

Adobe solutions for healthcare

“Communities of care” challenge healthcare provider efficiency



Adobe solutions for healthcare support a wide variety of providers, including:

- Health plans
- Home healthcare providers
- Hospitals
- Integrated delivery networks
- Long-term care facilities
- Medical groups
- Medical practice management services
- Medical research laboratories
- Prescription benefits management services
- Specialized healthcare services (for example, imaging centers)

Healthcare is more complex now than at any other time in history. Individuals benefit from a dynamic “community of care,” including primary care physicians, specialists, case managers, surgeons, social workers, nurses, and others. However, this extended community has increased the likelihood that individuals complete redundant paperbased forms, that specific care-related information is stored in separate files by individual physicians, that disparate systems are used to manage health information, and that privacy may be compromised.

Concurrently, healthcare providers are striving to improve patient care, reduce costs, protect patient privacy, and enforce compliance by streamlining and automating processes. Experts agree technology is the solution. However, though healthcare providers have invested heavily in software applications from a variety of vendors over the last few decades, they are still struggling to make them work more efficiently—when and where they are needed the most. The question remains: How can today’s healthcare providers better orchestrate the exchange of patient information between those in the community of care?

Adobe solutions support healthcare automation

With Adobe solutions, healthcare providers can improve caregiver collaboration and increase patient information process efficiency to save time, money, and most importantly, improve patient care. Adobe solutions can help replace inefficient, manual, paper-based processes with automated efficient processes that increase collaboration, streamline electronic forms, and support electronic medical records (EMRs) and personal healthcare records (PHRs).

With Adobe solutions, healthcare providers can:

- Streamline paper-based information processing—forms, charts, X-rays, images, and more—to ensure more accurate patient records
- Enable more secure dissemination of patient data within the community of care and to insurers
- Improve quality of care by consolidating an entire patient history into a single file
- Reduce or eliminate manual handoffs for faster, less expensive processing

EMRs and PHRs

In February 2005, HIMSS Analytics CEO David Garets reported that only 115 out of nearly 5,000 U.S. hospitals—just 2%—had what his group regards as a “complete EMR.” That requires a clinical data repository; computerized physician order entry; electronic records in the health information management department; an electronic medication administration record; a picture archiving and communications system; point-of-care documentation; and laboratory, radiology, and pharmacy information systems. Adobe and its partner solutions can help healthcare providers significantly increase that percentage.

Industry-standard Adobe® PDF serves as an ideal container to support EMRs and PHRs. With Adobe PDF, providers can leverage healthcare's long history of paper documents to create electronic versions that have the exact look and feel of their paper counterparts but are easier to store and distribute. In addition, Adobe PDF makes it easy to transfer information to anyone in the community of care—and payers—by consolidating information from different applications into one searchable Adobe PDF document or binder. This means an EMR or PHR can include information such as family history, physician notes, X-rays, and blood sample images, as well as multimedia content and more.

With Adobe's built-in support for digital signatures, access to information in an EMR or PHR is limited to the requisite parties within the community of care. Because of its small footprint and ubiquitous Adobe Reader® software, Adobe PDF can also help to improve quality of care by providing those who need to know with access to the records anytime and anywhere on a variety of devices—from computers to handhelds to tablet PCs.

Electronic forms

Many healthcare providers today are still plagued by paper. This may be in the form of a patient's history or a consent form due to a physician's requirement to have a patient's wet signature prior to conducting a procedure. For healthcare providers, paper can be a real obstacle to automated solutions due to longer processing times, as well as the additional expense and potential for errors involved with reentering data. Today's physicians cannot afford slower processing and higher costs.

Adobe solutions include a design engine that enables healthcare providers to easily render forms and create electronic charts and documents. Then, using free Adobe Reader, patients simply fill out these forms online or offline.

From there, Adobe LiveCycle® ES (Enterprise Suite) solutions allow providers to integrate the completed paper-based forms and charts with automated workflows to provide a higher quality of care. For example, Adobe solutions can prefill forms with redundant patient information from existing records—such as name, address, and social security number—and process them through a specified server-based workflow that includes appropriate community-of-care notifications.

By automating manual processes and data exchange, healthcare providers gain all of the benefits of XML for interoperability, but can still retain the familiar look-and-feel of their paper forms and documents. With Adobe solutions, providers can also promote more secure information delivery and patient confidentiality by applying persistent and dynamic security policies that enable members in the community of care to specify who has access to records and what they can do with them, when, and for how long.

Collaboration

To improve collaboration and communication among even the most remote members of a patient's community of care, Adobe offers interactive, high-impact solutions everyone can access instantly. Adobe's rich web communication system improves care by engaging specialists anytime and anywhere with multimedia content. When deployed, it leverages technology that is already installed on more than 98% of browsers worldwide, allowing caregivers to join an online session or training course or to watch a surgical demonstration or video on demand, instantly. In addition, the Adobe solution offers the unique combination of traditional streaming media capabilities and a flexible development environment for creating and delivering innovative, interactive media applications to broad audiences.

"Our Adobe solution will enable us to automate 80% of our records-related processes by 2008—up from 40% today. We believe we have the potential to improve patient care and reduce malpractice liability across Harvard hospitals by \$6 million per year, based on 30 years of claims experience with consent related issues, simply by automating patient consent forms."

John Halamka, MD and CIO,
Beth Israel Deaconess Medical Center
(BIDMC)

“As an association in a large state, Arizona Hospital and Healthcare Association (AzHHA) is always seeking ways to increase our visibility with members and to lessen their travel time to our offices in Phoenix. Your software brings us all into a single room for real-time meetings and information sharing... Allowing us to pursue our ‘just in time learning’ goals.”

Lynn Bruchhof, chief operating officer,
Arizona Hospital and Healthcare Association

With Adobe solutions, healthcare provider IT organizations can:

- Help reduce support costs by delivering and automatically processing electronic forms that look exactly like their paper counterparts
- Help protect existing IT investments by extending enterprise systems with open, standards-based technology
- Provide more secure patient information access anytime, anywhere—even on mobile devices—to those in the community of care who need to know

Adobe solutions support healthcare standards and regulations

Adobe has a tradition of establishing, supporting, and promoting standards. That tradition continues with Adobe’s commitment to building technology solutions that meet customer requirements and embrace healthcare industry standards such as the following.

The Health Insurance Portability and Accountability Act (HIPAA) brought an industry-standard set of protective security measures to the attention of providers that were vulnerable to problems in their information systems. Adobe solutions help providers meet HIPAA requirements by combining sophisticated solutions for document control, digital signatures, and document certification with the capabilities of leading security partners. Adobe solutions help providers maintain privacy and confidentiality by giving them control over how, when, and by whom documents are accessed.

Adobe’s support for the Signatures and Authentication for Everyone (SAFE) digital signature and identity management standard allows healthcare and life sciences organizations to more efficiently and cost-effectively conduct business by streamlining the secure movement of authenticated information between various sponsors, partners, and regulators. Adobe solutions provide persistent document security capabilities that improve authentication by helping to ensure there is an auditable electronic document of record, usable across organizations, that is better than paper.

Adobe solutions for healthcare include capabilities to support industry-specific standards, such as PDF Healthcare, Clinical Data Interchange Standards Consortium (CDISC), Health Level Seven (HL7), and Continuity of Care Record (CCR) standards, which are designed to help providers cut costs and facilitate interoperability. Through support for XML within Adobe LifeCycle ES and PDF, enterprises can leverage Adobe solutions to generate interactive forms, capture new or modify existing user data directly in forms, and integrate form data with core business systems. The Adobe XML architecture enables providers to extend their investments in Java™ Platform, Enterprise Edition (Java EE), service-oriented architectures, and web services to more easily deliver applications that take advantage of Adobe Reader software.

Help reduce costs with automated, more secure, intelligent information sharing

Adobe solutions for healthcare can be easily integrated with existing hospital or health information management systems and medical applications. Adobe LiveCycle ES solutions help providers reduce costs, while improving patient care and records accuracy.

Save time, help reduce costs, and improve accuracy with a single container for EMRs and PHRs

- Create electronic documents that have the exact look and feel of their paper counterparts but are easier to store and distribute using Adobe LiveCycle ES, Acrobat® software, and Adobe PDF.
- Consolidate information—including physician notes, X-rays, surgery videos, blood sample images, and more—into one searchable container using Adobe PDF.

Streamline forms completion and processing with LiveCycle ES

- Create forms and create fillable electronic documents using Adobe LiveCycle Designer ES software.
- Allow users to complete Adobe PDF forms online or offline, and then submit XML data directly into systems to launch effective workflows with Adobe LiveCycle Process Management ES software.
- Enable automated, real-time processes, such as forms data extraction, using Adobe LiveCycle Forms ES software, which reduces costs, errors, and time compared with manual data entry.

Enable more secure information exchange between communities of care and payers

- Apply digital signatures to Adobe PDF files using Acrobat or LiveCycle Reader Extensions ES.
- Verify electronic signatures and document integrity with Adobe LiveCycle Digital Signatures ES software.
- Gain better control of patient records by dynamically creating security policies that restrict access to Adobe PDF files and prevent others from altering or printing a record using Adobe LiveCycle Rights Management ES software.

Collaborate with other caregivers and deliver just-in-time medical training

- Encourage information sharing with others in the community of care about patient conditions and procedures using Acrobat Connect for real-time, web-based conferencing.
- Reduce time out of the office by offering streaming media presentations of surgical demonstrations using Adobe Flash Media Server.

Contact Adobe today

For providers around the world, Adobe solutions for healthcare automate, streamline, and improve the security of patient information. With support for industry standards, Adobe solutions help healthcare providers save time, improve data accuracy, and reduce processing costs. As a result, they can better orchestrate the exchange of patient information between those in the community of care and ultimately provide better quality, lower cost care. For more information about Adobe solutions for healthcare, call 800-861-9428, visit www.adobe.com/lifesciences, or send an e-mail to solutions@adobe.com.



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