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The Risk of Not Managing Risk

John K. Hogan

Clinical trials are complex projects that are subject to numerous risks. Minimizing risks to research subjects is paramount, but this article will discuss managing risks related to trial execution.

The typical clinical project manager manages risk with informal discussions at project meetings, without a systematic process for identifying, assessing, mitigating and avoiding risks. These discussions might be documented in meeting minutes, but without an accurate method for setting priorities or reliable system for follow up. When the next crisis *du jour* emerges, addressing *potential* problems becomes a low priority. However, that crisis often could have been avoided or mitigated — with far less cost, effort and drama — if the project team had already instituted a structured risk management process. The old saying, "Pay me now or pay me later," certainly applies to risk management, but with the additional caveat that fixing a problem is usually much more expensive than avoiding it and often leads to significant negative consequences.

Our organization recently managed the work of a well-known contract research organization (CRO) on a large, complex Phase III study with numerous vendors and sites, along with tight timelines and a challenging patient population. The CRO customarily employs many project management best practices, including risk management. Unfortunately, the project manager deferred creating a risk management plan so the project team could meet its start-up timeline. Not surprisingly, risks became actual problems, causing significant delays and client dissatisfaction. For example, late specifications delayed the lab kits and a shortage of trainers delayed rater training. Apparently, nobody asked the client to authorize a few days for planning to avoid the risk of problems that might delay the project for weeks or months. As a result, not only was the project delayed by about six weeks, but the project manager also had to accept full responsibility.

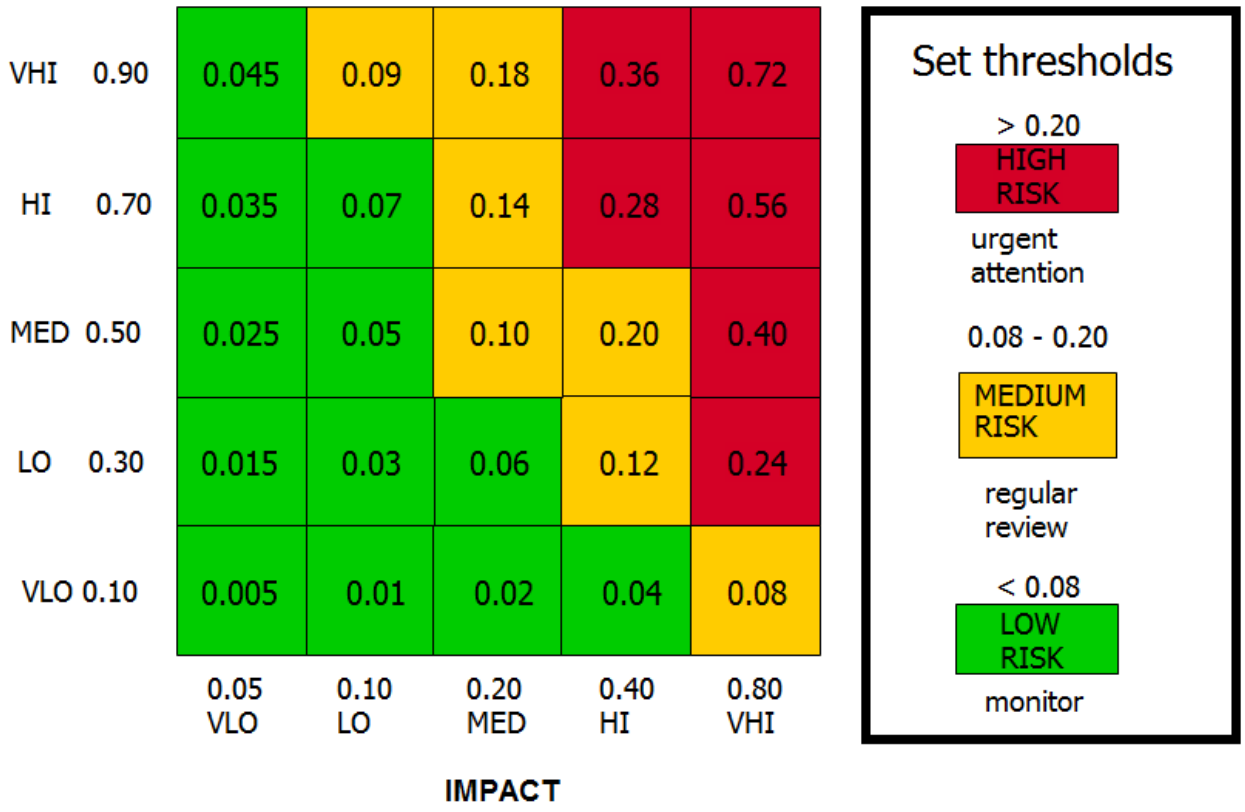
The challenge is to manage risk without risk management, itself, becoming an obstacle. Fortunately, a very simple tool, the Probability and Impact Matrix, can provide the foundation for an effective and only modestly time-consuming risk management process. The version of the matrix that we use (Figure 1) includes five levels of impact and five levels of probability. This matrix offers the great advantage of converting qualitative assessments into numeric scores that can be used to prioritize resources for addressing risks. Multiplying impact times probability yields a risk score of 0.0005 to 0.72. When an organization or project team starts using the matrix, it should verify that the risk scores correspond with its commonsense assessments. If not, the matrix or the scoring process can be revised.

With this matrix, the project team can identify, score and manage risks using a Risk Management Log (Figure 2). A Risk Management Log template can be found at http://www.firstclinical.com/journal/2014/1407_Risk_Log.xls.

Accurately assessing risks requires broad participation in the assessment process. Every group that could contribute to a risk or be affected by a risk that becomes reality should be represented. In the example above, it probably never occurred to the project manager to ask the vendor how it would handle enrollment that occurred faster than expected. The interaction of all the players can help identify risks that might otherwise fall in a crack and also mitigations that require cooperation among multiple groups. For example, if the vendor had been notified of enrollment trends early on, it could have ramped up production in time.

In addition, group participation can avoid mitigations in one area that create problems in another.

Figure 1. Probability and Impact Matrix



After a very rough start-up, the CRO implemented its risk management process and, for a couple of months, the project ran smoothly. So smoothly, in fact, that risk management again became a low priority. Remarkably, enrollment went faster than expected and a key vendor could not keep pace. As a result, we had to slow down enrolling sites and delay opening a number of planned, additional sites, potentially demotivating both. Had the CRO kept on top of risk management, we could have mitigated this risk without disrupting the sites. As this example demonstrates, risk management needs to start early and continue throughout a project because the risks change. This example also illustrates that seemingly good news can also create risks.

Risks and ongoing mitigations should be reviewed at project team meetings. The project manager should actively manage mitigation tasks between meetings. There should also be a process for surfacing risks that arise between meetings and adding them to the matrix for full-team review. To be effective, risk management must be a continuing process that is incorporated into the project team's routine work.

The risk management process is not complete until the project team completes two final tasks. First, it should assess the risk management process itself: Was it worthwhile? How can it be improved? Second, it should transfer its hard-won experience with all the risks to a knowledgebase that future project teams can access easily, so the risk-management wheel need not be reinvented for each new project.

Figure 2. Excerpt from Risk Management Log

	Project Name:			Date Created:				Review Frequency:			
Risk ID	Risk Description	Date ID'd	Open/ Closed	Prob-ability (P)	Impact (I)	Risk Rank (P x I)	Expected Time Frame for Impact	Service Group	Risk Owner	Risk Response Plan	Effectiveness of Risk Response Plan
1	Investigational product labeling may not be completed in advance of the anticipated first site initiation date	21-Apr-14	Closed	High	Very High	0.56	Start-up period	Regulatory	Sponsor	1) Pushback the date of the first initiation visit; 2) Determine if labeling vendor can add additional resources to complete task on time.	2) Labeling vendor not able to add any resources 1) Initiation visit date pushed back 8 weeks
2	Clinical database build may not be complete in advance of Investigator meeting on May 21st	1-May-14	Open	Medium	Medium	0.10	Start-up period	Biostatistics	CRO	1) Ensure appropriate resources are available to complete build on-time. 2) Determine if a split database release is possible to allow data to be entered for 1st subject visits. Second release would capture remaining visits.	1) Additional resources have been added. Additional resources appear to be on-track for delivering database on-time. Will continue to monitor closely. 2) Determined that split database release is not possible for this opportunity
3	Subject enrollment may be slower than the anticipated rate of 1.0 subject/site/month	14-Apr-14	Open	Very Low	Very Low	0.01	Enrollment period	Clinical Operations	CRO	1) Conducted competitive analysis which showed minimal competition for trial subjects and added additional sites to buffer any potential enrollment issues. Project team has decided that no further effort is required to mitigage risk at this time.	1) Enrollment is currently on track

If the project team concludes that the risk management process was, in fact, worthwhile, team members will be more likely to incorporate effective risk management in future projects. By allocating a bit of time for risk management, a much larger amount of time can usually be saved, as well as a lot of turmoil, exasperation and lost opportunity. Managing a clinical trial does not have to mean fighting one fire after another.

Author

John Hogan, MPM is Director of Project Management at Harvard Clinical Research Institute. Contact him at 1.617.307.5405 or John.Hogan@HCRI.Harvard.edu.

