[redacted]	N/A		N/A		N/A		[redacted]	
	333	CARDIAC CATH	[redacted]	N/A		N/A		N/A		[redacted]	
	334	CARDIAC STRESS TEST	[redacted]	N/A		N/A		N/A		[redacted]	

Sources: [redacted]
Calculated by PwC.
N/A = Not Available in OFI
Red Text - suggested alternate workload assumption based on PwC Analysis. This table is illustrative showing where the assumptions are being made and how they will be tracked in the data.
Note: Intermediate years (2004, 2005, etc.) will be available in full table. Not shown here for simplicity.

Figure 3.6 – Example of Workload Change Based on Data Validation

Stage I: Option Development

In Stage I, the options distribute workload to one or more locations. Some of these locations will be existing, others new, others potential contracting or shared-service arrangements. During Stage I what is most important is that all workload to be accommodated is distributed.

Figure 3.7 illustrates one conceptual allocation of workload for one CIC in Stage I.

HEALTHCARE METHODOLOGY - Stage I Option Workload Allocations

This table shows the distribution of workload by site

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC #2, Ambulatory: Cardiology	Correlated VA DSS Stop Codes	Key Space Driver	2023 Stops from Planning Cube	2023 Planning Data: Factored Stops	WORKLOAD ALLOCATIONS BY LOCATION: VAMC A	VAMC B	CBOC A	CONTRACT	Total Allocated Workload	All Workload Met?
	TOTAL	ALL CIC STOPS	[redacted]		-	8,340	5,036	-	13,376	Yes

Assumptions:
(A) VAMC B continues to provide invasive cardiology (stop codes 311, 333) and associated non-invasive testing (107, 303, 334).
(B) CBOC A is a new CBOC to address patient wait time issues. Location to be determined.

Figure 3.7 – Allocation of Workload by Location in a Sample Option

It is important to note that in Stage I, the precise location (at a ZIP code level) of CBOC A in the example above is unknown. During Stage II, this location level will be specified. In Stage I, the above level of output (as applied to all 26 CICs) will allow:

- The Capital Planners to identify major capital cost implications, aggregate space requirements, and subsequently inform the Re-Use Study Team of potential portions of a given site available for alternate use
- The cost analysis in the healthcare methodology to identify, at a high level, implications for increased or reduced costs associated with:
  - Absolute increases/decreases in volume
  - Distribution of volume
  - Potential new contracting costs
  - Potentially eliminated contracting costs

- Consideration of future opportunities to potentially share resources and services with other non-VA providers, such as DoD, municipal providers, or the private sector

Lastly, this format of analysis assures the entire team that no workload is "lost" in the options – we will be able to track the allocation of all workload across the variety of potential locations and, as illustrated in the Figure 3.7, be certain that all workload requirements are being met.

Stage II: Detailed Option Development

In Stage II, the Secretary-selected Business Plan Options distribute workload from the Market to one or more locations with an additional level of specificity. As in Stage I, some of these locations are existing, others new, others potential contracting arrangements. The main differences in workload allocation in Stage II will be:

- Specific identification of location for new facilities, either VAMCs or CBOCs, at the ZIP code level. We will use the ArcView tool (see discussion of Access preceding) to assist in identifying the best ZIP codes for the development of new or relocated facilities
- Consideration of other issues; such as continuity of care, enhancement of services, and quality in the timing of relocations. While Figure 3.8 below does not illustrate detailed phasing of the option, workload will be relocated in accordance with the anticipated physical (or facility) redevelopment and realignment sequence. As an example:

  - In the BPOs we will not move workload from VAMC B to CBOC A until either:
    - CBOC A is built and ready for occupancy
    - An alternative location for the workload moving to CBOC A is available that meets the required access and quality expectations of the VA, such as through a short-term contract with a non-VA provider

HEALTHCARE METHODOLOGY - Business Plan Option Workload Allocations

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC #2, Ambulatory: Cardiology	Correlated VA DSS Stop Codes	Key Space Driver	2023 Stops from Planning Cube	2023 Planning Data: Factored Stops	WORKLOAD ALLOCATIONS BY LOCATION: VAMC A	VAMC B	CBOC A in ZIP Code xxx01	CONTRACT	Total Allocated Workload	All Workload Met?
	TOTAL	ALL CIC STOPS	[illegible]	[illegible]	-	8,340	5,036	-	13,376	Yes

Assumptions:
(A) VAMC B continues to provide invasive cardiology (stop codes 311, 333) and associated non-invasive testing (107, 303, 334).
(B) CBOC A is a new CBOC to address patient wait time issues. Location will be in ZIP code xxx01 and is expected to open FY12.
Portion of stop codes 107, 334 to follow reallocation of stop code 303 workload.

Figure 3.8 – Business Plan Option Workload Allocation

The Stage II process for workload will not be iterative; the Secretary's decision of which BPOs are to be considered will provide clear direction about the distribution of workload for a given study site. The main challenge in Stage II will be to locate any new or relocated services in the best ZIP code to meet enrolled veterans' service requirements and to synchronize such relocations/new service developments with the facility implementation schedules developed by the Capital Planning and Re-use Study Teams.

3.2.2. Clinical Inventory

The objective of the clinical inventory analysis is to document the key space and service elements at a VA facility in two ways:

- The number of inpatient beds required by location by CIC (see calculations on following pages)
- The number of outpatient stops required by location by CIC
- The array of supporting clinical services required by location using the VA's inventory matrix, as described in the methodology on the following pages

Team PwC will review current clinical inventory at each site and detail any resulting changes for future clinical inventory requirements for all options.

For the eight healthcare studies, space is planned at a high level – basically by CIC or aggregated CIC, not at a department level as is the case in the Comprehensive Capital Plans being prepared for the ten non-healthcare study sites. Thus, the level of inventory detail needed by the Capital Planners and the VA to inform the Secretary as to selection of an option is substantially less.

Methodology

Collection of Current Clinical Inventory.

- Each healthcare study site will complete, as part of the requested GFI (Government Furnished Information), the appended clinical inventory checklists (Figures 3.C.1 and 3.C.2, appended)
  - The completed clinical inventory checklists will represent the services offered at the relevant VAMCs and CBOCs at present
  - This data will form the **2003** clinical inventory for each study site

Calculation of Inventory of Beds Needed

- Team PwC will generate a presentation of the inpatient beds needed by site. This calculation has the following steps:
  - First, the number of BDOCs is distributed by CIC. Figure 3.9 below shows this distribution
  - "Factored BDOC" means the number for BDOCs carried forward as planning assumptions based on resolution of any discrepancies between planning cube and local VISN data

HEALTHCARE METHODOLOGY - Bed Days of Care

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC #18, Inpatient Medicine & Observation	Correlated VA DSS Stop Codes	Key Space Driver	2003 BDOC from DSS Cube	2003 BDOC from Planning Cube	2003 Planning Data: Factored BDOC	2013 BDOC from Planning Cube	2013 Planning Data: Factored BDOC	2023 BDOC from Planning Cube	2023 Planning Data: Factored BDOC
	TOTAL	ALL CIC BDOC	[redacted]						

Sources: [redacted]
N/A = Not Applicable.
Note: Intermediate years (2004, 2005, etc.) will be available in full table. Not shown here for simplicity.
BDOC = Bed Days of Care

Figure 3.9 – Bed Days of Care Projections

- Next, the BDOCs are translated into an Average Daily Census (ADC), as illustrated in Figure 3.10. Mathematically this calculation is expressed as BDOC/365 = ADC

HEALTHCARE METHODOLOGY - Average Daily Census (ADC)

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A

CIC #18, Inpatient Medicine & Observation	Correlated VA DSS Stop Codes	Key Space Driver	2003 ADC from DSS Cube	2003 ADC from Planning Cube	2003 Planning Data: Factored ADC	2013 ADC from Planning Cube	2013 Planning Data: Factored ADC	2023 ADC from Planning Cube	2023 Planning Data: Factored ADC
	TOTAL	ALL CIC BDOC	[redacted]						

Sources: [redacted]
Calculated by PwC.
N/A = Not Applicable.
Note: Intermediate years (2004, 2005, etc.) will be available in full table. Not shown here for simplicity.

Figure 3.10 – Average Daily Census Projections

- Finally, the ADC from the above table is calculated to Bed Need using standard VA occupancy percentages, as illustrated in Figure 3.11. Mathematically this calculation is expressed as ADC/Occupancy Percentage = Bed Need. Note that Bed Need is rounded to the nearest whole digit

HEALTHCARE METHODOLOGY - Bed Need

VISN: Sample
Station: VAMC "A"
Sub-Station: N/A
Occupancy Percentage: [redacted]

CIC #18, Inpatient Medicine & Observation	Correlated VA DSS Stop Codes	Key Space Driver	2003 Calculated Bed Need	2003 Calculated Bed Need	2003 Planning Data: Factored bed Need	2013 Calculated Bed Need	2013 Planning Data: Factored Bed Need	2023 Calculated Bed Need	2023 Planning Data: Factored Bed Need
	TOTAL	ALL CIC BDOC	[redacted]						

Sources: [redacted]
Calculated by PwC.
N/A = Not Applicable.
Note: Bed Need rounded to nearest whole number.
Note: Intermediate years (2004, 2005, etc.) will be available in full table. Not shown here for simplicity.

Figure 3.11 – Bed Need Projections

Thus, in Stage I, we will know, by CIC, the number of beds to be operated (in existing, new or contracted space). In the example above, the VAMC needs to operate a total of 46 Medicine & Observation beds in 2023. This is eight beds less than the number they need to operate in 2003 (54-46=8).

An illustration of how this is allocated per site for the use of the Capital Planners and other Team PwC analysis is shown below. Figure 3.12 represents an example of an option where the Inpatient & Medicine Observation are impacted:

- Beds are reduced to 44 at VAMC A (the current site) to achieve a more efficient and effective operating environment
- During the period of time studied, need exceeds 44 – thus, the VISN contracts with a community provider for the extra capacity
- By 2023, a jointly operated DoD/VA facility is on-line in the Market. Any bed need above the 44 available at VAMC A will be met by this facility

HEALTHCARE METHODOLOGY - Per Site Allocation

CIC #18, Inpatient Medicine & Observation		2003	2013	2023
TOTAL	ALL CIC BDOC	[redacted]		
	VAMC A	54	44	44
	VAMC B	-	-	-
	CONTRACTED	-	6	-
	DoD Facility A	-	-	2

Sources: Government Furnished Information fr[redacted]
Calculated by PwC.
N/A = Not Applicable.
Note: Rounded to nearest whole number.
Note: Intermediate years (2004, 2005, etc.) will be available in full table. Not shown here for simplicity.

Figure 3.12 – Site Allocation of Workload

Note: When this data is transmitted to the Capital Planners there is the potential that the number of beds planned could differ from that calculated in Figure 3.11, above. This is because of operational and design conditions. The example data above is instructive in this regard. Assuming 46 beds are required, one could reasonably expect the Capital Planner to develop a plan for exactly 46 beds. However, in operations, it is extremely rare to find a 46-bed Inpatient Medicine & Observation Unit. Thus, the Capital Planner may legitimately translate this need into a variety of potential solutions, all of which are sensible considering operating and space planning considerations:

- Two 24-bed units = 48 total beds (two higher than calculated need but more efficient operationally)
- One 40-bed unit + one 8-bed observation unit (two beds higher but more efficient operationally)
- One 36-bed unit and one 10-bed unit (to take advantage of existing conditions)

The point is that it is possible for the Capital Planners' solutions to vary slightly from the specific inventory calculations. This is acceptable when the Capital Planners' solutions provide an environment of care which is superior in terms of quality and cost. In no case will the Capital Planners provide for fewer beds than mathematically calculated.

Stage I: Option Development

In Stage I, the Options describe a distribution of need and inventory from the site to one or more locations. Some of these locations will be existing, others new, others potential contracting arrangements. In Stage I what is most important is that all workload to be accommodated is distributed.

This will be done in a fashion identical to that described in the Workload section.

Stage II: Detailed Option Development

In Stage II, the Secretary-selected Business Plan Options distribute inventory from the site to one or more locations with an additional level of specificity. As in Stage I, some of these locations are existing, others new, others potential contracting or shared-service arrangements.

For each of the BPOs, Team PwC will update the clinical inventory checklists, Figure 3.C.1 and Figure 3.C.2 (appended), to reflect the specific allocation of inventory per BPO. This will assure that the transition from current conditions to the BPO is understood at the service level. Using detailed tables listing all potential VA services, the options will thus be able to clearly illustrate what services are being offered, where (facility) and by whom (VA or contractor). A partial example of this is shown in Figure 3.13.

Clinical Inventory - VA Health Care Business Plan Option C

Market Area

Codes for how services are provided

[illegible]

VA to populate table for Existing (2001) conditions. PwC to populate for Business Plan Options in Stage I of Healthcare Methodology.

Black Text = Existing
[illegible]

Program	CBOC A (EXISTING)	CBOC B (NEW)	CBOC C (NEW)				
Diagnostic Imaging							
Radiology-Xray	O	-	-				
Ultrasound	O	-	-				
MRI	-	O	-				
Mammography	-	O	-				
Primary Care Services/Medical Services							
Comprehensive Tobacco Cessation Prog	-	-	-				
ECHO	-	O	-				
EKG	-	O	-				
General Medical	V	V	V				
Prevention Clinical team	V	V	V				
Preventive Care Program	V	V	V				
Preventive Health	-	O	-				
Primary Prevention Program (Immuniz/screening)	-	O	-				
Treadmill Testing	-	-	-				
Weight Program	-	-	-				
Women's Clinic	-	O	-				
Other							
Tele home Care	-	-	-				
Audiology	-	-	SD				
Occupational therapy	-	-	SD				
Physical Therapy	-	-	SD				
Speech Pathology	-	-	SD				
Eye Care	-	-	-				
Pharmacy	SD	SD	-				
Podiatry	-	-	-				

Figure 3.13 – Example of Business Plan Option Inventory Listing

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The Stage II process for inventory will not be iterative; the Secretary's decision of which BPOs are to be considered will provide clear direction about the distribution of inventory. The main challenge in Stage II will be to locate any new or relocated services in the best ZIP code to meet enrolled veterans' service requirements and to synchronize such relocations/new service developments with the facility implementation schedules developed by the Capital Planning and Re-use Study Teams.

3.2.3. Access

Access is a key driver in the CARES decision process. The purpose of the Access analysis is to determine to what degree the VA is meeting, or will meet, its performance standards as it relates to enrolled veteran access to healthcare services. This study will evaluate drive time and consider patient origin in its business planning. All Business Plan Options, including the **baseline BPO**, will be compared to 2003 access levels.

PwC will utilize five tools in its access evaluation. These tools are as follows:

1. VA ArcView Access Tool – The official calculation, PSSG will use this tool to generate a data file for PwC.
2. Primary Care Access Tool – Used to assist in the evaluation of options.
3. Distributed Population Planning Bases (DPPB) – VA data source for patient origin information.
4. MapPoint – mapping software used to display drive time circles and Vet Pop origin.

Access Methodology Part 1 – Drive Time Measurement

Team PwC will utilize the current VA Access guidelines and assess how the changes will impact the number of enrolled veterans meeting and not meeting these guidelines. Results on drive times for primary care, acute hospital and tertiary care will be summarized, describing the comparative positive and negative impact of the options analyzed on geographic areas. The analysis will clearly present the rationale for the recommended option supported by access data of the preferred option.

The VA has developed a computational and graphical tool ("VA ArcView Access Tool") which calculates a VA enrollment grouping's access to healthcare services in its geographic region. In the case of this study, the defined region will be at the Market level, as determined by geographic sections as defined by the VA.

The Access standards used in this methodology are defined in the Under Secretary of Health's Draft National CARES Plan and noted below in Figure 3.14.

Type of Care	Time Criteria (min.)	Threshold Criteria
Primary Care	30 min. – Urban 30 min. - Rural 60 min. – Highly Rural	70%
Acute Hospital	60 min. – Urban 90 min. – Rural	65%
Tertiary Hospital	240 min	65%

Figure 3.14 – VA Access Standards

Threshold Criteria is the minimum acceptable percentage of projected enrollees in a designated market that must meet the access standard. VSSC will provide a list of counties by VISN and market with the designation of urban, rural or highly rural for each county.

Using VA enrollment databases for 2003 as its input source and the VA ArcView Access Tool, the VA will provide access measures for 2003. In addition, the VA will supply access measures for 2013 and 2023 enrollment. These will be calculated for each market and sector by the Planning System Support Group (PSSG). OSI will contact PSSG and request recalculation of access, under alternative options for location of facilities. The VA will supply to Team PwC data files (Figure 3.15) and maps (similar to Figure 3.17) for each VISN. This will determine the current access performance.

		Percent of Enrollees Meeting Access Guideline		
OPTION	Enrollees	Primary Care	Acute Care	Tertiary Care
All BPO 2003	63,617	85.8	76.6	N/A
Baseline BPO 2013	55,886	72.4	67.4	N/A
Baseline BPO 2023	47,788	70.5	78.4	N/A
BPO A 2013	55,886	72.4	67.4	N/A
BPOOption A 2023	47,788	87.2	78.2	N/A

Figure 3.15 – Sample Market Level Data Presentation

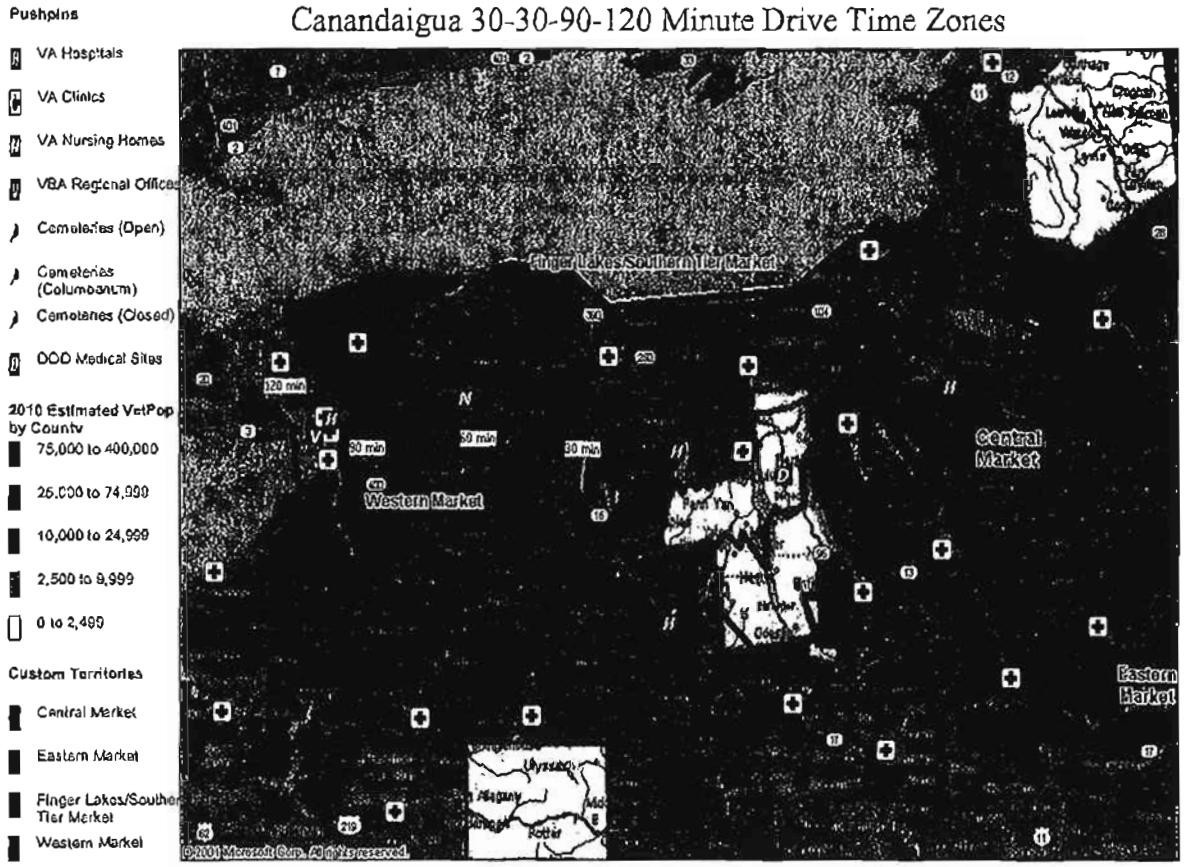

Figure 3.16 – VA Access Map

Team PwC assumes the following in its completion of this portion of the Access assessment.

- The VA ArcView Access Tool will produce a data point which is the percentage of the measured populations meeting the VA Access Standard
- Access under alternative options will be based on 2003 enrollee origin contained in the 2003 enrollment files.
- 2003 enrollment files will define the comparison standard used in the access study

    a. Inputs: Team PwC will utilize data files (containing the information included in Figure 3.15), and maps produced by the VA as inputs in the access studies. VA/VSSC will provide a basic set of maps showing markets and locations of facilities. If additional mapping capabilities become available by the VA during this study, the VA will make additional maps available to Team PwC for its use

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b. Outputs: Team PwC will produce a table which summarizes each VISN's performance to the VA Access Standard (Figure 3.18 and Figure 3.19). This document accompanied by maps supplied by the VA, will be incorporated into the decision support team's process

- VA/VSSC will provide Team PwC access to the Primary Care Access Tool

VISN: Business Planning Option #1: Relocate hospital to Zip Code 12XYZ
% of Enrollees Meeting VA Access Standard

	VA Access Standards					
	Primary Care		Acute Hospital		Tertiary Hospital	
	Baseline	BPO Impact*	Baseline	BPO Impact*	Baseline	BPO Impact*
Market 1						
Market 2						
Market 3						
Total						

*** BPO Impact is measured as Better, Same, Worse**

Figure 3.17 – Access Impact Tool

VISN: Business Planning Option #1: Relocate hospital to Zip Code 12XYZ
% of Enrollees Meeting VA Access Standard

	VA Access Standards								
	Primary Care			Acute Hospital			Tertiary Hospital		
	Baseline	BPO	% Δ	Baseline	BPO	% Δ	Baseline	BPO	% Δ
Market 1									
Market 2									
Market 3									
Total									

Figure 3.18 – Access Impact Tool

Stage 1: Option Development

For Stage I, each Option will include a conceptual review of that option's impact on access as compared to the **Baseline BPO**. Working from the market classification data for the Healthcare studies, Team PwC will:

- Review access data to determine if market areas meet VA threshold guidelines
- Using Veteran Population maps (Figure 3.16) produced by the VA using MapPoint, PwC will review where the enrolled veterans live as well as the concentration of enrolled veterans, and determine markets that don't meet threshold requirements

- Using the Primary Care Access Tool, identify solutions for addressing the access gap This might be adding a new site of care, contracting for care, expanding scope of services at existing sites or another solution

Stage 2: Detailed Option Development

For Stage II, Team PwC will quantify any change in access for each selected business planning option. This quantification will occur as follows:

- Team PwC will provide to the VA specific instructions on how to rerun the enrollee access calculations
- Team PwC will have the option to utilize the Primary Care Access Tool as a proxy to assist in determining potential facility locations, particularly during Stage II when the location(s) of new or relocated facilities is critical to fully assessing the BPOs. In addition PwC can utilize maps generated from MapPoint which display the locations of VA facilities and drive time ranges surrounding those facilities, as well as Vet Pop maps generated from MapPoint and illustrated in Figure 3.16 to assist in business option analysis. Vet Pop maps will be supplied by the VA.
- The VA will return to Team PwC similar data files and maps as in Stage I
- Team PwC will utilize this information to calculate the change in enrollment access against the 2003 access performance.
- Stage II data will be sorted to illustrate any potential impact unique to referrals in from other VA facilities
- For Stage II, Team PwC will present an empirical interpretation of the analysis for consideration

For each BPO, Team PwC will produce a table (Figure 3.18) which will empirically measure the change in enrollee access for all three (Primary, Acute and Tertiary) access standards.

Access Part II: Patient Origin Considerations

The second dimension of access is a study of patient origin. Patient origin differs from drive-time in that it looks specifically at those veterans who actually sought care at the study site. Origin analyzes the sectors (groups of zip codes) from which those veterans emerged to obtain care. In this way, origin complements the drive time analysis by showing which portions of the service area actually use the services at the facility. The patient origin analysis is dependent upon the VA being able to produce usable patient origin information by facility.

Since patient origin is only a historic measure - one cannot project use behavior - the analysis is limited to considering current origin patterns and extrapolating from that how veterans' access to care may be improved or maintained as part of the CARES business plans.

Stage 1: Option Development

Stage 1 reveals current origin patterns mathematically. It does not significantly contribute to option development, but complements the remainder of the study of access. During Stage 1, Team PwC will obtain from VSSC patient origin data which shows the origin of veterans in the market, by sector, receiving care at the study site. Identify those sectors from which the majority of veterans emerge, representing a total of approximately 80% of a facilities utilization for the four DPPB categories: Medicine/Surgery, Psychiatry, Outpatient, and Combined. PwC will narratively summarize the key patient origin data findings.

Stage 2: Detailed Option Development

In Stage 2 the potential impact of patient origin on the Business Plan Options can be factored into the overall access analysis. Using 2003 drive time analysis performance as the basis of comparison to evaluate the BPO, qualitatively discuss the relative importance of the drive time analysis in evaluating the option.

3.2.4. Quality of Care

The purpose of the quality of care analysis is to describe how recommended options will maintain or improve the quality of care delivered to specific services. The quality measures selected for use in Stages I and II were identified through collaboration between Team PwC quality experts and the leadership of the Department of Veterans Affairs' Office of Quality and Performance (OQP).

Team PwC will assess the quality of care of options to be considered as potential alternatives to the current VA delivery of care at each site. Additionally, the use of this methodology will produce meaningful descriptions of how the recommended option maintains or improves quality. Team PwC will also identify opportunities for improving quality at the sites that will provide realigned services.

Methodology

Utilizing measures of quality available from VA databases, and internal and external reports of quality, Team PwC will describe how the recommended option maintains/improves quality for specific services. We will also identify opportunities for improving quality at the sites that will provide realigned services.

The following methodology and associated tools will be applied consistently at the study sites in order to meet the VA's objective of determining how well the options maintain or improve quality as one evaluative dimension.

The quality measures to be used in Stages I and II were collaboratively selected by Team PwC and OQP based upon several factors. The factors that drove quality measure selection included:

- The measures reflect quality performance in a variety of clinical settings (e.g., ambulatory, inpatient, behavioral health) and are specific to high-volume diagnoses
- The measures must be representative of services for which the VA has sufficient volumes and data availability
- The measures should include quality performance from the "patient experience" or "unique perspective" in both the ambulatory and inpatient care settings
- The numbers of measures selected for Stage I versus Stage II evaluations would be concise yet robust enough to yield substantive variation in quality performance among options
- The measures selected for both Stages of review reflect a purposeful overlap in a select number of indicators to ensure consistency. Regardless, Stage II's increased number of measures will provide a more in-depth evaluation as prescribed (overlap of five of eight Stage II indicators)
- The measures were relevant to both VA and non-VA clinical environments (use of select JCAHO, CMS/HEDIS indicators, etc.)

In addition, PwC in conjunction with the VA may develop and utilize other quality measures for additional types of care (long term care , etc.) if appropriate data is available.

Wait Time Measurement

In addition to clinical environment quality measures described above, the evaluation of quality will include a study of wait time. Several factors impact wait time including capacity constraints, available resources and enrollee preference. An example of a resource issue effecting wait times is a shortage of primary care physicians resulting in a reduction in the number of appointment slots available for patient appointments ultimately increase the wait time for an appointment. Therefore wait times, as with patient origin, will be used to compliment the drive time analysis and quality indicators. The VA's Advance Clinical Access tool will be used for the analysis of patient wait times.

The analysis of wait time will identify whether a facility is meeting the VA standard for patient wait times for new patients and established patients. Using the VA's Advance Clinic Access Cube, PwC will extract each healthcare study site's wait time for new patients and established patients, focusing on patients seen in the 50 high volume DSS stop codes. PwC will produce and provide to the VA a table summarize each facility's performance against the VA Standard. The VA will document where a facilities shortfall to wait time performance standards is a result of a facilities capacity. This information will be considered during Stage 2 in evaluating options.

Through the implementation of this methodology, Team PwC will assess the quality of care of options to be considered as potential alternatives to the current VA delivery of care at each site. Additionally, the use of this methodology will produce meaningful descriptions of how the recommended option maintains/improves quality for specific services. Team PwC will also identify opportunities for improving quality at the sites that will provide realigned services through this quality of care evaluation process.

Consistent with the VA's stated question, this methodology has been designed to facilitate the ultimate determination of the recommended option(s):

> *"What is the optimal approach to provide current and projected veterans with equal to or better healthcare than is currently provided in terms of access, quality, and cost effectiveness, while maximizing any potential re-use of all or portions of the current real property inventory?"*

Stage I – Option Development

Stage I has been designed to conduct the initial review of options. The Quality of Care Methodology consists of a focused set of five key indicators.

Team PwC will use 2004 VA performance results as comparison standards. This evaluation will be focused on how each option's quality of care measures against current VA care in the sites in question. This quality of care evaluation is a qualitative analysis designed for the sole purpose of assessing the options available to the VA for selection of the most viable option(s).

The measures selected for Stage I analysis by Team PwC in collaboration with OQP are:

- Inpatient Care Measure – Heart Failure (VA, Centers for Medicare and Medicaid Services [CMS] measure):
  - ACE inhibitor for left ventricular dysfunction as a key inpatient measure
- Ambulatory Care Measure – Colorectal Cancer (VA, HEDIS measure):
  - Screening rates as a key ambulatory indicator
- Ambulatory Care Measure – Endocrinology (VA, HEDIS measure):
  - Full lipid profile in the past two years
- Behavioral Health:
  - Major Depressive Disorder – % of patients with a new diagnosis of depression -- medication coverage (VA, HEDIS measure)
- Patient Satisfaction – two measures (1. VA – Picker-based Survey – 2. Survey of Health Experiences by Patients [SHEP]):
  - Ambulatory services overall satisfaction results

- Inpatient care services overall satisfaction results

Consideration of "quality" measures defined by facilities – such as the number of private rooms, adequacy of infrastructure, modernity of buildings, and the like – will be captured in the Capital Planning portion of the study.

In addition to the above measures and indicators, the following will be considered within quality, though analysis may be performed in other areas:

- The sufficiency of healthcare provision and the size of any gaps between supply and demand in provision in a study site;
- The level of workload at any facility compared to workload thresholds;
- Quality concerns may also occur if it is assumed that the VA would contract with a non-VA provider for particular types of healthcare and there is no current proven healthcare provider of the required services within a particular location. In this case assumptions may need to be made about the likelihood of such a provider emerging. Any BPO that relies upon patient care being provided by third parties, where no such provision currently exists would fail this test unless there is a compelling reason for Team PwC to consider that there is a high probability that such services will be provided when they are required.

Stage II – Detailed Option Development

The Stage II methodology is designed to incorporate a more detailed evaluation consistent with Stage II's explicit purpose of facilitating the Secretary's Decision Document. The results of this Stage II evaluation will support Team PwC's subsequent technical data-driven analyses, from which a primary business plan option will be recommended.

The measures selected for Stage II evaluations by Team PwC and OQP are:

- Inpatient Care Measure – Heart Failure (VA, Centers for Medicare and Medicaid Services [CMS] measure) – *[Stage I indicator overlap]*:
  - Ace inhibitor for left ventricular dysfunction as a key inpatient measure

- Inpatient Care Measure – Acute Coronary Syndrome (VA, CMS measure):
  - Beta blocker prescribed at discharge

- Ambulatory Care Measure – Colorectal Cancer (VA, HEDIS measure) – *[Stage I indicator overlap]*:
  - Screening rates as a key ambulatory indicator

- Ambulatory Care Measure – Endocrinology (VA, HEDIS measure) – *[Stage I indicator overlap]*:
  - Full lipid profile in the past two years

- Behavioral Health – *[Stage I indicator overlap]*:
  - Major Depressive Disorder – % of patients with a new diagnosis of depression -- medication coverage (VA, HEDIS measure)

- Patient Satisfaction – two measures (VA – Picker-based Survey - SHEP) – *[Stage I indicator overlap]*:
  - Ambulatory services overall satisfaction results
  - Inpatient care services overall satisfaction results

- Patient Safety – use of Computerized Physician Order Entry (VA and Leapfrog):
  - Use of Computerized Physician Order Entry (CPOE) as this has been proven to have direct and dramatic effects on improving the incidence rate of medication errors. According to OQP, all VAMCs have implemented a CPOE program suggesting that for those BPOs that involve non-VA hospitals, there may be a negative quality implication if the BPO has not implemented CPOE

Team PwC will be responsible for performing the quality of care analyses in both Stages I and II. The VA's OQP will become involved in collaboration with Team PwC once data has been collected and scoring begins. Specifically, Team PwC will work with OQP to analyze and interpret the results.

The quality of care measure selection process involved coordination between Team PwC and OQP so that consensus could be reached in study design. An example of this communication yielded a decision not to utilize a quality measure that related to nursing home care because OQP indicated it was a newly implemented measure in 2005 and would, therefore, not have sufficient volume for analysis. However, an issue such as the replacement of semi-private or ward-style rooms with an all-private room configuration can be measured, and will be part of the results of the Capital Planning analysis.

The study results (BPO selection and rankings) of each site's Quality of Care Evaluation will be made available by study site to the breadth of Team PwC. The team will use these Quality of Care results in concert with the results of the other evaluation components.

Because the measures selected for both Stages of study are those prevalently relied upon by the VA's OQP and the non-VA healthcare sector (e.g., through NCQA, CMS/HEDIS and JCAHO), Team PwC and OQP believe data will be available for most selected measures to evaluate both VA and non-VA BPOs. However, for the evaluation of quality of care for the year 2023 Team PwC will assume a linear relationship to 2003 for certain measurements. With regard to the CMS measures used, data in connection with these measures by hospitals is submitted on a voluntary basis. However, CMS reported that 95% of hospitals nationally submitted data in 2004.

3.2.5. Enhancement of Services (EOS)

The purpose of this analysis is to identify any service enhancement or ancillary support services that would improve quality, cost effectiveness and continuity of care that become apparent as part of the analysis and impact the options, e.g., locating long term care facilities with Recreation Services, Compensated Work Therapy programs, etc. This will aid in determining the type and volume of identified services optimally needed at each of the VA healthcare study sites. Opportunities for Enhancement of Services improvement may include, for example, Phase II and III Cardiac Rehab services to complement Phase I Rehab.

Methodology

Stage I will inventory proposed and potential Enhancement of Services changes. Adjustments to the Business Plan Options will be made in Stage II to improve quality, cost effectiveness and continuity of care.

Stage I: Option Development

The Stage I methodology is to develop and understand the proposed Enhancement of Services opportunities for each healthcare study site. The following steps will be performed:

- Inventory VA CARES proposed enhancements from the CARES Report and the Secretary's Decision Document
- Meet with a VACO OSI representative to:
  - Develop and agree on "ideal" CIC groupings by service line for optimal operating efficiency. For example, link all five Outpatient Mental Health CICs into one service line. Thus, for a site providing all these services, it could be "ideal" that all were offered in proximal locations
  - Develop and agree on the threshold measures to be used in Stage II. Team PwC expects the thresholds to include a mix of existing VA and relevant commercial measures, similar to the mix documented in the earlier discussion of quality
  - The development of ideal groups and subsequent options respond to EOS issues will be collaborative between Team PwC and VA
- Identify Enhancement of Services opportunities for the site by analyzing current services:
  - Co-location of complementary services to improve enrolled veterans' continuity of care
  - Addition of services to resolve undersupply
  - Re-location or consolidation of services to resolve oversupply (inefficiency)
- Map current and projected workload to the proposed enhancement inventory of services

- Provide a narrative summary of findings

Stage II: Detailed Option Development

The Stage II methodology will concentrate on the quantification of their impact based upon agreed thresholds for patient access, quality of care, and cost effectiveness. The following steps will be performed:

- Identify recommended enhancements
- Using workload indicators representing existing VA guidance and commercial thresholds, quantify impact of change
- Identify recommendations to bring workload level to threshold (workload increased to or above indicator threshold)
- Quantify incremental costs of adjustment and annotate for inclusion in costing analysis for:
  - Capital investment
  - Human investment

All enhancements will be categorized using CIC and service line categories (developed in agreement with the VA). Team PwC assumes that a facilitated discussion with the VA will be necessary to confirm service line and the subsequent mapping to the CIC categories. It is assumed that both VA and commercial experience will be utilized in this facilitated session.

At the conclusion of Stage II, the BPOs will include a detailed list of enhancements quantified by their positive impact (patient access, quality of care, stakeholder impact and cost effectiveness) for each service line and/or CIC category.

3.2.6. Continuity of Care (CoC)

The objective of the review of continuity of care is to develop a high-level strategy for recommended options that will ensure no interruption of services during transition. It is assumed that changes in the location of patient care services should not occur until the receiving VA facility or any other site is fully available to receive those patients. This will include a discussion of referral patterns as appropriate.

Methodology

This analysis will identify potential disruptions to Continuity of Care that result from any change to patient care services, and develop mitigation strategies for the business plan options that will ensure three separate goals are met:

- Mitigated interruption of services during the transition. This means that enrollees will be able to receive required care on a continuous basis over the course of the

implementation period. Where the location for a service is changing or undergoing renovation, the BPO will make provision to ensure that enrollees will be able to receive the care in an alternate location during the disruption period

- Availability of the continuum of services required for "good medical continuity." This means that enrolled veterans being cared for a given condition will have access to the appropriate array of primary, secondary, and tertiary care services required to treat that condition.

The study of Continuity of Care is an undertaking due to its impact on patient satisfaction and the delivery of quality care.

Stage 1: Option Development

Team PwC and the VA identified "two meanings" relative to the analysis of continuity of care. These are:

- Minimized disruption in patient care as options are implemented
- Provision of care follows "good medical continuity" (e.g., inpatient to home care; ambulatory to impatient; or inpatient to rehabilitation)

During Stage I, Team PwC will:

- Obtain from each study site the clinical inventory that represents "good medical continuity" for CICs in the following clinical care services:
  - Inpatient Surgery
  - Inpatient Psychiatry and Substance Abuse
  - Inpatient Spinal Cord Injury
  - Inpatient Brain Rehabilitation Center
  - Inpatient Domiciliary
  - Ambulatory Cardiology
  - Ambulatory Rehabilitation Medicine

Stage I will document the VA agreed-upon definition of "good medical continuity" for the identified CICs. These will then be used in Stage II BPO development.

Stage II: Detailed Option Development

The methodology chosen to study beginning in Stage II is presented as follows:

- Review physical construction implementation sequence from the Finance and Capital Planning Team
- Review targeted relocation/ asset released dates from Re-use Planning Team
- Convene a collaborative work session with Team PwC and VA Site staff to plan an implementation schedule utilizing input and collaboration from the Finance and

Capital Planning and Re-use Planning Study Teams to determine the impact on continuity of care
- Provide a narrative summary of findings

The bulk of the analysis will occur within Stage II. This is appropriate given the emphasis of the analysis on mitigating issues to enrolled veterans during implementation, as implementation is not studied in detail until Stage II.

- Physical construction implementation sequence from the Finance and Capital Planning Team
- Targeted relocation/asset released dates from the Finance and Capital Planning and Re-use Planning Study Teams

At the conclusion of Stage II, each Business Plan Option will contain an inventory of co-located services with physical construction implementation sequences mapped to the business plan options and rated for continuity of care disruption. Mitigation to avoid disruption in care will be developed.

3.2.7. Community Impact

The objective of the Community Impact Assessment is to understand the implications of the BPOs on the community or marketplace. This assessment will quantify and qualify community impacts in the analysis and develop appropriate mitigation strategies for these impacts. The Community Impact Assessment will be performed only in Stage II.

Methodology

Team PwC's methodology for the Community Impact Assessment includes:

- Assessing the services and programs that may relocate to other health facilities in the market where services are either closed or relocated to another location
- Estimating the employment base at the VA site and disposition of those employees. Commenting on estimates of rehiring of affected VA site employees within the communities
- Estimating the impact on vendors and the impact of VA site purchasing on the community

To perform these assessments, Team PwC will develop a community inventory of healthcare services using a combination of available data and information from the VA sites, community and state health data reporting agencies (e.g., California Office of State Health Planning and Development – OSHPD), and other similar sources. This will help define the practical implications of any one scenario, accommodating competing/neighboring facilities' capacity to absorb incremental business if the option requires either temporary or permanent relocation of clinical services/programs.

A reasonable determination of capacity will be made among other neighboring clinical facilities/providers who meet CARES Access and Quality of Care criteria and have been targeted to absorb volume using publicly available data (specifically Solucient, LLC and AHA). Typical capacity planning by beds provides for a maximum capacity of 70-80% of licensed beds.

A human resources inventory will be completed using VA data sources regarding the number of VA employees affected by each option. Similar data will be determined at a high level based on available employment data by Standardized Industrial Classification (SIC) code for regional employers in which VHA facilities operate to determine possible rehiring opportunities for VA personnel. Team PwC will not undertake specialized analyses to determine compensation and benefit programs for VA employees who opt to find other employment within the community if the scenario yields closure or relocation of VA services from the community in which it currently operates; only numbers of employees will be enumerated and documented.

A vendor inventory which will include VA data will be completed to determine those neighboring VA facilities, community health facilities and local businesses affected by any of the BPOs. Analyses of these arrangements will augment the community impact review to better understand the impact of maintaining/closing a VHA asset. Information supporting these analyses includes a review of key supply, maintenance, or other similar contracts with vendors/contractors to support the routine operations of the VA.

These analyses will be supported with the latest available data and information on the community, its providers and the overall employment market. This Assessment will involve providing information available on local supplier, the employment market, difficulties in recruitment, etc. Frequently, reporting of this data and information may lag current planning by one to two years, though reasonable attempts will be made to update specific information as needed to ensure that the assessment is current.

Concurrent coordination with the Finance Team will take place as Community Impact data and information is validated as data inputs for the Finance Team's IMPLAN model. The IMPLAN model and community impact analysis are separate; Community Impact is an input to IMPLAN. Assurance through this process to avoid duplication of efforts in collecting, validating and inputting data and information into the financial model will be undertaken by site team leads, and Healthcare Team and Finance Team's functional leaders.

Additional interviews may also be conducted with the site teams and leaders.

Stage II – Option Development

The following will be developed as outputs from the Community Impact work:

- General description of options from Community Benefit/Impact perspective providing overview inventory of site-specific impact, supplies/local regional purchased services and vendor arrangements affected by the BPO
- Narrative of qualitative analyses of each BPO based on interviews, other data collected from VACO or site specific
- Assessment of alternative VA and other market area sites for clinical care based on available, known information and data on inpatient and outpatient capacity
- Estimate of relocated VA employees affected by BPO, and relatively high-level commentary on their expected absorption within the community's labor force particularly among other VA or neighboring provider sites to which patients are to migrate
- Estimate of impact to the regional vendors, in dollars by type of contract (e.g., discontinuing an outsourcing agreement with a local provider)

3.2.8. Patient Care Impact and Specialized Programs

This portion of the study will include an impact analysis of the following specialized services (as defined by the VA): Spinal Cord Injury/Disability, Blind Rehabilitation Centers, Traumatic Brain Injury, Inpatient Nursing Home, Inpatient Domiciliary, and the seriously mentally ill, inclusive of those requiring long-term care. This is the minimum data set to be studied. If there are other unique programs identified for a given site, Team PwC will include those identified programs in the study subsequent to consultation with the VA Team Leader or their designee.

Caring for unique populations of patients is at the core of the VA healthcare mission. In many respects the VA is the only option for care for these conditions. The VA is committed to the continual pursuit of excellence in these areas, ensuring access and quality care to all enrolled veterans requiring these unique services.

BPO development will address gaps in service and will evaluate impact as it relates to access, cost, and quality for the specialized programs.

Methodology

Team PwC will address any positive or negative impact on the following patient care and special disability programs: Spinal Cord Injury/Disability (SCI/D), Blind Rehabilitation Center (BRC), Traumatic Brain Injury, Inpatient Nursing Home, Inpatient Domiciliary, and the seriously mental ill. As a part of the recommended options, we will develop specific plans to ensure the continuation of accessible high quality services for the special disability VA patients.

Workload analysis will provide the basis of the methodology used to document the required clinical inventory to assure continued VA provision of service to the enrolled veterans. This will serve as a comparison standard for what must be met in the options.

This data will be augmented with anecdotal evidence from interviews with VA Team Leader(s) or their designees. This will contribute to an understanding of possible inter-VISN opportunities for collaboration. Potential service provision and/or partnerships by non-VA providers will be identified by review of workload data and discussion with the VA Team Leader and the COTR. Stakeholder input will also be incorporated as received during Stage I.

All associated legislated directives and requirements will be considered, such as VA Mental Health Strategy and VA Long-term Care Strategy. We assume that these directives are considered and the BPOs will be consistent with these directives.

Stage I – Option Development

Team PwC will identify:

- What special needs services exist at each of the eight study sites
- The expected workload and required clinical inventory
- Net increases/decreases in clinical inventory (2003 through 2023)
- Specific implications regarding options' impact on long-term mental health patients/ programs
- Key findings from relevant Federal mandates/directives
- What, if any, non-VA opportunities for partnerships exist in the relevant market

Stage II – Detailed Option Development

A narrative description of how each of the BPOs will continue to meet the needs of the specialized services will be provided. For the special needs services, services will either be provided:

- In existing VA facilities by VA staff
- In new or enhanced VA facilities by VA staff, or
- Via contract in non-VA facilities.

The BPOs will specifically include the required workload and clinical inventory to meet the needs of these enrolled veterans, and as discussed in the "Continuity of Care" section, any transition issues to relocate, renovate or replace a special needs service will be planned to avoid any disruption to enrolled veterans receiving care.

3.2.9. Future Flexibility and Innovation

The CARES initiative is an illustration of how the VA healthcare system must be poised to respond to the future advances in delivering care and services. As an integrated system serving enrolled veterans in many geographical locations they have both the need and the opportunity to take advantage of technological innovations that enhance their ability to provide the highest level of care to all enrolled veterans, even to those enrollees living in remote and potentially underserved areas. The VA has consistently been a leader in embracing new technologies and approaches to care, and this task is designed to assist in assuring that experience continues.

By studying the future flexibility of the BPOs, Team PwC will assess whether the options meet expected clinical best practices and whether the options incorporate cutting edge medical technologies. Specifically, the study will assess the BPOs:

- Adaptability to new/emerging technology
- Adaptability for future best practice patient care approaches
- Ability to respond to unexpected changes in demand (growth v. decline)
- Ability to reduce on-site utilization of services through telemedicine or similar technologies

Methodology

Team PwC will identify three to five future best-practice models of care and/or emerging technologies, as applicable, to site-specific inpatient, ambulatory acute care and long-term care CICs as identified in the workload statistics. Examples of best-practices/emerging technologies include but are not limited to:

- telemedicine
- bar-code medication delivery systems
- supply chain automation processes
- patient safety/privacy procedures

Major physical plant requirements, if any, for these three to five future trends, will be identified in consultation with the Capital Planners, VA Team Leaders and PwC subject matter experts.

Team PwC will request the VA Team Leader select up to three clinical experts from their site to discuss issues and trends unique to their site/site services and note any associated impact for BPO consideration. Input from VA clinical experts will be obtained through a collaborative panel discussion, facilitated by Team PwC, Team PwC will document the panel discussion as part of this analysis, and consider the findings in the qualitative scoring as explained below.

One quantitative component of the analysis will include an estimate of utilization that could be seen in an alternate setting (such as through telemedicine) as appropriate to the CICs at the site.

Team PwC will qualitatively score each of the BPOs to illustrate the BPOs ability to respond to the identified (3-5) emerging trends.

BPOs will be qualitatively scored as:
- Higher flexibility (BPO is better than the **Baseline BPO**)
- No significant change (BPO is no better or worse than the **Baseline BPO**)
- Lower flexibility (BPO is worse than the **Baseline BPO**)

Stage I: Option Development

During Stage I, CICs for each site will be identified via rank-ordering of enrollee utilization.

Stage II – Detailed Option Development

Both a narrative descriptor of the identified emerging trends and a flexibility score will be prepared for each of the BPOs as it relates to the identified three to five emerging trends. This information will provide additional insight to the VA and Local Advisory Panel as they assess BPOs (Figure 3.19).

BPO:	Higher Flexibility (BPO is better than the Baseline BPO)	No Significant Change (BPO is no better or worse than the Baseline BPO)	Lower Flexibility (BPO is worse than the Baseline BPO)
Adapting to new medical technologies			
Adapting to new patient care approaches			
Adapting to unexpected changes in demand (growth)			
Responding to unexpected changes in demand (decline)			
Serve utilization through telemedicine (including estimate of volume to be served)			

Figure 3.19 – Assessment Form for Flexibility and Innovation Measures

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3.2.10. Human Resources

The purpose of the Human Resource analysis is to assess the staffing impact for each of the proposed BPOs and the associated financial impact. The assessment will analyze the BPO impact in terms of numbers and types of FTEs, the labor market, and potential retraining and other types of transactional costs. This analysis has a potential to be of significance to the recommendation as human resources (i.e., labor represents a significant portion of the total cost of providing healthcare within the VA). Stakeholder issues may also have a significant human resource implication. The following describes the methodology that will be used to perform the human resource analysis.

Methodology

Team PwC shall assess the staffing impact for options proposed and the projected financial impact. Considering employee turnover rates, Team PwC shall assess the impact on health care occupations (RN, MD, PT, etc.) and support occupations (administrative services, other ancillary care staff) during implementation of all options. Team PwC shall analyze the labor market in the area to answer the following questions:

- If the facility loses a critical number of current provider staff, could the mission of the facility be maintained until the final date of conversion?
- At what cost and through what means?

Team PwC shall also examine other considerations for successful implementation and least impact on current VA staff such as re-training, day-care centers, parking garage, etc. Team PwC shall include these other considerations in the financial analysis of the given option. These may include but are not limited to:

- What is the distance to the "new site of care"? What commuting considerations need to be considered? How likely are employees to commute that distance?
- Does the current staff mix fit with the needs of the new recommended option? If not, are there any extraordinary re-training, or recruitment costs that need to be identified?

Stage I –Option Development

Team PwC will use the current human resource and cost data and information for each facility. This information will be obtained as GFI from VACO and include the following:

- Current staffing to include number of FTEs per facility by job classification and department (2003 data)
- Staffing costs for each job classification and department (2003 data that aligns with the workload data)

This information will establish the comparison standard and align with the workload information to provide staffing metrics, such as Registered Nurses per number of clinic stops. These metrics will be developed at a level for which staffing and workload can be mapped (i.e., at summary levels of the CICs as described in the Workload Section).

The scope of the Stage I Human Resource analysis is to gain an overall understanding of the impact each option will have on the human resources for the site. The analysis will include:

- A direct comparison of FTEs required based on volume for the various options
- An identification of significant concerns related to either loss of employment or gains in employment and anticipated recruitment difficulty

The FTE comparison will be performed extrapolating the current number of employees by job classification to each option based on the workload changes.

Significant concerns regarding loss of employment and or recruitment difficulty will be identified using a multifaceted approach. This will include:

- Interviews with Human Resource personnel at the site and/or VISN, specifically considering recruitment for highly competitive positions
- Access to and analysis of VAMC human resource statistics including time required to recruit and place certain job categories, current number of vacancies, average cost of recruiting, and average and median age of employee by job category
- Analysis of national and regional recruitment trends for job categories, e.g., Bureau of Labor Statistics and local studies
- Consideration of issues posed by Stakeholders

Team PwC will use this information to identify the extent to which Human Resources affects each option and how each option will affect the VA's human resources. This information will be incorporated into the decision making matrix both quantitatively and qualitatively. The following information will be captured for review (Figure 3.20).

Option	Estimated FTEs	Change in FTEs from Base line by MDs, Clinical and Administrative (Cumulative for 2003 – 2023)	Recruitment Difficulty (Very Difficult (5) No Difficulty Expected (0))	Expected Retention Impact (Very Diffient (5) No Difficulty Expected (0))	Stakeholder Issue	Range of Costs for Severance, Recruitment, Etc. (High, Moderate, Low)

Figure 3.20 – Identification of Human Resource Impacts

Material changes in the annual or one-time operating costs will be identified for each option. These costs will be input into the financial analysis.

Stage II: Detailed Option Development

In Stage II, Team PwC will perform a more detailed review of the staffing impact for the options proposed and the projected financial impact. Team PwC will also examine other Human Resource change management considerations for successful implementation of the option coordinating with the implementation planning and risk management teams.

Staffing Impact

Team PwC will perform a staffing impact analysis for each of the Stage II options. The staffing analysis will include:

- Confirmation and further development of findings identified in Stage I for that option including:
  - Number of affected FTEs by major job classification, e.g., MDs, RNs
  - Recruitment costs – including both increased number of positions to be recruited and a cost for recruitment benchmark by major job classification. This benchmark will be obtained from the VA or using a national published norm
  - Retention costs – market adjustments or other salary enhancements that are identified through discussions with local VA staff
  - Severance and/or "early retirement" costs – through an analysis of the age range of staff by major job classification, obtained from the VA, and when implementation would occur and the current directives and policies used by the VA

- Potential impact on the continuity of care, if the care is expected to move to another venue outside the VA, e.g., transferred out or contracted – inability to obtain personnel and costs of obtaining, e.g., agency personnel. This would be identified through discussions with local VA HR personnel and VA industry norms for the costs of agency personnel.

Staffing Change Management

Team PwC will examine other human resource considerations for successful implementation of the options. These considerations will identify change management opportunities that will minimize the impact of the option on the staff and facilitate its successful implementation. They may include such areas as:

- Commutes and related time and cost
- Change in skill and staff mix
- Change in patient population
- Change in availability of support functions, such as proximity to child care
- Access to nursing and ancillary support training centers

These considerations will be identified and quantified through discussions with local VA HR personnel, an analysis of the changing workload by age of the enrolled veterans and CICs, and an analysis of the facility and its environs.

The qualitative and quantitative impact for each option will be identified in the Human Resource Impact Analysis Form (appended). All quantitative impacts, not accounted for in the operating costs, will be identified in the financial analysis.

Human Resource Impact Analysis Form (Stage II)
CARES Study Facility:

Description	FTE Impact	FTE Non-Operating Costs/Savings	One Time Costs	Other Recurring Operating Cost Impacts	Related Capital Costs	Qualitative Consideration	Mitigation Strategy

Figure 3.21 – Stage II Impact Analysis Form for Human Resources

Key:

Description:	Description of staffing impact
FTE Impact:	Gain or loss of FTEs for 2003 to 2023 period. Supplemental chart identifies year and number by major job classification
FTE Costs/Savings:	Dollar estimate of above impact
Other Recurring Operating Costs:	Costs related to changes in skill mix, incentives, etc. that are not currently included in current unit costs.
Related Capital Costs:	Identification of capital need, e.g., parking lot, day care center
Qualitative Consideration:	Other considerations with no direct financial impact and explanations of mitigation strategies

3.2.11. Research & Education

Research and education ("R&E") are important missions of the Department of Veterans Affairs, and, as nearly one in ten physicians trains at a VA medical facility, VA hospitals are an integral element of the Academic Health Center enterprise of the United States. VA physician faculty have affiliations with 85% of the nation's medical schools which afford them joint appointments at the university and at VA and the ability to see patients at VA, supervise students and residents, and conduct research. Because of these interconnections, it will be critical to carefully consider the impact of any change on these important relationships.

During Stage I, Team PwC will:

- Assemble a comprehensive overview of research and education programs at all eight healthcare delivery study sites
- Assemble the necessary foundational data and analysis for determining the impacts on research and education in the context of possible VA asset realignment
- Identify potential impacts to R&E

During Stage II, Team PwC will:

- Create an inventory of potential or anticipated impacts to R&E specific to each BPO as selected by the Secretary
- Propose necessary mitigation strategies to overcome the impacts to R&E

Methodology

Team PwC will describe any impact and the mitigation of any negative impact on VA research and support to medical education.

Data Sources

Change to R&E relationships is a sensitive issue. Accordingly, we will follow a proscribed protocol in communicating with VA affiliate organizations. We expect the VA to provide this protocol in Stage I and offer as-needed guidance for proper communication methods. As an example, when we have identified an affiliate to contact, we will notify the VA Team Leader, explain the rationale for the communication, and request that the VA Team Leader contact the VISN Director. After consultation between the VISN Director and VACO, we would expect to learn about how we should precisely communicate with the affiliate, if communication is deemed appropriate. Both Team PwC and appropriate VACO/VISN representatives are expected to attend all meetings with affiliates.

Team PwC will rely on the following data inputs to execute the Research and Education studies:

- Access to affiliate organizations to seek input and guidance for this access will be provided, particularly in Stage II. Where access is not approved by the VA, Team PwC will note in its findings a summary of unresolved issues
- Access to the formal affiliation agreements between VA sites and affiliates, as well as the listing of residency and teaching programs
- The Graduate Medical Education Council at each facility will be able to provide site-specific data (aggregate information may not be available at the VHA level)
- The BPOs will be targeted to meet existing R&E programs. New programs contemplated by an affiliate will not be a requirement of the BPOs
- Patient volume (workload) in the future may or may not be sufficient to meet the requirements of the affiliated institution. Where workload appears to drop below the

threshold for appropriate training, we will note the drop, but the BPOs will not require the VA to find additional workload to meet the affiliates' R&E requirement
- This information will be gathered from the VA Graduate Medical Affairs Office. If the VA cannot provide the information, PwC will attempt to obtain this information from the American College of Graduate Medical Education and/or Association of Academic Medical Centers or other public sources. Otherwise, PwC will note the data gap and express the limitation on findings associated with that gap

Stage I: Option Development

During Stage I, we will develop an understanding of the research and education programs. This understanding will come from a review of available data and interviews and supplemental data requests to the VA COTR and Team Leader(s). We will review and analyze the available data to determine where there might be impacts on research and education in the context of possible VA asset realignment.

We will gather data using the following avenues:

- Direct provision of data (GFI) by the VA to Team PwC based on the initial data request
- Gathered data from the VA Portal by Team PwC
- Gathered data from other publicly available source by Team PwC. This research exercise will consist primarily of Internet-based research, accessing site-specific web pages, affiliate web pages, and other research and/or education-specific sources (i.e., clinicaltrials.gov and acgme.org)
- Interviews with VA Team Leader(s) or designees
- Interviews with VA site affiliates, if and as approved by VA and in the company of appropriate VA personnel

Team PwC will create snapshot of the research and education activities at each site, a brief narrative description of the research and education programs, and finally, an initial discussion of critical issues. Critical issues are defined as those issues that would potentially affect Access, Cost or Stakeholders (affiliates) at each site.

Stage II: Detailed Option Development

During Stage II, we will consider and analyze how each of the selected BPOs will affect research and education. We will compile an inventory of impacts for the BPOs based upon this analysis. Once all of the impacts have been defined, we will develop and recommend mitigation strategies for reducing the negative impact to the institution and enrolled veterans. Where necessary, we will work through the VISN and COTR to engage key affiliated institutions (universities, medical colleges. etc.) in any needed dialogue to fully understand the impact and solicit ideas for mitigation.

Team PwC will provide a document that, for each BPO, discusses the resulting direct impact to the research and education programs (i.e., changes to space, programs, number of residents, medical and other students, affiliation agreements, etc.), the effects of these impacts on the standard criteria (i.e., Access, Quality, Cost and Stakeholder), and finally, potential mitigation strategies for reducing the negative effects.

Figure 3.22 illustrates how our data collected on resources, quality, space, and funds in Stage I will be used to develop the various BPOs. These BPOs will in turn drive the identified impacts on research and education and mitigation strategies developed in Stage II.

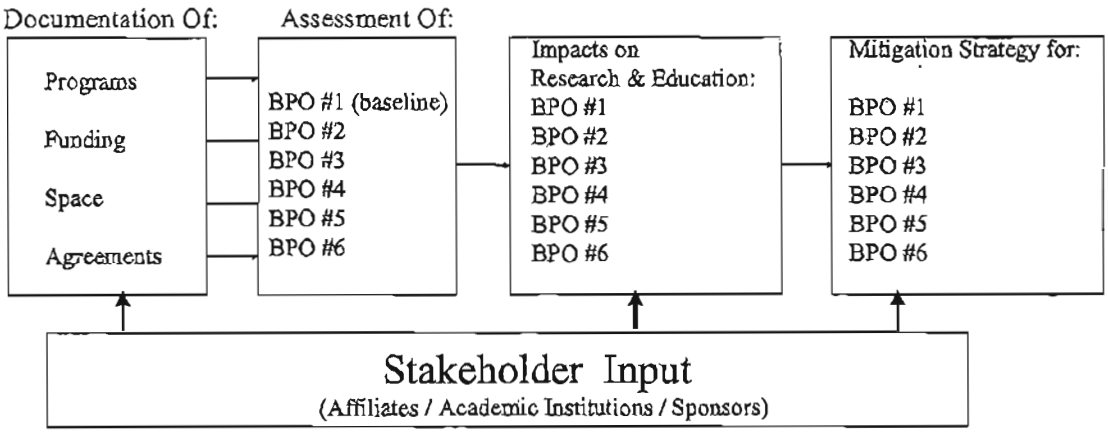

Figure 3.22

3.2.12. Impact on Safety and Environment

The objective of the assessment of the impact on Safety and Environment is to ensure that Business Plan Options developed result in a safe, sound, operationally effective working environment for VA personnel and accessible to enrolled veterans and their visitors.

Methodology

The methodology used involves the inputs of healthcare, capital planning and re-use planning specialists and the outputs of activities conducted as part of their individual study efforts. As indicated in Chapter 2 - all Business Plan Options developed by Team PwC are to be designed to ensure that this objective is met. As also indicated in Chapter 2 Team PwC's decision making process utilizes Initial Screening Criteria, including "Would result in a modernized, safe healthcare delivery environment that is compliant with existing laws, regulations, and VA requirements", that all Business Planning Options must pass to be considered. As indicated in Chapter 4, Team PwC's capital cost estimates include estimates based on GFI to ensure that all known physical deficiencies in current facilities are corrected early in the implementation plan for each Business Plan

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Option. Ultimately, as indicated in Table 2.1, Team PwC assesses the extent to which each Business Plan Option results in a "Modernized Safe Healthcare Delivery Environment" and uses this assessment as one of the basis used to compare Business Plan Options in the selection of a recommended option.

3.2.13. Operating Cost Development

The objective of the operating cost analysis is to provide a comparison of the estimated current state operating costs with the estimated operating costs for each BPO. Operating costs include such costs as labor, benefits, supplies, equipment, maintenance, etc. The operating costs will be identified by fixed direct, fixed indirect and variable. This will enable adjustments to the costs to be made for each BPO that relate to the operational changes identified for each BPO by the Healthcare, Capital Planning and Re-use Study Teams. The operating costs for the current state and each BPO will be a key input to the financial analysis. An overview of the operating cost methodology is shown in Figure 3.24.

Methodology

The methodology used to estimate the operating costs is a three-phased approach. The phases are as follows:

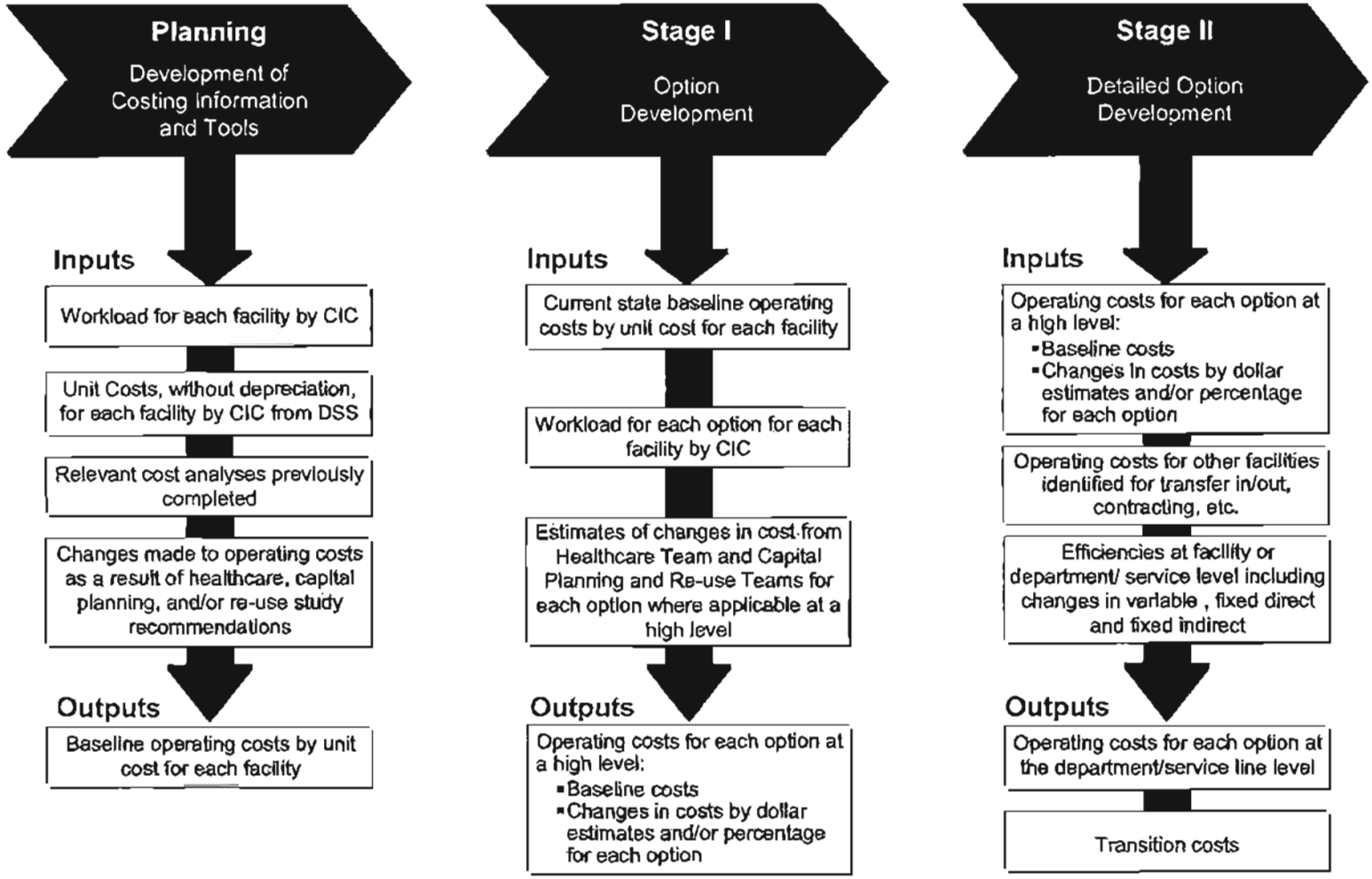
- Establish current state operating costs
- Estimate, at a high level, the operating cost changes associated with each BPO identified in Stage I of the study
- Estimate, at a department or CIC level, the operating cost changes associated with each BPO identified for further study in Stage II

The methodology used to estimate the current operating costs and the changes in those costs that relate to each BPO is based primarily on the use of Veteran's Health Administration's current cost experience. Team PwC, in detailed technical consultation with the VA, has chosen to use these costs due to the uniqueness of the VA facilities and the patient population. The operating costs that will feed the financial analysis will be based on the following key pieces of data:

- Current costs of operation – workload, facility, etc. – provided by the VACO
- Projected workload for each CIC (including correlated Stop Codes) for the period 2003 through 2023 (obtained from the Workload Analysis)
- Unit costs, without depreciation and overheads, obtained from the VA Decision Support System (DSS) – the official cost accounting system for VA – provided by the VACO
- Relevant cost analyses previously completed by the VA
- Changes made to the operating cost scenarios workload for each BPO as a result of the healthcare, capital planning, and/or re-use study recommendations. These may include leasing, contracting for services, consolidation of buildings, etc.

Figure 3.23

Costing Methodology



Team PwC, in concert with the VA, has chosen to use the operating costs resident in DSS for numerous reasons.

- DSS is the cost accounting system for the VA
- DSS unit costs provide the level of detail needed, i.e., fixed direct, fixed indirect, and variable
- DSS is structured to provide department costs and be able to roll-up costs at the CIC level as costs are maintained at the treating specialty and stop code level
- DSS data is available nationally for all VHAs. This provides cost information for the site under study and any sites to which patient workload may be transferred
- DSS data are reflective of the costs reported in the official VA Financial Management System (FMS)

Establish Current Operating Costs

The current state operating costs on a per unit basis will be established in Stage I. These costs will be obtained from the VACO for each facility under study. The costs will be provided in at least three categories, fixed direct, fixed indirect and variable costs and mapped to the CICs (workload). Any costs of operation not available through DSS, but provided in-house at the facility, will also be provided. These may include such costs as nursing home costs, domiciliary costs, etc. A discussion with the VA Site Team Leader and other designated personnel will identify any material issues with the DSS unit costs. Any material issues will be brought to the attention of VACO for resolution.

The VACO will also provide costs for VA facilities outside of the specific sites under study, but for which services may be transferred or for which the facility may provide a reasonable cost comparison. This would include, e.g., VAMCs that provide patient care in a newer, more efficient facility.

The current state operating costs will be shared with the Healthcare (where applicable), Capital Planning and Re-use Study Teams to aid them in their analyses and identification of Stage I options. The costs will also be input to the financial analysis.

Stage I: Option Development

Stage I operating costs will involve identifying the current state operating costs and changes to those costs based on assumptions that align with the options developed by the Healthcare, Capital Planning and Re-use Study Teams. The current state operating costs will be based on the unit costs at the CIC level and the projected utilization volumes provided by the VA using the Milliman data.

Changes in operating costs for the options considered in Stage I will be developed based on input from the Healthcare, Capital Planning and Re-use Study Teams including:

- Patient volumes at the CIC level
- Changes in care delivery or facility assumptions at the VAMC which may modify fixed costs or create operating efficiencies. Changes in these costs will either be provided by the Capital Planning or Re-use team or assumptions will be made related to the potential efficiencies based on a review of VA and Commercial healthcare benchmarks
- Changes in delivery assumptions, such as transition of care to complementary VAMCs using costs reflective of their costs
- Transition of care to contracted providers using costs reflective of care purchased by other VAMCs or Medicare costs
- Assumptions of transfer of care to other facilities such as DOD sharing, contract, joint venture, transfer in or out, sharing with community or DOD, and/or sell

The assumptions and detail behind the data will be at a high level during Stage I due to both the time available and the intent of the study. The options are not intended to represent all options that merit full business plan analysis, but to demonstrate that the universe of potential options has been considered. The assumptions will be fully documented and in some situations with be based on VA site specific, VA National and Regional and industry data. It is anticipated that collaboration with the VA Site Team Leaders and the VACO will occur during this time.

Stage II: Detailed Option Development

Stage II operating costs will involve identifying a more thorough development of the operating costs for each of the Secretary-selected options. This will involve working closely with the Healthcare, Capital Planning and Re-use Study Teams so that the options, as they are developed, consider the impacts on the related operating costs. During this Stage, the following process will occur:

- Adjustments to in-house operating costs based on the utilization workload. Variable in-house cost adjustments may consider VA staffing guidelines for minimum staffing, further refinement to consider efficiencies gained through consolidation of workload and/or change in the facility, etc. These adjustments will be based on an understanding of the option, comparison to similar VA and Commercial benchmarks, etc. These adjustments will be at the department/service/CIC level
- Adjustments to other VAMC costs to reflect changes for administrative and support functions and the changes related to options from the Capital Planning and Re-use Study Teams
- Adjustments for various other types such as contracting, joint ventures, transfers out, etc. This may include adjusting other VAMC costs that report higher costs than normal for episodes of care and/or interval cost outliers. These adjustments would try to consider, for example, patient severity at the VAMC or other location(s). DoD sharing opportunities will be confirmed with the local VA
- Additional costs and/or savings for the operation as a result of marginal costs will be identified through an in-depth understanding of the selected options

In addition, Team PwC will develop operational transition costs for the site and other impacted sites for each option looked at in Stage II as identified by the workload and option development teams.

While it ultimately reaches a hard endpoint in terms of cost data, the Stage II process will be a collaborative process to assist in the further refinement of the options under review. This collaborative process will provide the study teams with feedback relating to how the details of the option(s) impacts operating costs. Concurrently, the operating cost information will flow to the financial analysis.

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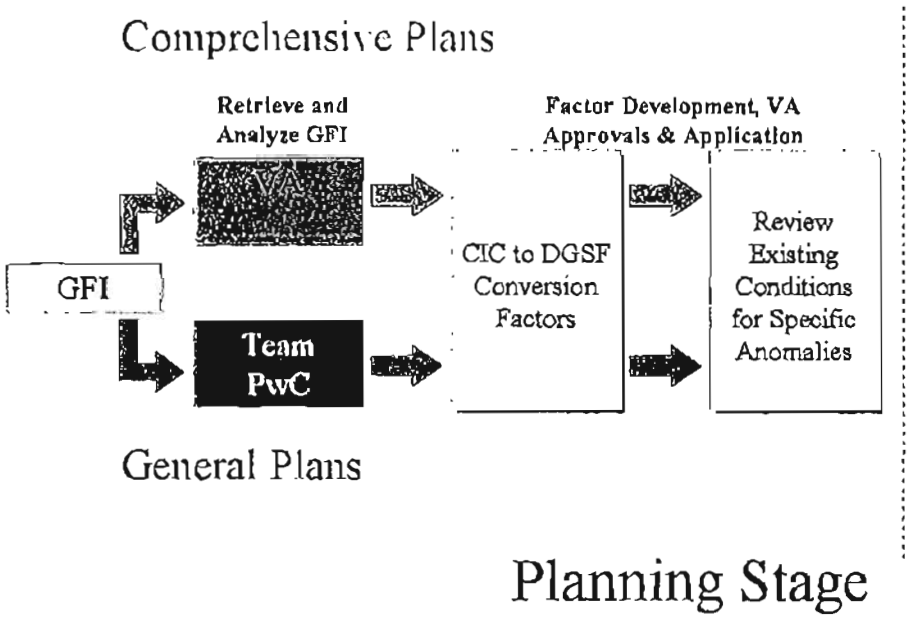
4.1. SCOPE AND PURPOSE

The Capital Planning Study work will provide the VA with a decision-making document for future site and facility development to present the optimum physical configuration for delivery of healthcare services to veterans.

4.1.1. Planning Stage



The VA will provide Team PwC with GFI for analysis and application to both General Capital Plans (GCP) and Comprehensive Capital Plans (CCP). As indicated in Figure 4.1, this information will be market workload (demand) for both plan types distributed by CIC and department/stop code for each project site. These workloads will be converted from CIC to Square Footage. This Square Footage is then compared with the existing conditions per site to identify anomalies.

Figure 4.1 Principal Capital Planning Activities for the Planning Stage

General Capital Plan

The General Capital Plan Study applies to Study Sites where no specific Secretary's Decision has been made to date. Team PwC's study will provide workload data, distributed by CID and stop code/department, and including planning factors that translate workload distributions into departmental square footage. The Study Sites for this type of plan are:

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- Boston
- New York City
- Louisville
- Waco
- Big Spring
- Walla Walla
- Montgomery

Comprehensive Capital Plan

The Comprehensive Capital Plan Study applies to Study Sites where the Secretary's Decision defines the healthcare provisions solution to be implemented. The VA will provide workload data, distributed by department, and include planning factors that translate workload distributions into departmental square footage. The Study Sites for this type of plan are:

- Canandaigua
- Montrose / Castle Point
- St. Albans
- Lexington
- Livermore
- White City
- Perry Point
- Gulfport / Biloxi
- West LA

In both study types, The Capital Planning Study Team assumes that the GFI is accurate and that the workload and distribution methods (from both Team PwC and VA) are valid and appropriate for the project sites and associated facilities.

Stage I

In the Secretary's decision, The Capital Planning Study Team is required to develop a broad range of potentially viable Business Plan Options that respond to the forecast healthcare needs for each of the Study Sites. As part of the Team PwC decision process, The Capital Planning Study Team will provide suggestions to the VA as to which Business Plan Options (up to six) should be taken forward into more detailed development and assessment. Figure 4.2 provides an overview of the key capital planning activities in this Stage.

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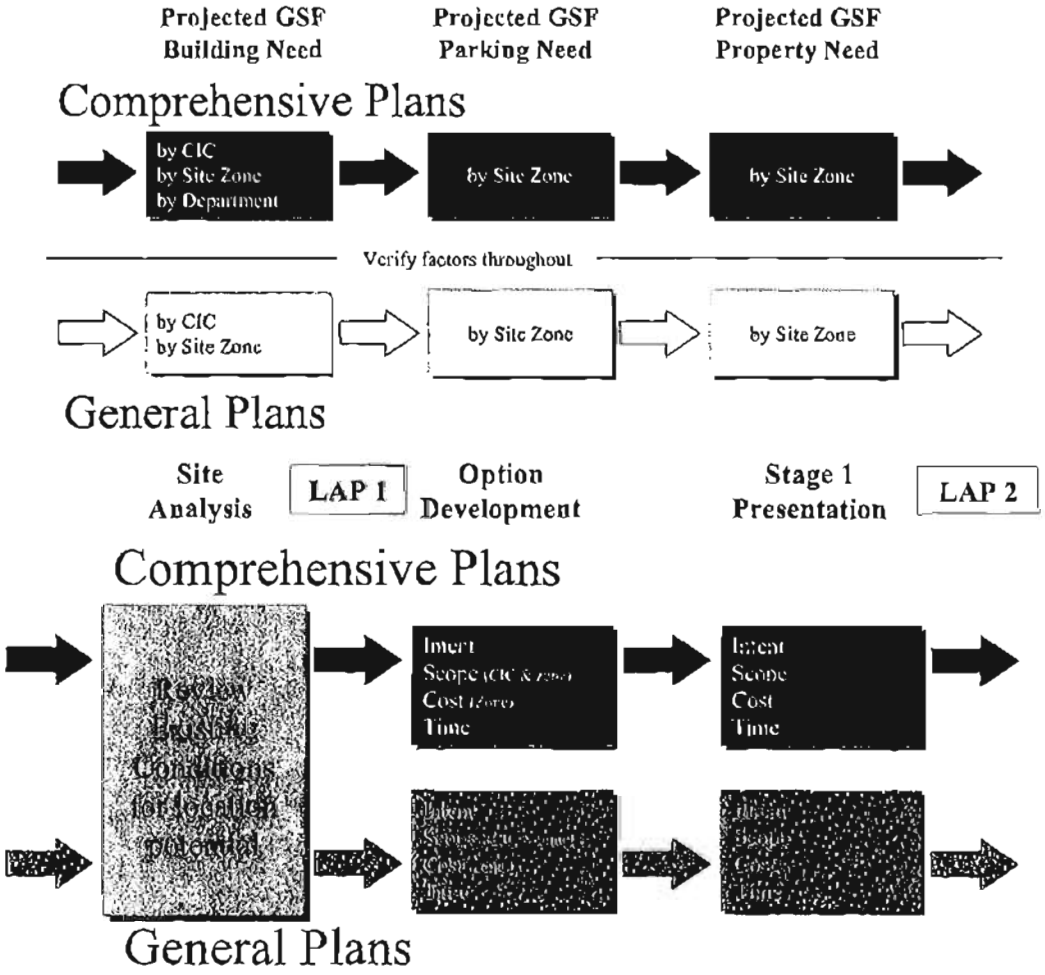

Figure 4.2 Principal Capital Planning Activities for Stage I

General Capital Plans

The Capital Planning Team will receive workload projections from the Healthcare Team and apply the approved conversion factors to develop a macro level SF need (by CIC and site zone) and associated parking SF needs by site zones. From these two, the team will develop projected SF property need by site facility and non-facility zones. At that point, further comparison with existing conditions and comments from the LAP meetings will be synthesized to develop options that will identify (1) Intent, (2) Scope, (3) Cost, and (4) Time. Those will be provided to the Finance, Re-use Teams and other Project Teams for further analysis followed by presentation at LAP meetings and delivered to the VA for evaluation and possible inclusion in Stage II.

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Comprehensive Capital Plans

Stage I approach and deliverable products will be the same as for General Capital Plans (described above) with the exception that workload projections will be VA-provided GFI..

Stage II

The Capital Planning Study Team will develop more detailed assessments (based on the Secretary's direction as discussed in Chapter 3) of the potentially viable site and facility Business Plan Options selected by the VA from Stage I and, as part of the Team PwC decision process, provide a recommendation to the VA of which Business Plan Option offers the optimal solution. Figure 4.3 provides an overview of the key capital planning activities in this Stage.

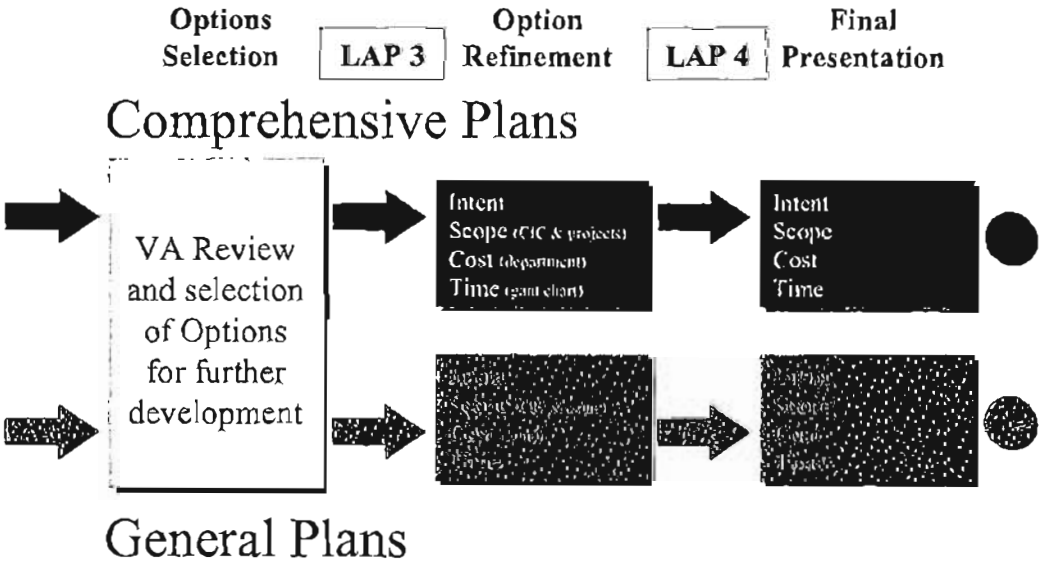

Figure 4.3 Principal Capital Planning Activities for Stage II

General Capital Plans

Based on VA-selected options from Stage I, additional refinements will be made. Stage II options will present: (1) Intent, (2) Scope, (3) Cost, and (4) Time.

Comprehensive Capital Plans

Similar refinements to the VA selected options from Stage I (as described above), additional refinements will be made. Final deliverable product refinements for Comprehensive plans will include department level area totals and block diagrams where

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appropriate as well as identification of projects and Gantt Chart based implementation plan for each Business Plan Option.

4.2. APPROACH

Inputs for General Capital Plan Sites and Comprehensive Plan Study Sites are detailed below:

4.2.1. Government Furnished Information - Building and Site Documents and Assessments

VA will provide architectural and engineering data regarding existing conditions for each Study Site. This includes plans, facility condition assessment reports, project scope, schedule and cost descriptions for establishing baseline existing conditions.

The Team PwC Healthcare Team will provide workload data at the CIC and stop code/departmental level for development of zone level facility and site area projections.

VA will provide projection data and distribution proportions as established in prior studies to establish the baseline for development of macro level facility and site area projections.

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Architectural and Engineering Documents

Site Plans (to the extent possible in AutoCAD): VA will provide civil site plans, surveys, property descriptions and other related data regarding existing sites to identify the extent and condition of surface and subsurface conditions within the project scope. Information in these documents will indicate topography, legal boundaries, archeological, environmental hazards, wetlands, parking, vegetation, roadways, easements, buildings and other natural features and physical improvements to the property. An example of a typical GFI site plan level of detail is shown as Figure 4.4

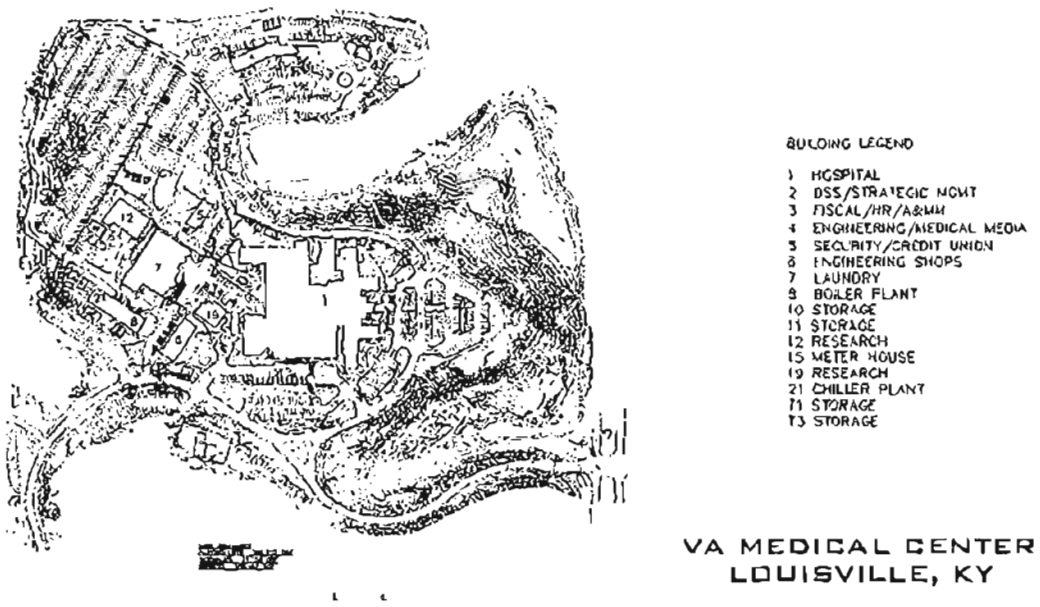

Figure 4.4 - Example of a typical GFI site plan level of detail

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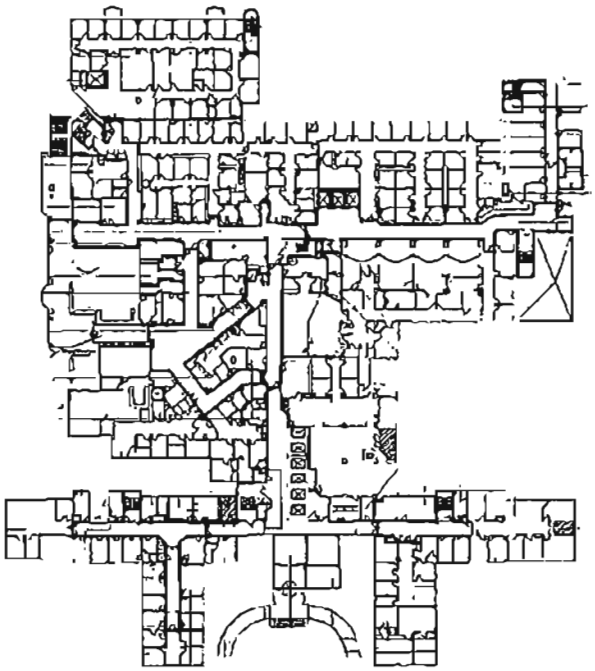
Building Plans (to the extent possible in AutoCAD): VA will provide architectural plans of each building and structure on the properties included in the project scope. Information in the documents for each building will indicate at minimum, the departmental boundaries of occupants for each floor with areas totals in departmental gross square feet (DGSF) that correspond to the totals provided in the facilities database (referenced in section 4.3.2 below). An example of a typical GFI building plan is indicated in Figure 4.5. GFI engineering systems drawings and related documents will be provided as appropriate for select buildings to identify where renovation and/or demolition would impact other related campus or facility operations.



Existing Floor Plan (GFI)

Figure 4.5 - Example of a typical GFI building plan

The Capital Planning Study Team assumes that all site plans are correlated to building plans, all buildings are correlated to departments therein, and all database references are correlated to the GFI Department List. If these correlations are not provided, the VA and Team PwC will convene to develop a methodology and solution that resolves discrepancies.

GFI - Facilities Database

The Capital Assets Inventory (CAI) Database will be provided by VA. It is assumed that the CAI database is reconciled with the documents identified above.

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GFI - Database "crosswalk" mapping documents

The VA and PwC Healthcare will provide mapping documents that demonstrate the relationship between the CARES Implementation Categories (CIC), Clinical Inventory (CI), and the GFI Department List.

GFI - Other data sets

The VA will provide documentation of approved facility planning and design standards and other data sets as appropriate and applicable to the project sites (these include historic preservation, environmental; facilities condition assessment, fire/life safety issues, etc.)

GFI and Team PwC - Site Zoning for Facility and Non-Facility areas

The Capital Planning Study Team will present existing and proposed area totals based on the CIC categories and Site Zone Categories as identified below. These categories were developed and approved in meetings with VA and Team PwC representatives on March 15-16, 2005.

- Site – Facility Zones
  - Acute Care
  - Nursing Home
  - Domiciliary
  - Rehabilitation
  - Behavioral Health
  - Ambulatory Services
  - Research
  - Administration
  - Logistics

- Site – Non-Facility Zones
  - Civil Issues
  - Buffer
  - Outdoor Recreation
  - Parking
  - Circulation
  - Demolition
  - Reuse

4.2.2. Other Potential Users of Site/VA Services

GFI - details of its non-health care facilities requirements at each project site.

The VA should describe existing non-health care facility use and square footage, proposed use and square footage, operational requirements and implications at the site, building and departmental levels.

GFI - details of potential collaboration or collocation opportunities with other VA organizations (most likely the VBA) or largely VA-funded organizations (e.g., like NCIRE).

The VA should describe existing use and square footage, proposed use and square footage, operational requirements and implications at the site, building and departmental levels.

Such co-location opportunities should identify terms of trade (including overall magnitude of potential rent and other costs saved from collocation) as well as the overall magnitude of the costs associated with implementing such a collocation

GFI - details of potential collaboration or co-location opportunities with the DoD to use/re-use VA facilities/sites. Team PwC anticipates that the VA Headquarters will coordinate with the DoD to identify potential co-location/collaboration opportunities for:

- The DoD utilizing VA land, facilities or services at sites identified in the scope of work and
- The VA utilizing DoD land, facilities or services at sites identified in the scope of work.

GFI - details of potential collaboration or co-location opportunities with Affiliated Organizations to use/re-use VA facilities/sites. Team PwC anticipates that the VA will coordinate with Affiliated Organizations to identify potential collocation/collaboration opportunities for:

- The Affiliated Organizations utilizing VA land, facilities or services at sites identified in the scope of work and
- The VA utilizing Affiliated Organizations land, facilities or services at sites identified in the scope of work.

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4.2.3. Capital Cost Basis

Team PwC's capital cost estimator (Davis Langdon) is required to prepare capital investment and capital life cycle cost estimates by Business Plan Options for both General Capital Plans and Comprehensive Capital Plans.

General Capital Plan - Stage I

A rough order of magnitude (ROM) cost estimate will be developed for each Site in each Business Plan Option at each Study Site using unit costs per GSF for the different building types within the site zones. Specific building types will be specified for costing purposes. The list will be developed for review and approval by VA Representatives. The assignment of costs will be categorized by the Cost Investment Types (as identified in the Glossary).

Separate cost estimates will be provided by Business Plan Option for each affected existing and proposed Site's facility and non-facility site zone. These then roll up into the overall capital cost estimate summary for each Site, which is input into the BPO Financial Analysis Tool for that BPO. The Building Gross Square Footage for each study option will be summarized (BGSF represents the total building area measured from the exterior face of the exterior walls). A separate calculation of developed site area, i.e. land used, will also be provided.

Site specific issues, such as soils condition, seismic requirements, access and other site related factors as identified in GFI or by the OGCs, will be considered as appropriate with each option and factored into the unit costs as appropriate.

Building cost (unit costs per SF) assumptions are based on a combination of unit rates taken from the VA's cost estimating data base and Team PwC's own historic cost information. Any significant unit rate differences from the VA cost data base will be explained as part of the reporting. Where data omissions or discrepancies exist, Team PwC and VA Representatives will convene to develop a solution and methodology for resolution. These cost estimates, based on unit costs per SF, will be adjusted as appropriate to be reflect site specific conditions, quality, time and geographic location. Published indices will be used as the basis of the capital cost escalators. Team PwC uses the Marshall & Swift Comparative Cost Index for computing these adjustments. Reference will be made to the VA's 'CARES Construction Cost Factors' documents & 'Inflation Allowance Charts', and any departure from these guidelines would be described.

Separate allowances will be included in the capital cost estimate for design contingencies and other soft costs to ensure that all items at the project cost level are accounted for. Where data conflicts or discrepancies with VA standard allowances exist, Team PwC and VA Representatives will convene to develop a solution and methodology for resolution.

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Stage I – General Capital Plan outputs will include:

- Intent (Descriptive narrative of intent of the proposed option)
- Scope (site plans and square footage totals by CIC and site zones for new, renovation and reuse)
- Cost (Estimates for square footage and costs by CIC and Facility and Non-Facility Site Zones as related to New, Renovation, Demolition or Reuse costs) and Life-cycle costs as appropriate
- Time (Estimated timeline for development through 2033.

Each option will include drawings indicating location as appropriate.

Comprehensive Capital Plan – Stage I

A rough order of magnitude (ROM) estimate will be developed for each option to the same level as presented in General Plan sites.

Stage I – Comprehensive Plan outputs will include:

- Same as for General Capital Plans

  Each option will include drawings indicating location as appropriate.

General Capital Plan - Stage II

The Stage II costing approach will be a refinement of intent and scope based on Secretary-selected options from Stage I. The methodology will be similar in that a unit price per SF will be applied. The refinement from the Stage I exercise to the Stage II exercise will be apparent and traceable.

In addition to the comparisons with benchmarking information described above, a Life Cycle Cost Analysis will be performed utilizing a '30 year life' model. This will recognize regular maintenance and replacement cycles in accordance with published recommendations such as ASHRAE.

Stage II – General Capital Plan outputs will include:

- Refinement of intent and scope based on VA selected Stage I Options with the level of detail indicating square footage and block diagrams at the site zone and building level where appropriate
- Costs allocated by VA categories at the site zone and building level where appropriate
- Refinement of timeline with Gantt chart indicating project phasing by year

Each option will include drawings indicating location as appropriate.

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Comprehensive Capital Plan - Stage II

The Stage II costing approach will be a refinement of intent and scope based on VA selected options from Stage I and will focus on a narrower band of options. The methodology will be similar in that a unit price per SF will be applied (where appropriate) at the departmental level in addition to facility non-facility site zone level. The refinement from the Stage I exercise to the Stage II exercise will be apparent and traceable.

In addition to the comparisons with benchmarking information described above, a Life Cycle Cost Analysis will be performed utilizing a '30 year life' model. This will recognize regular maintenance and replacement cycles in accordance with published recommendations (such as ASHRAE and other industry standards).

Stage II – Comprehensive Capital Plan outputs will include:

- Refinement of intent and scope based on VA selected Stage I Options with the level of detail indicating square footage and block diagrams at the site zone and department level where appropriate
- Costs allocated by VA categories at the site zone and department level where appropriate
- Refinement of timeline with Gantt chart indicating project phasing by year

Each option will include drawings indicating location as appropriate.

4.3. TOOLS AND TEMPLATES

4.3.1. Example Tools and Templates

Example tools and templates will be similar for application on both General Capital Plan and Comprehensive Capital Plan sites. An initial sample of this tool is provided in the Figure 4.6. Development of the tool for application specific to this project will be completed prior for initiation of Stage I Options.

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Figure 4.6 - Sample space allocation tool output

Louisville
Projected Area
Departments by Zone sample
March 21, 2005

EXAMPLE

Matrix is based on discussion from the March 15-16, 2005 meeting with Jill Powers.
Factors to be developed and VA approved prior to initiation of Stage 1 Options
CIC to Department mapping to be GFI

		Acute Care		Nursing Home		Domiciliary		Rehabilitation		Behavioral Health		Ambulatory Services		Research		Administration		Logistics		Existing (GFI from CAI database)	
CIC	VA Department	Area	Unit	Area	Unit	Area	Unit	Area	Unit	Area	Unit	Area	Unit	Area	Unit	Area	Unit	Area	Unit	Gross Area	Gross Leased
NURSING																					
	Inpatient Medicine	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Inpatient Surgery	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Medical ICU	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Surgical ICU	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Coronary ICU	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	23 Hour Observation/Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Rehabilitation Medical Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Inpatient Mental Health & Behavioral Medicine	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Included in Inpatient MHZ & BM	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Included in Inpatient MHZ & BM	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
DIAGNOSTIC & TREATMENT																					
	Urgent Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Primary Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Eye Clinic	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	EEG/Neurology Program (including Traumatic Brain Injury)	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Nuclear Medicine	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Pathology	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Cardiology	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Radiation Therapy	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Pulmonary/Respiratory Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Audiology Program	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Recreation Therapy Program	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Dialysis Program	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Dental	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Geriatrics	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Mental Health Clinic	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
	Substance Abuse Clinic	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		

Digestive Diseases/GI/Endoscopy	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Primary Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Employee Health	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Blind Rehabilitation	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Spinal Cord Injury	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Adult Day Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Day Treatment	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Prosthetics	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
LONG TERM CARE																				
Nursing Home Care	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
DOMICILIARY																				
Residential Rehabilitation & Domiciliary	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Other Inpatient Mental Health	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Included in Medicine Beds	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
SUPPORT																				
Nutrition/Food	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Canteen	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
(Sterile Process & Distribution) SPD Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
(Acquisition & Material Management) A&MM Warehouse	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Pharmacy - Inpatient	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Pharmacy - Outpatient	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Environmental Management Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Linen Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Engineering Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Police/Security	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Information Resource Management	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
On Site Laundry	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
On-Call Program	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Residential Quarters	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
EDUCATION																				
Education Program	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
ADMINISTRATION																				
Director's Suite	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Nursing Service Administration	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Medical Administration Services	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Fiscal Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
(Acquisition & Material Management) A&MM Administration	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		

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Human Resource Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Clinical Service Administration	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Social Work	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Voluntary Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Library Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Medical Media	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Chaplain Service	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Veterans Assistance/Service Organizations	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Child Care Centers	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Credit Union	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Employee Fitness Centers	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Veterans Benefits Administration	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
National Cemetery Administration	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Outleased Space	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
RESEARCH																				
Medical Research / Development	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
INFRASTRUCTURE																				
Lobby Space	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Centralized Staff Lockers	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Information Resource Management	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Boiler Plant	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Swing Space	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Vacant	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF	2	DGSF		
Total Departmental Area	154	DGSF	154	DGSF	154	DGSF	154	DGSF	154	DGSF	154	DGSF	154	DGSF	154	DGSF	154	DGSF		
Interdepartmental Circulation	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF		
Building Systems	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF		
Walls, Canopees, etc.	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF		
Building Efficiency Factor	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF	5	DGSF		
Building Gross Area	172	BGSF	172	BGSF	172	BGSF	172	BGSF	172	BGSF	172	BGSF	172	BGSF	172	BGSF	172	BGSF		

4.3.2. Department Area Projections as Distributed by Facility and Non-Facility Site Zones

Using the VA Department List, the tool will illustrate departmental area projections and include planning factors that quantify Departmental Gross Square Feet (DGSF). Department level area distribution by site zones will be presented for Comprehensive Capital Plan sites, and building level area distribution will be presented for General Capital Plan sites;

4.3.3. Parking Area Projections Based on Typical Parking Space to Facility Area Factors by Facility and Non-Facility Site Zones.

Factors will be adjusted with respect to facility site zones and peak hours of operation per building. A decision regarding the desired level of structured parking will be identified by the VA and parking area (BGSF) based on SF/space will derive the total projected area of structured and surface parking required. General structured parking footprint proportion will be derived from total needed capacity, typical structure and the total floors.

4.3.4. Facility and Site Area

Facility and site area requirements based on formulas derived with the VA and Team PwC to determine projected proportional distribution of space for Non-Facility site zones and the cumulative floorplate areas for buildings and parking will be made as described above. Site area not required for VA specific functions will be identified in square footage and quantity of Buildings for consideration by the Re-use Team. A sample of the Stage II site plan (for both General and Comprehensive Plan sites) and a sample facility plan (for Comprehensive Plan sites) is provided in the Figures 4.7 and 4.8, respectively.

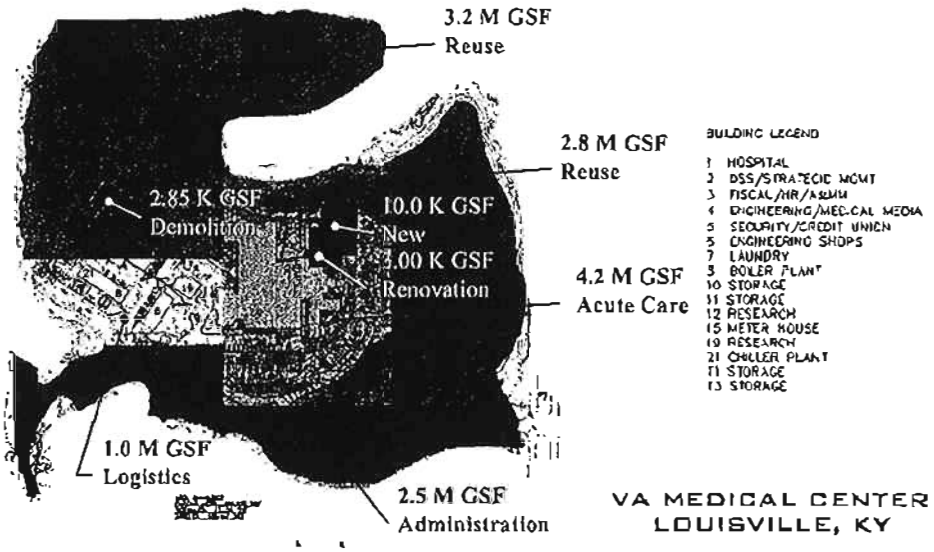

Figure 4.7 General/Comprehensive Capital Plan Site Plan

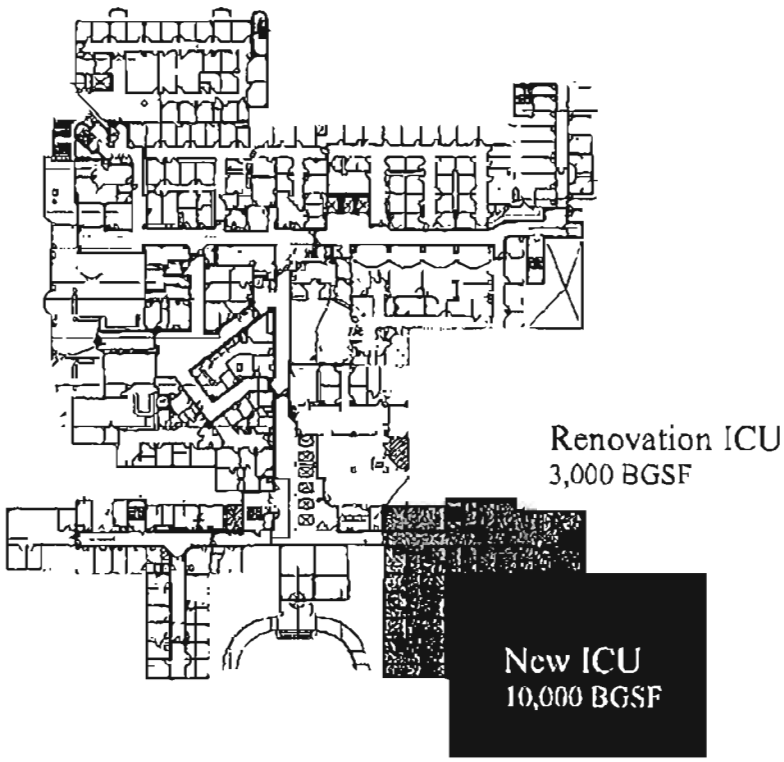

Figure 4.8 Comprehensive Capital Plan Floor Plan

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4.3.5. Cost Estimate Templates and Outputs

As indicated in 4.2.3, Capital Investment and Capital Lifecycle Cost estimates will be prepared by Perkins+Will and Davis Langdon for each Business Plan Option.

[Example tools and output will be provided following the Testing stage.]

4.3.6. Construction Schedule

The extent of projected construction will be identified by business plan option per site with specific construction projects identified for Comprehensive Plan. The scope and schedule for each will vary by site. A sample schedule is included in the Figure 4.9.

Figure 4.9

LOUISVILLE

	Task Name	Duration	Start	Finish
1	- LOUISVILLE	1476 days	Mon 1/1/07	Fri 7/1/11
2	- Ambulatory Care	329 days	Mon 1/1/07	Thu 4/3/08
3	Temporary Relocation Administration	66 days	Mon 1/1/07	Mon 4/2/07
4	Remodel	263 days	Tue 4/3/07	Thu 4/3/08
5				
6	- Nursing Home	522 days	Tue 7/1/08	Wed 6/30/10
7	New Construction	371 days	Tue 7/1/08	Tue 12/1/09
8	Demolition	129 days	Fri 1/1/10	Wed 6/30/10
9				
10	- Demolition (Site A)	852 days	Thu 1/1/09	Fri 7/1/11
11	Building # 4	129 days	Thu 1/1/09	Tue 6/30/09
12	Building # 5	129 days	Thu 1/1/09	Tue 6/30/09
13	Building # 6	129 days	Thu 1/1/09	Tue 6/30/09
14	Reuse	523 days	Wed 7/1/09	Fri 7/1/11
15				
16	Research (Building #10); Relocate to Univ. Louisville	132 days	Tue 7/1/08	Wed 12/31/08

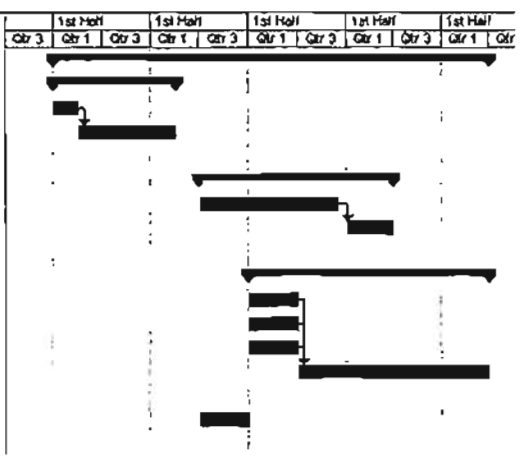

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Table of Contents

5.1. INTRODUCTION

This Chapter of Team PwC's methodology describes the approach, inputs, outputs and assumptions to be used by the re-use specialists both within Team PwC and Other Government Contractors (OGC's) appointed and directed by the Department of Veterans Affairs.

5.2. TEAM PWC GENERAL RE-USE METHODOLOGY

5.2.1. Overview

The sites that will be included in the general re-use studies include:

- Boston
- Brooklyn / Manhattan
- Louisville
- Waco
- Big Spring
- Walla Walla

5.2.2. Planning Phase

Real Property Baseline Reports

Per the scope, Government Furnished Information (GFI) for this phase includes:

- Descriptive data: boundary surveys; site plans; building plans
- Ownership data: leases; deed and title information
- Building condition reports
- Building utilization
- Aerial photographs
- Description of past practices on the facility
- List of existing tenant organizations, terms of tenancies and associated activities
- Deed restrictions
- Legal descriptions of the property
- Site improvements

Real Property Baseline – We will collect and analyze existing VA property information (both physical and legal) about the subject property (land and buildings) needed to identify significant property conditions including legal descriptions and boundaries, existing leases or easements, legislative jurisdiction, federal title and deed information, physical condition, use, and age of buildings and infrastructure, and VA capital investment profiles. The deliverable shall be a Real Property Baseline Report synopsizing/analyzing current information and identifying

build-able/develop-able vacant tracts or parcels, constraints, "as-is" non-VA potential uses of land and buildings, an overview of surrounding existing and future land uses and environmental conditions, and identification of critical data/information gaps.

Team PwC's subcontractor, Economic Research Associates ("ERA") understands that much of the above noted GFI will be provided in electronic form by the VA. Any information for the Real Property Baseline Reports that is not readily available to ERA through the data portal or the electronic data provided to ERA by the VA, will be collected by the VA or noted as not available. In addition to the GFI, ERA will obtain the appropriate documents, including comprehensive plans and specific area plans, local zoning ordinances, and similar documentation to establish the regulatory context affecting re-use potential.

ERA will develop Real Property Baseline Reports for each site that will summarize the existing conditions and identify their general impact on re-use potential indicated by these conditions, unconstrained by healthcare or capital planning input. Team PwC will identify any critical data/information gaps in the GFI received within its Real Property Baseline Report.

Environmental Baseline Study (EBS)

Collect and analyze existing VA environmental information (natural and man-made) from the existing environmental documentations (both in hardcopy and electronic format) compiled by the government in a central location per region about the subject property (land and buildings) needed to identify significant environmental conditions of VA property and assist VA efforts in complying with certain federal environmental laws (e.g., National Environmental Policy Act (NEPA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), etc.) potentially effecting the non-VA use and/or transfer of federal property as well as the timing and feasibility of alternative non-VA uses. The Contractor shall collate existing information provided by the VA on hazardous materials including asbestos containing materials (ACM); lead based paints (LBP), solid waste dumps, permits and the notice of violations, and the existence and condition of aboveground and/or underground storage tanks. Information about floodplains, wetlands, critical habitats, endangered species, and the existence of aboveground and/or below ground cultural resources, shall be collected and analyzed.

The deliverable shall be an Environmental Baseline Report identifying and analyzing significant environmental constraints to future non-VA uses. The Contractor shall be expected to document the findings using standard commercial formats like those found in ASTM Designation E1527-00, Standard Practice for Environmental Site Assessments (Phase I Environmental Site Assessment Process), or other environmental report formats acceptable to VA based on the available information and documentation provided by the Government. The report will also include identification of critical data and/or information gaps.

Horne Engineering Services, Inc. will conduct a limited environmental document review (a desk-top study) at each of the six sites listed above. The limited document reviews will examine the exiting facility documentation associated with the environmental concerns. The documentation will be provided by the Government for this effort. Horne Engineering will prepare the review report in a format similar to the ASTM Phase I Assessment report format identifying the potential environmental concerns associated with the facilities. No regulatory records search/review and site inspection are required except the review of documents provided by the Government. Qualitative review, analysis, and gap analysis will be completed and documented as part of the EBS report.

Appendix 5.A presents a summary table of contents for the EBS report required from the Re-Use teams at each of the six sites listed above (Team PwC anticipates that the VA will provide or procure similar reports for all the other study sites). It may be amended or reduced as a result of limited data availability. The report will identify any critical data and/or information gaps.

5.2.3. Stage I Option Development and Assessment

In this stage, ERA will develop a number of initial re-use plan options for each of the sites listed above for both the Baseline Business Plan Option and each of the other Business Plan Options Developed by Team PwC. These re-use plan options will be at a high level and range from re-use of the entire site, with or without the current structures, to re-use of part or all of a single buildings or partial re-use of the site, if feasible. Each site will include the option of reusing the entire site, cleared of existing buildings. Team PwC's Capital Planning team will collaborate with ERA to identify a broad range of potential physical options for each Site and provide ERA with the amounts and timing for vacant space, buildings and land for each of the Business Plan Options to be considered in Stage I. Other options will be developed by ERA upon receipt of indications of vacant land, buildings and space from the Capital Planning Team's initial Business Plan Option development. ERA anticipates that similar re-use options may be applicable to multiple Business Plan Options.

We will produce a realistic Re-use Plan (including re-use strategies, options, outcomes, schedules, and contacts) capable of gaining acceptance and approval by high-level VA decision-makers.

Preliminary Highest and Best Use Analysis

Highest and Best Use Analysis – We will collect and analyze non-VA real estate and market information needed to identify the most probable non-VA use, or range of uses, that is:

- Physically possible
- Legally (under both federal and state law) permissible
- Financially (through private sources) feasible, and
- Most profitable in terms of economic or operational value returned to VA

This task will include the following subtasks:

- Overview of salient market conditions
- Overview of local political and regulatory climate toward development
- Identification of potential high demand/high value VA properties
- Identification of likely alternative uses and users
- Likely alternative use analysis
- Pro forma Analysis by likely market types/uses

ERA has developed a checklist template (see Appendix 5.B) to screen the potential candidate uses for each site, whether for the whole site, a portion of the site, or for parts or all of specific buildings. The purpose of this exercise is to eliminate non-viable re-use options using rational and systematic application of consistent criteria. The criteria will include the presence and strength of key market demand drivers for specific uses, as well as the appropriateness of the site - size, configuration, access, visibility, and the like--to accommodate such uses. For example, hotel market demand drivers would include the presence of tourist attractions or employment centers nearby. This process will also consider surrounding land uses, the presence of nearby institutions, and existing linkages, both physical and programmatic.

Market Overview

For each of the potential uses identified in the preliminary screening (described above), ERA will conduct a market overview to develop an understanding of the level of likely market support for each relevant use on the sites, and to develop high level cost and revenue factors, and potential absorption.

ERA will attempt to utilize similar, standard, published sources of data for each of the sites, such as the Census, State data centers or labor departments, or private data providers such as Claritas, ESRI, CoStar, REIS, or Smith Travel Research. However, different uses in different locations may have unique data needs. For instance, Manhattan market analysis may require Manhattan-specific data sources. Additionally, hotel market data may not be available for remote locations, necessitating a unique approach to hotel demand analysis, should the initial filter indicate this use warrants analysis.

Environmental and Regulatory Assessment

Based on the Real Property Baseline Reports prepared during the Planning Phase; zoning and building code issues identified in the Real Property Baseline Reports; environmental issues identified in the Environmental Baseline Reports; and any issues identified by stakeholders in their communications to Team PwC or the initial public meeting process, ERA will identify key constraints and assess the potential for regulatory delay or risk.

Profile of Potential Uses and Users

ERA will identify candidate uses and, to the extent possible, categorical or specific candidate users for the surplus property. We anticipate that a significant source of interest may be derived from related healthcare and educational institutions. We will review any potential interest expressed through the stakeholder process from adjacent or linked institutions. For other uses, ERA will describe the type of activity or business, their space or land requirements, preliminary working assumptions for density, product type, development economics, and land rent and disposal (fee simple) value.

Desktop Valuation Analysis

We will create a Valuation Report identifying asset re-use strategies designed to maximize value and economic return to VA.

Stage I desktop valuation analysis will include both an estimate of development costs and residual land value, based on a stabilized year development and re-use cash flows associated with the re-use of vacant land and buildings associated with each of the Stage I Business Plan Options developed for the site by Team PwC's Capital Planning Team. Development costs will include any necessary demolition costs (to be provided by Capital Planning team), as well as hard and soft costs and any likely infrastructure and amenity costs.

The re-use team will apply an appropriate capitalization rate to a stabilized year cash flow for each option to determine the potential residual land value. Capitalization rates will reflect the end-user's or developer's perspective, rather than OMB or VA. The intent of this exercise is to determine the potential market support for re-use options. An estimate of annual rent and fee value will then be determined, based on a market-indicated rent to value proportions estimated based on local sources.

The broad indications of value for each re-use option that are developed in the desktop valuation analysis task will be converted to a re-use assessment scoring using the scales listed below, with accompanying descriptions of the level of difficulty and risk inherent in the options and included in the assessment of re-use potential for business plan options. The Team PwC Re-use team will provide these inputs to the Local Advisory Panel process and the Stage I deliverable. ERA will be available to address questions or concerns during this process.

Assessment of Re-Use Potential for Stage I Business Plan Options

We will produce a realistic Re-use Plan (including re-use strategies, options, outcomes, schedules, and contacts) capable of gaining acceptance and approval by high-level VA decision-makers.

Team PwC will produce descriptive summaries and assessments of potential re-use programs for each of the Business Plan Options (including the Baseline Business Plan Option) developed by Team PwC. ERA anticipates that similar re-use programs may be applicable to multiple Business Plan Options. These assessments will utilize the amount and timing of vacant land, buildings and space for Business Plan Options identified by the Capital Planning Team and net receivable values based on the net realizable cash flows identified in the Preliminary Highest and Best Use Analysis, and provide assessment scores in accordance with the scoring methodology set out in Chapter 2 (Decision Support and Business Planning). This assessment will include:

- Identification of the potential development product, the tenant profile, the timing and anticipated pace of redevelopment or re-use
- Identification of the amounts of land, buildings and space used for a re-use program and any space, land or buildings assumed not to be suitable for re-use
- Identification of suitable approaches to minimize retained ownership costs of any space, land or buildings assumed not to be suitable for use by the VA or re-use by pother parties
- Broad indications of value and identification at a high-level of the amounts and timing of potential re-use costs and revenues
- Re-use assessment scoring, using the scales listed below, with accompanying descriptions of the level of difficulty and risk inherent in the options and included in the assessment of re-use potential for business plan options. Team PwC assumes that the VA will instruct the OGC to provide these inputs to the Local Advisory Panel process and the Stage I deliverable and be available at Local Advisory Panel meetings and to Team PwC to address questions or concerns during this process.

Level of re-use proceeds relative to Baseline (based on results of initial re-use study)	
↓↓	High demolition costs, with little return anticipated from re-use
-	No material re-use proceeds available
↑	Similar level of re-use proceeds compared to Baseline (+/- 20% of Baseline)
↑↑	Higher level of re-use proceeds compared to Baseline (e.g. 1-2 times)
↑↑↑↑	Significantly higher level of re-use proceeds compared to Baseline (e.g. 2 or more times)

- Initial consideration of key risks and implementation issues.

5.2.4. Stage II Option Refinement and Testing

The tasks in Stage II will be similar to those outlined in Stage I, yet they will further refined and supplemented with additional inputs. At the commencement of this Stage Team PwC's Capital Planning team will collaborate with ERA to identify the range of potential physical options for each Site based on the Secretary's State I decision and provide ERA with the amounts and timing for vacant space, buildings and land for each of the Business Plan Options to be considered in Stage II.

Market Assessment

For each of the proposed uses in the selected Business Plan Options to be studied in this phase, the Re-use team will create a more detailed market assessment that relies on primary market data. Tasks include:

- Interview local real estate and land development professionals, including real estate brokers, property developers, builders, and economic development officials, regarding market conditions
- Obtain regional market data sources for the applicable uses. Variables to obtained include sales prices, rents, absorption, and inventory data
- Refinement of re-use programs based on revised amounts and timing of vacant land, buildings and vacant space in buildings for Business Plan Options generated by the Capital Planning Team in Stage II
- Identify relevant properties or development projects in the appropriate submarket and determine their capital costs and operating costs and revenues
- Using the data from both Stages I and II, the re-use team will refine the market analysis that was completed in Stage I

Environmental and Regulatory Environment

In Stage II, the assessment of the political and legal environment will be refined by holding meetings with local officials regarding the viability of zoning or other required changes in land use entitlements. Additionally, public reaction to the re-use options presented at the end of Stage I and other broad public desires for the sites expressed through the stakeholder process will be assessed.

Business Plan Option Refinement

Based on the refined market assessment and additional local inputs, the re-use potential of Business Plan Options will be refined, as necessary. Other non-market uses, such as another healthcare provider, or homeless shelter, that evolve from Stage I will be incorporated in this stage.

Inputs to the Financial Analysis

The Re-use team will complete a 30-year cash flow pro forma for each of the Business Plan options included in Stage II. The cash flows will identify the net revenue potential for the VA. The preferred transaction structure to be analyzed will be a 75-year Enhanced Use Lease. Since the timeline for the study is 30 years, the net present value of the remaining years of the lease will be capitalized in year 30. Where the value of the property under a given option will be greatly enhanced through disposition, we will create cash flow pro-formas that incorporate disposition, noting the likely risks and hurdles that might accompany such a disposition strategy.

Public and Private Funding Alternatives

The re-use team will consider potential redevelopment or re-use incentives, including direct investment by other government, state and local agencies through various grant or loan programs, tax credits, and similar approaches. Additionally, the re-use team will conduct an assessment of funding and financing options for the redevelopment or repositioning of the asset.

Implementation and Risk Assessment

The re-use team will recommend responsibilities for VA, development partners, and others as appropriate arrayed against an expected timeframe. Additionally, potential regulatory changes or other hurdles will be noted. Additionally, factors such as the location of proposed uses on the sites, or other uses that may impact the marketability of the proposed uses will be explored.
The re-use team will provide inputs to the Team PwC risk assessment and overall scoring of options in accordance with Chapter [6] (Implementation Planning & Risk Management Methodology) and Chapter 2 (Decision Support and Business Planning Methodology).

Liaison and Refinement

Throughout this stage ERA will be involved in liaison with Team PwC's Site Leader for each site and the Capital Planning team in particular. In addition, ERA anticipates being required to present and answer re-use related questions at Local Advisory Panel meetings. ERA also anticipates being required to revise and amended its analyses following Local Advisory Panel meetings to reflect the opinions received at these meetings and potentially to also develop additional options in short order to reflect the requests of the Local Advisory Panels.

Team PwC's stakeholder engagement team will provide ERA with copies of any comments or testimony received from stakeholders. ERA will provide Team PwC Site Leaders with both a commentary and expert advice on the impact stakeholders' comments have on re-use options for each site.

Following completion of the option assessment and the 4th Local Advisory Panel meeting, Team PwC will submit a draft business plan to the VA for its comment and review. This process is likely to take several months and will most likely result in the need to refine and/or revise analysis and inputs of the re-use and other team members potentially 2-3 times. It may also result in there needing to be another Local Advisory Panel meeting, where the re-use team would participate, and potentially further analyses and revisions to reflect the discussions at this meeting. The re-use advisor's inputs are integral to the finalization of the business plan for each site and therefore, ERA anticipates being required to refine the language of its outputs (or inputs to the Business Plan) as the Business Plan is refined in this process.

5.3. GENERAL AND COMPREHENSIVE RE-USE METHODOLOGY OTHER SITES

General and Comprehensive Planning studies are to be completed by Other Government Contractors (OGC) and are to work at the direction of the Department of Veteran Affairs.

5.3.1. Overview

As indicated in the SoW the OGCs are to complete both General Re-Use Plans and Comprehensive Re-Use Plans at:

1. Canandaigua
2. Montrose/Castle Point
3. St. Albans
4. Lexington
5. Livermore
6. White City
7. Perry Point
8. Gulfport/Biloxi
9. West LA

As indicated in both the SoW and in Team PwC's proposal, the work of the OGCs are an integral part of the study process at these sites. Team PwC will coordinate their work with the work of our study team and as such their inputs are on the critical path for each site.

Team PwC anticipates that the OGCs will provide the deliverables from such studies in accordance with VA's direction. Team PwC assumes that such direction would be commensurate with Team PwC's SoW, at a timescale commensurate with the work of Team PwC at each site.

Real Property and Environmental Baseline Reports

Team PwC assumes that the VA will provide or instruct the OGCs to provide a Real Property Baseline Report and an Environmental Baseline Report for each of the sites listed above consistent with those prepared by Team PwC. Team PwC had planned to complete these tasks within 1-2 weeks of the start of Stage I. Appendix 5.A contains a potential table of contents for the Environmental Baseline Study report (The Table of Contents is subject to VA having the information available for the VA facilities at each of the Study Sites).

5.3.2. Stage I – Initial Business Plan Option development and assessment

(Phase 2 of the Enhanced-Use Lease Real Estate Advisory Services Contract)

Team PwC assumes that the VA will provide or instruct the OGCs to provide high-level re-use plan options for each of the sites listed above for both the Baseline Business Plan Option and each of the other Business Plan Options Developed by Team PwC. Team PwC assumes these re-use plan options will range from re-use of the entire site, with or without the current

structures, to re-use of part or all of a single buildings or partial re-use of the site, if feasible. Team PwC assumes such re-use plans will include the option of reusing the entire site, cleared of existing buildings. Team PwC's Capital Planning team will collaborate with the OGC to identify a broad range of potential physical options for each Site and provide the OGC with the amounts and timing for vacant space, buildings and land for each of the Business Plan Options to be considered in Stage I. Specific Re-Use Plan Options will be dependent on Team PwC Business Plan Option development and the provision of indications of vacant land, buildings and space from the Team PwC Capital Planning Team. Team PwC anticipates that Re-use Plan Options developed by the OGC may be applicable to multiple Business Plan Options developed by Team PwC. This will provide an indication for each Business Plan option of the potential surplus space, buildings and land available for re-use.

The Team PwC Capital and Re-Use Planning teams will require early coordination with the OGCs at each site and inputs from them as to the scale of potential value of the site, as well as guidance as to any particular site and or building re-use factors that the capital planner should consider in developing capital planning options. This is particularly important where potentially high re-use values may have a material impact on the types of Business Plan Option developed. Where re-use potential is strong and land values are high, the team should develop Business Plan Options that examine the trade off between investment in site-consolidation against the income that the VA would receive for the site re-use. Where land values are high, alternative locations could be considered – closer to the Veterans or in Secondary locations, rather than primary locations – in these cases we anticipate the Capital Planner Team (who will define the footprint required) and the PwC Site Leader interacting with the VA/OGC Re-Use Contractor (who should have a good understanding of land values in the area) to assess the attractiveness of such options.

Team PwC assumes that the VA will instruct the OGCs to prepare an initial General Property Re-use Plans with options and quantified inputs to the financial analysis for consideration by both the Team PwC Site Team Leader and for presentation to the Local Advisory Panels.

Team PwC assumes that the VA will instruct the OGC to prepare re-use plan options for each Business Plan option developed by Team PwC and provide such additional options that Re-Use OGC considers necessary to be considered. Team PwC anticipates that re-use plan options may be applicable to more than one Business Plan Option. The re-use OGC is expected to provide a broad range of options for the re-use potential for part and whole areas of VA installations, part and whole re-use of individual existing buildings, including re-use of any surplus space within a medical center or other property jointly with VA (or other tenant's) continued operation. Certain re-use options, may directly relate to provision of care to veterans. For example, the VA may lease part of the site to a provider of long term care (LTC). The re-use OGC should provide an indication of the Ground Rent that should be paid by the care provider for the site based on, we assume, full open market rents levels. Team PwC will identify the charges payable for the LTC. It is our understanding that ground rents are to be at open market rental levels provided by the OGC, unless there is a strong case why a reduced rent would offer the VA better value for money.

Desktop Valuation Analysis

Team PwC assumes that the VA will instruct the OGC to complete a Stage I desktop valuation analysis, which will include both an estimate of development costs and net residual land values, presumably based on a stabilized year development and re-use cash flows associated with the re-use of vacant land and buildings associated with each of the Stage I Business Plan Options developed for the site by Team PwC's Capital Planning Team. Team PwC anticipates that development cost assumptions for such re-use plans will include any necessary demolition costs, as well as hard and soft costs and any likely infrastructure and amenity costs.

Assessment of Re-Use Potential for Stage I Business Plan Options

Team PwC assumes that the VA will instruct the OGC to provide Team PwC with descriptive summaries and assessments of potential re-use programs for each of the Business Plan Options (including the Baseline Business Plan option) developed by Team PwC. Team PwC anticipates that similar re-use programs may be applicable to multiple Business Plan Options. These assessments will utilize the amount and timing of vacant land, buildings and space for Business Plan Options identified by the Capital Planning Team and net receivable values based on the net realizable cash flows identified in the Preliminary Highest and Best Use Analysis, and provide assessment scores in accordance with the scoring methodology set out in Chapter 2 (Decision Support and Business Planning).

This assessment will include:

- Identification of the potential development product, the tenant profile, the timing and anticipated pace of redevelopment or re-use,
- Identification of the amounts of land, buildings and space used for a re-use program and any space, land or buildings assumed not to be suitable for re-use
- Identification of suitable approaches to minimize retained ownership costs of any space, land or buildings assumed not to be suitable for use by the VA or re-use by pother parties
- Broad indications of value and identification at a high-level of the amounts and timing of potential re-use costs and revenues, re-use assessment scoring, using the scales listed below, with accompanying descriptions of the level of difficulty and risk inherent in the options and included in the assessment of re-use potential for business plan options;

Level of re-use proceeds relative to Baseline (based on results of initial re-use study)	
↓↓	High demolition costs, with little return anticipated from re-use
-	No material re-use proceeds available
↑	Similar level of re-use proceeds compared to Baseline (+/- 20% of Baseline)
↑↑	Higher level of re-use proceeds compared to Baseline (e.g. 1-2 times)
↑↑↑↑	Significantly higher level of re-use proceeds compared to Baseline (e.g. 2 or more times)

- Initial consideration of key risks and implementation issues.
- Inputs to the Financial and Economic Analysis and assessment of Business Plan Options, including completion of financial analysis input and assessment templates as indicated in Appendix 5.C

Team PwC assumes that the VA will instruct the OGC to provide these inputs to the Local Advisory Panel process and the Stage I deliverable and be available at Local Advisory Panel meetings and to Team PwC to address questions or concerns during this process.

Team PwC assumes that the VA will instruct the OGC to provide inputs into Team PwC's business planning. These inputs are likely to include, but not be limited to:

Summary of the Re-use opportunity at the Site:

- Summary of the VA's facilities/land in the Study Area and a summary of key issues/constraints from the OGC's Real Property and an Environmental Baseline studies
- An overall summary of local market conditions and development trends/cycles in the vicinity of each of the VA facilities – such an analysis should include the re-use zoning context, provide general indicators of land and building values in the area and net rents achievable on medical or similar space on the open market (typically what is called a comparator analysis)
- An initial indication of the potential Highest and Best Use of each of the VA's potential re-use sites in the Study area
- A summary of the VA's recent experience letting or attempting to let, dispose or jointly re-use any surplus space / land at the study facilities
- A summary of any enquiries received by the VA from other VA Agencies, Federal Agencies, Research or Education bodies, providers of medical or long term care or developers seeking to re-use parts of VA sites/buildings
- A summary of any material issues impacting re-use raised by stakeholders or other parties during or following prior CARES rounds

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Description and assessment of Initial Re-use options

Team PwC anticipates that the OGC will provide an initial re-use plan for each Business Plan Option developed by Team PwC (although it is anticipated that re-use plan options could be applicable to multiple Business Plan Options), for each option this would include, as a minimum:

- A brief description of the re-use opportunity (i.e. the space or land available to market)
- A brief summary of any significant implementation issues or key risks and the pros and cons from a re-use perspective of implementing each option
- An indication of the program of re-use (i.e. a projection of the land or space assumed to be "taken-up" by the re-use plan) and the amount in each study year of surplus land/space remaining vacant that the VA would need to continue to maintain and secure
- An initial Rough Order of Magnitude net cash flows for each option for inclusion in the initial financial modeling (inclusive of all the VA's costs to achieve the cash flow). As indicated by Jim Sullivan (OAEM), it is not the VA's policy to invest re-use, rather the VA anticipates that the developer (the tenant or the acquirer) will pay for all costs of separating the sites, traffic flows and utilities. In addition, any transaction costs, including costs of the VA's due diligence etc. would be netted of off amounts received from the developer/tenant. We anticipate that the OGC will be required to provide cash flows for a small number of alternative timing assumptions.
- Inputs to the initial Rough Order of Magnitude indication of economic impact from the re-use in accordance with Appendix 5.C. This would include, for example, an indication of the scale of any redevelopment and number and type of jobs that could be located on an ongoing basis in the redeveloped/re-used site

Team PwC assumes that The VA will instruct the OGCs to be present at the 2nd Local Advisory Panel meeting in Stage I and provide presentations, if required, and supporting materials, on their study processes, the options they are considering and their conclusions. It may be necessary for the OGC to attend the 1st Local Advisory Panel meeting if the Agenda for that meeting changes from the Training/Administration meeting currently envisaged.

All the above will need to be completed within 3-4 weeks following commencement of Stage I. The precise timing for each site and interfaces is to be developed.

5.3.3. Stage II – Refinement and more detailed assessment of options
(Phase 3 of the Enhanced-Use Lease Real Estate Advisory Services Contract)

As indicated in the title this stage involves the more detailed development and analysis of the up to 6 options selected by the VA for study in Stage II, including more engagement with Local Advisory Panels and Stakeholders to ensure concerns are identified and addressed in refinement and completion of option development.

At the commencement of this Stage Team PwC's Capital Planning team will collaborate with the OGC to identify the range of potential physical options for each Site based on the Secretary's State I decision and provide the OGC with the amounts and timing for vacant space, buildings and land for each of the Business Plan Options to be considered in Stage II.

In relation to the Re-Use studies this would involve further consideration of specific issues:

Market Assessment

For each of the proposed uses in the selected Business Plan Options to be studied in this phase, Team PwC assumes that The VA will instruct the OGCs to create a more detailed market assessment that relies on primary market data. Tasks include:

- Interview local real estate and land development professionals, including real estate brokers, property developers, builders, and economic development officials, regarding market conditions
- Obtain regional market data sources for the applicable uses. Variables to obtained include sales prices, rents, absorption, and inventory data
- Refinement of re-use programs based on revised amounts and timing of vacant land, buildings and vacant space in buildings for Business Plan Options generated by the Capital Planning Team in Stage II
- Identify relevant properties or development projects in the appropriate submarket and determine their capital costs and operating costs and revenues
- Using the data from both Stages I and II, the re-use team will refine the market analysis that was completed in Stage I

Environmental and Regulatory Environment

Team PwC assumes that The VA will instruct the OGCs to refine in Stage II, the assessment of the political and legal environment will be the assessment of Environmental and Legal Environment by holding meetings with local officials regarding the viability of zoning or other required changes in land use entitlements. Additionally, public reaction to the re-use options presented at the end of Stage I and other broad public desires for the sites expressed through the stakeholder process will be assessed.

Business Plan Option Refinement

Team PwC assumes that The VA will instruct the OGCs to refine the re-use potential of Business Plan Options based on their refined market assessment and additional local inputs, as necessary. Other non-market uses, such as another healthcare provider, or homeless shelter, that evolve from Stage I will be incorporated in this stage.

Inputs to the Financial Analysis

Team PwC assumes that The VA will instruct the OGCs to complete a 30-year cash flow pro forma for each of the Business Plan options included in Stage II. The cash flows will identify the net revenue potential for the VA. The preferred transaction structure to be analyzed will be a 75-year Enhanced Use Lease. Since the timeline for the study is 30 years, the net present value of the remaining years of the lease will be capitalized in year 30. Where the value of the property under a given option will be greatly enhanced through disposition, we will create cash flow pro-formas that incorporate disposition, noting the likely risks and hurdles that might accompany such a disposition strategy.

Implementation and Risk Assessment

Team PwC assumes that The VA will instruct the OGCs to recommend responsibilities for VA, development partners, and others as appropriate arrayed against an expected timeframe. Additionally, potential regulatory changes or other hurdles will be noted. Additionally, factors such as the location of proposed uses on the sites, or other uses that may impact the marketability of the proposed uses will be explored.

The re-use team will provide inputs to the Team PwC risk assessment and overall scoring of options in accordance with Chapter 7 (Implementation Planning & Risk Management Methodology) and Chapter 2 (Decision Support and Business Planning Methodology).

Stage II Deliverables

- Revised Market Assessments and Re-use Plans for each site
- Refined Re-use Plans and value analysis, that will consist of 30-year pro formas for each of the Business Plan options from Stage I that are selected by the Secretary for further analysis in Stage II - the outcome of this would be a more detailed exploration of each of the Stage I assessment (items listed above) and any associated unresolved issues) and result in an more accurate definition of the re-use options and assessment of the associated potential net cash flows
- Implementation Assessments that includes key findings from Political and Legal Assessment task, as well as other hurdles and considerations for implementation - we anticipate the OGC will coordinate closely with Team PwC on the potential timing and associate risks with Re-use. Such coordination would include providing Team PwC with Schedules and Risk analysis consistent with the Team PwC implementation and risk analysis methodology (see Chapter 7). As agreed with the VA, such analysis most likely will consider the impact on net cash flows of one or more alternative timing scenarios (e.g. a 3 or a 5 year delay or a slower implementation by the VA). Transition issues should including potential revenues from short term lets of space or land and other revenue generating/offsetting measures.

- Impact on Local Communities and Stakeholder reaction – for the non-healthcare study sites, re-use of VA sites may have a potential significantly positive and/or negative impact on local communities and stakeholder groups.

  - Team PwC anticipates the OGC's serving a material role in securing and assessing inputs from local government agencies and community representatives responsible for real estate development, the EPA, SHPO and other governmental agencies engaged in the NEPA processes and for advising Team PwC and the Local Advisory Panels on the reasonableness or otherwise of any Re-use related commentary received from stakeholders (including local neighbors).
  - In addition, since Team PwC anticipates that the economic impact associated with Re-Use of vacated VA sites should have a materially positive or mitigating effect on the overall community impact of a particular option, to that end Team PwC anticipates the OGC's providing inputs to Team PwC's high level economic impact assessment for each option. As indicated above such assessment may include consideration of the potential development expenditures and the levels of on-going employment associated with such development (consistent with Team PwC's high level initial economic impact assessment methodology, see Chapter 6).

- Inputs to the Financial and Economic Analysis and assessment of options (including potential re-use cash flows associated with each option and economic impact inputs, such as development costs and on-going employment) - The OGC's will be actively engaged in the generation of the financial analysis and at the direction of the VA are assumed to be available to the Team PwC team on short notice to respond to enquiries, particularly as the financial assessments of options are assembled and relative merits of options are assessed.
- Inputs to the presentation of options to Local Advisory Panels and the evaluation of re-use related stakeholder comments - Team PwC assumes that The VA will instruct the OGCs to be present at all Local Advisory Panel meetings in Stage II and provide presentations, if required, and supporting materials, on their study processes, the options they are considering and their conclusions.
- Inputs to the Draft and Final Business Plan - Team PwC assumes that The VA will instruct the OGCs to provide high quality and suitable for publication Sections and Appendices for inclusion into the Draft Business Plan. Team PwC will provide the VA with a document template for use by the OGC. Team PwC assumes that acceptance of the OGC's work products by the VA is acceptance for these work products to be included in the Business Plan. Team PwC therefore assumes that it will not be required to edit the OGCs work products prior to their inclusion in the draft business plan.
- Team PwC assumes that The VA will instruct the OGCs to present the re-use plan at meetings with the VA and CIB as required by the VA and Team PwC's COTR

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Liaison and Refinement

Throughout this stage the OGC will be involved in liaison with Team PwC's Site Leader for each site and the Capital Planning team in particular. In addition, OGC can anticipate being required to present and answer re-use related questions at Local Advisory Panel meetings. The OGC can also anticipates being required to revise and amended its analyses following Local Advisory Panel meetings to reflect the opinions received at these meetings and potentially to also develop additional options in short order to reflect the requests of the Local Advisory Panels.

Team PwC's stakeholder engagement team will provide the OGCs with copies of any comments or testimony received from stakeholders relevant to the re-use of each Site. The OGC will be expected to provide Team PwC Site Leaders with both a commentary and expert advice on the impact stakeholders' comments have on re-use options for each site.

Following completion of the option assessment and the 4th Local Advisory Panel meeting, Team PwC will submit a draft business plan to the VA for its comment and review. This process is likely to take several months and will most likely result in the need to refine and/or revise analysis and inputs of the re-use and other team members potentially 2-3 times. It may also result in there needing to be another Local Advisory Panel meeting, where the re-use team would participate, and potentially further analyses and revisions to reflect the discussions at this meeting. The re-use advisor's inputs are integral to the finalization of the business plan for each site and therefore, The OGC should anticipate being required to refine the language of its outputs (or inputs to the Business Plan) as the Business Plan is refined in this process.

All the above, will need to be completed within 8-12 weeks following commencement of Stage II. The precise timing for each site and interfaces is to be developed.

Appendix 5.D provides details of the Interface with OGCs and the Inputs and Outputs between the VA's Contractors.

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6.1. SCOPE AND PURPOSE

Team PwC is required to develop a detailed cost effectiveness financial analysis for each option to ensure effective use of VA resources, and the provision of quality health care. This analysis shall be broken out into operating (recurring) costs and capital costs (non-recurring). The Secretary's decision document and CARES Commission report noted concerns regarding the limited financial analysis conducted during development of the Market Plans. Therefore, special attention shall be given to providing an independent and more specific department/service level cost analysis that builds upon earlier CARES analysis and provides clearly described cost and business decision options as part of the recommendation.

The detailed cost effectiveness study is required to include a return on investment analysis anticipated discounted cash flows, net present values, life cycle costing (30 years), and payback periods for the investments in the options. Team PwC is required to complete a Cost Effectiveness Analysis (CEA) using a template provided by the VA. Team PwC is required to validate the template to ensure it will address all issues and costs, including the transition costs for the site and other impacted sites. The CEA can be found on VA's Internet Site, under "About VA", "Strategic and Capital Plans", "Capital Investments", or (http://www.va.gov/oaem/).

Operating costs are discussed in the healthcare chapter: In the analyses, Team PwC illustrates how recommended options enhance services while more effectively utilizing resources and to outline the impact on operating costs, savings and FTEE in proposed options.

The financial cost effectiveness analysis must be presented clearly so that it can be easily understood by stakeholders as well as VA decision makers. Specific emphasis shall be placed on translating complex concepts such as present value, net present value, life cycle costing and others into language and examples that are easily understood. The results shall not be bogged down in technical language that is confusing and is a barrier to understanding the options, assumptions, the key financial/cost differences, and what they could mean in terms of staff/people and services that can be extrapolated from the cost differences.

6.2. APPROACH

Team PwC has developed a BPO Financial Analysis Tool, which is to be used to develop a detailed cost effectiveness analysis for each Business Plan Option developed for each Study Site. Inputs to the BPO Financial Analysis Tool include the effects of both operating and capital expenditures (recurring and non-recurring costs and revenues) and receipts (re-use proceeds) on each BPO. Outputs include: annual Life-cycle Cash-flows, annual VA Investment Levels, Net Present Costs, and also Return on Investment, Internal Rates of Return and Payback Periods for investments where applicable.

The BPO Financial Analysis Tool is comprised of a set of Microsoft Excel spreadsheets to facilitate the analysis at each of the Health Care and Non-Health Care Study Sites. As indicated in Figure 6.1 members of the Healthcare, Capital and Re-use teams provide inputs to the Financial Analysis and will complete a unique single spreadsheet model for each of the Analysis Scenarios at each of the Study Sites. Each unique Study Site- and Analysis Scenario-specific spreadsheet accounts for all activity within a Study Site and the model requires inputs specific to each Site within a Study Site. Some general assumptions (such as escalation and discount rate factors) will be pre-populated for each Study Site. Healthcare, Capital and Re-use Study Team members will, however, enter specific data resulting from their planning studies.

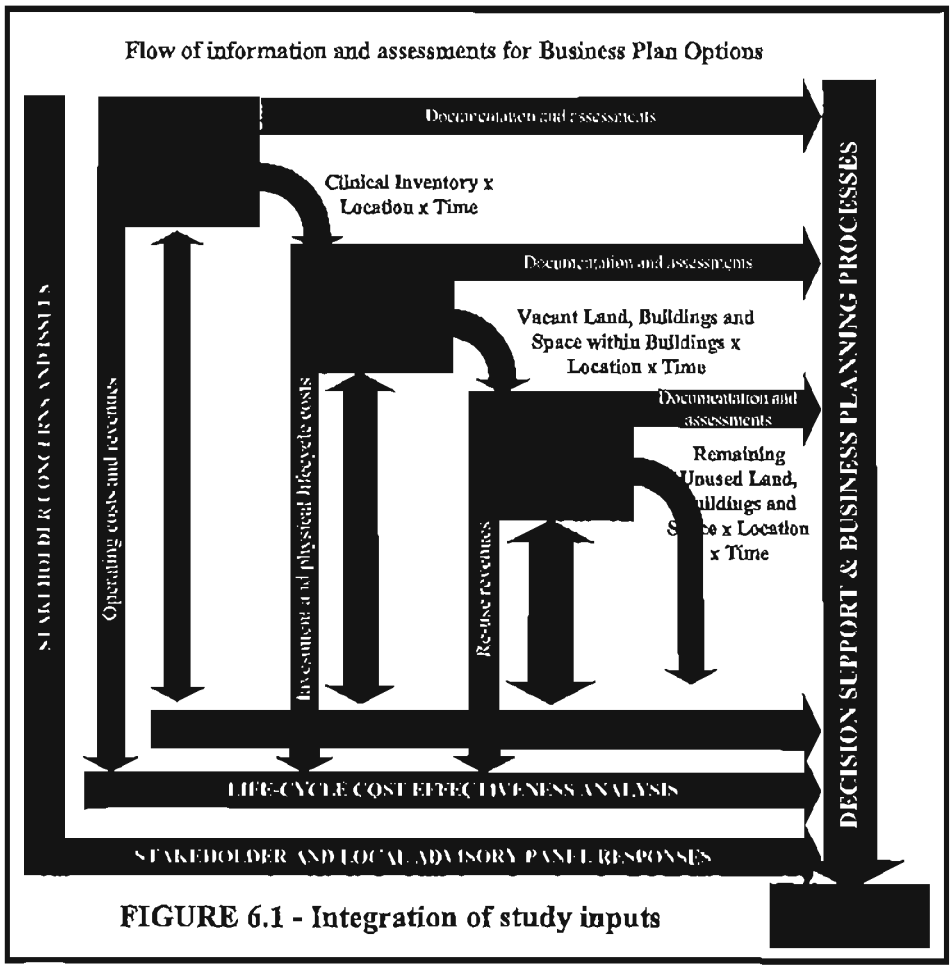

FIGURE 6.1 - Integration of study inputs

A second Microsoft Excel spreadsheet model ("The Comparison Model") is used to compare the outputs from BPO Financial Analysis Tools completed for each BPOs at each Study Site. The Comparison Model completes the cost effectiveness analysis and generates the financial outputs required for option assessment and the Draft Business Plans.

The Comparison Model and completed BPO Financial Analysis Tools provide the basis for an independent cost effectiveness analysis, compliant with OMB Circular A-11 and A-94 requirements. The adjacent flow chart further highlights the inputs and outputs from the financial analysis.

6.2.1. General Inputs and Assumptions

Scenarios: Two principal scenarios are considered for each BPO.

- Base Case - most expeditious and economically favorable time frame
- Delay Case - most expeditious and economically favorable time frame plus 5 years

As indicated in Figure 6.2, Team PwC's single analysis framework provides a common input framework for each work group to use for each BPO and Scenario at each of the Study Sites.

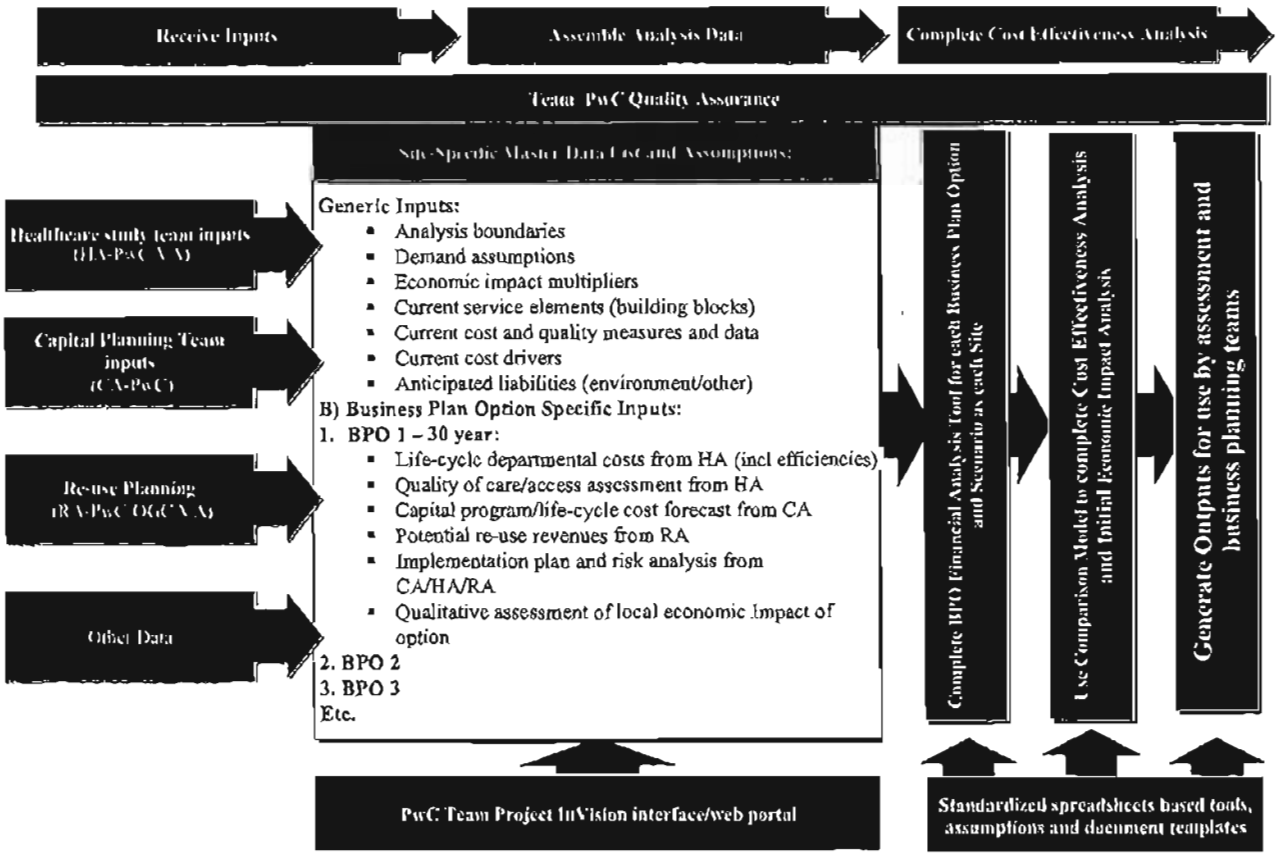

Figure 6.2 – Single Analysis Framework for Each BPO.

The most expeditious and economically favorable time frame is established by the Health Care, Capital and Re-use Study teams based on a) general guidance provided by the VA on the time the VA requires to secure funding; and b) the study teams' assessment of the pace of implementation that can be achieved given the requirements of NEPA, design processes, time required to establish contracts, etc. and such other normal development constraints as could apply to a hospital / health care or site disposal/redevelopment.

The 30-Year planning horizon with annual calculations begins in Fiscal Year ("FY") 2003 and ends in FY2033:

- Estimates for healthcare-related items (unit costs, workload, cost adjustments, etc.) from FY2024 and beyond are assumed to be equal to FY2023 values. The only growth projected beyond FY2024 for Healthcare-related items is due to escalator (inflationary) assumptions; and
- Estimates for Capital and Re-use planning items will be input over the entire 30-year planning horizon

Total Allocated Workload to be Allocated to the Sites by CIC by planning year for a given Study Site obtained directly from the VA's Demand Forecasts will be put into the BPO Financial Analysis Tool to serve as a further data validation check against the site-specific allocated workload input by the Healthcare team.

Escalation (inflation) factors convert data input in current (unescalated) dollars to escalated (nominal) values in each year of the planning analysis. Additional details on the following escalation discussion can be found later in this Chapter.

- All costs are escalated into nominal terms using a range of cost-specific inflation assumptions provided by relevant SMEs for each of the components (Healthcare, Capital and Re-use) of the analysis directly from the specific analysis teams or from estimates obtained by the VA. Consistent escalation factors will be set by the Team PwC National Financial Analysis team for each study site. Escalators are constant for individual sites within a given study site.
- Inflation projections from the Healthcare Team are specific to items such as escalation factors for direct and indirect fixed and variable costs and are obtained from a combination of industry standards and/or VA-provided assumptions and the costs of contracting, where independently identified. Healthcare cost escalators include separate escalation factors for each type of unit operating cost (direct fixed, indirect fixed and direct variable) for each of the CICs. In addition, a separate cost escalator is defined for use in projecting and anticipated operating cost adjustments including recurring/non-recurring savings and efficiencies and additional expenditures and revenues.
- Inflation projections from the Capital Team are specific to items pertinent to the analysis of capital expenditures including escalation factors for new construction, remodeling, demolition, etc. and are obtained from Davis Langdon and/or VA-provided assumptions. Escalators used in conjunction with the Capital analysis are critical to the analysis evaluating the effects of alternative timing and delivery options. Additional capital cost escalators input by the Capital Planning team include factors for the cost of vacant space and the cost of vacant land not currently utilized by the VA. This is calculated and applied as an operating cost in the financial analysis.
- Inflation projections from the Re-use Team are specific to revenue generating alternatives resulting from the potential re-use of existing VA facilities. Escalators used in conjunction with the Re-use analysis are critical to the analysis evaluating the effects of alternative timing and delivery options. Additional escalators pertinent to the Re-use team include factors for the value of vacant space and the value of vacant land.

National economic impact multipliers to assess the local economic impacts of each BPO have been obtained from the IMPLAN™ model (based on BEA, BLS, and Census data).

The net present cost of each BPO is calculated using a treasury nominal discount rate – currently 5.2% per annum (source OMB Circular A-94 Appendix C). Should outputs be required in constant prices a nominal to real cost deflator of 2% per annum will be applied to Nominal the costs provided by each study team (based on OMB Circular A-94 Appendix C).

Site study teams are expected to save a version of the BPO Financial Analysis Tool for each BPO and Analysis Scenario considered for each Study Site, including a separate version of the BPO Financial Analysis Tool for the Baseline BPO (no change to any element of the way health care is provided in the Study Site – this BPO is equivalent to a Do Minimum or Do Nothing/Status Quo Option).

6.2.2. Structure of Team PwC's Single Analysis Tools

BPO Financial Analysis Tool

- The Welcome & Title Screen as shown in Figure 6.3 appears first upon opening the BPO Financial Analysis Tool to show the Study Site and Business Plan Option, and Analysis Scenario selected, if applicable.

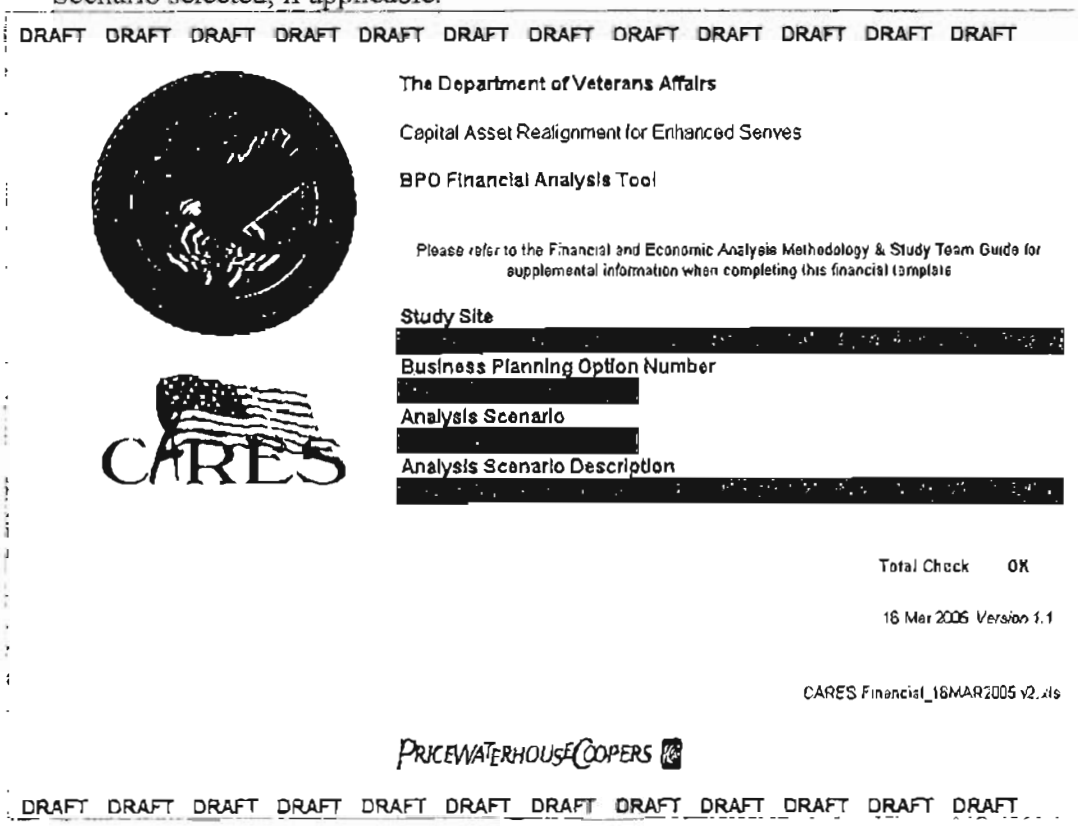

Figure 6.3 – Welcome and Title Screen of BPO Financial Analysis Tool

- **UserGuide worksheet** - holds any abbreviated instructions necessary to assist the User in operating the BPO Financial Analysis Tool, including a brief description of each worksheet within the BPO Financial Analysis Tool and a legend for cell formatting. Full documentation (including this Methodology) further assists the user in operating the BPO Financial Analysis Tool.

- General notes and general assumptions can be found on the **Notes worksheet**

- Common and specific data inputs and assumptions are entered on the **GenAssump worksheet.** Data inputs to the GenAssump worksheet includes items such as:
  - Study Site Name
  - Business Plan Option Number
  - Analysis Scenario
  - Discount Rate
  - Nominal-to-Real Deflator
  - Annual Total Workload to be Allocated to all Sites within the Study Site
  - Escalation factors Specific to the Projection of Healthcare, Capital and Re-use Data
  - National Economic Impact Multipliers

- Standardized input template worksheets are to be completed for each Site by each of the Healthcare, Capital and Re-use Teams for each of the BPOs and Analysis Scenarios. Users can insert additional worksheets as necessary and each of the Site-specific input templates worksheets begin with the sheet name "**Site#...**". In addition to accepting and holding the inputs for each Site, these worksheets also perform calculations necessary to the analysis, such as summarizing total unescalated costs and escalating the unescalated costs by applying the appropriate cost escalation factors, aggregating like items (such as capital investment levels by type of capital planning element), summarizing the total cost of vacant land / space for all facilities and summarizing the total net revenues available to the VA by re-use implementation method. This will occur across each of the facilities within a particular Site.

  It is expected that in-house services will be separated by Site (individual worksheets for each Site) and that separate worksheets will capture contracted care, transfers out, etc. and these separate worksheets will include all care, for example, that is contracted for within the given Study Site. For example, a given BPO may have 7 Sites and thus the BPO Financial Analysis Tool should contain 7 separate Site#... worksheets as well as a single sheet for any contracted care used in the study area.

- The **AggregatedCF worksheet** performs roll-ups as necessary of data entered on each individual site-specific worksheet. This worksheet is hidden from view to the user inputting Healthcare, Capital and Re-use plan data. The AggregatedCF worksheet also assembles and reconciles the relevant data necessary to perform the option analysis calculations, including applying the nominal-to-real deflator to arrive at real cost/revenue values including total operating costs, new capital investments and life cycle costs and reuse revenues.

- A **Control worksheet** is also hidden that contains cells and ranges necessary for some model functionality such as List Boxes and Error Checks that the casual user need not to be concerned with.

The **Comparison Model** for a study site is linked to the BPO Financial Analysis Tool completed for each Business Plan Option and Analysis Scenarios considered for the Study Site and used to carryout the calculations necessary for the CEA.

All assumptions and inputs used in the Financial Analysis will be compiled and maintained in a Master Data and Assumptions List (MDAL) for each Study Site. The MDAL and all BPO Financial Analysis Tool and Comparison Models for each Study Site will be managed on Team PwC's InVision PMO tool and will act as the conduit for aggregating the inputs of the various study teams at each Study Site. Team PwC is currently developing a standard MDAL template for use by the Study Teams.

6.2.3. Expected Specific Inputs & Model Calculations

The following is a discussion of the inputs necessary for a given standardized inputs template in the BPO Financial Analysis Tool and simply can be repeated for additional sites or for contracted service and/or transfers out of the site, etc.

Healthcare Analysis Inputs

The annual total allocated workload by CIC to be allocated to the entire study site for either the base case demand forecast or the Alternative Case Demand Scenario into the **GenAssump** worksheet, as shown in Figure 6.4. Team PwC then determines how many standardized input templates are applicable to the Study Site/BPO/Analysis Scenario contemplated (one template per Site within a BPO for a Study Site).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	...	2023
TOTAL WORKLOAD TO BE ALLOCATED TO SITES	60	60	60	60	60	60	60	60	60	60	60
Ambulatory: Behavioral Health	30	30	30	30	30	30	30	30	30	30	30
Ambulatory: Cardiology											
Ambulatory: Eye Clinic											
Ambulatory: Non-Surgical Specialties	30	30	30	30	30	30	30	30	30	30	30
Ambulatory: Orthopedics											
Ambulatory: Pathology											
Ambulatory: Primary Care & Related Specialties											
Ambulatory: Radiology & Related Specialties											
Ambulatory: Rehab Medicine											
Ambulatory: Surgical & Related Specialties											
Ambulatory: Urology											
OP Mental Health Program: Day Treatment											
OP Mental Health Program: Homeless											
OP Mental Health Program: Methadone Treatment											
OP Mental Health Program: Mental Hlth Intensive Case Mgmt (MHICM)											
OP Mental Health Program: Work Therapy											
OP Mental Health Program: Community MH Residential Care											
Inpatient Medicine and Observation											
Inpatient Psychiatry and Substance Abuse											
Inpatient Surgery											
Inpatient Residential Rehab & Domiciliary											
Inpatient Nursing Home											
Inpatient SCI											
Inpatient BRC											
Inpatient Dom											

Figure 6.4 – Total Allocated Workload by CIC by Site

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After inputting the annual total allocated Workload to each site within a study site on the GenAssump worksheet, the Healthcare team enters annual values of workload allocated by CIC and annual values of workload supply/demand (defined as projected clinical inventory required and supplied) specific to the particular site and as shown in Figure 6.5.

Workload Demand Projections	2003	2004	2005	2006	2007	2008	2009	2010	2011	...	2023
Total Allocated Workload (to Study Site)											
Ambulatory: Behavioral Health											
Ambulatory: Cardiology											
Ambulatory: Eye Clinic											
Ambulatory: Non-Surgical Specialties											
Ambulatory: Orthopedics											
Ambulatory: Pathology											
Ambulatory: Primary Care & Related Specialties											
Ambulatory: Radiology & Related Specialties											
Ambulatory: Rehab Medicine											
Ambulatory: Surgical & Related Specialties											
Ambulatory: Urology											
OP Mental Health Program: Day Treatment											
OP Mental Health Program: Homeless											
OP Mental Health Program: Methadone Treatmen											
OP Mental Health Program: Mental Hlth Intensive											
OP Mental Health Program: Work Therapy											
OP Mental Health Program: Community MH Resi											
Inpatient Medicine and Observation											
Inpatient Psychiatry and Substance Abuse											
Inpatient Surgery											
Inpatient Residential Rehab & Domiciliary											
Inpatient Nursing Home											
Inpatient SCI											
Inpatient BRC											
Inpatient Dom											
Capacity - Workload											
Projected Clinical Inventory Required											
Ambulatory: Behavioral Health											
Ambulatory: Cardiology											
Ambulatory: Eye Clinic											
Ambulatory: Non-Surgical Specialties											
Ambulatory: Orthopedics											
Ambulatory: Pathology											
Ambulatory: Primary Care & Related Specialties											
Ambulatory: Radiology & Related Specialties											
Ambulatory: Rehab Medicine											
Ambulatory: Surgical & Related Specialties											
Ambulatory: Urology											
OP Mental Health Program: Day Treatment											
OP Mental Health Program: Homeless											
OP Mental Health Program: Methadone Treatmen											
OP Mental Health Program: Mental Hlth Intensive											
OP Mental Health Program: Work Therapy											
OP Mental Health Program: Community MH Resi											
Inpatient Medicine and Observation											
Inpatient Psychiatry and Substance Abuse											
Inpatient Surgery											
Inpatient Residential Rehab & Domiciliary											
Inpatient Nursing Home											
Inpatient SCI											
Inpatient BRC											
Inpatient Dom											
Projected Clinical Inventory Supplied											
Ambulatory: Behavioral Health											
Ambulatory: Cardiology											
Ambulatory: Eye Clinic											
Ambulatory: Non-Surgical Specialties											
Ambulatory: Orthopedics											
Ambulatory: Pathology											
Ambulatory: Primary Care & Related Specialties											
Ambulatory: Radiology & Related Specialties											
Ambulatory: Rehab Medicine											
Ambulatory: Surgical & Related Specialties											
Ambulatory: Urology											
OP Mental Health Program: Day Treatment											
OP Mental Health Program: Homeless											
OP Mental Health Program: Methadone Treatmen											
OP Mental Health Program: Mental Hlth Intensive											
OP Mental Health Program: Work Therapy											
OP Mental Health Program: Community MH Resi											
Inpatient Medicine and Observation											
Inpatient Psychiatry and Substance Abuse											

Figure 6.5 – Workload Demand and Capacity in GenAssump

Team PwC inputs unescalated unit costs (in 2003 dollars) separated by direct fixed, indirect fixed and direct variable costs for each CIC of the allocated workload at each site. To determine the projected change in the unit cost drivers over time due to factors such as implementation phase

state changes (from the as-is through the transition to the to-be state), the annual unescalated percentage changes from the 2003 cost drivers are entered for each CIC and within each CIC for each of the three cost drivers mentioned above, as calculated by the Healthcare study team for each BPO.

This data entry procedure is simplified in Figure 6.6 showing the actual input fields in the BPO Financial Analysis Tool. This hypothetical example highlights a situation in which unit costs for a particular CIC are projected to increase by 17 percent in FY06 due to the transition from one space to another. Once the to-be state is reached in FY09, annual cost savings of 17 percent are realized compared to the 2003 value (note that this calculation does not include the effects of inflation which is handled at a later stage of the calculation). The FY03 unit cost drivers are assumed in this example to be equal to $1.00, $1.50 and $2.50 for the Direct Fixed, Indirect Fixed and Direct Variable cost drivers, respectively.

Ambulatory: Non-Surgical Specialties		2003	2004	2005	2006	2007	2008	2009	2010	2011	...	2023
Direct Fixed	$	1.000	100%	100%	117%	117%	117%	83%	83%	83%	83%	83%
Indirect Fixed	$	1.500	100%	100%	117%	117%	117%	83%	83%	83%	83%	83%
Direct Variable	$	2.500	100%	100%	117%	117%	117%	83%	83%	83%	83%	83%

Figure 6.6 – Input Fields for Increases

The workload allocated to each CIC will be multiplied by these appropriate projected unit costs, and then will be escalated to nominal dollars using the appropriate escalation factor. As described in Chapter 3, DSS level costing data is used as the basis for all operating costs. The unit costs are input into the BPO Financial Analysis Tool for the adjustments and, if necessary, applied by Team PwC's Healthcare study team to reflect the implementation of particular BPOs on an as-needed basis.

In Stage II, these unit costs will be amended to reflect adjusted unit cost estimates prepared by the Healthcare study team. These estimates will also take account of cost savings and impacts resulting from transition requirements and operating cost changes associated with any vacant space and/or unused land. To simplify the calculation of additional savings/revenues and/or costs in Stage I, the Healthcare team can enter operating cost adjustments directly into the BPO Financial Analysis Tool. These annual adjustments may fall into the following general categories: recurring savings/expenditures, non-recurring savings/expenditures and other savings/expenditures and could include such items for each BPO as a requirement to provide space for regional VHA administration facilities, or for VBA or other tenants, or to account for high site-specific costs (large grounds, substantial other operating costs, etc.). These adjustments are entered annually in 2003 (unescalated) dollars and are inflated using a cost escalator defined separately from the unit cost driver escalators discussed above.

Savings/Efficiencies/Additional Recurring Costs		— Input In 2003 $ (Unescalated) — Cash Outflows are Positive —						— In
Cost Adjustment #1	R Savings	-	-	-	-	-	-	-
Cost Adjustment #2	R Savings	-	-	-	-	-	-	-
Cost Adjustment #3	R Savings	-	-	-	-	-	-	-
Cost Adjustment #4	R Savings	-	-	-	-	-	-	-
Cost Adjustment #5	R Savings	-	-	-	-	-	-	-
Cost Adjustment #6	R Savings	-	-	-	-	-	-	-
Cost Adjustment #7	R Savings	-	-	-	-	-	-	-
Cost Adjustment #8	R Savings	-	-	-	-	-	-	-
Cost Adjustment #9	R Savings	-	-	-	-	-	-	-
Cost Adjustment #10	R Savings	-	-	-	-	-	-	-

Figure 6.7 – Savings/Efficiencies/Additional Recurring Costs Input

The Healthcare team then enters the unit costs associated with vacant space (dollars per square foot) and vacant land (dollars per acre) not utilized by the Re-use team in 2003 (unescalated) dollars. These unit costs are multiplied by the appropriate escalation factors to determine nominal values, which are then multiplied by the amount of vacant space and/or land not utilized by the Re-use team (determined by the Capital Planning team) to arrive at the amount of operating cost the VA is incurring for a particular BPO due to unused space and vacant land.

Finally, the BPO Financial Analysis Tool aggregates the overall operating cost in each year for each of the Sites in unescalated dollars and escalated (nominal) dollars after applying the appropriate escalation factors.

Capital Analysis Inputs

The Capital Planning team populates each site-specific worksheet with key physical implementation expenditure information including the level of capital investment and life cycle cost levels for each facility within a particular site.

The Capital Planning team provides at least one capital plan option for each BPO developed by the healthcare study team at a study site to indicate how the healthcare option could be implemented at the site. For non-healthcare study sites, it is the Capital Planning team who provides the BPO to be analyzed, and coordinates with the VA and Healthcare study team the provision of information indicated above.

The Capital Planning team inputs cost estimates generated using the Davis Langdon Cost Model (either Rough Order of Magnitude cost estimates or more detailed assessment depending on the site and Stage) for each of the key implementation elements at each Site within a BPO. The costs at each site are broken into each major capital expense elements (new construction, renovating, demolishing, temporary rental costs, etc.) and capital life cycle (or major maintenance) costs.

These cost expenditures are input annually in FY2005Q1 dollars throughout the individual project's construction/transition/demolition phase for each of the four scenarios listed above, as shown in Figure 6.8. Additional facilities sites can be added to the analysis by simply inserting rows into the BPO Financial Analysis Tool and copying the formulas from the rows above or below the newly-inserted rows.

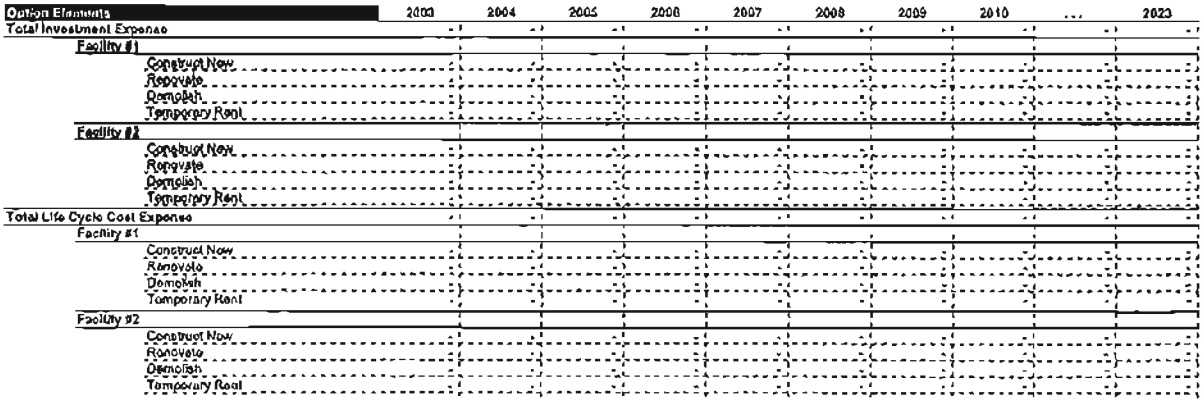


Figure 6.8 – Option Elements-Cost Expenditures

Cost escalators provided by the Capital Planning team (entered on the GenAssump worksheet) are used to convert unescalated FY05Q1 costs into nominal dollars and will be defined for each of the capital expense elements noted above. The capital planning team also provides cost escalators for the cost of vacant space and the cost of vacant land (defined by the Healthcare team in FY03 dollars) which are multiplied by the amount of vacant space / land not used by the Re-use team (discussed further below).

Finally, the BPO Financial Analysis Tool aggregates the overall levels of both new capital investment and life cycle costs in each year for each of the sites in unescalated dollars and escalated (nominal) dollars after applying the appropriate escalation factors.

Re-use Analysis Inputs

For each Capital Planning option at each Site, the Re-use team provides one or more re-use options and input the associated net annual re-use revenues for each study year reflecting the net income to the VA from the implementation of the re-use options considered. Such options are likely to include a range of transaction options to re-use vacant space, buildings and/or land using one or more methods of re-use management (divest, donate, enhanced use, out-lease, demolish, reserve) at each site.

The Re-use team enters the following key data items into the BPO Financial Analysis Tool for each year: the amount of vacant space (square footage) / land (acres) that is used in the re-use plan; and the net income that the VA can reasonably expect to receive by implementing that method of re-use management in FY05Q1 dollars (additional facilities and/or re-use management methods can be added to the analysis by simply inserting rows into the BPO Financial Analysis Tool and copying the formulas from the rows above or below the newly-inserted rows), as shown in Figure 6.9.

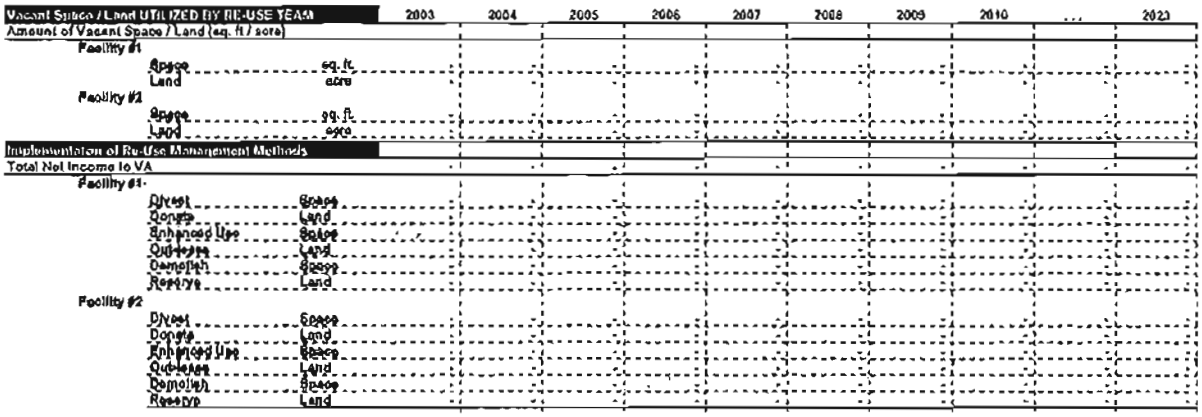


Figure 6.9 – Re-use Team Inputs to BPO Financial Analysis Tool

As stated above, the net cashflow revenues to the VA resulting from the re-use plans is input annually in unescalated FY2005Q1 dollars and may result from one or more of the following: leasing vacant space, sale of vacant land and/or buildings or from the long term enhanced use leasing of vacant land/buildings. These unescalated revenues are multiplied by the appropriate annual escalation factors input by the Re-use team on the GenAssump worksheet.

The Re-use team enters the amount of vacant space / land not utilized by the re-use plan. These values are used to calculate the proper operating costs that are attributable to the vacant space / land that the VA is not using at each site.

The Re-use team also enters estimated projections of site development costs for new development on re-used VA land disposed and/or leased as well as an estimate of the number of jobs potentially employed at the newly developed facilities. The site development cost estimates are input in thousands of FY2004 (unescalated) dollars. These inputs, shown below, are utilized in the Indicative Economic Impact Analysis, discussed later in this Chapter.

Finally, the BPO Financial Analysis Tool aggregates the overall revenues to the VA from re-use management in each year for each of the sites in unescalated dollars and escalated (nominal) dollars.

Escalation / Deflation Calculations

Generally, all cost and revenue inputs to the BPO Financial Analysis Tool are in unescalated dollars.

Detailed escalation factors for each type of cost and revenue at each study site, which are used to escalate costs and revenues in the BPO Financial Analysis Tool, will be determined and agreed with the VA at a National Level.

These escalation factors are entered into the GenAssump worksheet.

Figure 6.10 indicates a selection of escalation factors for some of the healthcare operating costs. The Healthcare, Capital Planning and Re-use teams enter the escalator in each future year of the analysis and the BPO Financial Analysis Tool then calculates the compounded factor that is applied to future values of costs and revenues. (the assumption of 5% per annum is only for illustrative purposes).

UNIT OPERATING COST ESCALATORS										
Healthcare Operating Costs	2003	2004	2005	2006	2007	2008	2009	2010	...	2023
Ambulatory: Behavioral Health										
Direct Fixed	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct Fixed Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Indirect Fixed	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Indirect Fixed Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Direct Variable	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct Variable Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Ambulatory: Cardiology										
Direct Fixed	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct Fixed Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Indirect Fixed	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Indirect Fixed Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Direct Variable	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct Variable Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Ambulatory: Eye Clinic										
Direct Fixed	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct Fixed Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Indirect Fixed	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Indirect Fixed Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Direct Variable	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct Variable Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Operating Cost Adjustements										
Operating Cost Adjustments	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Operating Cost Adjustments Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533

CAPITAL COST ESCALATORS										
Escalators for Capital Cost Elements (Inputs in FY05Q1 $)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2023
Construct New		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Construct New Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Renovate		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Renovate Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Demolish		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Demolish Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Temporary Rent		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Temporary Rent Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Escalators for Cost of Vacant Space / Land (Inputs in FY03 $)										
Cost of Vacant Space		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Cost of Vacant Space Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Cost of Vacant Land		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Cost of Vacant Land Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533

RE-USE REVENUE ESCALATORS (INPUTS IN FY05Q1 $)										
Value of Space Escalators										
Divest		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Divest Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Donate		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Donate Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Enhanced Use		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Enhanced Use Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Out-lease		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Out-lease Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Demolish		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Demolish Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Reserve		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Reserve Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Value of Land Escalators										
Divest		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Divest Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Donate		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Donate Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Enhanced Use		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Enhanced Use Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Out-lease		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Out-lease Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Demolish		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Demolish Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Reserve		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Reserve Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066

Figure 6.10 – Selection of Escalation Factors for Healthcare Operating Costs

To ensure the appropriateness and consistency of projecting cash-flows that involve costs with a range of varying underlying escalation rates, all unescalated costs are first escalated (inflated) using the appropriate inflation factors shown above to determine the nominal cost value (in the future) of each line-item analyzed. These nominal costs are then deflated using the nominal-to-real deflator to arrive at the real costs (or current dollar) for each line item. The discount rate is applied to determine the net present value of a stream of real cash flows.

Generation of Consolidated Outputs for a BPO at a Study Site

The BPO Financial Analysis Tool combines the various cash flows for each site in a study site into an overall cash flow for each BPO and Analysis Scenario at a given study site on the AggregatedCF worksheet.

The Comparison Model

As indicated in Figure 6.11, the Comparison Model aggregates the results of each BPO to generate outputs to facilitate analysis of the comparison of BPOs and the completion of the CEA. Within a given study site, the Comparison Model is used to analyze each BPO against the Baseline, to standardize the outputs and to provide a framework for BPO comparisons.

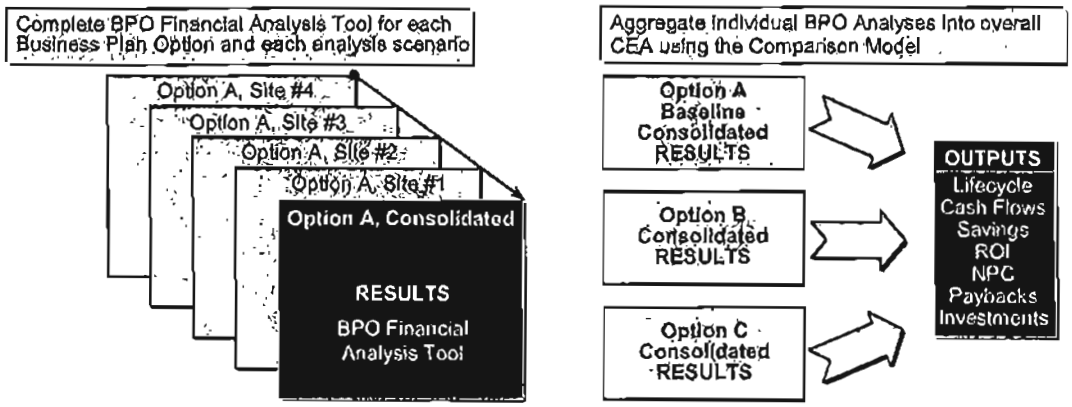


Figure 6.11 – Comparison Model

Master Data and Assumptions List

All assumptions and inputs used in the Financial Analysis will be compiled and maintained in a Master Data and Assumptions List for each Study Site. This list will be managed on Team PwC's InVision PMO tool and will act as the conduit for aggregating the inputs of the various study teams at each study site.

6.3. EXPECTED OUTPUTS

While similar outputs could be generated for both Stage I and Stage II, the depth of analysis and robustness of the cost and revenue analysis will vary significantly between stages. As indicated in Chapter 2, the results of the Stage I CEA are to be summarized and presented to the Local Advisory Panels, Stakeholders and the VA/CIB in highly summarized and largely graphical form (refer to Chapter 2). Stage II outputs will be included in the Draft Business Plans and are to include:

- Annual life-cycle cash-flows ("LCCF") for each BPO and analysis scenario considered for each Study Site.
- Return on Investment ("ROI"). The percentage return that is generated by each additional dollar invested. Positive ROI corresponds to a benefit-to-cost ratio greater than 1, which indicates that benefits are greater than costs while a negative ROI indicates a benefit-to-cost ratio less than 1, which indicates that costs exceed benefits. Since the Financial Analysis for CARES Business Plan Studies is a CEA, the term "benefits" means cost savings and cash-inflows estimated, and should not be confused with monetarized benefits or other economic measures used in a formal cost/benefit analysis.
- Net Present Cost ("NPC"). Annual cash-flows are discounted using the overall discount rate so that a particular BPOs cash-flow can be valued on a relative basis to the Baseline BPO cash-flows and can be consistently compared to other alternatives within a given study site.
- Internal Rate of Return ("IRR"). A particular project's IRR is the discount rate that causes its future-value cashflows to result in a zero NPC. This calculation may not be appropriate in all cases, since some BPOs could always result in an overall cost to the Department.
- Annual VA Investment Levels. Annual investment levels required by the VA for a particular Business Plan Option are aggregated and separated by major type of expense and compared to the Baseline BPO.
- Payback Periods for Investments. Payback periods are calculated by comparing the cumulative investments to any cost savings generated for a particular BPO and identifying the point at which a positive annual cash-flow is obtained. Payback periods can also be referred to as breakeven points or the point at which the cumulative NPC becomes positive. Payback periods are most useful in BPOs with in initial investment expenditure followed by a period of annual savings.

The metrics cited above are aggregated and calculated in the Comparison Model for each BPO and evaluated against the Baseline BPO and compared to other BPOs within a given Study Site in a form similar to Figure 6.12.

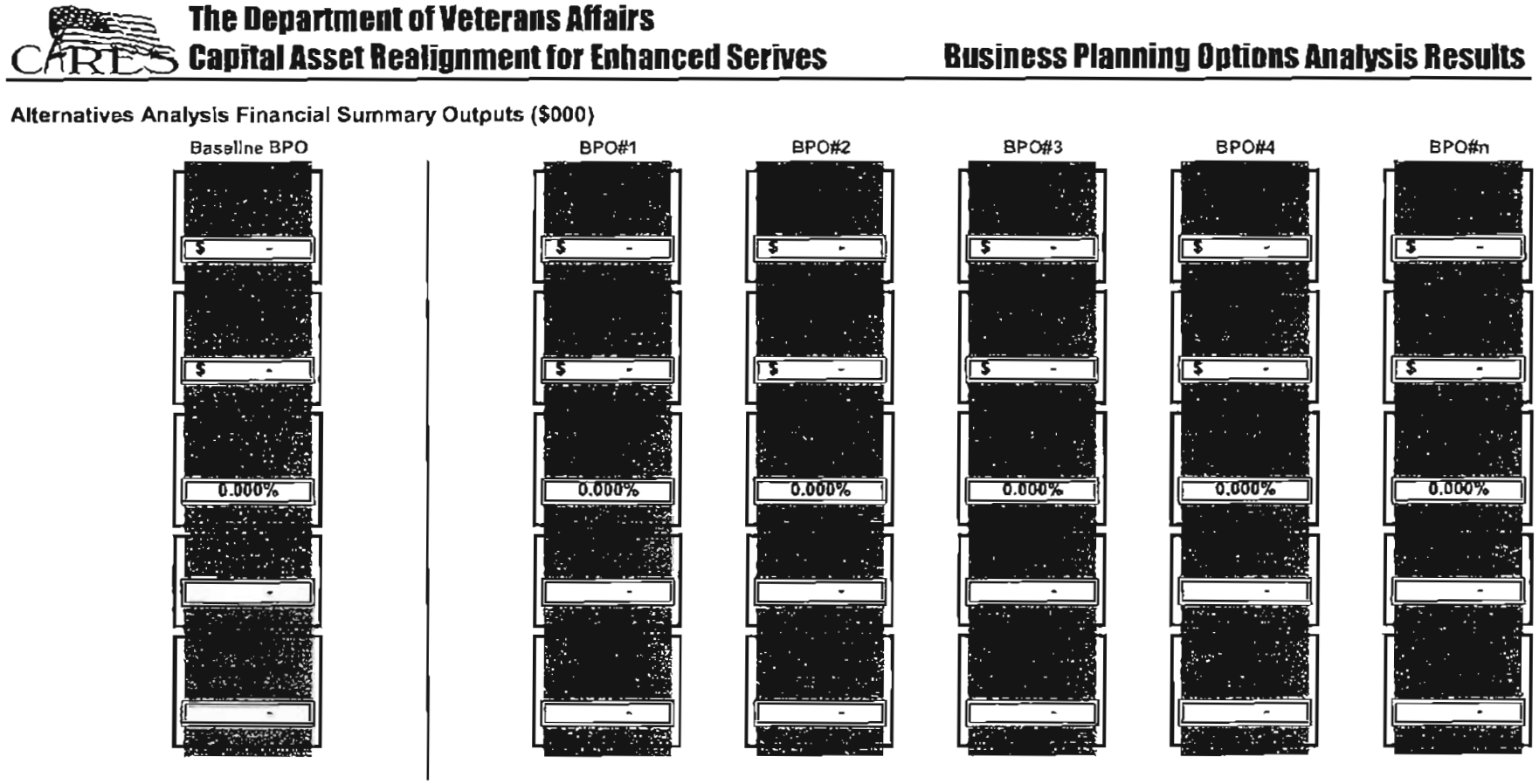
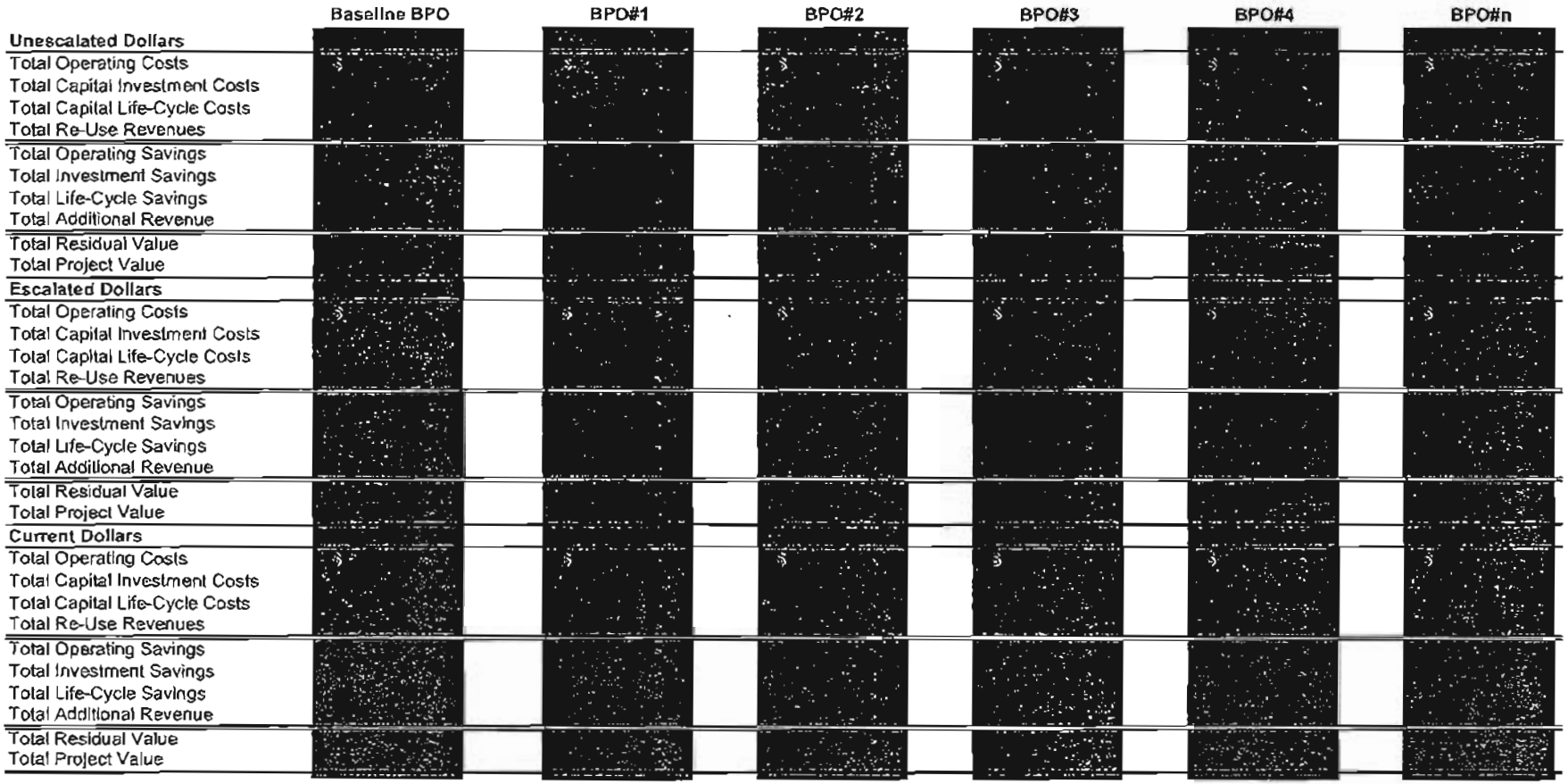


Figure 6.12 – Alternatives Analysis Financial Summary Outputs

In addition to the above summary of the BPO analyses, a further table in each model highlights and compares the unescalated, escalated (nominal) and real costs for each of the healthcare, capital and re-use savings and expenditure categories, as shown in the table below.

The Department of Veterans Affairs
Capital Asset Realignment for Enhanced Serives — **Summary of Business Planning Options**

Alternatives Analysis Financial Summary Outputs ($000)



	Baseline BPO	BPO#1	BPO#2	BPO#3	BPO#4	BPO#n
Unescalated Dollars						
Total Operating Costs	$	$	$	$	$	$
Total Capital Investment Costs						
Total Capital Life-Cycle Costs						
Total Re-Use Revenues						
Total Operating Savings						
Total Investment Savings						
Total Life-Cycle Savings						
Total Additional Revenue						
Total Residual Value						
Total Project Value						
Escalated Dollars						
Total Operating Costs	$	$	$	$	$	$
Total Capital Investment Costs						
Total Capital Life-Cycle Costs						
Total Re-Use Revenues						
Total Operating Savings						
Total Investment Savings						
Total Life-Cycle Savings						
Total Additional Revenue						
Total Residual Value						
Total Project Value						
Current Dollars						
Total Operating Costs	$	$	$	$	$	$
Total Capital Investment Costs						
Total Capital Life-Cycle Costs						
Total Re-Use Revenues						
Total Operating Savings						
Total Investment Savings						
Total Life-Cycle Savings						
Total Additional Revenue						
Total Residual Value						
Total Project Value						

Figure 6.12 (Cont'd)

6.4. INDICATIVE ECONOMIC IMPACT ANALYSIS

6.4.1. Overview

Purpose and Scope

The purpose of the Indicative Economic Impact Analysis ("IEIA") is to provide an indication of the relative economic impact of the various BPOs developed compared to the Baseline BPO. The indicative assessment is not intended to be a detailed assessment; rather it is designed to provide a single measure based on direct expenditures of the aggregate economic activity associated with a BPO.

In developing this methodology, Team PwC has taken account of best practice and appropriate level of detail available at this stage of the VA's decision making processes.

A well-established regional input-output model (IMPLAN™) commonly accepted and used by economists across the USA is used to address a wide range of impact topics in a given region (county, state, or national) and has been used to develop economic value added multipliers to apply to expenditures aggregated in the model.

The economic value added multipliers are multiplied against expenditures to provide a rough-order-of-magnitude analysis highlighting an initial indication of potential economic impacts of a particular BPO.

The results of the impact analysis show the indicative economic effects of particular BPO on the community and neighboring VA and non-VA health facilities.

The results of the impact analysis can also be extrapolated to account for internal VA impacts such as staff retraining and layoff expenses.

This very high-level economic analysis serves as a departure point for a fuller, broader and more comprehensive economic analysis as part of a larger Economic Impact Assessment[1].

[1] It is understood that the VA and most other healthcare providers are likely to procure a significant portion of the products and some of the services they use in a community to provide healthcare outside of the community, this behavior is implicit in the economic added value multipliers provided by IPLAN™. It may however be argued that since the VA tends to purchase more goods and services centrally than most community healthcare providers, the use of the full value of healthcare expenditures made by the VA as part of the basis for determining the indicative economic impact may overstate the true level of economic impact such expenditures have on the local community. However, it has not been possible to agreed robust alternative assumptions for use across all 18 sites – such assessments required detailed study, which is beyond the scope of this study. Team PwC is to use the full value of such expenditures in its determination of Indicative Economic Impact.

6.4.2. Approach

The BPO Financial Analysis Tool calculates an IEIA based on the direct expenditures included in the BPO Financial Analysis Tool multiplied by appropriate IMPLAN™ (see below) value added multipliers to calculate the indicative aggregate level of direct and secondary (indirect and induced) economic activity in the community arising from such expenditure. The total aggregate level of economic activity in the community arising from direct expenditure is calculated for each BPO and model scenario as follows:

- Expenditure in each model year in each of the IMPLAN™ Sectors, listed below, are multiplied by the appropriate IMPLAN™ SAM Value Added Multiplier and totaled for the year:
    - Healthcare expenditure by the VA (and others through VA facilities) is multiplied by the "Ave Health" value added multiplier (1.527) in all cases, except where the health care expenditure is skewed towards one particular type of care.
    - Construction and buildings maintenance related expenditures multiplied by the "Ave Const" value added multiplier (3.860) in all cases, except where the health care construction expenditure is skewed towards one particular type of construction.

- Assessments are made by the Re-use team of the type of development and expenditures a developer would make in re-utilizing surplus VA facilities and the scale of employment such development could accommodate. These values are multiplied by the appropriate factors to calculate the economic impact.
    - Expenditure for re-use redevelopment estimated by the Re-use study teams multiplied by the appropriate value added multiplier (i.e. 6.555, 3.926, 3.761 or 4.796 for residential structures; industrial and commercial buildings; government facilities or a mixed development respectively).
    - Estimates of the number of jobs accommodated in the re-use development each year is multiplied by the "Ave Job" (2.309) multiplier and an average per job cost of employment assumption (assumed to be $35,402) is multiplied by 25% (to account for the impact of displacement of employment within the study site, rather than new employment attracted into the community).

  Figures 6.13 and 6.14 provides the source and 1982 BEA sector and SIC Code / SIC code part description references for the IMPLAN™ economic multipliers listed above.

These totals are discounted back to FY 2003 to calculate the total aggregate level of economic activity associated with the BPO and scenario being considered.

Total aggregate levels of economic activity for each Alternative BPO are compared to the total aggregate level of economic activity for the Baseline BPO to identify the indicative positive or negative economic impact of the AlternativeBPO.

Team PwC assumes that the national average, rather than regionally specific, economic multipliers are sufficiently accurate for BPO comparison at any one study site.

6.4.3. Assessment of Aggregate Economic Activity for each BPO

The BPO Financial Analysis Tool calculates an indication of the Aggregate Economic Activity for each BPO at each study site. Team PwC has assumed that the Indicative Aggregate Economic Activity for a BPO at a Study Site equals the sum of the present value of the combined economic affect of both the direct expenditure by the VA on healthcare and capital investments associated with the provision of healthcare and 25 percent of the economic affect of the re-use by their parties of surplus land and buildings.

Figure 6.13 - Economic value added and employment multipliers and other assumptions

IMPLAN™ Sector Number	IMPLAN™ Sector Name	1982 sector	BEASIC SIC code part description	Code	/Average multiplier Type SAM	Value-added (county level)	Employment Type SAM (national)	multiplier	Average cost	Employment
Construction										
49	New industrial and commercial buildings	11.02	Part 15, 16, 17		3.926					
54	New government facilities	11.07	Part 15, 16, 17		3.761					
Ave Const	*Weighted Average (combined by IMPLAN)*				*3.86*					
Maintenance										
56	Maintenance and repair of other facilities	12.02	Part 15, 16, 17		2.397					
27	Landscape and Horticultural Services	4.0002	780		2.417					
Health Care										
490	Doctors and dentists	77.01	8010,8020, 8030, 8040		1.518					
491	Nursing and protective care	77.0301	8050		1.441					
492	Hospitals	77.02	8060		1.533					
493	Other medical and health services	77.0302	0740, 8070, 8080, 8090		1.558					
501	Residential care	77.08	8360		1.519					
Ave Health	*Weighted Average (combined by IMPLAN)*				1.527					
End-users of Re-use Development										
507	Accounting, auditing and bookkeeping	73.0302	8720,8990		2.24		1.910		$28,784	
508	Management and consulting services	Pt 73.0105	8740		2.949		2.807		$42,669	
509	Research, development & testing services	Pt 73.0105	8730		2.709		2.364		$39,769	
Ave Jobs	*Weighted Average (combined by IMPLAN)*				*2.590*		*2.309*		$35,402	

Source: IMPLAN™ Model, with 2000 base year data.

Note – IEIA analysis excludes expenditure on pharmaceutical provision to Veterans, this is assumed to be the same in all Business Plan Options.

Figure 6.14 – Site based healthcare Average Value-added multiplier (county level) Type SAM

IMPLAN™ Sector Number	IMPLAN™ Sector Name	Average Value-added multiplier (county level) Type SAM																	
		Boston	NYCity	Waco	WallaWalla	MontgomeryAL	Louisville	Muskogee	BigSpring	Canandaigua	Gulfport/Biloxi	Livermore	WestLA	Montrose	StAlbans	PerryPoint	Lexington	WhiteCity	PoplarBluff	AVE
490	Doctors and dentists	1.524	1.431	1.540	1.435	1.461	1.536	1.444	1.437	1.566	1.425	1.695	1.739	1.623	1.513	1.409	1.503	1.560	1.495	1.518
491	Nursing and protective care	1.427	1.351	1.531	1.360	1.412	1.467	1.411	1.335	1.462	1.399	1.569	1.614	1.502	1.411	1.357	1.450	1.489	1.415	1.441
492	Hospitals	1.558	1.421	1.650	1.394	1.508	1.566	1.446	1.360	1.583	1.473	1.680	1.737	1.638	1.474	1.462	1.573	1.562	1.429	1.533
493	Other medical and health services	1.573	1.463	1.807	1.471	1.492	1.550	1.588	1.438	1.537	1.504	1.706	1.701	1.632	1.502	1.435	1.527	1.585	1.434	1.558
501	Residential care	1.490	1.391	1.629	1.494	1.500	1.488	1.528	1.360	1.576	1.493	1.649	1.716	1.562	1.490	1.448	1.490	1.680	1.580	1.519
Ave Health	***Weighted Average (combined by IMPLAN)***	1.542	1.435	1.602	1.419	1.480	1.548	1.491	1.396	1.587	1.454	1.684	1.723	1.618	1.489	1.430	1.531	1.572	1.454	1.527

Source: IMPLAN™ Model, with 2000 base year data.

Note – IEIA analysis excludes expenditure on pharmaceutical provision to Veterans, this is assumed to be the same in all Business Plan Options.

6.5. SENSITIVITY ANALYSIS

Running additional iterations of the model allows for the evaluation of key sensitivities and risks. The model can be subjected to changes in very high-level risk factors to investigate the effects of questions such as:

- What happens if inflation is higher and/or lower than expected?
- What happens if the cost of contracting for services is higher and/or lower than expected?
- What is the impact of a 5-year delay in implementation?

Crossover analysis allows study teams to understand how much a particular variable has to change before the ranking order of BPO changes and can be an important method for testing importance of the key assumptions.

6.6. STAGE I AND II COMPARISON

Stage I and Stage II financial analyses have the same overall methodology and both utilize similar models. After obtaining the available data from each Study Site in Stage I, some adjustments to the methodology may be made to facilitate a more streamlined analysis in Stage II. The major differences between Stage I and Stage II financial analyses are the level of detail and refinement that is included in the inputs to the financial analysis as well as improvement in the completeness of the analysis to include more in depth analyses and second order impacts such as the implications on human capital and the community (retraining of staff, layoff expenses, etc.). These improvements will be provided by the Healthcare, Capital Planning and Re-use study teams. The end result of the Stage II financial analysis will be results with a higher degree of certainty and refinement than the results generated in Stage I.

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7.1. SCOPE AND PURPOSE

A final element of the CARES Business Planning Studies methodology is the approach for documenting plans to support implementation activities. For each BPO, formal transition plans will be created which reflect risk assessment considerations. These considerations will represent a culmination of risk awareness thorough the studies.

The objective of this task is to present a consistent implementation and risk management approach for each site. This approach provides technical direction to the study teams.

The ultimate goal of applying this approach is to create implementation plans informed by risk assessments that improve the likelihood of success for the options developed. The complexity of options and the planning environment requires the appropriate level of analysis be conducted to understand and mitigate potential implementation barriers.

Transition and Implementation Plan: Team PwC will provide a plan and Gantt chart outlining all transition and implementation activities including, clinical, capital and administrative. The intent is to provide a roadmap for the scheduling of key transitional and implementation activities based upon the availability of new facilities, land for reuse and patient transition scheduling. It will include any transition or implementation activities at all impacted facilities. It should be noted that VA requires no disruption in existing service capability as proposed activities to accomplish the recommended options are initiated. Therefore, staging and transition activities along with cost ramifications will be analyzed for all impacted sites.

A Risk Assessment will be performed for each final option being developed. The risk evaluation process is composed of three steps: identifying and scoring risks; rationalization; and control. There are ten significant risk components to be evaluated:

- Organization and Change Management
- Business
- Data/Information
- Privacy
- Technology
- Strategic
- Security
- Project Resources (Financial, FTE)
- Project Schedule
- Legal/Contractual

By identifying all known risks, developing a plan to mitigate and control them, the project will have a greater chance for success. VA will provide the Risk Analysis Guide and Templates to be utilized. These can also be found on VA's Internet Site, under "About VA", "Strategic and Capital Plans", "Capital Investments", or (http://www.va.gov/oaem/).

7.2. APPROACH

Implementation planning and risk management will support the development of options through supporting the study team's critical thinking and analysis processes. Early implementation planning prior to the selection of the final option supports building an awareness of implementation risk throughout the project and will drive delivery of a final implementation plan which integrates appropriate mitigation approaches. Realization of the selected option must not lead to any disruption of service. Therefore, risk mitigation and transition planning is critical to CARES overall success.

The risk evaluation process is composed of three steps: identifying and scoring risks; rationalization; and control. These steps deliver a complete project risk assessment by providing an overview of anticipated project risks and an approach to control risks.

The approach will be facilitated through the use of templates to guide collection and analysis of risk and plan elements by the Implementation Plan and Risk Management team. The more input collected, the more robust the level of risk analysis. The use of templates is critical for consistent information collection.

7.3. REQUIREMENTS

The implementation plans must include all transition activities at all impacted facilities. Since there cannot be disruption in existing service capability as proposed activities are accomplished, the plans reflect staging of activities and costs associated with this staging.

- Agreement on customization of risk components specific to studies and sites
- Definition of timing for transition and implementation activities for each option
- Completion and acceptance of risk profiles for each initial option (Stage I)
- Completion and acceptance of risk analysis for each selected option
- Definition and acceptance of risk mitigation strategies
- Input into the option development process

Team PwC is applying its standard Enterprise Risk Model in conjunction with the Office of Asset Enterprise Management (OAEM) recommended risk management model to provide a framework for cataloging all known risks and the impact of any solution-wide or dependent risks.

7.3.1. Identifying and Scoring Risks

To effectively gather relevant data required to perform a risk assessment consistently across multiple options, Team PwC has created a risk template.

The risk template contains a series of worksheets designed to allow the user to catalogue all known risks and generate risk factors associated with those risks. Each worksheet in

the template focuses on a risk category and its associated sub-categories as illustrated in Figure 7.1.

The template enables an assessment of risk based on the underlying measures of likelihood and impact. Each risk will be assigned a rating of high, medium or low. Under "Likelihood of Risk", low equates to an approximate likelihood of .25 or less of occurrence. Medium equates to a likelihood of occurrence between .25 and .75. High equates to a likelihood of occurrence greater than .75. The rating under "Impact of Risk" is an estimate determined by the study team.

Figure 7.1 – Risk Categories

Risk Categories	Risk Sub-Categories
1. Reputation – impacting level of public trust.	• Healthcare • Research • Graduate Education • Goodwill
2. Continuity of Care – impacting transition of delivery of healthcare services.	• Customer Access to Care • Inventory Management • Workload Management • Quality of Care
3. Organization & Change Management – impacting the management of healthcare clinics and medical centers.	• Staff Attrition • Mission Alignment • Workforce Transformation
4. Legal & Contractual – impacting existing or planned agreements.	• Third Party Agreements • Labor Agreements
5. Compliance – impacting regulations with local, state, and Federal regulations.	• Permits • Zoning • Regulatory Requirements
6. Security – impacting protection of physical and information access.	• Physical • IT/Data
7. Political – impacting local acceptance of proposed change.	• Local Acceptance • Constituent Management
8. Infrastructure – impacting management of facilities.	• Effectiveness • Space Considerations • Environmental Considerations
9. Financial – impacting operating cost and value of assets.	• Market Fluctuations

Risk Categories	Risk Sub-Categories
10. Technology – impacting information management.	• Data Management • Network Infrastructure
11. Project Realization – impacting transition management and implementation planning.	• Time • Resources • Transition

Using the risk template as the guide, each identified risk will be scored. The Risk Summary worksheet will summarize all worksheets and provide a "Risk Rating" for each risk category. An overall risk score is assigned to the option taking into account each risk category. The end result will be a risk score assigned to each of the following:

- Individual risks
- Risk Sub-Categories
- Risk Categories
- Option

7.3.2. Rationalization

In completing an option analysis, the rationalization process will focus on the identification of the appropriate risks based on the option identified and provide the study teams with an opportunity to define their justifications and conclusions regarding each individual risk.

7.3.3. Establishing a Control Plan to Mitigate Risks

Study teams will determine risk controls based upon their available resources and identify responsible parties to achieve mitigation.

During each phase, the site teams will be supported by the Implementation Planning and Risk Management teams to execute the following activities:

Planning

- Identification of Candidate Risks per study type and site
- Initial customization of Risk Analysis components (OEAM tool)
- Development high level risk profiling approach

Stage I

- Validation of components and approach
- Application of risk profiling approach
- Integration with option development
- Development of risk mitigation approach guidance

- Development of transition plan tracking guidance

Stage II

- Application of risk mitigation approach guidance
- Application of transition/implementation plan tracking guidance
- Quantification of risk analysis for financial modeling
- Development of transition/implementation plans

7.4. TOOLS AND TEMPLATES

- VA's OAEM Risk Guide and Risk Scoring Template
- PwC developed Risk Profile Tool for Each Option
- PwC developed Implementation planning (timeline and sequencing) tool

7.4.1. Implementation Planning Tool

The tool supports implementation project plan development in a simplified format which will serve as the input to develop a project plan in Microsoft Project providing Gantt charts. The tool links implementation tasks with risks which are detailed further in the risk template. The tool collects several critical categories of input as well as determining the sequencing and relationships of tasks through identifying predecessor relationships and outline levels. This format supports input by the PwC team site leaders and site teams and is easily convertible into Microsoft Project.

Implementation plans contain the tasks which will support transition activities as appropriate to each site and associated option. These elements include construction related tasks, transition of contracts, impacts to staff and staffing realignment, transition of patient care, equipment and technology transition and communication activities,

Figure 7.2 – Implementation Planning Template

ID	Task	Duration	Start	Finish	Predecessors	Outline Level	Risk Element	Owner
1	Identify Care Options	30d	10/1/05	10/31/05		1	Third Party Agreements	VISN
2	Negotiate Contracts	100d	10/31/05	12/25/05	1	2	Third Party Agreements	VISN
3	Transition Current Staff	200d	10/1/05	4/20/05	1	3	Labor Agreements	MC
4								
5								
6								
7								
8								

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PwC Developed Risk Profile Tool

Figure 7.3 – Option-Specific Risk Assessment

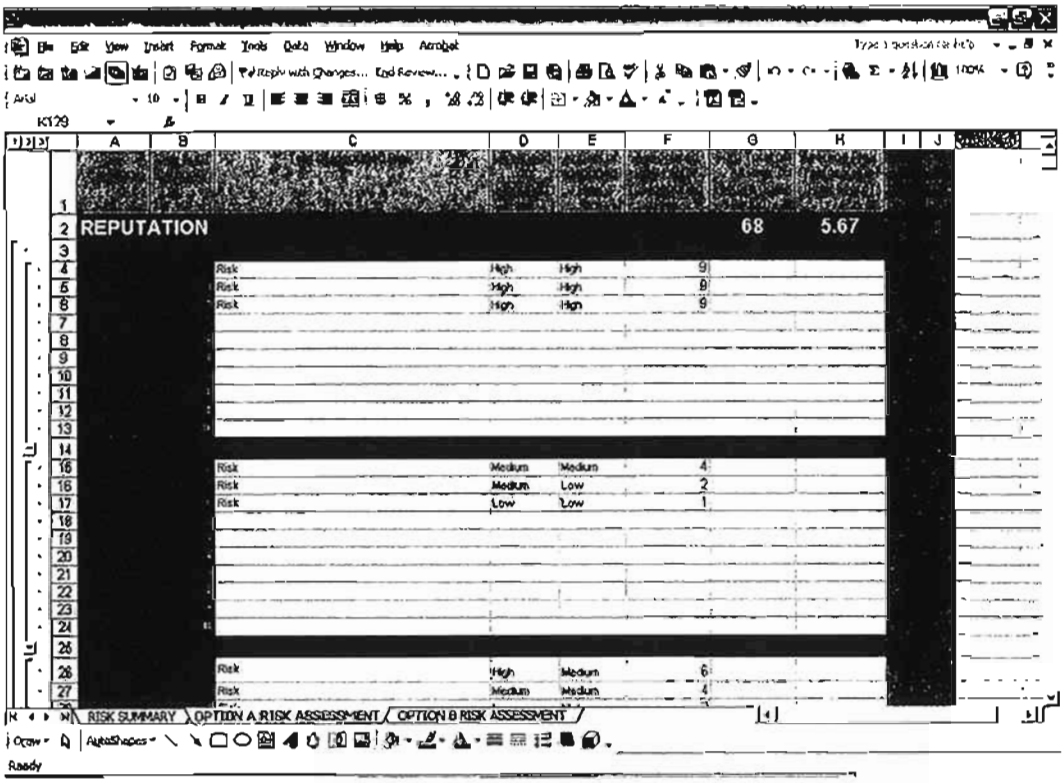
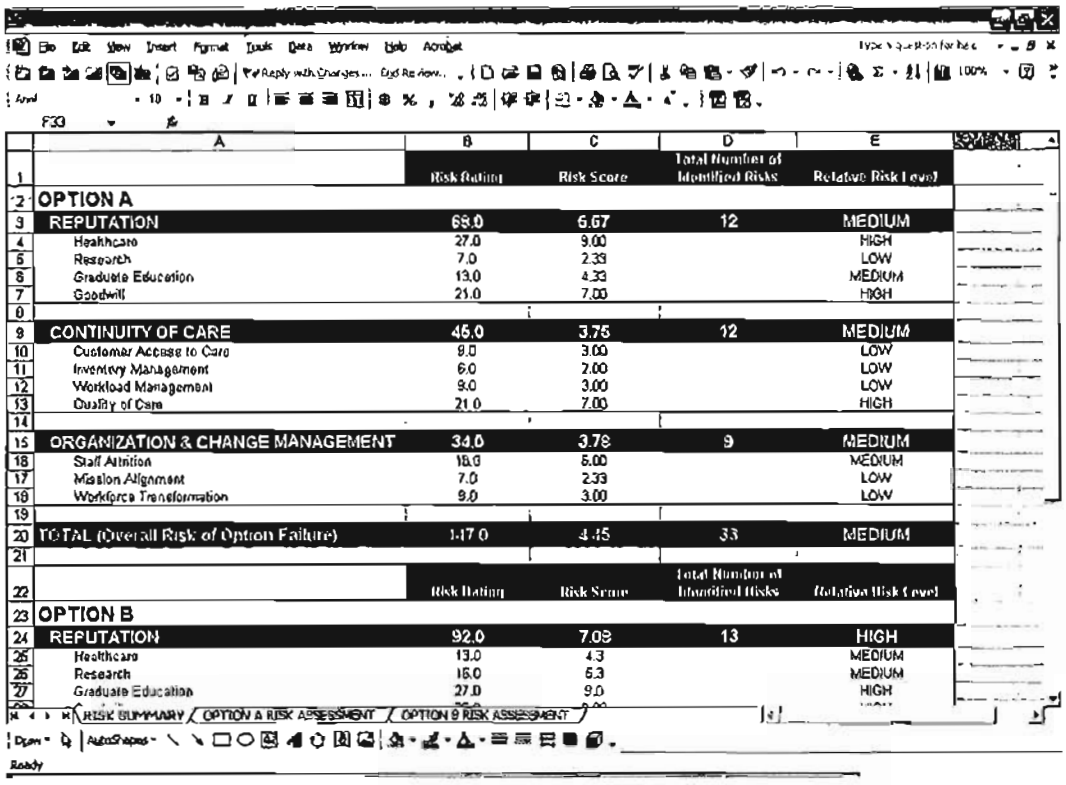


Figure 7.4 – Risk Summary



	A	B	C	D	E
1		Risk Rating	Risk Score	Total Number of Identified Risks	Relative Risk Level
2	OPTION A				
3	REPUTATION	68.0	6.67	12	MEDIUM
4	Healthcare	27.0	9.00		HIGH
5	Research	7.0	2.33		LOW
6	Graduate Education	13.0	4.33		MEDIUM
7	Goodwill	21.0	7.00		HIGH
8					
9	CONTINUITY OF CARE	45.0	3.75	12	MEDIUM
10	Customer Access to Care	9.0	3.00		LOW
11	Inventory Management	6.0	2.00		LOW
12	Workload Management	9.0	3.00		LOW
13	Quality of Care	21.0	7.00		HIGH
14					
15	ORGANIZATION & CHANGE MANAGEMENT	34.0	3.78	9	MEDIUM
16	Staff Attrition	15.0	5.00		MEDIUM
17	Mission Alignment	7.0	2.33		LOW
18	Workforce Transformation	9.0	3.00		LOW
19					
20	TOTAL (Overall Risk of Option Failure)	147.0	4.45	33	MEDIUM
21					
22		Risk Rating	Risk Score	Total Number of Identified Risks	Relative Risk Level
23	OPTION B				
24	REPUTATION	92.0	7.08	13	HIGH
25	Healthcare	13.0	4.3		MEDIUM
26	Research	15.0	5.3		MEDIUM
27	Graduate Education	27.0	9.0		HIGH

RISK SUMMARY / OPTION A RISK ASSESSMENT / OPTION B RISK ASSESSMENT

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8.1. SCOPE & PURPOSE

The purpose of the Team PwC Stakeholder Engagement Team's work stream is to provide an overall framework for managing and coordinating the wide variety of communications that take place, directly or indirectly, as part of the VA CARES Business Plan Studies project. The stakeholder engagement methodology addresses communication, training, capturing stakeholder input, and orchestrating public meetings.

The Team PwC Stakeholder Engagement Team will:

- Assist the VA in establishing credibility and engendering trust
- Minimize project risks by providing timely and useful information to stakeholders, the VA, Local Advisory Panels, Team PwC, and other government contractors
- Develop tools and templates to support communication within the internal team and to external stakeholders
- Obtain, analyze and incorporate stakeholder input into the overall option development process
- Provide support to Local Advisory Panels, local VA staff and PwC Site Team Leads in coordinating and preparing for administrative and public meetings
- Devise a coordinated and straightforward communication plan that ensures that the internal team (VA, Team PwC, Local Advisory Panels) and external stakeholders are clear about what needs to be communicated, how frequently, by whom, to whom, and how.

As depicted in Figure 8.1, stakeholder engagement is driven by the Local Advisory Panel public meeting schedule. All communication, stakeholder input capture and analysis, and meeting support requirements described in the approach section revolve around these public meetings. The PwC Stakeholder Engagement Team is a centrally located resource, serving as advisors to the Team PwC Site Team Leaders at each study site and other functional teams. The PwC Stakeholder Engagement Team is responsible for establishing and maintaining the public meeting-based communication structure that allows Team PwC to communicate effectively and contribute to the CARES Business Case Study Process.

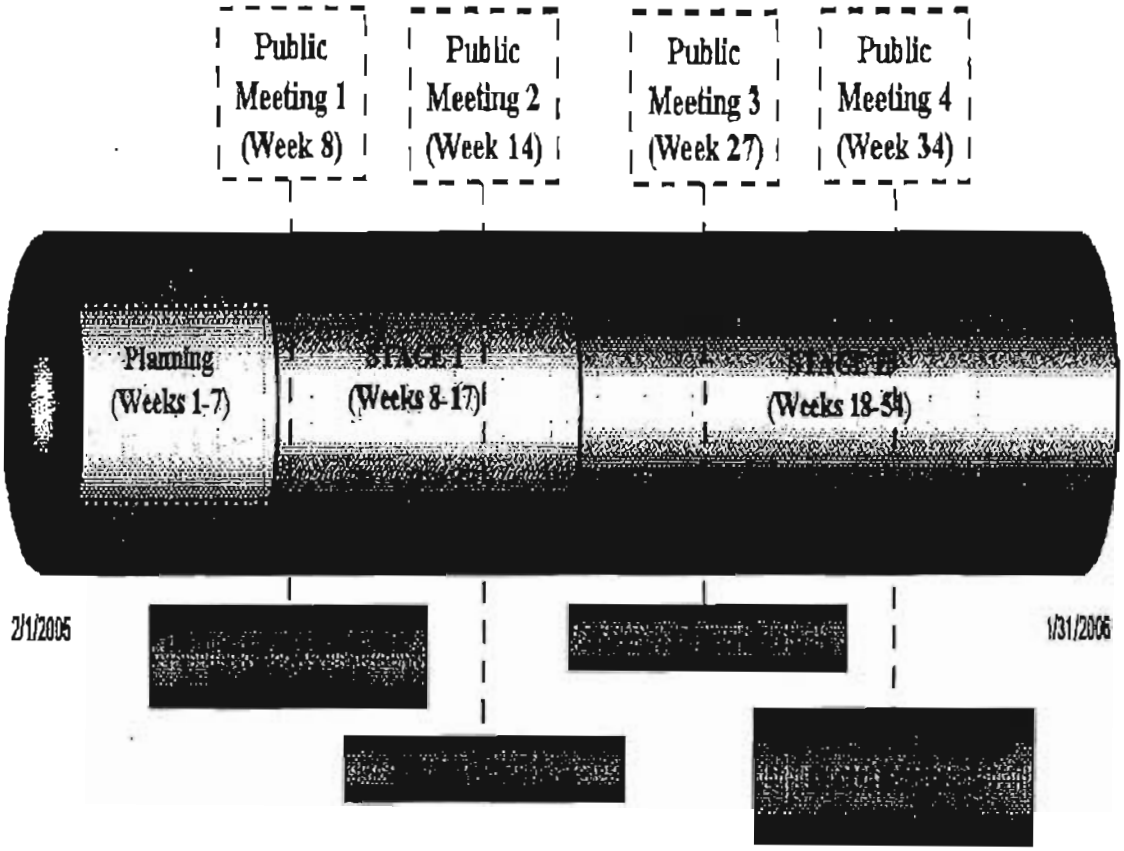

Figure 8.1

Similar stakeholder activities will take place at each public meeting. Team PwC's Stakeholder Engagement Team has grouped these activities into three distinct phases: 1. Pre-meeting activities, 2. Meeting activities, and 3. Post-meeting activities.

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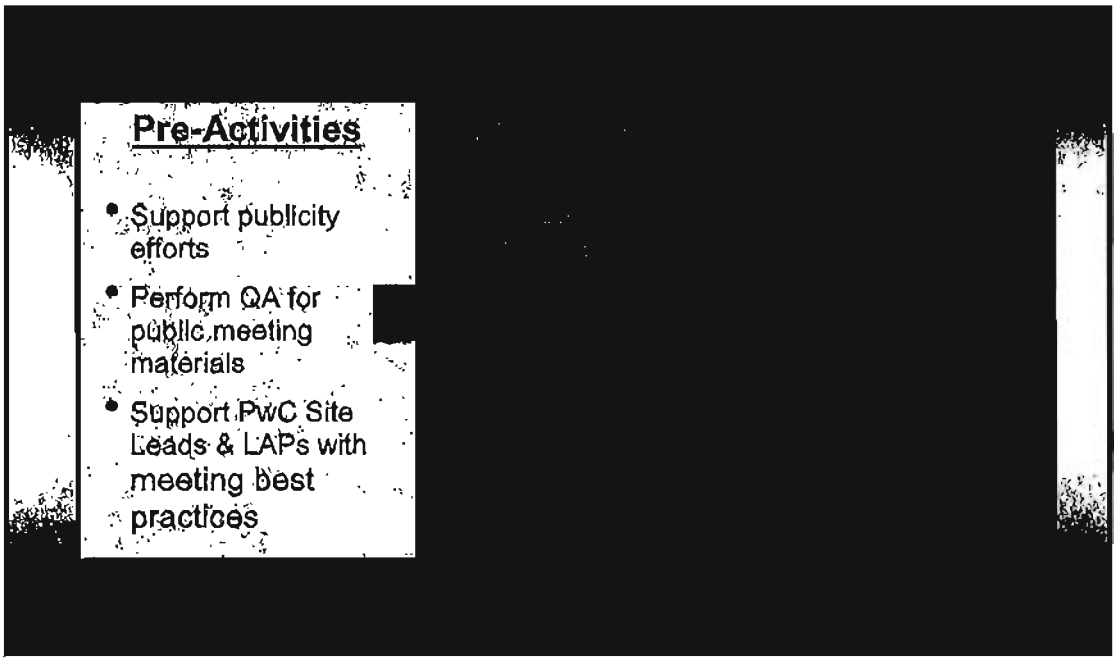

Figure 8.2

Pre- Meeting Activities: Work conducted during this phase consists of planning and preparation for the administrative and public meetings. In addition, a portion of this time is to be devoted to working with Team PwC site team leads and VA local public affairs officers to support publicity, media and logistical requirements.

Public Meetings Activities: This is the period when stakeholder comments are to be captured via electronic, written and oral mechanisms (Pre-determined cut-offs for receiving stakeholder input to be considered in the option development process will be established based on site specific project plan schedule).

Post-Meeting Activities: Following each public meeting: stakeholder comments are to be captured, analyzed and aggregated.

8.2. APPROACH

Section IV.C of the Statement of Work (SoW) sets out the requirements for the stakeholder input plan. The SoW also contains numerous other references to stakeholders and communications that are considered in the Chapter. As a result of discussions with the VA, several tasks have been modified and this methodology reflects the agreed-upon tasks to be completed. Team PwC Stakeholder Engagement Team has been tasked to perform work in four main areas: Communication, Training & Education, Stakeholder Input Capture and Analysis, and Meetings Support.

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8.3. COMMUNICATION

Team PwC's Stakeholder Engagement Team is tasked with instituting a comprehensive communication process for the entire project team. This communication process includes:

- Providing a structure that enables Team PwC team to interact and work efficiently and effectively as well as with VA staff members, Local Advisory Panels, and stakeholders impacted by the CARES project.
- Establishing standard practices for communications so it is clear what needs to be communicated, by whom, to whom, and how.
- Defining an outreach strategy that enables the team to increase stakeholder awareness and sponsorship, and minimize disruption to the organization through targeted, proactive communication.

8.3.1. Communication Process

Team PwC utilizes specified processes throughout the CARES Business Plan Studies to ensure that communication needs between external and internal parties are efficiently and effectively identified and managed. The Team PwC communication process consists of eight steps:

1. Identify internal and external audiences
2. Determine communication needs for all identified audiences
3. Outline communications roles and responsibilities for all parties
4. Devise tools & templates to support communication between internal and external parties
5. Establish scheduled and routine communication points to support milestones and deliverables
6. Develop communication materials; templates, methodologies, etc.
7. Track communication requests and information sharing
8. Reassess communication needs and realign process if necessary

This eight-step process is the overarching methodology that the Team PwC Stakeholder Engagement Team implements. All activities performed by the stakeholder engagement team are subsets within the overall communication process.

8.3.2. Communication Responsibilities

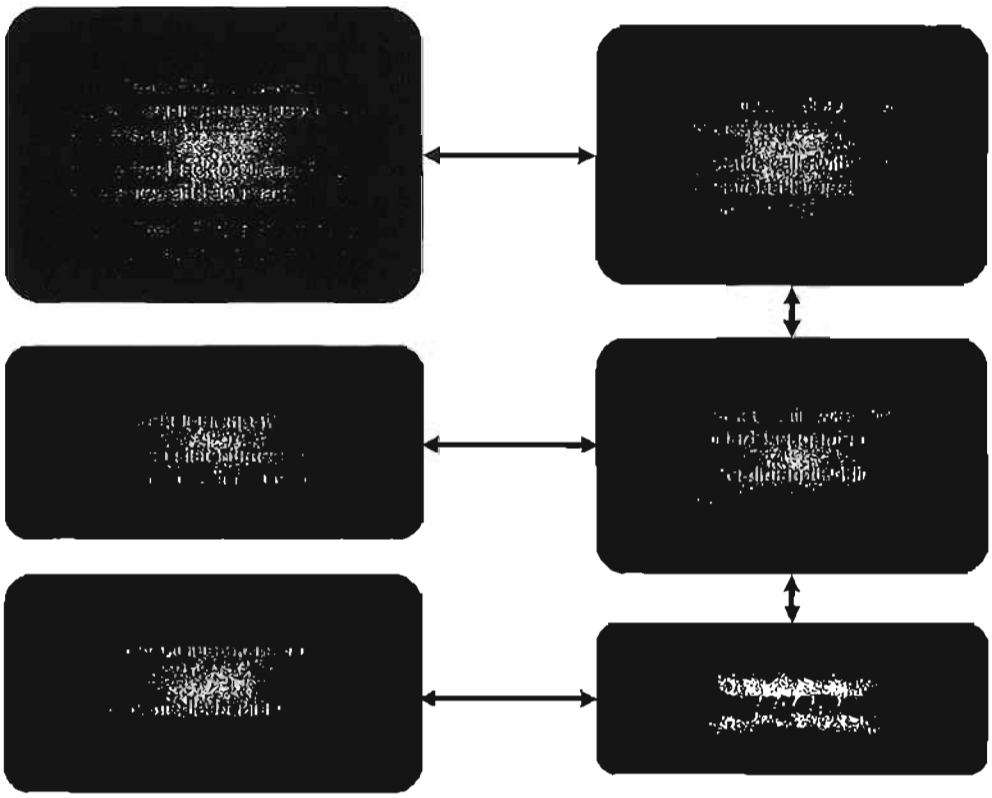

Figure 8.3

The Team PwC Stakeholder Engagement Team ensures that all Team PwC members are clear about what needs to be communicated; how frequently, by whom, to whom and how. The Team PwC Stakeholder Engagement Team directly communicates with the Team PwC Site Team Leads, the local VA Office of Public Affairs, Team PwC National Project Manager and as required, and also with members of the VA's Headquarters CARES team. The Team PwC Stakeholder Engagement Team indirectly supports the Local Advisory Panels and local VA staff in their roles by providing support to Team PwC Site Team Leads at each study site. A more complete list of the roles and responsibilities of the Team PwC Stakeholder Engagement Team may be found in the appendix to this chapter.

The Stakeholder Engagement Team will provide training for PwC Site Team Leads who will ultimately train the Local Advisory Panels and local VA staff on roles and responsibilities, project processes and methodologies, stakeholder interaction, and administrative and public meeting conduct.

Stakeholder engagement is also responsible for providing user-friendly mechanisms to support the process of capturing and analyzing input from CARES stakeholders. In addition, the stakeholder engagement team will ensure that stakeholders are kept informed of site-specific activities and the overall project process and progress through a variety of tools.

The Team PwC National Project Manager or PMO serves as a single point of contact between Team PwC and the VA. Communication requests from the stakeholder team and site team leads roll up to the PMO and information is exchanged between the PMO and the VA.

The Local Advisory Panels and Team PwC will be soliciting input from stakeholders and facilitating public meetings.

The Stakeholder Team is also providing support to the Local Offices of Public Affairs by developing effective publicity and media templates for placement in local papers, newsletters, radio stations and other venues. The stakeholder team is establishing a point of contact for each public affairs office to ensure consistency and responsiveness.

Periodic assessments of the communication process will be conducted at key intervals throughout the duration of the project to ensure that all parties are providing and receiving information in a timely and useful manner.

8.3.3. Communication Audiences

A key step in the communication process is to identify all groups or audiences that will be involved in the project. There are two major categories of audiences in the CARES communications process; those internal to the project who have some role in the execution of CARES objectives and the development of options, and those external to the project who will be providing input.

The internal audiences are:

- The Department of Veterans Affairs:
    - Office of Strategic Initiatives (OSI) including the project COTR
    - Office of Public Affairs (OPA)
    - Veterans Integrated Service Network (VISN)
    - VSSC
    - Cares Implementation Board (CIB)
    - Secretary of the VA
    - VA Employees
- Team PwC:

- Project Management Office (PMO)
- National Project Leadership/Functional Leads
- Stakeholder Engagement Team
- Site Leads

In concert with the Team PwC Site Team Leads, the Local Advisory Panels and the local Public Affairs Offices, the stakeholder engagement team will generate a list of key stakeholders for each site. A sample of these likely external audiences includes:

- Stakeholders:
  - Veterans
  - Veteran's family member
  - Veteran service organizations
  - Special disability organizations
  - Congressional offices
  - Local and state government
  - Community leaders
  - Unions
  - Educational affiliates
  - Others, as they are identified
- Local Advisory Panels
- Others, as they are identified

Each key audience has a unique communication goal and process for achieving that goal. The communication goals for several key audience groups and the mechanism to achieve the intended results are as follows:

Audience	Goal	How
External Stakeholders	Establish appropriate mechanisms to communicate project process and receive and incorporate stakeholder input	Solicit input via website, mail, and meetings Communicate with press and media
Local Advisory Panels	Provide tools, guidelines, templates and stakeholder data analysis to support LAPs in their role	Monthly reports, administrative meetings, training, stakeholder analysis reports
VA	Provide timely and accurate information reflecting stakeholder feedback	Meetings, reports, status call with local VA (OPA)
PwC Site Team Leads	Equip Site Team Leads with overall project process, templates, and tools to support them in their role	Weekly status calls, training
PMO & Functional Leads	Provide timely status updates and share communication requests	Project InVision, weekly status calls

Figure 8.4

8.3.4. Communications Media

There are two major categories of communications mediums that will be utilized throughout the course of the project. One is "Project Communication Mediums", which Team PwC will use to communicate internally, as well as with the VA. The other is "Stakeholder Communication Mediums", which Team PwC and the VA will use to communicate externally with stakeholders and the general public.

- **Project Communication Media:**
  - **Project InVision**: Internal PwC tool to manage project details, tasks, responsibilities and deadlines
  - **Templates & Guidelines:** Various best practices, methodologies and templates to guide user groups in the preparation of key communication items
  - **Progress Reviews and Status Report Conference Calls and Meetings:** Periodic reviews and updates provided from one group to another reporting the progress of a particular aspect of the project
  - **Administrative Meetings**
  - **Email**

- **Stakeholder Communication Media:**

- **Website:** web-based medium used to share project timelines, activities, meeting dates, documents with internal and external stakeholders, and also capture stakeholder input
- **Mail:** Utilize mail stop(s) to solicit written feedback from stakeholders
- **Public Meetings:** Forum to allow stakeholders the opportunity to voice their positions and to receive status updates on option development and decisions
- **Advertising (bulletins, newspapers, radio, etc.):** Announcement of public meetings to appropriate stakeholders and communities
- **Paper Comment Forms**

8.3.5. Email

As indicated, Email is a tool that will be used by the internal team to quickly communicate information. Since the CARES project involves individuals that are geographically dispersed, email is a form of communication for all team members. Provided the sensitive nature of the CARES project and the ability to mass distribute electronic documents, the Stakeholder Management Team will employ and encourage the use of recommended guidelines for Email communications between CARES team members (See Email guidelines in Appendix 8.A)

8.4. TRAINING AND EDUCATION

Team PwC Stakeholder Engagement Team is required to provide a comprehensive education program to the Local Advisory Panels and to local VA staff. Due to budget and travel constraints, the stakeholder team will conduct a train-the trainer session for Team PwC Site Leaders to equip them with tools and knowledge to provide subsequent training to Local Advisory Panels and local VA staff. We will employ our Toolkit of best practices and guidelines to execute specific tasks required to develop training relevant to this phase of the CARES project. Using a five phased approach, the Stakeholder Engagement Team will design, develop, and deliver a "train-the-trainer" session for Site Team Leads.

The training curriculum is designed to ultimately support Local Advisory Panels and the local VA staff. During the training, Site Team Leads will be provided a toolkit of guidelines and best practices to assist them with ensuring that Local Advisory Panels and the VA are functioning effectively and in accordance with operational and ethical requirements, well informed, understand the process and approach for the studies, and equipped to orchestrate well-run public meetings. Site Team Leads will be responsible for providing training to Local Advisory Panels and local VA staff.

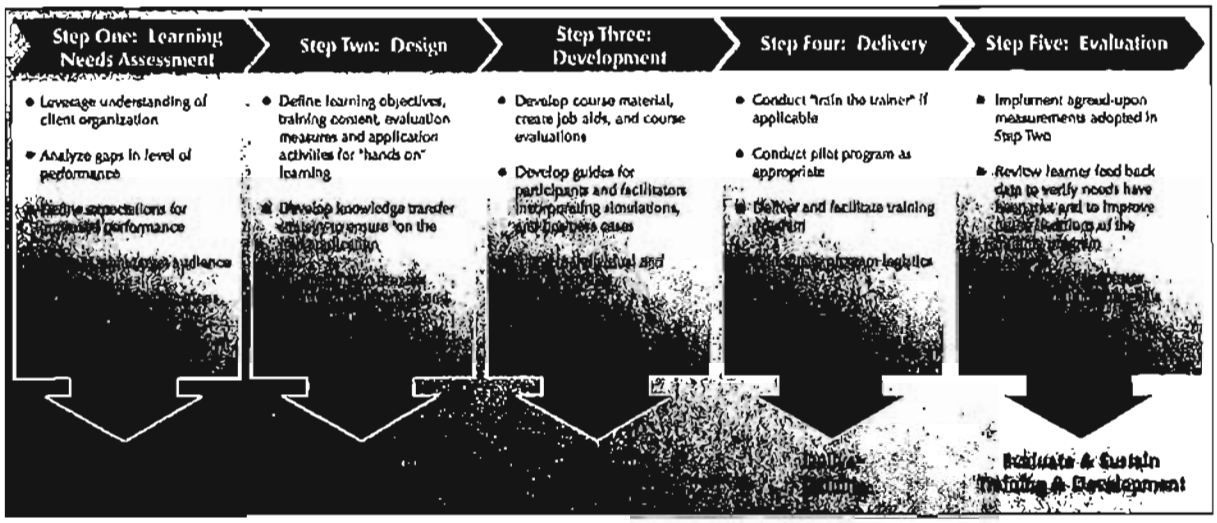

Figure 8.5

Step One, the **Learning Needs Assessment** is where we refine PwC's understanding of the VA's organization. During this phase we gain an understanding of Local Advisory Panel members as well as local VA staff. Because we are also training site leads and other functional leads, this is when we gather and document the specific needs of our site team leads.

Step Two is where we **Design** the training based on the understanding gained in Step One. The design team defines the learning objectives, training content, evaluation measures, application activities to provide "hands-on" learning and a knowledge transfer strategy.

In Step Three, the **Development** team writes the training materials based on the training design. This will include developing role-play exercises such as effective ways for conducting public meetings.

In Step Four, PwC will deliver the training. Following the development of the learning materials, we will employ a train-the-trainer delivery approach. We will train our site team leads to deliver training to the Local Advisory Panel and Local VA staff.

The final step is an **Evaluation** of the program. We will measure the results of our training through a formal evaluation of the site team leads, the local advisory panels and the local VA staff. The data received during the Evaluation step feeds back to evaluate the data collected in the Needs Assessment phase for accuracy and completeness. The Evaluation data will determine the need to create or refine guidelines and templates.

All phases of the training curriculum will be completed prior to the first public meeting. Throughout the duration of the studies, The Stakeholder Team will revise or create new

guidelines and templates to meet the needs of Site Team Leads and Local Advisory Panels.

8.4.1. Training Curriculum

I. Introductions
II. Project History and Background
III. Project Timeline and Schedule
IV. Roles and Responsibilities
Stakeholder Engagement
Site Team Leads
Local Advisory Panels (show 30 minute video produced by VA)
V. Study Methodologies
Approach/Methodology
Study Criteria
Inputs/Outputs
VI. Who are your stakeholders?
Describe Stakeholder Input Mechanisms
VII. Tools and Templates (Toolkit)
VIII. Meeting Execution
Presentation Skills
Role Play
IX. Recap, Final Q & A
X. Evaluation

The ultimate objective for the training is to ensure that the Local Advisory Panels and local VA staff are clear about project goals, timelines, roles and responsibilities, methodologies, stakeholder input capture mechanisms and to equip them with tools and guidelines for effective public meeting planning and execution. Site team leads will be given opportunities to conduct role-play exercises in preparation for public meetings, participate in learning activities, ask questions, and receive formal presentations.

8.5. MEETING SUPPORT

The Team PwC Stakeholder Engagement Team is expected to directly support the PwC Site Team Leads who will ultimately support the Local Advisory Panels and the VA with conducting four, potentially five, public meetings.

8.5.1. Specific Roles and Responsibilities

While the Local Advisory Panel Operating Procedures assign primary responsibility for agenda development, public announcement of the agenda summary, site selection, meeting conduct and management, public accessibility, and recordkeeping to the Chair and panel members, there are several other teams providing support. The specific roles

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and responsibilities associated with public meetings are listed in the Roles and Responsibilities table (Appendix 8.G).

Public Meeting Evaluation

The Stakeholder Engagement Team will develop an evaluation form for Local Advisory Panel Chairs to complete following the public meeting. It is anticipated that this form will be completed with input from all panel members no later than five days after the public meeting. This form will provide an opportunity for the Panel to discuss meeting dynamics. It will also serve as a basis for creating and refining the tools and templates used to support enhanced communication and public meeting execution.

8.5.2. Stakeholder Input and Analysis

Specific requirements include the following:

- Identify stakeholder groups, their issues and indications of support
- Analyze stakeholder views and impact on business plan options
- Create website for stakeholders
- Capture stakeholder input collection
- Aggregate and analyze stakeholder input from all venues and provide it to the Local Advisory Panels for deliberation
- Perform an independent external analysis of stakeholder feedback and incorporate into the option formulation process

Stakeholder Input Capture

The Stakeholder Engagement Team will establish and utilize accessible and user-friendly mechanisms to capture stakeholder feedback and provide information.

With assistance from the local Public Affairs offices and the Local Advisory Panels, stakeholders will be identified and their input/feedback will be solicited in three ways:

Electronic Comment Form

- In order to capture the most useful input, a Comments Form will be developed to elicit specific information from the stakeholder, as well as general comments.
- VA will provide generically approved questions for the Form, to comply with the OMB approval process. The quality and usability of input data captured will depend on the relevance of the pre-approved questions to the CARES project and its goals.
- Via a website dedicated exclusively to this phase of CARES, stakeholders will be able to submit their comments on an electronic form.
- Stakeholders will be able to access this site 24 hours a day, seven days a week until the conclusion of the fourth public meeting. (estimated timeframe)

- Where feasible, stakeholders will be provided access to PC terminals with the electronic comment form at the public meetings.

- Depending upon the VA's final ruling on privacy restrictions, PwC will activate an "Auto Reply" mechanism to acknowledge receipt, thank respondents for their comments, and assign a record number to each comment.

Paper Comment Form

- A paper version of the form will also be available, mirroring the layout and content of the electronic form.
- Paper forms will be distributed to local venues based on the recommendation of the Local Advisory Panel and local VA staff (e.g. hospitals, libraries, VSOs).
- Paper forms will also be available at the public meetings. PwC will provide the form template electronically. It is the responsibility of the Site Leads to print out and make copies for stakeholders at the public meetings.
- Individuals and organizations are responsible for envelopes and postage necessary to send their form through the US Mail, unless the comment form is collected on-site directly following the public meeting proceedings.
- Forms will be collected through a central P.O. Box in Washington DC (potentially Gaithersburg, MD) and at the public meetings.
- Mail sent to backup, site-specific mail stops will be forwarded by local VA staff to the processing center.
- Handwritten letters, form letters, and other forms of written correspondence, apart from the Paper Comments Form, sent to the central mail location or backup sites will also be collected, processed, categorized, and incorporated for analysis.
- All written correspondence will be processed accordingly: received at central P.O. Box in DC; catalogued with a record number, scanned into electronic format, and filed. The official paper comment forms will also be scanned.

Testimony, both verbal and written

- Public meetings proceedings will be summarized
- Written testimony will be accepted on site. A statement of comment for the record of the meeting must be submitted a minimum of two days prior to the public meeting date

Website Functionality

The website will be used for both:

- Communication with Stakeholders
  - Public meeting announcements and schedules, meeting agendas and related materials, meeting summaries, description of options, link to previous CARES

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archived website, congressional briefings, and other information pertinent to the project. (see Website Content section below for more information)

- Soliciting Stakeholder Input
  - Stakeholders can submit an Electronic Comment Form to provide feedback to on the CARES studies. All input receive via the website will be captured in a database.

Website Design, Development and Maintenance

- Working within OMB requirements, the Stakeholder Engagement Team will design and develop a website with guidance from the VA.
- PwC will provide the requirements and specifications to a subcontractor for the web design and correlated database development.
- All website and database files will be hosted on VA's servers. VA's supported development environment consists of: Microsoft IIS 5, SQL Server 2000, ASP, and ColdFusion.
- VA will assign a Point of Contact responsible for website content. PwC will submit all material to be uploaded, and any changes to the website, through this contact.
- Website Content will consist of:
  - Public meeting announcements and schedules
  - Meeting agendas and relevant materials
  - Meeting summaries
  - Summaries of stakeholder input (individual comments will not be posted)
  - Description of options
  - Link to previous CARES archived website
  - Congressional briefings
  - Other information pertinent to the project
  - Stakeholders can submit a comments form electronically to provide feedback to the CARES team on the project

Sample layout of website.

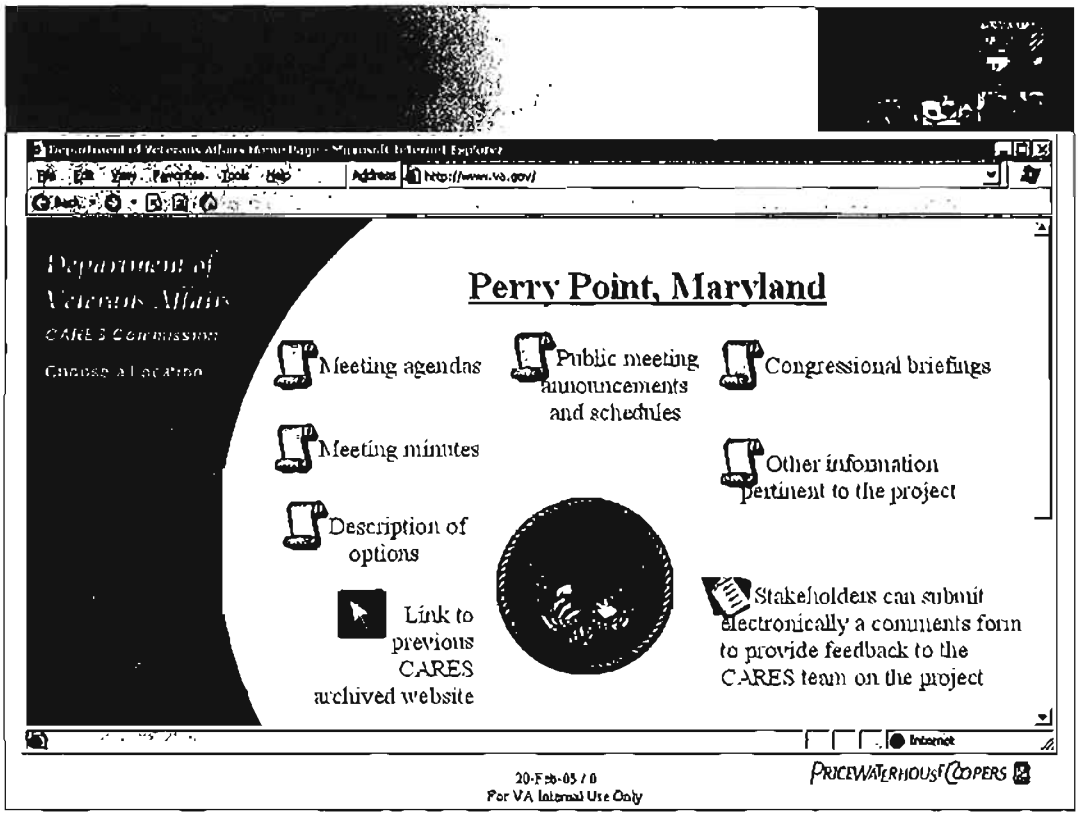

Figure 8.6

Stakeholder Input Analysis

- Analysis will be performed on three mediums of input: electronic comment forms, written comment forms & correspondence, and testimony received through agreed-upon (by VA and contractor) official channels.
- Comment forms received via the website will be assigned a tracking number (contingent upon on privacy restrictions), counted, sorted and analyzed using the associated database.
- Written comment forms will be assigned a tracking number, scanned, read, sorted by key themes, counted and input into database.
- Written correspondence will be scanned, archived and sorted by oppose/favor, and by key theme where applicable. As is feasible, responses will be further sorted according to the criteria used for sorting the electronic data. Every attempt will be made to review each piece of written correspondence received. Where the volume is too high, random sampling will be done.

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- Oral testimony will be categorized by key theme and listed as an entry into the database. Written submittals collected at public meetings will be available for further review by the Local Advisory Panel and Team PwC.
- Results of all three analyses will be summarized and aggregated by site.

Analysis will be provided to the PwC Team, the Local Advisory Panel, and ultimately the Secretary. Analysis results will be incorporated into the option development process and shared with the internal team (PwC, VA, Local Advisory Panel) and external stakeholders:

High-Level Analysis

- Website will reflect high-level summary analysis of stakeholder input:
  - Number of comments
  - Top areas of concern (key themes)

Detailed Analysis

- Reports to Local Advisory Panels, VA and Team PwC will reflect:
  - Site specific issues
  - Number of comments
  - Alignment of comments related to option development criteria

The specificity of the analysis will be dictated by our ability to ask relevant and pointed questions. In order to solicit comments, the Stakeholder Team will select from a VA pre-approved list of questions asked of veterans. Questions will be selected based on their ability to closely align with high level option development criteria: access, quality, economic impact and reliance on the VA facility. Pre-approved questions include questions about the ease with which a veteran can be seen by a doctor of his or her choice, the convenience of the location of the facility at which the veteran is seen, and his or her assessment of the overall quality of care provided. There are no pre-approved questions which are pertinent to potential changes in the locations at which VA provides care to veterans, so that the open-ended comments may be the only means to elicit views on specific options that have been developed.

Duration and Timeline

Stakeholder Input Capture and Analysis will occur in three phases:

- **Design and Development of Mechanisms**: website and mailstop(s)
  - February 2005 – April 2005 (estimated)

- **Collect Stakeholder Input**
  - April 2005 – October, 2005 (or longer if deemed necessary)

- Formal collection timeframes will be established prior to each public meeting to allow time to synthesize all responses and provide input to the correlated option development phase.

- **Stakeholder Input Analysis**
  - March, 2005 – October, 2005 (or longer if deemed necessary)
  - Stakeholder input will be monitored on a regular basis to identify critical issues that need to be addressed by either the VA or the Local Advisory Panel. As issues arise, the stakeholder team will route concerns through the site team leads to the Local Advisory Panel and local VA staff, or through the PMO to the VA.

8.6. TOOLS AND TEMPLATES

Stakeholder engagement is developing a Toolkit of best practices, guidance and templates for PwC Site Team Leads and ultimately the Local Advisory Panels, and local VA staff. The Team PwC Stakeholder Engagement and Communications Toolkit contains:

- Guidelines for Publicity
- Guidelines for Selecting a Location
- Guidelines for Managing Public Comments
- Guidelines for Public Meetings
- Tips for Organizing a Public Event
- Recommendations for Preparing Effective Meeting Summaries
- Evaluation Form
- Others to be determined

Detailed tools and templates are outlined in Appendix 8.

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APPENDICES

Appendix 1 – Glossary

Item	Definition
Access	The Access to healthcare assessment is evaluated along three dimensions: ▪ Drive time ▪ Patient origin ▪ Wait time
Access drive time thresholds	Purpose is to determine the numbers of actual enrollees that are within defined travel time parameters for primary care, acute hospital, and tertiary care. Type of Care / Time criteria (min.) / Threshold criteria (%) Primary Care / 30 min. - Urban / 70% 30 min. - Rural / 70% 60 min. - Highly Rural / 70% Acute Hospital / 60 min. - Urban / 65% 90 min. - Rural / 65% Tertiary Care / 240 min / 65% Threshold Criteria refer to the minimum acceptable % of projected enrollees in a designated market that must meet the access standard. VISNs were allows designate counties as highly rural and VSSC can provide a lists of counties by VISN and market with the designation of urban, rural or highly rural for each county.
Access patient origin	Patient origin looks specifically at those veterans who actually sought care at the study site. PwC will utilize reports from DPPB to evaluate patient origin, if the VA determines this is necessary.
Access wait time thresholds	Wait time measures the wait time between the appointment creation date and the day of the appointment encounter. This is measured for both new and established patients and factors in time spent waiting on the VHA electronic wait list or due to clinic cancellations. Patient type / Wait time target New patients / 80% of all new patients within 30 days of creation date. Established patients / 95% of established patients within 30 days of the desired appointment date (still to be determined).
Access tools	These tools used to evaluate Access are as follows: 1. VA ArcView Access Tool – The official calculation, PSSG will use this tool to generate a data file for PwC. 2. Primary Care Access Tool – Used to assist in the evaluation of options. 3. Distribution Population Planning Bases (DPPB) – VA data source for patient origin information. 4. Advance Clinic Access Cube – VA data source for wait times. 5. MapPoint – mapping software used to display drive time circles and Vet Pop origin.
Additional costs	Costs incurred in additional to "in kind" services from sharing agreements. For instance, VA may provide 50 MRIs for a non-VA provider in exchange for 50 inpatients medicine BDOC and an additional cost of $100 per BDOC.
Additional revenues	Revenues received in additional to "in kind" services from sharing agreements. For instance, VA may provide 50 MRIs for a non-VA provider in exchange for 50 inpatients medicine BDOC and an additional $100 per MRI.
Aggregate economic activity	The value of economic value added, calculated for each BPO, at each Study Site, utilizing the BPO Financial Analysis Tool.
Allocation	Distribution of workload applicable to Study Sites to Sites within the Study Sites.
Alternative Business Plan Options	Theses are Business Plan Options generated as alternatives to the Baseline Business Plan Option providing alternative ways the VA could meet the healthcare requirements of veterans at the Study Site

Item	Definition
Ambulatory Services	These are principally services to veterans in a clinic setting (that may or may not be on the same station as a hospital), for example, a Cardiology Clinic. The grouping as defined by the VA also include several diagnostic and treatment services, such as Radiology.
Analysis Scenario	Principle scenarios will be considered for each Business Planning Option during Stage II: • Base Case: most expeditious and economically favorable time frame – a single Utilization Forecast • Delay Case: most expeditious and economically favorable time frame plus 5 years – a single Utilization Forecast
Annual VA investment levels.	Annual investment levels calculated by the Financial Analysis required by the VA for a particular Business Plan Option will be aggregated and separated by major type of expense.
Appraisal reports	Details the market value of each VA property.
Average Daily Census (ADC)	Average Daily Census is a calculation that shows, on a typical day, the average number of veterans in the hospital for a given service. Mathematically this is Bed Days of Care / 365.
Base case implementation timing	This assumes that the first new investment would occur in FY08.
Baseline Business Plan Option	The Baseline Business Plan Option is the Business Planning Option for the VA not to change any element of the way healthcare is provided in the Study area (this Business Planning Option is equivalent to a Do Minimum (or Do Nothing/Status Quo) Option). Under this Business Planning Option: ▪ The future utilization forecast is applied to provision as today. Healthcare would continue to be provided from current locations using current facilities; save to the extent that (a) healthcare volumes for particular CICs fall below key threshold levels when it is assumed that such healthcare procedures would be contracted out and current facilities, or portion thereof, mothballed, unless they can be re-used, or (b) health care volumes for particular CICs increase to the point where additional capacity is needed. Where (b) applies, Team PwC's Healthcare and Capital Planning teams will consider minimal change options to meet the gap. ▪ Capital Planning costings will allow for current facilities to receive such early investment as is required to rectify any material deficiencies such that they would provide a safe and secure healthcare delivery environment (such investment is assumed to occur when necessary and include investment to make facilities seismically secure and to rectify all weaknesses identified in the facilities condition assessments). To the extent that Gaps in healthcare provision are identified at the Non-Healthcare study sites and the VA is to provide the healthcare facilities requirement, the Capital Planning team will develop Business Plan Options that provide physical solutions that meet the VA's need. ▪ Life-cycle capital planning costings will allow for such on-going planned preventative maintenance and life-cycle maintenance of major and minor building elements. In the event that a particular structure or key building element is life expired, it is assumed that the structure or key building element is replaced. ▪ Re-use plans will consider maximizing the re-use potential of existing vacant.
Bed Days of Care (BDOC)	A Bed Day of Care is a day that the inpatient bed is occupied by a veteran during a given stay. This is GFI by CIC.
Bed Need	Bed Need is calculated by dividing the ADC by a given occupancy percentage, typically 85%. Thus, if a station has an ADC of 34 for Inpatient Medicine, the Bed Need is 34/.85 or 40.
Benefits	Since the Financial Analysis for CARES Business Plan Studies is a Cost Effectiveness Analysis, the term "benefits" means cost savings and cash-inflows estimated, and should not be confused with monetarized benefits or other economic measures used in a formal cost/benefit analysis.

Item	Definition
BPO Financial Analysis Tool	Is the Microsoft Excel based tool developed by Team PwC to prepare the 30-year Life-cycle Cost Estimate for each Business Plan Option at each Study Site.
BPO Planning Indicators	These are the Planning Indicators provided to the Capital Planning team by Team PwC's Healthcare team for each BPO generated by the Healthcare Team for the General Capital Planning Sites and by the VA for the Comprehensive Capital Planning Sites. Indicators will be of two types: (a) beds by CIC, and (b) stops by CIC.
Building Gross Square Footage (BGSF)	This is the sum (in square feet) of DGSF and non-departmental space (exterior walls, canopies, docks, etc) composing the overall building area.
Building types to be considered	Building type descriptions (where available and applicable) will be used to provide further detail regarding distribution of space (particularly within existing buildings). A listing of potential building type includes (but is not limited to) the list of types below: ▪ Acute Care ▪ Primary Care (on Campus) ▪ CBOC (off Campus) ▪ Specialty Clinic ▪ Domiciliary ▪ Nursing Home ▪ Research & Development ▪ Education ▪ Administration ▪ Out Lease ▪ In Lease – rented space that the VA uses. ▪ Logistics ▪ Engineering and Utilities ▪ Quarters (on those sites where these are already provided) ▪ Other
Business Plan Option (BPO)	Business Plan Options are the Options developed and assessed by Team PwC as part of the Stage I and Stage II Option Development Process. BPOs are a set of multiple facility level solutions for a given specified CARES category(ies).
Capital Asset Realignment for Enhanced Services (CARES)	Program to proactively ensure VA's ability to effectively deliver healthcare over the next twenty years. The CARES planning process examines veterans' future needs as well as current VA resources in developing a series of planning initiatives (PIs). The CARES planning initiatives will determine how VA will realign its capital infrastructure to provide the optimal level of care in the future.
Capital Costing Team	Davis Langdon, working for Perkins+Will.
Capital Investment Types	The following capital investment types are used in the Cost Effectiveness Analysis: ▪ Construct New ▪ Renovate ▪ Demolish ▪ Temporary Rent ▪ Acquire Land ▪ Rent Space
Capital Planning Team	Perkins+Will (supported by Davis Langdon)
CARES category	Functional area where VA services, both clinical and non-clinical are provided. Examples include: Inpatient medicine, inpatient surgery, research, administrative, etc.

Item	Definition
CARES Implementation Category (CIC)	One of the following 25 categories under which workload is aggregated in the VA utilization forecast models (source): 1. Ambulatory: Behavioral Health (Milliman) 2. Ambulatory: Cardiology (Milliman) 3. Ambulatory: Eye Clinic (Milliman) 4. Ambulatory: Non-Surgical Specialties (Milliman) 5. Ambulatory: Orthopedics (Milliman) 6. Ambulatory: Pathology (Milliman) 7. Ambulatory: Primary Care & Related Specialties (Milliman) 8. Ambulatory: Radiology & Related Specialties (Milliman) 9. Ambulatory: Rehab Medicine (Milliman) 10. Ambulatory: Surgical & Related Specialties (Milliman) 11. Ambulatory: Urology (Milliman) 12. OP Mental Health Program: Community MH Residential Care (Milliman) 13. OP Mental Health Program: Day Treatment (Milliman) 14. OP Mental Health Program: Homeless (Milliman) 15. OP Mental Health Program: Mental Health Intensive Case Management (MHICM) (Milliman) 16. OP Mental Health Program: Methadone Treatment (Milliman) 17. OP Mental Health Program: Work Therapy (Milliman) 18. Inpatient Medicine and Observation (Milliman) 19. Inpatient Psychiatry and Substance Abuse (Milliman) 20. Inpatient Surgery (Milliman) 21. Other Mental Health Inpatient Programs (Milliman) 22. Inpatient Nursing Home (Non-Milliman source) 23. Inpatient SCI (Non-Milliman source) 24. Inpatient BRC (Non-Milliman source) 25. Inpatient Dom (Non-Milliman source)
CARES Implementation Category Cross walk	This is the crosswalk of existing DSS Unit Costs, Space Drivers, and Departments to the CARES Implementation Categories.
CARES Objectives	VA objectives that are the basis for the Contractor recommending the primary Business Plan Option that: ▪ Maintains or improves quality ▪ Maintains or improves access ▪ Maximizes reuse potential of VA owned sites ▪ Results in a modernized, safe healthcare delivery environment ▪ Results in a cost effective physical and operational configuration of VA resources
Cash-flows	These are the annual cash flow calculated by the BPO Financial Analysis Tool associated with the implementation of a particular Business Plan Option at a Study Site.
Clinical Inventory	Clinical Inventory is the listing of clinical services offered at a given Station or Sub-Station. Separate inventory forms exist for VAMCs and CBOCs. The VA will populate the Clinical Inventory for current state; PwC will populate for the BPOs.
Community Based Outpatient Care (CBOC)	A CBOC is an outpatient facility typically housing clinic services and associated testing.

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Item	Definition
Collaboration partners	These include potential collaboration or collocation opportunities with: ▪ Other VA organizations (most likely the VBA) or largely VA funded organizations (e.g. like NCIRE). (Such collocation opportunities should identify the overall magnitude of potential rent and other costs saved from collocation as well as the overall magnitude of the costs associated with implementing such a collocation) ▪ DoD to use/re-use VA facilities/sites. (We anticipate that the VA (HQ) will coordinate with the DoD (supported by Team PwC) to identify potential collocation/collaboration opportunities for: i. the DoD utilizing VA land, facilities or services at particular study sites and ii. the VA utilizing DoD land, facilities or services at particular study sites. • Affiliated Organizations. (We anticipate that the VA and/or the Local Advisory Panels will inform Team PwC of potential collocation and collaboration opportunities)
Collaboration Terms of Trade	These are the terms assumed for the Collaboration, which might include payment for services, payment for space, etc.
Comparison Model	The Microsoft Excel based model used to compare the outputs of BPO Financial Analysis Tool models prepared for a Study Site.
Composite re-use score	Illustrates the VA's CARES Stage II analysis of an existing space's potential for re-use and the relative level of renovations required to improve conditions up to VA standards for the desired function.
Composite functionality score	Illustrates the VA's level of renovations required to improve a space's condition to VA standards.
Comprehensive Capital Planning Sites	▪ Canandaigua ▪ Montrose / Castle Point ▪ St. Albans ▪ Lexington ▪ Livermore ▪ White City ▪ Perry Point ▪ Gulfport / Biloxi ▪ West LA
Comprehensive Re-Use Planning Sites	▪ Canandaigua ▪ Montrose/Castle Point ▪ St. Albans ▪ Lexington ▪ Livermore ▪ White City ▪ Perry Point ▪ Gulfport/Biloxi ▪ West LA
Computerized Physician Order Entry (CPOE)	A method by which physicians are able to input orders for patient care activities (tests) into a computer, greatly reducing error rates and expediting care.
Contract fee rates	Geographic rates that convey the cost of contracting non-VA resources to provide healthcare services. These may be updated by Team PwC for particular sites – like Poplar Bluff
Contract Officer (CO)	Is the Department of Veteran Affairs' Contractor Officer for this Contract
Cost Avoidance	Cost avoidance occurs when implementing an individual Business Plan Option would allow the VA not to make an investment projected in the annual cash flows calculated for the Baseline Option. Cost Avoidance calculations are used for reporting purposes only and do not form part of the Cost Effectiveness Analysis

Item	Definition
Cost Effectiveness Analysis (CEA)	A program is cost-effective if, on the basis of life-cycle cost analysis of competing alternatives, it is determined to have the lowest costs expressed in terms of present cost terms for a given amount of benefits. CEA is appropriate whenever it is unnecessary or impractical to consider the dollar value of the benefits provided by the alternatives under consideration. This is the case whenever (i.) each alternative has the same annual benefits expressed in monetary terms; or (ii) each alternative has the same annual effects, but dollar values cannot be assigned to their benefits. CEA can also be used to compare programs with identical costs but differing benefits. In this case, the decision criterion is the discounted present value of benefits. The alternative program with the largest benefits would normally be favored. CEAs that involve constant-dollar costs should use the real Treasury borrowing rate on marketable securities of comparable maturity to the period of analysis. This rate is computed using the Administration's economic assumptions for the budget, which are published in January of each year. A table of discount rates based on the expected interest rates for the first year of the budget forecast is presented in Appendix C of this Circular. Appendix C is updated annually and is available upon request from OMB. Real Treasury rates are obtained by removing expected inflation over the period of analysis from nominal Treasury interest rates. (see **Discount Rate**) The CEA for CARES Business Plan Studies is the systematic process used by Team PwC for identifying and comparing the acquisition and recurring costs and savings of a variety of alternatives against the Baseline Business Plan Option using the Team PwC Financial Analysis tool.
Cost Savings	Cost Savings are calculated by comparing the annual cash flows calculated for individual Business Plan Options to the annual cash flows calculated for the Baseline Option. (see Recurring Cost Savings)
COTR	Is the Department of Veteran Affairs' Contractor Officer's Technical Representative for this Contract.
Current allocation	Is the current distribution of workload to Sites within a particular Study Site?
Decision Support System (DSS)	VA's cost accounting system.
Deflator	This is the national Treasury deflation rate (currently assumed to be 2% per annum) used to convert nominal costs to 2003 Dollar Cost base or Real costs.
Delay Scenario	This is a 5 year delay to the Base Case Implementation Timing.
Demolish	Physical elimination of excess space.

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Item	Definition
Department	The following is a comprehensive listing of departments for distribution of projected space need as developed in a meeting with Jill Powers, and PwC Healthcare and Capital Teams.

NURSING

Inpatient Medicine
Inpatient Surgery
Medical ICU
Surgical ICU
Coronary ICU
23 Hour Observation/Care
Rehabilitation Medical Care
Inpatient Mental Health & Behavioral Medicine
included in Inpatient MHZ & BM
included in Inpatient MHZ & BM
Urgent Care
Primary Care
Eye Clinic
EEG/Neurology Program (including Traumatic Brain Injury)
Nuclear Medicine
Pathology
Cardiology
Radiation Therapy
Pulmonary/Respiratory Care
Audiology Program
Recreation Therapy Program
Dialysis Program
Dental
Geriatrics
Mental Health Clinic
Substance Abuse Clinic
Digestive Diseases/GI/Endoscopy
Primary Care
Employee Health
Blind Rehabilitation
Spinal Cord Injury
Adult Day Care
Day Treatment
Prosthetics

LONG TERM CARE

Nursing Home Care

DOMICILIARY

Residential Rehabilitation & Domiciliary
Other Inpatient Mental Health included in Medicine Beds

SUPPORT

Nutrition/Food
Canteen
Sterile Process & Distribution Service
Acquisition & Materiel Management Warehouse
Pharmacy - Inpatient
Pharmacy - Outpatient
Environmental Management Service
Linen Service
Engineering Service
Police/Security
Information Resource Management
On Site Laundry
On-Call Program
Residential Quarters

EDUCATION

Education Program

ADMINISTRATION

Director's Suite
Nursing Service Administration
Medical Administration Services
Fiscal Service
Acquisition & Materiel Management Administration
Human Resource Service
Clinical Service Administration
Social Work
Voluntary Service
Library Service
Medical Media
Chaplain Service
Veterans Assistance/Service Organizations
Child Care Centers
Credit Union
Employee Fitness Centers
Veterans Benefits Administration
National Cemetery Administration
Outleased Space

RESEARCH

Medical Research / Development

INFRASTRUCTURE

Lobby Space
Centralized Staff Lockers
Information Resource Management
Boiler Plant

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Item	Definition
Departmental Gross Square Footage (DGSF)	This is the measure of area (in square feet) of VA designated department including primary activity space (rooms), support and administrative areas directly associated with the functions of that department.
Departmental Level Costs	Are assumed to be Service Line level costs which equate to CICs.
Discount Factor	The factor that translates expected benefits or costs in any given future year into present value terms. The discount factor is equal to $1/(1 + i)t$ where i is the interest rate and t is the number of years from the date of initiation for the program or policy until the given future year.
Discount rate	The interest rate used in calculating the present value of expected yearly costs. In order to compute net present cost for a cost effectiveness comparison, it is necessary to discount future costs. This discounting reflects the time value of money. Costs are worth more if they are experienced sooner. All future costs should be discounted. The higher the discount rate, the lower is the present value of future cash flows. For typical investments, with costs concentrated in early periods and benefits following in later periods, raising the discount rate tends to reduce the net present value. The Discount Rate is the rate, published by the OMB, used to calculate the Net Present Cost in Cost-Effectiveness analyses. ***Nominal Discount Rates*** published by OMB are a forecast of nominal or market interest rates for 2005 based on the economic assumptions from the 2006 Budget. These nominal rates are to be used for discounting nominal flows, which are often encountered in cost effectiveness analysis – currently 5.2% per annum for a 30 year analysis. ***Real Discount Rates.*** A forecast of real interest rates from which the inflation premium has been removed and based on the economic assumptions from the 2006 Budget is presented below. These real rates are to be used for discounting real (constant-dollar) flows, as is often required in cost-effectiveness analysis – currently 3.1% per annum for a 30 year analysis.
Discriminating Criteria	These are the evaluation criteria that are used to rank Business Plan Options that have passed Initial Screening Tests (similar Criteria were called Impact Criteria in CARES Phase II).
Divest	Fee simple sale of excess space in buildings, facilities/buildings or land. The VA assumes that it will receive full fair market value in consideration of this Divestiture, save only to the extent that: 1. it is reasonably foreseeable that another Federal Agency would require the excess space in buildings, facilities/buildings or land for continued use by the Federal Government. In these cases it is assumed that the VA would receive either no consideration or payment of full fair market value as consideration for the transferred real property. 2. it is reasonably foreseeable that Home Less Veterans
Donate	Donation of excess space, facilities/buildings or land.
Economic Multipliers	The ratio between the direct effect on output or employment and the full effect, including the effects of second order rounds or spending. Multiplier effects greater than 1.0 require the existence of involuntary unemployment. Economic Multipliers used by Team PwC are the factors obtained from IMPLAN applied to expenditures and the re-use plan associated with a BPO and aggregated to identify the potential indicative economic impact of a particular BPO.
Efficiency savings	Savings resulting from efficiencies gained as a result of implementing a more efficient infrastructure, consolidating functional areas, or signing additional sharing agreements.

Item	Definition
Enhanced Use Lease (EUL)	Title 38 United States Code (U.S.C.) Section 8162, authorizes the Secretary of Veterans Affairs to out lease real property, under the control and/or jurisdiction of the Secretary, and to receive in return, monetary or "in-kind" consideration (i.e., the provision of goods, facilities, construction, or services of benefit to the Department), as all or part of the fair consideration for out leasing the property. The technical elements of this authority are: ▪ The term of an enhanced-use lease may be up to 75 years; ▪ The site to be leased must be controlled by the Secretary; ▪ All uses must be consistent with and not adversely affect the Department's mission; ▪ VA may use "minor" construction funds (up to $4 million) as a capital contribution in connection with an enhanced-use lease; ▪ VA may purchase services, space or facilities in connection with the lease; ▪ VA must hold a public hearing at the location of any proposed enhanced-use lease to obtain veteran and local community input; and ▪ VA must provide two notices to its congressional oversight communities prior to entering into an enhanced-use lease. One of the major elements of the enhanced-use leasing authority is that unlike traditional federal leasing authorities in which generated proceeds must be deposited into a general treasury account, the enhanced-use leasing authority provides that all proceeds (less any costs that can be reimbursed) are returned to medical care appropriations. The ability to keep proceeds created an economic incentive for VA and its property managers to fully utilize their existing capital assts and to begin to view these assets as potential resources to fund needed programs or facility requirements.
Escalators	Are the cost type and location specific inflators used in the Financial Analysis tool to convert Un-escalated (current dollar) costs into nominal costs (in the future).
Financial metrics	Are the explanatory measures that convey the overall financial effectiveness of an evaluated Business Plan Option.
Full DSS costs	Are the current fully loaded unit costs for providing one unit of care from a particular CARES Implementation Category.
General Capital Planning Sites	▪ Boston ▪ Brooklyn / Manhattan ▪ Louisville ▪ Waco ▪ Big Spring ▪ Walla Walla ▪ Montgomery For Muskogee and Poplar Bluff (Capital investment and lifecycle costing and assessment only)
General Re-Use Planning Sites	▪ Boston ▪ Brooklyn / Manhattan ▪ Louisville ▪ Waco ▪ Big Spring ▪ Walla Walla
Government Furnished Information (GFI)	All information and data listed in this document, Team PwC's proposal, the Statement of Work as being GFI is information or data provided by the VA to Team PwC.

Item	Definition
Healthcare Study Sites	1. Boston 2. Brooklyn / Manhattan 3. Louisville 4. Waco 5. Big Spring 6. Walla Walla 7. Montgomery 8. Muskogee
HEDIS	Health Plan Employer Data and Information Set.
IMPLAN	IMPLAN is a well-established regional input-output model commonly accepted and used by economists across the USA is used to address a wide range of impact topics in a given region (county, state, or national) will be used to develop economic multipliers to apply to expenditures aggregated in the model to generate rough order of magnitude indicative economic impacts.
Income stream	Is income generated as a result of the sale or leasing of VA property.
Indicative Economic Impact Analysis ("IEIA")	Is the analysis completed by Team PwC to provide an indication of the relative economic impact of the various Business Plan Options developed compared to the Baseline Business Plan Option. The indicative assessment is not intended to be a detailed assessment; rather it is design to provide a single measure based on direct expenditures of the aggregate economic activity associated with an option.
Inflation	The proportionate rate of change in the general price level, as opposed to the proportionate increase in a specific price of a good or service. Inflation is usually measured by a broad-based price index, such as the implicit deflator for Gross Domestic Product or the Consumer Price Index.
Initial Screening Criteria	A series of criteria used as the basis of the assessment of whether or not a particular Business Plan Option has the potential to meet or exceed the CARES objectives.
In-House workload	Is the total expected demand at the Site level and is a result of managing workload.
Inpatient Services	These are services provided to veterans in the hospital on an inpatient unit, such as a Surgical Unit or Spinal Cord Injury Unit.
Internal Rate of Return (IRR)	Internal Rate of Return ("IRR"). A particular project's IRR is the discount rate that causes its future-value cash-flows to result in a zero NPC. This calculation may not be appropriate in most cases, since these options always result as a cost to the Department.
Joint Ventures	Are sharing agreements that involve exporting workload to a non-VA facility. This is considered as Contracting in Team PwC's analysis
Key Threshold Levels	These are the levels of workload for any particular Healthcare procedure below which the VA would stop providing the particular procedure because of quality and economies of scale concerns. If healthcare volumes for particular procedures fall below Key Threshold Levels then it is assumed that such healthcare procedures would either be (a) transferred to another VA facility or (b) contracted out and the current facilities or portion thereof, used for this procedure mothballed, unless they can be re-used or demolished. Examples include Veterans Rural Access Hospital.
Life-cycle capital cost estimates	Theses are estimates for each Business Plan Option of periodic or continuing costs of significant maintenance or other capital investments over the 30 year assessment period (2003-2033) required to sustain the facilities used by the VA in the particular Business Plan Option.

Item	Definition
Life-cycle Cash-flows or Life-cycle Cost Estimate or Life-cycle Cost	The overall estimated cash cost for a particular Business Plan Option over the time period corresponding to the 30 year assessment period (2003-2033), calculated as the sum of the net annual cash flows resulting from direct (i.e. directly related to the CICs) and indirect operating costs, plus any Life-cycle capital cost estimates, plus any Capital Investment Costs, plus Net Revenues Resulting from Re-use. The Life-cycle cost estimate forms the basis of the CEA. Assessments of architectural and engineering systems repair and replacement status and projections are based on GFI facility assessment documents primarily located in the CAI.
Likelihood	The probability of any risk impacting successful execution of a business planning option's implementation plan.
Magnetic Resonance Imaging (MRI)	A device for imaging tissues in the body using a magnetic field.
Managed space	Complete Business Plan Option at a Site for satisfying space requirements at specific points in time – this is the result of the Capital Planning team.
Managed vacant space	Complete solution for eliminating excess space.
Master Data and Assumptions List (MDAL)	All assumptions and inputs used in the Financial Analysis will be compiled and maintained in a Master Data and Assumptions List (MDAL) for each Study Site.
Mothball	Vacating excess space that will require little future maintenance.
NCQA	National Commission for Quality Assurance
Net Present Cost (NPC)	Is the sum of the present value of the discounted present value of all the annual life-cycle costs associated with a particular BPO. Is the annual cash-flows (costs and revenues) of a BPO discounted using the Discount rate and summed to produce an indication of the BPO's overall costs. NPCs are used to allow options with different implementation timings to be compared on a similar basis relative to the Baseline's and other Business Plan option's net present costs.
Net Revenues Resulting from Re-use	These are the amounts and timing of net in-flows estimated by the Re-Use Team (or OGCs) that the VA could receive from the re-use by Divesting, Donating, Enhanced Use Leasing, Out-leasing, Demolishing (this would be an outflow) or Reserving (which would result in the VA continuing to incur costs on an ongoing basis) of surplus or vacant real property.
New construction	Method of satisfying space requirements by constructing new space.
Nominal Costs	These are costs expressed in "Money of the Day terms", for example a cost occurring in 2010 would be expressed in the amount of 2010 dollars required to pay for that cost.
Non-Healthcare Study Sites	1. Canandaigua 2. Montrose / Castle Point 3. St. Albans 4. Lexington 5. Livermore 6. White City 7. Perry Point 8. Gulfport / Biloxi 9. West LA
Office of Asset Enterprise Management (OAEM).	VA Headquarters Office of Asset Enterprise Management (004B), as described at www.va.gov/oaem
Office of Quality and Performance (OQP)	The Office within the VA responsible for, in part, the creation and use of clinical practice guidelines and healthcare quality measures.

Item	Definition
Operational savings	Savings resulting from vacating space currently utilized and maintained or implementing sharing agreements.
Other Government Contractors (OGCs)	The OGCs are to be appointed by the VA to conduct General and Comprehensive Re-Use Studies at Canandaigua; Montrose/Castle Point; St. Albans; Lexington; Livermore; White City; Perry Point, Gulfport/Biloxi; and West LA.
Outpatient Services	These are services to veterans in an outpatient setting.
Out lease	Method of eliminating space by leasing existing space to non VA providers in exchange for "in kind" services or other monetary considerations.
Payback Periods for investments	Payback periods are calculated by comparing the cumulative investments to any cost savings generated for a particular Business Plan Option and identifying the point at which positive cash-flows are obtained.
Practice Patterns	VA and Team PwC assumes that the actual practice patterns that occurred in 2003 will continue, unless modified by Team PwC's business plan options.
Real Costs	Real or Constant Dollar Costs – Are the values of expenditures in a year measured in terms of constant purchasing power. A real value is not affected by general price inflation. Real costs can be estimated by deflating nominal costs with a general price index, such as the implicit deflator for Gross Domestic Product or the Consumer Price Index. Real Costs in this analysis are costs expressed in 2003 Dollar terms.
Recurring Cost Savings	Recurring Cost Savings would occur if a particular Business Plan Option results a lower operating cost on an ongoing basis than the on-going cost of the Baseline Option. Recurring Cost Savings are calculated by combining: the assessment of future operating costs calculated by Team PwC's Healthcare Team with any recurring in-flows assessed from the potential re-use of surplus land or facilities by Team PwC's Re-Use Team or the OGCs. These assessments for part of the work required to generate the inputs to the Financial Assessment
Return on Investment (ROI)	The percentage return that is generated by each additional dollar invested. Positive ROI corresponds to a benefit-to-cost ratio greater than 1, which indicates that benefits are greater than costs while a negative ROI indicates a benefit-to-cost ratio less than 1, which indicates that costs exceed benefits. Since the Financial Analysis for CARES Business Plan Studies is a Cost Effectiveness Analysis, the term "benefits" means cost savings and cash-inflows estimated, and should be confused with monetarized benefits or other economic measures used in a formal cost/benefit analysis.
Research and Education (R&E)	Services associated with research and education. A subset of the Team PwC Healthcare Study focused on the identification and mitigation of potential impacts to R&E functions at the health care study sites.
Re-use existing space	Method of satisfying future space requirements that involves reusing space currently in use.
Re-use Team	Economic Research Associates
Re-use vacant space	Method of satisfying future space requirements that involves reusing space currently vacant.
Revenues	Team PwC will only consider revenues (or cash-inflows to the VA) arising from real property based transactions (i.e. the disposal or leasing of vacant real property assets). All other in-flows (for example like payments from payors) are considered to be materially equivalent in all Business Plan Options and, therefore, in accordance with VA Amendment.
Risk	Any barrier to success of a business planning option's transition and implementation plan or uncertainty about the cost or impact of that plan.
Risk Category	Eleven groupings of critical success factors for transition and implementation plan success.
Site	A Site is the location of an existing or potential new VAMC, CBOC, other VA, DoD or Community healthcare facility or other location where the VA procures or provides Care for its enrollees

Item	Definition
Site – Building Zones	These are designation of projected area need (measured in Building Gross Square Feet) based on CIC volume projections for a specific year and Station. Building zones identify one or more distinct buildings of similar construction type and functional activities. The Building Zone types are as follows: • **Existing** (buildings presently located on campus) • **Acute Care** (buildings where the primary occupants provide inpatient and outpatient functions) • **Nursing Home** (buildings where the primary functions is providing long term care services) • **Domiciliary** (buildings providing shelter for homeless veterans) • **Rehabilitation** (buildings where the primary occupants provide rehabilitation care functions) • **Behavioral Health** (buildings where the primary occupants provide mental health care and related services) • **Ambulatory Services** (buildings where the primary occupants provide outpatient diagnostic and treatment services) • **Research** (buildings where the primary occupants provide research and/or education services) • **Administration** (buildings where the primary occupants are administrative functions requiring office and conference space) • **Logistics** (buildings providing logistical services on campus such as warehouse, power plant, laundry facilities, etc.) • **Out Leased** (tenant space occupied by non-VA functions on the campus) • **Leased Space** (tenant space occupied by VA functions in off campus locations)
Site – Non-Building Zones	These are a designation of projected exterior area need (measured in Gross Square Feet) for a specific year and station and building zone. Non-building zones identify portions of the campus reserved for exterior activities associated with specific building zones. The Non-Building Zone types are as follows: • **Civil Issues** (Existing and/or proposed site conditions involving civil engineering elements. For example: water retention ponds, steep topographic slopes, wetlands, etc.) • **Buffer** (landscaped area surrounding buildings to provide for future expansion and/or visual separation of campus structures from adjacent neighborhoods.) • **Outdoor Recreation** (Exterior areas designated for recreation therapy, physical exercise and similar activities) • **Parking** (surface and structured vehicular parking areas) • **Circulation** (pedestrian and vehicular pathways, roads, walks and bridges) • **Demolition** (temporary campus areas where existing buildings are razed to provide for new construction) • **Reuse** (portions of the existing campus designated for occupancy as determined by a designated Reuse Contractor)
The Secretary	The Secretary of Veterans Affairs
The Secretary's Decision	The Secretary of Veterans Affairs CARES Decision Document as published on May 2004.
SME	Subject Matter Experts
Space Standards	1. The Space Types (inpatient, outpatient and other) describes the categories used in new space mapping in the CARES Strategic Planning categories. There are cases where the VA does not have space standards such as inpatient substance Abuse so for space that is mapped to inpatient psychiatry. 2. The CARES Strategic Planning categories are the basic elements of the clinical categories that the studies are to be used in conducting the studies.

Item	Definition	
Space Types – Inpatient	New Sept 2-15, 2004 Mapping CARES Strategic Planning Categories	S&F Inpatient Category (or * Additional Subcategories broken out for Workload)
	▪ Blind Rehab	▪ Inpatient Blind Rehabilitation Care
	▪ HCMI CWT/TR	▪ Homeless Domiciliary program
	▪ Intermediate Care	▪ Inpatient Intermediate Care
	▪ Medicine	▪ 23 Hour Observation/Care ▪ Inpatient Coronary Intensive Care ▪ Inpatient Medical Care ▪ Inpatient Medical Intensive Care ▪ Inpatient Neurological Care ▪ Inpatient Rehabilitation Medical Care
	▪ NHCU	▪ Hospice/Palliative Care ▪ Inpatient Nursing Home Care ▪ * SNF/ECF
	▪ Psych RRTP and PTSD RRTP	▪ Psychiatric Residential Rehabilitation (PRRTP) program
	▪ Psychiatric	▪ * CWT/TR ▪ Inpatient Mental Health & Behavioral Medicine Care ▪ * Inpatient Sub Abuse ▪ * SARRT ▪ * STAR I, II, III
	▪ Residential Rehab Treatment (Dom)	▪ Domiciliary program
	▪ Respite Care	▪ Respite Care program
	▪ Spinal Cord Injury	▪ Inpatient Spinal Cord Injury Care
	▪ Surgery	▪ Inpatient Surgical Care ▪ Inpatient Surgical Intensive Care
Space Types – Out Patient	New Sept 2-15, 2004 Mapping CARES Strategic Planning Categories	S&F Inpatient Category (or * Additional Subcategories broken out for Workload)
	▪ Ancillary/Diagnostic	▪ Nuclear Medicine ▪ Radiation Therapy program ▪ Radiology program
	▪ Cardiology	▪ Cardiology program
	▪ Day Treatment	▪ Day Hospital program ▪ MHSDP Day Treatment
	▪ Eye Clinic	▪ Eye Clinic
	▪ May be own Categories in LTC Model	▪ Adult Day Care program ▪ Home-Based Primary Care (HBPC)
	▪ Mental Health Clinics	▪ Day Treatment Center ▪ Mental Health Clinic ▪ MHSDP Homeless Program ▪ MHSDP MHICM ▪ MHSDP Work Therapy ▪ Psychology program ▪ Social Work program ▪ Substance Abuse Clinic
	▪ No-space required	▪ MHSDP Community MH Residential

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Item	Definition	
	▪ Non-Surgical Specialties	▪ ACS-Specialty Care ▪ Endocrine/Metabolic & Diabetes ▪ Oncology ▪ Pulmonary/Resp Care program
	▪ Pathology	▪ Pathology program
	▪ Primary/Urgent Care	▪ ACS-Primary Care ▪ ACS-Urgent Care ▪ Geriatrics
	▪ Rehab Medicine	▪ Rehab Medicine program
	▪ Substance Abuse Clinic	▪ MHSDP Methadone Treatment
	▪ Surgical and Related Specialties	▪ Audiology program ▪ Dialysis program ▪ Digestive Diseases/GI/Endoscopy ▪ EEG/Neurology program ▪ Orthopedics ▪ Surgical program
	▪ Urology	▪ Urology

Item	Definition
Space Types – Other	▪ A&MM Admin. ▪ A&MM Warehouse ▪ Canteen service ▪ Centralized Staff lockers/lounges/toilets ▪ Chaplain Service ▪ Clinical Service Administration ▪ Director's suite ▪ Education program ▪ Engineering Service ▪ Environmental Management service ▪ Fiscal service ▪ Human Resource service ▪ Information Resource Management ▪ Library Service ▪ Linen Service (Dispatch & Holding) ▪ Lobby Space ▪ Medical Administration Service (MAS) ▪ Medical Media ▪ Medical Research/Dev ▪ Nursing Service Administration ▪ Nutrition/Food ▪ On-Call program ▪ On-Site Laundry ▪ Police/Security service ▪ SPD service ▪ Veterans Assistance/Service Organizations ▪ Voluntary service ▪ Vacant Space ▪ Swing Space ▪ Out-leased ▪ Child Care ▪ Dental program ▪ Quarters ▪ Credit Union ▪ Employee Fitness ▪ Pharmacy Program ▪ Recreational Therapy program ▪ Moved to Inpatient - Respite Care
Space projections	Future space needs to adequately provide care in the future.
Special Needs Categories	For this study, defined as the following: 1. Inpatient Domiciliary 2. Inpatient Blind Rehabilitation Center 3. Inpatient Spinal Cord Injury 4. Special Mental Health Illness
Stabilized year development and re-use cash flows	These are annual cash flows occurring for the re-use development at the point occupancy or take-up achieves the assumed maximum stable level (e.g. 95% let or similar for residential); and are then used as the basis for determining the capitalized value or tradable value of the completed development.

Item	Definition
Stage I Report	This is the Report for each Study Site including: ▪ Healthcare Demand and Trends at the Study Site ▪ the impact of these trends on healthcare provision as today and the management decisions that would need to occur (The Baseline Business Plan Option) to maintain healthcare quality and access in a cost efficient manner ▪ the Alternative Business Plan Options developed for meeting the healthcare requirements of veterans at the Study Site ▪ Team conduct initial high-level assessment of these Business Plan Options against the Initial Screening Criteria; ▪ a summary of the Local Advisory Panel's perception of stakeholder concerns / Summary of stakeholder reaction/concerns and an assessment of how each option addresses these concerns ▪ the results of Team PwC's high level BPO assessment, including an assessment of the relative merits of the various Business Plan Options presented ▪ Team PwC's suggestions as to which Business Plan Options are most likely to meet the VA's objectives and should be considered for further study in Stage II
Stage II Report	This is the Draft and Final Business Plans for each Study Sites as detailed in Chapter 2.
Stakeholders	Means an individual who has a relationship with the VA facility being examined or an interest in what the VA decides about future activities at the facility.
Station and Sub Station	These are VA terms used within the VA's financial systems to describe each of the VA's existing Sites. Typically: ▪ Stations are VAMCs and ▪ Substations are CBOCS or Long-term care centers
Study Site	A Study Site is one of the 18 locations of VA facilities selected by the VA for study by Team PwC in this engagement. Study Sites included both Healthcare Study Sites and the Non-Healthcare Study Sites.
Team PwC	PricewaterhouseCoopers LLP and its subcontractors for this contract. (Refer to Team PwC Technical Proposal for further details)
Team PwC Implementation and Risk Management Team	Team PwC's risk management specialists.
Team PwC Healthcare Team	Team PwC's Healthcare specialists.
Team PwC's National Team Leadership	Refer to Team PwC's proposal, as amended from time to time with the consent of the COTR and final approval of the PwC lead partner for this engagement.
Team PwC's Scoring Panel	This is the Panel selected from Team PwC's National Functional Leaders and Subject Matter Experts who completes the scoring of options at all study sites on a consistent basis using the scoring process set out in the Chapter 2 (Decision Support and Business Planning). The panel is drawn from a combination of SMEs drawn from within Team PwC's National Team Leadership and other SMEs drawn from Team PwC's advisory panel
Team PwC Study Site Leader	These are the Team PwC individuals who are responsible for leading the work at each study site.
Team PwC's Site Study Teams	These are the Team PwC individuals who are responsible for conducting the work at each study site.
Team PwC Technical Proposal	Is the document submitted by Team PwC.

Item	Definition
Technical Methodologies	These are the methodologies for the Healthcare, Capital Planning, Re-use Planning, Stakeholder Engagement, Implementation Planning & Risk Management, Financial Assessment set out in the other chapters of this document.
Total excess space	The amount of space at the facility level not attributed to satisfying future demand and the corresponding space requirements after each BPO in the Study Site has been completed.
Transition and Implementation Plan	For each Business Plan Option, the plan which defines the clinical, capital and administrative elements required.
Travel standards	Set of guidelines that define VA access standards and maximum travel times imposed on veterans.
Unit Costs	These are the Variable Direct, Fixed Direct and Fixed Indirect Costs for each CIC and year input into the BPO Financial Analysis Tool by Team PwC's healthcare specialists that are multiplied by the workload to generate the operating costs for each Station and Substation included in a BPO. These Unit Costs are based on the current DSS Unit Costs for each Station and Sub Station.
Utilization Forecast	This is Utilization Forecast 2003-2023 from Milliman and the other CIC Data Cubes before any changes in workload associated with movement of services or other PwC adjustments associated with quality or access.
VA	Department of Veterans Administration
VAMC	Veterans Administration Medical Centers
VA Investment Levels	These are the annual levels of capital expenditure required from the VA for each BPO.
Veterans Rural Access Hospitals (VRAH) policy	VHA DIRECTIVE 2004-061 - "VETERANS RURAL ACCESS HOSPITALS", October 29, 2004, establishes VA policy defining the clinical and operational characteristics of small and rural facilities within VHA.
VHA	Veterans Health Administration
VISN	Collection of VA facilities organized into a geographic unit.
Workload / Utilization	This is the amount of CIC units by category determined for each market and Site (station and sub-station)
Workload/ Utilization Forecast	This is the Workload / Utilization forecasts obtained for CICs from the Milliman and other CIC data cubes for the years 2003 to 2023. Demand for years 2024-2033 is assumed to be the same as 2023. It is also assumed that the VA will provide this data after taking account of the Secretary's May 2004 CARES Decision.
Workload / Utilization received	Amount of Workload/Utilization received by a facility from another VA facility outside of the receiving facility's VISN.
Workload / Utilization sold	Workload/Utilization sold by a facility to an entity outside VA.
Workload / Utilization transferred	Workload/Utilization transferred by a Site to another VA Site outside of the transferring Site's VISN.
Workload / Utilization Thresholds	Workload/Utilization Thresholds are the minimum number of caseload procedures per annum for each Clinical Stop Code below which the VHA would seek to use alternative provision options. Workload/Utilization Thresholds established for healthcare procedures in the CARES Phase II (as shown in the CARES Phase II Guidebook 2nd edition) and amended by the VRAH policy are to form the basis of the Workload Thresholds used by Team PwC.

Appendix 2.A – Assessment Criteria

The following assessment criteria have been established based on the Statement of Work and the CARES Guidebook Phase II (June 2002).

A. Healthcare Quality and Need

A.1 Healthcare Quality

How does the Business Plan Option sustain or enhance healthcare quality, such as the relationship of volume of services and outcomes, or improved information transfer? Refer to the Stage II Healthcare Quality Indicators set out in Chapter 3.

For example:

- Describe any consolidations that increase volume to key thresholds.
- What is the impact on the continuity and continuum of care – such as key service adjacencies? Refer to the Stage II Healthcare Study Enhancement of Services and Continuity of Care findings.
- Describe the availability and location of outpatient oncology services to follow-up inpatient oncology care.

A.2 Healthcare Need

For the services below, the study has workload data for 2003-2023 by CARES Implementation Category. For each Business Plan Option, Team PwC realigns capacity to meet those needs in an appropriate setting. This may be a reduction, expansion and or a change in the location of services, or operating responsibility from VA to a contractual or joint-venture relationship. Team PwC is to demonstrate how the planned capacity and array of services as described in each Business Plan Option are adequately served. Specifically, how do the BPOs meet CARES Implementation Category workload requirements?

Ambulatory Care Services: Primary and Specialty Care

The Business Plan Option must demonstrate the appropriate capacity to meet the forecasted need for ambulatory service visits and procedures.

Acute Inpatient Care: Medicine/Surgery/Observation

The Business Plan Option must demonstrate the appropriate capacity to meet the forecasted need for acute inpatient care (beds).

Special Needs Programs: Spinal Cord Injury, Blind Rehabilitation Center, Residential Rehabilitation and Domiciliary Care, Seriously Mentally Ill

The Business Plan Option must provide for a full continuum and array of care for special disability program patients. It must demonstrate sensitivity to the special needs of this group of veterans.

Inpatient Extended Care/Nursing Home Care/Domiciliary Beds

The Business Plan Option must demonstrate the appropriate capacity to meet the forecasted need for these inpatient services (beds).

Mental Health Inpatient Services

The Business Plan Option must demonstrate the appropriate capacity to meet the forecasted need for Mental Health Inpatient Care.

Mental Health Outpatient Services

The Business Plan Option must demonstrate the appropriate capacity to meet the forecasted need (provided by VACO) for Mental Health Outpatient Care.

Overall

The Business Plan Option must meet the demand for healthcare services at the Study Site for each CIC in all years between 2003 and 2033. Shortfalls in service capacity are to be filled by redeployment to alternative VA locations or by contracting with suitable community healthcare providers. This measure is used to highlight any occurrences in a BPO where such gaps in service capacity cannot readily be filled or to identify where the options to fill the gap are potentially less than absolutely certain.

A.3 Results in a modernized, safe and secure healthcare delivery environment

Health Care Services to Veterans, Visitors and Staff shall be provided in modernized, safe and secure healthcare delivery environment.

Each Business Plan Option must ensure that all services it encompasses, including research, are delivered in safe and appropriate facilities to assure patient, visitor and staff safety, regardless of whether they are provided in a VA or non-VA owned and operated environment as measured by:

- **Layout:** viability of proposed physical layout
- **Enough space:** Adequate quantity of space for clinical inventory
- **Adjacency:** location of service with respect to other services to which it is functionally related
- **Code:** compliance with auditing/review bodies such as JCAHO, NFPA Life Safety Code or CAP
- **Accessibility:** Compliance with handicap accessibility standards (ADA, UFAS)
- **Privacy:** compliance with patient privacy standards
- **Major building system condition**
- **Condition of major medical equipment** This will not used by Team PwC, unless already documented by the VA. Team PwC will dialogue with VA Team Leader to document any substantive issues.
- **Security** BPO's will be considered against the VA's new security requirements

* Compliance is Determined based on data in the VA's space and functional surveys and facility condition surveys and critical values of scores. (i.e.: if there are low scores (1's or

F's for portions of space, this should be addressed, not just the average scores. Team PwC's capital plan (and associated cost estimate) assumes that the VA would invest in rectifying all such deficiencies such that all space would receive scores of 4.0 or better and investments would occur as soon as practicable, particularly for safety, seismic and security.

For each service identified as a realignment gap, show the following information from the Space and Functional Survey and the Facility Condition Assessment:

- Current and proposed square footage on all space proposed to be utilized in the Business Plan Option. Address each critical value and provide a summary of the space layout utilized and proposed.
- The costs associated with achieving a modernized, safe healthcare delivery environment are included in the life-cycle costing.

B. Healthcare Quality as Measured by Access

B.1 Primary Care Services

Demonstrate how the Business Plan Option impacts the percentage of the patients meeting access guidelines by describing the current percentage and the expected percentage of patients meeting this guideline.
This shall be measured using VA's Access Tool.

B.2 Inpatient Hospital Services

Demonstrate how the Business Plan Option impacts the percentage of the patients meeting access guidelines by describing the current percentage and the expected percentage of patients meeting this guideline.
This shall be measured using VA's Access Tool.

B.3 Tertiary Care

Demonstrate how the Business Plan Option impacts the percentage of the patients meeting access guidelines by describing the current percentage and the expected percentage of patients meeting this guideline.
This shall be measured using VA's Access Tool.

C. Use of VA resources

C.1 Cost Effective Physical and Operational Configuration

Cost Effective Physical and Operational Configuration is to be measured by the Net Present Life Cycle Cost of the Business Plan Option utilizing Team PwC's financial analysis tools. In addition, attention is to be drawn to the following 2 sub-factors:

30-year Life Cycle Cost Effectiveness Analysis

Quantify the 30-year life cycle cost of the Business Plan Option, including all Operating and Capital costs and the revenue generated from Re-use in Nominal and Present Value

dollars using the Team PwC Financial Analysis. Compare this life cycle cost to the life cycle cost of the Baseline Business Plan Option. This will provide the cost savings over 30 years.

Identify expected recurring and one-off Savings

Utilizing the Team PwC Financial Analysis, quantify the expected recurring and one-time savings in 2003 dollars from each Business Plan Option compared to the Baseline Business Plan Option. Attach the output from the Team PwC Financial Analysis tool that analyzes these cost savings.

C.2 Level of Investment Required

Measured by the total level of investment required by the VA in each year for each Business Plan Option. This factor is included recognizing that whilst a BPO may provide significant life cycle savings or enhanced services, the option may require the use of scarce investment dollars (capital budget) and the VA may achieve a better overall portfolio benefits is a sub-optimal BPO, which requires lower up front investment is implemented rather than the higher cost optimal solution. For this factor BPOs requiring high levels of investment would be considered less attractive compared those requiring less initial investment.

A measure that may be used is the ratio of the Net Present Life Cycle Cost savings of the Business Plan Option compared to the Baseline Business Plan Option divided by the Level Capital Investment required from the VA for the BPO over and above the investment required for the Baseline BPO. However, this measure has difficulties if alternative BPOs either require lower investment than the Baseline BPO or they result in a higher Net Present Life Cycle Cost than the Baseline BPO. Use of such ratios and the other ratios – like payback, return on investment or internal rate of return - will be determined on a Study Site by Study Site basis.

C.3 Maximizes reuse potential of VA owned sites

Since the re-use of vacant or surplus land and buildings is driven by the VA's objectives to improve its overall cost effectiveness, the costs and revenues associated with re-use are included in the life-cycle cost analysis for each Business Plan Option.

This criterion has been included in the assessment to ensure that VA objectives are for re-use are appropriately considered and visibility in the assessment. For each BPO study teams are to:

- Quantify the square footage utilized for each VA owned property, and the change proposed in the Business Plan Option in that utilization.
- Quantify the acreage of land utilized for each VA owned property, and the change proposed in the Business Plan Option in that utilization.
- Describe and quantify how the Business Plan Option will reduce (or optimize) vacant space and land to include a discussion of how the change will take place (Enhanced Use Lease, demolition, improved utilization, etc.)

- Note how the Enhanced Use Leasing program will be utilized to reduce the amount of underutilized space identified in the Business Plan Option and/or any unnecessary space created as result of the Business Plan Option.
- Note any impact on any known historical structures.

D Ease of Implementation

D.1 Ability to provide uninterrupted care

Refer to Continuity of Care findings in Healthcare Study. Describe the impact of the implementation of each Business Plan Option could have on the ability for the VA to provide uninterrupted care to its enrollees. Business Plan Options are to be designed to minimize the risk of interruptions to care. Where the risk of an interruption to care is material, the BPO is to include arrangements for either the enrollees to temporarily access alternative healthcare providers or VA healthcare to be provided out off temporary facilities.

D.2 Riskiness of implementing the BPO

Transition and Implementation Issues and Risks

Summarize the results of the initial implementation planning and risk analysis. Describe the relative ease and certainty of Business Plan Options compared to the Baseline BPO. Refer to the Team PwC Implementation Planning and Risk Analysis methodology for a more detailed description.

Risk Analysis

Risk is an inherent part of any capital investment. However, project risk can be reduced or eliminated by identifying consequences that can negatively impact a project's success. In this case, risk can be analyzed in eleven components. Proposals seeking full funding are required to complete the risk template. Proposals seeking planning funds are not required to complete the risk template, but must address each risk in a narrative form.

1. Schedule
2. Initial Costs
3. Life Cycle Costs
4. Technical Obsolescence
5. Feasibility
6. Reliability of Systems
7. Dependencies and Interoperabilities
8. Surety (Asset Protection)
9. Risk of Creating a Monopoly
10. Capability of Agency to Manage the Project
11. Overall Risk of Project Failure

- Identifies and analyzes all of the potential risk components associated with the initiatives, with supporting data and calculations
- Identifies the responsible party
- Utilize the Team PwC ***risk score template***
- Identification of specific risks within each risk category;
- Realistic scoring of the impact and likelihood for each risk.

E Support of other Missions of VA:

The degree to which BPOs support other missions (a, b and c below) of the VA will be determined through discussion with the VA Headquarters CARES team and appropriate VISN Directors or their designees.

E.1 Maximizing Program or Service Sharing Arrangements with the Department of Defense

- ***Outpatient Services***
  Describe how the Business Plan Option would impact the sharing of resources with DoD with respect to Outpatient Care.
- ***Inpatient Services***
  Describe how the Business Plan Option would impact the sharing of resources with DoD with respect to Inpatient Care.
- ***Special Disability Care***
  Describe how the Business Plan Option would impact the sharing of resources with DoD with respect to Special Disability Care.
- ***Extended Care Services***
  Describe how the Business Plan Option would impact the sharing of resources with DoD with respect to Extended Care.
- ***Mental Health Services***
  Describe how the Business Plan Option would impact the sharing of resources with DoD with respect to Mental Health Care.

E.2 Maximizing One-VA- Integration

Describe how the Business Plan Option would enhance One-VA opportunities and integrations with VBA and National Cemetery Administration.

Describe how the Business Plan Option would facilitate continuing existing One-VA co-locations and/or establishing new ones.

E.3 Special Considerations

Department of Defense Contingency Planning

Describe the strategy the VISN could use to meet a realistic estimate of demands by DoD contingency needs.

Homeland Security

Describe how the Business Plan Option would impact on any known Homeland Security needs.

Emergency Preparedness

Describe how the Business Plan Option would impact on the emergency need projections provided by VA's Emergency Management Strategic Health Group.

F Impact on Stakeholders

F.1 Impact on VA Human Resources

Refer to findings from Healthcare Study HR analysis. Characterize and if feasible quantify the potential impact of the Business Plan Option on staffing (current and projected # of FTEE, significant increases or decreases, minimal impact, quantify the cost of and redundancies and/or retraining and include these in the Financial Analysis as appropriate for each Business Plan Option).

Describe the strategy the VISN could use to reduce the potential impact of staffing changes on current staff, minimizing the downsizing and relocation problems. Look carefully at documentation related to re-training.

F.2 Impact on VA Research

Research Programs and Services

Describe how the Business Plan Option impacts the opportunities for Research Programs. Include a description of impact on neighboring facilities/affiliates and VISNs. Refer to Research & Education Analysis in Healthcare Study.

Research Space and Funding

Quantify the changes in Research space due to the changes in programs and services. Describe how the Business Plan Option impacts opportunities for Research funding. Refer to Research & Education Analysis in Healthcare Study.

Research Impact Strategy

Describe the strategy the VISN could use to minimize any potential negative impact on the Research programs. Refer to Research & Education Analysis in Healthcare Study.

F.3 Impact on VA Education / Academic Affiliations

Education Programs and Services

Describe how the Business Plan Option impacts the opportunities for clinical education programs include description of impact on neighboring facilities and VISNs. Include a description of impact on neighboring facilities/affiliates and VISNs. Refer to Research & Education Analysis in Healthcare Study.

Education Strategy

Describe the strategy the VISN could use to minimize any potential negative impact on the Academic Affiliations/clinical education. Refer to Research & Education Analysis in Healthcare Study.

F.4 Impact on Local Communities

Refer to Community Impact Analysis in the Healthcare Study. Characterize and quantify the potential impact of the Business Plan Option on community healthcare delivery systems, other VA affiliated organizations, and the private sector (current and projected

contracted care) and, using the Indicative Economic Impact assessment method described in Financial and Economic Analysis, the potential impact on the community economy (projected gain or loss due to projected staffing changes).

Describe the strategy the VISN could use to minimize any potential negative impact on the community healthcare delivery systems and economy.

G Addressing stakeholder concerns and reactions

Provide a summary of comments from the Local Advisory Panel (full testimony/reports/etc to be provided as an appendix). Provide and summarize any Stakeholder reactions submitted (full testimony to be retained as public record).

Provide an overview of how Stakeholders' key concerns related to the Business Plan Options developed and assessed in accordance with Team PwC's Statement of Work have been considered in the Business Plan Option development process.

Organize the reactions from the following groups and the ability of each BPO to address these concerns: VSO/Veterans; VA Staff; VA Clinicians; Community Health System; Affiliated Academic/research organizations; and Local Community/Neighbors.

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Appendix 2.B – Example Stage I presentation/report outline

The following provides an initial outline for the Second presentation to the Local Advisory Panel and the Stage I report to the VA.

Introduction (Statement of Work / Secretary's Decision)

Purpose of this presentation

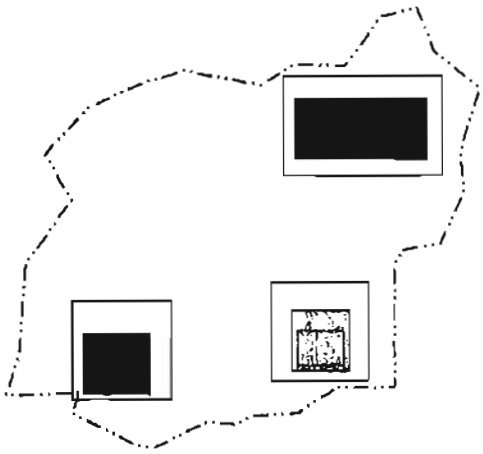
[redacted]

Overview of Health Care Demand and Trends
Provide a brief summary of current healthcare workload and the trends from the workload analysis.

The BASELINE (provision as today but with the future demand applied)

- Current Healthcare Provision (CICs, Workload and Inventory)
- Facilities and services offered (map)
- The size of current gap or surplus in health care provision
- Access: share of enrollees meeting/not meeting access guidelines
- 2003 annual Cost of Care:

  $100m total expenditures
  $80m on health care
  $20m on facilities (20%)



- Summary of current and forecast investment requirements based on no change to location (investment to accomplish only 'the things that need fixing'); sustain current clinical inventory modified only for changes in workload
- Summary of current surplus / vacant space

[redacted]

Describe likely impact of long term healthcare trends on current health care provision

- Describe the impact of long-term healthcare trends have on current health care provision solution and the results the forecast decline in X VA would have surplus clinical capacity at each site (such as number of available beds)
- Impact on key performance indicators critical **to these decisions** (e.g. Rural Access Guidelines met or not, healthcare thresholds exceeded or not)
- The size of VA-projected gap or surplus in healthcare provision at 2013 and 2023
- Access: changes to the proportion of enrollees meeting access standard

- VA is bound to optimize the use of its resources and therefore without any realignment of services the VA would alter (most likely down-size/consolidate by CIC) at each treatment facility to meet the declining population. However, without significant investment in realignment/new facilities (each of which is a Business Plan Option) the operational effectiveness and long-term cost effectiveness of the facility will reduce over time with a declining served population.
- Indications of the annual Cost of Care impact at 2013 and 2023:

  $80m total expenditures
  $60m on healthcare
  $20m on facilities (25%)

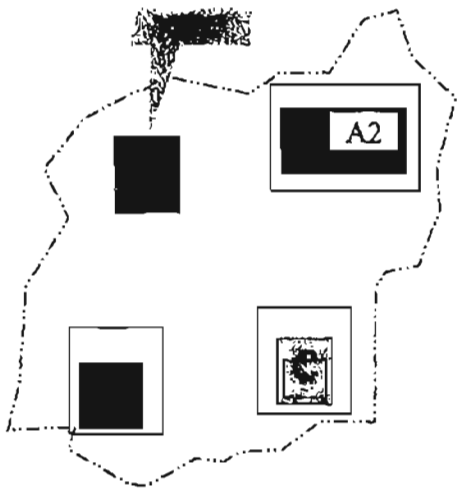
- Impact on VA staffing
- Changes in occupied / unoccupied space by category
- The minimum Investment to ensure the Baseline solution provides a modernized (within existing layouts), safe healthcare delivery environment within existing facilities
- Potential re-use considerations

Alternative Business Plan Options
There are a number of planning solutions that the VA could use to address the consequences of the forecast changes in healthcare demand and location patterns. Provide a brief overview and assessment of the broad range of potential alternative Business Plan Options comparing each to the Baseline (or do minimum Business Plan Option):

The following summary Business Plan Option outline is to be completed for EACH BUSINESS PLAN OPTION and included as an appendix with a summary in the presentation:

Healthcare provision rationale for Business Plan Option – Consider documenting workload and/or enrollee changes and their impact; VA may consider locating a new out patient treatment facility closer to veterans in X location to ensure access levels are at least maintained).

Concept of operation – With the exception of efficiencies to be gained in new or consolidated services, it is assumed that there will be no change in current working practices as a result of implementing a CARES Business Plan Option. Thus, without either one of these factors, we are to assume current operational practices and the associated staffing models are maintained into the future.



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Business Plan Option description – key elements:

- New CBOC (D) provided within zip codes 22203/22204
- Realign hospital A to create new inpatient facility and seek re-use of vacated buildings and land
- etc. ....

Implementation considerations:

- Site would need to be secured in 22203/22204, lots of land available. Work load would migrate once new CBOC (D) completed
- Realignment of VAMC A, including the creation of a new consolidated inpatient facility
- Consequence some of the outpatient work at A2 would migrate to D leaving surplus land and buildings at A2, that could be re-utilized
- Surplus land/buildings at A2 has high re-use potential that could be used to offset cost of investment
- Identify key risks and uncertainties

Assessment (Based on the assessment process set out in Section 2.)

Impact on Health care quality

Significantly Better	As a result of reducing footprint on VAMC A and the creation of a new inpatient facility overall quality of care has the potential to increase at VAMC A The location of a new CBOC at D offers some marginal improvement in quality as a result of improved access.

Impact on Health care access

Significantly Better for Primary care	Locating a CBOC (D) within zip codes 22203/22204 addresses long standing primary care accesses concerns from the Veteran community D and improves the % of VA enrollees with access to primary care within the guidelines from xx% to yy%.
No impact on Acute Hospital Care	No general impact, but improved site layout and access to parking should improve ingress and egress for disabled veterans

Results in a cost effective physical and operational configuration of VA resources

Significantly Better	As a result of reducing footprint on VAMC A and the creation of a new inpatient facility overall adjacencies and operating configuration of inpatient services at VAMC A would be greatly improved

Operating cost effectiveness (based on results of initial health care/operating costing)

↑↑↑↑	As a result of reducing footprint on site A and the re-use of A2, the Business Plan Option has the potential to provide significant recurring operating cost savings compared to the Baseline, even after taking account of the creation of a new CBOC at Site D.

Level of expenditure anticipated (based on results of initial capital planning costing)

↓↓ Modest investment required to implement the project early in the implementation relative to the baseline in both:

realigning VAMC A and creating a new inpatient facility

securing space for and establishing a new CBOC (D) provided within zip codes 22203/22204

Level of re-use proceeds relative to Baseline (based on results of initial re-use study)

↑↑ Reduction in footprint at A and associated realignment provides a sizable parcel of land that could be utilized for reuse and as such provides potentially higher level of re-use proceeds compared to Baseline. Whilst this maximizes the reuse potential of the size, the potential level of these proceeds are likely to be less than 25% of the investment required to realign VAMC A.

Overall Cost effectiveness (based on initial NPV calculations)

↑↑↑ Results of initial financial analysis indicate that this Business Plan Option offers a lower Net Present Cost relative to the baseline.

Cost avoidance (based on comparison to Baseline)

↑ Implementation of Business Plan Option A and the investment in a new facility would allow the VA to avoid being required to re-build A2 in 8-12 years and invest in increasing uncertain levels of life-cycle maintenance in the interim

Consideration of Transition and Implementation Issues and Risks ("Ease of implementation") Summarize key risks and issues that may adversely impact implementation

High risk	Existing medical space suitable for a CBOC is scarce in 22203/22204 and land values are high. Cost impact of securing suitable space for a CBOC has been factored into the investment required. However, lack of current availability may adversely impact the schedule
Medium risk	Location of a CBOC at D, allows reduction in footprint at VAMC A, adjacent to current inpatient services, such space may be required as swing space during the redevelopment. Any delay to the funding of CBOC D would adversely impact the redevelopment.
Medium risk	The VAMC Campus A has significant available land for the location of a new inpatient facility. However, no surveys are available of this land and this site has had a history of ground conditions problems. Cost estimate includes an allowance for some adverse ground conditions
Issue	Circulation on VAMC Campus A and current inpatient activities may be adversely impacted during the building of the new inpatient center. More detailed planning will be required before a determination can be made.

Local Advisory Panel perception of stakeholder concerns / Summary of stakeholder reaction/concerns

Provide a structured summary of feedback received from the Local Advisory Panel and stakeholder reaction/concerns

Area	Reaction
Access	Significant support from Veterans and VSOs for the location of a CBOC at in 22203/22204
Access	Some concerns voiced about the impact the building of a new facility on VAMC A would have on access to inpatient facilities during the building program
Access	Concerns expressed that this Business Plan Option did not adequately address access to special care at VAMC C and concerns that inpatient services may be relocated at some future time from both B and C to the new center in A

Provide a summary of any other pros and cons with this Business Plan Option.

Pros

Overall this Business Plan Option appears to offer significant improvement in outpatient access in the D area and significantly improved operational effectiveness of inpatient services at VAMC A.

The Business Plan Option offers the longer term potential for consolidation of all inpatient services in the Study area to A, therein allowing the VA to further reduce levels of activity at the increasingly scarcely used inpatient facilities in B and C, both of which would fall below threshold levels within 10 years. Transition plans can accommodate current and forecast inpatient levels of inpatient work load at B and C

Cons

Business Plan Option requires early investment in both the CBOC and new inpatient facility.

The linkage of these investments is a significant risk that will need to be managed

The Business Plan Option does not address special care needs at C

Suggestion

Team PwC suggests this Business Plan Option is considered together with a subsequent larger consolidation of inpatient facilities within 10 years reflecting forecast continued decline in the levels of inpatient work load at B and C

Overall assessment

Overall "Attractiveness" of the Business Plan Option Compared to the Baseline

↑↑ Team PwC considers that this Business Plan Option is likely to offer a solution that at least maintains quality and access compared to the baseline whilst appearing more cost effective than the baseline and as such is considered "attractive" and worthy of further study, together with a subsequent larger consolidation of inpatient facilities within 10 years reflecting forecast continued decline in the levels of inpatient work load at B and C

Such an outline is completed for all Business Plan Options and summarized in a table similar to the following:

Comparison of Business Plan Options		Baseline	BPOA	BPOB	BPOC	BPOD
Brief description		Realign within existing footprint	Realign within site, disposing of surplus. Location of new CBOC	New Build Hospital on current site and new CBOCs	Contract for inpatient care, new CBOC	[etc.]
Impact on Health Care Quality		No change	No change	Significant improvement	No change	
Impact on Health Care Quality – Functional Facilities		No change	Improves	Improves significantly	Improves significantly	
Impact on Health care access	Primary Care	No change	Improves	Improves	Improves significantly	
	Inpatient Hospital Care	No change	No change	No change	Improves significantly	
Results in a modernized, safe health care delivery environment		Will worsen over time	Improves	Improves significantly	Improves significantly	
Results in a cost effective physical and operational configuration of VA resources (using symbols)						
Investment required		↓↓	↓↓↓	↓↓↓↓↓	↓↓	
Adverse Operating costs impact		↓↓↓	-	-	-	
Potential Recurring cost savings			↑↑	↑↑↑	↑↑↑	
Cost avoidance opportunities			↑↑↑	↑↑↑	↑↑↑	
Potential reuse revenues		-	↑↑	↑↑↑	↑↑↑	
Overall Cost Effectiveness Impact		↑↑	↑↑↑	↑↑↑↑	↑↑↑↑	
Maximizes reuse potential of VA owned sites		No change				
Transition and Implementation Issues and Risks		Medium	Low	Low	High	
Impact on VA Human Resources	Impact	Declining workforce	Declining workforce	Declining workforce	All care contracted	
	Potential Mitigation	none	none	none	Transfer to community	
VA Research & Education	Impact	Declines	Declines	Declines	Eliminated	
	Potential Mitigation	none	none	None	Transfer to community	
Impact on Local Communities		Declining	Short term positive impact then declining	Short term positive impact then declining	Greatly improves viability of community health system	
Stakeholder concerns		Adverse	In favor	Strong support	Strongly adverse	
Overall evaluation		-	↑↑↑↑	↑↑	↑↑	

Appendix 2.C – Decision Support Application

Introduction

Team PwC has built an application in Microsoft Excel to support the Stage II option scoring and ranking process for the VA CARES Business Case Studies. This Appendix provides an overview of the Team PwC Decision Support Application, with typical inputs, and outputs to provide a guide to using the application.

Overview of the Application

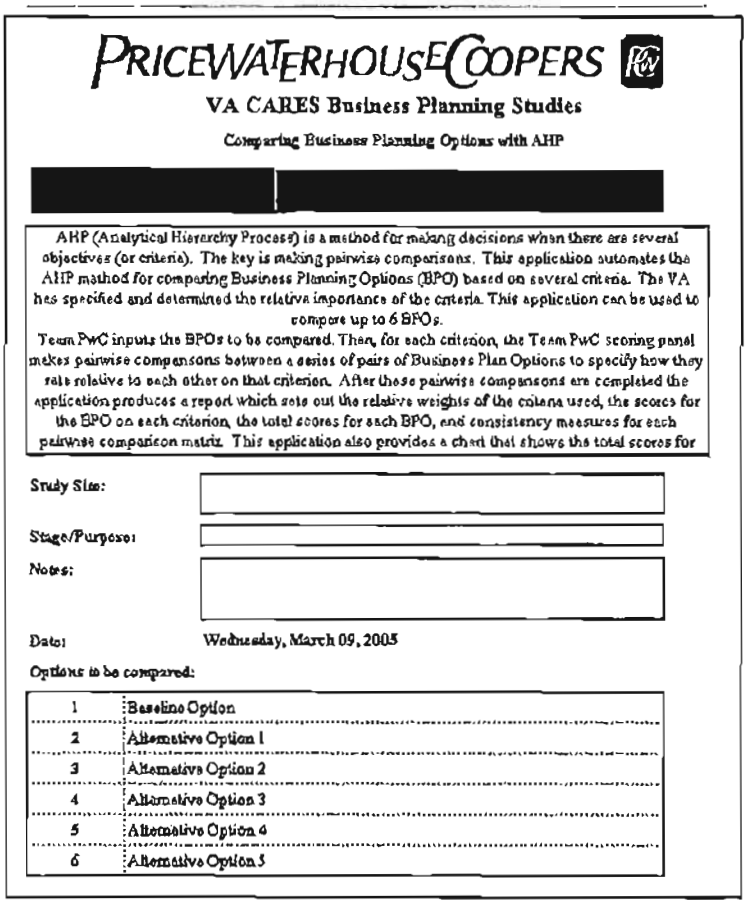
AHP (Analytical Hierarchy Process) is a method for making decisions when there are several objectives (or criteria). The key is making pairwise comparisons. The Team PwC VA CARES Decision Support application automates the AHP method for comparing Business Plan Options (BPO) based on several criteria.

The VA has specified and determined the relative importance of the criteria.

Figure A.2.3.1 shows a screen shot of the cover page of the Team PwC decision support application.

This application can be used to compare up to 6 of BPOs at a single site/collection of sites.

Team PwC inputs names for each of the BPOs to be compared, Then, for each analytic element, a Team PwC scoring panel makes pairwise comparisons between a series of pairs of Business Plan Options to specify how they rate relative to each other on that criterion.



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VA CARES Business Planning Studies

Comparing Business Planning Options with AHP

[redacted]

AHP (Analytical Hierarchy Process) is a method for making decisions when there are several objectives (or criteria). The key is making pairwise comparisons. This application automates the AHP method for comparing Business Planning Options (BPO) based on several criteria. The VA has specified and determined the relative importance of the criteria. This application can be used to compare up to 6 BPOs.

Team PwC inputs the BPOs to be compared. Then, for each criterion, the Team PwC scoring panel makes pairwise comparisons between a series of pairs of Business Plan Options to specify how they rate relative to each other on that criterion. After these pairwise comparisons are completed the application produces a report which sets out the relative weights of the criteria used, the scores for the BPO on each criterion, the total scores for each BPO, and consistency measures for each pairwise comparison matrix. This application also provides a chart that shows the total scores for

Study Site:

Stage/Purpose:

Notes:

Date: Wednesday, March 09, 2005

Options to be compared:

1	Baseline Option
2	Alternative Option 1
3	Alternative Option 2
4	Alternative Option 3
5	Alternative Option 4
6	Alternative Option 5

FIGURE A.2.3.1
Title page of the Team PwC Decision Support Application

After these pairwise comparisons are completed the application produces a report which sets out the relative weights of the criteria used, the scores for the BPO on each criterion, the total scores for each BPO, and consistency measures for each pairwise comparison matrix. The application also provides a chart that shows the total scores for each of the BPOs analyzed.

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Setting the weights for the Criteria

As indicated in Figure A2.3.2 the application uses a series of defined Primary and Secondary Criteria.

These Criteria and supporting definitions, shown in Appendix 2.A.

Their relative weightings are to be provided to Team PwC by the VA's CARES team. These weightings are to be used for all Study Sites.

Values for weightings indicated in Figure A2.3.2 are notional and used to prove the application.

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VA CARES Business Planning Studies

Comparing Business Planning Options with AHP

Comparison Criteria

NOTIONAL WEIGHTS INCLUDED TO TEST THE MODEL. RATIONALLY DEFINED WEIGHTS WILL BE USED FOR THE ANALYSIS

Primary Criteria	Sub-Criteria	Weights of Primary	Weights of Sub-Criteria
		100%	100%
Healthcare Quality		30%	100%
	Quality of Medical Services		60%
	Meeting Need (size of gap)		20%
	Modernized Safe Healthcare Delivery Environment		20%
Healthcare Access		28%	100%
	Primary Care		60%
	Acute Hospital Services		40%
Use of VA resources		20%	100%
	Cost Effective Physical and Operational Configuration / Net Present Life Cycle Cost		60%
	Level of Investment Required		20%
	Maximizes Re-Use Potential of VA owned Sites		20%
Ease of Implementation		10%	100%
	Ability to provide uninterrupted care		60%
	Riskiness of BPO implementation		40%
Impact on Stakeholders		10%	100%
	On VA Human Resources		40%
	On VA Research		20%
	On VA Education/Academic Affiliations		20%
	On Local Communities		20%
Ability to Support VA programs		5%	100%
	DoD sharing		33%
	One-VA Integration		33%
	Special Considerations		33%
Addressing Stakeholder concerns		5%	100%
	VSO/Veterans		30%
	Staff		20%
	VA Clinicians		10%
	Community Health System		10%
	Affiliated Academic/research organizations		10%
	Local Community/Neighbors		10%

FIGURE A.2.3.2
Discriminating Criteria Weightings

As indicated by Figure A.2.3.3, Team PwC's application allows for pairwise comparison between Primary and Secondary Discriminating Criteria respectively, which enables the relative criteria weightings to be generated.

The user makes pairwise comparisons between specified criteria in order to specify the relative importance of the various criteria to the VA. AHP then calculates "weights" for the criteria.

The application also calculates the Relative Consistency Indexes (CI/RI) of the pairwise comparisons among criteria.

FIGURE A.2.3.3
Example of pair wise comparison of Criteria

Inputting the names of the BPOs to be

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considered

The user inputs the names of the BPOs to be considered on the Title sheet.

Completing pairwise comparisons

Overview
The model allows two levels of assessment:

- Comparing BPOs using only the 7 primary criteria
- Comparing BPOs using the 23 secondary criteria, the results of which are used to generate combined scores for the primary criteria.

High level analysis – using only Primary Criteria (Stage I)

The user clicks on the Run High Level Application button on the Explanation worksheet and then inputs the results of Team PwC scoring panel's pairwise comparisons for each Primary Criteria for the series of pairs of Business Plan Options to specify how they rate relative to each other on that criterion using the Scoring forms similar to those presented in Figure A.2.3.4 that appear automatically.

With 6 BPOs and 7 Primary Criteria, this should involve 105 pairwise comparisons.

After these pairwise comparisons are completed the application produces a report which sets out the relative weights of the criteria used, the scores for the BPO on each criterion, the total scores for each BPO, and consistency measures for each pairwise comparison matrix.

The application also provides a chart that shows the total scores for each of the BPOs analyzed.

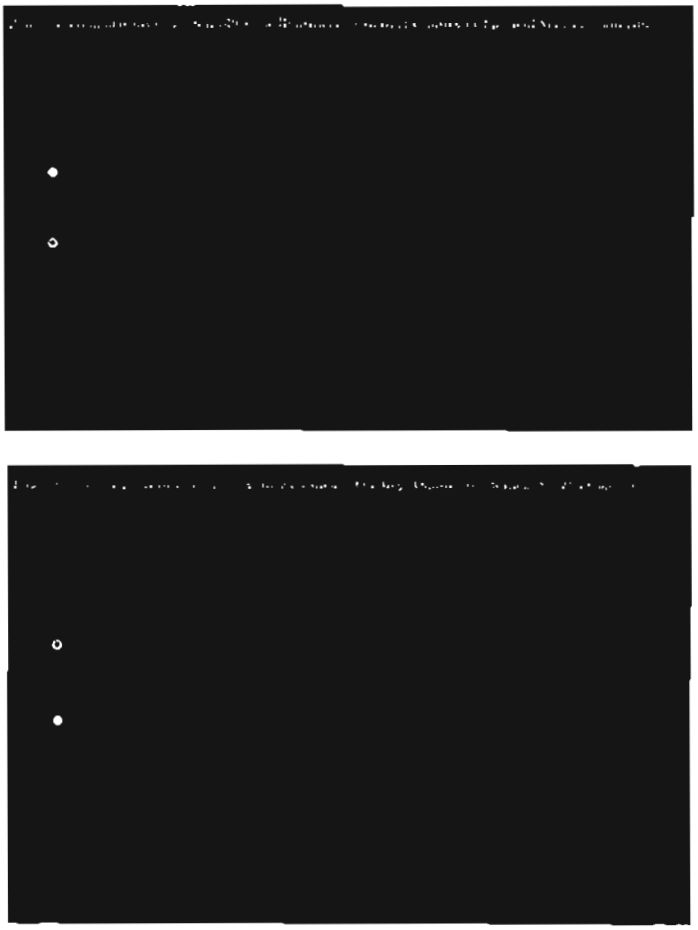

FIGURE A.2.3.4
Examples of Pairwise Comparisons

More detailed analysis – Primary and Secondary Criteria (STAGE II)

An alternative and more robust approach is to complete scores utilizing secondary criteria or a combination of primary and secondary criteria.

The user completes the detailed option scoring sheet, an example of which is shown in Figure A.2.3.5.

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FIGURE A.2.3.5
Extract of Detailed Scoring Sheet

BPO Scoring Sheet

Comparison of 6 Options on a pair wise basis involves 15 pair comparisons for each Criteria

NOTIONAL SCORES INCLUDED TO TEST THE MODEL, NATIONALLY DEFINED WEIGHTS WILL BE USED FOR THE ANALYSIS

Alternative Option 1	--vs--	Baseline Option	B	6
Alternative Option 2	--vs--	Baseline Option	A	3
Alternative Option 3	--vs--	Baseline Option	B	8
Alternative Option 4	--vs--	Baseline Option	A	4
Alternative Option 5	--vs--	Baseline Option	A	5
Alternative Option 2	--vs--	Alternative Option	B	2
Alternative Option 3	--vs--	Alternative Option	B	6
Alternative Option 4	--vs--	Alternative Option	B	9
Alternative Option 5	--vs--	Alternative Option	B	3
Alternative Option 3	--vs--	Alternative Option	A	1
Alternative Option 4	--vs--	Alternative Option	A	2
Alternative Option 5	--vs--	Alternative Option	B	5
Alternative Option 4	--vs--	Alternative Option	B	4
Alternative Option 5	--vs--	Alternative Option	A	2
Alternative Option 5	--vs--	Alternative Option	B	3
Alternative Option 1	--vs--	Baseline Option	B	6
Alternative Option 2	--vs--	Baseline Option	A	3
Alternative Option 3	--vs--	Baseline Option	B	6
Alternative Option 4	--vs--	Baseline Option	A	4
Alternative Option 5	--vs--	Baseline Option	A	8
Alternative Option 2	--vs--	Alternative Option	B	3
Alternative Option 3	--vs--	Alternative Option	B	8
Alternative Option 4	--vs--	Alternative Option	B	9
Alternative Option 5	--vs--	Alternative Option	B	3
Alternative Option 3	--vs--	Alternative Option	A	4
Alternative Option 4	--vs--	Alternative Option	A	2
Alternative Option 5	--vs--	Alternative Option	B	5
Alternative Option 4	--vs--	Alternative Option	B	4
Alternative Option 5	--vs--	Alternative Option	A	2
Alternative Option 5	--vs--	Alternative Option	B	3
Alternative Option 1	--vs--	Baseline Option	B	8
Alternative Option 2	--vs--	Baseline Option	A	3
Alternative Option 3	--vs--	Baseline Option	B	8
Alternative Option 4	--vs--	Baseline Option	A	4
Alternative Option 5	--vs--	Baseline Option	A	6
Alternative Option 2	--vs--	Alternative Option	B	3
Alternative Option 3	--vs--	Alternative Option	B	8
Alternative Option 4	--vs--	Alternative Option	B	9
Alternative Option 5	--vs--	Alternative Option	B	3
Alternative Option 3	--vs--	Alternative Option	A	1
Alternative Option 4	--vs--	Alternative Option	A	2
Alternative Option 5	--vs--	Alternative Option	B	5
Alternative Option 4	--vs--	Alternative Option	B	4
Alternative Option 5	--vs--	Alternative Option	A	2
Alternative Option 5	--vs--	Alternative Option	B	3
Alternative Option 1	--vs--	Baseline Option	B	6

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Generating outputs

After these pairwise comparisons are completed the application produces a report which sets out the relative weights of the criteria used, the scores for the BPO on each criterion, the total scores for each BPO, and consistency measures for each pairwise comparison matrix. The application also provides a chart that shows the total scores for each of the BPOs analyzed.

Figure A.2.3.6 provides an example of the graphical output from the analysis.

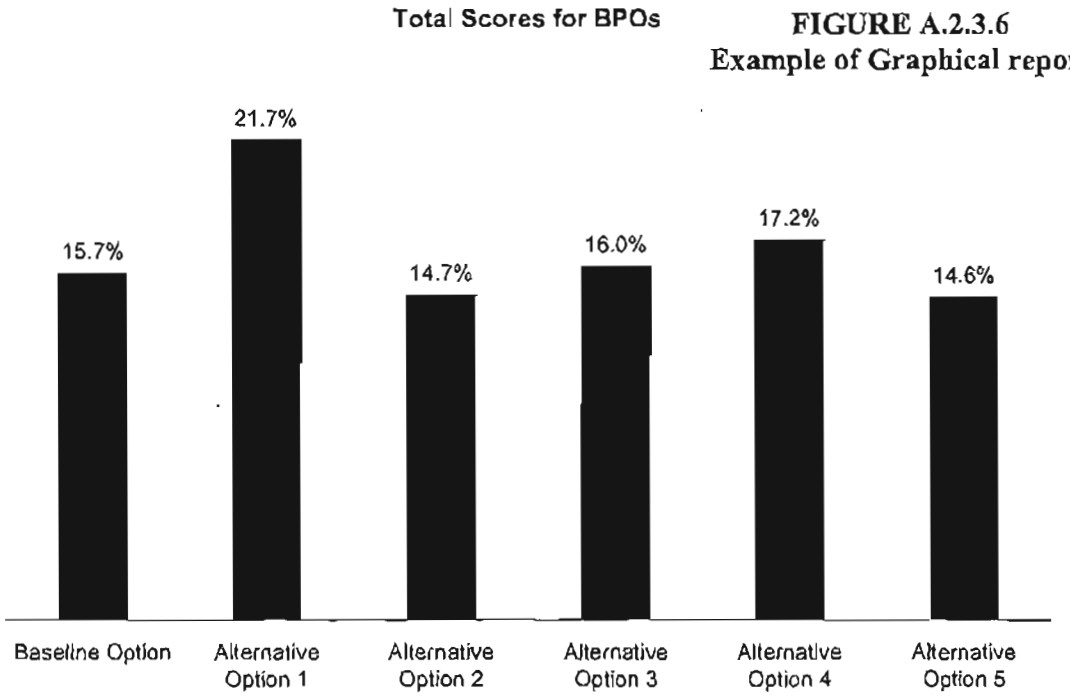

FIGURE A.2.3.6
Example of Graphical report

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Figure A.2.3.7 provides an example of a report of a detailed assessment.

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Comparing Business Planning Options with AHP

Results from AHP

NOTIONAL WEIGHTS - SCORES INCLUDED TO TEST THE MODEL. NATIONALLY DEFINED WEIGHTS WILL BE USED FOR THE ANALYSIS

FIGURE A.2.3.7
Example of Detailed Report

Criteria	Weights for Criteria	Scores for BPO on various criteria: Baseline Option	Alternative Option 1	Alternative Option 2	Alternative Option 3	Alternative Option 4	Alternative Option 5
Healthcare Quality	30%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Quality of Medical Services	50%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Meeting Need (size of gap)	25%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Modernized Safe Healthcare Delivery Environment	25%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Healthcare Access	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Primary Care	33%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Acute Hospital Services	33%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Tertiary care Services	33%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Use of VA resources	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Cost Effective Physical and Operational Configuration / Net Present Life Cycle Cost	65%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Level of Investment Required	30%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Maximize Re-Use Potential of VA owned Sites	5%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Ease of Implementation	10%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Ability to provide uninterrupted care	60%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Riskiness of BPO implementation	40%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Impact on Stakeholders	10%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
On VA Human Resources	40%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
On VA Research	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
On VA Education/Academic Affiliations	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
On Local Community	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Ability to Support VA programs	5%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
DoD sharing	33%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Non-VA Integration	33%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Special Considerations	33%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Addressing Stakeholder concerns	5%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
VSO/Veterans	30%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Staff	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
VA Clinicians	20%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Community Health System	10%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Affiliated Academic/research organizations	10%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Local Community/Neighbors	10%	19.9%	29.1%	13.4%	9.8%	16.9%	10.9%
Overall BPO scores (best score highlighted)		**19.95%**	**29.07%**	**13.37%**	**9.82%**	**16.86%**	**10.93%**
RANK				4	6	3	5

In this application, options are ranked highest to lowest based on their overall scores. As shown in Figure A.2.3.7, the Application calculates this ranking and highlights the top 3 BPOs. In this case Alternative Option 1 would be the preferred option, since it has the highest overall score.

Conducting Sensitivities

Criticisms of AHP approaches often are typically directed towards the weightings assigned to individual criteria, rather than the scores used. The Application therefore includes functionality to test the sensitivity of the Ranking generated to the individual weights assigned to Primary Criteria. Figure A.2.3.8 provides an example of the output from the Application from sensitivity tests of individual Primary Weightings. As can be seen in this example calculations are made for each of the weightings at both twice their input level and at 0%, all other weightings are adjusted proportionally so as to maintain a total 100% weight and the proportion between these weightings is kept constant. The Application then presents the results and shows the impact on BPO Rankings calculated. In this case, it can be seen that if the weighting assigned to Healthcare Quality is reduce3d to 0% then the Ranking changes materially, with Alternative Option 4 becoming the preferred option, since it has the highest overall score. However, Alternative Option 1 remains the option with the highest score for the sensitivity tests applied to other criteria.

FIGURE A.2.3.8 - Example of a sensitivity test

Comparing Business Planning Options with AHP

Sensitivity Test on Weighting of Comparison Criteria
NOTIONAL WEIGHTS INCLUDED TO TEST THE MODEL MATH

Standardized Sensitivity Matrix

Primary Criteria	Sub-Criteria	Weights of Primary Criteria	Weights of Sub-Criteria	Healthcare Quality		Healthcare Access		Use of VA resources		Ease of Implementation		Impact of BPO on Stakeholders		Ability of BPO to Support VA programs		Addressing Stakeholder concerns	
	Sensitivity Range			200%	0%	200%	0%	200%	0%	200%	0%	200%	0%	200%	0%	200%	0%
			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Healthcare Quality		30.0%	100%	60.0%	0.0%	22.5%	37.5%	22.5%	37.5%	26.7%	33.3%	26.7%	33.3%	28.4%	31.6%	28.4%	31.6%
Healthcare Access		20.0%	100%	11.4%	28.6%	40.0%	0.0%	15.0%	25.0%	17.8%	22.2%	17.8%	22.2%	18.9%	21.1%	18.9%	21.1%
Use of VA resources		20.0%	100%	11.4%	28.6%	15.0%	25.0%	40.0%	0.0%	17.8%	22.2%	17.8%	22.2%	18.9%	21.1%	18.9%	21.1%
Ease of Implementation		10.0%	100%	5.7%	14.3%	7.5%	12.5%	7.5%	12.5%	20.0%	0.0%	8.9%	11.1%	9.5%	10.5%	9.5%	10.5%
Impact of BPO on Stakeholders		10.0%	100%	5.7%	14.3%	7.5%	12.5%	7.5%	12.5%	8.9%	11.1%	20.0%	0.0%	9.5%	10.5%	9.5%	10.5%
Ability of BPO to Support VA programs		5.0%	100%	2.9%	7.1%	3.8%	6.3%	3.8%	6.3%	4.4%	5.6%	4.4%	5.6%	10.0%	0.0%	4.7%	5.3%
Addressing Stakeholder concerns		5.0%	100%	2.9%	7.1%	3.8%	6.3%	3.8%	6.3%	4.4%	5.6%	4.4%	5.6%	4.7%	5.3%	10.0%	0.0%

Business Plan Option - Primary Criteria Scores	Healthcare Quality	Healthcare Access	Use of VA resources	Ease of Implementation	Impact of BPO on Stakeholders	Ability of BPO to Support VA programs	Addressing Stakeholder concerns
1 Baseline Option	12%	18%	8%	7%	58%	2%	13%
2 Alternative Option 1	39%	12%	27%	4%	2%	10%	6%
3 Alternative Option 2	22%	9%	3%	3%	5%	6%	8%
4 Alternative Option 3	15%	27%	22%	8%	5%	7%	12%
5 Alternative Option 4	6%	13%	29%	33%	6%	36%	20%
6 Alternative Option 5	6%	12%	10%	25%	0%	17%	39%

Business Plan Option - Total Scores	Score based on National Weightings	Healthcare Quality-200%	Healthcare Quality-0%	Healthcare Access-200%	Healthcare Access-0%	Use of VA resources-200%	Use of VA resources-0%	Ease of Implementation-200%	Ease of Implementation-0%	Impact of BPO on Stakeholders-200%	Impact of BPO on Stakeholders-0%	Ability of BPO to Support VA programs-200%	Ability of BPO to Support VA programs-0%	Addressing Stakeholder concerns-200%	Addressing Stakeholder concerns-0%
1 Baseline Option	15.76%	14.06%	17.46%	15.52%	16.00%	13.20%	18.32%	14.80%	18.72%	20.44%	11.08%	16.01%	15.51%	15.53%	15.98%
2 Alternative Option 1	21.68%	29.30%	14.26%	19.00%	24.32%	21.81%	21.55%	19.67%	23.59%	21.84%	21.72%	21.07%	22.25%	20.86%	22.50%
3 Alternative Option 2	14.70%	18.59%	11.01%	17.45%	11.95%	11.76%	17.65%	14.62%	15.12%	13.64%	15.76%	14.22%	15.17%	14.21%	15.18%
4 Alternative Option 3	16.05%	11.85%	17.64%	17.78%	14.30%	17.53%	14.86%	18.22%	15.87%	14.84%	17.26%	15.57%	16.52%	15.81%	16.28%
5 Alternative Option 4	17.22%	13.07%	21.36%	16.04%	16.83%	20.24%	14.10%	19.06%	15.42%	15.88%	19.56%	17.67%	16.86%	17.64%	16.79%
6 Alternative Option 5	14.58%	10.76%	18.45%	14.17%	15.60%	13.52%	13.73%	16.26%	12.59%	13.56%	15.67%	15.27%	13.58%	15.91%	13.34%

Business Plan Option - RANKING	Ranking based on National Weightings	Healthcare Quality-200%	Healthcare Quality-0%	Healthcare Access-200%	Healthcare Access-0%	Use of VA resources-200%	Use of VA resources-0%	Ease of Implementation-200%	Ease of Implementation-0%	Impact of BPO on Stakeholders-200%	Impact of BPO on Stakeholders-0%	Ability of BPO to Support VA programs-200%	Ability of BPO to Support VA programs-0%	Addressing Stakeholder concerns-200%	Addressing Stakeholder concerns-0%
1 Baseline Option	4	4	3	6	3	5	5	5	5	6	4	3	4	5	4
2 Alternative Option 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 Alternative Option 2	5	5	6	3	6	6	3	6	6	5	6	6	5	6	6
4 Alternative Option 3	3	3	4	5	5	3	4	4	3	4	3	4	3	4	3
5 Alternative Option 4	2	2	5	4	4	2	2	3	4	3	2	2	2	3	2
6 Alternative Option 5	6	6	2	6	4	4	6	3	5	6	5	5	6	3	5

Figure A.2.3.9 provides an example of the Graphical output from the Application from sensitivity tests of individual Primary Weightings. Users should use these graphs to identify intersection points on each measure at which the top line crosses the next line down and read off the value on the X access. In this case Alternative 4 would become the Top Ranked Option if the Weighting provided to Healthcare Quality were reduced to ~60% of its current value and all other weightings adjusted proportionally. Such a significant change in weightings is unlikely to occur and therefore decision makers can have high confidence in the Ranking.

These sensitivities are not designed to examine the validity of the weightings used in the analysis, rather they are designed to examine the sensitivity of the Rankings to these weightings and to help direct effort to further refining analyses where small changes in weightings lead to a different top Ranked BPO being determined.

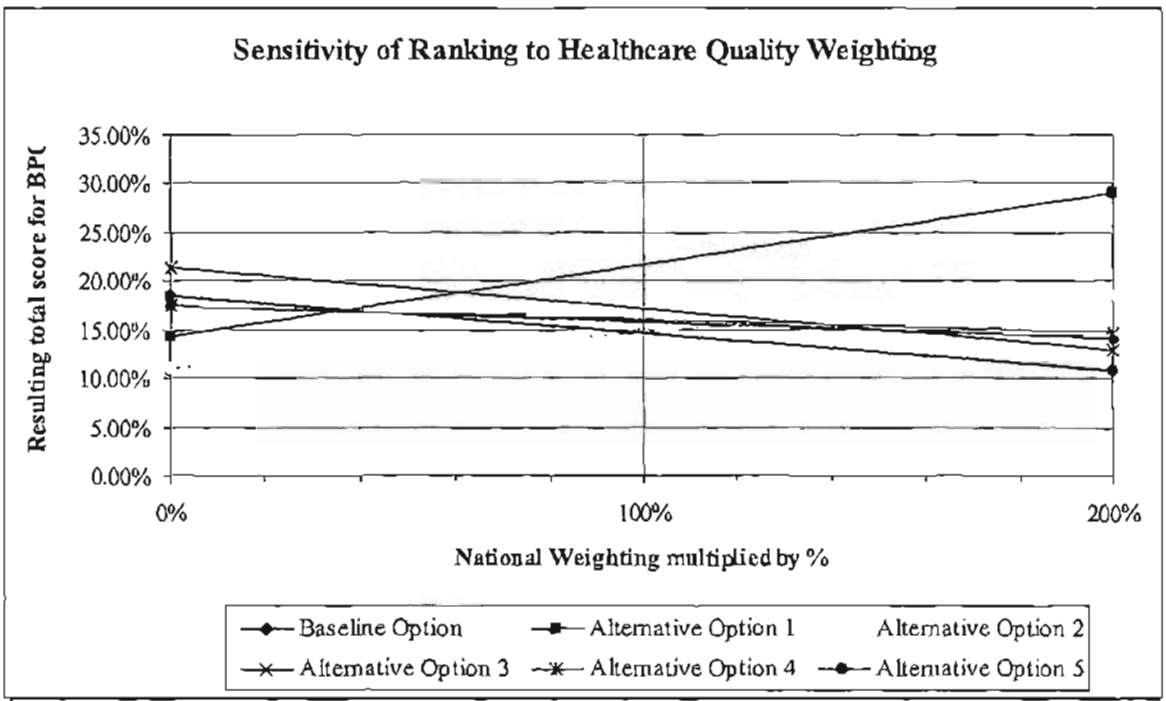

FIGURE A.2.3.9
Graphical Output from sensitivity test
In this case Alternative 4 would become the Top Ranked Option if the Weighting provided to Healthcare Quality were reduced to ~60% of its current value and all other weightings adjusted proportionally. Such a significant change in weightings is unlikely to occur and therefore decision makers can have high confidence in the Ranking

Appendix 2.D – Stage 2 Assessment Outputs

For each Study Site the Baseline Business Plan Option and at least one alternative Business Plan Option are to be compared using the assessment criteria. As a result Team PwC anticipates providing the following assessment outputs in both presentation and report form.

Description:

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Healthcare Quality and Need:

HealthCare Quality

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

HealthCare Need

(See assessment criteria for specific requirements by type of service – Ambulatory, Acute Inpatient, etc. Respond to appropriate criteria. Appropriate capacity is determined from calculations of the number of projected enrollees plus an estimate of non-enrolled eligible veterans. Projected patients/users are derived from these enrollment projections. Capacity is based upon VA standards / private sector standards as described in the planning section of the guide.)

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Results in a modernized, safe healthcare delivery environment

Healthcare Services to Veterans, Visitors and Staff in a Safe and Suitable Environment: For the Baseline and each alternative Business Plan Option, summarize the impact on the following – layout, adequacy of space, adjacencies, code compliance, accessibility, privacy, and condition of major building systems or major equipment.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Healthcare Quality as Measured by Access

Program (Primary or , Inpatient)	Base-line	Business Plan Option 1	Business Plan Option 2
Criteria (i.e. 30 minutes, 60 minutes, etc)	% of patients within guidelines	% of patients within guidelines	% of patients within guidelines
Issues (describe any other particular access issues)			

Summarize the impact (narrative) on access and travel times for each alternative:

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Making best use of VA resources

Cost Effective Physical and Operational Configuration / Net Present Life Cycle Cost

Cost effectiveness analysis and lifecycle costing

Summarize the results of the Cost Effectiveness analysis and the outputs from the 30 year life-cycle costing

	Baseline Business Plan Option	Alternative Business Plan Option 1	Alternative Business Plan Option 2
Net Present Cost of 30-year life cycle cost			

Investment Required for Business Plan Options

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Expected Savings from Alternative Business Plan Options

- **Business Plan Option 1**: Describe any recurring or one off cost savings estimated for the Alternative Business Plan Option 1
- **Business Plan Option 2**: Describe any recurring or one off cost savings estimated for the Alternative Business Plan Option 2
- Etc…

Maximizes reuse potential of VA owned sites

Summary of real property required by the Business Plan Option

	Baseline Business Plan Option	Business Plan Option 1	Business Plan Option 2
SF utilized for Business Plan Option			
Land utilized for Business Plan Option (acres)			
Vacant space in SF			
Vacant/surplus land (acres)			

Enhanced Use Leasing Initiatives

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the alternative Business Plan Option
- **Business Plan Option 2**: Describe the Alternative Business Plan Option
- Etc…

Disposal Initiatives

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed alternative Business Plan Option
- Etc…

Other re-use Initiatives

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed alternative Business Plan Option
- Etc…

Provide a summary of the remaining underutilized real property:

	Baseline	Business Plan Option 1	Business Plan Option 2
Available vacant space in SF			
Available vacant land in Acres			

Assess impact of options:

Impact on VA Staff

	Baseline	Business Plan Option 1	Business Plan Option 2
FTEE level			

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Describe in narrative the impact on staffing for each alternative

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Impact on Research and Academic Affiliations

Research Programs and Services:

Describe how the Baseline and each alternative Business Plan Option maintains and impacts the opportunities for Research programs.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Research space and funding

	Baseline	Business Plan Option 1	Business Plan Option 2
Research Space (SF)			
Estimated Research funding ($)			

Academic Affiliations Programs and Services

Education Programs and Services:

Describe how each alternative maintains and impacts the opportunities for Education programs.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

	Baseline	Business Plan Option 1	Business Plan Option 2
# of residents slots			
Number and type of programs			

VA Education Programs and Services

Describe how each alternative maintains and impacts the opportunities for Education programs.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option

- Etc…

Impact on the Community Healthcare system and the Local Community

Describe in narrative the impact on community healthcare system and the Local Community for each alternative:

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Support of other Missions of VA

Maximizing Program or Service Sharing Arrangements with the Department of Defense

Describe in narrative the impact on maximizing the Program or Service Sharing Arrangements with the Department of Defense.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Maximizing One-VA-Integration:

Describe in narrative the impact on enhancing One-VA opportunities and integrations with VBA, NCA and other VHA programs.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Department of Defense Contingency Planning:

Describe in narrative the impact on meeting a realistic estimate of demands by DoD contingency needs and those contingency needs provided by VA's Emergency Management Strategic Health Care Groups.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Homeland Security

Describe how the Business Plan Options will impact on any known Homeland Security needs.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Emergency Preparedness

Describe how the Business Plan Option will impact on the emergency need projections provided by VA's Emergency Management Strategic Health Group.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Stakeholder concerns and reactions

Provide a summary of comments from the Local Advisory Panel (full testimony/reports/etc to be provided as an appendix)

Provide and analysis and summary of Stakeholder reactions (full testimony to be retained as public record)

Provide an overview of how Stakeholders' key concerns have been considered in the Business Plan Option development process.

- **Baseline**: Describe the existing situation and the Baseline Business Plan Option.
- **Business Plan Option 1**: Describe the proposed Alternative Business Plan Option
- **Business Plan Option 2**: Describe the proposed Alternative Business Plan Option
- Etc…

Appendix 2.E – Likely contents of a draft business plan

EXECUTIVE SUMMARY

1. INTRODUCTION

2. DECISION MAKING PROCESS
   - A. Overall process: Assessment and Evaluation criteria Agreed
   - B. Consultation and approval process
   - C. Other Independent Reviews (if any)

3. SUPPLY OF HEALTHCARE SERVICES IN THE [SITE] HEALTHCARE SYSTEM
   - A. Service Delivery
   - B. Assessment of adequacy of current healthcare environment
   - C. Real Property Description (including Condition assessment and Environmental Factors)
   - D. Other Factors

4. DEMAND FOR HEALTHCARE SERVICES

5. DESCRIPTION OF SELECTED BUSINESS PLAN OPTIONS
   - A. The BPOs selected by the VA for Study in Stage II and reasons given for their selection
   - B. Detailed description of each BPO
   - C. Analysis of Short-listed Business Plan Options (description, costing, and quality scoring)

6. CAPITAL INVESTMENT REQUIREMENTS of Shortlisted Business Plan Options and Analysis of Short-listed Business Plan Options (high level description and assessment)

7. RE-USE OPPORTUNITIES
   - A. Reuse Planning considerations for BPOs
   - B. Analysis of Short-listed Business Plan Options

8. CONSIDERATION OF STAKEHOLDER ISSUES AND CONCERNS

Details of key stakeholder concerns and how the business plan options developed address these concerns

9. SELECTION OF RECOMMENDED BUSINESS PLAN OPTION
   - A. Approach (Financial & Economic Analysis, Assessment)
   - B. Results of Assessment of Short-listed Business Plan Options and Ranking process
   - C. The Recommended Business Plan Option
   - D. Feedback received from FAC and key stakeholders

10. RECOMMENDED BUSINESS PLAN OPTION DETAILS

11. CONCLUSIONS and NEXT STEPS

APPENDICES

- Healthcare Needs: Workload
- Healthcare Needs: Clinical Inventory
- Detailed Business Plan Options Definitions and analyses:
- Description of healthcare solution and assessments of health care impact, human resource impact, research and education impact, safety and environment impact.

- Capital Plans, including detailed description of location and size of retained VHA facilities and facilities needed for the delivery of accessible, cost effective quality

- Capital Plans, including detailed description of location and size of retained VHA facilities and facilities needed for the delivery of accessible, cost effective quality care to veterans
- Construction and lifecycle operating costs associated with transitions into or out of existing or new/rehabilitated VA facilities and departmental level operating costs
- Re-use Plans, including
  - Highest and Best use analyses, valuation and reuse plan
  - Real Property Baseline Report
  - Environmental Baseline Report
- Transition and Implementation plans
- Risk Analysis
- Financial and economic analysis
- Business Plan Option assessment evaluation
- Supporting documentation from Stakeholders, Affiliated organizations and Local Advisory Panels
- [if required] Record of the long list of Business Plan Options Considered in Stage I and the reasons given for the VA's selection of BPOs for study in Stage II
  A. Long list of Business Plan Options (high level description)
  B. Results of Analysis of Long-listed Business Plan Options (high level costing and quality scoring)
  C. Business Plan Options Shortlisted
  D. Feedback received from Local Advisory Panels and stakeholders
- Appropriate Documentation supporting Business Plan Option assessment

APPENDIX 3.A – GOVERNMENT FURNISHED INFORMATION

The following Government Furnished Information (GFI), by Study Site, is required to complete the Healthcare Delivery Studies:

Identified in SoW:

- Final listing of CARES Implementation Categories
- Market level 2003 – 2023 workload, sorted by station (VAMC) and sub-station
- Market level 2003 – 2023 workload for Special Needs Services
- Proposed enhancements from CARES Report and Secretary's Decision Document
- Planned and existing Facility Enhancement Inventory (Facility Condition Assessments)
- Current staffing (2003) to include number of FTEs per facility by job classification and department
- Staffing costs for each job classification and department (2003 data that aligns with the CIC data – will work with VA to create process)
- Unit costs from DSS with mapping function to CIC
- Non-VA Care Unit Costs

Identified in Proposal:

- Guidelines for planning or relocating services
- Quality thresholds for key services

Identified in Conversations with VA:

- Market level maps illustrating 2003 access (baseline) and for selected BPOs
- File by VISN which provides Urban, Suburban, and Rural drive-time data for Primary Care, Specialty Ambulatory Care, Extended Care, and Hospital Care
- VA Access Tool and ArcView to determine the site's performance to access standards
- Quality indicator data from the Office of Quality Performance care database – EEB, by Study Site (access and VA assistance required and agreed)
- NPDFC patient satisfaction data (access and VA assistance required and agreed)
- From each facility, information regarding professional and administrative recruitment and retention programs, difficulties and job vacancies
- Information on employee seniority, years of service, severance, etc., as identified as a need during Stage II
- VA Human Resource policies and procedures regarding severance, early-out, etc.

Identified as a Requirement to Perform Methodology:

- Disaggregated workload by DSS stop codes
- Completed clinical inventory checklist by CIC
- Safety measures from VA's National Center for Patient Safety

- Any relevant employment data available by market (e.g., unemployment rates, job openings, shortages, etc.)
- Necessary market specific data detailing relationships with community vendors, other facilities, etc. that may be impacted by options
- Promotional materials for research programs
- Listing of residency and teaching programs
- Number of Residents by specialty, number of medical and other students
- Listing of research space use and assignments (basic science, clinical, and animal labs)
- Listing of research studies
- Formal affiliation agreement documents between VA and research and/or education institutions, including supporting documentation such as space, headcount, expenditures, etc.
- Medical Education and Research program organizational chart(s)

APPENDIX 3.B – INITIAL INTERVIEW QUESTIONS

During the initial site visits Team PwC will:

- Tour the site facilities to gain an overall appreciation for the campus;
- Meet with the VA Team Leader to discuss administrative matters;
- Interview, as appropriate to the site, one or more of the following persons:

    - The person responsible for Graduate Medical Education
    - The person responsible for research
    - The person responsible for healthcare operations
    - The local DSS person
    - The facility Director

During the interview(s) noted above, Team PwC will ask specific questions to:

- Clarify any data issues (such as noted in the discussion of each healthcare methodology element)
- Gain local input into issues which are specific to the unique characteristics of the site and the enrollees it serves. Since each of the 18 total sites is unique in this regard, a standardized questionnaire is not practical. Accordingly, prior to the site visit, we will assemble a custom interview question list and submit it to the VA Team Leader and COTR for approval. We expect the interview list to contain items like those in the "Potential Questions" list below.

Potential Questions:

1. What are the research and education missions for your VISN/facility and how does your organization support these missions?
2. What are the major elements of your research or education program?
3. What are the major affiliation/collaborative agreements for your institution (for example with medical schools, other teaching programs, site management organizations, etc) and which ones would be most affected by reorganization of VA services (i.e., relocation of inpatient, specialty or clinic services)? How would these agreements be affected and how transferable are they?
4. What special populations do you serve that attract sponsors/grantors to offer research opportunity and funding at your facility? Does this facility offer innovative treatments (including access to clinical trials) that are not offered elsewhere for veterans and do other VA sites access your institution for providing such innovative care?
5. How much patient care is provided by residents, medical students, and students of other health professions?

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6. What proportion of your staff is faculty at affiliate organizations?

7. What proportion of revenue for this institution is constituted by research funding or education programs?

8. Have you any recent experience in re-locating, co-locating or moving services within campus or off-campus?

    a. What were some of the positive aspects from these "moves" that should be incorporated in any future "move"?

9. What were some of the pitfalls that must be avoided in future "moves"?

10. What are typical modes of transportation for the majority of your enrollees - auto, public transportation, family, VA service, etc.? How might options impact enrollees' ability to utilize their current modes of transportation?

11. What is the average length of time it takes an enrollee to schedule an appointment [for the relevant CICs under study and available] at your facility? How do you think this is better/the same/worse than other community facilities?

12. What cultural considerations must be considered in the options?

13. What are the local community expectations of this VA as an employer, purchaser of services, community presence, etc.?

14. What technology improvements/enhancements, if developed or incorporated at this site, might improve services? For example, telemedicine, remote imaging, etc.

15. Do complementary services exist within this VA site and/or VA service market that could be enhanced with re-location or co-location to gain efficiencies and economies of scale? For example, might recreation services offered in the domiciliary be co-located or combined with similar services offered in the long-term care facility?

16. Discuss any local or regional market employment issues that are impacting your site. For example, nursing shortages, ability to recruit and cost of recruitment, union issues, cost of living increases, commuting issues, etc.

17. Discuss features, systems and/or services at your site which you regard as being unique and which you believe must be given consideration in any option development

APPENDIX 3.C – CLINICAL INVENTORY DATA COLLECTION TOOL

Clinical Inventory -VA Health Care Network XX FY 20XX

Market Area:

Codes for how services are provided

NC= service provided by Non-VA through a Contract/Consult/Fee
O= service on site
P=Planned Program (listed must have prior HQ/VISN approval)
SC= service provided through community provider sharing agreement
SD= service provided through DoD sharing agreements
SM= service provided through medical school affiliate sharing agreement
V= referral to other VAMC in Network where service provided
X= service not provided

VA to populate table for Existing (2003) conditions. PwC to populate for Business Plan Options in Stage 3 of Healthcare Methodology.

Program	CBOC A	CBOC B	CBOC C	CBOC D	CBOC E	CBOC F	CBOC G
[redacted]							
Chaplain							
Nutrition Services							
Social Work							
[redacted]							
Radiology-Xray							
Ultrasound							
MRI							
Mammography							
[redacted]							
Chemistry (Routine)							
Chemistry (Point of Care)							
Coagulation (Routine)							
Coagulation (Point of Care)							
Fecal Occult Blood							
Hematology (Routine)							
Hematology (Point of Care)							
Microbiology (Routine/BSL 1 or 2)							
Microbiology (Point of Care)							
Provider Performed Microscopy Procedures							
Urinalysis (Routine)							
Urine Dip Stick Procedures (only)							
Urine Microscopic Procedures							
Whole Blood Glucose Procedure (Glucometer)							
[redacted]							
Behavioral Medicine(including biofeedback)							
Case Management, Intensive (MHICM)*							
Case Management Standard							
Community Residential Care (CRC)							
Day Treatment							
Family education/therapy							
HCHV Contract Residential Program*							
Homeless and grant per diem*							
Homeless HUD/VASH*							
Homeless Outreach*							
Mental Health Clinic							
Mental Health Consultation-Liaison							
Mental Health emergency							
Mental Health Primary Care Clinic							
Neuropsychology/Neurobehavioral exam (Psychology)							
Opioid Substitution							
Psychiatry Group/Individual							
Psychogeriatric Clinic							
Psychology Group/Individual							
Psychosocial Rehabilitation (outpatient)							
PTSD outpatient clinics (including PTSD Clinical teams*)							
Sleep Disorder Clinics							
Substance Use Disorders-outpatient*(including intensive outpatient)							
Tele-mental health							
Vocational Rehabilitation (CWT-TT)							
[redacted]							
Comprehensive Tobacco Cessation Prog							
ECHO							
EKG							
General Medical							
Prevention Clinical team							
Preventive Care Program							
Preventive Health							
Primary Prevention Program (immunity/screening)							
Treadmill Testing							
Weight Program							
Women's Clinic							
[redacted]							
Tele home Care							
Audiology							
Occupational Therapy							
Physical Therapy							
Speech Pathology							
Eye Care							
Pharmacy							
Podiatry							

Figure 3.C.1

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Clinical Inventory - VA Health Care Network

Codes for how services are provided

- NC= service provided by Non-VA through a Contract/Consult/Fee
- O= service on site
- P=Planned Program (listed must have prior HQ/VISN approval)
- SC= service provided through community provider sharing agreement
- SD= service provided through DoD sharing agreements
- SM= service provided through medical school affiliate sharing agreement
- V= referral to other VAMC in Network where service provided
- X= service not provided

VA to populate table for Baseline (2003) conditions. PwC to populate for Business Plan Options in Stage 2 of Healthcare Methodology.

Program	VAMC A	VAMC B	VAMC C	VAMC D	VAMC E	VAMC F	VAMC G
[illegible]							
Chaplain							
Hoptel beds							
Nutrition/Dietetics							
Readjustment Counsel.							
Social Work							
[illegible]							
Assistive Listening Devices							
Auditory Rehabilitation							
Audiology							
Augmentative and alternative comm. Devices							
Balance Assessment							
Cochlear Implant							
Cognitive Disorder Clinic							
Compensation and Pension Exams							
Dysfluency Clinic							
Dysphagia Management Team							
Electrophysiology (ABR, MLR, OAE)							
Hearing Aid Clinic							
Hearing Conservation Program							
Instrumented swallowing exams (MBS, FEES)							
Neurogenic speech/language							
Speech Lab							
Speech Pathology							
Tinnitus Management							
Voice Disorder Clinic							
Voice Prostheses							
[illegible]							
Blind Rehab. Center *							
Blind Rehab. Clinic *							
BROS*							
VIST*							
VICTORS							
[illegible]							
Dental Hygeine							
Endodontics							
Facility Dental Lab service							
General Dentistry							
Gerodontics							
Oral/Maxil Surgery							
Periodontics							
Prosthodontics							
[illegible]							
Angiography							
Contrast Procedures/Routine Xray							
CT Scan							
Diagnostic Imaging							
Diagnostic neuroradiology							
Interventional							
Mammography							
MRI							
PACS							
Radiology Service							
Teleradiology							
Ultrasound							
[illegible]							
Autopsy Pathology							
Blood Donor Collection and Component Processing							
Chemistry (Routine)							
Chemistry (Special)							
Coagulation (Routine)							
Coagulation Reference Lab							
Crystal Identification Ref. Lab							
Cytogenetics							
Cytopathology							
Dermatopathology							
Electron Microscopy							
Endocrine Reference lab							
Flow Cytometry							
GLC Mass Spectroscopy							
Hematology (Routine)							
Hemoglobinopathy Ref. Lab							
Immunofluorescence Microscopy							
Immunohistochemistry							
Infertility Testing (Semen Analysis and Related testing)							
Microbiology (BSL 3 or Higher)							
Microbiology (Routine BSL/1 or 2)							

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Clinical Inventory - VA Health Care Network

Codes for how services are provided

NC= service provided by Non-VA through a Contract/Consult/Fee
On service on site
P=Planned Program (listed must have prior HQ/VISN approval)
SC= service provided through community provider sharing agreement
SD= service provided through DoD sharing agreements
SM= service provided through medical school affiliate sharing agreement
V= referral to other VAMC in Network where service provided
X= service not provided

[redacted]

Program	VAMC A	VAMC B	VAMC C	VAMC D	VAMC E	VAMC F	VAMC G
Microprobe Analysis							
Molecular Pathology (PCR/Immunoblot/Related Technology)							
Muscle Biopsy Pathology							
Mycobacteriology (Routine)							
Mycobacteriology Ref. Lab							
Mycology Ref. Lab							
Mycology (Routine)							
Neuropathology							
Parasitology							
Paternity Testing							
Serology (Autoimmune Disease)							
Serology (Infectious Disease including Hepatitis, HIV, Syphilis, Others)							
Surgical Pathology							
Tissue Typing/Transplant Ref. Lab							
Toxicology Reference Lab							
Transfusion medicine							
Virology Reference lab							
[redacted]							
Adult Day Health Care (Contract)							
Adult Day Health Care (VA)#							
Adult Day Health Care (State)							
Alzheimer's (Dementia) Tx							
Assisted Living Pilot							
Community Home Health							
Community Nursing Home Care							
Community Residential Care							
Domiciliary (State)							
Domiciliary (VA)#							
End of Life							
GEM (Outpatient)							
GEM(Inpatient)							
Geriatric Consultative Services							
Geriatric Primary Care							
GRECC							
HBPC#							
Homemaker/Home Health Aid Svcs							
Hospice (inpatient)							
Hospice (outpatient)							
Respite Care							
VA Nursing Home Care#							
Nursing home Care (State)							
[redacted]							
Acute Internal Medicine Beds							
Admitting/Screening							
Aids Clinic (Op)							
AIDS/HIV Comm							
AIDS/HIV LTC							
Allergy Treatment							
Bone Marrow Trans.							
Cardiac (non-invasive)							
Cardiac catheterization							
Cardiac Holter							
Cardiac intensive care							
Cardiac telemetry							
Cardiology Section							
Cardiology(Consult/Init)							
Cardiothoracic ICU							
Cardiov. Risk Factor							
Cardiov. Risk Factor							
Chronic Vent. Unit							
Coronary Angioplasty							
Counselin clinic							
Dermatology							
Dialysis							
Echocardiology							
Electrocardiography							
Electrophysiology/Pacer							
Endocr. & Metabolism							
Endoscopy (Diag)							
Gastroent - ERCP							
Gastroent - Lasers							
Gastroent - Proctology							
Gastroenterology							
Gulf War Clinic							
Hematology Section							
Immunology Section							
Infectious Disease							
Intermediate Medicine							
Laser Treatment							
Medical Inpatient ICU							
Metabolic Units							
Nephrology Section							
Onc Cancer Treat. (Prim)							
Onc.Cancer Treat. (Sec)							
Onc.Cancer Treat. (Tert)							
Pacemaker Implants							
Primary Care							
Preventive Care Program							
Primary Prevention Prog (Immune/screen)							
Prevention Clinical Team							

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Clinical Inventory - VA Health Care Network

Codes for how services are provided

NC= service provided by Non-VA through a Contract/Consult/Fee
O= service on site
P=Planned Program (listed must have prior HQ/VISN approval)
SC= service provided through community provider sharing agreement
SD= service provided through DoD sharing agreements
SM= service provided through medical school affiliate sharing agreement
V= referral to other VAMC in Network where service provided
X= service not provided

VA to populate table for Existing (2003) conditions, PwC to populate for Business Plan Options in Step 3 of Healthcare Methodology.

Program	VAMC A	VAMC B	VAMC C	VAMC D	VAMC E	VAMC F	VAMC G
Weight Program							
Comprehensive Tobacco Cessation Prog							
Pulm - scopes							
Pulmonary Medicine							
Rheumatology Section							
Sleep Disorders Prog							
Telemedicine							
Telephone Care/Triage							
Therapeutic Pheresis							
TransesophagealUsound							
Women's Health Clinic							
Gynecology							
Obstetrics							
Behavioral Medicine(biofeedback)							
Case Management, Intensive (MHICM)*							
Case Management Standard							
Community Residential Care (CRC)							
CWT Transitional Residence (CWT/TR)							
Day Hospital							
Day Treatment							
Electroconvulsive Therapy (ECT)							
Family education/therapy							
General Mental Health Intermediate Beds							
General Mental Health/SMI Residential Rehab (PRRTP and/or Domiciliary)*							
HCHV Contract Residential Program*							
Homeless Domiciliary*							
Homeless HUD/VASH*							
Homeless grant and per diem*							
Homeless Outreach*							
Mental Health Clinic							
Mental Health consultation-liaison							
Mental health emergency							
Mental Health intensive care unit(PICU)							
Mental Health Primary Care Clinic							
Neuropsychology/Neurobehavioral exam (Psychology)							
Opiod Substitution							
Psychogeriatric clinic							
Psychogeriatric inpt setting (separate unit or NHCU subunit)							
Psychiatry Individual/Group							
Psychology Individual/Program							
Psychosocial Rehabilitation (outpt)							
PTSD-inpatient* (EBTPU; SIPU)							
PTSD outpatient clinics (including PTSD Clinical Teams*)							
PTSD Residential Rehab Program (PRRP and/or Domiciliary*)							
STAR (Sustained Treatment SMI*)							
Sleep Disorders Clinic							
Specialized Women's Programs (Womens Trauma Recovery; Womens Stress Disorder Trtmnt Team)							
Substance Use Disorders-Inpatient*							
Substance Use Disorders-Outpatient*(including intensive outpatient)							
Tele-mental health							
ADD							
ALS Center for Excellence							
Behavioral Neurology							
Brain Electrical Activity Mapping							
Consult Svcs (Neuro)							
Dementia							
Electroencephalography							
EMG(Neuro)							
Epilepsy Center							
Evoked potential Testing							
Movement Disorders							
Multiple Sclerosis							
Nerve Conduction Studies							
Neuro AIDS							
Neuro Bed SVC							
Neurodegenerative Disorders							
Neuroimmunology							
Neurology Service (consultation/liaison)							
Neurology/AIDS							
Neuromuscular Disease							
Parkinson's Disease							
PADRECC							
Seizure Disorders							
Stroke Center (Acute)							
Bone Densitometry							
Cyclotron							
Nuclear Med (Diagnostic)							
Nuclear Med (scans)							
PET							
Radiation Therapy/Linear Accell							
Radioimmunoassay							
Radionuclide Therapy							
Radiopharmacy							
Telemed Med Interpreter							
Clinical Pharmacy Inpatient							
Clinical Pharmacy Outpatient							

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Clinical Inventory - VA Health Care Network

Codes for how services are provided

NC= service provided by Non-VA through a Contract/Consult/Fee
O= service on site
P=Planned Program (listed must have prior HQ/VISN approval)
SC= service provided through community provider sharing agreement
SD= service provided through DoD sharing agreement
SM= service provided through medical school affiliate sharing agreement
V= referral to other VAMC in Network where service provided
X= service not provided

[redacted]

Program	VAMC A	VAMC B	VAMC C	VAMC D	VAMC E	VAMC F	VAMC G
[redacted]							
ADD Restoration Lab							
Amputee Clinic							
Auto. Fabrication & Restoration							
Home Respiratory Care							
Prosth/Ortho. Lab.							
Wheelchair Clinic							
[redacted]							
Biofeedback (Rehab.)							
Brain Injury Rehab*							
Cardiac Rehab. Prog.							
Chiropractic Medicine							
Chronic Pain Program							
Compensated Work Therapy							
Drivers Training Rehab							
Electromyography/nerve conduction studies							
Gait Analysis							
Incentive Therapy							
Kinesiotherapy							
Occupational Therapy							
Physiatry							
Physical Rehabilitation (Inpatient) CIRP							
Physical Rehabilitation (Outpatient)							
Physical Therapy							
Preservation/Amputation Care & Trimet (PACT) *							
Recreation Therapy							
Stroke Rehab.							
Therapeutic Swimming Pool							
Work Evaluation							
Vocational Rehabilitation Therapy							
[redacted]							
AICD							
Anesthesia-Pain control							
Anesthesia (General)							
Anesthesiology-Pain Control							
Anesthesiology-MD on Staff*							
Anesthesiology-CRNA only							
Cardiac Surgery							
Endoscopy (Broncho)							
Heart Transplant							
Hyperbaric							
Intensive Care (Sur)							
Kidney Transplant							
Laparoscopic Surgery							
Liver Transplant							
Neodym laser							
Neurosurgery							
Ophthalmology							
Optometry							
Region Eye Centers							
Otolaryngology							
Peripheral vasc. Lab							
Podiatry							
Shock Wave							
Surgery (Ambulatory)							
Surgery (General)							
Surgery (Hand)							
Surgery (Orthopedic)							
Surgery (Plastic)							
Surgery (Thoracic)							
Surgery (Urology)							
Surgery (Vascular)							
Surgery (GYN)							
23 hour stay beds							
[redacted]							
SCI Center *							
SCI Primary Care Team*							
SCI Support Clinic*							
[redacted]							
Emergency Department							
Trauma center							
Urgent Care							
Fitness Center							
Free standing outpatient care center							
Emergency Preparedness Site							
Decontamination							
Pharmacy Cache							

FIGURE 3.C.2

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APPENDIX 3.D – QUALITY OF CARE EVALUATION TOOL

Presentation and Validation Method

The following figures illustrate the components of the Quality of Care Evaluation Tool designed to capture and present the performance scores collected during the two stages of study. The tool is comprised of the following sections.

- Quality of Care Study Assumptions
- Quality of Care Measure– Stage I
- Quality of Care Measure– Stage II
- Quality of Care Rating Tool – Stage I
- Stage I Findings – Commentary, Projected Impact and Improvements Needed by Final BPO Selection(s)
- Quality of Care Tool – Stage II
- Stage II Findings – Commentary, Projected Impact and Improvements Needed by Final BPO Selection

Team PwC will populate the Quality of Care Tool (Stage I and II) with VA and non-VA performance data and scores for each BPO under review. The Stage I and II Findings tabs will contain narrative data collected through various sources such as (i) associated primary and secondary research, (ii) Team PwC evaluation commentary (concerns, issues, questions) and (iii) study site stakeholder communications

Key steps in PwC's validation process are to conduct at least two Quality of Care data validation meetings with the VA OQP contact during the course of each Stage to review findings at appropriate intervals.

Quality of Care Study Tools and Assumptions

[redacted]
a) 2004 data will be used for this quality of care study.
b) The data supporting the measures to be used to evaluate quality impact by Business Plan Option (BPO) must reflect sufficient data volume.
c) The data supporting the measures to be used must be obtainable through VA for evaluating all VA BPOs and from publicly available sources for non-VA BPOs.
d) There may be an inherent difference in illness burden or case mix between VA populations and those treated in non-VA clinical settings that may be evaluated during this study. By virtue of VA and non-VA limited availability of this risk adjustment capability, there will not be the ability in Stage I or II to normalize this data for purposes of these impact analyses.
e) There is insufficient quality data available for 2003 in the VA and/or the public domain for evaluating the quality of certain services such as those provided in nursing homes, etc. which resulted in the quality of care indicator focus in ambulatory, inpatient and behavioral health clinical settings. In addition, assumption will be made that relationship between 2003 data and 2023 is linear.
f) These measures are meant to provide the evaluation process with the ability to qualitatively evaluate the impact ("no impact", "negative impact" or "positive impact") when considering BPOs. A smaller set of measures will be employed in Stage I where broad numbers of BPOs are being considered and the goal is to refine the number of viable options for more in-depth study in Stage II. Stage II measures are more comprehensive and designed to elicit greater granularity of findings and impacts among up to six BPOs.
g) Due to the fact that this evaluation is of a qualitative nature, scores by measure may be reported numerically or by non-numeric value (e.g., no impact, negative impact, positive impact).

Figure 3.D.1: Quality of Care Evaluation Assumptions

24-23

	Numeric/Non-Numeric Score	Comments
[redacted]		
• Heart Failure		
[redacted]		
• Breast Cancer		
• Endocrinology		
[redacted]		
• Major Depressive Disorder		
[redacted]		
• Ambulatory		
• Inpatient		
[redacted]		

Figure 3.D.2: Quality of Care Measures – Stage I Evaluation

	Numeric/Non-Numeric Score	Comments
[redacted]		
• Heart Failure		
• Acute Coronary Syndrome		
[redacted]		
• Colorectal Cancer		
• Endocrinology		
[redacted]		
• Major Depressive Disorder		
[redacted]		
• Ambulatory		
• Inpatient		
[redacted]		
•		
[redacted]		

Figure 3.D.3: Quality of Care Measures – Stage II Evaluation

[redacted]								
Heart Failure	Ace inhibitor for left	VA, Centers for						

24-234

	ventricular dysfunction as a key inpatient measure	Medicare and Medicaid Services [CMS]						
Breast Cancer	Screening rates as a key ambulatory indicator	VA, HEDIS						
Endocrinology	Full lipid profile in the past two years	VA, HEDIS						
Major Depressive Disorder	% of patients with a new diagnosis of depression - - medication coverage	VA, HEDIS						
Ambulatory Care		VA, Industry						
Inpatient Care		VA, Industry						
CPOE		Leapfrog						
Total Score								

Figure 3.D.4: Stage I Quality of Care Rating Tool.

Figure 3.D.5: Stage I Findings -- Notations

24-234

Stage II

Heart Failure	Ace inhibitor for left ventricular dysfunction as a key inpatient measure	VA, Centers for Medicare and Medicaid Services (CMS)				
Acute Coronary Syndrome	Beta blocker prescribed at discharge	VA, CMS				
Colorectal Cancer	Screening rates as a key ambulatory indicator	VA, HEDIS				
Endocrinology	Full lipid profile in the past two years	VA, HEDIS				
Major Depressive Disorder	% of patients with a new diagnosis of depression – medication coverage	VA, HEDIS				
Ambulatory Care		VA, Picker				
Inpatient Care		VA, Picker				
Total Score						

Figure 3.D.6: Stage II Quality of Care Rating Tool

24/23

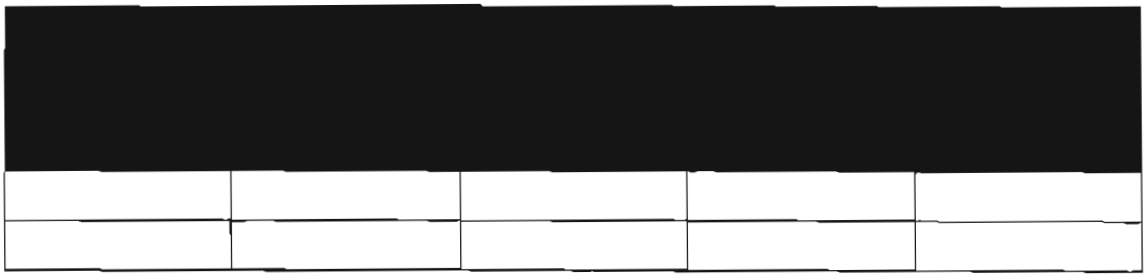

Figure 3.D.7: Stage II Findings -- Notations

24-237

APPENDIX 3.E – ENHANCEMENT OF SERVICES RATING AND NOTATION SYSTEM

The Enhancement of Services impact rating and notation system used to quantify and describe the affect of quality and access to care on proposed enhancements is shown below. The table is a draft of the proposed rating and notation system. The final rating and notation system will be agreed with COTR during Stage I.

The CARES Enhancement Inventory Template will be used to document all current and planned enhancement strategies. Each strategy will be identified by type of enhancement and impact. An illustration for using the recommended enhancement of a new linear accelerator would be recorded as follows:

Rating Category	**Impact**
Enhancement Code	New Equipment
Impact	Improved access
Functional Area	Outpatient/Ambulatory
Service Line	Oncology
CIC Category	Radiology and Related Specialties
Continuity of Care	Significant disruption of care, one month

CARES ENHANCEMENT INVENTORY

VISN:
Site:

Directions: Record your recommendations for services below. Code the recommendation using the code key in this file. Prioritize the most important code first. You must choose at least one code for each rating. If you need more than three codes, an addi

Market	Facility(ies)	Strategy	Year Planned	Enhancement Code			Impact Code			Functional Area Code			Service Line Code	Continuity of Care Impact Code	CIC Category
				#1	#2	#3	#1	#2	#3	#1	#2	#3			
Example															
East	West Haven	Add a linear accelerator	2004	1.2	1.7	1.9	2	2.3	2.1	3.2			4.3	6.2	8

The following template will be utilized by subject matter experts to document additional enhancements. The same scoring and notation system will be utilized as in the above example. Each strategy is also identified by functional area, CIC and service line.

SME RECOMMENDED ENHANCEMENTS

VISN:
Site:

Directions: Record your recommendations for services below. Code the recommendation using the code key in this file. Prioritize the most important code first. You must choose at least one code for each rating. If you need more than three codes, an additional column may be inserted.

Market	Facility(ies)	Strategy	Year Planned	Enhancement Code			Impact Code			Functional Area Code			Service Line Code	Continuity of Care Impact Code	CIC Category
				#1	#2	#3	#1	#2	#3	#1	#2	#3			
Example															
East	West Haven	Consolidate cardiac rehab from all facilities to West Haven	2005	1.4	1.7	1.3	2.0	2.1	2.2	2.4	3.2			4.2	6.0	2

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APPENDIX 3.F – CONTINUITY OF CARE DISRUPTION ASSESSMENT

The following template is an example of what may be utilized in Stage II to document the options recommended and the physical construction implementation sequence associated with each option. Each option will be evaluated based on the level of disruption to continuity of care.

Continuity of Care

VISN:
Site:

Continuity of Care Impact Assessment

Evaluation:
Disruption in Care - Y/N

Instructions: Identify the impact of the option by choosing the code that best fits the disruption of care

Option #	Market	Facility	Option	Year Planned	List the Sequence of Changes Required for Each Option	Continuity of Care Impact Assessment
1	East	West Haven	Develop urgent care services at XX CBOCs	2006	Identify workload potential	Yes
					Identify space requirements	
					Identify furniture and equipment requirements	
					Develop site budget	
					Develop space plan based on work flow	
					Identify staffing needs	
					Develop construction documents	
					Recruit staff	
					Order equipment and furnishings	
					Develop operational policies	
					Complete construction	
					Communicate new services to patients	
					Move in	

24-239

APPENDIX 3.G – STAGE I OUTPUTS

Research and Education
Stage I Outputs

Site: Healthcare Study Site X

A. *Research and Education Dashboard* - This would include key data points from the data collection tool.

Research		Education	
Both			
• Affiliate 1 • Affiliate 2 • Affiliate 3		Human Tissue (Yes or No)	
Critical Decision Factors[1]			
• Critical Decision Factor 1 • Critical Decision Factor 2 • Critical Decision Factor 3			

B. *Research and Education Description*

Subject	Description
	This would include summarized information from the data collection tool.

[1] A Critical Decision Factor can be defined as anything that when changed has a potential impact on Access, Quality, Cost, or Stakeholder Concerns (i.e., high dependency on medical residents, non-transferable affiliation agreements, etc.)

24-240

C. Critical Issues Discussion

Critical Issue #1	Please include brief name of critical issue	[redacted]	A, Q, C, SI
	Please include discussion of critical issue and how this issue has the potential to impact Access, Quality, Cost, or Stakeholder Input / Concerns		
Critical Issue #2	Please include brief name of critical issue	[redacted]	A, Q, C, SI
	Please include discussion of critical issue and how this issue has the potential to impact Access, Quality, Cost, or Stakeholder Input / Concerns		
Critical Issue #3	Please include brief name of critical issue	[redacted]	A, Q, C, SI
	Please include discussion of critical issue and how this issue has the potential to impact Access, Quality, Cost, or Stakeholder Input / Concerns		

[2] Indicates areas impacted if change to critical issue. A = Access, Q = Quality, C = Cost, and SI = Stakeholder Input

24-2411

APPENDIX 3.H – STAGE II OUTPUTS

Research and Education
Stage II Outputs

Site: Healthcare Study Site X

BPO	Direct Impact	Resulting Effect	Mitigation Strategy
	This section is to describe how the proposed option directly impacts the research and education programs (i.e., changes to space, programs, number of residents, med students, affiliation agreements, etc.)	This section is to describe how this will impact the facility in terms of the standard criteria: Access, Quality, Cost, and Stakeholder Input / Concerns.	This section is to discuss potential mitigation strategies to reduce the possible negative effects of the direct impacts.

24-242

APPENDIX 4.A – EXAMPLE OF SPACE TOOL AND OUTPUTS

Project Site Name
Proposed Area
Department By Zone example
April 12, 2005

EXAMPLE

CTC	VA Department	Workload	Workload Unit	% In-House	Occupancy Rate						Wkld per KPU	Quantity (KPUs)	Units In House	DGSF / KPU	DGSF / Wkld Unit	Area	Area Unit	% of Category
	NURSING											264				137,450		13%
Inpatient Medicine & Observation	Inpatient Medicine	25,000	Pt Days	100%	0.83						309	81	Beds	450	1.46	36,450	DGSF	25%
Inpatient Surgery	Inpatient Surgery	25,000	Pt Days	100%	0.85						309	81	Beds	450	1.46	36,450	DGSF	25%
Inpatient Medicine & Observation	Medical ICU	2,000	Pt Days	100%	0.83						286	7	Beds	650	2.28	4,550	DGSF	3%
Inpatient Surgery	Surgical ICU	2,000	Pt Days	100%	0.85						286	7	Beds	650	2.28	4,550	DGSF	3%
Inpatient Medicine & Observation	Rehabilitation Medical Care	3,000	Pt Days	100%	0.83						294	17	Beds	500	1.70	8,500	DGSF	6%
Inpatient Psychiatry and Substance Abuse	Inpatient Mental Health & Behavioral Medicine	5,262	Pt Days	100%	0.85						310	17	Beds	550	1.78	9,350	DGSF	6%
Inpatient SRC	Blind Rehabilitation	5,000	Pt Days	100%	0.85						294	17	Beds	1,400	4.76	23,800	DGSF	16%
Inpatient SCI	Spinal Cord Injury	5,000	Pt Days	100%	0.85						294	17	Beds	1,400	4.76	23,800	DGSF	16%
	DIAGNOSTIC & TREATMENT			% In-House	Utilization Rate	Procedure Time	Unit	Hours of Operation	Unit	Stops per Room						44,000		0%
Ambulatory: Cardiology	Cardiology	10,000	Stops	100%	0.70	20	Average Min/Exam	8	H/Day	4,200	2	Suite	600	0.14	1,429	DGSF	3%
Ambulatory: Eye Clinic	Eye Clinic	10,000	Stops	100%	0.70	32	Average Min/Exam	8	H/Day	2,625	4	Ex Rooms	500	0.19	1,905	DGSF	4%
Ambulatory: Non-Surgical Specialties	Pulmonary, Respiratory Care	10,000	Stops	100%	0.75	42	Average Min/Exam	8	H/Day	2,143	5	Ex Rooms	500	0.23	2,333	DGSF	5%
Ambulatory: Non-Surgical Specialties	Diabetes, Dermatology, Oncology, Pain Clinic	10,000	Stops	100%	0.75	42	Average Min/Exam	8	H/Day	2,143	5	Ex Rooms	500	0.23	2,333	DGSF	5%
Ambulatory: Orthopedics	Orthopedics	10,000	Stops	100%	0.75	42	Average Min/Exam	8	H/Day	2,143	5	Ex Rooms	500	0.23	2,333	DGSF	5%
Ambulatory: Primary Care and Related Specialties	Urgent Care	50,000	Stops	100%	0.70	48	Average Min/Exam	8	H/Day	2,100	24	Ex Rooms	525	0.25	12,500	DGSF	28%
Ambulatory: Primary Care and Related Specialties	Geriatrics	10,000	Stops	100%	0.70	20	Average Min/Exam	8	H/Day	4,200	2	Ex Rooms	500	0.12	1,190	DGSF	3%
Ambulatory: Primary Care and Related Specialties	Primary Care	100,000	Stops	100%	0.70	20	Average Min/Exam	8	H/Day	4,200	24	Ex Rooms	500	0.12	11,905	DGSF	27%
Ambulatory: Primary Care and Related Specialties	Employee Health	10,000	Stops	100%	0.70	20	Average Min/Exam	8	H/Day	4,200	2	Ex Rooms	500	0.12	1,190	DGSF	3%
Ambulatory: Radiology & Related Specialties	Nuclear Medicine	3,000	Stops	100%	0.70	1	Average Min/Exam	8	H/Day	84,000	0	Fixed Modalities	1,200	0.01	43	DGSF	0%
Ambulatory: Radiology & Related Specialties	Radiation Therapy	3,000	Stops	100%	0.70	1	Average Min/Exam	8	H/Day	84,000	0	Fixed Modalities	1,200	0.01	43	DGSF	0%
Ambulatory: Radiology & Related Specialties	X-Ray, MRI, CT	3,000	Stops	100%	0.75	20	Average Min/Exam	8	H/Day	4,500	1	Mixed Modalities	1,200	0.27	800	DGSF	2%
Ambulatory: Rehab Medicine	Physical, Occupational, Kinesio Therapy	3,000	Stops	100%	0.70	1	Average Min/Exam	6	H/Day	84,000	0	Fixed Modalities	1,200	0.01	43	DGSF	0%
Ambulatory: Surgical & Related Specialties	Digestive Diseases, GI, Endoscopy	10,000	Stops	100%	0.75	45	Average Min/Exam	8	H/Day	2,000	5	Ex Rooms	500	0.25	2,500	DGSF	6%
Ambulatory: Surgical & Related Specialties	ENT, Neurology Programs (including Traumatic Brain Injury)	10,000	Stops	100%	0.75	15	Average Min/Exam	8	H/Day	6,000	2	Ex Rooms	500	0.08	833	DGSF	2%
Ambulatory: Surgical & Related Specialties	Audiology Program	10,000	Stops	100%	0.75	15	Average Min/Exam	8	H/Day	6,000	2	Ex Rooms	500	0.08	833	DGSF	2%
Ambulatory: Surgical & Related Specialties	Dialysis Program	10,000	Stops	100%	0.75	15	Average Min/Exam	8	H/Day	6,000	2	Ex Rooms	500	0.08	833	DGSF	2%
Ambulatory: Surgical & Related Specialties	Podiatry, Plastic Surgery, Neuro Surgery	10,000	Stops	100%	0.75	15	Average Min/Exam	8	H/Day	6,000	2	Ex Rooms	500	0.08	833	DGSF	2%
Not projected	Dental	10,000	Stops	100%	0.70	1	Average Min/Exam	8	H/Day	84,000	0	Ex Rooms	500	0.01	60	DGSF	0%

Figure A4.1 – Sample space allocation tool and output.

CIC	VA Department	Workload	Workload Unit	% In-House	Occupancy Rate				Wkld per KPU	Quantity (KPUs)	Units In House	DGSF / KPU	DGSF / Wkld Unit	Area	Area Unit	% of Category
Not projected	Prosthetics	10,000	Stops	100%	0.70	1	Average Min/Clinic	8	H/Day	64,000	0	Ex Rooms	500	0.01	60	DGSF	0%
	Behavioral Health														211,660		1%
Ambulatory: Behavioral Health	Mental Health Clinic (includes substance abuse)	100,000	Stops	100%	0.70	60	Average Min per Consult	8	H/Day	1,400	71	Group Rooms	500	0.36	35,714	DGSF	17%
Outpatient Mental Health Program: Day Treatment	Day Treatment	100,000	Stops	100%	0.70	60	Average Min per Consult	8	H/Day	1,400	71	Ex Rooms	500	0.36	35,714	DGSF	17%
Outpatient Mental Health Program: Homeless	Homeless	100,000	Stops	100%	0.70	60	Average Min per Consult	8	H/Day	1,400	71	Ex Rooms	500	0.36	35,714	DGSF	17%
Outpatient Mental Health Program: Methadone Treatment	Methadone Treatment	100,000	Stops	100%	0.70	60	Average Min per Consult	8	H/Day	1,400	71	Ex Rooms	500	0.36	35,714	DGSF	17%
Outpatient Mental Health Program: MHICM	Mental Health Intensive Case Management	100,000	Stops	100%	0.70	60	Average Min per Consult	8	H/Day	1,400	71	Ex Rooms	500	0.36	35,714	DGSF	17%
Outpatient Mental Health Program: Work Therapy	Work Therapy	100,000	Stops		0.00128		VA Factor	8	H/Day		128	Work Stations	150	0.19	19,200	DGSF	9%
Outpatient Mental Health Program: Community MH Residential Care	Community MH Residential Care	100,000	Stops	100%	0.30	10	Average Min per Consult	8	H/Day	3,600	26	Ex Rooms	500	0.14	13,889	DGSF	7%
	LONG TERM CARE										17				9,775		0%
Inpatient Nursing Home	Nursing Home Care	5,000	Pt Days	100%	0.85				294	17	Beds	575	1.96	9,775	DGSF	100%
	DOMICILIARY										34				11,900		0%
Inpatient residential Rehab & Domiciliary	Residential Rehabilitation & Domiciliary	5,000	Pt Days	100%	0.85				294	17	Beds	350	1.19	5,950	DGSF	50%
Other Mental Health Inpatient Programs	Other Inpatient Mental Health	5,000	Pt Days	100%	0.85				294	17	Beds	350	1.19	5,950	DGSF	50%
	Total Clinical DGSF													424,785	DGSF	
	SUPPORT													77,903		0%
	Nutrition/Food	295	Beds									52		15,340	DGSF	21%
	Canteen	295	Beds									36		10,620	DGSF	15%
	(Plants Process & Distribution) SPD Service	3,866		0.91% of total clinical DGSF								1		3,866	DGSF	5%
	(Acquisition & Materials Management) Assets Warehouse	5,820		1.37% of total clinical DGSF								1		5,820	DGSF	8%
Ambulatory: Pathology	Pathology	12,744		3.00% of total clinical DGSF								1		12,744	DGSF	16%
	Pharmacy - Inpatient	295	Beds									12		3,540	DGSF	5%
	Pharmacy - Outpatient	4,375		1.03% of total clinical DGSF								1		4,375	DGSF	6%
	Environmental Management Service	3,058		0.72% of total clinical DGSF								1		3,058	DGSF	4%
	Linen Service	295	Beds									9		2,655	DGSF	4%
	Engineering Service	3,398		0.80% of total clinical DGSF								1		3,398	DGSF	5%
	Police/Security	680		0.16% of total clinical DGSF								1		680	DGSF	1%
	Information Resource Management	3,653		0.86% of total clinical DGSF								1		3,653	DGSF	5%
	On Site Laundry	100		Maintain existing or eliminate service								1		100	DGSF	0%
	On-Call Program	1,954		0.46% of total clinical DGSF								1		1,954	DGSF	3%
	Residential Quarters	100		Maintain existing or eliminate service								1		100	DGSF	0%
	EDUCATION													4,425		0%
	Education Program	295	Beds									15		4,425	DGSF	100%

Figure A4A.1 (continued) – Sample space allocation tool and output

CIC	VA Department	Workload	Workload Unit	% In-House	Occupancy Rate	Wkld per KPU	Quantity (KPUs)	Units In House	DGSF / KPU	DGSF / Wkld Unit	Area	Area Unit	% of Category
	ADMINISTRATION										14,590		0%
	Director's Suite	1,062	0.25% of total clinical DGSF						1		1,062	DGSF	
	Nursing Service Administration	850	0.20% of total clinical DGSF						1		850	DGSF	
	Medical Administration Services	425	0.10% of total clinical DGSF						1		425	DGSF	
	Fiscal Service	2,761	0.65% of total clinical DGSF						1		2,761	DGSF	
	(Acquisition & Material Management)	425	0.10% of total clinical DGSF						1		425	DGSF	
	ADMIN Administration												
	Human Resource Service	637	0.15% of total clinical DGSF						1		637	DGSF	
	Clinical Service Administration	1,954	0.46% of total clinical DGSF						1		1,954	DGSF	
	Voluntary Service	425	0.10% of total clinical DGSF						1		425	DGSF	
	Library Service	1,912	0.45% of total clinical DGSF						1		1,912	DGSF	
	Medical Media	2,761	0.65% of total clinical DGSF						1		2,761	DGSF	
	Chaplain Service	680	0.16% of total clinical DGSF						1		680	DGSF	
	Veterans Assistance Service	100	Maintain existing or eliminate service						1		100	DGSF	
	Organizations												
	Child Care Center	100	Maintain existing or eliminate service						1		100	DGSF	
	Credit Union	100	Maintain existing or eliminate service						1		100	DGSF	
	Employee Fitness Center	100	Maintain existing or eliminate service						1		100	DGSF	
	Veterans Benefits Administration	100	Maintain existing or eliminate service						1		100	DGSF	
	National Cemetery Administration	100	Maintain existing or eliminate service						1		100	DGSF	
	Outleased Space	100	Maintain existing or eliminate service						1		100	DGSF	
	RESEARCH										75,000		0%
	Medical Research / Development	100	Investigators						750		75,000	DGSF	
	INFRASTRUCTURE										91,259		0%
	Lobby Space	76,461	10.00% of total clinical DGSF						1		76,461	DGSF	
	Centralized Staff Lockers	1,954	0.46% of total clinical DGSF						1		1,954	DGSF	
	Swing Space	12,744	3.00% of total clinical DGSF						1		12,744	DGSF	
	Vacant	100	Maintain existing or eliminate service						1		100	DGSF	
	Total Non-Clinical (less Boiler Plant) DGSF										267,177	DGSF	
	Total Clinical plus Non-Clinical (less Boiler Plant) DGSF										681,962	DGSF	
	Boiler Plant								15%		102,294	DGSF	
							Total Departmental Area				784,257	DGSF	
							Interdepartmental Circulation		20%		156,851	DGSF	
							Building Systems		8%		62,741	DGSF	
							Walls, Canopies, etc.		8%		62,741	DGSF	
							Building Efficiency Factor		0%		0	DGSF	
							Building Gross Area				1,066,589	DGSF	

Figure A4A.1 (continued) – Sample space allocation tool and output

Figure A4A.1 (continued) – Sample space allocation tool and output

CARES
Project Site Name
Projected Area
Departments by Zone sample
April 13, 2005

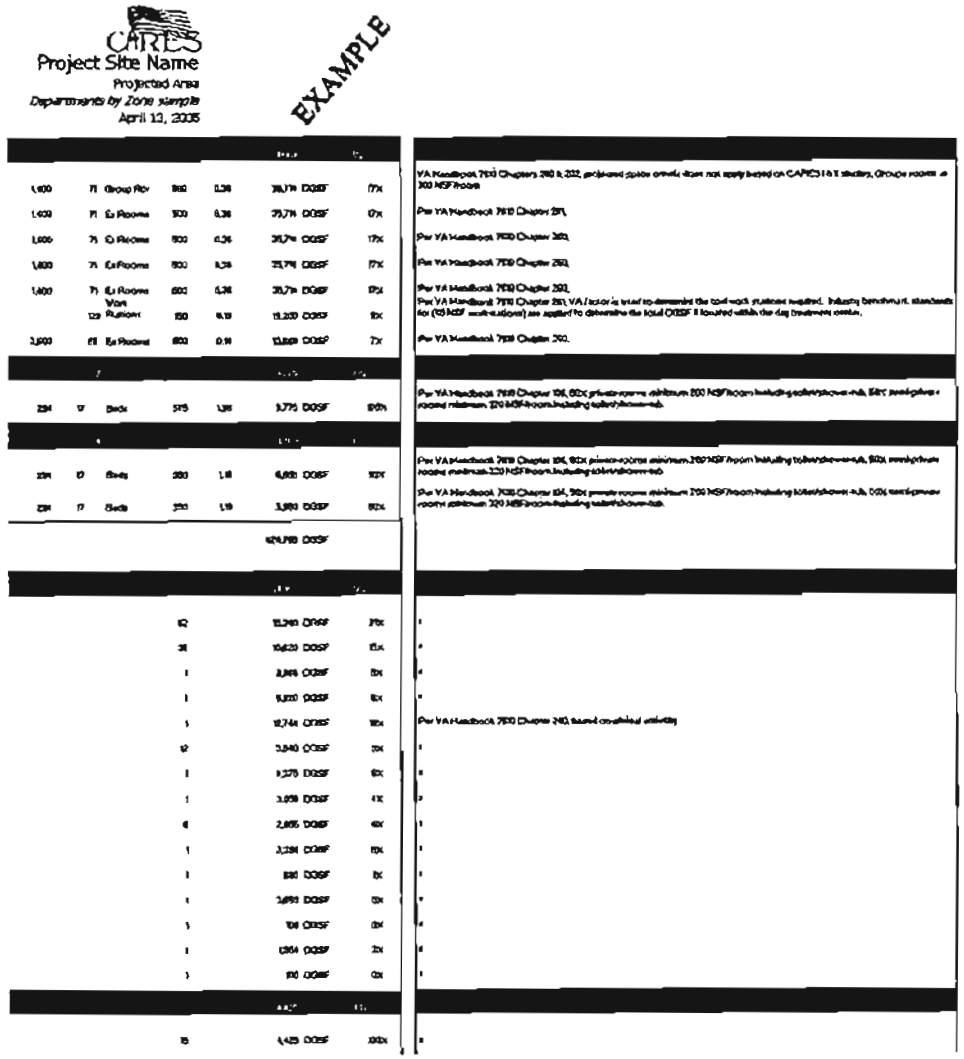
EXAMPLE

Workload to Area Calculation

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Area	Area Unit	[illegible]	Comments & Assumptions
	[illegible]				[illegible]		[illegible]	
305	61	Beds	450	1.45	26,880	DGSF	25%	Per VA Handbook 7610 Chapter 102, 15% of total Medicine beds will be Medical ICU. 100% Private Rooms, minimum 200 NSF/room including toilet/shower/tub, 2 isolation rooms/unit with a common anteroom. 23 hour observation units will match this criteria.
303	61	Beds	450	1.49	26,450	DGSF	25%	Per VA Handbook 7610 Chapter 102, 10% of total Surgery beds will be Medical ICU. 100% Private Rooms, minimum 200 NSF/room including toilet/shower/tub, 2 isolation rooms/unit with a common anteroom. 23-hour observation units will match this criteria.
228	7	Beds	650	2.28	4,550	DGSF	3%	Per VA Handbook 7610 Chapter 102, 10% of total Medicine beds will be Medical ICU. 100% Private Rooms, minimum 350 NSF/room including toilet/shower/tub.
285	7	Beds	650	2.28	4,550	DGSF	2%	Per VA Handbook 7610 Chapter 102, 20% of total Medicine beds will be Medical ICU. 100% Private Rooms, minimum 350 NSF/room including toilet/shower/tub.
294	17	Beds	500	1.70	8,500	DGSF	6%	Per VA Handbook 7610 Chapter 102, 100% Private Rooms, minimum 200 NSF/room including toilet/shower/tub, 2 isolation rooms/unit with a common anteroom. Additional support space required for specialty equipment and supplies. Treatment rooms are located in diagnostic & treatment space.
310	17	Beds	550	1.78	9,350	DGSF	5%	Per VA Handbook 7610 Chapter 102, 50% private rooms minimum 240 NSF/room including toilet/shower/tub, 50% semi-private rooms minimum 300 NSF/room including toilet/shower/tub, 2 isolation rooms/unit are included in the private room count.
294	17	Beds	1,400	4.76	23,800	DGSF	16%	Per VA [illegible] Standard, 50% private rooms minimum 275 NSF/room including toilet/shower/tub, 50% semi-private rooms minimum 330 NSF/room including toilet/shower/tub.
294	17	Beds	1,400	4.76	23,800	DGSF	16%	Per VA Handbook chapter 104, 50% private rooms minimum 305 NSF/room including toilet/shower/tub, 50% semi-private rooms minimum 515 NSF/room including toilet/shower/tub.
[illegible]					[illegible]		[illegible]	
4,200	2	Suites	800	0.19	1,625	DGSF	3%	Per VA Handbook 7610 Chapter 280 & 282.
2,625	4	Ex Rooms	500	0.19	1,905	DGSF	6%	Per VA Handbook 7610 Chapter 283.
2,941	5	Ex Rooms	600	0.22	3,300	DGSF	5%	Per VA Handbook 7610 Chapter 282.
2,143	5	Ex Rooms	500	0.23	2,300	DGSF	5%	Per VA Handbook 7610 Chapter 282.
2,143	8	Ex Rooms	500	0.23	3,200	DGSF	8%	Per VA Handbook 7610 Chapter 282.
2,100	24	Ex Rooms	525	0.25	12,500	DGSF	20%	Per VA Handbook 7610 Chapter 282.
4,200	2	Ex Rooms	500	0.12	1,000	DGSF	7%	Per VA Handbook 7610 Chapter 282.
4,200	21	Ex Rooms	500	0.12	7,906	DGSF	27%	Per VA Handbook 7610 Chapter 282.
4,200	2	Ex Rooms	600	0.15	1,100	DGSF	2%	Per VA Handbook 7610 Chapter 282.
84,000	0	Fixed Mod	1,200	0.01	43	DGSF	0%	Per VA Handbook 7610 Chapter 272.
84,000	0	Fixed Mod	1,200	0.01	43	DGSF	0%	Per VA Handbook 7610 Chapter 277.
4,500	1	Fixed Mod	1,200	0.27	800	DGSF	2%	Per VA Handbook 7610 Chapter 276.
84,000	0	Fixed Mod	1,200	0.01	43	DGSF	0%	Per VA Handbook 7610 Chapter 270.
2,000	5	Ex Rooms	500	0.25	2,500	DGSF	6%	Per VA Handbook 7610 Chapter 262.
4,000	2	Ex Rooms	500	0.08	833	DGSF	2%	Per VA Handbook 7610 Chapter 281.
4,000	2	Ex Rooms	500	0.08	833	DGSF	2%	Per VA Handbook 7610 Chapter 282.
4,000	2	Ex Rooms	500	0.08	833	DGSF	2%	Per VA Handbook 7610 Chapter 282.
4,000	2	Ex Rooms	500	0.08	833	DGSF	2%	Per VA Handbook 7610 Chapter 282.
84,000	0	Ex Rooms	500	0.01	60	DGSF	0%	Workload data not projected
84,000	0	Ex Rooms	500	0.01	60	DGSF	0%	Workload data not projected

3H-3HC

Figure A4A.1 (continued) – Sample space allocation tool and output



A4A-37

Figure A4A.2 – Sample parking and site allocation model and output

CARES
Project Site Name
Projected Area
Parking & Site by Zone sample
April 13, 2005

EXAMPLE

Based on a space/bed ratio of 5
and a space/area ratio of 400

	Area to Cost Conversion				
Parking Elements	Beds / Area	Beds / Area	Beds / Area	Beds / Area	Beds / Area
Inpatient Demand	288 Beds	288 Beds	288 Beds	288 Beds	288 Beds
Building Area	422,288 Gross ft²	422,288 Gross ft²	422,288 Gross ft²	422,288 Gross ft²	422,288 Gross ft²
Parking per Bed:	53 spaces	53 spaces	53 spaces	53 spaces	53 spaces
Parking per Area:	1,056 spaces	1,056 spaces	1,056 spaces	1,056 spaces	1,056 spaces
Total parking space needs	1,888 spaces	1,888 spaces	1,888 spaces	1,888 spaces	1,888 spaces
Percent of vehicles in Parking Structure:	80%	80%	80%	80%	80%
Total vehicles in Parking Structure:	887 spaces	887 spaces	887 spaces	887 spaces	887 spaces
Total Parking Structure floors:	3 floors	3 floors	3 floors	3 floors	3 floors
Vehicles per floor:	296 spaces	296 spaces	296 spaces	296 spaces	296 spaces
Square Feet per car:	400 ft²/car	400 ft²/car	400 ft²/car	400 ft²/car	400 ft²/car
Footprint for structured parking:	88,291 ft²	88,291 ft²	88,291 ft²	88,291 ft²	88,291 ft²
Percent of vehicles in surface parking	20%	20%	20%	20%	20%
Total vehicles in surface parking:	222 spaces	222 spaces	222 spaces	222 spaces	222 spaces
Square Feet per car:	600 ft²/car	600 ft²/car	600 ft²/car	600 ft²/car	600 ft²/car
Footprint for surface parking:	80,870 ft²	80,870 ft²	80,870 ft²	80,870 ft²	80,870 ft²
Total parking space needs (Check)	1,888 cars	1,888 cars	1,888 cars	1,888 cars	1,888 cars
Total site area required for parking:	223,101 ft²	223,101 ft²	223,101 ft²	223,101 ft²	223,101 ft²
Total site area required for parking:	5 acres	5 acres	5 acres	5 acres	5 acres

	Area to Cost Conversion									
Zone Elements	Beds / Area		Beds / Area		Beds / Area		Beds / Area		Beds / Area	
Inpatient Bed & Building Gross Totals:	288	422,288 ft²	288	422,288 ft²	288	422,288 ft²	288	422,288 ft²	288	422,288 ft²
Percentage of area in patient towers:	25%		25%		25%		25%		25%	
Number of patient floors:	6		6		6		6		6	
Footprint of patient towers:		18,255 ft²		18,255 ft²		18,255 ft²		18,255 ft²		18,255 ft²
Percentage of area in non-patient towers:	75%		75%		75%		75%		75%	
Number of non-patient floors:	3		3		3		3		3	
Footprint of non-patient floors:		104,143 ft²		104,143 ft²		104,143 ft²		104,143 ft²		104,143 ft²
Civil Issues	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²
Buffer	500%	521,713 ft²	500%	521,713 ft²	500%	521,713 ft²	500%	521,713 ft²	500%	521,713 ft²
Outdoor Recreation	100%	104,143 ft²	100%	104,143 ft²	100%	104,143 ft²	100%	104,143 ft²	100%	104,143 ft²
Parking		223,101 ft²		223,101 ft²		223,101 ft²		223,101 ft²		223,101 ft²
Circulation	500%	521,713 ft²	500%	521,713 ft²	500%	521,713 ft²	500%	521,713 ft²	500%	521,713 ft²
Logistics	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²
Future Expy	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²	200%	208,285 ft²
Total site area required:		2,103,633 ft²		2,103,633 ft²		2,103,633 ft²		2,103,633 ft²		2,103,633 ft²
Total site area required:		48 acres		48 acres		48 acres		48 acres		48 acres

Figure A4A.2 (continued) – Sample parking and site allocation model and output

CARES
Project Site Name
Projected Area
Parking & Site by Zone Sample
April 13, 2005

EXAMPLE

Based on a [illegible] ratio of [illegible]
and a [illegible] ratio of [illegible]

[illegible]	Area to Cost Conversion					
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Leased Space
Inpatient Demand	[illegible] Beds	[illegible] Beds	[illegible] Beds	[illegible] Beds	[illegible] Beds	[illegible] Beds
Building Area	[illegible] Gross ft²	[illegible] Gross ft²	[illegible] Gross ft²	[illegible] Gross ft²	[illegible] Gross ft²	[illegible] Gross ft²
Parking per Beds	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces
Parking per Area	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces
Total parking space needs	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces
Percent of vehicles in Parking structure	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total vehicles in Parking structure	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces
Total Parking Structure floors	[illegible] floors	[illegible] floors	[illegible] floors	[illegible] floors	[illegible] floors	[illegible] floors
Vehicles per floor	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces
Square Feet per car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car
Footprint for structured parking	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²
Percent of vehicles in surface parking	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total vehicles in surface parking	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces	[illegible] spaces
Square Feet per car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car	[illegible] ft²/car
Footprint for surface parking	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total site area required for parking	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²
Total site area required for parking	[illegible] acres	[illegible] acres	[illegible] acres	[illegible] acres	[illegible] acres	[illegible] acres

[illegible]	Area to Cost Conversion					
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Leased Space
Inpatient Bed & Building Gross Totals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Percentage of area in patient towers	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Number of patient floors	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Footprint of patient towers	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²
Percentage of area in non-patient towers	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Number of non-patient floors	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Footprint of non-patient floors	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Buffer	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Outdoor Recreation	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Parking	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Circulation	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Logistics	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Formal Entry	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total site area required	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²	[illegible] ft²
Total site area required	[illegible] acres	[illegible] acres	[illegible] acres	[illegible] acres	[illegible] acres	[illegible] acres

6HC-HC

Figure A4.3 - Sample construction project costing tool output

CARES
Project Site Name
Projected Area
Construction Budget by Zone sample
April 13, 2005

EXAMPLE

	Area to Cost Conversion											
New Construction	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000
Renovation	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000
Parking	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000
Site	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000
Demolition	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000	10,000	DGSF	$10,000
Utilities			$10,000			$10,000			$10,000			$10,000			$10,000
Off-Site Development			$10,000			$10,000			$10,000			$10,000			$10,000
Site Specific Condition #1			$0			$0			$0			$0			$0
Site Specific Condition #2			$0			$0			$0			$0			$0
Site Specific Condition #3			$0			$0			$0			$0			$0
Soil Conditions			$10,000			$10,000			$10,000			$10,000			$10,000
Seismic			$10,000			$10,000			$10,000			$10,000			$10,000
Subtotal			$30,000			$30,000			$30,000			$30,000			$30,000
Phasing		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Scale		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Location Factor		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Regional Adjustment		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Fast Track		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Design Contingency		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Bid Contingency		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Escalation		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800		2%	$1,800
Construction Cost			$394,488			$394,488			$394,488			$394,488			$394,488

Figure A4.3 (continued) - Sample construction project costing tool output

CARES
Project Site Name
Projected Area
Construction Budget by Zone sample
April 13, 2005

EXAMPLE

Soft Costs	Acute Care		Nursing Home		[illegible]		Rehab		Behavioral Health	
Land Acquisition		$1		$1		$1		$1		$1
Construction Contingency	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Owner Contingency	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Architecture & Engineering Services	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Commissioning	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Medical Equipment		$1		$1		$1		$1		$1
Fixtures, Furnishings & Equipment	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Installation & Moving	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Administrative Costs	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Hazardous Materials		$1		$1		$1		$1		$1
Construction Management Fees	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Escalation	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088	2%	$2,088
Soft Cost		$18,796		$18,796		$18,796		$18,796		$18,796
Total Project Costs		$123,195		$123,195		$123,195		$123,195		$123,195

04-386

Figure A4.3 (continued) - Sample construction project costing tool output

CARES
Project Site Name
Projected Area
Construction Budget by Zone sample
April 13, 2005

EXAMPLE

	Area to Cost Conversion											
[illegible]	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		Leased Space	
New Construction	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000
Renovation	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000
Parking	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000
Site	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000
Demolition	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000	10,000 DGSF	$10,000
[illegible]												
Utilities		$10,000		$10,000		$10,000		$10,000		$10,000		$10,000
Off-Site Development		$10,000		$10,000		$10,000		$10,000		$10,000		$10,000
Site Specific Condition #1		$0		$0		$0		$0		$0		$0
Site Specific Condition #2		$0		$0		$0		$0		$0		$0
Site Specific Condition #3		$0		$0		$0		$0		$0		$0
Soil Conditions		$10,000		$10,000		$10,000		$10,000		$10,000		$10,000
Seismic		$10,000		$10,000		$10,000		$10,000		$10,000		$10,000
Subtotal		$30,000		$30,000		$30,000		$30,000		$30,000		$30,000
[illegible]												
Phasing	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Scale	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Location Factor	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Regional Adjustment	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Fast Track	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Design Contingency	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Bid Contingency	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Escalation	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800	2%	$1,800
Construction Cost		$184,400		$184,400		$184,400		$184,400		$184,400		$184,400

34-253

Figure A4.3 (continued) - Sample construction project costing tool output

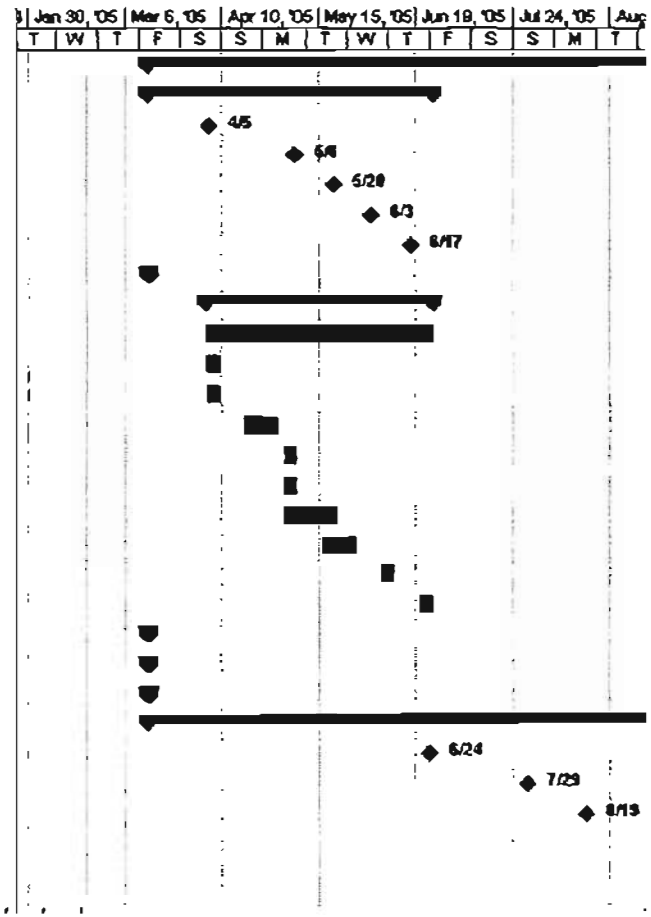
CARES
Project Site Name
Projected Area
Construction Budget by Zone sample
April 13, 2005

EXAMPLE

											Leased Space	
Land Acquisition		$1		$1		$1		$1		$1		$1
Construction Contingency	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Owner Contingency	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Architecture & Engineering Services	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Commissioning	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Medical Equipment		$1		$1		$1		$1		$1		$1
Fixtures, Furnishings & Equipment	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Installation & Moving	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Administrative Costs	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Hazardous Materials		$1		$1		$1		$1		$1		$1
Construction Management Fees	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Escalation	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000	2%	$2,000
Soft Cost		$16,795		$16,795		$16,795		$16,795		$16,795		$16,795
Total Project Costs		$123,195		$123,195		$123,195		$123,195		$123,195		$123,195

Figure A4A.4 - Sample schedule

	WBS	Task Name	Duration
1	1	− Canandaigua	158 days?
2	1.1	− Stage One	74 days?
3	1.1.1	Conduct 1st LAP public meeting	0 days
4	1.1.2	Conduct second LAP meeting - Submit options for review	0 days
5	1.1.3	Submit downselected options to COTR	0 days
6	1.1.4	Present downselected options to VHA/CIB	0 days
7	1.1.5	Obtain VA approved options for detailed study	0 days
8	1.1.6	+ Stakeholder Engagement	1 day?
12	1.1.7	− Capital Planning Study	59 days
13	1.1.7	Health Care Study	59 days
14	1.1.7.1	Site Assessment	5 days
15	1.1.7.2	LAP Meeting 1	5 days
16	1.1.7.3	Select Initial Options	10 days
17	1.1.7.4	LAP Meeting 2	5 days
18	1.1.7.5	Receive Metrics	5 days
19	1.1.7.6	Analyze Options	15 days
20	1.1.7.7	Cost Options	10 days
21	1.1.7.8	P+W QA/QC Review	5 days
22	1.1.7.9	Issue Report	5 days
23	1.1.8	+ Re-Use Study	1 day?
27	1.1.9	+ Financial Analysis and Business Plan	1 day?
31	1.1.10	+ Implementation Planning and Risk Management	1 day?
35	1.2	− Stage Two	168 days?
36	1.2.1	Third LAP meeting - Present downselected options for comment	0 days
37	1.2.2	Fourth LAP meeting - Submit draft business plans	0 days
38	1.2.3	Submit draft business plans to COTR	0 days
39	1.2.4	Submit final draft business plans to COTR	0 days
40	1.2.5	Present revised final draft business plans to VHA/CIB	0 days
41	1.2.6	Obtain VA approval of final draft business plans	0 days



APPENDIX 4.B – CAPITAL PLANNING INPUTS TO FINANCIAL ANALYSIS

Financial analysis inputs

- The Capital Planning team populates each site-specific worksheet with key physical implementation expenditure information including the level of capital investment and life cycle cost levels for each facility within a particular site.
- For each Capital Planning option at each Site in a Study Site, the Capital Planning team The Capital Planning team provides at least one capital plan option for each BPO developed by the healthcare study team at a study site to indicate how the healthcare option could be implemented at the site. For non-healthcare study sites, it is the Capital Planning team who provides the range of BPOs to be analyzed, and coordinates with the VA and Healthcare study team the provision of information indicated above.
- The Capital Planning team inputs cost estimates generated using the Davis Langdon Cost Model (either Rough Order of Magnitude cost estimates or more detailed assessment depending on the site and Stage) for each of the key implementation elements at each Site within a BPO. The costs at each site are broken into each major capital expense elements (new construction, renovating, demolishing, temporary rental costs, etc.) and capital life cycle (or major maintenance) costs.
- These cost expenditures are input annually in FY2005Q1 dollars throughout the individual project's construction/transition/demolition phase for each of the four scenarios listed above, as shown in Figure A4.1. Additional facilities sites can be added to the analysis by simply inserting rows into the BPO Financial Analysis Tool and copying the formulas from the rows above or below the newly-inserted rows.
- Cost escalators provided by the Capital Planning team (entered on the GenAssump worksheet see Figure A4.2) are used to convert unescalated FY05Q1 costs into nominal dollars and will be defined for each of the capital expense elements noted above. The capital planning team also provides cost escalators for the cost of vacant space and the cost of vacant land (defined by the Healthcare team in FY03 dollars) which are multiplied by the amount of vacant space / land not used by the Re-use team.
- Finally, the BPO Financial Analysis Tool aggregates the overall levels of both new capital investment and life cycle costs in each year for each of the sites in unescalated dollars and escalated (nominal) dollars after applying the appropriate escalation factors.

Option Elements	2003	2004	2005	2006	2007	2008	2009	2010	...	2023
Total Investment Expense	-	-	-	-	-	-	-	-	-	-
Facility #1										
Construct New	-	-	-	-	-	-	-	-	-	-
Renovate	-	-	-	-	-	-	-	-	-	-
Demolish	-	-	-	-	-	-	-	-	-	-
Temporary Rent	-	-	-	-	-	-	-	-	-	-
Facility #2										
Construct New	-	-	-	-	-	-	-	-	-	-
Renovate	-	-	-	-	-	-	-	-	-	-
Demolish	-	-	-	-	-	-	-	-	-	-
Temporary Rent	-	-	-	-	-	-	-	-	-	-
Total Life Cycle Cost Expense	-	-	-	-	-	-	-	-	-	-
Facility #1										
Construct New	-	-	-	-	-	-	-	-	-	-
Renovate	-	-	-	-	-	-	-	-	-	-
Demolish	-	-	-	-	-	-	-	-	-	-
Temporary Rent	-	-	-	-	-	-	-	-	-	-
Facility #2										
Construct New	-	-	-	-	-	-	-	-	-	-
Renovate	-	-	-	-	-	-	-	-	-	-
Demolish	-	-	-	-	-	-	-	-	-	-
Temporary Rent	-	-	-	-	-	-	-	-	-	-

Figure A4B.1 – Option Elements-Cost Expenditures

CAPITAL COST ESCALATORS										
Escalators for Capital Cost Elements (Inputs in FY05Q1 $)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2023
Construct New		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Construct New Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Renovate		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Renovate Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Demolish		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Demolish Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Temporary Rent		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Temporary Rent Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Escalators for Cost of Vacant Space / Land (Inputs in FY03 $)										
Cost of Vacant Space		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Cost of Vacant Space Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533
Cost of Vacant Land		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Cost of Vacant Land Compounded Factor	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	1.4071	1.4775	2.6533

Figure A4B.2 – Selection of Escalation Factors for Capital Costs

APPENDIX 4.C – INTERFACE WITH OGCs FOR NON-HEALTHCARE SITES

Inputs and Outputs VA Contractors' CARES Study Coordination Matrix
(Comprehensive Reuse/Redevelopment Campuses)

	Team PwC	CARES Reuse/Redevelopment Contractor (OGC)
Key Inputs	• VA or Government Furnished Information (GFI) based on results of VA data call • OGC Orientation briefing and results of site visit & non-VA market overview • OGC findings -- VA property and environmental baseline conditions (Phase 1) • OGC findings -- vacant VA land and buildings (Phases 2 & 3) • OGC findings -- reuse potential/highest & best use/non-VA market assessment (Phases 2 & 3) • OGC findings – valuation of available VA property (Phases 2 & 3) • OGC findings – potential net rents/payments from reuse/redevelopment options (Phase 3) • OGC findings – optimal locations for non-VA reuse/redevelopment (Phases 1, 2, & 3) • OGC prepared briefings • OGC support of LAP meetings • VA comments	• VA or Government Furnished Information (GFI) based on results of VA data call • Team PwC orientation/collaboration briefing • Team PwC methodology and public communication plan/protocols • Team PwC analysis and synopsis of LAP meetings and public comments • Team PwC findings -- vacant VA land, buildings and Space and timing • Team PwC's findings – VA capital investment requirements • Team PwC's findings – financial (cost effectiveness) assessment of Business Plan Options • Team PwC findings – optimal on-campus or off-campus location for continuing VA health care requirements • Team PwC findings -- VA health care business options • Team PwC finding – VA "down selected" options • Team PwC draft and final Business Plan • Team PwC prepared briefings • Team PwC support of LAP meetings • Access into InVision, Team PwC's web-based CARES project management site • VA comments
Key Interfaces	• VA (CARES Team) • VA Support Team (Site/VISAN) • OGC Team • OGC Team Leader/Project Manager	• VA (CARES Team) • VA Support Team (Site/VISN) • Team PwC Capital Planning Team Leader • Team PwC Site Leader • Team PwC Project Management Office Liaison on Business Plan Option development and assessment from a re-use perspective

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Key Outputs	• Team PwC analysis and synopsis of LAP meetings and public comments • **Team PwC findings -- vacant VA land and buildings** • Team PwC "user metrics" and measures • **Team PwC's findings – VA capital investment requirements** • Team PwC's findings -- financial feasibility/cost benefit of required VA facilities • **Team PwC findings – optimal on-campus or off-campus location for continuing VA health care requirements** • Team PwC findings -- VA health care business options • Team PwC finding – VA "down selected" options • Team PwC draft and final Business Plan • Team PwC inputs to stakeholder communications • Team PwC prepared briefings • Team PwC weekly status reporting • Team PwC Issue Identification to VA	• OGC findings -- VA property and environmental baseline conditions (Phase 1) • OGC findings – vacant VA land and buildings (Phases 2 & 3) • OGC findings -- reuse potential/highest & best use/non-VA market assessment (Phases 2 & 3) • OGC findings – valuation of available VA property (Phases 2 & 3) • OGC findings – potential net rents/payments from reuse/redevelopment options (Phase 3) • OGC findings – optimal locations for non-VA reuse/redevelopment (Phases 1, 2, & 3) • OGC prepared briefings • OGC inputs to stakeholder communications • OGC weekly status reporting • OGC Issue Identification to VA • OGC's inputs to - financial analysis • OGC's inputs to – optimal on-campus or off-campus location for continuing VA health care requirements • OGC's inputs to -- VA health care business options • OGC's inputs to draft and final Business Plan • OGC's inputs to Local Advisory Panel and Stakeholder Engagement • OGC's inputs prepared briefings • OGC's inputs into InVision, Team PwC's web-based CARES project management site

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APPENDIX 5.A –TABLE OF CONTENTS FOR THE ENVIRONMENTAL BASELINE STUDY REPORT

The following is a potential table of contents for the Environmental Baseline Study Report required from the Re-Use teams (Team PwC or OGC) at each site. It may be amended or reduced as a result of limited data availability. The report identifies any critical data and/or information gaps.

LIST OF TABLES

LIST OF APPENDICES

APPENDIX 5.B - CHECKLIST FOR SCREENING POTENTIAL CANDIDATE USES FOR SITES

Re-Use Planning Initial Screening Template

	POTENTIAL RE-USE CATEGORIES											
	Residential		Commercial		Industrial			Hospitality / Recreation		Other		
INITIAL SCREENING FILTERS (1)	Multifamily	Single Family	Office	Retail	Light / Flex	Heavy	Biotech / Wet lab	Hotel	Rec. / Ent.	Cultural	Education	Healthcare
[illegible]												
a. Residential												
b. Office												
c. Retail												
d. Industrial												
e. Hospitality												
f. Institutional / Civic / Religious / Education												
g. Open Space / Active Recreation												
h. Noxious Use (within 0.5 miles)												
[illegible]												
a. If only part of the facility could potentially be re-used, is the candidate use compatible with continuing on-site healthcare services?												
[illegible]												
a. Street-level visibility												
b. Roads												
c. Transit												
d. Heavy Rail												
e. Waterfront / Port												
f. Airport												
g. Utilities (water, gas, sewer, elec., etc.)												
[illegible]												
a. Environmental Consideration (e.g. is site in a flood plain?)												
b. Moratorium restricting uses												
c. Historic preservation (including adjacent property)												
d. Other restrictions												
[illegible]												
a. Community goals & vision for the site (LAP meetings)												
b. Local / regional economic development initiatives & goals for site												
c. Prior master planning / visioning documents												

Notes:
(1) Cells marked "x" indicate criteria for elimination of the re-use category from Stage I analysis. Please see accompanying document for text detailing the reason for elimination.

APPENDIX 5.C - FINANCIAL ANALYSIS INPUT AND ASSESSMENT TEMPLATES

Financial analysis inputs

- For each Capital Planning option at each Site in a Study Site, the Re-Use team will provide one or more re-use options and input the associated net annual re-use revenues for each study year reflecting the net income to the VA from the implementation of the re-use options considered. Such options are likely to include a range of transaction options to re-utilize/re-use vacant space, buildings and/or land using one or more methods of re-use management (divest, donate, enhanced use, out-lease, demolish, reserve) at each Site.
- The Re-Use team will enter the following key data items annually into the model: the amount of vacant space (square footage) / land (acres) that is utilized in the re-use plan; and the net income that the VA can reasonably expect to receive by implementing that method of re-use management in FY05Q1 dollars (additional facilities and/or re-use management methods can be added to the analysis by simply inserting rows into the model and copying the formulas from the rows above or below the newly-inserted rows), as shown in the following model input table.

Vacant Space / Land UTILIZED BY RE-USE TEAM			2003	2004	2005	2006	2007	2008	2009	2010	...	2023
Amount of Vacant Space / Land (sq. ft / acre)												
Facility #1												
	Space	sq. ft.	-	-	-	-	-	-	-	-	-	-
	Land	acre	-	-	-	-	-	-	-	-	-	-
Facility #2												
	Space	sq. ft.	-	-	-	-	-	-	-	-	-	-
	Land	acre	-	-	-	-	-	-	-	-	-	-
Implementaton of Re-Use Management Methods												
Total Net Income to VA			-	-	-	-	-	-	-	-	-	-
Facility #1												
	Divest	Space	-	-	-	-	-	-	-	-	-	-
	Donate	Land	-	-	-	-	-	-	-	-	-	-
	Enhanced Use	Space	-	-	-	-	-	-	-	-	-	-
	Out-lease	Land	-	-	-	-	-	-	-	-	-	-
	Demolish	Space	-	-	-	-	-	-	-	-	-	-
	Reserve	Land	-	-	-	-	-	-	-	-	-	-
Facility #2												
	Divest	Space	-	-	-	-	-	-	-	-	-	-
	Donate	Land	-	-	-	-	-	-	-	-	-	-
	Enhanced Use	Space	-	-	-	-	-	-	-	-	-	-
	Out-lease	Land	-	-	-	-	-	-	-	-	-	-
	Demolish	Space	-	-	-	-	-	-	-	-	-	-
	Reserve	Land	-	-	-	-	-	-	-	-	-	-

- As stated above, the net cashflow revenues to the VA resulting from the re-use plans will be input annually in unescalated FY2005Q1 dollars and may result from on or more of the following: leasing vacant space, sale of vacant land and/or buildings or from the long term enhanced use leasing of vacant land/buildings. These unescalated revenues will be multiplied by the

appropriate annual escalation factors input by the Re-Use team on the **GenAssump** sheet

RE-USE REVENUE ESCALATORS (INPUTS in FY05Q1 $)										
Value of Vacant Space Escalators										
Divest		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Divest Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Donate		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Donate Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Enhanced Use		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Enhanced Use Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Out-lease		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Out-lease Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Demolish		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Demolish Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Reserve		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Reserve Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Value of Vacant Land Escalators										
Divest		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Divest Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Donate		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Donate Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Enhanced Use		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Enhanced Use Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Out-lease		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Out-lease Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Demolish		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Demolish Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066
Reserve		3.14%	3.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Reserve Compounded Factor	0.9401	0.9696	1.0000	1.0500	1.1025	1.1576	1.2155	1.2763	1.3401	2.4066

- The Re-Use team will enter the amount of vacant space / land not utilized by the re-use plan. These values will be used to calculate the proper operating costs that are attributable to the vacant space / land that the VA is not using at each site.
- The Re-Use team will also enter estimated projections of site development costs for new development on re-used VA land disposed and/or leased as well as an estimate of the number of jobs employed in the newly developed facilities. The site development cost estimates will be input in thousands of FY5 (unescalated) dollars. These inputs, shown below, will be utilized in the Indicative Economic Impact Analysis, further discussed below.
- Finally, the model will aggregate the overall revenues to the VA from re-use management in each year for each of the Sites in unescalated dollars and escalated (nominal) dollars after applying the appropriate escalation factors.

APPENDIX 5.D – INTERFACE WITH OGCs

Inputs and Outputs VA Contractors' CARES Study Coordination Matrix
(Comprehensive Reuse/Redevelopment Campuses)

	Team PwC	CARES Reuse/Redevelopment Contractor (OGC)
Key Inputs	• VA or Government Furnished Information (GFI) based on results of VA data call • OGC Orientation briefing and results of site visit & non-VA market overview • OGC findings -- VA property and environmental baseline conditions (Phase 1) • OGC findings -- vacant VA land and buildings (Phases 2 & 3) • OGC findings -- reuse potential/highest & best use/non-VA market assessment (Phases 2 & 3) • OGC findings – valuation of available VA property (Phases 2 & 3) • OGC findings – potential net rents/payments from reuse/redevelopment options (Phase 3) • OGC findings – optimal locations for non-VA reuse/redevelopment (Phases 1, 2, & 3) • OGC prepared briefings • OGC support of LAP meetings • VA comments	• VA or Government Furnished Information (GFI) based on results of VA data call • Team PwC orientation/collaboration briefing • Team PwC methodology and public communication plan/protocols • Team PwC analysis and synopsis of LAP meetings and public comments • Team PwC findings -- vacant VA land, buildings and Space and timing • Team PwC's findings – VA capital investment requirements • Team PwC's findings – financial (cost effectiveness) assessment of Business Plan Options • Team PwC findings – optimal on-campus or off-campus location for continuing VA health care requirements • Team PwC findings -- VA health care business options • Team PwC finding – VA "down selected" options • Team PwC draft and final Business Plan • Team PwC prepared briefings • Team PwC support of LAP meetings • Access into InVision, Team PwC's web-based CARES project management site • VA comments

Key Interfaces	• VA (CARES Team) • VA Support Team (Site/VISAN) • OGC Team • OGC Team Leader/Project Manager	• VA (CARES Team) • VA Support Team (Site/VISN) • Team PwC Capital Planning Team Leader • Team PwC Site Leader • Team PwC Project Management Office Liaison on Business Plan Option development and assessment from a re-use perspective
Key Outputs	• Team PwC analysis and synopsis of LAP meetings and public comments • Team PwC findings -- vacant VA land and buildings • Team PwC "user metrics" and measures • Team PwC's findings – VA capital investment requirements • Team PwC's findings -- financial feasibility/cost benefit of required VA facilities • Team PwC findings – optimal on-campus or off-campus location for continuing VA health care requirements • Team PwC findings -- VA health care business options • Team PwC finding – VA "down selected" options • Team PwC draft and final Business Plan • Team PwC inputs to stakeholder communications • Team PwC prepared briefings • Team PwC weekly status reporting • Team PwC Issue Identification to VA	• OGC findings -- VA property and environmental baseline conditions (Phase 1) • OGC findings -- vacant VA land and buildings (Phases 2 & 3) • OGC findings -- reuse potential/highest & best use/non-VA market assessment (Phases 2 & 3) • OGC findings – valuation of available VA property (Phases 2 & 3) • OGC findings – potential net rents/payments from reuse/redevelopment options (Phase 3) • OGC findings – optimal locations for non-VA reuse/redevelopment (Phases 1, 2, & 3) • OGC prepared briefings • OGC inputs to stakeholder communications • OGC weekly status reporting • OGC Issue Identification to VA • OGC's inputs to - financial analysis • OGC's inputs to – optimal on-campus or off-campus location for continuing VA health care requirements • OGC's inputs to -- VA health care business options • OGC's inputs to draft and final Business Plan • OGC's inputs to Local Advisory Panel and Stakeholder Engagement • OGC's inputs prepared briefings • OGC's inputs into InVision, Team PwC's web-based CARES project management site

APPENDIX 8.A - GUIDELINES FOR PUBLICITY

General Guidelines

- Local Advisory Panels and site leads will work with local public affairs staff to ensure maximum impact of local publicity
- Site leads, working with local public affairs staff, will consider all language needs for meeting notices, based on local audiences
- All meeting notices are to be short and factual
- Proposed notices will include the following: 1) who (Local Advisory Panel); 2) what (public meeting); 3) why (solicit stakeholder input on CARES implementation); 4) when (time and date); and 5) where (location).
- Notices should stress that public comment is being sought and valued
- Notices should provide a main contact number for all further questions
- Notices will include website address and mailstop
- Notices are to be developed in English. In the event that foreign languages (e.g. Spanish) are used, site leaders will also need to determine language needs for available printed materials and notices at the meetings, as well as translators for presentations
- All publicity will emphasize use of official channels (website, mail, testimony) is preferred
- Publicity efforts will focus on: 1) print notices; 2) email distributions; and 3) flyers/leafleting
- Notices should advise potential witnesses about when and how to submit written testimony and how to request time to present oral testimony.

Print Advertisement-Specific Guidelines

- Print notices should run in the local newspaper of record. This could mean the large regional daily newspaper or the local community daily or weekly, depending on what is monitored mostly closely by stakeholders.
- Notices should also run on specialty publications that reach key public interest groups
- Print advertisements should run at least two weeks prior to the public meeting
- Work with publications to explore possibility of free public service announcement (PSA) space for ads
- Notices are to be designed in black-and-white, with minimal (if any) photos and graphics
- Notices should have sufficient "white space" to allow for the ad to be sized and minimized when necessary

Email-Specific Guidelines

- All emails should be short – limited to one paragraph if possible

- Full email text should fit on one computer screen, with no need for reader to scroll down
- Emails should clearly highlight the website and mailstop
- Emails should include a compelling, factual subject line
- Email recipients' names should NOT be included in the TO line of the email. All recipients should be included in the BCC line to prevent spamming and revelation of Local Advisory Panel email lists.
- Emails should be distributed to stakeholder organizations, with a request for organizations to distribute directly to their individual membership as well
- Emails should be distributed no less than three weeks prior to the meeting, and re-distributed each week leading up to the meeting

Flyer/Leafleting-Specific Guidelines

- All flyers should be 8 ½ inches by 11 inches versions of the print notice
- Supplies of flyers should be distributed to all key stakeholder organizations for their distribution
- Flyers should be printed on colored paper (no white) to attract attention
- Flyers should be posted no less than two weeks prior to the meeting, with check-ups to ensure that they remain posted in key locations
- Distribution of flyers should focus on common areas, public venues, VA facilities, and other sites frequented by stakeholders

APPENDIX 8.B - GUIDELINES FOR CHOOSING A LOCATION

- Location should be familiar to stakeholder audiences in the local community
- Location should be a public space
- Location needs to be handicapped accessible
- Ample public parking should be available
- When possible, location should be accessible from public transportation
- Auditorium site is preferred – providing for a dais for Local Advisory Panel, podium for presenters and theater-style seating for attendees
- Location should offer wide aisles for public comment period needs
- Locations should be properly lit, inside and out
- Location should support all needed AV needs, including amplification and necessary presentation capabilities
- Location should provide necessary security, when appropriate
- Team PwC Site leaders should work with local public affairs staff to determine media needs at site locations
- If possible, a site should be chosen with a separate entrance for members of the Local Advisory Panel. For several reasons, it would also be desirable for the site to have an adjacent room with a telephone that is reserved for use by Local Advisory Panel members and staff

APPENDIX 8.C - GUIDELINES FOR PUBLIC MEETINGS

(This is a supplement to the Local Advisory Panel OPERATIONAL ISSUES handout provided by the VA on 2/9/05)

- Meetings should be held on weekdays/non-holidays. Ideally, meetings will be held during business hours (some flexibility may need to be demonstrated based on stakeholder time availabilities, to be determined by site)
- Length of meeting will ultimately be determined by full run of show – time necessary for all presentations to the Local Advisory Panel. The VA advises that public meetings for most sites should be a full day.
- Meeting schedule should allow for two to three hours for public comments
- All meetings need a defined END time that is publicized prior to the meeting and reiterated at the meeting
- Short breaks should be provided every 2.5 hours
- All public meetings are to be summarized in a substantive manner
- American flags must be displayed on the dais of each public meeting
- Meetings will provide a dais for Local Advisory Panel, podium for presenters, and microphone stands for public comment. Note that some presenters may not be able to stand, so at least one microphone should be available to accommodate these presenters.
- Local Public Affairs staff, working with Site Leads, must determine needs/regulations for assisting the hearing impaired and those for whom English is not a first language
- Local Public Affairs office working with Site Leads, must determine the needs and specific protocols for working with the media (access to sound feeds, onsite interviews with Local Advisory Panels, media availabilities, etc.)
- The meeting chair reserves the right to remove any individual or group of individuals who are causing disruptions to the proceedings

APPENDIX 8.D - ORGANIZING A PUBLIC EVENT

- Consider possible conflicts. Check to see what is on the docket in the local area. Check the major newspapers media calendars to see if there are special issue deadlines to keep in mind.
- Consider where you might like to hold the event. Think about:

    - Ease of access for media;
    - Overtones associated with the proposed site;
    - Cost for venue (if non-government);
    - Services available at venue including technology and audio/visual;
    - Availability of venue

- Create a timeline for event activities and a production schedule for materials. (Confirm that your ideal date is in the realm of the possible.)
- Select and Reserve Venue

    - Call ASAP.
    - Discuss the size of available rooms and probable size of the event.
    - View room.
    - Discuss room setup
        - Audience seating (Classroom style, theatre style, tables, etc.)
        - Speaker seating, podium,
        - Resource tables, sign-in tables (inside or outside of the room)
        - Other (easels/display tables, platforms, screens, computers)
    - Discuss audio/visual needs
        - Number of microphones
        - Type/s of microphones (lapel, hand-held wireless, fixed microphones)
        - If inviting TV and Radio, consider a multi-box for your podium. (A multi-box will allow everyone to plug into a box that feeds the sound from a single podium microphone. Makes it easier for the speakers.)
        - Need for a sound mixing board
        - Need for a sound tech
    - Confirm how event will appear on venue-created signage (for example, using changeable signage outside of public schools)

- Decide on Information Kits Contents and Design

    - Determine information kit contents, which could include:
        - Press release
        - Meeting agenda
        - Speaker bios
        - Speaker presentations

- Fact Sheet on VA/CARES
- Questions & Answers on meeting topic
- Contact sheet for Local Advisory Panel, site leaders

- Create Outreach Lists
  - Determine targets for outreach. Think about:
    - Official stakeholder organizations
    - Organizations comprised of high numbers of stakeholders
    - Local elected officials
    - General community leaders
    - Media
  - Create lists and link to dissemination vehicle
- Create/Secure Visuals for the Event
  - Make decision about visuals for the event. Site leads/local public affairs staff assumes responsibility for creating or securing, and production timelines. Possible visuals include:
    - Podium signs
    - Posters/Blow up of graphics
    - Banners
    - Custom table tent cards for speakers and/or name tags
- Event Supplies
  - Cell phone
  - Sign-in sheets
  - Clipboards
  - Pens
  - Back-up supplies including stapler, scissors, push-pins, black sharpie marker, heavy tape, scotch tape, double sided tape (to affix signage to lectern) and giant binder clips
  - Table tents for speakers table (if applicable)
  - Backup computer/technology
  - Flags for stage
- Assign On-Site Responsibility
  - One individual (site leader) with ultimate responsibility for total meeting
  - Primary point of contact for Local Advisory Panel members
  - Local public affairs staff as primary point of contact for advertising/media

APPENDIX 8.E - LOCAL ADVISORY PANEL PUBLIC MEETING SUMMARIES

- All public meetings will be summarized
- PwC will provide draft meeting summary to VA no more than 10 business days following receipt of draft summaries
- Record start, stop, and break times for all public meetings in real time
- Meeting summaries will follow the same common format: 1) opening remarks and introductions; 2) presentations; 3) public comments; and 4) synthesis of issues presented
- Meeting summaries will serve as written summaries of meeting remarks. Minutes will not include speaker quotes or full text of actual remarks.
- All public testimony will be referred in the official meeting summaries.
- Site leads will be responsible for noting audience reaction, general meeting flow, tone, intent, and external activities to ensure proper context in meeting minutes
- Draft meeting summaries will be submitted to Local Advisory Panel Chair for approval prior to finalization
- After Local Advisory Panel Chair approval, all meeting summaries will be posted on the Web site

APPENDIX 8.F - GUIDELINES FOR MANAGING PUBLIC COMMENTS

- Local Advisory Panels will publicize the public's ability to speak during the planned meeting through notices in local media prior to meetings.
- Notices will clearly state that written testimony received before the meeting and verbal public comment given during the meeting will receive equal weight.
- For planning purposes, those wishing to speak during the meeting will be encouraged to sign-up prior to the meeting by contacting an officially designated Local Advisory Panel representative.
- Because of meeting time constraints, the Local Advisory Panel recommends written testimony (instead of verbal testimony) from those who wish to be heard as part of the meeting.
- Attendees who are unable to sign up prior to the meeting will be permitted to sign up for public comment during the meeting if time is still available. It is suggested that a central signup sheet be made available outside the meeting room and kept by an officially designated Local Advisory Panel representative.
- All individuals wishing to provide comment will be asked to provide their name, address, and the group or organization they represent (if applicable).
- All public commenters must be registered on the official sign-up list before they can speak .
- The chair of the meeting reserves the right to close the sign-up period for public comment and should make a public announcement to that effect.
- The second half of the meeting will be reserved for public comment; attendees will not be permitted to make public comments after each presentation during the first half of the meeting.
- The chair of the meeting reserves the right to ask public commenters not to deliver comments that have already been specifically made
- Throughout the meeting, the chair of the meeting should reiterate that written comments will hold the same weight as verbal comments
- The rules for speaking during public comment period (time limits, no questions, etc.) will be detailed at the start of the meeting, at the beginning of the public comment period, and as needed during the public comment period.
- Public commenters will not necessarily speak in the order in which they signed up. The meeting chair reserves the right to reorder the sign-up list to ensure that all points of view are heard
- Public commenters will be called in groups of five to minimize lines in the aisles. Commenters should be asked to avoid lingering near the microphones until their names are called by the meeting chair
- All public commenters must be recognized by the meeting chair before they can speak.
- Those individuals who sign up for public comment, but fail to respond when their names are called, will forgo their opportunity to speak at the public meeting.
- Public commenters are not to approach the Local Advisory Panel; all public comment must be delivered from the provided audience microphones.

- At appropriate interval, the meeting chair should announce how many people remain on the public comment list.
- All public comments from individuals will be limited to XX minutes each.
- All public comments from those officially representing stakeholder organizations will be limited to XX minutes each.
- The meeting chair will have a designated timekeeper to ensure that no public commenter takes more time than allowed under the meeting rules
- Public commenters cannot yield their time to other audience members or to individuals who did not sign up to make public comment
- The meeting chair reserves the right to adjust the allowable comment time, based on time constraints
- Public commenters will not be allowed to ask presenters or the Local Advisory Panel specific questions
- All public commenters are expected to follow general rules of decency, including no profanity, arguments, or personal attacks. Those who do not follow these rules can be removed from the meeting or have their speaking time taken back
- If a public commenter refuses to cede the microphone, the meeting chair reserves the right to cut off the microphone and move to the next speaker
- If a public commenter (or any attendee) is unruly or disruptive, the meeting chair reserves the right to use site security to remove the disruptive commenter
- Attendees are prohibited from bringing signs, posters, and other materials that may disrupt the administration of the meeting
- Meeting chairs are not to engage public commenters or answer their content-based questions; meeting chairs and Local Advisory Panel members are to announce each commenter prior to their statement and thank them at the conclusion of the statement
- The meeting chair reserves the sole right to make decisions regarding procedures and rules of conduct not specifically addressed in these guidelines

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APPENDIX 8.G – ROLES & RESPONSIBILITIES

Task	Primary Responsible Party and Assisting Party	Task Type	Supporting Party	Reference
1	Develop and provide training to LAP members and VHA lead staff to ensure understanding of the study methodology and process	Pre-Meeting		SOW IV.C.1.d.(3).d
2	Provide training to local VA support team (public affairs, data, capital planning, helath care services, and finance) on the tools and methodologies of the study. The training should be in parallel but separate from the LAP training.	Pre-Meeting		SOW IV.C.4.b VA OSI Project Management Strategy, II.B
3	Develop content and slide for public meeting materials to be presented by PwC Site Lead	Pre-Meeting	PwC Stakeholder Engagement Team	
4	Send meeting materials to LAP 1 week prior to meetings	Pre-Meeting		SOW IV.C.1.b.(8)
5	Prepare copies of meeting agenda to handout to LAPs and public meeting attendees	Pre-Meeting		
6	Advise on execution of public meetings	Meeting	PwC Stakeholder Engagement Team	
7	Conduct briefings to solicit LAP members' evaluation of meeting, gather LAP feedback	Post-Meeting		SOW IV.C.1.b.(7)
8	Secure final attendee/public commenter sign-in sheets	Post-Meeting		
9	Collect Stakeholder input forms following the public meeting from the on-site drop box	Post-Meeting	LAPs, Local VA PAO	
10	Send directly or assign a designee (e.g. PAO) to send stakeholder input forms, letters and testimony to central mailstop	Post-Meeting		
11	Send out meeting summaries to Stakeholder Engagement Team	Post-Meeting		
12	Send public meeting audio recording (if requested) to Stakeholder Team	Post-Meeting		

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Task ID	Primary Responsible Party and Task Description	Task Type	Supporting Party	Reference
13	Prepare tools to support the successful implementation for four public meetings	General		Stakeholder Engagement Methodology
14	Provide best practices and guidelines for conduct of public meetings	General		Stakeholder Engagement Methodology
15	Provide guidelines and best practices for handling public comment sessions	General		Stakeholder Engagement Methodology
16	Provide guidelines for publicizing public meetings	General		Stakeholder Engagement Methodology
17	Advise Site Leaders on execution of site-specific public meetings	General		Stakeholder Engagement Methodology
18	Provide support to Site Leads for coordination with local public affairs staff on publicity/media/AV needs for local public meetings	General		Stakeholder Engagement Methodology
19	Develop and provide training to the Site Leads to ultimately train LAP members and VHA lead staff to ensure understanding of the study methodology and process	General		Stakeholder Engagement Methodology
20	Review public meeting materials for clarity, grammar, and appropriate grade level	General		
21	Aggregate and analyze stakeholder input from all venues and provide it to the LAPs for deliberation	General		SOW IV.C.1.b.(10)
22	Maintain records of meetings: summaries, agenda, stakeholder input	General		SOW IV.C.1.b.(4)
23	Establish a collection point for stakeholder input by mail, manage collection process of written stakeholder input capture	General		SOW IV.C.1.b.(5)
24	Maintain a website where site-specific study progress reports and LAP deliberations are available to the public including meeting minutes (summaries) and other local site study information	General		SOW IV.C.1.d.3.c, VA CARES Advisory Committee Operating Procedures, Section IV.C (post meeting minutes)
25	Establish a website in which local site study information will be available to all participants	General		VA OSI Project Management Strategy II.C
26	Post updates to website	Post-Meeting		
27	Prepare a report of stakeholder input comments and send to appropriate groups	Post-Meeting		
28	Provide monthly progress reports to LAP members between meetings by the 28th of each month	Post-Meeting	PwC Site Leads	SOW IV.C.1.d.(3).a

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28	Provide PwC with a perspective on previous CARES local planning products, facility mission and workload, facility clinical issues, environmental factors, VISN referral and cross cutting issues in order to assist PwC in the refinement of the options to be recommended	General		SOW IV.1.e
30	Confirm dates and times for the administrative and public meetings	Pre-Meeting	PwC Site Leads	
31	Submit recommendations for the administrative and public meeting agendas (including order and duration of witness testimony)	Pre-Meeting	PwC Site Leads	
32	Hold votes to determine panel decisions or recommendations	General		VA CARES Advisory Committee Operating Procedures, Section V
33	Preside over LAP meetings and work with the Local Federal Official (could be the same as the chair if the chair is a senior VA manager) on meeting agendas and priority issues to be addressed.	General		VA CARES Advisory Committee Operating Procedures, Section III
34	Select dates and times for the administrative and public meetings			
35	Participate in the development of the administrative and public meeting agendas and provide final approval	Pre-Meeting		
34	Synthesize issues heard during public meetings and prepare meeting summary			VA comments on Stakeholder Engagement Methodology
35	Facilitate the meetings, ensure that meetings stay on schedule, and maintain orderly conduct	Meeting	PwC Site Leads	
36	Responsible for certifying the accuracy of all minutes	Post-Meeting		VA CARES Advisory Committee Operating Procedures, Section III
37	LFO serves as VA's representative for all matters related to activities of the LAP	General		VA CARES Advisory Committee Operating Procedures, Section III
38	Must approve the times and locations of meetings	Pre-Meeting		VA CARES Advisory Committee Operating Procedures, Section III
39	Must approve meeting agendas	Pre-Meeting		VA CARES Advisory Committee Operating Procedures, Section III
40	Must attend all LAP meetings	Meeting		VA CARES Advisory Committee Operating Procedures, Section III
41	Must adjourn any meeting when he or she determines it to be in the public interest	Meeting		VA CARES Advisory Committee Operating Procedures, Section III
42	Must chair LAP meetings when so directed by the Secretary	Meeting		VA CARES Advisory Committee Operating Procedures, Section III
43	Coordinate with PwC on maintaining meeting records and developing minutes	Post-Meeting		VA CARES Advisory Committee Operating Procedures, Section III

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Task	Primary Responsible Party and	Task Type	Supporting Party	Reference
44	Respond to the PwC site teams requests for assistance and to assist the contractor's understanding of site services and structure	General		VA OSI Project Management Strategy, II.A
45	Content leads for a. Public affairs, b. LAP support, c. Data, d. Capital planning, e. Health care services, f. Finance will respond to PwC requests for site specific information that cannot be obtained through national data systems, as well as assist in response to local inquiries and regularly interact with OSI regarding local study progress and issues	General		VA OSI Project Management Strategy, II.B
46	Weekly call and short written report will be submitted to OSI	General		VA OSI Project Management Strategy, II.B, II.C
47	Identify available VA space for meetings (or off-site location if required)	Pre-Meeting	PwC Site Leads	SOW IV.C.1.c.(3)
48	Select space for meeting	Pre-Meeting	LAPs, PwC Site Leads	
49	Assess needs for AV equipment	Pre-Meeting	PwC Site Leads	
50	Arrange for AV equipment at public meeting	Pre-Meeting	PwC Site Leads	
51	Address and coordinate security issues	Pre-Meeting	PwC Site Leads	
52	Ensure that sufficient parking will be available at meetings	Pre-Meeting	PwC Site Leads	
53	Set up of meeting location	Meeting	PwC Site Leads	
54	Check with key individuals upon arrival: Local PAO, Facilities manager, On-site security (if available), Audio technician (if available), computer technician (if available, for terminals), transcriptionist (if available), LAP Chair, Designated Federal Official, On-site medical staff (if available)	Meeting	PwC Site Leads	
55	Ensure that needed supplies are provided: Cell phone numbers of key individuals, sign-in sheets for meeting attendees and witnesses, clipboards, pens, general supplies (markers, clipboards, stapler, etc), tables for LAP and speakers, backup computer/technology, flag for stage/room, pad and pens for LAP members, stopwatch, paper surveys	Meeting	PwC Site Leads	
56	Contact all necessary individuals (see above) to discuss any issues or concerns	Meeting	PwC Site Leads	
57	Ensure site is set up correctly, with table for LAP, podium for presenters, appropriate technology for presentations, all microphones (LAP table, presenters' podium, microphone stands) work	Meeting	PwC Site Leads	
58	Ensure U.S. flag is clearly displayed in room	Meeting	PwC Site Leads	
59	Ensure seats are RESERVED for presenters, all VIPs	Meeting	PwC Site Leads	
60	Ensure all aisles are clear	Meeting	PwC Site Leads	
61	Designate a handicapped accessible seating area	Meeting	PwC Site Leads	

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Task #	Primary Responsible Party and Associated Tasks	Task Type	Supporting Party	Reference
62	Check technology to make sure it is operational	Meeting	PwC Site Leads	
63	Set up sign-in table(s) for both attendees and public commenters	Meeting	PwC Site Leads	
64	Set up area for meeting transcriptionist/recorder	Meeting	PwC Site Leads	
65	Monitor additional sign-ins for attendees, public commenters	Meeting	PwC Site Leads	
66	Ensure sign-in, information tables remain organized	Meeting	PwC Site Leads	
67	Direct any media inquiries/issues to local PAO	Meeting	PwC Site Leads	
68	Troubleshoot, as necessary	Meeting	PwC Site Leads	
69	Secure all supplies and technology	Post-Meeting	PwC Site Leads	
70	Break down all tables (if necessary)	Post-Meeting	PwC Site Leads	
71	Check with transcriptionist/recorder	Post-Meeting	PwC Site Leads	
72	Ensure all attendees leave site	Post-Meeting	PwC Site Leads	
73	Ensure facilities are in same condition as arrival	Post-Meeting	PwC Site Leads	
74	Will coordinate all activities with the PwC site team and will interact on a regular basis with the OSI to assist in the timely completion of the study and early resolution of issues that might negatively impact this completion.	General		VA OSI Project Management Strategy, II.B
75	Will work with the Federal Designated Official, Jay Halpern, and the Local Federal Official (usually the LAP chair) to ensure that all regulatory requirements are met.	General		VA OSI Project Management Strategy, II.B
76	This lead is responsible for ensuring that all local stakeholder contacts, inquiries, and written information are transmitted to the PwC site leader.	General		VA OSI Project Management Strategy, II.B
77	The LAP lead will provide the PwC site leader with stakeholder contact information as well as identify stakeholder groups with known or suspected interest in the local study	General		VA OSI Project Management Strategy, II.B

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Task	Primary Responsible Party and Task	Task Type	Supporting Party	Reference
78	Will interface with the PwC site team to ensure that VHA responds to the contractor's requests for site specific information in a timely manner. The COTR and OSI are to be kept informed regarding these requests and additional information provided.	General		VA OSI Project Management Strategy, II.B
79	Will work with regional and national PAO office to respond to local media contacts and prepare regular news releases as the local study progresses	General	Local VA PAO	VA OSI Project Management Strategy, II.B
80	Advertise LAP meetings	Pre-Meeting	Local VA PAO	SOW IV.C.1.c.(1)
81	Create content for meeting publicity	Pre-Meeting	PwC Site Leads	
82	Handle placement of meeting publicity	Pre-Meeting	PwC Site Leads	
83	Communicate with media	Pre-Meeting	Local VA PAO	
84	Identify stakeholder lists for any mailings	Pre-Meeting	Local VA PAO	SOW IV.C.1.c.(2)
85	Handle placement of meeting materials in local venues	Meeting	Local VA PAO	
86	Provide clear external signage directing meeting attendees to site	Meeting	PwC Site Leads	
87	Provide clear internal signage directing meeting attendees to restrooms	Meeting	PwC Site Leads	
88	With PAO, determine where local media will be situated during meeting	Meeting	PwC Site Leads	
89	Set up information table to disseminate all necessary materials	Meeting	PwC Site Leads	
90	Coordinate audio recording of meeting	Meeting	Local VA PAO	
91	Responsible for LAP coordination and communication and resolution of issues between PwC, LAPs and support staff	General		VA OSI Project Management Strategy, II.C.5
92	Pay for meeting space	Pre-Meeting		
93	Responsible for the regular briefing of national VSO and Congressional representatives; all local congressional staff briefings will be coordinated between the local support team lead and the OSI site lead to ensure consistency	General		VA OSI Project Management Strategy, II.C
94	Publication of Federal Register Notice at least 15 days prior to public meetings	Pre-Meeting		VA CARES Advisory Committee Operating Procedures, Section IV