

## Alfresco's Mobile Content Management Solution with iPads Helps PhenoPath Automate Standard Operating Procedures

PhenoPath Laboratories, PLLC is a physician-owned pathology reference laboratory providing diagnostic and contract research services to hospitals, physician offices, surgery centers, biopharmaceutical companies and research institutions nationwide.

### Challenge

As a healthcare organization, PhenoPath is subject to regulations mandated by a growing list of government and professional bodies including the Food and Drug Administration, Centers for Medicare & Medicaid Services (CMS), The College of American Pathologists, and the Departments of Health Services for Washington, California, Florida, New York, Rhode Island and Maryland. These regulations include strict requirements for managing and controlling the company's Standard Operating Procedures (SOPs) throughout their life cycle from creation, revision, periodic (annual) review and finally to retirement.

Since PhenoPath's inception, this has been a manual process managed by the Document Control Coordinator and involved many steps, each of which needed appropriate sign-off and documentation. As PhenoPath grew the task became more and more onerous, as this manual approach was time intensive, inefficient and did not account for user mobility needs. It became apparent that an automated system better fit the company's long-term needs.

### Solution

PhenoPath evaluated multiple document management systems including Documentum, Interwoven, Microsoft SharePoint and Alfresco. In addition to the functional and user requirements that were used to evaluate these solutions, ensuring seamless integration with company's Macs, along with PCs and Linux boxes, was an important consideration.

After the evaluation process, PhenoPath decided that open source Alfresco offered the best document management platform for the company. The other systems were more expensive — at almost double the cost — and did not offer the same flexibility, mobile capabilities and Apple support.

Reva Solutions, an Alfresco Partner and experts in mobile application development, helped PhenoPath implement Alfresco and recommended making the solution mobile using Apple iPads. Reva's four-phased approach includes: (1) managing SOP automatically; (2) developing a mobile employee Training Module; (3) managing assessments using iPads; and (4) using Alfresco as PhenoPath's corporate intranet.

Reva implemented Alfresco as the central document repository for all PhenoPath standard operating procedures, including customized workflows to document approval at different steps in the process.

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Reva also built a custom mobile application to integrate competency assessments within Alfresco using XML forms. This will replace the manual assessments performed by PhenoPath supervisors. Assessments developed as templates will be stored in the Alfresco repository where they can be called up at any time via the iPad application. Using this mobile solution, a supervisor can observe the employee performing their job tasks and record the results on the iPad. After successful completion of the assessment both the employee and supervisor will be able to signoff directly on the iPad resulting in the record being immediately stored in the employee's training file. This system will eliminate paperwork altogether and ensure proper record keeping, and will allow for easy verification of whether a competency assessment has been performed for any given employee, a win for all.

The Alfresco solution also incorporates advanced workflow technology for creating and modifying SOPs to ensure that PhenoPath meets Good Laboratory Practices (GLP) and compliance with the FDA's 21 CFR 11 by providing auditing, reporting and security.

As a result of going paperless and automating the process, PhenoPath saw immediate improvements in the on-time annual review rate of SOPs; jumping from two percent to 60 percent weeks after implementation; and to 98% after six months.

## Results

- 96% improvement in on time completion of review of standard operating procedures (SOPs)
- 100% reduction in time needed to enter data
- Greater control of documents
- Potential to scale with future growth
- Automated and streamlined standard operating procedure management for documents, increasing efficiency and regulatory compliance.
- The enterprise-wide mobile application on iPad will help to manage assessment data in a meaningful way and store it in Alfresco.
- Reduced risk for noncompliance, due to automation

Alfresco makes it easy for businesses to connect with content anywhere. The Alfresco platform integrates with mobile technology allowing companies like PhenoPath to leverage the benefits mobility in a true enterprise setting. We look forward to continuing to help PhenoPath leverage their Alfresco investment for more process improvements and efficiencies.

— Eswar Eluri, Principal, Reva Solutions