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CANON SOLUTIONS AMERICA HEALTHCARE INDUSTRY UPDATE

Strategic Information Management: Healthcare's RX for Triple Aim Success

The Imperative of Integrating Print/Scan Architecture

This research was the result of collaboration between Canon Solutions America's Enterprise Managed Services Division Healthcare Advisory Team and Patina Solutions. The Healthcare Advisory Team delivers industry research and best practices related to print, document management technology, and workflow optimization to Canon Solutions America's healthcare clients to help them stay at the forefront of innovation in the changing world of healthcare.

Triple Aim for Healthcare

In 2008, Don Berwick, Administrator of the Centers for Medicare and Medicaid, published a call for healthcare's "Triple Aim" - improving population health, improving the patient experience, and reducing per capita costs. The idea took hold, providing an organizing framework for public policy initiatives and drove the strategies of healthcare industry participants nationally and internationally.[1]

Berwick put into motion the foundation for our country's new healthcare delivery model built on the premise that America will not achieve high-value healthcare unless improvement initiatives pursue a broader system of linked goals.

An Unprecedented Time for Industry Changes

The changes healthcare leaders must make to survive and thrive in post- health reform are daunting. There is a new playing field full of challenge and risk with many new rules and interdependencies. New technologies and innovations have been implemented to help improve processes, drive standardization, and reduce human error.

Better work processes and lower costs are key component to shift the healthcare industry.

Information Management (IM): A Critical Success Factor

Well into the Triple Aim Journey, providers continue to make significant investments in enabling technologies, notably in electronic health records (EHR) and system interoperability. These new architectures move the right information to the right place at the right time, across organizational barriers.

"As on-ramps and off-ramps to provider information and workflows, print, copy, fax, and scan play a critical role in the success or failure of an IM plan and its ability to enable provider staff in effective patient care," says Valerie Belli, Vice President of the Enterprise Managed Services Division of Canon Solutions America. *"The challenge is in not recognizing this dependence and therefore not incorporating this architecture as part of the system's IM Plan,"* she added.

PRINT/SCAN ARCHITECTURE:
A KEY COMPONENT OF HEALTHCARE IM

Perspectives from IT Leadership

IT leaders are highly invested in a successful EHR rollout but are often less prepared when the lack of user print and scan process change erodes the expected EHR end result.

According to Terry Chartier, Chief Information Officer at Mercy Health Network in northern Iowa, "*Although EHR adoption promises lower costs and improved processes, there remains a significant amount of printing, driven by both process and sheer convenience – user habits are slow to change. Clearly, better processes are the key to lower costs and improved data security.*"

Industry analysts from PwC estimate that at least 60% of electronic records will be printed at least once, a key reason why annual print volumes are still increasing at 11% per year and the typical healthcare employee generates up to $1,000/year in document output costs.

"*Despite our industry's aggressive approach to build out the EHR environment, paper documents are very much alive and well,*" according to Christopher Timbers, Vice President & Chief Information Officer, NorthBay Healthcare in Fairfield and Vacaville, CA.

With multiple technology initiatives underway, the nuts and bolts of a successful print and scan architecture can find itself moved down the priority list. Allowing that to happen is a mistake, say industry experts. "*All health systems deal with multiple variables and vendors, which means more headaches for IT,*" says Canon Solutions America's Belli. "*We're moving to establish an enterprise print and scan platform in which technology and workflows are fully standardized and services are delivered directly by the vendor.*"

The Issue of Security

Another important benefit of a high performing print program is increased security and reduced organizational risk.

The Ponemon Institute, a leading research center dedicated to information security, estimates that 89% of healthcare providers experience a data breach in any given year–whether through a criminal attack or employee negligence–and that the cost of a data breach has reached $363 per record.

"*An unsecured print infrastructure lacking hardened devices, encryption, and access controls poses significant risks to the provider organization and its patients,*" states Kristin Von Manowski, Senior Strategist with the Enterprise Managed Services Division at Canon Solutions America.

Despite these apparent risks, security related to print, copy, fax, and scan is often low on the list of priorities for provider IT security experts. Provider IT teams are already stretched from a staffing and budget perspective. As a result, print security policies and standards are

often informally dispersed to staff with loose compliance measures in place for clinicians and employees.

A strong security strategy incorporates people, process, and technology. Employees are pivotal to achieving improved information management. Therefore, security needs to be a part of the overall training and education. Nearly 60% of IT security professionals pinpointed employees as the most likely source of accidental or intentional breaches.

According to a study conducted by McAfee, 54% of employees admit they do not always follow the IT security policies of their companies. Moreover, 51% of employees with access to a printer, copier, or multifunction device in their offices admit to copying, scanning, or printing information that is classified as confidential.

"Development of a comprehensive print security strategy including the execution of that strategy from an internal communication and end user engagement perspective is a critical part of the solution," shares Von Manowski of Canon Solutions America. *"Change management and user engagement are essential components of any provider security strategy that includes print."*

"It's key for health organizations to educate staff and hold them accountable, otherwise, change management will not be successful. People quickly pick up on whether the changes are in the best interest of the patient," continues Von Manowski.

Medical Leadership Opinion

Clinical leaders should participate in building a comprehensive information management strategy that provides the best possible patient care with the least possible risk to patient safety.

"It can be the Wild, Wild West out there," says Steven Nicholas, M.D. a 30-year physician health system leader and Patina Solutions Professional. *"With the proliferation of data and devices, it can be difficult to get your arms around all the necessary changes to workflows. Inexplicably, print and scan remain afterthoughts."*

Dr. Nicholas offers these examples:

A nurse is delayed after sending a chart to the printer. The document sits unattended in an output tray.

Test results are sent to a printer where a copy remains on the device's hard drive. Hackers invade the device, stealing its data and bootstrapping their way into the hospital's network.

A patient carries paper medical records into the hospital and they are scanned but not captured and indexed properly. The medical history is not fully referenced in subsequent patient care decisions.

"Scenarios like these play out in hospitals every day, presenting unique challenges to the ability to print and scan effectively," says Dr. Nicholas. *"Access AND security are both necessary to deliver quality care."*

The CFO and the Bottom Line

CFOs should realize that the cost savings opportunity related to print is not limited to device and toner cost. Financial leaders should be working with vendors to drive a comprehensive and standardized print management program that delivers long-term cost savings through improved capacity management, workflow optimization, and user engagement.

"Our experience shows us that the average provider program can reduce costs by 30-40% when a comprehensive strategy is effectively implemented, as compared to 10-15% saved when a provider is narrowly focused on unit costs," shares David Cavanaugh, Director of Strategy in the Enterprise Managed Services Division of Canon Solutions America. *"Financial returns are realized when contracts are consolidated, devices and volumes are reduced, end-users engaged, and workflows optimized,"* he added.

"We have long-term reductions in print expenses as our overall goal," says Steve Chen, Chief Financial Officer of Dignity Health in Bakersfield, California. Dignity Health is America's fifth largest hospital system with hospitals in 17 states. *"We always knew that achieving our goal started with the right vendor relationship and improved service levels. Process improvement and expense reductions go hand-in-hand."*

Perspective of Industry Experts

Industry experts often offer tremendous knowledge regarding how best to align your print, copy, fax, and scan environment with organizational goals.

"The basic question we are asked is 'How much and what should we be printing?,'" says David Reynolds, President/CEO of ROI, Inc. an IT industry advisor to healthcare organizations. *"Print spending can be difficult to track and monitor, resulting in wasteful practices and unnecessary costs, hence the need for a comprehensive IM plan and good strategic vendors and partners."*

"Many organizations track only basic metrics such as the total number of devices deployed, system reliability and uptime, and the expense of consumables like toner and paper," says Reynolds.

"Print spend reductions are feasible," says Darice Gryzbowski, health information management (HIM) consultant: *"It's important to assess the total print environment including storage locations and software applications offering print capabilities. Where are you printing? Why? From what system? Where does the output go?"*

In her HIM audit work, Gryzbowski finds that a typical mid-sized community hospital will have:

- 60-80 storage locations where original EHR-related paper is stored

- 80-200 different electronic applications producing information

- 2,000 different forms needing to be printed at some point

By one estimate, providers implementing a comprehensive print management strategy could expect measurable reductions in the total cost of ownership of 40% or more, including a 35-40% reduction in print volumes, a 30% reduction in toner and paper costs, print asset consolidation of 50% or more, and color printing reduced to below 10%.[2]

Canon Solutions America has established a **Healthcare Advisory Team**, a non-sales team of senior level experts focused on consulting with providers on how to develop and implement the most appropriate strategies. "*Our Healthcare Advisory Team performs primary research and benchmarking of healthcare providers in order to guide clients through the process of solution development using the best available strategies and technology,*" says Rick Ranft, Senior Director with Canon Solutions America's Enterprise Managed Services Division **Healthcare Advisory Team**.

Bringing it Home

A comprehensive print and scan strategy should be a critical element in an organization's overall enterprise business solution that can drive efficiencies, lower costs, ensure security, and support cost savings.

Combining a strong print and scan strategy with EHR implementation to improve project outcomes is critical. Taking a strategic view of IM requires a system view by all internal key stakeholders, as well as having the right vendor partner who asks the right questions, can customize the right solution strategy, and can remain agile as your organization and its processes evolve over time.

Vendors need to offer providers more than just a fleet of devices with service technicians to keep them operational. A qualified vendor partner is able to align with your organization to manage print queues, devices and their service levels, and support users without the intervention of provider resources, allowing provider IT to focus on other high impact projects.
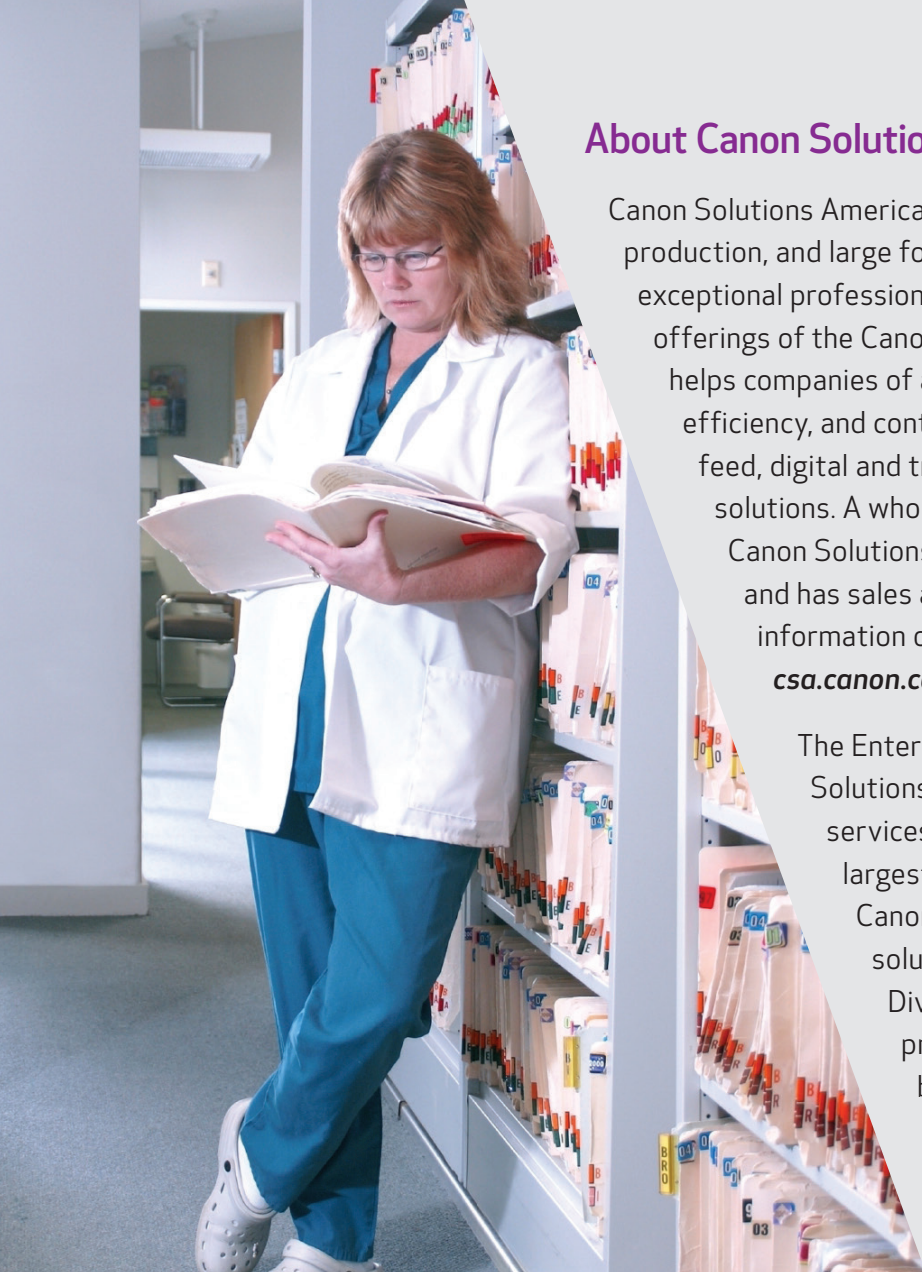
Picking the right vendor like Canon Solution America's Enterprise Managed Services Division is a critical part of the equation. Some of the vendor "must haves" include:

- Strategic view of your business needs

- Flexible project governance model

- Operations and technology resources that work as an extension of your staff

- Key IM planners to contribute workflow solutions

- Strategies to improve security and reduce risk

- Programs to engage users in the process of change

Overall and most importantly, vendors must help the provider to accomplish process change more quickly and efficiently at a lower cost. These savings can then be reinvested in support of the hospital's mission to serve the healthcare needs of their communities.

[1] Berwick DM, Nolan TW, Whittington J. The Triple Aim: Care, health, and cost. Health Affairs. 2008 May/June; 27(3):759769

[2] http://www.us.logicalis.com/news/eight-little-known-printing-facts-costing-hospitals-millions-of-dollars/

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Canon Solutions America provides industry leading enterprise, production, and large format printing solutions, supported by exceptional professional service offerings. With the technology offerings of the Canon and Océ brands, Canon Solutions America helps companies of all sizes improve sustainability, increase efficiency, and control costs through high volume, continuous feed, digital and traditional printing, and document management solutions. A wholly owned subsidiary of Canon U.S.A., Inc., Canon Solutions America is headquartered in Melville, N.Y. and has sales and service locations across the U.S. For more information on Canon Solutions America, please visit *csa.canon.com*.

The Enterprise Managed Services Division of Canon Solutions America provides leading edge onsite services and solutions to Canon Solution America's largest and most complex clients. By combining Canon technology with best of breed industry solutions, the Enterprise Managed Services Division delivers innovative, high performance programs tailored to each client's unique business goals.

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