Clinical engineering (CE) and healthcare technology management (HTM) departments have the responsibility to manage many equipment and technology vendors, and healthcare facilities contract with vendors and third-party support organizations to implement and maintain many different types of technologies. However, most HTM departments are not proactive about monitoring vendor responsibilities and accountabilities; instead, they only interact with the vendor when problems occur. Trying to manage a vendor while in a downtime situation or after a crisis generally doesn’t provide the outcomes for which organizations strive. This article seeks to provide insight and best practices to proactively contract with and manage vendor relationships through contracts.

**Vendor Contracts**

Proper vendor management requires a proactive approach, which means starting with solid management of the relationships for all contracting parties. First, a good relationship with the end user is foundational. Alignment of the end user with the vendor can be achieved through understanding the uptime that clinicians require to maintain operations, their operational workflows, the relationships between clinicians and vendors, and their perceptions of third-party service providers. Second, good communications and a clear understanding of scope, roles, and responsibilities allows for growth and development of a collaborative relationship with your supply chain contract management department, as well as with vendors.

Contract management departments strive to create standard master terms and conditions that cover a whole host of legal and financial requirements and help set standards on how your organization works with the vendor organization. Generally, these are standard clauses and clinical engineers have little input into master terms and conditions. We would argue that CE and information technology (IT) departments should be proactively involved in understanding and adapting these conditions for the vendor, either through standard terms for all vendors or specific supplemental terms and conditions specific for a device or situation. For example, CE and IT should provide input on terms related to acceptance testing, warranties, manuals, clinical and technical training, IT security requirements, and payment terms.

After these terms and conditions are negotiated, a scope of work can be amended. This scope of work can be for a project/implementation or support for which you are contracting with the vendor. This scope of work should include:

- Specifications/requirements, including detailed lists of products/equipment, coverage types, hours of coverage, expectations, etc.
- Deliverables/milestones with schedule

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and, if needed, budget.

- Expectations for ongoing support for the product or service.
- Quality metrics that define the success of the project/implementation/support and how/when the metrics will be measured. These quality metrics ensure that specific Joint Commission and department of health requirements are met around assessing the quality performance of every vendor.
- Any additional requirements specific to your institution (e.g., business associate agreement, cybersecurity, vendor credentialing, background checks, vaccine requirements).
- Details for vendor reviews and vendor scorecard.

These details form the basics needed to begin holding vendors accountable. Without fully defining the requirements/specifications and quality metrics, holding vendors accountable is exceedingly difficult.

CE and IT departments should spend time developing this scope of work to define, for example, how the devices or services will be implemented and supported over the life of the product, response times, the individuals responsible for primary and secondary troubleshooting, and how updates/life cycle will be handled. All requirements and metrics for all aspects of the implementation, ongoing support, and life cycle of the products should be included in this section. These requirements and quality metrics become the basis for your scorecard for vendor reviews. Fundamentally, if it’s not documented in the scope of work, you can’t hold vendors accountable to it.

The final requirement that should be in every scope of work is a definition of how and when vendor reviews will be conducted. Generally, large, complex enterprise systems or premier vendor partners should be reviewed at least quarterly. In addition, including key stakeholders, which in most cases would be relevant clinical area, IT, and supply chain staff, in the review is imperative. Vendors and systems that are smaller and less complex may be reviewed semiannually or annually. Vendors should be provided the vendor scorecards the organization will use during assessment (Figure 1). In addition, a contract scope of work should clearly define what constitutes a “passing” grade and the remediation expectations for a “failing” grade. Remediation may include a 30- or 60-day time period to solve the issue or include financial remuneration on the following year’s contract cost. Either way, all of these terms and expectations should be included in the scope of work.

**Vendor Scorecards**
Well-documented and communicated vendor scorecards are clearly linked to the requirements, specifications, schedules, and quality metrics in your scope of work. Each scope of work should have its own vendor scorecard. If the scope is implementation based, the scorecard should include but not be limited to items such as timelines, deliverables, shipping, acceptance testing, invoicing, and customer service metrics. If the scope of work is service, support, or ongoing maintenance, then scorecards should include items such as response time, time to resolution, invoicing, customer service, and value. Each scorecard will be vendor and scope of work specific and should identify the responsible party for the action and next steps identified.

One can relate a vendor scorecard to a path for both parties to succeed. Clearly communicating and agreeing to that path generally makes the relationship easy to understand, navigate, and ultimately attain success.

Table 1 shows an example of a simple scorecard for a vendor who was contracted to provide education documentation and
training to three groups of staff. As shown, each requirement, measurement, and result is detailed. When completing the scorecard, if follow-up steps are needed, they should be documented as well.

After scorecards are developed, they should be shared with vendors during contract negotiations. Clear processes on how scorecard items will be measured should be discussed. Vendors should know the expectation of how often these measurements will occur and when the teams will review the results. Clear, open, and honest communication between your organization and the vendor organization will allow for a better understanding of expectations and outcomes from your collaboration. After baseline expectations are set, scorecards can be enhanced to include quantitative measures to facilitate long-term measurement of performance improvement.

**Vendor Accountability**
The initial creation of scopes of work and scorecards isn’t the hardest part of vendor management. Completing documentation proactively helps you set expectations with your vendors; however, you still have to follow through on measurement and hold quarterly, semiannual, or annual meetings with vendors. Soliciting feedback from team members and completing the scorecard takes time and effort. This work can seem like a waste when vendors are doing well; however, when vendors are underperforming, it’s well worth the effort.

Holding vendors accountable when they are not meeting expectations is akin to having a crucial conversation with an underperforming staff member. It’s generally not a comfortable conversation, and most people avoid dealing with the issues at hand. As most human resources leaders will tell you, the longer one puts off the crucial conversation, the more difficult it will be to change behavior. The same is true with your vendor discussions. In general, vendors want to meet expectations and keep customers happy so that they will want to continue doing business. However, if the organization isn’t open and honest about how the vendor is performing, they aren’t able to make improvements.

Conversations with vendors about the scorecard should be open and honest, including areas that are working well and those that

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### Table 1

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Measurements</th>
<th>Results/Outcomes</th>
<th>Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor follows policies on badging</td>
<td>Audit of vendor credentialing software. Assessment of badges when vendors are on site</td>
<td>All onsite vendors were credentialed in vendor credentialing software, as measured on Aug. 1. However, on one occasion (June 5), hospital staff observed John Smith entering unit without his badge. Staff discussed with him and issue was resolved immediately.</td>
<td>Review vendor credentialing policy with vendor staff and ensure all staff are credentialed. Follow-up review will be conducted next quarter.</td>
</tr>
<tr>
<td>on vendor credentialing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor required to meet June 1</td>
<td>Review schedule and deliverable and attain feedback</td>
<td>Staff education presented to team on June 1. Staff review of documentation showed it to be complete and accurate.</td>
<td>None</td>
</tr>
<tr>
<td>deadline for creation of</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>staff education</td>
<td></td>
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<tr>
<td>Vendor to train all staff by</td>
<td>Audit of staff training, schedule, and quality</td>
<td>Education sessions scheduled on June 3, 19, and 22. Vendor was on site and on time for sessions on June 3 but was late for the session on June 19 and did not show up for June 22 session. Training not completed as of Aug. 1.</td>
<td>Vendor to reschedule training for teams that were to be trained on the June 19 and 22. Training will be completed by Aug. 31. Failure to complete this timely will be considered a breach of contract.</td>
</tr>
<tr>
<td>July 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor provided invoices 30</td>
<td>Receipt of invoice</td>
<td>Invoice not paid as work has not been completed</td>
<td></td>
</tr>
<tr>
<td>days after training</td>
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</tbody>
</table>
need to be improved. If items need to be added or removed from the scorecard, this quarterly, semiannual, or annual meeting is the time to do it. If follow-up discussions need to occur before the next quarterly, semiannual, or annual meeting, they should be set during your meeting. Continuing to set clear expectations helps all parties understand next steps and follow-up actions. Keeping your messages consistent across your vendor base also is crucial to success.

**Conclusion**

Vendor management requires a proactive approach to setting expectations, roles, and responsibilities between your organization and the vendor organization. Clear vendor deliverables, scorecards, and regular meetings help keep lines of communication open and minimize surprises at the end of projects or contracts. Although vendor management does take time and effort, the result of the work ensures that you and your organization will be successful in partnering with your vendors to ensure work is completed as expected.

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