

# Cedars Sinai Ensures Patient Safety, Reduces Costs and Improves Researcher Productivity



Cedars-Sinai, a leading hospital and research institution

## Business Challenge

- Burdensome and time-intensive procedures for managing completed and in-progress research studies
- High paper and printer services costs

## Solution

Click Commerce eResearch Portal

## Results

- Saved \$9,000 in printing costs
- Increased investigator satisfaction with IRB submission processes by 50 percent
- Attained 90 percent investigator participation two months prior to launch date
- Streamlined IRB application submissions

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**Dr. Eifaang Li**

*Director of Research Compliance  
Cedars-Sinai*

Cedars-Sinai Health System, located in Los Angeles, is one of the nation’s leading hospital and research institutions. The organization’s 1,800 physicians are leaders in basic and clinical research, bringing advancements in medicine directly from the laboratory to the bedside. In addition, they teach more than 245 residents and fellows in nearly 60 graduate medical education programs.

Biomedical clinical research is a major component of Cedars-Sinai’s mission and is critical to its commitment of maintaining excellence in patient care. The health system’s 164,000-square foot research institute is one of the largest state-of-the-art clinical research trial facilities of any private hospital in the nation.

Cedars-Sinai investigators are currently conducting more than 600 clinical research projects. These encompass basic, translational, clinical and health services research and cover the entire spectrum of disease investigation, including molecular genetics, biochemical analysis and disease-based areas such as cancer, cardiovascular disorders and neurosciences.

In 2005, Cedars-Sinai was recognized as one of America’s best hospitals. Also in 2005, Cedars-Sinai received the “Most Wired Hospital” designation from Hospitals & Health Networks magazine. They are among only seven hospitals in California and 100 in the nation to receive this distinction for the advanced use of information technology in safety and quality, customer service, business process, workforce, and public health and safety.

## Business Challenge

At any one time, research compliance analysts oversee dozens of research trials, handle requests for multiple trial amendments and continuations, manage submissions of thousands of adverse event reports associated with ongoing trials, in addition to information for hundreds of completed trials, all in an effort to meet Institutional Review Board (IRB) guidelines and

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other applicable regulatory requirements. These analysts must create multiple paper copies of each research application, maintain paper copies of adverse event reports, spend hours tracking down the review status of a particular research trial, and be constantly on guard for submission errors.

"We had a dedicated Intake team," said Dr. Eifaang Li, director of research compliance. "Their primary responsibility was to ensure the completeness of research applications, make copies of applications, create duplicate paper folders, and log the applications into our database. It was a cumbersome, labor intensive, and long process."

Dr. Li and her team were spending thousands of dollars on paper and printing costs, and extensive time and effort following up to help investigators meet deadlines and submit accurate applications.

They knew there was a better way.

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## Solution

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Dr. Li envisioned an integrated research administration portal where both research and compliance staff could easily make changes to research protocol information and manage the regulatory status of multiple research protocols. She hoped that the successful implementation of a research administration portal would launch Cedars-Sinai's move toward complete research compliance management via the Internet.

In 2002, Dr. Li moved forward with her vision and decided to use National Institute of Health (NIH) grant funds to pursue a solution.

Dr. Li and her team started internally with their own IS department, but soon realized that time and budget constraints were stalling their initiative. After an initial review of available products and vendors, the team assembled an 18-page vendor demo script and met with four chosen software vendors, rating them on the functionality and configurability of their solutions. The vendor with the highest score was awarded the contract. The Click Commerce eResearch Portal soundly beat the competition.

"Click Commerce was the clear leader in our ratings process," commented Dr. Li. "Their solution showed the most flexibility and configurability for our specific needs."

For example, it was very important to Dr. Li and her team to have the ability to quickly make changes to IRB application forms when regulations or their own internal processes changed. In addition, they needed workflows to be easily modified to match the precise way in which Cedars-Sinai conducts departmental and ancillary committee reviews (such as Medical Radiation Safety Committee, Sponsored Research Administration, etc.).

"We do not have any information systems professionals on our team – except for a business-oriented project manager from the IS Department—the team is comprised of research compliance domain experts," said Dr. Li. Therefore, one requirement for this system was that it be easy to use and easy to update on a moment's notice. Working with Click Professional Services personnel, Dr. Li's IRB staff spearheaded this entire project.

As a result, they were able to move quickly to develop the forms and workflows they desired when it came time to implement the portal.

“We kicked off the project in September 2003, and sent regular announcements to our research community to keep them up-to-date on our progress,” commented Dr. Li. “We have an excellent partnership with the research community and that helped us tremendously with our testing milestones.”

Before rolling out the system for limited deployment the following July, 10 core research teams were involved in a comprehensive testing process.

Dr. Li and her team implemented suggestions from the research team and tweaked the workflows and content of the IRB applications accordingly. Mandatory use of the site by all research personnel was targeted for Jan. 1, 2005. From the voluntary use of the system in July to the end of December 2004, the team worked hard to promote awareness of the availability of the new system to all research teams.

The volunteer users helped with word of mouth, but Dr. Li and her team also gave frequent presentations, conducted regular group training sessions, and provided periodic announcements via Cedars-Sinai’s e-mail Exchange. One of the most successful efforts in promoting the wide-spread use of the system was the frequently held “Office Hours,” during which research staff were encouraged to come to a convenient location for one-on-one, hands-on training.

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## Results

### Improved Satisfaction

By October – more than two months before the mandatory use deadline of Jan. 1, 2005 - almost half of the 19 IRB meeting agenda items were submitted via the new system. By December, while still in the voluntary use period, all but two of the 24 IRB meeting agenda items were prepared and submitted on-line.

“We were very pleased that most of the research departments were already using the system several weeks before it was required,” said Dr. Li. “This was a clear indicator of the successful adoption of the Click Commerce eResearch Portal.” It also was a key indicator of how much feedback Dr. Li’s team incorporated into the system in a very short time.

Dr. Li and her team conducted pre-implementation and post-implementation surveys to help gauge the success of the project. More than 100 responses were collected for both surveys and they were overwhelmingly positive.

One particular finding produced dramatic changes: When asked about the ease of preparing and submitting applications to the IRB prior to implementing the eResearch portal, 28 percent said “easy or very easy.” Post-implementation, this number nearly doubled.

### Reduced Costs

The Research Compliance Department’s printing costs have decreased dramatically – shaving \$9,000 from their annual Kinko’s bill.

In addition, they were able to re-allocate their dedicated intake team to focus on the primary goal of Cedars-Sinai’s IRB: protect and safeguard research subjects.

### Improved Administrator Productivity

Today, Cedars-Sinai research compliance analysts manage the review and oversight of more than 1,000 research studies and over 2,000 contacts via the Click Commerce eResearch Portal. With this solution they can quickly find studies, make content changes, track the status of any study in the system, and produce a variety of reports including time and efficiency measurements.

In addition, their experienced analysts do not have to rely on a third person in order to make changes to IRB processes. Cedars-Sinai administrators can make system changes to reflect revised or new policies and procedures, update applications, or post notices to the research community, without having to contact their internal IT department or the vendor.

“Because we work directly with researchers, if a change needs to be made, we can make that decision quickly, test it, and make the changes almost immediately,” said Dr. Li.

### Improved Investigator Productivity

Prior to the Click Commerce eResearch Portal implementation, the most common criticisms of the IRB applications process included redundant, time-consuming paperwork, lack of coordination between the IRB and other institutional review bodies, lack of communication regarding the status of applications, and overall length of time required to process an application for new research and approval to start the research.

Today, investigators no longer need to spend hours tracking down the status of their applications. After entering application data into the eResearch Portal, they can simply look online to see the status of their application, eliminating multiple, repeated phone calls to determine where an application is at each stage in the process.

Additionally, investigators enter information into one application that is automatically routed to other institutional review bodies responsible for reviewing the project, eliminating the redundant paperwork and improving coordination.

Overall, the turnaround time for processing new applications, adverse events, continuing reviews and amendments has been reduced dramatically, allowing proposed research to get started more quickly and enhancing the protection offered to research volunteers.

According to one survey administered by Dr. Li's team in November 2005, "The staff has always been helpful, but the addition of Click Commerce and electronic processing of correspondence has made everything better and much more efficient."

### Future Plans

With a successful launch of the eResearch portal behind them, Dr. Li's team has established a platform for launching additional research services to investigators such as new applications for animal research, which was deployed to the campus in March of this year. The institution is also considering using the portal to streamline conflict of interest disclosures and reviews and clinical trial postings for public access.

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### About Click Commerce Research and Healthcare

Click Commerce Research and Healthcare is a leading provider of automated research administration and compliance systems to many of the premier research institutions in North America, including Johns Hopkins University, Duke University and the University of Pittsburgh. Click's eResearch Portal can be configured to accommodate institutions of all sizes and is backed by an experienced Professional Services organization and the financial stability of a Fortune 200 company.

### Take the Next Step

Contact us to find out how eResearch Portal can be licensed and configured to support your institution's processes.

Visit us online at: [research.clickcommerce.com](http://research.clickcommerce.com), or call **1-800-590-5400**.