



# USC Cancer Surveillance Program Automates Medical Records Processing and Ensures Compliance with ABBYY

The CSP of the University of Southern California (USC) ascertains information on all new cancer cases reported in Los Angeles County, nearly 40,000 every year. Each case and its treatment must be reported to the California Cancer Registry, which requires that the CSP digitize thousands of cancer-related records annually – a task completed accurately and automatically with ABBYY FlexiCapture®.

*“ABBYY FlexiCapture was the right choice. As we progress, it grows and adapts with us.”*

*Moses Villa, Computer Services Consultant, CSP*



## About Los Angeles Cancer Surveillance Program

The Los Angeles County Cancer Surveillance Program (CSP) reports on all new cancer cases in Los Angeles County – making important contributions toward understanding the demography and etiology of cancer. The operation of the CSP is a key priority of the University of Southern California (USC) Department of Preventive Medicine.

Learn more at [www.usc.edu/lacsp](http://www.usc.edu/lacsp)

### A key resource for understanding the trends and demographics of cancer

Whenever someone in Los Angeles County is diagnosed with cancer, he or she contributes to scientists' understanding of the disease. This is because, since 1972, the University of Southern California collects and administers data about every diagnosis through the Los Angeles County Cancer Surveillance Program (CSP).

By gathering information on every new case of cancer reported in the county, CSP provides a vital resource for generating new hypotheses about cancer; for monitoring patterns of cancer incidence; and for identifying demographic groups at high risk of cancer. Additionally, California law requires that every case must be reported to the California Cancer Registry (CCR). As Dianne Kerford, MIS Manager, CSP, explains, “To provide a full picture of what’s happening, our submissions must include initial information about each case, and all therapy.”

### Manual form processing: Inefficient, risky and in need of a cure

Per California law, hospitals have six months from when a case is identified to submit it to the CCR's Eureka database. This process covers thousands of records every month – and involves repeat visits to dozens of sites, the capture of thousands of forms, in hundreds of formats, and their entry into the database.

CSP was adding patient records for 40,000 new cases a year. And although some of the records were received electronically, CSP was heavily reliant on paper-based manual processes that were expensive, slow and potentially insecure. “In the past,” says Kerford, “our field staff would take manual photocopiers to facilities, make copies of the pertinent portions of cancer records and bring them back in locked cases for manual extraction and entry into CCR's Eureka database.”

CSP also engaged a vendor to digitize images. And according to Kerford, it had all become too expensive and labor intensive: "Photocopying images, carrying them in locked cases, bringing them in-house, managing the paper documents, contracting with the vendor to get them imaged... it was slow, costly and inefficient. And not only that," continues Kerford, "we needed to strengthen our security. Carrying paper back and forth is not a good idea. It all had to change. We needed to automate our forms processing."

But a critical element was absent from the solution CSP envisioned: Accurate and reliable data capture. "Optical character recognition (OCR) was the weak link," says Kerford. "And we'd been looking at OCR software for a long time. But none of the providers offered the accuracy we needed, and what was out there was expensive."

### **From manual processes to automatic medical records capture: Taking the fast track with ABBYY FlexiCapture**

After a long period of investigation, CSP was ready to move ahead and began comparing vendors – engaging with 1Mage Software and their partner WiseTREND. "Apart from their imaging and document management expertise," says Kerford, "the big selling point for us was their use of ABBYY FlexiCapture for form capture."

With help from Ilya Evdokimov of WiseTREND, 1Mage integrated FlexiCapture into a solution for automating the process of imaging, converting and storing cancer records. Implementation was swift, as USC Computer Services Consultant, Moses Villa, describes: "It only took a few weeks from installation to training. We began testing with three hospitals, customizing templates for each. Such flexibility was critical, since each hospital has its own forms."

The process begins when field staff equipped with portable scanners and encrypted laptops visit clinics and hospitals – where they scan pertinent portions of records directly into their laptops as PDFs. Upon returning to CSP, the files are uploaded into a server dedicated to FlexiCapture – which extracts information from as many as eight different fields. After verification of the extracted data, the original image and data are automatically uploaded into the CCR's Eureka database – with a copy maintained at CSP in the 1Mage Document Management database.

"Initially," says Villa, "the process of accommodating new document formats was ponderous. But Ilya helped create a process that we could easily replicate when customization was required. In time, everything became easier and intuitive. Now if we need to make any modifications, the process is simplified."

And such ease of modification, Villa stressed, is important: "Hospitals change, names change, formats change. We're talking about a large list of hospitals and each has their own way of doing things. When they change formats, we have to change with it so that Eureka gets what it needs. FlexiCapture makes that happen."

### **The results**

For CSP, the time savings that automated form capture brings are significant. "Information is extracted faster and if there's anything to verify we can get to it more quickly," says Kerford. "Our ultimate goal is to go from hospital to registry within days and, with ABBYY/1Mage helping us, we're well on our way to doing that."

As Kerford also describes, the process of updating patient records is now far easier and less time consuming: "The system can handle different addendums that come in with different dates. It recognizes when dates have changed and the original record is amended with the latest information. So the six month report represents a more detailed picture of what happened with each cancer case."

And as Villa says, "FlexiCapture's flexibility is vital to the solution's success: Each hospital is unique and can have multiple unique templates. Inevitably, these change over time and as we progress and grow, FlexiCapture grows and adapts with us. For our field and our work, FlexiCapture and 1Mage Software was the right choice."

The solution has also eliminated the need to outsource imaging to costly vendors. "Plus," adds Kerford, "we've eliminated the security risks that come with manual processes. All that paper and copying is gone."

### **About 1Mage**

1Mage Software Inc. has been a leader in the document imaging and management industry for 20 years. The company provides paperless solutions to organizations of all sizes, helping them become more profitable through secure management of non-structured information via results-driven software. Visit [www.1Mage.com](http://www.1Mage.com) for more details.

### **About WiseTREND**

WiseTREND is a premier provider of advanced OCR and Data Capture solution integrations based on award-winning ABBYY technologies. The company was recognized as the "ABBYY Technology Partner of the Year 2013" in North America. Learn more at [www.WiseTREND.com](http://www.WiseTREND.com).

## **The Challenge:**

Replace slow and risk-prone manual processes with automated capture and submission of patient records to the California Cancer Registry.

## **The Result:**

Implemented in weeks, ABBYY FlexiCapture enabled USC-CSP to create a solution for automating the capture and conversion of cancer records – lowering costs, speeding submission of data and eliminating the security risks associated with paper-based processes.

*"Our ultimate goal was to go from hospital to registry within days. With ABBYY helping us, we're well on our way to doing that."*

*Dianne Kerford  
MIS Manager, CSP*

**Learn more at [www.ABBYY.com/FlexiCapture](http://www.ABBYY.com/FlexiCapture)**

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