

# EXECUTIVE BRIEFING 1

By Susanna E. Krentz and  
Thomas R. Miller

## How to Evaluate Financial Risks

**R**isk has a negative connotation and is often viewed as something to be avoided. However, incurring risk is not inherently bad. It is important to understand risk—and financial risk, specifically—to ensure that an organization’s portfolio of activity reflects an appropriate level of risk given the organization’s culture, financial position and strategic plan.

### RISK POSTURE

The board plays an important role in defining the risk posture, also known as risk tolerance, of an organization. However, a more complete view of risk posture considers a combination of risk tolerance and risk appetite. Risk tolerance implies a defensive approach to risk, while risk appetite suggests a more strategic approach that recognizes that meaningful strategic gains generally require an element of risk-taking, or the proverbial “no pain, no gain” scenario.

The board should have an explicit discussion about risk to ensure that leadership has a shared perspective about both the tolerance and appetite for risk. Most importantly, this conversation should be part of an organization’s strategic thinking because risk posture may influence organizational direction and priorities.

How should a conversation about risk posture be framed? At its simplest, the question is: Are people in the organization comfortable taking risk?

This can be expanded by thinking about risk tolerance or appetite for the key risk categories for an organization. An organization may be willing to take on more financial risk while wanting to minimize any quality or safety risks (See Assess Your Organization’s Risk Posture, page 19).

### ELEMENTS OF RISK

Risk has many faces. While most ultimately translate into a financial impact, to manage risk, an organization needs to identify it and take steps to mitigate its frequency and impact.

A typical health care organization faces four types of risks.

#### 1. Financial

- **Credit:** The risk that an organization’s bond rating or ability to access capital is reduced
- **Capital:** The risk of capital cost overruns
- **Cost structure:** The risk of higher-than-expected supply or labor costs
- **Revenue structure:** The risk that payer class mix will change or that average payments will be much less than expected

#### 2. Performance

- **Quality:** The risk that outcomes will be impacted negatively
- **Safety:** The risk that a patient, employee or the public’s safety will be impacted negatively
- **Compliance:** The risk of being out

of compliance with regulations

- **Legal:** The risk of legal liability

#### 3. External

- **Regulatory:** The risk that Medicare or Medicaid rules will change

#### 4. Strategic

- **Market:** The risk that the market or demand for a new venture will not materialize

- **Reputational:** The risk that the good will of an organization is compromised

- **Physician-capacity availability:** The risk of losing physician capacity and therefore availability and access

- **Relational:** The risk of harm to the relationship between an organization and stakeholders such as physicians

All types of risk come together in enterprise risk management, which is a comprehensive, three-dimensional view of the risk facing an organization. While many risks ultimately can be translated into financial implications (for example, if market share goes down, so may patient revenue), effectively managing the risk should not be viewed solely as a financial challenge or as a problem for risk managers

Trustee Executive Briefing is  
made possible through the  
generous support of

**CONIFER**  
HEALTH SOLUTIONS™

alone. The various kinds of risk need to be part of the decision-making process throughout an organization and integrated into myriad business decisions.

ERM focuses on the development of a methodology to create repeatable processes to identify, evaluate and monitor risk on an ongoing basis. This requires an understanding of the top risk factors for an organization, project or area, and the estimated frequency and severity of their occurrence. This approach to understanding and managing risk is multidimensional and can require synthesizing the perspectives of different areas of an organization to paint a robust picture of risk.

### Risk vs. Uncertainty

There is a big difference between risk and uncertainty. The level of risk is directly related to the probability of a certain outcome. Higher-risk paths are associated with a lower probability of actually occurring. Organizations undertake risky directions when the outcomes are so desirable that the probability of failure makes it worthwhile.

If an outcome is so uncertain that no probability can be assigned to it, then the situation falls off the risk scale. In today's climate, many hospi-

tals face uncertainty. In most instances, however, certain actions can be assigned a probability of occurring that translates that uncertainty into risk. And risk can be evaluated in the context of an organization's risk posture. However, there are occasions when the probabilities, and therefore the risks, are unknown, and an organization faces true uncertainty. In this case, tools like scenario planning and sensitivity analyses can help frame decision-making.

## ACCOUNTING FOR RISK IN FINANCIAL PROJECTIONS

When reviewing a possible investment, most organizations develop financial projections that show the anticipated financial performance of the project and the impact of the proposed project on the whole organization. The answer to the question "Can we afford this?" is often different from the answer to "Is this a good use of our scarce resources?"

### Key Assumptions

In any financial projections, there are a number of basic considerations:

- **Time frame:** Financial projections generally should extend three to five years after the project's completion.

- **Capital outlays and financing costs:** These are the capital costs that will be spent on the project, which include any up-front and ongoing capital needs during the forecast period.

- **Volumes:** Expected utilization is one of the most critical and often most difficult assumptions to develop. Overly optimistic utilization assumptions can make an unattractive opportunity appear less risky than it really is.

- **Revenues:** These are the revenues associated with the project, including anticipated payer class mix and payer-specific payment levels.

- **Expenses:** This includes both salary and non-salary expenses, ideally built up with both fixed and variable costs.

- **Capital structure:** This is the project's impact on an organization's overall capital structure, including new aggregate debt service coverage.

Separate assumptions for the key drivers of risk are essential. For example, if volume and labor costs are the greatest risk factors, there should be separate assumptions for each.

Although financial forecasts may include the financing plan (that is, whether the project will be financed with cash or debt), in general, the decision to proceed with an investment shouldn't be affected by how an organization plans to finance it. That is, a good project is a good project, regardless of how an organization would pay for it. The converse is equally true.

### Net Present Value and Internal Rate of Return

There are two frequently used calculations to understand the anticipated financial performance of a project.

**Net present value:** NPV calculates the difference between the present value of the cash outlays for a project and the present value of the cash inflows. This calculation requires that there are projections of the cash outlays and inflows over time and an assumption about a discount rate to translate future dollars into current values. When selecting a discount rate, trustees should consider expected inflation over the time period and a targeted return over and above inflation that reflects the risk of the specific opportunity.

When a project has a positive NPV, there is an expected positive cash flow over and above inflation and the targeted return. Such projects are financially appealing. If a project has a negative NPV, there is an expected negative cash flow or the project won't generate enough cash to cover inflation and the targeted return. Such a project would be a financial drain on an organization over time.

**Internal rate of return:** The IRR is the discount rate required to achieve a net present value of zero. The higher a project's IRR, the more attractive the project is financially. As with the NPV calculation, projections of cash outlays and inflows over time are needed.

If an organization has more than one project to consider, the IRRs should be compared to rank the pro-

## The ABCs of Risk

**ERM:** Enterprise risk management is a comprehensive view of the risk facing an organization.

**NPV:** Net present value calculates the difference between the present value of the cash outlay for a project and the present value of the cash inflow.

**IRR:** Internal rate of return is the discount rate required to achieve an NPV of zero.

**WACC:** Weighted average cost of capital is the average cost of the financing sources for an organization's assets.

ject’s financial appeal. Because the IRR calculation gives a rate of return, most organizations identify a “hurdle rate” or the minimum level of return before they will consider making an investment. The hurdle rate, similar to the discount rate, incorporates assumptions about inflation and required returns.

### Payback Period

A calculation that can complement the NPV and IRR calculations is the payback period. Because some of an organization’s financial risk is the magnitude of cash outlay in advance of the cash inflows, how quickly an organization will “repay” itself helps leadership understand a project’s financial risk.

A more refined payback-period analysis incorporates a discount rate to account for the time value of money. All things being equal, an organization would prefer to have a quicker payback period even if the IRR for two projects is the same.

### Weighted Average Cost of Capital

The weighted average cost of capital may be used as part of the NPV or IRR calculations. Simply put, this is the average of the costs of the various sources of financing for an organization’s assets. For example, an organization may have outstanding bonds at one interest rate and variable rate instruments at different interest-rate levels. The WACC is the average amount of interest the organization has to pay for every dollar it finances. Because of this, the WACC is used as a proxy if the project is expected to have a similar risk profile as the overall organization and will be financed without changing the average cost of capital. The discount rate or hurdle rate should reflect riskiness of the project being considered, and frequently projects have a different risk profile than the organization as a whole, so the WACC would not be appropriate.

### Terminal Value

Another important consideration in developing the financial forecasts for a project is the assumption about the

## Assess Your Organization’s Risk Posture

More Risk-Taking  More Risk-Averse

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
<b>Willingness to commit</b>	Our organization doesn’t feel compelled to “keep our options open” when evaluating opportunities.	-----	-----	-----	-----
<b>Fortitude</b>	We are willing to continue with implementation even if things are initially a little bumpy.	-----	-----	-----	-----
<b>No rose-colored glasses</b>	We have stopped doing something when it is clear it won’t meet our original expectations.	-----	-----	-----	-----
<b>Timing</b>	We think it’s important to be first to market with initiatives.	-----	-----	-----	-----
<b>Strategy vs. operations</b>	Our strategic priorities go beyond cost control and quality improvement, although these are critically important.	-----	-----	-----	-----
<b>Independence</b>	We are willing to take a different path than the other health care organizations in our market.	-----	-----	-----	-----
<b>Capacity to change</b>	Our organization has a history of successful change.	-----	-----	-----	-----
<b>Resource availability</b>	Our organization has money we can afford to lose.	-----	-----	-----	-----

Source: Krentz Consulting LLC, 2011

terminal value at the end of the forecast period. Consider the building of an ambulatory surgery center. The time frame for the financial forecasts will be three to five years after its opening. But, the ambulatory surgery center will continue its operations for longer than that time frame. Trying to project the behavior of individual revenues and expenses becomes less of a forecast and more of a guess. To handle this, financial forecasts generally will include a terminal or a perpetuity value. This often is calculated as an annuity value or as an annuity with a constant decreasing cash flow to reflect the greater uncertainty.

### Imperfections of the NPV and IRR analyses

While NPV and IRR are extremely helpful analyses, there are some chal-

lenges in ensuring useful results.

**1.** Cash flow assumptions become more difficult to model for each year in the forecasts. Additionally, because future years’ forecasts typically are built on the prior year, even a small erroneous assumption in an early year of the financial forecasts can result in a compounding error over time.

**2.** Time also makes capital expenditures more difficult the further out one goes. For capital-intensive projects, an incorrect estimate in the magnitude or the timing of the expenditure may have a big impact on the results.

**3.** The assumed discount rate or hurdle rate is critical in the usefulness of the calculation. Organizations sometimes prefer to use the IRR because the rate of return is transparent. In the NPV analysis, the discount rate is em-

bedded in the calculation and may not be as readily transparent.

### Risk Premiums

When developing a discount rate for an NPV analysis or the hurdle rate in an IRR analysis, it is possible to account for the relative riskiness of the project by adjusting the discount or hurdle rate assumption. For example, an organization typically requires a discount rate of inflation plus 2 percent. However, if a project presents significantly higher risk, the discount rate may be increased to reflect that, such as inflation plus 2 percent plus an additional 2 percent as a risk premium. A hurdle rate can be adjusted similarly to reflect the riskiness of various projects.

Another way to adjust for the increased risk of a project's terminal or perpetuity value is to add a risk premium to the discount rate used to calculate the annuity value. Given the greater uncertainty associated with the terminal value projections, a risk premium can bring greater confidence in the NPV or IRR results. However, organizations must be cautious. It is possible to overestimate risk, and assume

too high a risk premium, resulting in an organization's rejecting projects that may be appropriate for it to pursue.

When identifying risk, it is important to consider the current financial position of an organization. The same opportunity may have different levels of risk depending on the strength of an organization's current financial position. An organization that has a large fund balance designated for risky projects, for instance, or one that has a strong operating margin can take on a project with risk that other organizations couldn't consider.

### Sensitivity Analyses

One of the most important tools in understanding a project's financial risk is to incorporate sensitivity analyses into the NPV or IRR analyses performed for the financial projections. The targeted areas for the sensitivity analyses should be those variables that have the greatest risk of error in the assumption and those in which this type of error will have a material impact on the financial performance. Sensitivity analyses are a way to assess the confidence in the expected finan-

cial performance, and a way to isolate those variables that will require the most active management. As suggested previously, scenario analysis or another tool like Monte Carlo simulation (using random numbers and probability to solve problems) also can contribute to a better understanding of risky variables.

### Exit Strategies

Once a project is approved, it is helpful to consider what would trigger exiting the project if the risk can't be managed or avoided, and the project isn't performing as expected. The best time to identify exit triggers is when the project is approved as part of the risk assessment.

## EVALUATING COMPETING EXPENDITURES

Expected financial performance and financial riskiness are only one aspect of evaluating competing expenditures. In addition to an NPV or IRR result, other financial, market or mission criteria may be important for an organization to consider to ensure the right balance of risk tolerance and risk appetite. Effective resource allocation calls for an organization to understand what is important in light of its current position and strategic priorities. Applying evaluation criteria to competing opportunities will take an organization beyond financial considerations to a more fully balanced assessment (See How to Develop Evaluation Criteria, left).

Understanding the characteristics of risk for an organization is one of the essential functions of effective boards and executive management. Organizational leaders need to be aware of their risk posture and their tolerance and appetite for risk. Once an organization has committed to a strategy, leaders must monitor results closely. **T**

**Susanna E. Krentz, M.B.A.** ([skrentz@Krentz-Consulting.com](mailto:skrentz@Krentz-Consulting.com)), is president of Krentz Consulting LLC, Chicago. **Thomas R. Miller, Ph.D.**, is assistant professor, health policy and management, Texas A&M Health Science Center in College Station, Texas.

## How to Develop Evaluation Criteria

- ✓ Be mindful that no single set of criteria works for every organization.
- ✓ Develop criteria using a process that includes key constituents: board members, management, medical staff and other stakeholders.
- ✓ Decide what factors and characteristics are important and ensure criteria reflect these.
- ✓ Limit the number of criteria.
- ✓ Use criteria that are easy to understand and quantify (even if they are qualitative).
- ✓ Minimize the number of subjective criteria and couple these with concrete measurements and scores.
- ✓ Recognize that all criteria are not equal; that is, some criteria should carry greater weight than others.
- ✓ Consistency with an organization's mission and vision should be a minimum threshold for all projects.
- ✓ Live with the results.

Source: "Strategic Resource Allocation: The Board's Critical Role" by Susanna Krentz, Cathy Clark, Scott Clay and Dennis Kennedy; The AHAs Center for Healthcare Governance, 2009