MOVING TO THE NEXT-GENERATION MEDICAL INFORMATION CALL CENTER

Pharma companies are improving personalized relationships across more channels—while cutting cost, complexity, and risk

Increased competition and higher customer expectations are putting pressure on pharmaceutical organizations to leverage medical information in new ways.

As the mission of the Medical Information Call Center expands to include strategic customer relationship-building, companies are looking for new ways to personalize responses and communicate with healthcare providers and consumers via the channel they prefer, whether print, email, web, or mobile device.

By carefully determining their “next-generation” requirements, Medical Information Call Centers can do more than meet these new demands: they can cut costs, while still maintaining strict control over approved, regulated medical content. Friendlier authoring environments and better content re-use practices, for example, can boost agent productivity by as much as 15 percent and dramatically reduce training times for new employees. And new, more flexible, standardized architectures can slash IT costs.
THE NEW FACE OF PHARMA
The Medical Information Call Center plays a pivotal role in helping pharmaceutical companies establish and maintain market share in competitive markets, while meeting demanding regulatory requirements.

In addition to providing accurate information on products and usage, the Medical Information Call Center is taking on a front-line role in fostering more personalized, multi-channel relationships with healthcare providers—and consumers, as patients become more actively engaged in their care. Fast, accurate, personalized responses, via the channels that information requesters prefer, builds loyalty and can be a powerful differentiator in the marketplace.

NEW DEMANDS DEMAND A NEW APPROACH
Many Medical Information Call Centers are finding the applications they've relied on for years increasingly ill-suited in meeting the expectations of healthcare providers, consumers, and regulators. Custom legacy applications are not only costly and non-adaptable; they were not designed to be able to respond to requests for medical information sent from the mobile devices that have become the preferred communication channel of many physicians and consumers.

Other issues that make it difficult to achieve critical objectives include:
- Complex authoring tools that require arcane coding by highly specialized medical writers and agents and make it difficult to generate on-demand responses in real time
- Large, monolithic documents that slow searches, limit flexibility of response, and can challenge compliance and/or require additional approval cycles for edits
- Proprietary technologies that require specialized skills to set up or change workflow and control documents

Over time, internally customized Medical Information Call Center solutions have grown large and costly to maintain. Performance is a growing issue, as is the lag time in incorporating new functionality. Aging and non-standard platforms also complicate integration across the enterprise, typically requiring additional customization to link processes and share data.

ACCURACY AND COMPLIANCE
Even as the expectations for Medical Information Call Centers expand, the ability to deliver the most up-to-date and accurate medical information and comply with evolving regulations remains the top priority—and challenge.

In no other industry are the consequences of the right response and need for call center excellence more critical. Good medical practice and patient outcomes depend on physicians getting clear, correct information in a timely manner. Strict control of content and efficient review and approval by medical experts, compliance managers, and legal teams remain paramount. As Medical Information Call Centers enable more flexible front-end capabilities, they will continue to need proven content management capabilities on the backend to ensure secured shared access and control over regulated content.
PEOPLE, PROCESS, AND TECHNOLOGY

Every pharmaceutical company has different requirements and plans for its Medical Information Call Center. Turning strategic goals and functional requirements into technical specifications can be challenging, however. Addressing the people and process aspects of Medical Information Call Center transformation can be too often overlooked.

EMC® pharmaceutical industry and regulated content management experts deliver Next-generation Medical Information Call Center consulting and program management services to help with clarifying and translating Medical Information Call Center objectives into actionable plans that incorporate best-practice process—and design and implement solutions to meet those objectives. Transition services begin with defining new and more efficient processes and include integration of cloud and on-premises systems, migration and conversion of existing content/response bodies, template and workflow user training, and change management.

To accelerate and reduce the risk and cost of designing and implementing regulated content management solutions in the pharmaceutical industry, EMC has developed a number of standardized application frameworks built on leading industry and enterprise-class solution components, such as the EMC Documentum® ECM. These include “next-generation” frameworks for Life Sciences Quality and Manufacturing and eTMF, as well as for the Medical Information Call Center.

PAYBACK POTENTIAL

In moving forward, Medical Information Call Centers can benefit from a more flexible, modular, and standardized approach to regulated correspondence and document management.

New options, such as enabling medical writers and agents to use rules-based templates while authoring and editing in Microsoft Word—instead of complex conventions for content creation, formatting and tagging—promise significant return on investment. Combined with new practices for the re-use of content, such changes can improve the productivity of Medical Information Call Center agents by 5 to 15 percent. Improved ease-of-use has also been shown to lead to better agent satisfaction, which in turn leads to better customer satisfaction.

Given that the average cost of a highly qualified healthcare professional working in the Medical Information Call Center is approximately $140,000 a year, the savings can be significant—and payback can be rapid.

In addition to agent productivity gains, Medical Information Call Centers can realize hefty cost-savings in licensing, maintenance, IT infrastructure, and operations as older, monolithic applications are replaced with lighter-weight application frameworks that leverage commercial off-the-shelf software.

Besides lowering IT total cost of ownership (TCO), standardizing on enterprise platforms in the Medical Information Call Center simplifies process integration across core functions. The ability to use the same platform for all regulated information management needs, for example, opens new opportunities for business agility and efficiency with functions, such as Quality & Manufacturing and Electronic Trial Master File (eTMF).

SET THE BAR HIGH

For all the potential benefits, changing existing Medical Information Call Center systems and processes is a major undertaking—an investment that pharmaceutical companies expect to last 5-7 years. Making the right decisions in moving forward, therefore, takes more than identifying immediate functional requirements; it encompasses careful consideration of long-term flexibility, extensibility, and viability as well.

WHAT’S POSSIBLE

Change drivers fall into two categories: 1) The need for new functionality, such as personalization or multi-channel expression, and/or 2) Issues with current systems, such poor as performance or high operational costs.

To fully define and prioritize functional requirements, it can be helpful to break the medical information response process down into its three basic phases—how inquiries/requests come in and are managed; how a response is researched / searched, created / edited, and approved; and how a final response is provisioned and delivered. In each instance, decision-makers need to look beyond the optimization of existing processes and examine possibilities for process innovation enabled by new technologies and practices.

Major areas of opportunity include:

• **Personalization**—When a physician calls, agents must be able to quickly pull up complete and current information about the relationship with the healthcare provider and easily pull in relevant information to personalize the response in terms of what is known about the doctor’s practice and affiliations. By leveraging
CASE IN POINT: INTEGRATING SALESFORCE.COM

In defining and designing a new Medical Request Response Center of Excellence, this specialized subsidiary of a large pharmaceutical company wanted to leverage best-of-breed solutions to enable faster, more personalized responses to requests for medical information. A team of EMC industry and customer communication management experts worked with the client using a next-generation application framework to configure a proof-of-concept integrating cloud-based Salesforce.com services with on-premises-hosted EMC Document Sciences xPression® Correspondence software. The solution enabled agents to:

- Launch the xPression xEditor from a Salesforce.com case
- Work in native Microsoft Word to assemble the appropriate medical content and personalize the response within the rules-based xEditor template
- Simultaneously send the final approved content in the appropriate channel-specific format, attach it to the Salesforce.com case, and forward as searchable content in the Salesforce.com Knowledge base

Building on this experience and solution, the client is proceeding in a modular fashion to develop and implement an end-to-end, next-generation ECM and CRM platform, process redesign, and training program for its Center of Excellence.

...an enterprise CRM solution such as Salesforce.com, rather than replicating CRM in the Medical Information Call Center with a more customized solution, the enterprise can benefit from a single, up-to-date, enterprise-wide customer master and enable the call center and direct sales force to work together seamlessly and efficiently.

- **Ease of use**—The way Medical Information Call Center users create, edit, assemble, personalize, approve, fulfill, and manage content has a major impact on productivity and the speed and quality of response. It can even shorten time to market by reducing the time required to create new reference material and scripting for a product launch.

- **Medical writers/agents**—Replacing yesterday’s complex, proprietary authoring environment with a WYSIWYG tool such as Microsoft Word can dramatically boost medical writer and agent productivity.

- **Compliance managers**—It should be easy to manage versioned content and regulatory status and to associate regulatory logic with fragments of content. Regulatory changes and updates to shared content should be automatic and occur wherever the modified content exists.

- **System administrators**—Robust facilities must be provided for managing the security, data access and mapping, content management, and output processing configurations for e-mail, and printing.

- **Document designers**—Designers should be able to use familiar tools such as Adobe software to design dynamic, rule-based document templates that automatically express content and images in the proper format.

- **Multi-channel excellence**—Medical Information Call Centers that pride themselves on answering a call within a few rings need to be able to also take inquiries and respond quickly and efficiently via channels including mobile devices, integrated rich HTML e-mail, and physician portals with personalized web landing pages. When agents are able to work in a single content template—regardless of the fulfillment channel—and rely on the system to automatically and properly format content, productivity is enhanced. Options such as check-off boxes and default settings can help ensure best practices, such as attaching responses to the customer’s profile and relationship history and sending newly created and approved content to a website, healthcare provider portal, and/or archive, in addition to the requester response.

- **Content re-use**—Many enterprises have adopted the principal of “author once, publish many” as a best practice for better content re-use. To maximize re-use, Medical Information Call Centers are looking at content differently. Rather than organizing processes and tools around documents, they are creating smaller content components or “chunks” that can be used—and re-used—as content building blocks. This granularity enables agents to search for and assemble pieces of pre-approved content faster—and significantly increases re-use. Rather than having to edit a long document, possibly compromising compliance or triggering another cycle of review and approval, agents can build responses using pre-approved paragraphs, figures, tables, citations, and so on that specifically address the request for information. Default elements, such as boxed warnings and disclaimers, further simplify compliance. Automated workflow processes can ensure that every time a new content element is authored and approved, it is categorized and saved in a searchable library / knowledge base for re-use.
• **Compliance and version control**—The primary objective and challenge for Medical Information Call Centers continues to be controlling content and maintaining compliance, even while enabling agents to generate on-demand responses to requests for medical information in real time. New practices, such as the ability to assemble pre-approved, reusable granular “chunks” of content, as noted above, helps to maintain regulatory compliance while responding quickly to information requests. The ability to leverage enterprise-class repositories for regulated content management to manage access and permissions, protect content from unauthorized changes, and manage versions of content are critical, especially as content is broken down into many more elements. Built-in enterprise content management (ECM) capabilities, such as security, availability, version history, audit trails, and activity logs across the content lifecycle are a must.

• **Workflow and programming**—The ability to fully leverage functionality depends on the richness of the programming and workflow environment. Tools need to be designed for authorized users to be able to set up and modify workflow and define templates, without requiring technical specialists. They need to be capable of automating end-to-end dynamic, rule-based content generation, web-based previewing, and editing of correspondence in real time. Workflow should automatically enforce predefined editing rules, but also allow be flexible enough to allow for authorized ad-hoc editing. Routing for review and approval should be seamless and transparent and able to span multiple solutions from multiple vendors—for example, to enable agents to pull CRM content into Word for personalization, forward edited responses in HTML format to web-based reviewer for additional editing and approval, and automatically format and print the final approved content in PDF for fulfillment.

**IMPLEMENT BEST-IN-CLASS SOLUTIONS**

Factors such as flexibility, performance, scalability, security, and extensibility are critical if a Medical Information Call Center platform is to be viable for 5+ years.

Modular solutions that leverage enterprise-class, best-available commercial solutions deliver multiple “next-generation” advantages over large, monolithic applications. Rather than trying to “reinvent the wheel” in a vertical solution that delivers all functionality, solutions built on a scalable, interoperable architecture can incorporate best-in-class solutions from multiple sources. As a result, they are faster to implement and easier to modify and update. They deliver new functionality as it becomes available in the marketplace and reduce overall TCO.

Modern, lightweight web-services architectures and APIs simplify functional integration between off-the-shelf solution components and services in the cloud or on premises. They are fully scalable, enabling single sign-on for authorization and authentication across different applications, and they are designed to take full advantage of virtual infrastructure, automatic workload balancing, clustering, failover, security, and resource management.
The ability to leverage commercial off-the-shelf, enterprise-class products for critical functions, such as authoring and editing in native Microsoft Word, not only boosts agent and enterprise-wide productivity but also keeps pace with market and technology changes, so Medical Information Call Centers get access to new functionality faster. By enabling the Medical Information Call Center to standardize on the same platforms used by other departments—for example, by using one ECM to manage controlled data across the enterprise—pharmaceuticals can improve their overall agility while reducing cost, risk, and complexity.

**IN SUMMARY**

Being a solution engineer requires a strong understanding not only of the business problems that your organization is trying to address, but also of the capabilities of new Big Data and advanced analytics innovations. Applying the six-step solution engineering process described in this paper ensures that you deploy the right technology capabilities at the right time to solve the right business problem.