Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)	Agenda Item Q. I. C
Department:	Information Services	Committee Finance
Requested By:	David Albright	
Project / Item:	Stinger Cart Power Supply Upgrade	Page Number 124
Capital Cost:	\$25,500	

Project description:

Med/Surg and OB currently use Stinger Integriti carts for patient vital sign collection. The initial purchase for the project was seven carts. The power supplies on these carts are now out of warranty. These units have been historically problematic industry wide due to the inability to hold a charge during an average 12 hour shift. Additionally, if the cart is neglected and not religiously connected to an outlet, the battery can take up to 12 hours to recharge and lose up to thirty percent run time capacity at each total discharge. Batteries are being replaced approximately once per quarter and one power unit is normally out of service awaiting repairs.

Stinger has developed retrofit power supplies that are based on a Lithium-Polymer battery. The battery is charged in a separate unit eliminating the need to connect the cart to an outlet. Notice is given when the battery is discharged and a charged replacement battery is inserted from a stand alone charger – much like a portable drill battery.

Impact on Quality of Care:

When batteries are exhausted, patients wait for available carts.

Link to Strategic Plan Goals:

Workforce – provide the necessary equipment for satisfactory job performance and quality care Financial Health -

Information Systems Solutions – meet strategic goals to provide necessary connectivity Clinical and Service Excellence – resolve shortage of equipment due to exhausted batteries Intense Market Focus to Expand Market Share

Financial Implications

An expensive upgrade; however, considering the amount of repair labor, shipping & parts, replacement batteries, inconvenience to Nursing Staff, and delays in equipment availability for patients this upgrade justifiable.

Identify any applicable regulatory issues:

National Patient Safety Goal

Alternatives and reasons for rejecting them:

No Viable alternative considering the initial investment in these carts. A possible consideration would be to fund a partial replacement over two fiscal years. The replaced power supplies would server as backups and parts over the next year - \$15,000 for four replacement units.

Implementation requirements and timeframe:

Hardware would be purchased upon approval of FY09 request.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Infrastructure – 4006 Switch Replacement
Capital Cost:	\$30,000 – END OF LIFE REPLACMENTS

Project description:

All phone and workstation are connected to the data center by the use of switch gear. Each switch is configured and managed to provide this connectivity. End of life equipment is not supported by the vendor and must be replaced. Switches that reside in the Mountain tower 2nd and 3rd floor were old switches from the data center have reached end of life status. We will be replacing one of the 4006 switches in FY09 and the other in FY10.

Impact on Quality of Care:

Switches in these areas connect Med/Surg, ICU, PACU, Surgery, and Outpatient Surgery. These switches must be in service in order to continue patient quality care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

This project impacts all five strategic goals.

Financial Implications

Replacement of the first 4006 switch will cover part of these areas for the next three years plus. The second switch will be replaced in FY10. Next critical upgrade should be included at the end of the five year plan.

Identify any applicable regulatory issues:

National Patient Safety Goals Joint Commission

<u>Alternatives and reasons for rejecting them:</u> No Viable alternative.

Implementation requirements and timeframe: Replacement of this switch will occur in the first quarter of FY09

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Unity Voice Mail Replacement – END OF LIFE
Capital Cost:	\$40,000

Project description:

The voice mail system is housed on two servers. One of the two has reached end of life and the hardware is no longer supported. The other server will require replacement along with the unsupported model. This project will include upgrade of the software application

Impact on Quality of Care:

Voice mail has evolved into a integral facet of quality patient care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five strategic goals are impacted by the voice mail system

Financial Implications

Replacement of servers should cover our call manager hardware requirements for the next three years plus. Next critical upgrade should be included at the end of the five year plan.

Identify any applicable regulatory issues:

Joint Commission

Alternatives and reasons for rejecting them:

No Viable alternative

Implementation requirements and timeframe: Implementation and testing are scheduled for the 3rd quarter of FY2009.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	VMware Expansion
Capital Cost:	\$82,000

Project description:

The IS department has instituted hardware and software that has the ability to create virtual servers. Currently, we are running several health care applications on these virtual servers. With each host we are capable of creating 8 virtual servers. This project is an expansion of our existing virtual server cluster for new projects FY09. Additionally, the additional capacity allows duplication of servers that are critical to patient care. These include EKG, Spacelab, Integriti vital signs, Logicare and Rhapsody interface engine for Meditech.

Impact on Quality of Care:

Major healthcare applications excluding Meditech are housed in a virtual server environment. Lost of the ability to quickly duplicated critical server application or create servers for new applications will have a negative impact on quality of care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share The project impacts all five strategic goals.

Financial Implications

Continuation and expansion of the virtual server cluster is a cornerstone of the IS strategic plan to minimize cost for individual server hardware, reduced server room footprint, flexibility to initiate hospital wide application needs and provide redundancy for critical applications

Identify any applicable regulatory issues:

National patient safety goals Joint Commission

Alternatives and reasons for rejecting them:

No viable alternatives. Project is an expansion of current hardware for server implementation in the data center.

Implementation requirements and timeframe:

Project will be implemented first quarter of FY09

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	VMware host and VM backup
Capital Cost:	\$24,000

Project description:

Purchase hardware and software for virtual machine backup and disaster recovery. Approximately 25 lower end servers will have achieved the end of the initial three year purchase warranty. Some of these servers currently house critical quality care applications for the hospital such as EKG, Fusion Dictation, Fusion Voice, Space Labs, and Integriti vital signs. Others house vital network functionality tasks such as domain control, Internet filtering, Antivirus control, thin client control, Public and Internal web sites and campus wide printer control. Although support can continue, repair can create an outage of the service for several days. The project will allow the creation of virtual server for these low end servers. Additionally, the virtual server will be in a stand by status with current information backed up and ready to assume production functionality within minutes.

Impact on Quality of Care:

Loss of the low end servers that provide critical care functionality will have a severe impact on the quality of care at this facility.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five strategic plan goals are enhanced with the implementation of this project. Of course the first four receive the greatest benefit; however, additional infrastructure added in future projects such as DME, PIM, and RHC will also be able to take advantage of this project as we expand market share.

Financial Implications

Since the majority of these low end servers were purchased in the same time frame, a wholesale replacement will not be necessary. The project provides a cost effective method to replacing low end servers with a more reliable and redundant server for critical needs.

Identify any applicable regulatory issues:

Extended loss of the low end server will create issues with National Safety Goals and Joint Commission

Capital Project Request Summary Continued

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	VMware host and VM backup
Capital Cost:	\$24,000

Alternatives and reasons for rejecting them:

No viable alternative. This project dovetails with our current VMware cluster and current capital request FY09 to expand this cluster to accept additional virtual servers.

Implementation requirements and timeframe:

This project would be implemented as soon as approval was received.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Vocera Application Upgrade
Capital Cost:	\$20,000 END OF LIFE ISSUE

Project description:

The Vocera system has been integrated into our clinical areas to the extent that the workforce has become dependent on its efficient operation. Vocera badges are used to contact nursing staff, radiology staff, ED staff and respiratory care staff. Additionally, the Vocera system has been integrated into the Hill Rom nurse call system.

The current Vocera badges have reached end of life (EOL) on April 1st 2008. New badges are available; however, they will not function with the current software version of our system. In order to use the new badges, this upgrade must be performed. The attrition rate of the badges is relatively high and efforts are being made to secure the older model of badges to sustain the hospital until July.

Impact on Quality of Care:

The software upgrade will allow use of the new version of Vocera Badges. The quality of care will be impacted if the upgrade does not occur and there is a lack of equipment for the clinical staff.

Link to Strategic Plan Goals:

Workforce – obligation to provide adequate functional equipment for patient care Financial Health -Information Systems Solutions – strategic goal to maintain and upgrade IS systems Clinical and Service Excellence – functional equipment promotes quality care. Intense Market Focus to Expand Market Share

Financial Implications

A possible unexpected financial impact could occur if critical health care information is not accurately and reliably transmitted due to the lack of functional equipment.

Identify any applicable regulatory issues:

National Patient Safety Goals

Alternatives and reasons for rejecting them:

No Viable alternative. System is currently in production. Upgrade is required to use the new generation of Vocera Badges.

Implementation requirements and timeframe:

Purchase and implementation will occur immediately upon approval. Lack of funding will incur an unbudgeted capital expense.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	CPGH-FAX server replacement
Capital Cost:	\$9000

Project description:

Currently, the hospital services 57 internal and external fax numbers via a hardware and software solution that uses four analog phone lines. This appliance has experienced FAX failures multiple times in the last few months that can be attributed to software and hardware. The effect has been hospital wide interruption in reception and transmission of FAXES for HIM, Pharmacy, Lab, OB, Med/Surg, ED, physician providers and other departments.

This project will replace the original hardware and upgrade to the current software version of the solution. A reliable campus wide FAX solution is imperative to the operation of our facility.

Impact on Quality of Care:

All departments are affected by the loss of the fax solution. The quality of care diminishes, for example, when FAXES to pharmacy are delayed or dropped from the clinical areas.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

This campus wide application has a profound affect on all five strategic plan goals **Financial Implications**

Delayed implementation will result in a high cost for an immediate "on demand" replacement during failure and an unbudgeted capital expense.

Identify any applicable regulatory issues:

National Patient Safety Goals

Alternatives and reasons for rejecting them:

No Viable alternative. Present solution just requires an upgraded software version and a reliable hardware platform

Implementation requirements and timeframe:

Implementation will begin immediately upon approval.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Exchange Email Server
Capital Cost:	\$82,000

Project description:

The hospital email system currently processes approximately 32,000 emails per day. This is handled by one licensed server. There isn't a full size backup server to balance load or assume redundant functionality during a hardware or software failure. A recent five hour outage demonstrated the critical dependency of the hospital on the email system. This project will replace the current server with two identical servers to provide load balancing and redundancy. The project will also attach these servers to our Storage Area Network for backup of information.

Impact on Quality of Care:

Our email system has become a critical component of the quality of patient care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

The email system is a critical component of all five strategic goals

Financial Implications

Replacement of the server should cover our core email hardware requirements for the next three years plus. Next critical upgrade should be included at the end of the five year plan.

Identify any applicable regulatory issues:

Joint Commission

Alternatives and reasons for rejecting them:

A single server could be purchased. This solution will not resolve load balancing and redundancy and was rejected.

Implementation requirements and timeframe: Tentatively scheduled for the 3rd guarter of FY2009

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)	
Department:	Information Services	
Requested By:	David Albright	
Project / Item:	Fusion Dictate (Dictation System Replacement)	
Capital Cost:	\$70,600 END OF LIFE - MUST BE REPLACED FY09 1 ST QUARTER	

Project description:

Current dictation system (DVI) purchased in 2002 has started failing. Hardware is at end of life. Department is very pleased with this vendor and their products. DVI has more current product that has been demonstrated and partially implemented as a result of the need to keep failing system functional.

Fusion Dictate is a networked voice file system that allows dictators to use telephone, PC microphones, or hand-held (portable) units. System includes front-end or back-end voice recognition capabilities. PC dictation is currently being used by Radiologists and ED physicians with high level of satisfaction.

Impact on Quality of Care:

Improve staff efficiency and report turnaround time. Failure to replace has a critical impact on patient care.

Link to Strategic Plan Goals:

Workforce

System will take advantage of medical transcriptionists knowledge of medical language in editing functions, retaining staff and retraining from current transcription model to medical editing model. Operational performance for report timeliness has potential to improve beyond our current goals. There is no physician satisfaction without a reliable dictation system in place as demonstrated when the current system failed

Financial Health

Improving report timeliness reduces coding delays.

<u>Financial Implications</u> (potential volumes/revenue, ongoing operating costs, return on investment,): Reduction in coding/billing delays related to report timeliness.

<u>Ongoing costs include:</u> Maintenance and service contract after the 1st year

Identify any applicable regulatory issues: HIPPA compliance

<u>Alternatives and reasons for rejecting them:</u> No alternative. Current system must be replaced ASAP

Implementation requirements and timeframe: Project will be initiated immediately upon approval.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Meditech OSAL Server
Capital Cost:	\$5,000

Project description:

In FY08 all Meditech Servers were replaced. Our former equipment carried a four hour service response from the vendor which was faithfully honored. The new server vendor can not honor the four hour response time due to our location. Repair parts and service may be delayed up to forty eight hours or more. Meditech modules encompass all patient data from the time a patient is admitted to discharge and billing. The loss of any one of the six Meditech servers for an extend period would not be acceptable. This project will provide a "Hot Spare" server that will be in standby mode prepared to accept configuration for duplication of any of the production Meditech servers.

Impact on Quality of Care:

Loss of any critical Meditech server for an extended period of time would adversely affect the quality of patient care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five of the strategic plan goals are impacted by this project. Emphasis could be placed on the information systems goal of redundancy and disaster recovery

Financial Implications

This project provides a low cost solution to maintaining critical Meditech systems without incurring high overnight shipping fees and delayed service.

Identify any applicable regulatory issues:

Joint Commission National Patient Safety Goals

Alternatives and reasons for rejecting them:

No Viable alternative.

Implementation requirements and timeframe: Equipment would be purchased and placed into service as soon as approved.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Medseek Phase II Website
Capital Cost:	\$90,000

Project description:

This project is a continuation of a two part website solution. Phase I was funded in FY08 to provide a revision and upgrade of our internal web site. The two phase approach was required to provide external hosting which transitioned into a hospital hosted solution. The second phase components are being renegotiated to conform to the strategic goals. The external web site improvements are geared to providing patient needs for patient's information, pre-registration, schedule provider appointments, online job applications, baby announcements, and physician portal.

Impact on Quality of Care:

These web site improvements bring CPH to the basic standards of service other providers are providing to patients.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share All five strategic plan goal are impacted by completing this project

Financial Implications

The second phase requires finding to complete the project as negotiated.

Identify any applicable regulatory issues:

The goals of providing resources to our customers must be competed in a manner that conforms to HIPPA regulations

Alternatives and reasons for rejecting them:

Continuation of in house supported web solutions are labor intensive can not provide the desired strategic goals in a fiscally responsible manner.

Implementation requirements and timeframe:

Phase II would be scheduled for implementation and testing during the second quarter of FY09. Hardware requirements are included in Virtual server expansion capital for FY09

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	Mike Webb
Project / Item:	Net APP 2020
Capital Cost:	\$60,000

Project description:

ARTN will be installing long term storage equipment in a hosting center in Anchorage for CPH to use as a long term disaster recovery site. To provide seamless backup and recovery, a Net APP 2020 is needed for communication within the CPH data center. It will interface directly with the Net App 3030 that ARTN is providing at the hosting center. This unit will provide CPH the ability to SnapMirror and SnapRestore critical devices for disaster recovery purposes.

Impact on Quality of Care:

Continuation of quality care is dependant on providing backup and restore of critical data devices in case of disaster recovery.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five strategic plan goals are impacted by a quality disaster recovery system.

Financial Implications

Purchase of equipment for offsite disaster recovery is essential to the financial welfare of CPH for FY09 and FY10.

Identify any applicable regulatory issues:

National Patient Safety Goals

Alternatives and reasons for rejecting them:

No viable alternative. Offsite disaster recovery is essential in case of a major disaster to data systems within the hospital.

Implementation requirements and timeframe:

Implementation will occur the 1st quarter of FY09

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Finance / Accounting
Requested By:	Mike Haggerty
Project / Item:	Capital Budgeting Module for OI System
Capital Cost:	\$16,000

Project description:

Add-on module for the Organizational Intelligence Budgeting and Reporting system purchased in FY08. Will provide for a more efficient and automated process for capital budgeting. The module can be customized with thresholds for Return on Investment analysis, definition of required and optional fields, classification of projects, and ranking of priorities. Users submit requests online and can view the approval status of their projects in real time. Includes reporting capabilities and can interface with Meditech to track capital purchases throughout the year against the approved budget.

Impact on Quality of Care:

No direct impact, but the system can help us prioritize our capital funds, and better consider issues related to quality of care in the capital approval process.

Link to Strategic Plan Goals:

This purchase links to both the Financial Health and Information Systems Solutions goals of the strategic plan, through improved operational efficiency and the development of strong information systems. Improved allocation of capital with increased focus on purchases that will support efforts to increase market share will benefit the organization. This system will help us create consistent criteria for determining our capital priorities.

Financial Implications

(potential volumes and revenue, ongoing operating costs, return on investment,):

Operating expenses for annual software support are 20% of the capital cost for software and implementation services, or \$3,200. No additional staff costs for operation of the system, as it replaces a current manual process. If we interface with Meditech for purchase tracking, there may be minimal report writing costs for a data interface if in-house staff cannot create a report.

Identify any applicable regulatory issues:

None

Alternatives and reasons for rejecting them:

Can continue with current system of Word documents and Excel spreadsheets, but management of requests is cumbersome and submissions vary greatly in content and detail.

Implementation requirements and timeframe:

No on site visit by OI staff is required. All implementation and training is completed on line or by phone. Purchase should occur early in the year to be ready for service area budgeting in October.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	PHI Encryption Appliance
Capital Cost:	\$30,000

Project description:

This project was approved in FY08 but it was not completed in a timely manner and funding was lost. Patient Health Information can not be transmitted within emails due to HIPPA regulations. As a health organization, we are obligated to prevent this transmission or implement a compliant solution. This project provides a campus wide solution to the encryption, transmission, and auditing of PHI contained in email from our facility. A current barebones "shareware" solution running on an end of life hardware platform can not meet regulatory standards.

Impact on Quality of Care:

Demand for this application solution has been rooted in HIM requests, physician requests, and Heritage place requests. Most notably, Heritage had been emailing family members PHI information and requires a compliant method.

Link to Strategic Plan Goals:

Workforce – prevent inadvertent violation of HIPPA regulations Financial Health – prevent consequences of violations Information Systems Solutions – solve management of illegal emails Clinical and Service Excellence – provide a compliant method of passing PHI Intense Market Focus to Expand Market Share – to be determined

Financial Implications

This solution takes advantage of a three year contract discount and provides a dedicated CPH web portal for email recipients off campus.

Identify any applicable regulatory issues:

HIPPA compliance Joint Commission

<u>Alternatives and reasons for rejecting them:</u> No Viable alternative that efficiently resolves PHI email issues

Implementation requirements and timeframe:

Implement and configure as soon as approved in 1st quarter FY09

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Physical Medicine
Requested By:	Teresa Robinson
Project / Item:	ReDoc; Electronic Documentation system (Meditech compatible)
Capital Cost:	\$73, 345 (\$43, 345 for software, \$30,000 for hardware)

<u>Project description:</u> ReDoc is an intuitive software application designed to optimize the efficiency and quality of the documentation process for physical, occupational and speech language pathology services.

Impact on Quality of Care: This product guides and prompts the therapist to document completely, comprehensively, and within the clinical standards of practice, thus facilitating quality care and documentation throughout the clinical workflow. This product is able to interface with Meditech. ReDoc eliminates the transcription of information from one clinical treatment to the next, and with an electronic interface to the client's billing system, can also eliminate transcription of demographics. This facilitates efficiency for the front desk, therapy staff and billing staff, eliminating several sources of human error. By automating reports and documentation, therapist spend less time documenting and more time with patients. Additionally, ReDoc software can lead to reduce overtime costs, increasing revenues and decreased denials.

Link to Strategic Plan Goals: It is part of the strategic goals to incorporate Physical Medicine into full electronic documentation. We are currently trying to utilize Meditech for our documentation, but program has several limitations for therapy documentation. This is creating increased time for documentation as well as duplication of documentation. Current electronic documentation has a significant negative impact on our productivity. With the inherent limitations of Meditech, I project very little improvements unless we incorporate a rehab specialized software that is Meditech compatible.

Financial Implications

(potential volumes and revenue, ongoing operating costs, return on investment,):

On average, our therapist spend 90 minutes a day documenting in patient records. ReDoc can save between 20-40 % time required for documentation. This would equate to approximately .5 hours per day per therapist that is freed up to see one additional patient. With having 8 Therapist, this equates to four additional patients a day, or 20 additional patients in one week. An average .5 hour patient visit is approximately \$78 (\$56 is an average unit charge, multiply by 2; 70% collection rate). Based on 4 additional patients per day and a 240 day work year, this equates to an additional 960 patient visits per year or an additional \$74,880 dollars in revenue. In addition to this increased revenue, there are substantial financial implications from: Correct coding, decreased denial rates, automated charge capture and reduced administrative costs for charging, filing, and transcription.

Identify any applicable regulatory issues: This software is designed to facilitate compliance with JCAHO, CMS, HIPAA and state licensure requirements. It is updated annually to assure continued compliance.

<u>Alternatives and reasons for rejecting them</u>: We have limited options as we have to work with programs that can interface with Meditech. There are several other software's out there, but they are in early stages of development and still have "bugs" to work out of their systems. ReDoc has been endorsed by the American Physical Therapy Association and American Occupational Therapy Association for over 9 years. It is a proven and reliable system with an excellent reputation with rehab professionals.

Implementation requirements and timeframe: Successful implementation of ReDoc can be accomplished within 4-12 weeks from purchase.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	SAN Fiber Switches
Capital Cost:	\$21,000

Project description:

Servers in the data center are connected to the storage area network (SAN) via an optical fiber backbone and fiber switches. The current switch capacity needs to increase as additional servers requiring access to the storage area network increases. This project will increase that capacity for anticipated FY09 demand to the SAN.

Impact on Quality of Care:

Continuation of quality care is dependant on providing for the data requirements of the hospital.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five strategic plan goals are impacted by increasing access to the SAN

Financial Implications

Purchase of fiber switch hardware is expected to cover increased access to the storage area network for FY09 and FY10

Identify any applicable regulatory issues:

National Patient Safety Goals

Alternatives and reasons for rejecting them:

No viable alternative. Fiber backbone infrastructure is currently in place and this project provides increased access capacity.

Implementation requirements and timeframe:

Implementation will occur the 1st quarter of FY09

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	Mike Webb
Project / Item:	Collective Capital Projects
Capital Cost:	\$726,845

Project description:

The following table is a collective list of proposed capital projects within the Information Services Department for FY09. Each of these projects fall within one of three categories (essential, growth or replacement.) An essential project is one that is either a regulatory mandate or an item that is essential to the operation of a department. A replacement item is a project that replaces a current asset that has either gone out of warranty and cannot be supported with a hardware maintenance contract or an item that has a high probability of failure within FY09 and would have a major impact on the day-to-day operations of our facility. A growth item is an expansion that falls within the scope of our Strategic Plan. Some items may fall into more than one category. In that particular case, the category that most suits the capital project will be listed. Also listed is the projected month for each implementation.

Capital Project	Estimate Cost	Category	Estimate Start Date
Cisco Switch Backup	\$8,000	Growth	Aug 08
Email Encryption Filtering	\$30,000	Essential	Aug 08
NetApps for ARTN LT Storage	\$60,000	Growth	Sep 08
Fusion Dictation Upgrade	\$71,000	Replacement	Sep 08
Meditech OSAL Server	\$5,000	Growth	Oct 08
Medseek Phase II	\$90,000	Growth	Oct 08
Vocera Application Upgrade	\$20,000	Replacement	Nov 08
Call Manager Migration	\$50,000	Replacement	Nov 08
CPH Fax Server System	\$9,000	Replacement	Dec 08
4006 Switch Migration	\$30,000	Replacement	Jan 09
ReDoc PT Electronic Docu	\$73,345	Growth	Jan 09
Capital Budget Module OI	\$16,000	Growth	Feb 09
VMware Host and VM Backup	\$24,000	Growth	Feb 09
4402 Wireless Controller	\$10,000	Growth	Mar 09
Unity Voice Mail System	\$40,000	Replacement	Mar 09
SAN Fiber Switches	\$21,000	Growth	Apr 09
VMware Expansion	\$40,000	Growth	Apr 09
Stinger Integrity Carts	\$22,000	Replacement	May 09
Exchange Email Migration	\$82,000	Growth	May 09
Stinger Cart Power Supply	\$25,500	Replacement	Jun 09
	\$726,845.00		

Impact on Quality of Care:

All replacement projects, if not implemented could very likely have a major impact on the Quality of Care. Those projects categorized as essential will definitely have a major impact. Some of the Growth items could possibly impact Quality of Care and at the very least would have an impact on the Strategic Plan Goals.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five of the strategic plan goals are impacted by these projects. Emphasis could be placed on the information systems goals of redundancy and disaster recovery, marketing and external access, and continuity of care and facility infrastructure.

Financial Implications

These projects provide a low cost solution to maintaining critical health care information systems without incurring high emergency replacement costs and liabilities.

Identify any applicable regulatory issues:

Joint Commission National Patient Safety Goals HIPAA

Alternatives and reasons for rejecting them:

No Viable alternative.

Implementation requirements and timeframe:

Equipment would be purchased and placed into standby service during FY09, scheduled according to prerequisites, system priorities and available manpower resources.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Physical Medicine
Requested By:	Teresa Robinson
Project / Item: Drop System)	Bioness Ness H200 (Hand Rehab System) and L300 (Foot
Capital Cost:	\$31, 230

Project description:

This system is designed for use in patients who have lost use of their arm or leg due to a stroke or other neurological disorder. It uses electrical stimulation to stimulate the muscles. The NESS H200 is an advanced therapy system designed to use mild electrical stimulation to improve the way a patient's arm works. It helps you get the most out of therapy, and reduce complications including muscle spasms. It allows the patients to perform functional activities such as: drink from a glass, reach for things, write, and use two hands again. The NESS L300 is an advanced foot drop system designed to use mild stimulation to lift your foot to help you walk more safely and easily. It makes it easier to walk with increased speed on flat ground, up and down stairs, as well as on uneven surfaces.

Impact on Quality of Care:

Currently, patients who have had a stroke and are not re-gaining use of their extremity though traditional therapy methods do not have many choices to help them re-gain their full function. Once they hit their full potential with traditional PT, they are discharged from therapy, most likely not to further regain function. This system has provided the therapy world with a new alternative to give patients. It allows the therapist to have another option to give patients who are recovering from conditions such as a stroke. It helps those who would otherwise, not regain full function back the opportunity to retrain the muscles with a use of electrical stimulation. Having this technology available will be a huge adjunct to current treatments.

Link to Strategic Plan Goals:

Service Excellence. If we got this system, we would be the only place in our area to offer this technology and systems. It would allow us to truly be the leaders in treating neurological patients. I believe that not only will it drive referrals for use of this system, but it will drive increased overall neurological diagnosis' our way.

Financial Implications

(potential volumes and revenue, ongoing operating costs, return on investment):

The average patient would receive an evaluation and 18-20 treatments for this disorder. This would equate to each new referral bringing in a revenue of \$2972 (Evaluation =\$224, 18 Treatments at \$224 (ther ex X3, E-stim). This would require us to bring in 10 new patients to break even and see our return on investment for this product.

Identify any applicable regulatory issues: None identified.

<u>Alternatives and reasons for rejecting them:</u> None, this is a one of a kind product.

Implementation requirements and timeframe: 30-60 Days

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	4402 Wireless Controller Addition
Capital Cost:	\$15,000 -CRITICAL REDUNDANCY

Project description:

The wireless system consists of access points strategically placed throughout the facility. These access points are managed by wireless controllers. The system was designed to allow for a loss of one controller and still maintain all wireless access points. As we have expanded our wireless system, the numbers of access points have exceeded the capacity of any one controller. A controller failure will create a loss of approximately 30% of all access points at random locations.

The hospital uses the wireless system for Vocera communications, EKG transmission, Integriti vital signs, Space Lab patient monitoring, Meditech charting on mobile carts and Cisco portable phones.

Impact on Quality of Care:

An unexpected loss of a controller may create a wireless blackout in critical clinical areas of the hospital. This will have a very adverse affect on the quality of patient care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

The project impact all five of the hospital strategic plan goals

Financial Implications

This project will add redundant capacity that would cover any projected future wireless additions.

Identify any applicable regulatory issues:

Joint Commission National Patient Safety Goal

Alternatives and reasons for rejecting them:

No Viable alternative. Wireless system is in production and this is a required expansion

Implementation requirements and timeframe:

Purchase and implementation would occur upon approval. Lack of funding will most likely create a unbudgeted capital item.

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Call Manager
Capital Cost:	\$50,000- END OF LIFE CRITICAL REPLACEMENT

Project description:

The Voice over IP phone system is managed and controlled by two Cisco servers. These servers will reach end of end of life during fiscal year 2009. The hardware and software will require replacement prior to May 2009.

Impact on Quality of Care:

Phone system must be maintained to continue our quality of care

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share All five strategic plan goals are impacted by this capital request

Financial Implications

Replacement of servers should cover our call manager hardware requirements for the next three years plus. Next critical upgrade should be included at the end of the five year plan.

Identify any applicable regulatory issues:

Joint Commission National Patient Safety Goals

Alternatives and reasons for rejecting them: No viable alternative

Implementation requirements and timeframe: Implementation and testing are scheduled for the 2nd quarter of FY2009

Fiscal Year:	2009 (July 1, 2008 – June 30, 2009)
Department:	Information Services
Requested By:	David Albright
Project / Item:	Standby Cisco Switch
Capital Cost:	\$8,000

Project description:

All phones and workstations are connected to the data center by the use of switch gear. Each switch is configured and managed to provide this connectivity. The loss of a switch will result in downtime to heath care resources such as Meditech, EKG, Spacelab, and Client Server. Repair parts and service may be delayed up to forty eight hours or more due to our location The loss of any one of our switches for an extend period would not be acceptable. This project will provide a spare switch that would be prepared to accept configuration for duplication of any of the production Cisco 3750 switch stack members.

Impact on Quality of Care:

Loss of any critical switch for an extended period of time would adversely affect the quality of patient care.

Link to Strategic Plan Goals:

Workforce Financial Health Information Systems Solutions Clinical and Service Excellence Intense Market Focus to Expand Market Share

All five of the strategic plan goals are impacted by this project. Emphasis could be placed on the information systems goal of redundancy and disaster recovery

Financial Implications

This project provides a low cost solution to maintaining critical health care information systems without incurring high emergency replacement costs and liabilities.

Identify any applicable regulatory issues:

Joint Commission National Patient Safety Goals

Alternatives and reasons for rejecting them:

No Viable alternative.

Implementation requirements and timeframe: Equipment would be purchased and placed into standby service as soon as approved.