INVESTING CAPITAL
IN UNCERTAIN TIMES:
THE BOARD'S ROLE

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I. Introduction

Hospitals have just come off the greatest construction spending spree since the 1950s, when both the post-war economy and the population were booming. Just a year ago, the annual survey by *Health Facilities Management* and the American Society for Healthcare Engineering prognosticated that "nobody expects the (building) boom to end soon."[1] A total of $41 billion was invested in hospitals and clinics in 2007 and estimates are that $40.7 billion was under construction at the start of the fourth quarter of 2008. If you see a construction crane up in most towns or cities today, you know that you are near a hospital!

That seemingly never-ending boom in hospital-related construction has, as everyone knows, come to a sudden cooling off, if not a grinding halt. The overall credit crisis that eliminated low-cost borrowing options enjoyed by the industry over the past several years, coupled with huge declines in the stock market, a recession threatening at least two lean years, the possibility of healthcare reform, and other uncertainties have caused hospital and health system leaders to step back and reassess their approach to capital allocation and investment in plant, equipment, and information and clinical technology.

The new economic realities challenge board members with difficult questions about what to do next. Of course, it is tempting to "just stop everything until we figure this out." However, figuring this out—during a period of great uncertainty—takes a systematic process and time. It requires openness to new, sometimes radical ideas about the future of hospitals and healthcare in general; the discipline to demand improved short-term operating performance when many in the organization feel that there is nothing left to cut, acceptance of your organization's current financial realities (forget about your former strength; it has been diminished!), the willingness to be patient until a variety of scenarios have been examined and your strategic plan reexamined, and the need to be exceptionally clear about your organization's risk preference.

Exhibit 1 outlines a set of short-term approaches to address the capital crisis. Each of these actions is outlined in greater detail in this white paper. Collectively, these ten actions focus the organization on taking steps *under its own control* to rebuild financial strength and creditworthiness, to avoid allocating capital to projects that may not be the "best and highest use;" to capitalize on investments already undertaken (as opposed to considering them sunk-costs); to ensure that you are getting the maximum dollar value for any capital being invested; and to prepare the hospital or health system for a more systematic, long-term strategic financial planning process.

Exhibit 1: Short-Term Approaches to Address Capital Crisis

Immediate Actions
1. Get everyone on same page.
2. Preserve cash.
3. Improve operating results.
4. Reassess financial capability.
5. Delay non-essential projects.
6. Favor projects with short payback.
7. Focus on core business—shrink, close, divest the rest.
8. Leverage existing capital investments.
9. Cut costs of required capital projects.
10. Start/rejuvenate long-term financial planning and capital allocation processes.

This white paper presents a framework to assist hospital and health system boards in making prudent, affordable capital allocation decisions not just today, but for years to come. We hope and expect that today's economic crisis will eventually diminish such that credit at reasonable rates is once again available, that the stock markets will recover such that investment balances will increase from today's levels, and that hospitals and health systems will start to feel more confident about their future and be more willing to invest capital. The tips and approaches outlined in this white paper are useful and applicable both today and under a (hoped for) more favorable economic environment.

This white paper is organized into sections; each are described briefly below.

1 D. Carpenter, "Not So Hot: Hospital Construction Boom Starts to Cool, Annual Survey Shows," *Hospitals & Health Networks,* American Hospital Association, March 2009.

Impact of Uncertainty on Capital Investment

This section of the white paper not only identifies the major sources of uncertainty facing hospitals and health systems but, more importantly, outlines practical approaches to managing uncertainties and risks. No one can make the uncertainties and risks "disappear." Ignoring them is not productive. Instead, board and management should work together to learn as much as possible about trends that are predictable and to identify future "scenarios" or "wild cards" that could dramatically change your operating environment. Thinking through the best responses to such "wild cards" now—before they occur—can give your organization a competitive advantage moving forward.

This section also identifies a variety of business risks associated with capital investment to ensure that your organization (a) explicitly recognizes these risks when making investment decisions, and (b) articulates its risk preference (i.e., how risk averse is your organization? How risk averse *should it* be?).

Finally, this section helps boards think through risks associated with *not* investing.

Short Term: Investing Capital in the Next Year

Since "retreat to the trenches" is not a winning strategy but a defensive tactic, this section outlines in detail practical tips and approaches to implementing each of the short-term actions identified in Exhibit 1. Some hospitals and systems will find that they are already taking many of these recommended steps. For them, this section is a reinforcement of best practices with perhaps some nuances or tips to improve processes.

For other organizations, this section may demand that you bring a new level of rigor and discipline to your financial planning and monitoring processes and well as to many of your financial policies (e.g., establishing targeted financial ratios for five years out). It will be important to allow board members and senior management the time needed to explore these issues together. All individual board members must understand the implications of the new capital investment policies being considered, not just the members on the finance committee. Board members must be active participants in these discussions. Management's financial experts are a wealth of knowledge and expertise. However, no board member should be shy about asking questions or expecting an answer in clear, understandable terms about issues as important as these.

This section concludes with a "checklist" of actions the board can use to make sure it is taking the right steps over the next twelve to eighteen months to position the organization for future financial viability and flexibility.

Longer Term: Develop a Rational Capital Investment Policy

The final section of this white paper is devoted to more traditional strategic financial planning guidance. This section clearly differentiates between a capital plan (which most hospitals and systems have) and a true strategic financial plan (which all organizations need).

This section begins with articulating the key questions related to long-term capital investment policy that each hospital or system must answer, and then outlines practical approaches to addressing each. One of the key roles of the board is to articulate guiding principles to frame capital allocation and investment decisions. These principles need to balance the organization's role as a community resource with the need to ensure its long-term financial viability. Examples of guiding principles are provided to get you started.

This section also recommends using an objective, transparent process for setting priorities between and among capital projects, whether for replacing an old bed tower to investing in an electronic health record to building a freestanding ambulatory care center. The evaluation process must utilize a balanced set of criteria, reflecting the mission, strategic intent, and financial requirements of the organization. An example of such criteria is provided as a sample to get you thinking about what kinds of criteria would work for your organization.

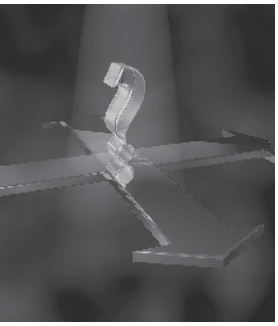
It is essential, long term, that hospitals and health systems are willing and able to compare and "trade off" disparate types of investments (private rooms versus electronic health records). Virtually all hospitals and health systems could consume more than their total financial capability just "replacing themselves." However, simply reinvesting in more up-to-date hospital facilities—especially with the uncertainties facing our industry that could have a profound impact on the types of services needed and the delivery sites—could be a bad decision.

This section concludes with recommendations for systematically reviewing the breadth and depth of existing service offerings via a portfolio assessment process. This is different from the capital project review process since it focuses on reviewing all service lines, whether they are requesting capital investment or not. This process is used to determine which few services or lines of business should be grown; which closed or divested; which shrunk; and (importantly) which should be focused on improving performance, not growing. This latter category is especially important as capital is increasingly constrained. Hospitals and health systems will realize, if they have not already done so, that they need to free up capital from services and business lines that contribute less to the hospital or health system's mission, vision, and financial viability in order to ensure sufficient capital for "better and higher uses" in meeting community needs.

We strongly believe that each board member has an intrinsic obligation to both the hospital or health system *and the community it serves* to leave the organization with sufficient financial strength and flexibility that, ten years from now, when a new group of individuals convenes as a board to steward this critical resource, they will look back at the decisions your board is making today and say, "Thanks for making those decisions. Thank you for the financial discipline you exercised. You have allowed us to thrive to meet today's community health needs." That would be a great success for us all.

II. Impact of Uncertainty on Capital Investment

One of the first "financial realities" a new hospital board member learns is that hospitals are very labor intensive organizations. Typically, labor costs approximate half of the total costs of delivering care to patients. This is no big surprise. What many new board members don't realize is, paradoxically, hospitals and health systems are also extremely capital intensive. In fact, they are more capital intensive than the average manufacturing company in the U.S. In 2007, the average hospital generated approximately $2.00 of total net revenue for every $1.00 of price-level adjusted net fixed assets (that is, the cost of net property, plant, and equipment whose value has been adjusted for inflation).[2] This *fixed asset turnover (price level adjusted)* ratio generally held true for both urban and rural hospitals; and for hospitals of all bed sizes. This means that, if your hospital wants to grow net revenues by $10 million and sustain that level, it will need to invest an additional (one time) $5 million in plant, technology, and equipment. Therefore, the hospital or health system must continuously reinvest capital in order to sustain even minimal, year-over-year growth.



Even in stable economic times, allocating capital to the best and highest use is a challenge. Today, many boards feel immobilized by uncertainty. With unprecedented declines in the hospital's or system's investment balances, the potential for landmark national healthcare reform, and recent utilization declines in many markets, what is the right decision for long-term capital investment? When seeing even beyond the next three years is challenging, how can boards make the right decisions when considering investments with a 30-year useful life?

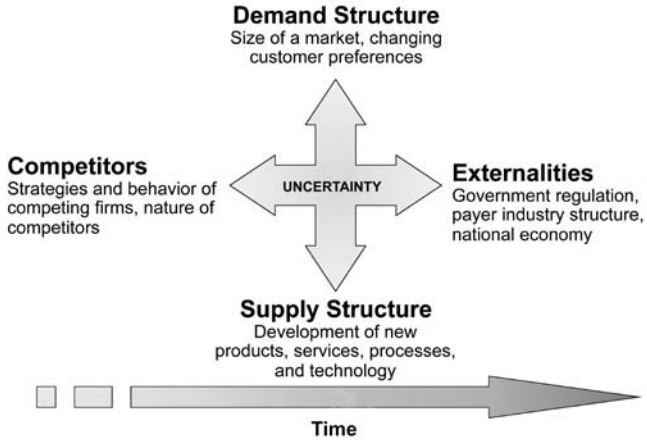
As outlined in a landmark 1997 *Harvard Business Review* article, "Strategy Under Uncertainty," uncertainty plays havoc with strategic and capital decision making:[3]

> "Risk-averse leaders who think they are in very uncertain environments don't trust their gut instinct and suffer from decision paralysis. They avoid making critical strategic decisions about the product, market, and technology they should develop. They focus instead on reengineering, quality management, or internal cost-reduction programs. Although valuable, those programs are no substitute for strategy."

Fine, but what should hospital and health system board members—who, after all, are fiduciaries of the community's assets—do now?

As outlined in **Exhibit 2**, hospitals and health systems face uncertainties across a number of dimensions, not just economics. There are great uncertainties related to: future demand for services; the amount and form of future payments; the competitive landscape, especially the degree to which physicians will become even greater local competitors; the impacts of emerging technologies (e.g., when will genomics *really* impact care in community hospitals?); and the timing of fundamental, disruptive changes to the healthcare system.

Exhibit 2: Sources of Uncertainty



Source: Adapted by M. Jennings Consulting from "Competitive Strategy Under Uncertainty," *Strategic Management Journal,* Volume 8, 1987.

Uncertainty: Demand Structure

Over the past six months, many hospitals and health systems across the country have seen a softening of patient volume, particularly in surgical and other elective cases, accompanied by flat or marginal increases in outpatient procedures, as compared to more significant increases in recent years. Is this a trend or merely a short-term aberration? Are customers deferring healthcare or are they seeking services away from the hospital setting? Are new payment plans—such as high deductible

2 *2009 Almanac of Hospitals Financial and Operating Indicators,* INGENIX, 2008.

3 H. Courtney and J. Kirkland, "Strategy Under Uncertainty," *Harvard Business Review,* November–December 1997.

insurance plans—dampening demand for hospital services? Will a new cadre of empowered consumers, using Web sites allowing patients to compare prices for services, start making health choices based upon cost and quality data, in that order, as pundits have suggested?

Uncertainty: Externalities

Hospitals are highly regulated and also highly dependent upon federal and state health insurance programs (Medicare and Medicaid), which together account for approximately 55 percent[4] of a typical community hospital's patient revenues. Given unprecedented state and federal budget deficits, coupled with the first baby boomers turning 65 in 2011, what is the future for these programs? Will the long-anticipated major cuts in Medicare payments, such as those that occurred in 1997, come to fruition? Will there be targeted payment reductions for the few profitable service lines such as cardiovascular and orthopedic care? Will there be fundamental healthcare reform at the national level or at your state level?

Uncertainty: Competitors

There are myriad competitive uncertainties. Typical examples include: What will regional hospital competitors do as they face financial challenges? If our regional competitors already have more modern, up-to-date facilities than ours, how can we *not* invest and remain competitive? If a local competitor is a failing institution, what might they do in their desperation that could adversely affect us? Will insurers provide incentives to their members and to physicians to encourage use of lower-cost freestanding outpatient facilities instead of the hospital?

Uncertainty: Supply Structure

There is a bewildering array of uncertainties about "how care will be delivered in the future," especially for non-physicians on the board. When will new technologies dramatically change (disrupt) the delivery of care—moving patients even more rapidly out of hospitals to free-standing centers, physicians' offices, or home care settings? Will there be a "pill" that cures heart disease? A procedure that cures diabetes? A manipulation of genes that prevents cancer?

We also have other supply uncertainties with which to contend. How will worsening nursing shortages impact us? Where will primary care physicians come from, when fewer graduates of U.S. medical schools each year choose primary care as their specialty? There are now shortages across a wide range of physician specialties, from general surgeons to pediatric endocrinologists. How will we attract the specialists needed to serve our patients?

Uncertainty: Time

Many of the aforementioned uncertainties are, at their core, less about "*if* they will happen," than "*when* they will happen." Most people would agree that, in 100 years, approaches to treating all major diseases will be fundamentally different. Exactly when is uncertain.

When making long-term capital investments, the question becomes, "How different will healthcare be over the next ten to twenty years?"

Uncertainty versus Risk

A primary tenet in capital allocation is to balance the potential return of an investment against its intrinsic risk. Naturally, prudent organizations want to avoid excessively "risky" investments. The problem is, in a period of great uncertainty, it can be difficult to determine how much and what types of risk the organization is assuming.

Uncertainty and risk are fundamentally different. *Uncertainty* is the condition of being in doubt; *risk* is the probability of a loss.[5] In true uncertainty, the possible outcomes are numerous (or endless) and it is not possible to assign probability to any one particular outcome. On the other hand, with risk, it *is* possible to assign probability (or likelihood) to particular outcomes.

It is this combination of numerous possibilities, plus the difficulty or impossibility of assessing the likelihood of any one outcome, that makes uncertainty so debilitating. A common problem in today's uncertain environment is to overcome "active imaginations." Without a clear picture of the future, information voids are often filled with wild speculation, manifesting themselves more like worst-case scenarios than realistic assessments of risk.[6] Decision making, including capital allocation, may be chaotic—yielding the illusion of addressing key issues, but using inappropriate tools and analyses.

In order to make prudent capital allocation decisions, hospital boards need to incorporate the realities of both uncertainty and risk into their decision-making processes. They need management to supply information regarding clear trends and expected market dynamics. They also need management to openly identify true uncertainties, so that together, the board and management can understand the implication of potentially dramatic changes in the market place on proposed capital projects and investments, whether for facilities or technologies.

4 *National Health Expenditure Data,* Centers for Medicare & Medicaid Services, 2008.

5 *New Merriam-Webster Dictionary,* Merriam-Webster, Inc.,1989.

6 M. C. Jennings, Editor, *Health Care Strategy for Uncertain Times,* AHA Press/Jossey-Bass, 2000.

Approaches to Managing Uncertainty and Risks

A recent article in the *Harvard Business Review,* entitled "Six Ways Companies Mismanage Risk," identified a number of common pitfalls that companies of all types often make in uncertain environments and/or with managing risk.[7] **Exhibit 3** presents a summary of the six ways risk is mismanaged as identified in the article.

Exhibit 3: Six Ways Companies Mismanage Risk

Mismanagement Risks
1. Relying on historical data when an industry is facing potential major changes
2. Focusing on overly narrow measures of risk
3. Overlooking knowable risks
4. Overlooking concealed risks
5. Failing to communicate
6. No managing in real time

Source: Stulz, R. M., "Six Ways Companies Mismanage Risk," *Harvard Business Review,* March 2009.

The article's author, Renee Stulz, makes an excellent observation: "If you live in Florida or Louisiana, you shouldn't spend a lot of time thinking about how likely it is you'll be hit by a hurricane. Rather, you should think what would happen to your organization if it was hit by one and how you would deal with the situation."

The following "lessons learned" from this article apply to healthcare and provide insight into prudent capital investment.

Do Not Expect the Future to be a Continuation of the Past

It is essential to base capital investment decisions on facts and a thorough situation assessment. However, it is equally important not to assume that future volume or payment levels will be a linear projection of the recent past. This may be one of the most significant changes to how we traditionally have developed financial projections. It is extraordinarily difficult to break the pattern of assuming that our recent trends, especially positive trends, will sustain themselves into the future. However, the board must challenge such linear thinking.

Identify the Long-Term Risks Associated with Capital Allocation

It is tempting to minimize the risks associated with capital investment decisions, particularly those involving new buildings that may "simply replace what we have" but that may last for thirty or more years. Yet it is essential that board and management leaders acknowledge intrinsic risks and proactively identify actions to minimize them by: designing facilities that have maximum flexibility built in; minimizing the capital costs associated with all projects, but especially with facility replacement; allocating a greater portion of dollars to clinical and information technology versus "bricks and mortar;" and avoiding the temptation to "keep up with the Joneses," or to build Ritz-Carlton level facilities (when patients using these facilities will be paying with the equivalent of "governmental vouchers").

Identify Both Knowable Risks and Concealed Risks

Although the exact timing and magnitude of payment cuts are uncertain, it is clear that there will be substantial Medicare payment reductions within the next two years. This is an example of a *knowable risk*. As such, it should be incorporated into our baseline financial modeling assumptions. Other, similarly "knowable" risks should be articulated and incorporated into the financial forecasts supporting capital project requests.

What kind of *concealed risks* should we unearth and focus attention? A concealed risk may be the organization's historical tendency toward optimism in its forecasts. The board should review the actual performance and returns on capital investments made in the last three to five years to identify key success factors and/or to understand what has hindered the achievement of expected returns. To ignore this history will not lessen the hospital's risk moving forward. Instead, it will simply "conceal" the risk or make it invisible, especially to newer board members.

Ask Management to Identify Uncertainties and Risks Associated with Proposed Capital Projects

In an effort to demonstrate their competence and capabilities, managers often overstate their ability to understand and effectively manage future risk.[8] While this is understandable, it can be a disservice to the board (and the organization). Such an error of omission may lull the board into a false sense of security regarding its capital investment decisions. The board should invite and encourage management to be explicit about uncertainties or risks that might challenge the wisdom of a proposed capital project. Armed with this information, the board can make better, more informed decisions.

Incorporate Scenario Planning into Your Strategic and Capital Planning

Scenario planning—or "what if" planning—seeks to incorporate risks and uncertainties about the future environment into decision-making processes. The board should always ask management, "*What if* changes

7 R. M. Stulz, "Six Ways Companies Mismanage Risk," *Harvard Business Review,* March 2009, pp. 86–94.

8 *Ibid.*

in the market, demand, payment, or other factors occurred? Would the proposed capital project still be a good idea?"

Scenario: What if National Priorities Are Adopted?

An illustrative example of a potentially "game changing" scenario is the potential adoption, nationwide, of proposed national priorities for the healthcare system.

The National Quality Forum (NQF) recently convened a National Priorities Partnership with 28 stakeholder organizations including The Leapfrog Group, AARP, the American Medical Association, the American Nurses Association, the Chamber of Commerce, the Centers for Disease Control, and almost every other major national health policy player. This partnership has identified six priorities for the U.S. health system, as shown in **Exhibit 4**.[9]

Exhibit 4: National Quality Forum Priorities

Are you investing to achieve these priorities?
1. Engage patients and families in managing their health and making decisions about their care.
2. Improve the health of the population.
3. Improve the safety and reliability of America's healthcare system.
4. Ensure that patients receive well-coordinated care within and across all healthcare organizations, settings, and levels of care.
5. Guarantee appropriate and compassionate care for patients with life-limited illnesses.
6. Eliminating overuse while ensuring the delivery of appropriate care.

Source: National Quality Forum Web site, www.qualityforum.org.

It is essential that board and management leaders consider the likelihood of such radical changes in our healthcare system before investing capital based upon "yesterday's rules of engagement."

Forget for a moment whether you personally believe that these priorities are the right ones. Instead, consider the impact on your hospital or system if the federal government adopted these priorities as the basis for Medicare payment. How would that affect your hospital's capital allocation? Are you investing sufficiently *and quickly enough* in electronic health records or personal health records—which may be the critical underpinning for the first two priorities? According to a report released in March 2009 by *The New England Journal of Medicine,*[10] only 1.5 percent of non-federal U.S. hospitals currently use a comprehensive electronic health record. How much money will your organization need to invest to achieve true electronic functionality?

What would be the impact on your hospital if it were paid nothing for care that was not 100 percent safe and reliable (as defined by Medicare)? How would you fare under an already proposed "bundled payment" mechanism whereby the hospital and physician payment was combined? Proposed priorities 5 and 6 sound a great deal like rationing. What would be the financial impact on your hospital or system and its capital requirements? Was there a dramatic reduction in the number of patients with life-limited illnesses hospitalized in their last two weeks of life? Would you need fewer medical and intensive care beds or more hospice beds?

Of course, we have no idea whether these six priorities will become the basis for future Medicare payment. That is the uncertainty.

However, it is essential that board and management leaders consider the likelihood of such radical changes in our healthcare system before investing capital based upon "yesterday's rules of engagement."

Understand Business Risks Associated with Capital Projects

All capital projects are risky. However, some are riskier than others. What makes the difference? In general, project-related or business risk increases with any combination of the following:

- The project involves a new service line or new line of business.
- The project involves entering a new geography where the hospital has little market share or name recognition.
- The project involves new, emerging technology, which may or may not become the clinical norm.
- The project relates to a service that serves a disproportionately large percentage of Medicare or Medicaid patients (given the fragile economic underpinning of these public programs).
- The project involves a major strategic repositioning of the organization, seeking to rebrand the entire organization.
- The project commits a substantial portion of the dollars to "brick and mortar" facilities, with the intrinsic risk of any thirty-year-plus investment.

In addition to the business risks outlined above, it is essential that the hospital or health system consider how much risk it is assuming, in total, based upon how many projects or initiatives it has underway simultaneously.[11]

9 J. Corrigan, Ph.D., "Transforming Health Care in a Time of Crisis," *hfm,* February 2009, pp. 38–41.

10 A. Jha, "The Use of Electronic Health Records in H.S. Hospitals," *The New England Journal of Medicine* – online edition, March 26, 2009.

11 K. Kaufman, "Managing Risk in a Challenging Financial Environment," *hfm,* August 2008, pp. 45–50.

Consider, for example, a hospital that is just completing a major bed-tower project that adds capacity. The hospital is also expanding (investing in) and turning around a financially-challenged employed physician group. With this on its plate already, the hospital should reconsider the wisdom of simultaneously building a major, freestanding ambulatory center in a new suburban market. While each project, on its own merits, might pass "project review criteria" (as outlined in section IV), together these projects may result in more cumulative risk than the hospital or system can absorb.

Similarly, a hospital that once enjoyed an A– bond rating, struggling to maintain its credit-worthiness after a 35 percent decline in investment balances over the past year, may defer a project that would have been approved in 2007. While the project itself may not be any riskier than it was eighteen months ago, the hospital's current starting position is riskier, properly affecting the decision.

Recognize the Long-Term Risks of Not Investing

With the current environmental and economic uncertainties and risks, board leaders may feel that the only answer is "do not invest." While "do not invest *now*" may be sound advice, it is not a viable long-term strategy. Rather, it is a short-term, defensive tactic.

It is essential that board leaders understand the risks implicit in under-investing long term, whether in facilities or information/clinical technology. While the risks of this approach may be less visible than the risks associated with undertaking a new project, many hospitals have failed because of a systematic lack of strategic investment over a long period. Unless you believe that your hospital's current positioning is ideal with no major investments for five years or more, you need to develop both a short-term approach (see section III) and a long-term approach (see section IV) to make prudent capital allocation and investment decisions.

III. Short Term: Investing Capital in the Next Year

"Retreat to the Trenches"

Even before the recent economic crisis, hospitals and health systems have faced major financial challenges due to providing the majority of their services to patients covered under governmental programs, whose payments over the past decade have failed to keep pace with inflation. Coupled with ever-rising costs fueled by labor shortages and expensive, new medical technologies, even in the best of times, hospitals have struggled to amass sufficient resources to meet long-term capital demand.

Obviously, the credit crisis of 2008–2009 has dramatically amplified these challenges. First, the financial crisis has diminished or, in some cases, eliminated the ability of hospitals and health systems to access the credit markets for planned plant replacement or expansion. Secondly, the overall financial crisis has dramatically reduced the level of hospitals' investment balances and drastically limited liquidity to levels that, in some cases, put hospitals and health systems in danger of violating restrictive bond covenants.

Key Survey Results Show Distress

As shown by two recent surveys undertaken by the Healthcare Financial Management Association (HFMA)[12] and the American Hospital Association (AHA),[13] even the financially strongest hospitals and health systems have been negatively affected by the recent financial crisis coupled with weakening patient volumes.

The recent HFMA and AHA surveys identified the following key findings:

Access to capital is constrained both for financially strong hospitals/systems, as well as traditionally weaker hospitals with, more marginal credit. In the survey, nearly 30 percent of financially strong hospitals/systems that traditionally have had ready access to capital indicated they have seen substantial increases in the cost of financing over the past six months. In addition, twenty-four percent of these very creditworthy organizations are facing liquidity challenges and have either withdrawn or delayed a bond issue over the past six months.

As expected, and more dramatically, 43 percent of hospitals or systems with self-described "limited access to capital" indicated that they had a substantial increase in the cost of debt and nearly one third-identified both difficulty in securing liquidity and that they had "not even attempted to access financing sources" for needed capital investments.[14]

Exhibit 5 (on the next page) presents details from the HFMA survey related to expected changes in capital spending.

Hospital margins are weakening due to a combination of factors:

- Declining patient volumes, particularly "elective" surgical cases and procedures, which have traditionally been the most profitable services offered by hospitals. Inpatient volumes have trended downward in more than half of all surveyed hospitals in the past six months. In one quarter of these hospitals, volumes have declined by two percent or more. Mid-sized hospitals (those with 300–500 beds) noted the most substantial drop, with more than three-quarters of survey respondents reporting a decline in inpatient volumes. Approximately half of all hospitals that noted inpatient volume declines also noted a drop in outpatient volume.[15]
- Increases in both bad debt and charity care, due to more area residents having either no insurance or inadequate insurance. Patients without means, traditionally considered "charity care" patients, are growing in numbers despite expansions in governmental programs such as the S-CHIP program, which in early 2009 expanded coverage for children of low-income families. Hospitals in the third quarter of 2008 saw an eight percent increase in uncompensated care compared to the same quarter in 2007.[16]
- Importantly, non-operating income has disappeared (and over the past year, has been substantially negative) for most hospitals and systems. This has not only eliminated the ability to supplement operating profits with investment earnings. It has been much more devastating because generally these investment losses are significantly greater than total operating margin, resulting in large total losses.

12 *The Financial Health of U.S. Hospitals and Healthcare Systems*, Healthcare Financial Management Association, January 2009.

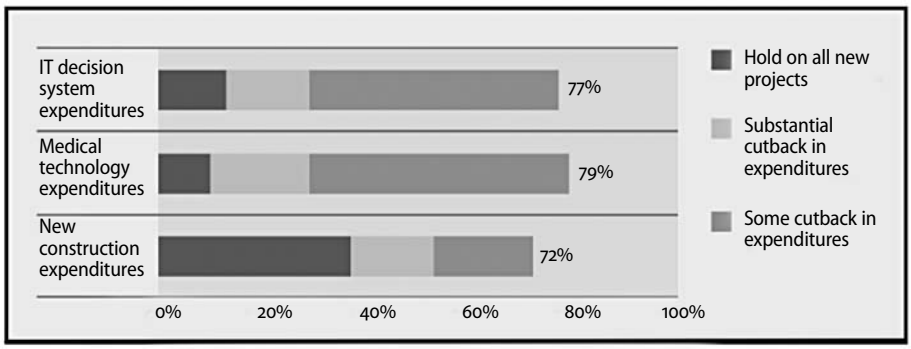
13 *Report on the Capital Crisis: Impact on American Hospitals,* American Hospital Association, January 2009.

14 HFMA, January 2009.

15 *Ibid.*

16 *Report on the Economic Crisis: Initial Impact on Hospitals,* American Hospital Association, November 2008.

Exhibit 5: Substantial Capital Spending Cuts Are Likely



Source: HFMA, *The Financial Health of U.S. Hospitals and Healthcare Systems,* January 2009.

- *Hospitals and health systems* are cutting spending in response to recent trends. The HFMA survey[17] identified that 37 percent of all responding hospitals/systems indicated a hold on all new construction projects; over half (53 percent) indicated cutbacks in operating expenditures; and over three-quarters (78 percent) indicated that they are reducing future capital expenditures.

Nine out of ten hospitals reported more difficulty in attracting charitable donations:[18]

- The AHA survey indicated that 35 percent of hospitals say that philanthropy is a "very important" source of external funding for capital projects. Over 40 percent of respondents indicated that generating charitable donations was "significantly harder" and 49 percent said that it was somewhat harder than in past periods.

More Evidence: Even the Strongest Systems Are Cutting Back

Issues regarding future levels of capital expenditures are not limited to individual hospitals or mid-sized systems. Even the nation's strongest, most financially secure health systems have been directly affected.

A good example is one of the nation's largest, AA rated, non-profit health systems (we will call it "the AA system"). According to this system's Web site, net patient revenue grew nearly 9 percent in the first half of fiscal year (FY) 2009 versus the same period last year. However, despite that strong volume growth, operating income (before impairment, restructuring, self-insurance trust fund investment return, or other non-recurring expenses) was reportedly down by 32 percent compared to last year. In FY 2008, the health system expended more than $1.0 billion in capital; whereas in the first half of FY 2009 capital expenditures are running at an annualized rate 25 percent below prior levels.

A key measure of the rate of capital reinvestment is the *capital expenditure to depreciation expense* ratio, which measures the degree to which a hospital or health system is reinvesting to maintain or expand its fixed asset base (property, plant, and equipment). In the first half of FY 2008, the AA system had a capital expenditure to depreciation ratio of 1.42x (or it invested $1.42 in capital projects for every $1.00 of depreciation expense). In the first half of FY 2009, that ratio had declined to 1.26x. Therefore, while the AA system continues to reinvest at a rate greater than it is depreciating its fixed assets, a notable decline has occurred. And the reality may be even worse: achieving a 25 percent decline in this ratio in six months can be difficult, given major capital projects (such as a major facility replacement) already in progress.

Like all investors, hospitals and health systems have seen substantial declines in their investment balances. Our AA system is no different. Its audited financial statements, posted on its Web site, show that as of June 2007, the system had nearly 210 days cash on hand. That declined to 185 days by June 2008. Management noted that the declines reflected both stock market declines plus the ($1.0+ billion) capital expenditures made in FY 2008. As of December 2008, the system's days cash on hand had declined to 141 days. Unfortunately, this 32 percent decline in days cash on hand over the past eighteen months is not atypical and cannot be recovered any time soon.

17 HFMA, January 2009.

18 AHA, January 2009.

If there are any silver linings to the clouds on the horizon they would be the following: the economic crisis has given all hospitals and health systems a moment of reflection. Over the past several years, every hospital has raced to provide "everything to everyone" including the most up-to-date technology, equipment, and facilities. This race now has come to a screeching halt. Board leaders and senior management have the opportunity to reassess their operations and their capital allocation processes. If done wisely and thoughtfully, today's crisis could yield higher quality, more cost-effective, efficient hospitals in the future, with less duplication of services.

What's Next?

As previously discussed, the storm clouds continue on the horizon. Additionally, the future U.S. economic environment—along with whether healthcare reform will occur and, if so, what form it will take—make it difficult for hospitals to invest capital with any sense of confidence.

However, lest we despair, Richard Clarke, president and CEO of the Healthcare Financial Management Association, has an interesting longitudinal perspective: "Few sectors of the economy have faced—and weathered—as much continuous financial tension as the hospital sector, which must regularly adjust to payment and regulatory changes. Hospital … leaders must, once again, marshal all of their assets to face current realities and use their considerable expertise to provide what is best for their communities."[19]

Short-Term Actions for the Board

As introduced in Exhibit 1 (see page 1), we recommend ten key immediate actions for every hospital or health system board and management team to take, collaboratively, over the next eighteen months. Each of these ten short-term actions is described in the remainder of this section.

Short-Term Action #1: Get Everyone on the Same Page

"Get everyone on the same page." Seems like the most obvious recommendation in the world. Right? Yes and no.

Think about these two questions:

1. How much time has your finance committee and board spent over the past several months lamenting its weakening balance sheet, patient volumes, and profit margins?
2. Now, how much time have you spent in a room with board leaders, managers, and physician leaders to ensure that all of you understand the current economic realities and agree on a plan of action for your hospital or health system?

Consider three practical approaches: First, it is essential that board members, *as well as* senior management, engage physicians and other key stakeholders in a dialogue about the financial realities of hospital economics and then engage them as partners in crafting short-term responses as well as more rational, longer-term capital allocation approaches. A forum for this may be the finance committee, if that has sufficient physician representation. Ultimately, every dollar spent on capital will accrue to the benefit of the patients and community you serve. Physicians are critical intermediaries in that process. They can be your friend or foe in making rational capital investment decisions, not only today, but over the next five years.

The same can be said for nursing. Nursing is the single largest department in the hospital. Nurses represent a scarce commodity. Nationally, unions have targeted the nursing profession as a "growth opportunity." It is essential that the board and senior management understand nurses' perspectives and that nurses are active partners at the table in designing capital allocation approaches. While management is in constant dialogue with nurse leaders, many boards have few opportunities to exchange ideas with nursing leaders. The board should make sure that nursing is actively involved in the "getting us all on the same page" dialogue.

Second, the board should charge its finance committee with updating (or, in some cases, articulating) capital allocation policies, both for the short term and for the long term. Finance committees are actively involved with approving annual capital budgets and major, multi-year capital expenditures (projects). However, it is critical that the finance committee oversee a much more robust and strategic capital budgeting and capital allocation process. This is described in greater detail in section IV.

Third, after robust dialogue—that has actively encouraged diverse perspectives and opinions—the board needs to create consensus about needed changes to short-term capital investment approaches. Both the HFMA survey and the AHA survey referenced earlier found that most hospitals and systems were putting "holds" on capital expenditures for this year (the AHA survey found that 45 percent of hospitals had postponed capital projects planned to start within six months and 13

19 HFMA, January 2009.

percent had halted capital projects already in progress[20]). However, the board needs a policy beyond "just say no." It needs to be able to determine what capital should or must be allocated in the next two fiscal years, and why.

Finally, it is essential that board members encourage management, and directly participate themselves, in active communication with community leaders about the hospital's current financial condition, and the steps being taken to ensure ongoing financial integrity and to be able to reinvest in facilities over time. This is especially critical if you are deferring a major facility project of which the community is well aware.

For example, a large, successful urban hospital had been seen as the "beacon of hope" in a declining rust-belt city. The hospital, with strong community support, had spent the past eighteen months fighting vigorously to attain state approval for a $250 million facility replacement/modernization. One argument that had been made, repeatedly and visibly, was that this project would "bring good construction jobs to our city" as well as "allow us to provide 21st century care to our residents." The board's appropriate decision to defer and reevaluate the scope of this project was met with dismay by community leaders and community members. Your board must be prepared for similar community reactions—and the potential for the community to feel that you have let them down or that you are in financial jeopardy (as opposed to acting prudently). Frequent, consistent communication with both community leaders and the community-at-large is a must.

Short-Term Action #2: Preserve Cash

"Cash is king! Long live cash!" As it turns out, the amount of cash and unrestricted investments, a key measure of hospital and health system financial strength and liquidity, has been one of the greatest determinants of bond ratings over the past several years. As outlined in an August 2005 *BoardRoom Press* article,[21] both *days cash on hand* and another key ratio—*unrestricted cash to long-term debt*—have been directly correlated to bond ratings. Specifically, the greater these two liquidity ratios, the higher the bond rating. On the other hand, there has *not* always been as clear and consistent a relationship between operating margins, or even total margins, to bond ratings. Therefore, an essential element to the hospital's long-term ability to access capital in order to invest capital is to ensure that the hospital or health system has a strong balance sheet, with sufficient cash/unrestricted investment balances.

What are the specific actions that the board should take, given the substantial declines in cash and investments over the past year?

First, accept the reality of your days cash on hand as it is today. You need to forget "what our cash balances were a year ago." Those days are gone and they may not reappear for years, if ever. It is time to move on.

Immediately identify a new days cash on hand target for the next two fiscal years, based upon today's starting point and a long-term, targeted bond rating. This is essential because it then determines the magnitude of capital you can afford to invest short term.

As counterintuitive as it may sound, ***organize for a radically stepped-up approach to philanthropy.*** You should consider this a long-term proposition, not an annual expense with an associated annual return. All major universities and charities that receive substantial gifts have invested enormous time, organization, and resources into creating a philanthropic infrastructure that can weather both good times and bad. As part of this, the hospital board should ask management to objectively assess its internal fundraising capabilities. Often hospitals and smaller systems have promoted competent, community-oriented, long-standing staff members into this role. At your hospital, you need a professional, effective fundraiser with a demonstrated track record of success.

Join the ranks of most other American hospitals and defer discretionary capital expenditures. Unless expenditure is required for life safety code or other regulatory reasons, or it is for a project in midstream, defer the project/initiative until you have had the opportunity to develop a more objectively based, robust, strategic capital allocation process. This will be a painful but necessary step. Dollars expended this year or next cannot be recovered and "redeployed" once a more rational capital allocation policy has been established.

Short-Term Action #3: Improve Operating Results

The first priority for management over the next twelve to eighteen months is to improve operating cash flow. This means improving the financial results of operating the core business of the hospital or health system, excluding any and all investment income returns. Accomplishing this typically involves three sequential responses:

- Reduce operating expenses.
- Enhance revenues and revenue-related cash flows.
- Shrink, divest, or close lines of business or entities that require ongoing subsidization.

While it is never a popular statement, we truly believe that "it will never be easier to make money (operating profit) than it is today." Most experts agree that payments for hospitals, long-term care, home care, and physician services will not keep pace with expense inflation. Therefore, it is absolutely essential—and more important than

20 AHA, January 2009.

21 M. C. Jennings, "The Importance of Cash for Long-Term Financial Health," *Boardroom Press,* Vol. 16, No. 4, The Governance Institute, August 2005, p. 3.

ever—that the hospital or health system make a generous operating profit this fiscal year and next. Under no circumstances should the board accept break-even performance on operations or, worse yet, accept an operating loss.

First Response: Reduce Operating Expenses

The board should request that management identify reductions in operating costs such that the organization generates at least a 3 percent operating margin over the next two fiscal years, assuming little to no volume increase. This tactic is important not because it is the most effective long-term approach; rather, it generates an immediate, positive cash-flow impact. However, even this short-term action should be undertaken in the context of a longer-term strategic approach to improving cost effectiveness and efficiency, while maintaining or enhancing quality, safety, and service.

Often, board and other hospital leaders juxtapose "cost effectiveness" and "quality." These are seen as an either/or proposition. In reality, the highest-quality care is often the most cost-effective care. As every manager in every industry understands, mistakes are costly. Therefore, the board should request that any immediate cost reductions—whether related to labor or non-labor costs—are part of a longer-term strategic initiative to enhance quality *and* cost effectiveness.

Long-term strategic cost management should include the following components:

- ***Manage the cost of an episode of care.*** Long term, the only way that hospitals and health systems will truly become more cost effective is to manage the total cost of an episode of care, including all services rendered prior to, during, and as follow-up to a hospitalization or major ambulatory encounter. Today, many hospitals manage efficiency at the departmental level (e.g., how productive is radiology?). The episode of care approach, of course, requires that the hospital understand and manage the actual costs of providing care across the continuum and work to reduce variation in the costs of caring for the same condition. It sometimes surprises board members to learn that, within their own institution, differing physician ordering patterns often result in variations of up to thirty percent for care delivered for the same patient condition (as measured by Medicare diagnostic related groups, commonly known as the DRG approach).

  For over twenty years, there have been many reliable healthcare decision support software products on the market that routinely provide information on the total cost of care, the variable cost of care (that is, the costs that change with volumes), and the operating profit or loss associated with each patient, service line, and/or physician. Unfortunately, often these decision support systems are not implemented effectively or are poorly utilized. It is time for that to change. Every hospital and health system needs to have accurate and reliable decision support that allows managers and physicians, as partners, to truly understand how to improve efficiency and quality simultaneously.

  It should be noted that, long term, one approach that the federal government (Medicare) is now considering via a demonstration project is to "bundle" together the hospital's and physicians' payments for a patient's care into one lump sum, that would then be divided by the parties. Should this payment approach gain momentum, having in place the underlying cost accounting and decision support systems to truly manage care and to fairly and equitably divide the bundled payment would be a must.
- ***Improve labor productivity and invest in your staff's ability to work smarter, not harder.*** Secondly, the hospital needs to implement, or update and revise, departmental labor productivity standards (e.g., standards for the laboratory or nursing) and manage to these productivity standards in a much more disciplined fashion. Many hospitals and health systems, when they examine their department-level productivity performance over the past three to five years, realize that staff productivity has declined. In other words, the organization is using more labor time and costs per unit of output. In virtually all such cases, this trend must stop.

  One approach taken by some hospitals has been as simple as asking each department to reattain its 2004 actual productivity levels. This approach may yield surprisingly great reductions in labor costs, particularly for hospitals for which volumes over the last five years have been reasonably flat. If your institution has experienced rapid growth, you would expect to see productivity improvements. Just "maintaining" productivity levels over the past few years is not good enough—growth should have allowed the institution to spread fixed labor costs (e.g., supervisors) over a larger base.

  In addition, the board should encourage management to reevaluate its labor strategy. Hospitals must reexamine and reengineer their compensation practices, including premium pay and overtime pay, as well as the use of temporary (so called "traveler") employees. A strategic approach to labor is particularly important today since major labor unions, including the Service Employees International Union (SEIU), have targeted hospitals for membership drives across the country. It is critical that the hospital retain the ability to redesign care processes to enhance quality and improve cost effectiveness. Despite the difficulties that negotiating or renegotiating union contracts may entail, every effort should be made to reach an

Exhibit 6: Key Financial Terms

Term/Ratio	Definition	Measure
Cash	= Unrestricted cash and investments + unrestricted board designated funds	Liquidity
Days cash on hand	= [Cash /(operating expenses – depreciation expense)] x 365 days	Liquidity
Debt service coverage	= (Net income + depreciation & amortization expenses + interest expense)/ (interest + principle)	Ability to repay debt
Long-term debt to capitalization	= Long term debt/(unrestricted net assets + long term debt)	Leverage
Net income	= Operating income + net non-operating revenue	Profitability
Operating income	= Total operating revenue – Total operating expenses	Profitability
Unrestricted cash to long-term debt	= Cash/long-term debt	Liquidity

agreement that provides management with the needed flexibility to improve productivity while respecting the rights of its employees.

The key to achieving and maintaining meaningful labor productivity improvements, longer term, will be to invest in technology and process redesign to enable the hospital's staff to work more efficiently and effectively, not simply try to accomplish their jobs with fewer available human resources.

- ***Proactively support the evolution of traditional staff and professional roles.*** Hospitals need to take a leadership position at both the state and national levels in encouraging appropriate changes that would facilitate the use of a wider range of staff and professionals in roles from which they are prohibited today. The realities of the healthcare labor market, such as forecasts for substantial nursing shortages and primary care shortages (along with shortages in numerous other technical and physician specialties), coupled with emerging technologies and care processes, show the need to open up opportunities for lesser skilled and trained staff and professionals to perform functions currently restricted to the few.
- ***Implement more effective supply chain management initiatives.*** There is a tremendous opportunity for many hospitals to standardize supplies, especially implantable devices and medical supplies. Board members, especially those with manufacturing or retail backgrounds, can offer great insights from their business background to aid the hospital in these efforts.

Second Response: Enhance Revenues and Revenue-Related Cash Flows

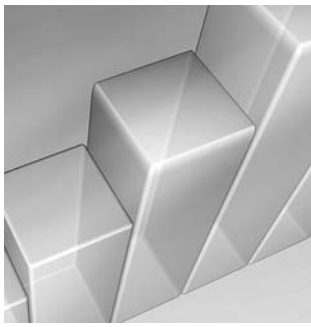
Simultaneously with the first response (reducing operating costs), the board should charge management with identifying all legitimate strategies to enhance short-term revenues and cash flow. Often, the first priority is to improve revenue cycle management, including strengthening both front-end processes such as registration, scheduling, insurance verification, and copay and deductible collection, as well as ensuring that the hospital receives all payments due under its current contractual arrangements. Longer term, the hospital may be able to renegotiate payer contracts under terms that provide fairer and more adequate payment.

Additionally, the hospital should ensure that its days in accounts receivable are as low as possible. This is a one-time vehicle for increasing cash, but should not be overlooked.

In addition, the hospital and system should seek to grow revenues by prudent, focused service-line growth initiatives. Care must be taken to ensure that this "top-line" growth translates into bottom-line growth (profits). The days are long gone when simply growing admissions or outpatient business would readily translate into operating profits.

Third Response: Shrink, Divest, or Close Lines of Business or Entities that Require Ongoing Subsidization

"Cut losers." The third response to improving cash flow in the short run is to reexamine all service lines and entities, with a particular focus on those that require a cash subsidy. This is explored in greater depth in section IV. However, the necessary first step is for the board to determine which services are core to achieving its mission. Services that are tangentially or indirectly related to the core mission and that require a subsidy are immediate candidates for downsizing and/or closure.



Longer term, closing or divesting non-core business lines should not be the only focus of the reassessment process. All lines of business and entities need to be evaluated against a consistent set of balanced criteria. The board and senior management should be willing to consider downsizing, restructuring, or closing services that are less strategically important and that are draining financial resources that could be better deployed elsewhere.

Short-Term Action #4: Reassess Financial Capability

Financial capability is the amount of capital, including both equity investments (cash the hospital will invest) as well as borrowed money (debt), a hospital or health system can invest at an acceptable level of risk.

If we have all learned one thing over the past year, it is that our financial capability is dynamic, not static. Many hospitals have seen their financial capability reduced by tens of millions of dollars; larger systems have seen their financial capability reduced by hundreds of millions of dollars.

Two Basic Components of Financial Capability

There are two components of financial capability:

1. Available cash
2. Investment balances that can be used for capital expenditures

The hospital or system should determine how much cash it will have available over the next three to five years, net of the cash reserves (days cash on hand) targeted for the end of the forecast period. Sources include:

- Cash generated from operations (operating income plus non-cash items such as amortization and depreciation)
- Cash generated from philanthropy, fundraising, and other contributions
- Cash earnings on existing investments (when and if the capital markets return to normal)
- The amount of unrestricted cash or investment that may be used to support a capital project while always maintaining minimum targeted days cash on hand

Hospitals and systems are seeing dramatic declines in cash and investments available for capital expenditures. For example, a larger A-rated health system recently revealed that not only had the system lost over $100 million on investments in calendar year 2008, resulting in days cash on hand (refer to **Exhibit 6**) falling by almost 50 days to under 120 days, but also reductions in patient volume generated operating losses. The system finished 2008 with a negative 4.0 percent margin. Therefore, three of the four cash sources identified above (cash generated by operations, cash earnings on existing investments, and the amount of unrestricted cash) declined substantially in 2008.

Incremental Borrowing

Debt includes issuing long-term, tax-exempt debt or using other financing vehicles that can be undertaken prudently. (This white paper does not focus on alternative financing sources; rather the focus is on capital allocation and investment.) This borrowing amount is known as *debt capacity*. Of course, in the short term the critical question is, "When will capital markets stabilize such that borrowing at reasonable rates, not necessarily the low interest rates of the past several years, will once again be a reality?"

What Determines Debt Capacity?

Many board members, particularly those without a financial background, enter the world of hospital finance and feel that, like Alice in Wonderland, they have fallen through a rabbit hole!

Between the complexities of the reimbursement system and the nomenclature of capital finance, some board members defer totally to their peers and the financial experts in management on all financial questions. While, of course, board members should rely on those with the greatest expertise, the basic underlying concepts related to debt capacity are relatively easy to understand and should be understood by *all* board members.

If we go back to the "good old days," when bankers lent prudently to those looking to acquire a home, there were always two fundamental questions that the banker would ask of the potential homebuyer: "How much money do you make?" and "How much are you going to put down on your house?"

In financial terms, these translate into the following:

- "How much money do you make?" is asked because any prudent lender needs to understand the free cash flow available to support timely debt repayment. This is called an *income statement* or *cash flow* approach. In the hospital or health system setting, the question would be reframed as "What portion of your cash flow will go to repaying the debt obligation (interest and principle) each year?"

  The computation or measurement of cash available to repay debt is known as the *debt service coverage* ratio (or DSC ratio). It is computed as shown in **Exhibit 6**. A higher ratio is preferred; it indicates that the organization is generating greater cash flow compared to its annual principle and interest payments. Lower ratios indicate greater financial risk, both for the lender and the borrower.

  Currently, the median DSC ratio for A-rated hospitals is 4.7x.[22] In layman's terms, this means that for all A-rated hospitals across the country, half of them in 2008 generated at least $4.70 for each $1.00 of debt repayment; the other half generated less than $4.70.
- The second determinant of debt capacity is the so-called *balance sheet* approach. It is akin to answering the question, "How much are you going to put down on your house?" For hospitals, naturally, the question is framed differently and the expected equity contribution is different from traditional home mortgage equity. However, the general concept is similar, and easily understood by any board member.

  Unlike the income statement or cash flow approach outlined above, which seeks to limit risk by ensuring that free cash flow is

22 Standard & Poor's, "Not for Profit Healthcare Mid-Year Update and 2008 Median Ratios," *September 2008 Ratios for Hospitals*.

substantially greater than debt repayment requirements, the balance sheet approach seeks to limit risk based upon the strength of the organization's balance sheet, with emphasis on the organization's cash and leverage positions. Over the past several years, bond rating agencies such as Standard & Poor's, Moody's, and Fitch have shown a strong bias in their ratings to rewarding hospitals and systems that hold substantial cash and investments on their balance sheets.

There are three commonly used balance sheet ratios that every board member should understand and monitor:

- ***Long-term debt to capitalization.*** This leverage ratio measures the dependence of the organization on using debt as a source of financing its asset base. The definition is shown in **Exhibit 6**. In 2008, A-rated hospitals had a median long-term debt to capitalization ratio of 32.1 percent.
- ***Days cash on hand*** is a measure of the hospital's liquidity and flexibility, a key measure of financial strength. The definition is shown in **Exhibit 6**. In 2008, the median value for A-rated hospitals was 205 days cash on hand. The stock market declines over the past six months have reduced these cash reserves more than 35 percent for most systems. The average hospital or system that held 205 days cash on hand in June 2008 likely holds less than 140 days cash on hand today.
- ***Unrestricted cash to long-term debt.*** This ratio is less frequently monitored by hospital boards, but is a key indicator of financial strength. As its name implies, this ratio compares the amount of unrestricted cash and investments an organization holds to its total long-term debt. In 2008, the median for A-rated hospitals was 1.4x. In other words, half of all A-rated hospitals had $1.40 of cash/unrestricted investments for every dollar of long-term debt. Naturally, having sufficient cash resources to repay all long-term debt is considered highly desirable by lenders.

Math alone would estimate that the average hospital with a 1.4x unrestricted cash to long-term debt ratio last June currently has a ratio at or lower than 1.0x.

What Creditors Are Looking For

Hospital board members also must understand what creditors/rating agencies are looking for when they establish a bond rating; this is then used by lenders both to determine whether to lend to the hospital or health system and at what interest rate, and to identify restrictive debt covenants. Creditors are generally looking for:

- ***A strong and stable balance sheet,*** with substantial cash balances after the project is completed.
- ***Strong sustained operating results;*** specifically, operating income before any investment income of 3 percent or more, sustained over time. This is a must for credit-worthiness and the board should look to management to find ways to achieve this without compromising quality of care.
- ***Clear, board-approved plans to address the consequences of the national economic crisis and, particularly, the local economic impact.*** This is particularly true in hard-hit states such as Michigan, Rhode Island, Nevada, Florida, and California. However, it is generically true across all markets.
- ***Stable or growing utilization levels.*** Of particular importance is focused growth; that is, that the hospital or health system can demonstrate it is growing in areas that it has deemed most critical for its future success. The board should ask management to keep it informed of local market changes, particularly related to whether volumes in targeted growth areas are softening across the market.
- ***Specific "turnaround" plans*** for troubled subsidiaries or lines of business. Rating agencies and other lenders want specific actions taken to limit the financial exposure of the hospital or heath system.

Boards must avoid the temptation to put strategic projects on a permanent hold. Short term, this may be required. However, the board must be careful not to cut off key long-term strategies of value in the interests of short-term conservatism.

Practical Tips for the Board in Reassessing Financial Capability

The board should reassess the hospital's or health system's financial capability immediately, if it hasn't already done so. All board members should understand the implications of the new, lower, financial capability on the organization. In addition, the board should establish clear financial targets, especially for the next two years, pegged to a targeted bond rating five years out. These financial indicators will include the key ratios of: operating and total margin targets, days cash on hand targets, capitalization ratio targets, cash to long-term debt targets, and other key leverage and liquidity ratios.

In addition to understanding the current financial capability and establishing financial targets, the board should identify three to five specific steps to take immediately to start increasing financial capability. As described in Short-Term Action #3, such steps could include one-time actions that improve short-term cash flow (e.g., reduce days in accounts receivable to generate cash), to improving operating margin (e.g., through reduction of expenses), to focused efforts to increase market share, to stepping up philanthropy even in challenging financial circumstances.

Short-Term Action #5: Delay Non-Essential Projects

The board, like its counterparts across the country, should immediately delay non-essential projects. Of course, the critical question is, "What is non-essential?" The hospital's mission and vision statements should provide guidance for determining whether a project is critical. Recommended actions for the board include:

- ***Ask management to identify all projects that could be delayed without violating life safety codes or regulatory requirements or compromising quality.*** This is the list of "potential," non-essential projects, all of which should be vigorously reviewed before taking any action to move them forward.
- ***Ensure that the board fully understands the "costs of delay" on any project that may be deferred.*** In the short term, delaying a non-essential project may seem like an obvious decision. While it may well be very prudent, it is essential that the board understand the "hidden" costs of delay to making an informed decision. These costs could range from things as obvious as project inflation to more subtle "costs" related to a diminished competitive positioning if others in the market, already ahead of the hospital, widen the strategic gap.
- ***Reassess all strategic priorities in the hospital's or system's strategic plan given the new economic realities.*** With the hospital's reduced financial capability, the amount of capital available for both replacement and strategic projects has been diminished. It is critical that while delaying so-called "non-essential" projects, those that are strategic but not essential are thoroughly reviewed to determine when and if they should be undertaken. Boards must avoid the temptation to put strategic projects on a permanent hold. Short term, this may be required. However, the board must be careful not to cut off key long-term strategies of value in the interests of short-term conservatism.
- ***Finally, give priority to projects with the strongest short-term return on investment (three to five years).*** It is essential that the hospital fund projects that have a high likelihood of generating a strong financial return quickly in order to expand future financial capability. This is described more in Short-Term Action #6.

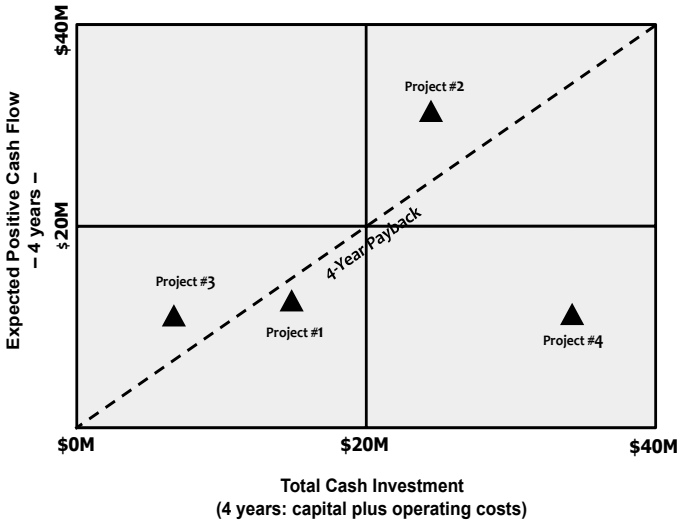
Short-Term Action #6: Favor Projects with a Short Payback

Traditionally, hospitals have used a "return on investment" (ROI) criterion as a primary factor in allocating capital. Such an approach is used across all industries because it is the best indicator of an investment's ability to generate future positive cash flows and therefore expand future financial capabilities.

However, there can be a difference between projects with strong long-term ROIs and projects that generate a short-term payback. The payback period is defined as the time required before net cash inflows (returns) "repay" the sum of the original investments. Essentially, it measures how long an investment takes to "pay for itself." The payback approach is easy to understand and to compute. Obviously, it favors projects with lower capital investments, since these projects can more easily generate the cash flow needed to pay back the investment in the short term.

When using a payback approach, the board needs to recognize that major capital-intensive investments that may have a better long-term ROI will be disadvantaged. For example, major construction—such as building a major ambulatory center in a new market—may generate a strong, positive ROI over a six- to eight-year period. However, over a two- to four-year period, this project may not achieve a "payback."

Exhibit 7: Favor Projects with Short Payback



As indicated in **Exhibit 7**, Project #2 is forecast to generate net positive cash flow within four years of inception. On the other hand, Project #4, which might well have a greater long-term ROI, is expected to be a net user of cash over the four-year period. With a strong need to enhance short-term financial capability, the hospital or system would prefer Project #2 to Project #4 because it will provide greater financial flexibility by 2013.

Exhibit 8: Capital Asset Planning Approach

Generic Asset Enhancement Strategies	Illustrative Examples
1. Maximize use of existing	• *Maintenance programs* • *Preventive maintenance systems for all biomedical equipment*
2. Add new technologies to what you have	• *Change lab equipment* • *Add non-invasive diagnostics* • *Modular offices*
3. Adapt/retrofit what you have	• *Remodel lobby* • *Reduce size via closing* • *Change boiler* • *Convert wing to fitness spa*
4. Dispose what you have	• *Sell office building to doctors* • *Close rural satellite clinics* • *Sell lab to physician—hospital joint venture*
5. Add new facilities (cautiously)	• *Build adjacent surgi-center* • *Add new entrance* • *Add new emergency room*
6. New designs	• *Modular partitions in lab/x-ray* • *Energy conservation* • *Economize staffing via nurse station*

Source: Rice, James A., Ph.D., FACHE and David A. Schuh, *Capital Asset Planning: An Integrated Approach* (white paper), The Governance Institute, Spring 2005. Developed from Exhibit 3.

The payback approach is well suited to periods of uncertainty. Its focus on generating short-term cash flow reduces the risks intrinsic in longer-term returns in an uncertain future.

It is essential that the board asks management to assess all projects, from both a "payback" approach and a "return on investment" approach, to identify the long-term advantages and disadvantages of each. As is always the case, the board must make an informed decision, recognizing the risks or disadvantages of its decision.

Short-Term Action #7: Focus on Core Business

All tough economic times result in businesses "focusing on their knitting." In other words, focusing capital investment and management time on those business components most core to their mission, vision, and future success. For hospitals or health systems, this means reassessing your business lines to determine if they are core to your purpose, truly needed by the community, and affordable while maintaining viability. Common examples of services that may be considered non-core include: home healthcare, ambulance and helicopter services, long-term care facilities, senior living centers, wellness centers, geographically dispersed primary care clinics, and owned health plans. This list is not meant to be exhaustive nor to imply that these services/entities are never core or financial contributors, but to stimulate discussion at the board level of "what is core to us."

To determine what is core, the board must have a clear, meaningful, directive mission statement. The mission statement should help you differentiate between and among services, projects, and initiatives regarding which best further the core purpose of the organization. Today, many mission statements are far too broad to provide meaningful guidance to the board in assessing what is "core." Therefore, step one in focusing on the core business is revisiting the mission statement to ensure that it is directional and useful to separating what is core from what is not.

The board should request that management reassess the entire continuum of care offered, especially any service line or component that is being subsidized or "consuming" financial resources. Such subsidized services directly reduce financial capability. They should be maintained "as is" only if they meet four criteria: (a) they are *critical* to achieving the organization's purpose, (b) no other provider could meet the community's need, (c) they are proven (not assumed) to be run efficiently, and (d) they do not jeopardize the financial viability of the organization.

The board also should identify any entities or business lines for which there are ready buyers. Even under normal circumstances, the board should ask itself why it would *not* divest of a business or entity in order to generate cash that could be better deployed elsewhere (or saved to improve the balance sheet). It is better to start with the question, "Why would we *not* divest?" than to start with the question, "Why *would* we divest?"

Such financial discipline and board focus are called for in today's harsh economic times.

Short-Term Action #8: Leverage Existing Capital Investments

The board should request that management audit the success of capital expenditures undertaken over the past five years. The key questions are: "Did we get the expected return on investment?" and "What are the lessons learned over the past five years?"

For example, a regional hospital system invested $250 million in capital between 2004 and 2008. This is approximately half of its annual net patient revenue. Over the past 18 months, its operating margins have shrunk despite the "promised" positive returns associated with each project when approved by the board. Management conducted a review to:

- Identify what occurred for each major project versus the original business plan expectations.
- Identify specific actions to get each project "back on track." For example, one of the projects was a new bed tower at a hospital that, during construction, unexpectedly lost 500 inpatient discharges. Management identified actions to both recover those "lost" discharges and to build to the original business plan volumes.
- Identify a more vigorous and ongoing "post-project approval" monitoring process for the board to use.

The Governance Institute published a white paper in the spring of 2005 entitled *Capital Asset Planning: An Integrated Approach.*[23] It defined capital asset planning as "a process whereby financial realities are carefully assessed; phasing of new capital spending is taken into account; and plans for the protection, maintenance, and control of existing assets are incorporated into the overall program." **Exhibit 8** presents six key aspects of the authors' approach, more relevant than ever today.

Short-Term Action #9: Cut Costs of Required Projects

For projects that are deemed immediately essential, and therefore require short-term investment, leaders should ensure the maximum benefit for the dollars expended. A recent study[24] indicated that hospital project costs could be reduced by 10 percent and time-to-market reduced by 25 percent by using a combination of:

- *LEAN* standards
- Building information modeling (BIM)
- An integrated project delivery (IPD) approach

A representative from Sutter Health System was quoted as saying "Once we had adopted IPD and LEAN for standards with all major capital projects, experience tells us we cannot go back."[25]

The case study below from Montgomery General Hospital, a community hospital located in the Washington, D.C. suburbs, outlines the approach it took to achieve its facility objectives while significantly reducing the associated project costs. As demonstrated in this case study, Montgomery General reduced its project costs by one-third while achieving the vast majority of its desired outcomes.

23 J. A. Rice, Ph.D., FACHE and D. A. Schuh, *Capital Asset Planning: An Integrated Approach* (white paper), The Governance Institute, Spring 2005.

24 J. Young, "Best Practices Cut the Cost of Capital Projects," *Strategic Financial Planning* (HFMA), Vol. 3, No 1, Winter 2008.

25 *Ibid*.

CASE STUDY

Montgomery General Hospital
Reducing the Cost of Capital Projects

Montgomery General Hospital is a 165-bed not-for-profit community hospital located in the Washington, D.C. suburbs in an affluent, fast-growing area. Montgomery General is a member of MedStar Health.

First Approach

In 2005, prior to joining MedStar, the hospital hired a well-known architectural firm to develop a "... forward-looking plan for how the organization will use its site and facilities in furthering its business purpose."

The resultant master facility plan included a new professional office building (POB), an additional parking garage, a major outpatient expansion including an emergency room expansion, major diagnostic department renovations, inpatient expansion, new construction and renovations to create private patient rooms, an updated women's health unit, and an expanded intermediate care unit.

The ambitious project included relocating the emergency department to the other side of the hospital's campus to optimize traffic and patient flows. While desirable, the hospital knew that the local community would likely be up in arms at the proposed roadway changes.

The price tag of approximately $100 million included about $20 million for the POB. Since the hospital expected to have a developer construct the POB, the net cost to the hospital would have been $80 million.

The Second Opinion

The hospital knew that undertaking an $80 million project was beyond its financial capability. The CEO recalled working at a previous institution with a design-build firm that had offered a "second opinion" service. The design-build firm was engaged to identify potential solutions that would (a) generally accomplish the objectives outlined by management, (b) be lower-cost or able to be implemented in phases to make it more affordable, and (c) would not be controversial with the local community.

The result? The hospital currently is in the midst of a $30 million construction project being undertaken by the design-build firm. The project anticipates, as phase two, approximately $20 million in additional construction/renovation, bringing the total project to $50 million, or *more than 35 percent lower* than the original estimated costs.

This more affordable project includes all of Montgomery General's high priority elements in the original $80 million project, albeit in a different approach:

- Montgomery General will have a new emergency department, with 40 beds versus the 32 in the original (big) project approach. Not relocating this department saved a great deal of money.
- The hospital will develop private medical/surgical beds from renovation versus new construction. These private rooms will be slightly smaller than "best case" but will be functional and provide the amenities needed to be competitive in the market.
- The original, larger project expanded ICU capacity by two beds and intermediate care capacity by seven beds. The current project eliminated these expansions.
- The phased approach allowed the hospital to obtain the short-term benefits (and cash flow) of a newly renovated and expanded emergency department prior to commencing the second phase.
- The plans for phase two are underway, allowing the hospital to customize the approach to finishing shell space and preparing for the remaining renovations.

Lessons Learned

1. Don't be afraid to get a second opinion.
2. Focus on functionality and balance "perfect solutions" versus the cost of perfection. Sometimes the last 5 percent of your requirements adds disproportionate amounts of capital costs. Can you live with 95 percent of your requirements for 65 percent of the cost?
3. Not all buildings need to win national architectural awards to work for your patients, your physicians and staff, and your communities.
4. Timing can be critical. Projects that can be phased or opened more quickly provide great benefits.

Short-Term Action #10: Start/Rejuvenate Long-Term Financial Planning and Capital Allocation Processes

The board needs to start or reinvigorate its long-term strategic financial planning processes. The short-term actions outlined in this section are a great first step, but not a substitute for ongoing strategic financial planning. The elements of the long-term financial planning and long-term capital allocations processes are outlined in section IV.

Exhibit 9 presents a checklist of short-term actions recommended for the board to shore up the organization's financial position in order to position itself for a more rational, long-term capital investment and allocation process.

Exhibit 9: Checklist of Short-Term Actions for the Board

- ❑ Get board members, physician leaders, nurse leaders, and management on same page.
- ❑ Charge finance committee with identifying/updating capital investment processes/approaches.
- ❑ Create consensus about needed changes to your capital investment approaches.
- ❑ Communicate with community leaders.
- ❑ Reassess your financial capability.
- ❑ Identify three to five specific steps to start *now* to increase financial capability.
- ❑ Accept the reality of today's "days cash" *today*.
- ❑ Identify days cash targets for the next two fiscal years based upon today's starting point and targeted bond rating.
- ❑ Step up philanthropy.
- ❑ Improve current fiscal year operating results and defer expenditures to strengthen balance sheet.
- ❑ Give priority to projects with strongest ROI.
- ❑ Favor projects with short payback
- ❑ Ask management which projects can be delayed without violating life safety code issues or compromising quality.
- ❑ Make sure the board understands the "cost of delay" to making an informed decision.
- ❑ Understand labor implications of improving productivity.
- ❑ Target five-year operating margin >3% to ensure minimal long-term viability.
- ❑ Establish clear financial targets pegged to targeted bond rating in five years.
- ❑ Reassess all business lines and continuum of care.
- ❑ Identify any businesses for which there are ready buyers: should we divest to generate cash?
- ❑ Take immediate corrective action early on any services/entities being subsidized.
- ❑ Reassess strategic priorities given new economic realities.
- ❑ Clarify your mission statement to help you know "what *is* core."
- ❑ Audit results for capital expended over past five years: Did we get expected ROI? What are the lessons learned for future allocation?
- ❑ Identify actions that could be taken now to increase return on already invested capital.
- ❑ Actively investigate alternative approaches to projects that could save substantial dollars.
- ❑ Make sure your hospital/system uses best practices for project development and management.

IV. Longer Term: Develop a Rational Capital Investment Policy

Unless leaders believe that the organization's current positioning is optimal for the long term, at some point you will need to begin investing again, in a fashion that is both prudent and consistent with the organization's long-term strategic direction.

The board and senior management must work together to develop a rational basis for long-term capital allocation. The approach must ensure that:

- ***The hospital or health system can remain competitive*** in its local marketplace attracting high-quality personnel and physicians, attracting patients as a desired destination for care, and offering services that are high quality, accessible, and affordable.
- ***"Mission and margin" are balanced.*** The hospital or health system is not merely an economic entity, but a community resource. Therefore, capital allocation needs to focus on addressing the community's health needs in a manner that maximizes financial viability, current and future.
- ***Sufficient strategic capital is invested.*** The board must ensure that capital is allocated for strategic positioning, rather than simply investing to replace existing facilities and services. This is necessary because there generally are not enough dollars available to fully replace plant and equipment. Difficult decisions must be made regarding reinvestment/replacement in order to free up capital for strategic investment, whether for information technologies, new clinical technologies, new sites of care or delivery models, or other strategic investments.
- ***The capital investment policy anticipates new models of care and likely changes in the marketplace.*** It is critically important that the capital investment policy not simply "reinvest in what has been successful in the past." Future uncertainties must be kept front and center.
- ***The capital investment policy must have, as a primary goal, maintaining or enhancing the long-term financial flexibility of the organization.*** Uncertain times call for even greater than usual financial flexibility. Translated into practical terms, this means that the capital investment policy must articulate as a specific goal strengthening the balance sheet, a key determinant of financial strength and flexibility.

Key Questions: Long-Term Capital Investment Policy

Exhibit 10 identifies the major questions to be addressed in designing your long-term capital allocation strategy. Each of these questions is explored in greater detail in the remainder of this section.

It is critically important that the capital investment policy not simply "reinvest in what has been successful in the past." Future uncertainties must be kept front and center.

How Much Capital Investment Is Affordable?

A strategic financial plan is the basis for determining how much capital can be invested by the organization over the next five years. A strategic financial plan incorporates the results of a financial capability

Exhibit 10: Questions for Long-Term Capital Policy

Question to be Addressed	Approaches/Vehicles
How much capital investment can we afford?	Financial capability assessment/ strategic financial plan
How big is our "financial gap"	Strategic financial plan
What principles should guide our capital allocation?	Guiding principles
What projects should receive priority for capital?	Capital allocation process/ project review criteria
What are the risks?	Sensitivity analyses/scenarios
Did we get what we expected?	Monitoring process

assessment (outlined in section III), but goes well beyond such an assessment.

What is a strategic financial plan? It is not simply a capital plan or multi-year capital budget. A strategic financial plan aligns the organization's mission, vision, and goals with available resources. This is its "strategic" aspect. The "financial" portion of this plan is that it recognizes that the organization cannot afford to do everything that it wishes to accomplish. The strategic financial plan specifically seeks to set priorities to improve overall financial performance, strength, and flexibility. It views all uses of capital as competing for the same scarce, limited resources. It does not "grandfather in" any categories of capital (e.g., replacing the nursing units) as necessary. Instead, it makes replacement capital compete with strategic capital.

Key Components of a Strategic Financial Plan

A strategic financial plan starts with a five-year forecast of baseline operating performance and cash flow. This "most likely" financial forecast incorporates market trends and expected changes, known or extremely likely payment changes, realistic cost inflation, and existing board-approved capital investments. The five-year forecast should include projected income statements, statements of cash flow, and balance sheets.

Management will identify the resource requirements, both capital and operating, and the financial benefits, including revenues and cost savings, associated with strategies. Generally, the proposed strategies in aggregate will not be affordable and priorities will need to be set using an objective set of evaluation criteria.

Sensitivity Analyses

It is critically important that the baseline financial forecasts are neither overly optimistic nor unnecessarily conservative. An overly optimistic forecast creates a sense that the organization has greater financial wherewithal than is real. An overly pessimistic forecast is equally unrealistic. Especially in periods of great uncertainty, it is easy to generate "gloom and doom" projections. Care must be taken to identify what is most likely to occur and to then model "best case" and "worst case" scenarios as sensitivity analyses.

A sensitivity analysis is a "what if" assessment; it must be used with logic and care. For example, assume that the hospital or health system has identified three sensitivity analyses: one related to cuts in payment, one related to a reduction in demand for services, and one related to costs increasing faster than expected. Let us further assume that each of these sensitivity analyses is independent and each has a 40 percent likelihood of occurring. The likelihood that all three would occur simultaneously is only 6.4 percent (40% x 40% x 40% = 6.4%).

A more sophisticated approach to assessing risk is to use Monte Carlo simulation, which essentially computes a distribution of combinations of outcomes based upon repeated random sampling simulations. This approach can help all parties understand the likely risks when there are many uncertainties.

Magnitude of the Financial Gap

In section III, the basic approach to determining financial capability was outlined. This is only half of the equation. This identifies the "sources of available funds" (that can prudently be allocated) and is sometimes referred to as the "capital constraint."[26] This is a key first step in the organization's identifying its "financial gap." Every organization has a financial gap, defined as the difference between financial capability (or "capital constraint") and the potential uses of capital, including routine capital spending.

Exhibit 11: The Financial Gap

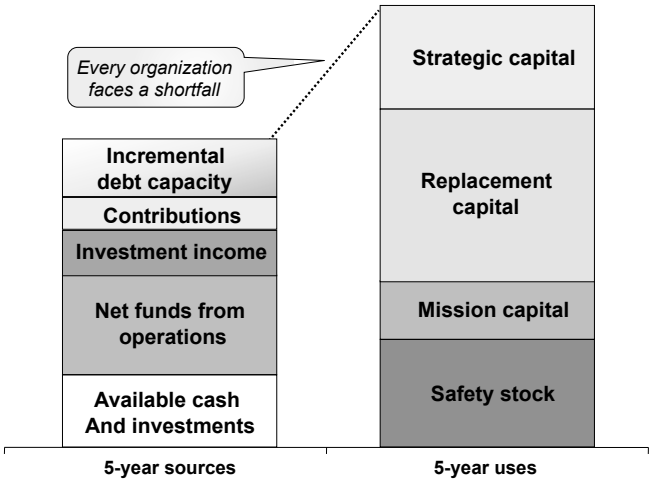


Exhibit 11 identifies, on the left side, the five *sources of capital* identified in section III. On the right are *uses of capital*—terminology that may be new to board members. The four uses are described below.

Safety stock. This is essentially the cash and unrestricted investment balances held in reserve at the end of the forecast period. These dollars provide future financial flexibility as well as ability to fund a short-term

26 HFMA, GE Commercial Finance, and Kaufman, Hall & Associates, Inc., "Principle 6. Consistent Templates or Formats Facilitate Evaluation of Capital Investment Opportunities," *Financing the Future II – Report 3: Essentials of Integrated Strategic Financial Planning and Capital Allocation,* Healthcare Financial Management Association, November, 2005.

economic downturn crisis. The most common measure of safety stock is the targeted cash or days cash on hand at the end of the period.

Safety stock, or cash and unrestricted investments, should be reduced from targeted levels only for unforeseen contingencies and with the approval of the board. In such cases, replenishment of these funds should be the board's top investment priority.

Mission capital. This use of funds is associated with capital that is invested for needed services that are expected to never break even; that is, they always will require a cash subsidy. From a financial perspective, capital invested in this category is fully consumed and will never replenish itself. It is essential for the board to understand that investing in mission projects, while worthwhile and appropriate—even essential—for a not-for-profit organization, is the financial equivalent to "burning money on the front lawn of the hospital."

Despite this image of a conflagration, *mission capital should not be excluded from consideration*. Instead, it is essential that such capital investment be made knowingly and intentionally. Board and management alike should be certain that capital allocated for "mission" goes to the best and highest use of scarce resources.

The board should establish the amount of capital to be allocated to subsidized programs and services. This should be affordable, based upon the financial forecasts. Also, to ensure long-term financial integrity the board should explicitly require that other projects/investments generate greater cash flows (returns) to offset these mission-related subsidies.

Replacement capital. This is capital that is invested to maintain the current range of services at current site(s). Such capital is often needed to enhance or maintain quality, patient or resident satisfaction, convenience, or cost effectiveness. All are laudatory objectives. However, great care must be taken to ensure that all capital allocated to replacement projects is warranted. As described later in this section, it is prudent to use portfolio assessment or other similar approaches to determine which current services, product lines, or entities warrant capital infusion for growth, which should be maintained without a capital infusion, and which should be candidates for shrinkage or even closure.

Given the changes in care delivery expected over the next decade, it is essential that the hospital not allocate an excessive amount of its financial capability to simply replacing what it already operates. Certainly, some replacement capital is necessary and should be given priority. However, the board must ensure that replacement capital does not crowd out strategic capital or safety stock.

Annual replacement capital is typically funded as a percentage of depreciation expense (historically, for stronger organizations, at 100 percent of depreciation). However, in the current capital crisis, the board should reexamine how much funding is allocated to replacement capital. Past levels may not be sustainable.

Finally, a key question for the board is: "What ROI should we expect from replacement capital investments?" We know that mission capital investments generate a negative return. If no return is expected from replacement capital, leaders are depending upon returns generated from cash/investments and the (relatively small amounts of) truly strategic investments for the entire return. Is this a reasonable approach to ensuring long-term viability? Is this over-reliance on investment income, in particular, how we have gotten into our current financial predicament?

Strategic capital. This is capital that changes or expands the organization's range of services or its capacity to serve patients or residents, repositions the organization in a very special way, or changes the organization's geographic reach (e.g., new ambulatory facilities in an outlying market). Typically, such capital investments are accompanied by a rigorous business plan that presents an expected return on investment (ROI). Unfortunately, no such ROI requirement is used or even expected by many organizations for replacement capital expenditures.

Ironically, most hospitals and systems allocate fewer dollars to truly strategic capital than to replacement or mission capital. How, then, can financial viability be assured? Often this allocation has been made without an explicit articulation of both strategic and financial goals. The results generally are not, therefore, what the hospital or health system desired. To avoid misallocating scarce capital, it is essential that each organization develop a strategic financial plan that integrates long-term strategic objectives with practical financial realities.

Practical Tips for the Board: The Strategic Financial Plan

In developing a solid strategic financial plan the board should:

- ***Ensure that the strategic financial planning process is not just a capital budgeting process.*** The strategic financial plan must integrate the strategic plan with a reasonable, multi-year financial plan.
- ***Include sensitivity analyses.*** As described in section II, no one has a crystal ball. What would be the impact on your hospital of such events as national healthcare reform, major cuts in Medicare payments, consumer-driven healthcare taking off, or a major and sustained decline in elective procedures and volumes?
- ***Identify ways to improve cost effectiveness.*** This is essential to increase your sources of funding and reduce the size of your "financial gap."
- ***Examine historical capital investments by category (mission, replacement, and strategic).*** How much has your organization allocated over the past five years to mission capital? To replacement capital? To strategic capital? Was the board aware, at the time, of the implications of the capital allocation distribution?

Exhibit 12: Strategic Financial Plan "In a Nutshell"

Guiding Principles	• **All board work.**
Credible Baseline	• Baseline financial forecasts must be reasonable, not a "best case" or "hoped for" forecast. • **Incorporate already board-approved capital and strategies.**
Quantify Resources	• Identify incremental operating costs, capital requirements, and revenues by year to implement strategic plan and achieve targets.
Financial Gap	• **Target days cash on hand & capitalization ratio for bond rating.** • Identify magnitude of the "financial gap." • Identify approaches to increase sources to shrink the gap.
Trade-Off	• Quantify and trade-off strategies based upon available resources and resource requirements. • **Reduce/delay or do not undertake strategic initiatives;** review existing programs/initiatives.
Update Metrics	• Recalibrate metrics (measures/targets) for that are reasonable/achievable, given the strategic financial plan and final strategies. • Realize that not all metrics can be top-level performance/represent quantum leap.

Note: **Bold** indicates board policy issues.

Exhibit 12 presents the key elements of the strategic financial plan "in a nutshell." As indicated, a good strategic financial plan incorporates:

- ***Guiding principles***—approved by the board and described in this section.
- ***A credible baseline case financial forecast***, as described earlier.
- ***A quantification of the resources required to implement projects and strategies***.

It is especially important that the leaders identify not just the capital requirements but the incremental operating costs associated with plan implementation. Many organizations focus exclusively on capital investment when allocating capital, ignoring associated operating costs. A particularly good example relates to information technology investment. At one hospital, for every dollar of capital to be invested in information technology over the next four years, there was an associated $0.80 in incremental operating costs. It is essential that the full financial impact be included in the financial model.

Magnitude of the Financial Gap

The financial gap described earlier will be closed by a combination of reducing capital investments and increasing funding sources. The board should not allow the gap to be closed by reducing ending cash/investment balances to below targeted levels. It is important that the long-term days cash on hand target (and the reasons for that target) are kept front and center and any actions that would reduce cash to below the targeted levels be made only after there has been explicit agreement to the implications of this change of policy. The gap is better closed by improving internally generated cash flows as outlined in the short-term actions, by becoming more effective at fundraising, and/or by saying "no" to projects that are beyond the financial reach of your hospital or health system.

Priority Setting

Projects and investments must compete against each other for funding. That is the "trade off" component of the strategic financial plan. The board should ask management what desirable projects or initiatives have been delayed or not undertaken, based upon the financial realities facing the organization.

Updated Metrics or Expected Outcomes

Once the strategic financial plan is complete, leaders should expect that some of the "lofty objectives" embedded in a preliminary strategic plan cannot be achieved. For example, the strategic plan may call for the hospital to perform at the top decile across all quality, safety, and patient satisfaction scores. However, if the needed resources cannot be committed to these objectives, the targets should be scaled back. It is not reasonable to hold management accountable for quantum improvements in performance, unless the associated capital investments (and other resources) have been committed.

Strategic Financial Planning: Guiding Principles

The foundation for a good strategic financial plan is a set of guiding principles, endorsed by the board, to set the stage for management's work. Guiding principles typically include the following elements:

- ***A targeted bond rating*** for the end of the forecast period (usually five years out). This should include key liquidity and leverage ratios as previously defined in Exhibit 6.

- ***An explicit articulation of expected operating margin levels*** during the five-year period. For example, the hospital should maintain at least a 4 percent operating margin during the five-year period.
- ***The need to say "no."*** Some boards have established a principle that they want senior management to identify potentially desirable strategies or projects that have been delayed or deferred, due to financial constraints. Not all worthy projects or initiatives can be undertaken and some boards want management to demonstrate its willingness to say "no."
- ***Implications of allocating capital to mission-related projects.*** This principle ensures that all leaders understand the explicit requirement that other investments must generate a greater return on investment to compensate for the zero or negative returns associated with mission capital.
- ***Focus on the vital few.*** Often called the "rifle" approach rather than the "shotgun" approach, another common guiding principle relates to partially funding or underfunding numerous initiatives. Instead, investment should be focused on the most important priorities and projects. There are two good reasons for this. First, many strategies or projects do not generate a return until they are fully funded and operational. Therefore, partial funding may result in never achieving the desired return. Secondly, there is the inexorable increase in funding that generally accompanies partially funded projects ("in for a dime, in for a dollar").
- ***Recognize the inter-connectedness of strategies.*** A final common principle relates to an explicit recognition of the inter-connectedness of strategies. It is essential to recognize and fund foundational initiatives that may not generate a return on their own, but are required in order to support other top priority projects.

Project Review Process

The board should ensure that an objective project review process is used for all major capital expenditures, whether for strategic, replacement, or mission-related purposes. Naturally, the rigor and requirements of the process will increase based upon the size of the capital expenditure. For example, small capital expenditures should not undergo the same scrutiny as multi-million dollar projects.

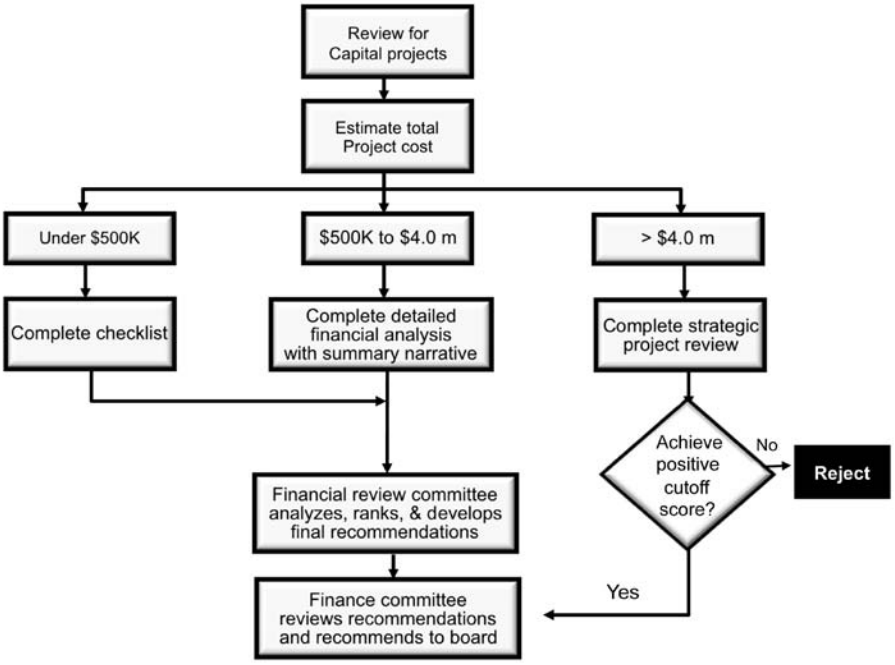
The cutoff points for review requirements vary by size of the organization. Typically, projects of less than $500,000 would be reviewed based upon a "checklist" approach with no five-year financial forecasts required. Projects between $500,000 and $4.0 million would require a five-year financial projection, but a short narrative description. Projects over $4.0 million—whether for mission-related activities, replacement of facilities or equipment, or for strategic purposes—would require a complete financial analysis and detailed project review.

It is important that all proposed capital expenditures—excluding capital for life safety code or regulatory requirements—receive screening:

- ***All projects or expenditures should be reviewed to ensure consistency with the mission.*** Any project or initiative that cannot be *directly* correlated to the mission should be rejected. Actually, this does not eliminate many projects.
- ***Use of a checklist for smaller projects/expenditures.*** For smaller projects (typically mission or replacement capital), the finance committee should ensure that management uses a *checklist review,* which helps to set priorities between and among small requests. Your board and finance committee should work together to establish guidelines for review.

Management will make recommendations to the finance committee regarding priorities for smaller capital expenditures,

Exhibit 13: Project Evaluation Review Flow



typically as part of the annual capital budget. The finance committee should be charged with reviewing and setting final priorities, and recommending these priorities to the board as part of the annual budgeting process.

- ***Larger projects—between $500,000 and $4.0 million—require more detailed analysis.*** A sound capital project review process requires five years of *pro forma* financial projections with assumptions that are clearly defined and substantiated. A summary narrative should indicate the strategic "fit" of the project or initiative with a set of project review criteria that have been approved by the board. The finance committee would recommend action to the full board. However, there is no need to do a detailed evaluation against every criterion or to rank each of these mid-sized initiatives/projects, unless you desire to do so.
- ***Major project review.*** Major projects such as major replacements of facilities and/or major strategic initiatives require a detailed review, balancing strategic, mission, and financial considerations. As indicated in **Exhibit 13**, all projects compete for limited resources against each other, regardless of project size or type. Exhibit 13 refers to a "positive cut-off score" for major projects being reviewed. This scoring relates to the development and application of a robust set of *project review criteria*, described below.

Project Review Criteria

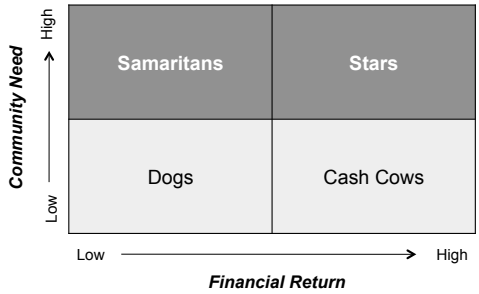
When asked, hospital and health system leaders almost always identify return on investment (ROI) as their primary criterion for determining whether to fund a capital project. However, in our experience, decision making in not-for-profit organizations is significantly more complex. The board is entrusted with stewardship of resources that, while under their governance control, are really the community's. Therefore, decisions about capital investment must reflect the community's interests, balanced with the board's responsibility to ensure the long-term financial integrity of the organization.

William Cleverley, Ph.D., a long-standing and highly regarded healthcare finance expert, said "In the taxable (corporate) world, the primary objective is maximization of shareholder wealth, measured by ROI…but in the tax-exempt (hospital) world, ultimately, we believe that the measurement of return is linked to achievement of mission."[27]

Exhibit 14 presents a *capital investment analysis framework* developed by Dr. Cleverly that emphasizes the importance of considering community need as well as potential financial return. Obviously, all organizations want to invest in the "stars" and to avoid investing in the "dogs." It is invaluable to frame the hospital's or health system's project evaluation criteria to assist management, the finance committee, and

27 W. O. Cleverly, Ph.D., "Ten Critical Questions for Healthcare Boards and Senior Executives," *Strategic Financial Planning* (HFMA), July 16, 2008.

Exhibit 14: Capital Investment Analysis Framework



Source: Cleverley & Associates; HFMA, *Strategic Financial Planning,* Fall 2008.

the board as a whole to understand how different projects and initiatives fall within a matrix such as this.

A good set of project review criteria encompasses mission, strategic, and financial considerations. **Exhibit 15** shows an example of such criteria. Importantly, the process of developing these criteria can be a valuable, team-building experience for board and management. The board should both help craft these criteria and determine their relative weights.

Mission-related criteria should directly correlate to your organization's mission statement. For example, if your mission is to "enhance the health of the community," then you would favor initiatives that directly address top community health issues.

Strategic criteria must tie to key elements of your desired future positioning. For example, a sample criterion included in Exhibit 15 articulates "targets the growing eastern portion of the service area." This was relevant because the strategic plan had identified specific geography as a priority for future growth and development. The board should look for a direct correlation between strategy and project review criteria.

Another strategic criterion included in Exhibit 15 is "medical staff support." This is often the unspoken but most powerful determinant of whether a project moves forward. In their desire to be objective, many hospitals and health systems fail to adequately address the importance of (or even to include) this one criterion. In our experience, it is better to directly incorporate it, if it is important to your decision making, and to weight this criterion appropriately.

Financial criteria should articulate your financial preferences, such as a short payback period. One sample financial criterion in Exhibit 15 is "risk-adjusted ROI." What is the appropriate risk adjustment? Section II outlined key business risks to be considered in project review. As the business risks associated with the project increase, so should the expected risk-adjusted return requirements.

Using Project Review Criteria

In order for project review criteria and the overall process to be meaningful, it is essential that:

- ***Each of the criteria can be objectively measured.*** It is essential that criteria are both meaningful and measurable. An objective mechanism for "scoring" each criterion must be established and used consistently. Typically, the scoring for each criterion ranges from zero points to three points. Against any one criterion, only the top quartile of projects would receive the maximum scoring. In selected cases, a criterion

Exhibit 15: Sample Project Review Criteria

		Criteria	Measurement
Mission	1.	Mission ("go/no go")	Furthers the mission of the organization of improving health
	2.	Community need	Addresses health needs documented in the community needs assessment
	3.	Image/reputation	Strengthens image of first-class facility with M.D.s & patients
Strategic	4.	Quality/safety	Directly enhances quality of clinical outcomes or patient safety
	5.	Medical staff support	Has strong support of medical staff(s)
	6.	Geographic expansion	Targets the growing eastern portion of service area
	7.	Incremental inpatients	Increases inpatient admissions in areas for focused growth
	8.	Incremental outpatients	Increases outpatient volumes in areas for focused growth
Financial	9.	Track record	Service line/entity has met or exceeded its budget over the last 3 years
	10.	Risk-adjusted ROI	Provides rate of return commensurate with risk
	11.	Payback period	Prefer projects with shorter payback period
	12.	Payment risk	Prefer services with lower percentages of public payers
	13.	Cost effectiveness	Generates tangible dollar savings from the project/improves cost effectiveness of care

Exhibit 16: Portfolio Assessment Approach

Approach Explanation/ Description	Close/ Divest	Shrink/ Downsize/ Reposition	Stabilize/ Enhance	Grow
	✓ Divest or stop operating. ✓ No tangible benefits. ✓ Consumes resources better devoted elsewhere.	✓ Reduce resources allocated. ✓ Free up resources better devoted elsewhere.	✓ Improve entity/ service. ✓ Increase the tangible benefits. ✓ Enhancement, *not growth,* is focus.	✓ Devote strategic capital and time to growing the entity/service.

may require qualitative assessment and ranking. This is acceptable as long as the evaluation process is clear, fair, and transparent.

- ***The criteria must be weighted based upon their relative importance.*** Not all criteria are created equally, nor are the mission, business, and financial categories necessarily equal in importance. The board should articulate, first, the relative importance of each of the three categories. Typically, the financial category will receive the greatest relative weighting—often accounting for 40 percent or more of total scoring. In today's uncertain and troubled economic times, the board may weigh the financial category even higher.

  Once the weightings of these three categories have been established, the board and management (working together) should evaluate the relative importance of each criterion within a category. For example, the community need criterion may carry a relative weight of five percent while the risk-adjusted ROI criterion may carry a weight of twenty percent.
- ***The project review criteria and their relative weightings should be well known within the organization.*** Transparency in the project review process is not only critical but also beneficial in many ways. One indirect benefit of using a rigorous capital review process is that the board and senior management have clearly articulated "what it takes for a project to be approved." In this way, physician leaders and managers throughout the organization will understand whether a program, service, or initiative in which they are interested is likely to "match" what the hospital or health system is seeking.

The Portfolio Assessment Process

The project review process outlined above focuses on capital associated with new initiatives. In addition to reviewing proposed capital expenditures as they are identified, the hospital or health system needs to reevaluate its current portfolio of services, programs, or entities. The financial reality for many organizations is this: in order to have sufficient capital to invest in the "vital few" priority programs or services that should be grown or developed, resources may need to free up from other program areas. This process, known as the *portfolio assessment process*, has been used in the corporate world for decades. It has been used infrequently as an ongoing tool in not-for-profit hospitals or health systems. Instead, typically, leaders review individual "troubled" service lines or businesses that are candidates for downsizing, closure, or divestment, on an isolated basis.

This is a new reality for most historically successful hospitals and health systems.

Portfolio Assessment Is a Tool, Not an Answer

The portfolio assessment process is just that, a process or a tool to assist leaders in making informed decisions regarding:

- Identifying the "vital few" services, programs, or entities for growth and development
- Identifying services, programs, or entities that should focus not on growth but on improving their performance
- Limiting capital investment in lower priority services, programs, and entities
- Identifying targets for downsizing, closing, or divestment

While extremely valuable, the portfolio assessment results are never a substitute for board and management judgment.

Exhibit 16 presents a schematic representation of the portfolio assessment process. At the conclusion of such a process, all programs, services, or entities (depending upon the approach used by the hospital or health system) will be categorized under one of these four

columns: grow; stabilize or enhance; shrink, downsize, or reposition; or close/divest.

It is essential that board leaders, managers, and physician leaders understand the purpose of shrinking, closing, or divesting some services or entities. The rationale is to free up resources that can be redeployed to areas offering a better fit with the organization's mission, strategy, and financial requirements. As resources are increasingly constrained, hospitals and systems will be unable to invest needed capital into those (few) best opportunities for growth and development unless they redeploy capital from other areas. This is a new reality for most historically successful hospitals and systems. In the past, most successful organizations were able to access capital to simultaneously grow numerous programs and services. Today, with constrained capital access, all healthcare organizations will need to make difficult capital investment choices.

Management, with board approval, will articulate a set of evaluation criteria for the portfolio process. These criteria should be congruent with the capital project review criteria. However, there are likely to be some important differences, additions, or modifications for the portfolio process. For example, in the portfolio process, leaders may want to give higher priority to service lines that have demonstrated exceptional clinical outcomes, have received national recognition for quality, and/or have demonstrated outstanding patient satisfaction. These types of criteria might be incorporated as part of the "strategic fit." Similarly, while for capital project review, ROI is an essential criterion, in the portfolio assessment process (where there may not be a major capital investment required), often hospitals and systems incorporate a "financial contribution" criterion (e.g., contribution margin) in place of or in addition to ROI.

The portfolio assessment process establishes an objective, transparent process for decision making and priority setting. This process communicates that the organization is ready to stop trying to be "all things to all people."

Prior to embarking on a portfolio assessment process, which requires a major investment of staff time, the board needs to do some soul searching to honestly assess "Are we, as a board, willing to make the tough decisions related to downsizing, closing, or divesting current programs and services?" Unless the board can honestly answer that question "Yes," you should not commence the portfolio assessment process.

Summary: Practical Tips for the Board—Long-Term Capital Allocation/Investment

In order to ensure that your hospital or health system has in place a sound, long-term approach to capital investment, the board should:

- Assume that the future will not be a continuation of the past.
- Clearly articulate guiding principles related to desired future financial performance and positioning.
- Identify long-term financial capability, based upon a five-year strategic financial plan, targeted financial performance levels, and a bond rating for five years from now and beyond.
- Articulate acceptable levels of business risks as well as external financing risks.
- Reassess capital expenditures over the past five years by category: mission, replacement, and strategic. Identify whether this allocation (a) matched the organization's strategic plan, and (b) was appropriate to achieve your desired future positioning.
- Develop an objective and transparent capital allocation process, using measurable project review criteria. Review all major projects whether mission, replacement, or strategic, capital investments.
- Require a detailed business plan for all large projects.
- Ensure that your capital project review criteria and your portfolio assessment criteria reflect your mission, strategic and financial preferences—and their relative importance.
- Before embarking on portfolio assessment, do some real soul searching: "Are we really willing to make the tough decisions related to downsizing, closing, or divesting of current services?" Don't undertake the portfolio assessment process unless you are committed to implementing recommendations at the end of the process.
- Be prepared for backlash if previous capital allocation has been based more on politics than on a transparent, objective process.
- Build cash—future uncertainties make this an absolute must!

References

1. *2009 Almanac of Hospitals Financial and Operating Indicators*. Salt Lake City, UT: INGENIX, 2008.
2. American Hospital Association. *Report on the Capital Crisis: Impact on American Hospitals*. Chicago, IL: American Hospital Association, January 2009.
3. American Hospital Association. *Report on the Economic Crisis: Initial Impact on Hospitals*. Chicago, IL: American Hospital Association, November 2008.
4. Burik, D. and Irwin, M. *The Capital Gap: Top Actions for Health System Boards* (white paper). San Diego, CA: The Governance Institute, Spring 2004.
5. Cleverly, W. O., Ph.D. "Optimal Capital Structure: A Mix of Debt and Equity." *Strategic Financial Planning*, Vol. 3, No 4, Fall 2008. Westchester, IL: Healthcare Financial Management Association.
6. Cleverly, W. O., Ph.D. "Ten Critical Questions for Healthcare Boards and Senior Executives." *Strategic Financial Planning*, July 16, 2008. Westchester, IL: Healthcare Financial Management Association.
7. Corrigan, J., Ph.D. "Transforming Health Care in a Time of Crisis." *hfm*, February 2009. Westchester, IL: Healthcare Financial Management Association.
8. Courtney, H. and Kirkland, J. "Strategy Under Uncertainty." *Harvard Business Review*, November–December 1997. Boston, MA: Harvard Business School Press.
9. Evans, M. "Recession's Sting Revealed in '08." *Modern Healthcare*, February 23, 2009. Chicago, IL: Crain Communications, Inc.
10. Evans, M. "Playing Defense." *Modern Healthcare*, Vol. 39, No. 6, February 9, 2009. Chicago, IL: Crain Communications, Inc.
11. HFMA. *The Financial Health of U.S. Hospitals and Healthcare Systems* (survey). Westchester, IL: Healthcare Financial Management Association, January 2009.
12. HFMA, GE Commercial Finance, and Kaufman, Hall & Associates, Inc. *Financing the Future II – Report 3: Essentials of Integrated Strategic Financial Planning and Capital Allocation.* Westchester, IL: Healthcare Financial Management Association, November 2005.
13. Jennings, M. C. "From Good to Great: Connect Finance & Quality with Long Term Vision." *Boardroom Press*, Vol. 18, No. 2, April 2007. San Diego, CA: The Governance Institute.
14. Jennings, M. C. "The Importance of Cash for Long-Term Financial Health." *Boardroom Press*, Vol. 16, No. 4, August 2005. San Diego, CA: The Governance Institute.
15. Jennings, M. C. "Why Does Your Bond Rating Matter." *Boardroom Press*, Vol. 16, No. 3, June 2005. San Diego, CA: The Governance Institute.
16. Jennings, M. C. "Too Many Projects, Not Enough Capital—Part 1." *E-Briefings*, Vol. 4, No. 1, January 2007. San Diego, CA: The Governance Institute.
17. Jennings, M. C. "Too Many Projects, Not Enough Capital—Part 2." *E-Briefings*, Vol. 4, No. 2, March 2007. San Diego, CA: The Governance Institute.
18. Jennings, M. C. "Allocating Capital: The Financial Gap," *Boardroom Press*, Vol. 15, No. 4, October 2004. San Diego, CA: The Governance Institute.
19. Jennings, M. C., Editor. *Health Care Strategy for Uncertain Times*. Chicago, IL: AHA Press/Jossey-Bass, 2000.
20. Jha, A. "The Use of Electronic Health Records in H.S. Hospitals." *The New England Journal of Medicine,* online edition, March 26, 2009. Waltham, MA: The Massachusetts Medical Society.
21. Kaufman, K. "Managing Risk in a Challenging Financial Environment." *hfm*, August 2008. Westchester, IL: Healthcare Financial Management Association.
22. Kaufman, K. and Grube, M. E. "Hospital Strategy in the Current Credit Crisis: 7 Must-Do Actions." *Trustee*, Vol. 61, No. 10, November/December 2008. Chicago, IL: Health Forum, Inc.
23. Maji, C. L. and York, R. "Repositioning the Outpatient Business: A Framework for Strategic and Financial Growth." *Strategic Financial Planning*, Vol. 3, No. 4, Fall 2008. Westchester, IL: Healthcare Financial Management Association.
24. *National Health Expenditure Data*, Centers for Medicare & Medicaid Services, 2008.

25. *New Merriam-Webster Dictionary*. Springfield, MA: Merriam-Webster, Inc., 1989.

26. Rice, J. A., Ph.D. and Schuh, D. A. *Capital Asset Planning: An Integrated Approach* (white paper). San Diego, CA: The Governance Institute, Spring 2005.

27. Standard & Poor's. "Not for Profit Healthcare Mid-Year Update and 2008 Median Ratios." *September 2008 Ratios for Hospitals*. New York, NY: Standard & Poor's Financial Services LLC.

28. Stulz, R. M. "Six Ways Companies Mismanage Risk." *Harvard Business Review*, Vol. 87, No. 3, March 2009. Boston, MA: Harvard Business School Press.

29. Sull, D. "How to Thrive in Turbulent Markets." *Harvard Business Review*, Vol. 87, No. 2, February 2009. Boston, MA: Harvard Business School Press.

30. Wellspring Partners. *Ten Steps to Survive the Imperfect Storm in Healthcare*. Chicago, IL: Huron Consulting Group, Inc., 2009.

31. Young, J. "Best Practices Cut the Cost of Capital Projects." *Strategic Financial Planning*, Vol. 3, No 1, Winter 2008. Westchester, IL: Healthcare Financial Management Association.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