

"Through our partnership with KYOS we expanded our Patient Care services for our hospital by converting two paper-based file rooms to digital images. Working with KYOS, we were able to realize a more favorable ROI, and our provider satisfaction strongly enhanced by incorporating their vision of access to critical patient information through their automated business rules based processing and indexing for integration into our existing EMR structure." – HIM Director

"We took advantage of KYOS' broad knowledge of digital conversions and document data management. The integration of paper records into our EMR is complex, and we benefited tremendously throughout the project by having KYOS on our team. Their dedication, accessibility and collaboration were very appreciated and improved our outcome." - HIM Manager



UWHC is a HIMSS Level 7 organization with 493 beds and 1,281 physicians. HIM staff manages hundreds of paper chart requests from physicians per day with multiple paper file rooms located around campus and off site storage.

### The challenge:

UWHC desired targeted back file scanning to:

- Further the longitudinal patient record
- Integrate transplant records into their EMR
- Decrease records management operations costs
- Create clinical space for increased revenue generation
- Increase clinical revenue by clearing on site space

HIM staff occupied with scanning incoming loose leaf documents with limited capacity for large scale backfile conversion. UWHC senior management desired a rapid, cost effective solution and cost savings through redeployment of staff. Two on site file rooms totaling 2500 sq ft targeted for clinical repurposing.

### The solution:

UWHC employed KYOS' automated, intelligent document processing for effective EHR integration. Processing required highly complex business rule application and validation with >99% guaranteed accuracy. Example rules included finding and deleting duplications, previous scans, creating new tabs for anesthesiology records, chronological ordering, MRN validation, and others. In all, more than 50 business rules were algorithmically implemented by KYOS, replacing usual human effort. UWHC utilized a combination of self-scanned and service bureau services to provide the images to KYOS to process according to UWHC specified business rules. KYOS then provided validated images and data for upload into UWHC's OnBase document management system and from there into their Epic EHR system.

### The Results:

More than 2 million images in <3 months working time were processed and delivered at 99.8% measured overall accuracy against all specified business rules. 2500 sq ft of new potential clinical space created. >2800 new and transplant records integrated into UWHC's EMR. New tabs created to aid physician search for high value data. Significant decrease in records management, retrieval, and storage costs.



# KYOS TransFORM™: Intelligent Scanning

The Next Generation Answer For Improved Scanning Performance

## The Process:

KYOS began the project by first meeting with key HIM managers to understand, map, and document records management workflows. For KYOS, 'thought flow' is work flow. Talking to the experts and knowing how record processing is manually completed is critical to building automated workflows designed to streamline the process and boost productivity.

Two critical aspects drive this process of business rule mapping:

1. Understanding the work steps required to constitute the complete record, and
2. Knowing how end users expect to search for and visualize the information in the record.

KYOS begins the *thought flow = workflow* mapping by working with the client to specify record level rules, tab-specific rules, and systematically working down to the document, page, and field levels to capture all work steps in record processing.

## Summary

UWHC as a large leading academic medical institution has achieved the highest level of HIMSS certification for electronic health record (EHR) implementation. However, UWHC's HIM staff are still scanning millions of loose leaf pages/year, and in the interest of patient safety, physicians are still requesting large numbers of historical paper records each day, thus requiring maintaining a high level of records management operations cost.

KYOS employed its Intelligent Page Recognition™ to recognize each and every page of every document. UWHC specified business rules per field, per page, per document was applied to ensure complete and accurate processing. Information from end users on what and how they expect to search and retrieve was also built into the rules library, e.g., finding and aggregating all anesthesiology records into its own tab. All exception handling rules for special cases were also built into the automated processing workflow.

QA and validation workflows were then added to provide UWHC the assurance that all processing and end results were in compliance with their record processing and integration requirements.

The end result: doubling in processing throughput versus in-house activities, freeing up 2500 sqft of clinical space, reduced HIM operations costs, staff redeployment opportunities, reduced senior management time.

KYOS Systems Inc. delivers its innovative high accuracy, forms and document processing and management solution to give our clients complete, secure and immediate access to all information from paper and electronic forms. KYOS Systems combines its award winning technology with solid workflow design expertise to help you build the solution that streamlines your records management costs, dramatically boosts the value of your image archive, and helps you achieve your digital and electronic records goals. Whether you are already scanning and need a way to boost performance, or planning on scanning now, KYOS has the technology, expertise, and experience to help you succeed.

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