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Avoiding the Perfect Storm

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Hospital building project delays come with inevitable conditions

There are an untold number of large projects that have been cancelled or delayed due to the economic uncertainties of our times; however, this is nothing new. Large projects, especially politically sensitive ones, have been delayed and resurrected ever since man started building. How do you manage the delay to make resurrection possible and do it efficiently? What is special and different about a large healthcare project that is delayed and brought back to life again?



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There are a few issues that cannot be avoided, and you must come to grips with them at the outset of any project delay. First, healthcare is a very dynamic business and new businesses, new services, new policies, and new service delivery methods will be started during the hiatus. Second, when the project is placed on hold or delayed, time will be lost and gone forever. And, finally, there will be cost escalation. Keep in mind, these issues cannot be ignored and should be addressed clearly and cleanly. There are logical procedures and philosophies that can be used to help respond to these inevitabilities.

During a recent project, [Matthei & Colin Associates](#) learned many things regarding these issues—what worked and what didn't work. After a four-year delay, [Meritus Regional Medical Center](#) in Hagerstown, Maryland, part of the [Washington County Health System](#), was completed in December 2010. The benefit of the experience was realized when our team tried to avoid the perfect storm.

Challenges

Healthcare, business, and technology changes. During the holding period, several new businesses were started at Meritus, including a comprehensive Wound Care Center with four hyperbaric chambers, a hospital-based infusion center, a Level II nursery, enhanced cardiac intervention facilities, and others. We also had to accommodate changes in the delivery of care that had profound implications for space and/or infrastructure. Some of the healthcare delivery methods that changed are: medications delivery and barcoding systems; enhanced workstations on wheels that included medications delivery enhancements; the continuing transition to digital health records; and upgraded and up-rated IT/IS systems.

During the delay, we met periodically with administration and key managers to assess impact to the project. If the impact was such that the plans and specifications needed to be altered, then we made the necessary changes.

Building code changes. When a project is delayed for a long period of time, codes and standards are likely to change. This project was impacted by the community switching from the Building Officials and Code Administrators (BOCA) guideline to the International Building Code (IBC). This change had a profound impact on the structural design, with vastly increased seismic requirements. There were also changes to the minimum guidelines and several other care standards.

Time. When time is lost due to a planned delay, there is usually no way to gain it back, but there are a few solutions to minimize the impact. A high emphasis was placed on the construction process. We needed to be ready to go when the conditions were favorable again for resuming construction. As part of this solution, a building permit was applied for and plan review fees were paid to position the project for a quick start.

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The building department was informed of the changes that we were making due to the changes in codes or design requests. By taking this step, the construction documents and permit applications were kept up-to-date so we could be ready to go right away. This effort yielded several positive results:

- Time was minimized for the restart of the project;
- The building department was treated as a team member and was eager to help us get restarted; and
- Equally important, the hospital and community at-large were kept engaged, so morale remained high.

Cost escalation. At some point, escalation and financing costs increase to the point that the proforma must be reconstructed. The construction manager was kept up-to-date on the changes so scheduling and cost impacts could be assessed and managed. When the certificate of need (CON) was clear, zoning legal challenges were dispensed with, and a comfort order from the bond guarantors was received, we were in the market within a month.

The final cost numbers were approved in the amended CON in January 2008, and bonds were sold and construction started in February. Thirty-three months later, the Washington County Health System was closing the old Washington County Hospital and treating patients in the new Meritus Regional Medical Center. A key to the success here: The financing documents were up-to-date.

Lessons learned

Acceleration during construction is the only way to recoup any of the lost time. In this case, the project was always ready to start immediately. Two key points made that possible. The building department was treated as a team member, and when the project restarted, they were on board and eager to move forward. Secondly, it was vitally important to manage the updates and continuously revise all project and building documents to move forward quickly when the project was under “go” conditions again.

These two key points allowed hospital administration to respond and work effectively with the financing and CON issues. These issues were in good shape because we addressed them as if the project was underway. All of these steps seem logical and effortless.

Good communication was essential to meet the challenges. As previously stated, new business units, new technology, and new healthcare delivery were added and planning was in motion here. Keeping everyone informed and diligently updating plans paid off.

We also assembled a design and construction team that was flexible and focused on the outcome, not self-protection. There were several site and construction conditions that could have pushed the schedule out further. The project theme was: “There is no extra time. Finish ahead of schedule.”

We employed several practical policies that yielded tangible results to keep the construction schedule moving forward, such as:

Address issues immediately. Quick resolution of issues prevents claims for damage and delay.

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1. Make prompt payments to contractors. This kept our project at the front of their priorities, and when we needed more men or material to keep on track, we received it.
2. Review all owner's purchase orders. The construction manager reviewed all the owner's purchase orders for equipment to ensure that infrastructure, installation, and rigging was covered in the construction documents or the vendor's quote.
3. Ensure that on-site project management time is included by the vendors. We were able to troubleshoot all the installation, access, and rigging issues for all of our major equipment, such as in the operating room(s) and imaging systems purchases. This step made the installation of these critical systems proceed without surprise.
4. Create a fund for overtime work. This fund was used to accelerate portions of work that would allow acceleration of the work whenever a positive cost benefit to the schedule could be identified.

Any large project should have tangible benefits attached to its completion. Increased revenues, improved patient safety, operational efficiencies, etc., are a few good examples. It is imperative to keep this in mind when planning and designing any building project and is not different with a hospital building project. There is a danger of forgetting about the identified benefit because a project has so many twists and turns that maintaining the right focus is difficult.

The overall delay, changes in capital and its costs, scope of the project, project costs, guidelines, and availability of the team provide tenuous conditions that can set up that perfect storm.

Ground rules need to be established on how to effectively manage the changed, and often accelerated, construction process. Every step, or misstep, is magnified and more costly. The entire team—hospital, construction, and design—agreed on how to move forward clearly and efficiently.

The patients and community were counting on the medical center to keep its promise. In this case, the project was very successful. It was completed on time with an accelerated schedule, challenging political climate, and tight capital construction costs.

Today's building climate is affected by the uncertain economic conditions and outlook, and the delay of healthcare construction projects is more likely than ever due to tight capital. We need to be prepared for this. The careful coordination of construction goals, hospital goals, and cost control are going to gain more attention now. Open communication and clear management objectives and approaches are the keys to solving many of the problems from these delays in construction. **HBI**

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