



## THREE WAYS HP IS IMPROVING TECHNOLOGY FOR BETTER PATIENT OUTCOMES

*Progressive information technology stakeholders are learning that advanced printing technologies can help fill critical gaps in care — improving patient safety, adherence to physician instructions, and compliance.*

Healthcare's investment in innovative information technology (IT) systems has provided critical support to both clinical and business objectives, transforming the industry in both expected and unexpected ways. Numerous studies have now demonstrated that key IT investments have helped healthcare organizations of all shapes and sizes reduce medical errors, decrease readmissions, improve care coordination, and increase hospital profitability.<sup>1</sup> While many might attribute such successes solely to the adoption of electronic medical record (EMR) platforms, progressive chief information officers (CIOs) and technology stakeholders understand that the right investments in other IT programs and platforms also play a vital role. That includes technologies such as advanced printing solutions.

“These leaders are rethinking how they view these kind of technologies as they develop a comprehensive IT strategy — they aren't just in the background anymore,” said Daniel Colling, BSc, RN, Global Lead for Clinical and Print Workflow Solutions at HP Inc. “They now understand that innovative printing technologies can support IT and clinical stakeholders, filling in critical care gaps to help improve care coordination and patient safety, resulting in better patient outcomes.”



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MELINDA SCHMIDT | BSN, RN, SENIOR HEALTHCARE SPECIALIST | HP INC.

Here are three ways healthcare organizations can leverage advanced printing technologies to help improve patient care and safety — and, in the process, patient outcomes.

### Facilitating Patient Identification and Safety

Melinda Schmidt, BSN, RN, Senior Healthcare Specialist at HP Inc., said that advanced printing technologies also offer healthcare organizations novel ways to accurately identify and track patients, ensuring that the right patient is getting the right care at the right time.

“It wasn't that long ago that you had to write out a patient's identification wristband. Some patients would have several wristbands to indicate who they were, a do-not-resuscitate order, allergies, a fall risk, or other important medical information,” she said. “If one of those wristbands fell off, or if you couldn't read what was written on it, you'd have a serious problem.”

Studies suggest that accurate patient identification remains a challenge for many healthcare organizations, leading to patients having to undergo unnecessary medical tests, as well as receiving improper medications and procedures.<sup>2</sup> New printing technologies, Colling said, now allow healthcare organizations to avoid the old manual and error-prone processes.

“Instead of having this manual process where you have to match the patient, date of birth, and medical record number to tie it to the patient chart, you can now leverage technology so that the patient wrist band is printed with a QR code, 2D barcode, or even a radio-frequency identification (RFID) tag,” he said. “That code or tag will have all the information required so that you can scan it and directly tie it all back to the patient and the EMR, thus reducing the risk of identity error.”

### Promoting Compliance

Sometimes it seems as though government regulations regarding patient confidentiality and information security change as soon as your organization has implemented a new system to manage them. Advanced printing technologies like HP PageWide A3 multifunction printers coupled with HP’s Jet Advantage Link Ecosystem for Healthcare can easily integrate with EMRs and other hospital systems to generate accurate, up-to-date records related to risks and readmissions, helping to ensure your organization remains compliant.

“These are the metrics that drive decisions and help you achieve



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**DANIEL COLLING** | BSC, RN, GLOBAL LEAD FOR CLINICAL AND PRINT WORKFLOW SOLUTIONS | HP INC.

value-based outcomes,” said Colling. “But you can’t keep track of these measures if the platforms you are using aren’t up to date with the latest guidance.”

### Upgrading discharge instructions

It’s standard operating procedure for patients to receive a printed copy of discharge instructions when leaving the hospital after treatment with prescriptions as well as detailed instructions on how to best manage care at home. But this transition from hospital to home often leads to a critical gap in care.

“If the patient does not follow through on those physician’s instructions, we know there’s a high likelihood that he or she will be readmitted to the hospital for the same symptoms within 30 days,” said Colling. “With value-based care models holding the healthcare system financially accountable for readmissions, it’s important to find ways to support patients once they leave the hospital.”

Studies suggest that many patients have difficulty comprehending discharge instructions — and that there is a need for innovative ways to ensure patients

not only read these important notes but also understand them.<sup>3</sup> Advanced printing technologies, like HP’s PageWide A3 devices with impactful color, can assist in creating easy-to-follow instructions, creating critical care information specific to each patient to help increase the success rate of this pivotal transition.

“You have younger patients who now want to get these instructions in a patient portal, but older patients still want to walk out of the hospital with those papers in hand,” he explained. “Being able to provide those papers to those patients in color, without it being cost-prohibitive to the healthcare organization, can provide a more meaningful impact in educating the patients and, in doing so, help reduce those unnecessary hospital readmissions.”

To learn more about how advanced printing technologies can help to improve patient outcomes at your healthcare organization, visit [HP Healthcare Solutions](https://www.hp.com/go/healthcaresolutions).

### References:

<sup>1</sup> Wang T, Wang Y, and McLeod A. “Do health information technology investments impact hospital financial performance and productivity?” *International Journal of Accounting Information Systems* 28 (March 2018): 1-13, <https://www.sciencedirect.com/science/article/pii/S1467089516301476>.

<sup>2</sup> The Pew Charitable Trusts. *Enhanced Patient Matching is Critical to Achieving Full Promise of Digital Health Records*. October 2018. [Full Report](#).

<sup>3</sup> Sheikh H, Brezar A, Dzwonek A, Yau L, and Calder LA. “Patient understanding of discharge instructions in the emergency department: Do different patients need different approaches?” *International Journal of Emergency Medicine* 11, No. 5 (February 8, 2018): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5805670/>.



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