21st Century Systems for 21st Century Healthcare:

Guidance on Payer Core-System Project Strategy and Execution

CHANGE HEALTHCARE

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Guidance on Payer Core System Project Strategy and Execution

Complex new care and payment models are replacing traditional fee-for-service as the transformation of healthcare accelerates. Innovative avenues for coordination between providers and payers are being developed. The ability to isolate and act upon data in all forms has never been more important.

These changes necessitate the use of more consistent, high-quality, and cost-effective healthcare information technology (IT). Yet the reality is that many of healthcare's existing systems are ill-equipped to handle the demands of today's rapidly changing environment. This is particularly true for payer core systems.

As a result, many organizations are exploring the replacement of their legacy systems. Determining the best platform for managing both today's operations and tomorrow's needs can be a daunting task. Just as challenging is ensuring that the selected technology is implemented properly and configured to the unique requirements of your organization.

The essays in this e-book offer guidance and insight into the planning and execution of a core-system-replacement project. Written by IT consulting experts at Change Healthcare, the articles reflect lessons learned from hundreds of core-system projects successfully completed over the past decade in partnership with dozens of health-plan clients nationwide.

Each essay explores different aspects of the core-system-replacement planning and implementation process. Our consultants have direct experience in system replacement as well as with many other payer IT implementation and upgrade projects. We believe their combined knowledge and depth of experience uniquely positions Change Healthcare Consulting to deliver unmatched guidance and assistance for companies seeking to transition to new technology.

From helping assess, select, and procure new core systems to building out and bringing to life new platforms across organizations large and small, we take pride in our ability to work side by side with clients to help them achieve even the most complex IT objectives. At Change Healthcare, we are **Inspiring a Better Healthcare System**. We hope you'll be inspired by the knowledge presented here to begin your own core-system journey. If you're interested in learning more about how our consultants can help you, please give us a call.

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Modernizing Your Core Systems:

Ensuring the Best Technology Decisions in Today's Evolving Healthcare Environment

By David Gallegos

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The healthcare industry is transforming faster than ever, with rapid changes being fueled by unsustainable costs, heightened customer expectations, and more active government regulation. Technology-enabled innovations are fueling this transformation as incumbent organizations work to reinvent themselves and new entrants push to disrupt the status quo.

Unfortunately, many organizations remain shackled to legacy systems and antiquated technology. Because legacy platforms were designed for a different era, they lack critical capabilities, such as value-based reimbursement, flexible benefits, and native APIs for interoperability. In an effort to meet some of these demands, many plans have worked to assemble viable solutions that wrap around older enterprise platforms. But these solutions frequently prove less than optimal while also adding complexity and costs.

Widespread adoption of 21st-century technology is therefore essential to support critical elements of the emerging healthcare environment, from value-based care and price-and-quality transparency to improved collaboration, an optimized patient experience, and advanced cybersecurity. The ability to rapidly respond to market dynamics, exchange data among trusted partners, and leverage analytics to enable and automate decision-making will be critical competencies going forward.

Nonetheless, many organizations are reluctant to embrace new technologies as they continue to rely—sometimes precariously—on their legacy-installed base. This caution is understandable given the cost, complexity, and risk typically associated with implementing new software.

Moreover, a growing recognition exists across healthcare that technology alone cannot transform an organization. More than a few executives have learned the hard way that deploying new systems can require organizations to fundamentally rethink business models, processes, and job descriptions originally designed around legacy platforms. Leaders consequently worry that even the best-designed solutions may cause major disruptions and fall short of an organization's business objectives and budget targets.

Compounding this uncertainty are dramatic changes in the vendor community. Recently, several software vendors have determined that their product road

maps have hit a dead end. They realize their underlying technology is out-of-date and cannot meet the current and future needs of their customers. Some of these vendors are rearchitecting their platforms and encouraging clients to move to their new systems. Others are selling their client base to vendors with more modern capabilities with the hope that their clients will migrate to the new vendor's system. In these instances, clients are being pushed to new platforms and technology whether they like it or not. Unfortunately for these clients, change has caught up with them before they're ready. Now what should they do?

If this situation sounds familiar, our recommendation is to push back against the vendor and instead adopt a thoughtful, proactive approach to taking charge of your IT future. At its core, this process involves embracing change as a means of driving your organization's digital transformation toward success in the new healthcare environment.

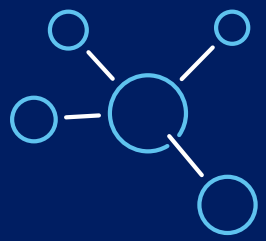
Here are some key factors to consider at the outset of your journey:

- **Don't let your existing system vendor force you onto their new platform without considering all alternatives.** Document your current and future requirements and evaluate various software applications before finalizing your selection. Your vendor's new platform may ultimately be the right choice, but don't default to that conclusion without carefully weighing your needs against alternative solutions.
- **Evaluate multiple software vendors carefully.** Several options generally exist in a given software-systems market, and each product will have its strengths and weaknesses. The right system for your organization will depend on aligning the application's capabilities with your organization's specific requirements and objectives.
- **Product demos are not enough.** Many vendors are great at presentations. But it is critical that you remain diligent in your evaluation and go beyond "the pitch." Assess your requirements against each vendor's capabilities and require proof-of-concept demonstrations based on your specific business scenarios.

- **Software capability has no value without a solid implementation strategy.** Investigate the processes and methodologies vendors have in place to migrate your business to their platform. Understand what roles your organization will be responsible for and what that means to your business. Equally important, explore the vendor's implementation track record.
- **Make sure the vendor's product road map and culture align with your organization's strategic trajectory.** Think carefully about future needs. Here's an example: If you're not serving a Medicare population currently but plan to do so in the future, make sure your vendor of choice can perform all the tasks necessary to accommodate this complex line of business (or at least that they offer the required functionality in their product road map).
- **Confirm that the vendor is viable for the long term.** Many innovative start-up companies have grand ideas and cutting-edge technology—but their early-stage costs can be high, and the competition is strong. The last thing you want is to find yourself in a situation where you have implemented a solution only to find the vendor is shuttering the product or selling it to another company.

Because replacing technology solutions is rarely easy and not without risk, aligning with an experienced, unbiased third party to help guide your digital transition can be enormously beneficial. Change Healthcare Consulting has been working with a wide range of healthcare organizations to evaluate vendors and implement solutions for more than a decade.

During this period, we've assisted hundreds of clients in the successful deployment of core claim systems, electronic health records, provider-credentialing systems, care- and disease-management systems, and consumer-facing web portals. And because each of our consulting-team members averages more than 15 years' experience, we've developed the leadership, insight, and management skills necessary to support the best decisions at each step in the process.

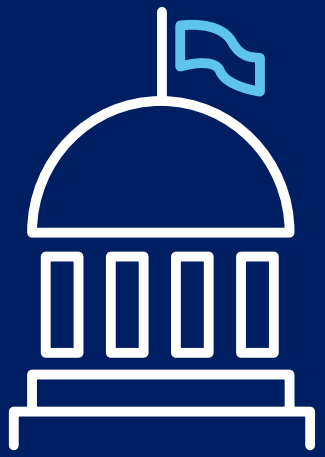


At **Change Healthcare**, we can help you see around unknown corners to chart a clear path forward. We can help you avoid pitfalls and steer toward the enterprise system that is right for your organization. We can also assist with implantation once you have selected a new solution to help reduce the risks associated with transitioning complex systems.

The Four Pillars of Success:

Establishing a Framework for Effective Core System-Implementation

By Maureen Simmonds and Mauricio Jimenez



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As the transformation of healthcare continues to accelerate, the limitations of many legacy core systems are increasingly apparent when it comes to meeting the demands of today's value-based environment.

Faced with the need to support higher levels of provider-payer collaboration, stronger member engagement, and the design and execution of complex reimbursement models, a growing number of payers are seeking systems that are more flexible, scalable, and data-driven.

These modern systems leverage newer technologies to achieve these demands. Technologies like microservices, FHIR APIs, and artificial intelligence are tools that can be leveraged to adapt to rapidly changing operational demands and regulatory requirements.

Identifying the optimal replacement platform, however, represents only half the battle when it comes to transitioning mission-critical business operations. Without a similar commitment to ensuring the implementation process is effectively planned and executed, the best of intentions can quickly unravel. In the worst case, this can mean ongoing disruptions to vital business functions, deteriorating provider and member relations, out-of-control timelines, and extensive cost overruns.

At Change Healthcare Consulting Services, we understand the complexities surrounding core-system replacement and the many steps required to successfully advance a project from inception to fruition. Having worked with dozens of clients to assist in the deployment of not only core claims systems but other enterprise-scale payer platforms, we've identified what we believe are the essential factors that can help ensure a successful system replacement.

We've organized these elements into a series of planning and execution steps that collectively fall into four categories—what we call the **Four Pillars of Success**. The pillars include:

- **Implementation Readiness**
- **Governance**
- **Business Transformation**
- **Execution Framework**

Before initiating the steps encompassed by the Four Pillars, it's important to revisit the central rationale for the project by reexamining anticipated benefits as well as perceived risks. By communicating to all affected employees clear and concise objectives, along with anticipated hazards that could derail the project, implementation leaders help sustain buy-in and vigilance across the organization.

Implementation Readiness

Developing detailed answers to five critical questions is a good starting point for defining the project scope and creating a viable road map for moving forward with implementation. The Q&A process looks like this:

Why? Create a concise statement that defines the aims of the project, including the high-level strategic objectives, tactical business goals, and specific and measurable outcomes.

How? Identify and resolve key decisions that need to be made before moving forward. These can include issues surrounding data migration, data warehousing, system reporting, and process redesign. Decision outcomes (as well as the process followed to reach them; e.g., pros, cons, justifications, etc.) should be documented in detail, since these will serve as guardrails to guide the scope of the project.

What? Scope the specific body of work that will be contained within the project, including business functions, integrations, interfaces, and the number of business lines and reports impacted. Define what's in and what's out. Create success metrics at the beginning of the project rather than at the end.

Who? Clearly define the roles and respective responsibilities of each team member. Eliminating role ambiguity improves collaboration, reduces misunderstanding, and expedites execution.

When? A mutually agreed-upon project schedule should encompass all milestones, project activities, and assignments and include planned start and end dates, as well as an effective tracking mechanism.

Governance

A governance framework will serve to more precisely define elements developed during the Implementation Readiness phase and more effectively manage the project. Key governance processes must be agreed upon by all parties and include roles and responsibilities; ownership; change management procedures; the delineation of risk, action, issue, and decision processes (RAID); as well as strategic considerations.

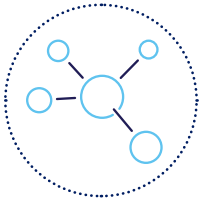
When further refining roles and responsibilities, it's useful to identify single points of accountability and expertise in specific areas, as well as the processes team members should follow to access these resources when issues arise.

In our implementation-consulting engagements, we typically seek to tailor the governance structure to accommodate the cultures and capabilities of the client organization. For example, if the client has a project management office (PMO), Change Healthcare will incorporate the PMO into the governance structure. Alternatively, we can provide the necessary project-management expertise if those capabilities are not available internally.

Either way, it's essential that project ownership reside within the organization. Deferring all aspects of the implementation to a vendor or consultant can result in diffuse objectives and responsibilities and, ultimately, a lack of accountability.

One of the most critical components of the governance pillar is the establishment of a clear and workable communications strategy. In our experience, we've found that communications breakdowns are among the most common reasons for unsuccessful implementations.

Status reporting must be formalized and widely available to build confidence and shared commitment as the project moves forward. In addition, both internal and external communication responsibilities must be defined. On the external side, for example, ownership should be established for apprising vendors, providers, and government entities about implementation progress and to alert them about testing or other considerations.



Business Transformation

Transformation inevitably brings disruption, so it is therefore important to carefully think through the impact the new platform's functional changes will have on business processes. This step involves identifying value chains for core business functions, codifying new workflows and procedures, defining new or changed roles and responsibilities, and creating critical performance indicators that can measure the new processes.

Equally important is the development of training initiatives that will help ensure the system's capabilities are adopted and the benefits fully realized. Focused, role-based training is the most effective way to maximize returns on your training investment. In other words, training must be tailored to each role within the organization. An individual from Member Services clearly should not receive the same training as someone from Provider Relations.

Unless training content directly relates to the individual's tasks and responsibilities, a trainee will feel their time has been wasted and ignore the message. Similarly, neglecting employees affected by the transformation will guarantee resistance to change.

Effective training ultimately depends on employee buy-in, which, in turn, requires a steady, clear, and transparent communication stream from the project owners. You must not only send the right message to the right people, but you also must let them know how often and by what means relevant information will be conveyed.

Execution Framework

Competent execution is the most critical of the Four Pillars, since without it, the best-laid implementation readiness, governance, and business-transformation efforts will be wasted. One of the keys to optimal implementation is strict adherence to the plan in place, particularly when conflicts or problems arise. This may seem self-evident, but it is common for distractions to divert attention, energy, and effort once the process begins, leaving team members scrambling to complete necessary tasks.

Leaders should emphasize the importance of remaining focused and should stand ready to assist team members in quickly and consistently prioritizing as issues begin to pile up. And while sticking to the plan remains the baseline of solid execution, flexibility also is important to quickly work around unforeseen problems or complexities.

Here are some other key factors to keep in mind during the execution phase:

Requirements gathering: Focus on business requirements. We often see requirements that mimic the processes of the legacy system, as opposed to focusing on business or system-agnostic requirements born from actual business needs. It is therefore important to segregate business and technical requirements. Remember, the technical requirements provide the blueprint for the technical solution's architecture, while the business requirements represent the functionality you wish to achieve.

Stay Focused: All relevant information must be spelled out in detail when it comes to requirement Gathering. Incorrect or misunderstood requirements result from miscommunications, erroneous assumptions, undocumented processes, and misaligned definitions.

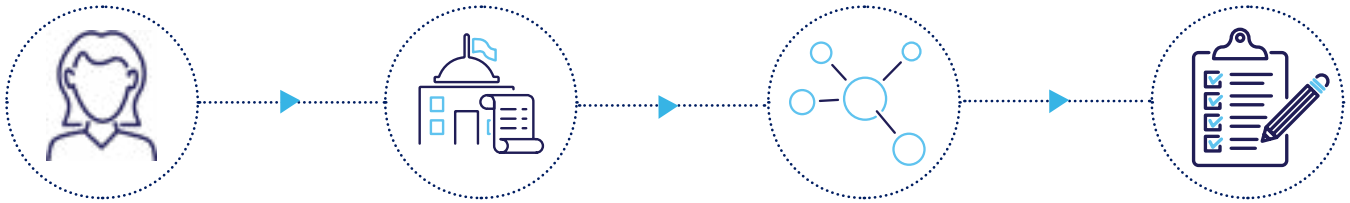
System Integration: An integration strategy is required to define standards around how systems will talk to each other. Define an enterprise-system architecture, coding guidelines, tools, languages, system schedulers, and endpoints. Develop an end-to-end connectivity approach.

A Custom, Comprehensive Approach

The Four Pillars of Success reflect the knowledge and wisdom we've accumulated over the course of dozens of implementation projects going back more than a decade. That said, we recognize that every project is unique and must be assessed from the ground up as a stand-alone, custom installation. In other words, we won't adopt a cookie-cutter approach when it comes to implementation assistance.

Similarly, we will calibrate our support to a level that best meets your needs and desires. Our spectrum of consulting services ranges from playing a limited advisory and project-review role to filling key positions and running the implementation. We've found the most effective approach is a blended arrangement that incorporates personnel from both your organization and ours, with Change Healthcare filling in gaps as necessary from a skill and capacity perspective. This partnership model helps ensure that you, the client, retains ownership, and also creates an avenue for knowledge transfer between our personnel and yours.

Ultimately, the Four Pillars provide a blueprint that will help you anticipate and overcome common pitfalls that often derail core-system implementations. With detailed planning, a comprehensive governance structure, proactive change management, and a systematic implementation framework, your organization can smoothly transition from today's increasingly obsolete system capabilities to a platform capable of accommodating the growing complexities of today's value-based environment.



Implementation Readiness | **Governance** | **Business Transformation** | **Execution Framework**

Taking Command:

Guidelines for Ensuring Effective Project Ownership During a Core-System Replacement

By Steven Kotin and Robert Chhugani

CHANGE HEALTHCARE

Core systems support virtually all critical functions within a payer organization, from member enrollment and benefits to provider networks, contracts, and claims management. Because many core-system platforms were designed and installed in the 1990s, they're increasingly unable to accommodate the ever-expanding automation, interoperability, and data demands of today's evolving healthcare ecosystem. As a result, replacing them has become a priority for many insurers.

If your organization has decided to implement a new core system and you've been appointed executive owner of the project, it's important to think broadly about what the job will entail. In the simplest terms, the executive owner must identify and/or recruit a capable, well-rounded team; anticipate organizational barriers to success; champion key decisions; be prepared to assess options and make final judgments regarding change requests; and rally the rest of the company around the project.

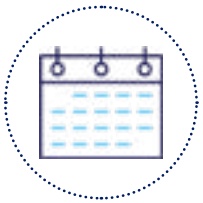
Perhaps most importantly, the executive owner is responsible for creating and sustaining a positive leadership shadow that will inform, inspire, and sustain team members from project start to finish. It is, admittedly, a daunting responsibility.

Fortunately, during our involvement in dozens of major core-system implementations over the years, we've identified a list of 10 strategies that, in our experience, can help produce a successful core-system implementation project.

1. Advocate internally and with vendors and consultants to staff the project with high-performing team members. Ask for the best personnel for your internal teams, consultants, and vendor staff. Internal team members should be knowledgeable about the organization's systems and process; be analytical; demonstrate a strong work ethic; and be comfortable working in a collaborative environment. Consultants should be experienced in system implementation and familiar with the implementation methodology of the core-system vendor. Vendor staff should be experts in the product and be able to guide internal team members to optimal configuration decisions. If these capabilities aren't present on your team at the outset, work to ensure that they can be developed as early as possible in the process.

2. Invest in a robust implementation-readiness phase. Implementation readiness is perhaps the most critical phase of the project. Make sure that key project decisions are clearly delineated; that inventories of configuration, interfaces/extracts, reports, custom software, surround systems, products and the like are documented and confirmed; and that scope by functional area (e.g., claims, membership, billing, etc.) is documented to the satisfaction of all parties. Delineate concise roles and responsibilities and make this information available to all team members. Treat the completion of implementation readiness and sign-off on the project charter as a stage gate before initiating project work.

3. Keep the project scope as narrow as possible; value speed of implementation as the driving force of the project. Many implementation projects attempt to squeeze transformation/technical projects into the core-system implementation. This can be an expensive mistake. To stay on track, it is critical that team members working on business and technical transformation focus specifically on what must be altered as a direct and sole result of the implementation. Everything else involving transformation is discretionary and should only be considered if it cannot be achieved post-implementation without significant rework of code and configuration. Put stringent criteria around approving these kinds of changes and expect timelines and budgets to shift as a result.



4. Treat the first week of project execution like the last and keep an eye on the budget as a leading indicator of delays. In every implementation, a strong temptation exists to accept delays early in the project, particularly when they're supported by team members' rational arguments for shifting or reprioritizing project deliverables. But it is vital to stick to the plan. Require root-cause analysis and remediation for slipped dates. The project-management team will produce a milestone list based on the schedule. This is obviously an important tracking document. However, an equally compelling metric is the comparison of actual monthly labor expense to the forecasted labor expense. Coming in under budget early in the project can be a leading indicator that the project is trending behind schedule, even if the milestones are on track.

5. Expect metrics from program management to inform leadership on the project status. Key metrics include projected versus actual milestones, projected versus actual spend (labor in particular), trends and counts of issues with severity and time to closure, trends and counts of risks and mitigation approaches, change control counts and status, test-case preparation/execution, and defect counts trended by severity and status. Expect to hear about the top issues and risks weekly and take an active role in their resolution. Do not allow high-severity issues and risks to fester. Hold the project team accountable for speedy resolution.

6. Ensure cross-project team dependencies are documented and tracked. During execution, project staff will divide into project teams responsible for delivering specific scope elements. However, the work across each of these teams will have connection points and dependencies. These generally are not identified during the implementation-readiness phase and can be expected to evolve as the project moves forward. You should therefore ensure that the tools and resources are in place to illuminate and support the critical connective tissue between teams and scope elements.

7. Secure active participation from company leaders not directly engaged in the project. The program-management team should hold monthly steering-committee meetings with organizational leadership to review project status and the configuration/technical decisions made by the project team. Nonprogram leaders and their staff should be encouraged to raise issues. Make sure a mechanism is in place to capture and respond to these questions or concerns. It is important to remember that during the training and implementation phases, these leaders will need to be closely involved. Making sure they have a voice during all stages of the project implementation can help solidify their ongoing support for the effort.

8. Limit the number of changes required to the vendor system to meet your organization's specific needs. Loading a large amount of core platform-development work on the vendor is a surefire way to put the project scope and timeline at risk. While it is virtually certain that gaps in system functionality will be identified during implementation, try to make sure that only critical gaps with low-impact fixes are assigned to the vendor for coding. Wherever possible during implementation, develop workarounds instead of demanding vendor fixes.

9. Sell the project internally. Form an internal communication team to publicize the project and to convey its benefits to the rest of the organization. As soon as a stable project plan is delivered, develop a road map with the project deliverables. Publish this information in public spaces within the company so all employees are aware of upcoming deliverables. Your communications strategy should focus on providing visual, living, and simple-to-understand documents. Create a

mechanism for nonproject employees to ask questions or raise issues, and develop a means for addressing these issues quickly and in a public forum. Remember, too, that the executive owner is the face of the program to internal and external stakeholders. Therefore, that role and all that goes with it should not be delegated to subordinates or consultants.

10. Cast a leadership shadow. Behave the way you expect your project team members to behave. Here are three recommended behaviors:

- If you say you will do something, get it done and do it on time. You cannot hold your team accountable if you are not accountable.
- At every meeting, ask if there is anything the team needs from you.
- At some point, even the best-planned core-system-implementation projects can go off the rails. If and when that happens, take a measured, thoughtful approach in responding to bad news and work to systematically develop a solution by drawing from the capabilities of your team.

Core system implementations can be among the most challenging projects a leader will face during his or her career.

These 10 elements for ownership success may not eliminate the stress of such an endeavor or mitigate every possible glitch, but they will certainly improve the chances of succeeding on time and on budget.

At **Change Healthcare Consulting**, we have a team of experts, including many with direct health-plan experience, that has successfully worked with hundreds of clients across the country in such endeavors. We specialize in core-systems project leadership, including executive advisory and implementation services. We bring experts to the table who provide technical and business-related project management, overall program management, and executive support throughout the life of the project.

Listening, Reading, and Doing:

Developing an Effective Training Program for System-Implementation Projects

By Mary Branagan and Wani Geis

CHANGE HEALTHCARE

Embarking on the implementation of a new core system is a complicated task with major financial implications for the sponsoring organization. Training is therefore crucial to ensure that all involved understand their responsibilities and can perform their job duties from day one. If executed successfully, a comprehensive training program will help drive user acceptance of the new system and increase the likelihood that the system's full potential will be realized.

For optimal results, a detailed and complete training strategy should be formulated well in advance of the replacement-implementation launch. Client and vendor must collaborate closely to develop a strategy that encompasses all phases of the project, in addition to ongoing training needs.

Because every individual has their own style of acquiring knowledge, it is important that training programs incorporate the three primary methods of adult learning: listening, reading, and doing. As part of this process, training strategies should utilize change-management techniques to help users develop a clear understanding of the project's overarching business purpose and goals.

The three essential training areas associated with core-system implementations are:

- **Project Training**
- **Product Training**
- **End User/Role-Based Training**

Project Training

Project training, or educational efforts designed around the implementation process itself, is an area often overlooked when core-system training initiatives are being developed. Project training should instill an understanding of how project work will differ from day-to-day work and clarify for those involved the mechanisms associated with moving the implementation forward. Typically, these elements can include project governance, as well as administrative processes and procedures.

Because many of those who've been brought into the project may not have experience with complex implementations, the project kickoff should provide rich detail on the following topics:

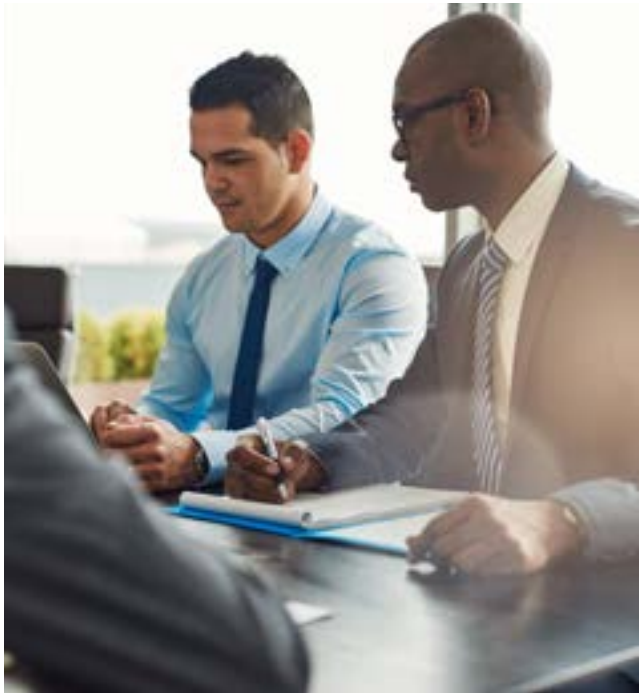
- Scope, or the specific body of work that defines what is in and what is out
- Roles and responsibilities for each person working on the project
- A high-level plan that reflects the different stages of the project and the expected timelines and deliverables for each phase
- A communication plan that includes both internal and external expectations
- Reporting structure and reporting responsibilities for project team members
- Processes to report and resolve issues and risk monitoring/remediation
- Meeting schedule, structure, and expectations (including reviews of what has been completed and what is expected in next meeting/phase)

After the project kickoff, project managers and sponsors should anticipate a wide range of questions from those assigned to the implementation. Many of these questions can be easily addressed by directing team members to a central data repository that contains a full range of documents and resources concerning all aspects of the project.

Product Training

Once project training is complete, the focus should shift to the product being implemented. This training typically does not cover customer-specific internal processes or how those processes will change once configuration and system integration is complete. Product training, which is usually delivered by the system vendor, may be part of the design and configuration process and can involve a classroom setting. Product training should include the following steps:

- **Review training options.** Review each training element and understand what is being taught, the documentation that will be used, expectations regarding the knowledge coming out of the course, prerequisites for taking each course, and team members assigned to each course.
- **Schedule the courses.** Make sure the appropriate prerequisites can be completed before classes are scheduled.
- **Confirm documentation.** Confirm that the vendor will supply the documentation necessary for all courses. It is recommended that this information be reviewed during system selection, since it will help illuminate the capabilities of the vendor.
- **Perform evaluations.** Ensure that meaningful evaluations are developed for all courses and sessions



End-User/Role-Based Training

The organizing principle that should guide all role-based training is relevancy. To maximize the return on your training investment, training must target each role using the new system within the organization. For example, an employee from Member Services should not receive the same training as someone from Provider Relations. Process training must be specific to how the user will perform their business processes in the new core system. Because this training is focused on the end user's knowledge requirements, it will likely vary by department and user. As a result, an assessment should be performed prior to the initiation of training that identifies needs, skills, and gaps for each end user role. Information that should be incorporated into this assessment includes:

- An overview of the system areas users will be accessing
- Business changes from legacy system to new system
- Detail of business desktop procedures
- Review of all new workflows
- Review of how information will be passed from one department to the next
- Complete set of documentation

To help strengthen users' retention of new-product skills, training should be timed to anticipate the operational status of the product and go-live, and personnel should be ready to execute in support of User Acceptance Testing (UAT) or end-to-end testing prior to training. We recommend that this testing be focused on superusers, aka the most experienced users from each functional area. This can help in the documentation of successful test cases and can also provide early warning of system-process errors in training. These individuals also can provide support during the broader training phase for all remaining users.

Training should coincide with the next functional area that will begin using the system. For example, membership resources may be the first to start using the system, while others who only need to know how to look for information may be last. When scheduling end user training, take into consideration operational ramifications and involve the managers of the affected departments. It is best practice to develop a training calendar and analyze the staffing impacts in order to assure the staff is relieved from day-to-day duties while training. Training outside the department can reduce interruptions and distraction.

Each organization has different needs when it comes to training and training-program development. We at Change Healthcare have assisted organizations in a variety of training capacities, from the development of training strategies to creating educational materials and training delivery.

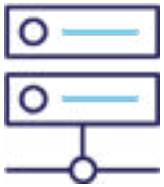
A good training strategy provides the foundation for user acceptance and helps ensure the system will be used as intended. It can also help prevent many of the pitfalls frequently associated with system implementations so as to allow organizations to maximize their return on a significant, long-term investment.

Transformation Equals Disruption:

Developing a Strategy for Managing Process Redesign

By Maureen Simmonds and Annalis Lown

CHANGE HEALTHCARE



Your organization has decided to replace its legacy platform with a **new core system**.

While many may view this kind of initiative as simply an IT upgrade aimed at installing new software, it's important to recognize a core-system replacement goes well beyond this limited scope.

In reality, you are embarking on a business-transformation event that will cause major disruption to virtually all aspects of your operations. Understanding the impact of these disruptions and developing a strategy to mitigate them—while simultaneously embracing the benefits of transformation—is key to owning a change of this magnitude and capturing the new efficiencies and improvements it can produce.

A business-transformation strategy must reflect both the volume and velocity of change an organization and culture can sustain. During a core-system-replacement project, new software and IT processes will be implemented that will impact business operations. As part of this process, the business team will be called upon to provide business requirements and offer input regarding configuration, development, and design solutions, as well as participate in user-acceptance testing.

It's important to remember that in addition to contributing to system planning and implementation, most business teams will continue to be responsible for their everyday tasks and duties. When everyone—especially the go-to subject matter experts—are operating beyond full capacity, it's easy to miss the business-transformation opportunities that new-system implementations create. Minimizing or ignoring these openings undermines one of the central reasons for undertaking the project in the first place.

It is therefore imperative during project initiation and scope definition to determine how you will incorporate business transformation into the project. The approach must be customized to meet each organization's project scope, existing standards, time and budget constraints, and culture. Primary areas that must be addressed in an effective business-transformation strategy include:

- **The alignment of functionality changes to business processes that are new or different**
- **Impact assessments to functional departments**
- **Resource requirements for the project, including sustaining day-to-day operations during and after the implementation**
- **Policy and procedure changes required due to new functionality and processes**
- **Role-based training needs, including the identification of skill gaps**

Importantly, Change Healthcare recommends that a business-transformation strategy remains focused on aligning business processes with the new system and not include a full-blown process-improvement project running simultaneously with the core-system replacement. Experience has shown that trying to do too much at once can tax resource, budget, and timeline constraints.

That said, new-found efficiencies and improvements inevitably will emerge. The magnitude of these changes will be determined by new-system functionality, as well as the legacy platform's overall level of antiquation or obsolescence. Our consulting team refers to this kind of focused business-transformation approach as Business Process Alignment (BPA).

BPA includes identification of the following domains:

- Value chains for core business functions
- Level of change to the organization
- New or changing roles and responsibilities
- Priorities for organizational-change management
- New workflows, processes, and procedures
- Critical performance indicators

Once this information is compiled, the next step is to incorporate business process alignment tasks into the project schedule. Change Healthcare recommends using common process-improvement techniques and tools, such as DMAIC (Define, Measure, Analyze, Improve, Control). Examples include but are not limited to:

- Collecting existing current-state workflows or creating the primary business processes and/or value-chain components
- Creating SIPOCs (suppliers, inputs, process, outputs, customers). This tool will help you outline a high-level map with key information to provide further process clarity.
- Using the current-state base, develop future-state swim-lane workflows. This is where the rubber meets the road in terms of aligning business processes with the new system:
  - Identify where new functions will reside within the organization.
  - Define changes to job functions from increased/decreased or changed functionality.
  - Identify training needs and skill gaps.
  - Confirm business requirements.
  - Codify policy and procedure changes.
  - Assess staffing needs and considerations.
  - Critical-to-Quality (CTQ) assessments help identify essential metrics by mapping the overall customer need into specific and measurable requirements.

When it comes to developing a transformation strategy, we recommend beginning with your current business processes—not a blank sheet of paper. At the same time, it is important to not simply mirror your legacy system. Bringing forward processes because "we have always done it this way" or automating the business process "as is" are techniques we refer to as "paving the cow paths."

BPA participants should clearly understand their business process and the impact that automation may have on process capabilities. Sometimes another set of eyes is important. Organizations often rely on system integrators like Change Healthcare Consulting to assist them in understanding the new system's functionality and the possibilities of change available with the new core system.

As previously noted, transformation brings disruption. Neglecting employees affected by the transformation will all but guarantee resistance to the new system. It is therefore critical to engage employees by listening to them and including them in the process. To this end, you can create change ambassadors by assigning senior and respected subject matter experts to the project. These individuals can then communicate positively to the rest of the organization. Consider allocating existing resources 100% to the project and include business transformation in your communication strategy.

Implementing a new core system can be a major challenge, but Change Healthcare Consulting is ready to help. Our portfolio of customer experience and collaboration solutions can provide a unified and comprehensive approach to business transformation for your implementation project's unique requirements.

Five Rules:

Optimizing Requirements Gathering for Core-System Replacements

By Andy St. Remy and Thomas Ruwald

CHANGE HEALTHCARE

A core system is a large-scale software package that supports all major functions within a health plan, including member enrollment, premium billing, benefits, providers, contracts, claims adjudication, and claims payment. Most health plans will undertake a core-system replacement project once every decade or so to take advantage of increased functionality available through evolving, modernized technologies.

Because core-system replacements are pursued so infrequently, the required subject matter expertise may not be available in-house. At Change Healthcare Consulting, our team of experts has worked on hundreds of core-system projects over the past decade. From these experiences, we've developed recommendations that can help you execute your replacement project in a timely and successful fashion.

A Broad Spectrum of Requirements

Business requirements must be documented to describe the capabilities the proposed solution should provide to support the business model. Functional requirements represent the next level of detail and define each of the steps necessary to deliver the prescribed functionality for each business requirement.

During the life cycle of a core-system replacement project, you'll discover that requirements gathering can take place before the project starts as well as throughout various phases of the implementation itself. If this timing seems counterintuitive, it's important to remember that many different types of requirements must be collected.

Project requirements, business requirements, functional requirements, technical requirements, testing requirements, and configuration requirements are just some of the specifications that need to be defined and documented, and a portion of these are best identified once the project is underway.

Change Healthcare Consulting has developed five general rules that can help streamline and optimize the requirements-collection process. These recommendations reflect lessons we've learned over the course of multiple successful implementations over the past decade:

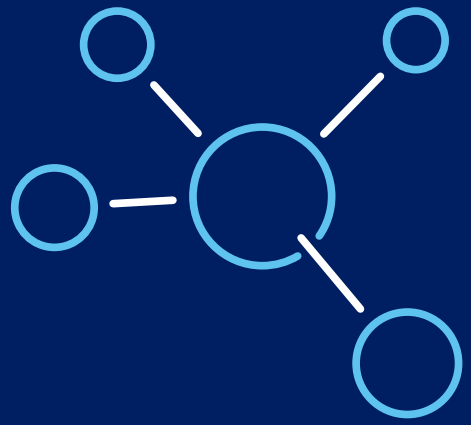
1. **Focus on Business.** During implementation, it's important to keep current and future system functionality out of mind. Instead, focus on gathering requirements specific to the needs of the business.
2. **Engage Stakeholders.** Gathering requirements by involving key stakeholders can help avoid changes or new requirements being identified late in the project, which can cause delays and add to project costs. Block out time with stakeholders to discuss their specific business need. Doing so will help commit stakeholders to participating in the process.
3. **Avoid Ambiguity.** Most stakeholders have a high-level idea of what's needed. It is critical that requirements gathering include facilitated sessions where all stakeholders are walked through developing process flows that align with business functionality. These discussions can illuminate the actual business need and should lead to the evolution of a detailed requirement. Business process flows also are valuable tools for mapping the business need to help ensure no requirements are missed.
4. **Follow Documentation Standards.** Developing a consistent approach to documentation standards will be important for requirements gathering. All requirements should be captured in a manner that will allow traceability through configuration development and testing. This will enable tracking back to test cases, coding/development items, and business process alignment needs. Business and Technical Design documents are good tools for documenting how requirements will be implemented, as well as for confirming that identified requirements are included in the design.
5. **Follow the Change-Control Process.** The change-control process is designed to capture any requirements that were missed during the requirement-gathering phase. Its purpose is to document impacts of a missed requirement. It is critical to establish a timeframe for completing the requirement-gathering phase. A procedure should simultaneously be implemented that requires any subsequent revision—including adds, changes, or deletions—to undergo a structured, disciplined change-control process that takes into account cost and benefit. Each organization's culture will determine where approval authority ultimately resides and whether a team or certain individuals should have this authority.

A core system replacement project can be overwhelming, stressful, and relentlessly challenging. However, we've learned over the past decade that by properly documenting requirements before the design solution begins and by keeping the right people involved, you'll create a **solid foundation** on which to build your new core system. If you are planning to undertake a core-system replacement project, feel free to reach out to **Change Healthcare Consulting** so we can share what we've learned.

Making Connections:

A Core-System Replacement Project with a Comprehensive Integration Strategy

By Mauricio Jimenez and Thomas Ruwald



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Digital engagement is a critical component of the future of healthcare. Health plans are investing in modern technologies by replacing their core system to adapt to the digital era. Due to a constant stream of real-time data exchanges, health plans must improve existing legacy-integration competencies and move to a modern comprehensive-integration strategy. A comprehensive-integration strategy will help leverage advancements in cloud technologies; microservices; the proliferation of SaaS, PaaS, and BPaaS models; all while remaining flexible enough to accommodate future market demands.

How do you know where you are going, if you don't know where you are today?

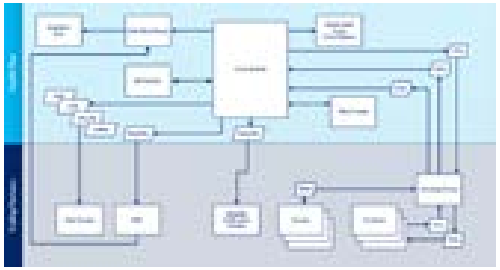
Current State: The first step in any system-replacement effort is to develop a clear understanding of existing integration points. We recommend the creation and/or updating of two documents to depict all integration points:

A. Current State Diagram: This document provides a visual diagram showing all types of data feeds coming and going from the legacy core system, including X12 transactions, batch files, real-time services, and the like.

B. Current State Inventory: This spreadsheet identifies those same integration points, as well as all source and target systems, system owners, business descriptions of the data feeds, execution frequencies, and other pertinent details.

Taken together, the documents create a comprehensive picture of your current state technology and business process integration. As such, they represent an ideal starting point to begin work on future state integration.

Sample Current State Diagram



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Integration Strategy: An integration strategy can also be referred to as a management control strategy. As the name implies, it focuses on giving the business operation control over how and when to share data. From a technical standpoint, a management control strategy defines the blueprint for automation and integration.

During the procurement of the new core system, integration architects can assess each system's integration capabilities for both on-premises and in-the-cloud solutions. Once a system has been selected, architects can develop the integration strategy and focus on the two main areas: a) a hybrid integration platform and b) a flexible deployment models.

This kind of strategy will allow data feeds coming in and out of the plan to be easily created and deployed, giving the plan flexibility to pilot multiple business drivers.

- **Hybrid Integration Platform.** The technology footprint of most health plans will undoubtedly leverage both cloud-based services and on-premises applications. The idea of hybrid integration is to connect cloud-based services with on-premises applications, creating a larger ecosystem for the health plan. Furthermore, building an integration platform creates a framework of integration between cloud system; BPaaS, PaaS, and SaaS vendors; on-premises applications; state and federal regulators; and external trading partners. The implementation of a new core system is the perfect time to establish a hybrid platform. The implementation will require that most existing legacy interfaces be recreated from the new system, making it an optimal opportunity to build a platform to leverage the

new core system. A hybrid integration platform solves the problem of handling emerging data-sharing requirements.

- **Flexible Deployment Models.** Code can be built with deployment flexibility. In other words, it can be created in a manner that would enable it to be deployed into any of your environments. During the deployment preparation, each deployment package is bounded to a target environment, thereby removing the need for developers to tie code to a specific data source and location.

An integration strategy also establishes the guiding principles for how integration will be handled during a core-system replacement. The strategy typically will address the following topics:

A. Tools: Define what tools will be used. Definitions need to be precise and should include both the type of tool and its specific purpose. Avoid ambiguous definitions, which can produce open gaps in tool standardization.

Here's an example of a clear definition:
"SSIS will be used for the development of all imports and extracts."

In this case, the tool is SSIS and the purpose is ETL development of all imports and extracts.

Here's another example:
"All incoming X12 transactions will go through MS BizTalk for validation Levels 1 and 2."

B. Coding Standards: Development standards must be fully defined before the project kicks off. Although most organizations already have defined development standards, global shared components are frequently neglected. Yet it is critical to understand how code components shared across the organization will be handled within the development process. For example, a health plan may have a specific way of calculating the number of member months past-due. In this case, the calculation typically will be defined by the business. The IT organization, in turn, needs to create an established process for defining the calculation once and then reusing the component throughout interfaces and reports across the organization. If the business lead subsequently chooses to change the method of calculation, IT will only need to update one global shared component for the changes to be propagated throughout all solutions that subscribe to it.

C. Development Life Cycle: Most technology operations have a defined systems development life cycle (SDLC). If your organization hasn't established one, now is the time to create it. The integration strategy needs to call out all phases of the SDLC and how they'll relate to the project phases and timeline.

The required subject matter expertise for core-system replacements often is not available in-house due to the infrequency of these projects. At Change Healthcare Consulting, our team of experts has worked on hundreds of successful core-systems projects. From these experiences, we have developed a methodology framework for executing business-transformation projects in a timely and successful fashion.

Don’t Forget the Testing:

Incorporating Testing into Your Core-System Planning Process

By Damion McCain and Cyndi Van Herpe

CHANGE HEALTHCARE

It's never too early to begin integrating testing decisions into the planning process once your core-system implementation project has been approved. In fact, the sooner you focus on testing, the better prepared you'll be to validate key business and technical decisions. And by identifying defects and missed requirements early on, you'll give your implementation team the time needed to remediate problems with little or no impact on the project timeline.

As the project team begins to develop and define business requirements, test scenarios should be identified and documented. Test scenarios are frequently presented by subject matter experts in these discovery sessions as problems with your current system, challenges in your reporting, and/or gaps in your existing processes.

These are the so-called "gotcha's" that are sometimes mentioned in passing while discussing more general requirements. Testing scenarios are detailed, written descriptions in nontechnical terms that outline specific features or ways your system should and should not function. These scenarios are the starting point and basis for developing your test cases. Every business requirement should have a test scenario tied to it.

Test cases are the functional and system-specific details, with explicit instructions or steps, for verifying that the requirements outlined in your test scenarios work as expected. Test cases include the system data—such as member-identification numbers, claim-creation input data, or other distinct criteria—that either exist or must be created and then leveraged to complete the test case.

The test steps documented are system-specific and comprehensive enough that a person unfamiliar with your system or application can execute the test case. Test cases support both the expected functions of the application as well as actions and inputs which should not work, such as invalid dates, incomplete data elements, or other conditions which your business requirements deem improper.

To streamline the testing process, it's helpful to build repeatable testing scenarios that can be used in different test phases and cycles of the system implementation.

Before each test phase, review the scenarios with end users to identify any new requirements, since missed scenarios for key business requirements can impact the success criteria. Agree to the format of your scenarios, including which requirements are to be tested, which data will be included to test the scenario, and what the expected results should be.

The testing strategy should include not only what will be tested but how the testing will be executed, who will perform the tests, where the testing will be performed (what environment), and when each type of test is scheduled to occur. In addition, the testing strategy should outline where the test cases and testing results will be posted and how they will be shared with the relevant team responsible for remediating coding or configuration. The testing lexicon should also be defined in the test strategy. Clear communication is essential: All team members need to understand the definition of testing terms and speak the same language.

Phases of Testing

Ideally, your project plan should incorporate a range of different tests at various phases of the implementation process to validate business and technical designs. In complex solution requirements-gathering or new system builds, it may be helpful to perform some proof of concept or prototyping development and testing.

This can reduce the likelihood of rework that results when the proposed solution cannot be executed as designed or the intended functionality and process must be reconfigured. This prototype testing is frequently performed early on, in the design and requirements-gathering phases.

Once requirements are fully defined and development or configuration has been completed, the configuration or development team executes unit testing. Unit tests ensure that the solution, as understood by the development team, is working as designed. A unit test is typically the first phase of the full testing strategy. Any test cases that fail the unit test require remediation of the solution until the test case can pass or until an acceptable resolution is reached.

User acceptance testing (UAT) is usually the next phase of the testing life cycle and begins when the solution has passed the unit test phase and the coding changes have been moved or "promoted" to the preproduction model office (PPMO) environment or its equivalent. Your quality-assurance team or subject matter experts assigned to the project then execute their own test cases against the application.

Their testing should include scenarios through which the platform is expected to work as planned, as well as situations that should result in an error message or other error-handling logic. These are called positive and negative test cases. User-acceptance testing can have a bonus benefit to the organization in that it can help staff become more familiar with a new application or solution and more confident in how to navigate it. The process also can shed light on defects that require remediation. The full engagement

of the business in UAT is critical to ensure that the requirements, as the business defines them, are being met with the solution changes or configuration.

It's important to carefully document all test-execution results with as much detail as possible. Screen shots of the results can be invaluable for determining the root cause of issues identified or to provide documented positive results for the development outcome. These test cases—including their results, accompanying screen shots, and outcome narratives—can and should be leveraged for future upgrades, coding changes, and updates.

Having screen shots of the results of each test case can be a life-saver later if problems arise that require further process refinement or if regression-testing verification is needed to confirm your system is functioning as before. The requirements documents, configuration workbooks, and testing results are key organizational assets that should be safeguarded for future use.

Finally, end-to-end testing provides an opportunity to ensure that the solution functions not only as expected but that it fully integrates with other platforms, data sources, and downstream processes and data points. Careful consideration must be given to where and how the data created or modified in the new system will be leveraged in applications, reports, and other structures. Ensuring that those processes continue to function as designed is the intent of end-to-end testing.

It's important to consider not only the testing methodologies you'll use to achieve your success criteria but also what tools you'll rely on to track and remediate defects. Entrance and exit criteria for any cycle testing performed should likewise be established

Types of Testing

- **Unit testing** focuses on specific business requirements and occurs throughout the project to ensure that configuration builds and system integration or development code meets quality standards. Unit testing occurs prior to introducing solutions and changes into the integrated testing process. Include end users when building the unit test scenarios that developers and analysts will execute in the construction of the new core-system and integration points. Offer demonstrations of the application being unit tested, in addition to code reviews, as part of the sign-off request for the unit test.
- **Prototype testing** validates your business decisions soon after initial requirements gathering has begun and provides the project team with confirmation that decisions made by the different business areas will successfully integrate into the system's business configuration. This testing is used as a "first look" into how the system works and helps validate certain configuration design and solutions prior to the build. This is intended to be a playground area.

  Setting up the prototype-test environment should focus on the minimum necessary configuration and data to perform the tests required. Select a line of business that represents a high-volume of members/claims or a cross-section of administrative capabilities for your organization. Demonstrate the prototype to the business leads and project sponsors.

The demonstration creates an opportunity for the audience to provide feedback and identify missed requirements before moving into a full build of all the enrollment, benefits, premium billing, and provider-contract capabilities necessary to successfully configure your business.

- **User acceptance testing** involves leveraging end users, subject matter experts or quality-assurance teams to execute system-specific test cases. These test cases focus on the application or system that has been modified and does not yet consider the entire data-flow process. As previously mentioned, user-acceptance testing should include test scenarios and accompanying test cases for each business requirement, module, functionality, and process being modified or implemented. It's also critically important to consider user permissions when testing your application functionality. Make sure that only those who you've identified as having a need to access, modify, or edit data or system modules are granted access and permission to do so.
- **End-to-end testing** includes mock go-live activities followed by daily, weekly, and monthly business and technical processes. Use business process flows, desk-level procedures, and business requirements to build scenarios that can execute in the order of the day-in-the-life for each process, whether it involves a member, claim, or provider. Performing the end-to-end testing on the production platform provides the technical team with time to troubleshoot any issues with integration points between the core application and satellite systems. Consider performing two to three cycles and allow time between each cycle for defect remediation. Each cycle should include regression testing of passed scenarios to verify that changes have no negative impact on original tests.

A Continual Process

Testing shouldn't be considered the last step in an implementation but instead should be incorporated into all project phases in some fashion. The test team should stay involved in every aspect of the project to ensure that all requirements are understood, all documentation is up to date, and no requirements are missed.

The project dates and milestones need to provide sufficient time to create the necessary test data (such as claims, members, providers, or authorizations), execute all the test cases, remediate defects, and redeploy code prior to moving to the next project phase.

Testing timelines are frequently compressed due to delays in requirements gathering, documentation, and finalization. This can result in costly rework post go-live.

Safeguard the testing timelines carefully as you finalize the requirements. It is only through thorough testing and defect remediation that you will deliver a system that fully supports your business needs and drives your organization to the transformation you have envisioned.

Here are five principles to keep in mind when addressing testing for a core-system replacement:

1. Always include subject matter experts and end users in your testing preparation and throughout the implementation phase.
2. Testing will ensure the system is configured correctly, system integrations are functioning properly, and actual results are as expected.
3. Plan for executing many cycles of testing scenarios to ensure successful end-to-end testing.
4. If the project schedule needs to be compressed, don't reduce your testing timeframe.
5. Post-implementation regression testing is important and an excellent method for detecting and quickly remediating any production issues.

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