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Peer-to-Peer Learning Exchange Research Report

Capital Equipment: Managing the Life Cycle of High Technology

Introduction

Though the diffusion of new medical technologies may have slowed somewhat as a result of the continuing economic downturn and vast uncertainties resulting from health reform, competitive pressure to remain on the cutting edge of clinical capability remains. Thus the latest costly entrants in the medical arms race – including 320-slice CT, robotic surgery and proton beam therapy – are still deemed "must haves" for health systems that want to position themselves as the best of the best.

While health reform places new emphasis on cost control, it also is upping the high-tech ante. Thanks to the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Patient Protection and Affordable Care Act, there is new impetus to adopt electronic medical records and other health information technology. The HITECH law will provide $17.2 billion to providers that adopt meaningful use of certified electronic medical record technology by 2015, but to get a share of those funds, hospitals will have to meet requirements such as exchanging electronic health information to improve quality of care and submitting clinical quality and other measures electronically to the federal government. A Health Information and Management Systems Society survey in July 2010 found that 72% of 400 chief information officers and other senior IT executives expect their IT operating budgets to increase over the next two years.

What this means for health systems is a greater need to find the resources to finances the costs of hardware, software and human resources associated with managing EMR implementation, on top of existing IT demands and the need for new medical technology.

Those same hospitals are also bracing for reimbursement cuts and other payment changes associated with health reform. Providers are being pushed to justify their use of resources, and those that are out of line with national benchmarks will be subject to intense new scrutiny. These changes will call for IDNs to manage dollars more tightly, including resource use at the system, facility, service line and unit levels.

Thus, health systems' ability to easily finance capital equipment purchases has grown far more complicated. Not only are finances constrained, but straight capital purchases using long-term debt and typical amortization and replacement cycles is far more problematic in an era when some medical technology could be obsolete within a few years of acquisition.

There are, of course, ways to acquire equipment other than simply buying it. Those options include lease deals, pay-per-use contracts and acquisitions in exchange for future purchases of disposable supplies. Each has an upside and downside, and new regulations will have an impact on how these transactions are accounted for – further clouding the picture.

Many IDNs have decentralized capital equipment decision-making, but as finances become tighter, that is changing. A growing number of organizations are bringing equipment acquisition into overall strategic planning, where each large purchase is evaluated to see if it meets organizational goals. In many cases, key stakeholders, including the CEO, clinical leadership, finance, legal and supply chain management, sign off on each acquisition.

Once a decision is made to acquire a piece of equipment, a secondary process unfolds in which the options for acquisition are evaluated based on the expected life cycle of the asset and how the investment will be reflected on the balance sheet. Through sound management and planning, IDNs can aim for a capital equipment acquisition strategy that links the type of financing to the nature of each piece of equipment and each piece of equipment to the organization's long-term goals.

A team approach

There are various models for creating a "purchasing team" for medical equipment, but the consensus is that you need clinical, financial, business and legal expertise in order to make sound acquisition decisions. The clinical member of the team often brings in department specialists with relevant expertise on the requested equipment. A finance office member in charge of administering all capital equipment is involved, as well as a permanent member of the legal staff. And an experienced senior buyer skilled in capital procurement, leases and outside services is usually part of the team. The team can evaluate each acquisition in a two-tiered process – deciding first whether the equipment meets organizational strategic needs and then calculating which of the acquisition options makes the most sense from a business, financial and legal perspective. If all of those aspects are not part of the decision-making equation, the results can often be a strategic mistake.

Technology planning often means bringing in outside experts and financial partners, who can help compile strategic data on industry trends and, in the case of a strong financial partner, someone to share the risks by taking ownership of the technology in a lease arrangement.

This team approach is a requirement of successful technology life-cycle management. This management group can be charged with routinely revisiting critical technology investments and identifying opportunities for new investments or reinvestments to deliver continuous improvement.

Life-cycle management

The typical capital budget process starts with a department submitting a request for a purchase of a piece of equipment; often a specific product and vendor are named. Finance, a clinical leader and perhaps another C-suite executive may review the request and try to find out what other competing priorities are in play. The traditional financing mechanism for fixed assets is using long-term debt for a straight purchase.

This approach has severe limitations with medical technology and IT, which change too fast and must be replaced long before the debt is paid off. Through life-cycle management, these decisions can be made in a framework of a larger equation whose components are known. You need to establish what equipment is already on hand and how it is being used. Predictions must be made on when the new equipment will likely be obsolete for its immediate intended use and for subsequent uses within at IDN. A CT scanner, for example, may have only a two-year life cycle in a major teaching and research hospital, but it may have many more years of life in a community hospital or trauma facility. The technology life-cycle management program should be predicated on the assumption that change is inevitable and should therefore be anticipated at the outset, even though its timing and specifics are unpredictable. For every asset, the technology life-cycle management team will need to develop a plan for migrating to a replacement solution.

The full life-cycle costs include a wide range of additional data. There are the costs of servicing the equipment, software upgrades and management, disposables related to the equipment, logistics management and support and training, among numerous other factors.

Sometimes an investment is required simply to remain viable in the market. Such investments may be difficult to justify through a standard return on investment analysis, but keeping a position as a market leader comes at a high price. One such investment is an electronic medical record system. Another might be robotic surgery. These may not pay off on a predictable schedule, but patients have come to demand them, so they must be acquired through whatever means necessary.

Financing alternatives

With such a high risk of obsolescence for medical technology and IT, many health systems have been rethinking the traditional purchase of equipment with long-term debt or operating cash flows. They are moving into the business of leasing the equipment, financing it to a predetermined life, returning it and moving on to the next technology. Other means include pay per use (also known as "pay per click") and straightforward rentals. Factors to consider in making that decision include the organization's debt philosophy, debt capacity, operating cash flow, cushion of liquidity, useful life of assets to be purchased and the likely effect on existing debt covenants.

An example where the lease option could be examined as part of the capital expenditure approval process is a current-generation CT scanner. A major health system might be able to negotiate a special equipment price discount, which further leverages the capital that might be brought in by a financing partner that actually buys the device. This would result in reduced monthly lease payments for the system, a tangible cash flow benefit. The radiology department then has the flexibility to migrate to new imaging technology during the lifetime of the lease contract, while the financing partner finds alternative uses for the equipment.

Lease payments are made out of operating cash flows, which eliminates the need for financing costs and preserves debt capacity for other uses. There are some disadvantages to lease financing, including the potential strain on liquidity and an impact on existing debt covenants, and the lease accounting changes by FASB. (We'll deal with most serious challenge to leasing in the next section.) Generally, it's not a good idea to lease medical equipment that is portable, such as infusion devices, because portable equipment often gets misplaced, broken or lost during the lease term, and you'll have to pay a large buy-out fee if you can't return functioning equipment at the end of the lease term. Also, portable equipment, especially infusion devices and respiratory therapy equipment, are increasingly the target of recalls, and since manufacturers typically do not hold the lease, you could be stuck paying for equipment that you cannot use.

There are, of course, other mechanisms for acquiring high-tech items. If a health system is already in the process of a long-term bond issue for fixed assets such as a new facility, it may want to consider adding a new EMR system to that issue for the sake of both efficiency and the protection of operating cash flow.

There is also the bank line of credit, which has low issuance and financing costs. However, that is a taxable source of funds and the term is quite short, generally a year, which means the organization needs adequate cash flows to repay the debt quickly.

Pay-per-use is a concept that is starting to get more attention. An example is Olympus' Cost Per Procedure Financing program, which allows the IDN to pay for Olympus' diagnostic equipment only when it is actually used. Payments are made while the health system is generating income from the procedures, facilitating positive cash flow and enabling a predictable margin. Olympus bears the burden of ownership and the technology risk of obsolescence.

The FASB problem

Lease deals are about to undergo a serious challenge. In July 2006, the Financial Accounting Standards Board Financial Accounting Standards Board and the International Accounting Standards Board agreed to a joint project on lease accounting. A discussion paper, *Leases: Preliminary Views*, was issued in March 2009. A draft of a standard was expected in mid-2010, with a final standard to be issued in 2011 that has an effective date of no earlier than 2012.

Under the standard being considered, operating leases of the kind just discussed – including pay-per-use – would effectively have to be accounted for in the same way as capital leases – recorded on financial statements as an asset and a debt.

Regulators say that companies routinely structure leasing deals to keep assets off the balance sheet. The Securities and Exchange Commission published an extensive study in 2005 about off-balance-sheet accounting, calling for changes to accounting rules to produce financial statements that reflect the economic realities of lease agreements.

The FASB change will not have an effect on a health system's cash flow, but it will change the debt-to-equity ratio for systems that have loan covenants with a bank or financial institution. So even though an organization's equity and cash flow remains the same, suddenly its liability has increased dramatically and it could fail a debt covenant.

A large unknown is how soon the users of financial statements (banks, financial institutions and investors) will understand the change and adapt their loan covenant requirements to reflect it.

Another significant change is to estimate whether purchase options in a lease arrangement are more likely than not to be exercised. If the answer is yes, then that option would have to be factored into lease payments.

A health system must determine the incremental borrowing rate, a rate that, at lease inception, the lessee would have incurred to borrow over a similar term the funds necessary to purchase the leased asset. That may be different for each lease depending on length. Determining the IBR is based on the financing costs of a later purchase of the asset with different financing options and the potential weighted average of different borrowing rates.

A lot is unknowable today in absence of a final standard, but at the very least, IDNs must begin to re-evaluate the lease vs. purchase equation. As the new standard will apply to all existing leases, any lease contract that has more than two years to go must be looked at anew for its potential to disrupt system finances.

Peer-to-peer exchange questions

1. What do you see as the biggest challenge your organization faces today and over the next two years, as it relates to the acquisition of new technology, or just the replacement of obsolete technology. What are some of the strategies your organization is implementing or proposing to implement?

2. Is capital equipment acquisition part of your organization's overall strategic planning?

3. Is life-cycle management used in your organization in the process of buying capital equipment? If yes, has it been effective in rationalizing the acquisition process?

4. Will the FASB lease accounting rules severely limit your organization's ability to use this flexible equipment acquisition tool?

5. What is the future of pay-per-use financing for capital equipment?

6. Absent leasing and pay per use, is outright purchase of medical technology a viable option for most healthcare organizations?

7. What are some of the other important issues affecting capital equipment acquisition?