



Innovation Through Integration

Introducing HCL's Unified Clinical Platform for the Healthcare Industry

HCL believes there's a better way to do pharmaceutical and biotechnology R&D and manage healthcare outcomes. That's why we are building a new operating model and technology platform that simplifies life for researchers and R&D managers, accelerates projects, and controls costs by giving R&D teams a single source for accessing applications and data.

WHY HCL?

HCL is powered by more than 70,000 people in 31 countries. Our work is driven by highly experienced professionals who are drawn to our entrepreneurial environment and strong customer focus. We are passionate about helping our client make changes that count, and our team has a record of successful engagements to show for it.

R&D AT A CROSSROADS

Massive forces are reshaping how pharmaceutical and biotechnology companies develop and commercialize new drugs. Pressured by the changing economics and politics of the healthcare industry, pharmaceutical companies are discovering that traditional models of R&D no longer work and that success – indeed survival – will depend on adapting to a new landscape that is far more integrated, more rapidly evolving, and more competitive than could be imagined just a decade ago.

How can pharmaceutical companies thrive in this new landscape? A formula for success began to emerge more than a decade ago, when Pharma found it could partner with specialized firms to help control costs and accelerate drug development. An ecosystem of contract research organizations (CROs) and development partners – along with specialized applications and technologies – emerged to fill the need for automating core processes ranging from discovery, pre-clinical, and clinical trials to drug safety and long-term product surveillance.

Also entering the ecosystem were new information systems and data providers that promised to help drug companies and researchers make sense of the explosion of information and that has become integral to modern pharmaceutical R&D programs.

But taming this torrent of data hasn't been easy. Information sources continue to multiply, often stretching across dozens of databases, research organizations, healthcare entities, and government and academic institutions. At many large pharmaceutical companies, researchers shift between hundreds of software applications and tools to tap data sources and interact with partner organizations. In these complex environments, it's no surprise that R&D productivity has suffered, while the cost of managing the supporting IT infrastructure and data environments has skyrocketed.

REINVENTING R&D

HCL believes there's a better way to do pharmaceutical R&D. That's why we are building a new operating model and IT platform services that simplifies life for researchers and partners, enables collaboration and externalization, accelerates projects, and controls costs by giving R&D a single source for accessing applications and data within a streamlined IT environment.

We call it the Unified Clinical Platform for Healthcare – and already it's generating value for some of the world's leading pharmaceutical companies. The platform brings together data sources, applications, and service providers across the healthcare ecosystem, creating a unified, multi-tenant-based service that drives productivity, savings, and innovation.

As a leader in healthcare and global IT services, HCL has been at the forefront of building innovative and secure information systems that deliver value to the entire healthcare ecosystem. We're a proven IT integrator with 71,000 employees in 31 countries, and we seed innovation and incubate new solutions through HCL's international Clinical Center of Excellence.

These experiences, coupled with our close partnerships with global pharmaceutical companies, inspired us to create this latest R&D offering. The Unified Clinical Platform is an innovation that delivers the benefits of integration and automation – which businesses have long come to expect of their ERP systems – to the Pharma R&D marketplace. Industry leaders have called for this evolution toward simplicity and integration, and HCL is excited to be a key enabler of this future.



HCL'S UNIFIED CLINICAL PLATFORM FOR R&D

HCL's Unified Clinical Platform addresses a spectrum of R&D business processes that pharmaceutical and biotech companies need to develop, test, and commercialize new medicines and therapies. Key capabilities of HCL's R&D platform include:

Clinical Data Aggregation

- Efficiently manage and seamlessly integrate data from partners ranging from multi-regional CROs, central labs, and EKG to emerging healthcare information and omics
- Streamline clinical systems from data capture to analysis, and align with business processes
- Seamlessly integrate data from internal sources for a "single version of the truth"

Clinical Trial Data Management

- Streamline and enhance key activities such as protocol development and study management
- Enable adoption of current and emerging clinical trials models from Adaptive to Patient Initiated
- Enable standardization and improved quality checks across data flows

Compliance and Document Management

- Align effectively with internal and external regulatory bodies
- Enhance oversight and support models for clinical trials
- Efficiently respond to regulatory and legal bodies regarding ongoing clinical trials

Analysis, Reporting and Interpretation

- Provide a single technology platform for all A&R activities
- Leverage enhanced analytics, modeling and simulation capabilities
- Enable unstructured data analysis

Commercialization

- Enable a new level of CRM that enhances key relationships across the partner landscape
- Enable a truly mobile and agile sales force armed with real-time marketing and syndicated data
- Enable an agile marketing organization that can effectively conduct closed loop marketing campaigns

POWERFUL EFFICIENCIES AND SAVINGS

Leading pharmaceutical companies are turning to HCL's R&D solution because its efficiencies generate business value and spur innovation. By integrating clinical and healthcare data from multiple sources and partners, HCL's platform gives you a single starting point for managing all R&D data across your organization. You connect to one entity – and from there you automatically integrate with all data sources, from CROs to R&D partners, to healthcare entities.

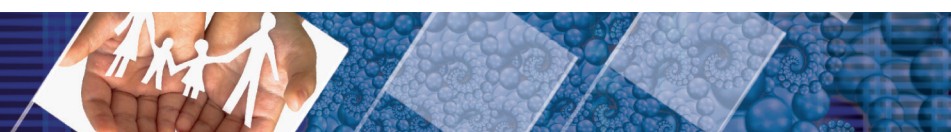
HCL's platform is designed to evolve in step with your company, responding rapidly to new regulatory, technology and market changes – and automatically certifying each new system iteration. Fully configurable and cloud-enabled, the Unified Clinical Platform gives companies the power to integrate this new productive power within their existing IT and partner-collaboration environments.

Operational and Strategic Benefits

- Keep research teams focused on R&D, not database and application management
- Accelerate clinical trial development, study management, report analysis, and regulatory submissions
- Minimize protocol development and complexity
- Improve data quality
- Eliminate data duplication and inefficient workflows
- Harmonize data-management platforms and tools

THE BUILDING BLOCKS OF INTEGRATION

HCL's Unified Clinical Platform integrates stakeholders, systems, and data sources with common standards and interfaces, creating one portal for streamlined R&D.



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INSIDE THE UNIFIED PLATFORM

HCL's Unified Clinical Platform is built from our market-tested technology solutions, including:

- *R&D Reference Data Module.* Stages internal and partner data sources and institutes data management processes that ensure a high degree of data quality and governance.
- *Operational Data Warehouse.* Consolidates key data domains (Drug, Protocol, Countries, Investigators, etc.) and provides standard vocabularies, dictionaries, and thesauri.
- *Clinical Data Warehouse.* Leverages Oracle's Life Sciences Hub and HCL's Exchange Hub to integrate and analyze data across a wide swath of clinical scientific sources.
- *Trial Master File.* Provides a hosted solution that allows for integration and access to study trial data for up to 800 studies and 10,000 users.
- *Information Exchange Hub.* Enables data transfers between applications and uses service-oriented architecture (SOA) to support efficient messaging and data transfers.

As the pharmaceutical industry rises to meet the challenges of the new healthcare ecosystem, HCL offers a compelling new model for Pharma R&D. HCL's Unified Clinical Platform represents the logical next step in the industry's search for efficiency, simplicity, and integration. It is enabling pharmaceutical companies to cut through the complexities of data and system management and focus on what really matters: creating innovations in medicines and therapies that generate value for your business.

FOR MORE INFORMATION

For more information about HCL's Unified Clinical Platform for R&D, contact healthcare@hcl.com or visit www.hcltech.com/healthcare.



Hello, I'm from HCL! We work behind the scenes, helping our customers to shift paradigms and start revolutions. We use digital engineering to build superhuman capabilities. We make sure that the rate of progress far exceeds the price. And right now, 79,000 of us bright sparks are busy developing solutions for 500 customers in 31 countries across the world. **How can I help you?**

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