

Consulting Services



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Introducing AdvanTech's Consulting & Services Division

AdvanTech's Consulting & Services Division is dedicated to developing and improving systems to support Healthcare Industry Providers and Hospitals through:

- Needs Analysis
- Alternative Evaluation
- Systems Design
- Information Systems Acquisition
- Strategic Planning

By 2016 Americans will spent over \$11.2 billion daily – *over \$4.1 trillion annually* – for healthcare according to a report on rising healthcare expenditures from the National Health Statistics Group at CMS. This will represent a staggering 20% of our Gross Domestic Product, with most of it spent in hospitals and doctors' offices.

According to the National Coalition for Healthcare, *"Experts agree that our health care system is riddled with inefficiencies, excessive administrative expenses, inflated prices, poor management, and inappropriate care, waste and fraud."* All of these problems significantly increase the cost of medical care and health insurance for employers and workers and affect the security of families. Increasingly, those who pay are requiring better performance for their healthcare related expenditures.

Emerging technologies promise to help, especially when properly applied. However, the maze of possible solutions for meeting changing needs is frequently more than any individual can master. As a result, selection and implementation of new technology and management systems often requires specialized expertise to minimize expenses while maximizing benefits achieved.

AdvanTech's principals and staff are uniquely experienced in assisting in the definition, design, choice, and incorporation of new, improved approaches into healthcare settings. Our experience has proven to be beneficial to AdvanTech clients in facilitating planning and successful implementation of alternatives selected after careful consideration of cost-saving opportunities. We would be pleased to explore your needs and our service offerings with you.

THE ADVANTECH APPROACH

Many issues influence the planning and improvement of Management Systems in different organizations. AdvanTech does not approach a particular project with a predetermined solution. Our process is designed to select and develop those systems which work within the constraints of the particular situation. Consideration includes evaluation of service requirements, location, existing space and facilities, resources, government regulations and the objectives of the organization. Viable alternatives and recommendations consider strategic planning needs. Our approach to meeting client needs is usually through a phased approach. Our approach is customized for each project and involves accomplishment of the following tasks:

System Objectives: We first seek to develop the objectives of the system for the necessary support requirements.

Evaluation of Existing Systems: We evaluate existing systems against future objectives to determine key opportunities for improved systems.

Projection of Further Requirements: Based on the evaluation of existing systems compared to objectives, we identify key users and volumes anticipated, as well as scheduling and related requirements that will impact achievement of future efficiencies.

Selection of Alternatives: Following the initial steps, we are then able to select and develop the alternatives which provide the optimal levels of benefits to the organization in meeting the established objectives.

Evaluation of Alternatives: We believe in the use of the life cycle management approaches and benefits that can be derived from them.

Selection of the Appropriate Systems: Based on the structured process, one of the alternatives often presents the most favorable system for the enterprise or institution.

After the best system(s) have been selected, AdvanTech can assist in implementation activities. Implementation of new systems frequently requires the development of revised personnel schedules and staffing requirements to meet the needs of the organization during initial system installation and/or improvement activities.

Our clients frequently request subsequent assistance in conducting post-implementation audits. This support provides the client with guidance in making final system adjustments and ensures optimal benefits from new systems.

FOCUS ON HEALTHCARE INFORMATION SYSTEMS

The challenges of today's healthcare environment require sound automated information systems. The selection of a computer system cannot be based solely on data processing related costs. AdvanTech's Consulting & Services Division can provide support in identification of all impacts, costs and related issues associated with either existing or proposed systems.

AdvanTech has the expertise to assist small and large organizations in upgrading or replacing existing systems as well as provide implementation and training support to first-time users of Automated Information Systems. The AdvanTech team specializes in providing:

REQUIREMENTS DEFINITIONS AND PROPOSAL DEVELOPMENT: Based on the requirements of your institution, we will assist you in developing a request for proposal to evaluate available systems. When appropriate, we assist in developing customized solutions using available hardware and software. In determining the best solution, AdvanTech evaluates functional user needs, and subsequently uses cost/benefit analysis and internal rate of return methodologies to clearly present the financial implications from the various choices. By assisting you in your evaluation, we ensure that the best systems may be selected to meet your requirements.

PRE-IMPLEMENTATION AND CONVERSION: Our experience with installation of system upgrades or new systems will ease the impact of these activities on your environment. AdvanTech's project control approach has proven results. We outline the necessary activities for managing a system during its life cycle to ensure documentation is maintained in an adequate manner to minimize difficulties in future upgrades and replacements.

TRAINING: AdvanTech has staff specialists with advanced degrees in computer education. Staffs are also selected to support projects based on their knowledge of the specific functional area where the training is to be provided. In addition to in-hospital training, we provide training materials for use during conversion and continuing education programs for existing and new staff.

POST-IMPLEMENTATION FOLLOW-UP: AdvanTech provides ongoing support and quality assurance programs in order to maximize the advantages of new systems. We can provide a post-implementation audit to determine system effectiveness and recommend opportunities for future enhancements.

FOCUS ON E-COMMERCE SYSTEMS

Organizations in today's healthcare environment recognize the positive financial contribution that occurs from use of electronic commerce standards for business transactions between trading partners. AdvanTech has completed several assignments in support of client needs for strategies to improve productivity using e-Commerce standards for their systems. This is a "win-win" strategy where all parties involved can benefit. Use of data interchange standards to facilitate computer-to-computer information exchange reduces business transaction costs. Typical consulting assignments involving AdvanTech's Consulting & Services Division have included:

OPERATIONAL AUDITS: AdvanTech reviews your current operations and provides recommendations with regards to improved use of data standards and electronic commerce systems methods and procedures. As a result, we will assist your institution in developing an action plan to maximize the benefits that can be derived from standards use.

FUNCTIONAL REQUIREMENTS: We assist your organization in performing an assessment of system requirements to develop requests for proposals for systems that will best meet your needs. The costs and benefits of various hardware and software alternatives are defined to assist you in formulating your strategic plans to satisfy the needs and objectives of your organization.

INSTALLATION AND TRAINING: AdvanTech provides support for the installation of new systems and training of personnel and to reduce current operational costs and ensure maximum efficiency. Effective training is important because of the complexity of systems being introduced today. Initial program development efforts frequently focus on educational issues to insure participants understand the objectives and benefits to be gained through data standards use.

IMPLEMENTATION PLANNING: Following initial support, AdvanTech has provided clients with assistance in developing phased implementation plans for installing systems using several e-Commerce standards for their transactions. These activities have included development of mapping instructions from current paper transactions to standard formats for business transactions and working with trading partners to evaluate data requirements and agreements for procedures to manage and control e-Commerce system use.

AdvanTech's Consulting & Services Division support can include assistance in preparation of a Request For Proposals, evaluation of vendor responses, and implementation planning and training support to achieve optimum results from state-of-the-art systems.

FOCUS ON OPERATING ROOM MANAGEMENT SYSTEMS

The Operating Room provides significant opportunities for savings through development and implementation of effective management strategies. AdvanTech provides support in evaluating baseline performance criteria by working with OR administration, nursing and surgical staff. AdvanTech focuses on the identification of opportunities and benefits of improved Operating Room Management and Support Systems in the following areas:

OR INFORMATION SYSTEMS: These systems provide an essential tool to achieving improved resource utilization in the OR. AdvanTech provides support in evaluating information needs and system requirements to assist you in making a sound financial decision for your institution based on careful assessment of costs and benefits associated with these systems.

OR ORGANIZATION: Personnel resources are the greatest portion of the OR operating budget. AdvanTech's Consulting & Services Division consultants are experts in evaluating the allocation of nursing and surgical technicians. We employ an interactive approach to identify organizational methods that will contribute to improved effectiveness and morale, leading to reduced staff turnover and improved patient care quality.

DISTRIBUTION SYSTEMS AND TECHNIQUES: AdvanTech can assist you in evaluating the best distribution systems to meet the needs of your aggregate surgical environment. We are experts in developing solutions for supply storage through use of manual systems, par level systems, exchange carts, case carts, or hybrid systems using a mixture of these for different commodities and equipment.

OR INVENTORY MANAGEMENT: AdvanTech can provide the necessary expertise to assist you whether your needs are to reduce expensed inventories or to take advantage of capitalizing existing inventories. Our inventory audit and analysis can identify the savings potential and financial benefits available to you through effective OR inventory management.

QUALITY ASSURANCE AND MANAGEMENT REPORTING: AdvanTech is sensitive to the benefits that can be achieved through establishing a program of regular performance monitoring. Because of our extensive line management experience in teaching hospitals, we understand the importance of providing management reports on key activities and workloads. AdvanTech works with the OR team to guide development of quality improvement programs and reports for achieving optimum performance with existing OR resources.

FOCUS ON SUPPLY CHAIN / MATERIAL MANAGEMENT PROGRAMS

Supply Chain / Material Management contributes directly to the bottom line! Rising material cost, concern over prospective payment systems and DRGs, along with the need to enhance productivity have resulted in an increased focus on Material Management. AdvanTech can have a positive impact on your operating costs by applying its comprehensive expertise in logistics management to your institution. We do this through:

OPERATIONS AUDITS: Where do you stand now and what key opportunities exist to improve your current operations? How can you improve productivity in the months ahead? AdvanTech can assist you in capturing "one-time savings" from improved inventory turnover and cash flow, and provide systems necessary to sustain these savings. AdvanTech works with Administration and Material Managers to establish specific goals for improved operations.

MATERIAL PROCESSING: Effective processing of sterile supplies -- including linen and surgical instruments -- is crucial to an overall Material Management strategy. We assist you in evaluating these activities and establishing optimum cost effectiveness. AdvanTech's experienced team will help you recognize opportunities that exist in the operating room, radiology, and other material intensive areas to achieve more efficient operations.

AUTOMATED INFORMATION SYSTEMS: The experienced staff of AdvanTech can assist you in managing the critical flow of information. We have assisted clients in the selection, conversion, and implementation of automated information systems, including the new bar code standards. AdvanTech also provides post-implementation follow-up to evaluate and ensure proposed benefits have actually been achieved.

VALUE ANALYSIS: Are you getting maximum value for your dollars? Strengthening purchasing and standards activities can result in increased income. We can train your staff in value analysis, life-cycle costing, rate of return and other methodologies designed to improve the decision-making process.

QUALITY ASSURANCE: To maintain profitability of clinical and ancillary departments, Material Management must measure and control cost and service levels. We are innovators in using Quality Circles in Material Management and specialize in the development of quantitative tools to measure Quality Assurance.

FOCUS ON FACILITIES PLANNING

The well-designed medical facility is one that integrates the flow of patients, staff and visitors with the requirements of hospital support services. To bring about this very complex goal, AdvanTech's Consulting & Services Division provides:

CONCEPTUAL MODELING: Models developed will focus on identification of all of the components affecting the movement of personnel, patient equipment, and supplies on both a horizontal and vertical basis. A comprehensive audit along with recommendations will provide support for determination of need application.

FACILITIES DESIGN SUPPORT: Working with design teams, architects and staff, AdvanTech provides support in developing detailed user design specifications for systems to be integrated with the overall project plan. We recognize that care must be taken to ensure that the unique requirements of nursing, clinical, and ancillary support personnel are considered in the selection of alternative approaches.

CONSTRUCTION AND SYSTEMS IMPLEMENTATION: AdvanTech minimizes the initial investment required during installation, start-up, and ongoing operating costs by identifying and coordinating the operational steps, times, and phases required to bring proposed systems from concept to implementation.

FOLLOW-UP: AdvanTech provides assistance in developing quality assurance programs to ensure all selected systems are smoothly implemented. We will assist in the identification of expectation levels, and work with hospital staff to ensure these levels of expectation are realistic and can be met in a timely manner.

EQUIPMENT PLANNING SERVICES: AdvanTech will work with you to develop equipment requirements and plans for future requirements. We will assist you in conducting an inventory and in evaluating existing equipment assets. Following review of your requirements, we will work with you to define procurement specifications for acquisition and installation of new equipment, as well as establishing cost-effective parameters for periodic maintenance to ensure satisfactory operation over the life of the equipment.

FOCUS ON ASSET MANAGEMENT

Whether you are interested in planning a new facility or maintaining control of a very significant asset, AdvanTech can assist you in developing a total property management and equipment maintenance system. The purchase of equipment differs from the purchase of supplies since the equipment is not consumed and typically cost hundreds if not thousands of times more than consumable supplies. Equipment must be monitored for warranty, documenting of maintenance performed, depreciation, location tracking, scheduling, replacement determination, and finally, it must be disposed of in an appropriate manner. AdvanTech will provide assistance to you through:

SPECIFICATION DOCUMENTATION: AdvanTech will work with your staff to identify asset needs related to new projects or short- and long-term replacement programs and develop required plans.

LIFE CYCLE COSTING: AdvanTech will identify the impact on operations and related expenses for personnel required to support the proposed systems along with the amount of capital necessary and anticipated maintenance and service requirements.

POLICIES AND PROCEDURES: To maintain the property management program, AdvanTech will assist you in documenting the tasks and responsibilities from acquisition through installation, and preventive maintenance to subsequent disposition of capital equipment.

PROPERTY ACCOUNTING AND PREVENTIVE MAINTENANCE:

AdvanTech will assist you by working with your staff to develop a sound system of control based upon definitive cost alternatives that can be implemented and supported with an automated approach.

EQUIPMENT MAINTENANCE: Identification and forecasting of man-hour requirements for preventive maintenance, calibration and safety services will be facilitated by AdvanTech modeling techniques. Assistance may include automated scheduling of maintenance and performance reports that reflect monthly workload data and statistics. We can also support development of comprehensive contract specifications to provide for support by outside service vendors, including establishment of appropriate and cost-effective quality assurance monitoring programs.

FOCUS ON INTEGRATING STANDARDIZATION EFFORTS

To control your costs, you must know your costs. Standardization of material intensive healthcare procedures offers a key to that knowledge. AdvanTech recognizes that successful standardization of product/service options requires a collaborative effort between the direct patient care delivery team and purchasing/material management personnel. A shared goal of excellence in healthcare delivery at the lowest cost forms the basis for achieving maximum standardization. Standardization in turn provides reliable cost data so that your organization can successfully compete for capped and shared risk contracts.

PATIENT-CHARGE SYSTEMS: AdvanTech conducts a comprehensive evaluation of the current distribution processes for med-surg and pharmaceutical supplies to determine current level of efficiency, lost-charge ratios, inventory excesses and related elements of the stock-to-end-user processes. This analysis yields a foundational element for defining and building a efficient system that captures all the data needed to accurately track the usage, costs, and patterns associated with supply usages throughout the healthcare system.

INFORMATION SYSTEMS INTEGRATION: AdvanTech can provide comprehensive support in the evaluation, strategy development, and implementation and training phases of system integration efforts. Automation is the foundation of work flow processing and electronic commerce, with a proven track record of cost savings associated with paper-less transactions.

Standardization efforts that include automated systems in the overall strategic plan can expect to achieve improved levels of product/service tracking documentation.

PRODUCT/SERVICE PROFILING: Provider preferences for supplies and services have been nurtured by manufacturers and service organizations for generations. The confidence that a provider has in a particular product or service cannot be dismissed, rather, alternatives must be identified that meet functional requirements and provide outcome based evidence of effectiveness. AdvanTech's team of experienced nursing, material management, and procurement professionals guide personnel in developing and implementing the process for systematically achieving standardization throughout the supply chain links.