

Clinical Knowledge Management: An EMC Documentum xCP Use Case

Summary

- Increases adoption of CPOE and EHR content through an easy-to-use review process
- Eases the burden of clinical content management by integrating content, decisions, and processes with status and work queues
- Speeds the time for reviews with easy-to-use work queue support—eliminating the need to sort through e-mails to find out what is required for review, attention, or opinion
- Provides a templated approach to team collaboration, enabling rapid deployment and adoption
- Provides a single, easy-to-use, secure, centralized collaboration workspace for dispersed internal and external project teams
- Maximizes content reuse and enables development of best practices
- Provides visibility across large, complex projects and programs
- Prevents information leaks of confidential documents with information rights management (IRM) capabilities

Improving patient care through collaboration and content management

Challenges to optimizing patient care

Healthcare clinicians and administrators must increasingly process and manage a variety of data and information sources—diagnostic test results, medication lists, past treatment histories, and others—to make effective care decisions and provide measurable quality healthcare. Practitioners and IT staff are under tremendous pressure to manage many clinical applications throughout their product lifecycles. And project managers must tie quality goals, processes, and systems to successful project execution, despite the fact that managing clinical content by traditional methods is increasingly expensive and time consuming.

In this environment, effective problem solving and decision making depend on healthcare professionals having immediate access to the right information at the right time. Unifying processes, people, and systems can drive better decision making and is a crucial part of maximizing the resources of any healthcare organization.

Traditionally, teams within healthcare organizations, such as project managers and analysts or physicians and multidisciplinary teams have collaborated through e-mail. But e-mail collaboration often results in duplication of work, difficulty reaching consensus, miscommunication, and the inability to share information securely internally and externally. In addition, this collaboration does not allow content to be reviewed regularly by clinical teams in a governance model to ensure adoption, patient safety, and support for the clinical workflow.

Easing the burden of evidence-based medical practices

Utilizing a clinical knowledge management strategy enables caregivers and researchers to ensure safer and more efficient patient care. The ability to develop and review care protocols, medical administration, and other standard operating procedures enables providers to improve protocol development and review.

Unlike a clinical data warehouse, clinical knowledge management is a platform of processes, templates, content management tools, and a collaboration environment which improves the maintenance and administration of various sources of information around existing fragmented content and systems.

Clinical knowledge management also provides templated workspaces to support information management, collaboration, tracking, and reporting, and can be rolled out to any clinical content development group, including order set management. Utilizing clinical knowledge management enables organizations to incorporate knowledge sources to analyze clinical practice impacts such as diagnoses, patient safety indicators, medications, clinical protocols, and genetic and social profiles.

Team collaboration

Within a clinical knowledge management strategy, dispersed teams can collaborate in one secure, centralized portal and workspace. All of the information—e-mails, content, link to order set in CPOE, and supporting documentation—is stored and effectively managed and archived in the collaboration portal.

Clinical knowledge management benefits

- Unite request for change and review of changes in a single workspace
- Connect geographically dispersed teams
- Facilitate decision making
- Arrive at consensus in less time
- Streamline methodologies to facilitate best practices
- Maximize reuse and review previous decisions
- Avoid clogged inboxes
- Utilize auto versioning and archive
- Ensure secure access control

Each team has its own workspace and can manage status, assignment, and timelines for review within the work environment via scheduling support and work queues. In addition, team members can see each other's opinions in relation to the review, enabling faster review times and consensus across physicians, nurses, and multidisciplinary review teams. Team members also have dynamic visibility into the review and schedule and can update their own task progress.

With clinical knowledge management, teams can:

- Communicate on clinical content development objectives and initiatives
- Utilize a dedicated, easy-to-use workspace
- Manage efforts programmatically, tracking progress against defined goals and objectives
- Create a contextual workspace to aggregate project content and information
- Collaborate within their review team or easily invite other teams to collaborate when dependencies arise to quickly reach decision and consensus
- Track opinions, versions of content, decisions, communication, and status on review by aggregating information that is typically scattered across desktops, e-mail systems, and file systems
- Provide overall program management visibility with the ability to drill down to project details
- Develop project-specific or team-specific workspaces with templates to standardize methodologies and facilitate rapid initiation and adoption across teams

Integrating information and process through a unified ECM platform

Building a clinical knowledge management strategy using the EMC® Documentum® xCelerated Composition Platform (xCP) enables healthcare organizations to employ a case-based approach to application development. For many years, organizations have viewed case management as a strictly public sector activity, common to fields like social work, where there were actual case workers. But the case management model—initiate, gather information, evaluate and assess, communicate, and close—actually describes a work process that exists in virtually every industry, including healthcare.

With Documentum xCP, the conceptual structure of a case is not only that it pulls together everything that an old manila folder would contain—documents or content files—but also that it aggregates and orchestrates all the data, rules, policies, processes, and discussion threads that are relevant to that specific case instance.

A clinical knowledge management strategy built on Documentum xCP incorporates cross-functional collaboration with governance and a multidisciplinary approach to improve IT process management, patient care, and quality outcomes with the following features.

- **Collaboration:** Collaboration portals aligned with governance, business, and outcomes reduce the fragmentation of people, systems, content development, and objectives.

New intranet portals provide users with a consistent, organized way to communicate and interact with content, processes, and data.

- **Enterprise content management:** Centralized collaboration, content storage, and processing enable users to search for and retrieve the right content at the right time. Integrating information silos and tracking document versioning enable more secure audit trails.

Doctors and clinicians share knowledge and get faster access to second opinions for both patients and online expertise profiles.

- **Business process management:** Automating critical business processes supports workflows and reduces the time required to maintain content. Support for transaction-based content such as scanning and forms means content and workflow are managed as part of a unified model.

Hospital management can increase the accuracy of clinical data, streamline billing processes, and ensure maximum reimbursements.

EMC Documentum xCP solutions can include a variety of features and functions, including:

- Intelligent capture
- Task-specific graphical interfaces
- Content management and repository services
- Business process management
- Secure collaborative workspaces
- Customer communications management
- Information governance and regulatory compliance
- Monitoring and reporting

A templated approach

The fully templated approach of a clinical knowledge management strategy built on Documentum xCP enables providers to kick-start their efforts for organizing clinical content development through the following features.

- Easy-to-use capabilities for design and configuration of processes without coding, enabling providers to build their own templates
- Full work queue support in each collaboration portal
- Flexibility to change system as processes are discovered, designed, and changed
- Dashboards for easy tracking of review status
- Possibility for API integration with external systems, applications, and data sources
- Robust user search options through achieve and search filters
- Maximized reuse of content and approaches

Summary

Utilizing clinical knowledge management enables healthcare organizations to integrate content, decisions, and processes for effective problem solving and optimized patient care—all while easing the management burdens of project, program, and process management associated with clinical content development. The time and costs associated with managing clinical content are also reduced.

Clinical knowledge management can be rolled out to any clinical content development group beyond order set management. It provides a central place to collaborate securely inside and outside the firewall and stores every case file and contract securely. And templated workspaces support information management, collaboration, tracking, and reporting, which are managed as part of a unified model.

Take the next step

To learn more about clinical knowledge management, visit www.EMC.com or call **800.607.9546** (outside the U.S.: +1.925.600.5802).



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