HEALTHLEADERS MEDIA

HEALTH IT & QUALITY EXCHANGE

Insights Report

March 2015 | Report 1 of 2

DAVID HARTIG

CLINICAL REDESIGN TOWARD POPULATION HEALTH

Analysis and in-depth discussion from healthcare leaders at the 2014 HealthLeaders Media Health IT and Quality Exchange

An independent HealthLeaders Media report supported by

EMC²

Analysis

Leveraging Technology to Design and Deliver Care

SCOTT MACE
Senior Technology Editor
HealthLeaders Media

Nontraditional teams continue to be assembled to redesign the delivery of healthcare. These teams consist of healthcare provider executives, physicians, information technology leaders, nurses, analysts, and care coordinators, plus their counterparts in payer organizations and self-insured companies.

The challenge of redesigning healthcare is to leverage an ever-evolving set of technological tools with the explosion of data powered by the digitization of the record of care, augmented by vast growth in data generated by organizations outside the care setting, and even by patients themselves.

The consensus of the 30 leaders who gathered at HealthLeaders Media's first ever Healthcare IT and Quality Exchange, held in November 2014 at The Lodge at Torrey Pines in San Diego, was that aligning people and process is at least as important as selecting and implementing the proper technology.

In small-group sessions titled "Clinical Redesign Toward Population Health," participants shared their perspectives on what population health means, how it impacts the design and redesign of their organizations, and the prospects for integrating digital information from other organizations and from patients.

In an October 2014 HealthLeaders Media Intelligence Report, 57% of respondents said they have invested in analytics using population data as part of their population health management efforts. And 51% said they have invested in care management with risk-based panels as part of their effort to redesign the delivery of care with the intent of supporting population health. Much of this work is in its infancy, and in years ahead, as healthcare solves its information interoperability problems, greater returns on investment are inevitable.

Sponsor Perspective

Beyond the EMR

Today more than ever, healthcare IT needs analytics and broad data access to ensure both the best patient care and reimbursement value.

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The transition to electronic medical records once seemed a revolutionary leap, but today we know it as only the first step in a total reinvention of healthcare information systems. Clinicians need access to patient information, but they must also have the tools to fully analyze and incorporate it into treatment plans for individuals and populations. Where healthcare once centered primarily on patient-doctor exchanges, today's key participants also include patient populations, clinical providers, healthcare administrators, and payers across the entire continuum. Indeed, more systems complexity related to the Patient Protection and Affordable Care Act will lead to higher expectations for outcomes and cost-effectiveness, requiring the industry to depend more on information. But without integration or analysis, healthcare data will lack genuine value and have little possibility of becoming actionable.

These trends formed the basis of the HealthLeaders Media Health IT & Quality Exchange held last November. Executives from health systems across the nation discussed their growing emphasis on population health, analytics, and effective health management. Individual medical records offer selected information, but to provide the best and most appropriate care, clinicians need access to broader resources. They need complete patient information incorporating vast amounts of unstructured data—such as documents, audio, and images—that is often stored outside the EMR. And they need a longitudinal view to deliver the right information, in the right context, to the right person, at the right time.

Data-driven healthcare is possible only when clinicians have the analytic tools and appropriate view of patient information to determine the most effective treatment paths. In this post-EMR landscape, two clear directions for leaders emerge:

1. **Integrated information.** Providers must have access to information originating from different sources, systems, formats, and hosts. Patients receive healthcare from many professionals, served by often unrelated (and unconnected) data systems. They, and their healthcare providers, require a comprehensive patient record. Payer data, too, may be available across systems. Moving beyond individual EMRs, healthcare needs systems that integrate the otherwise disparate elements of structured and unstructured data.

Eventually, these multifaceted formats will replace the single patient record. It's important to note that paper records still comprise 38% of all patient documents used in healthcare today (IDC Health Insights). These documents, along with audio, images, and other unstructured data, as well as their applications, become siloed and inaccessible. Some of it may be considered proprietary. Payers have expansive historical claims data, providing more insight to the clinical data collected and stored by providers. Sharing across these traditional boundaries can—and should—become more commonplace.

2. **Population healthcare.** Related, but separate, is the growing emphasis on broader healthcare approaches for chronic disease management, including standard treatment expectations for populations with similar conditions. A 2014 report from HealthLeaders Media showed that 90% of healthcare leaders held a commitment to improving the overall health of a defined organization. Organizations need more and better patient data to achieve population health management. Yet vast amounts of healthcare data alone will not result in better population management for chronic diseases. Clinicians need information with value, as well as proven, evidence-based treatments that improve outcomes without increasing costs. Healthcare IT can generate greater understanding of the continuum of care as well as standards of care, treatment expectations, and value-based reimbursement.

With healthcare IT measured in terabytes, we can count on cloud computing to replace traditional on-premise storage methods, partially or fully, in the not-too-distant future. To preserve patient confidentiality, proprietary information, and health systems' administrative data, healthcare IT must avoid system vulnerabilities that allow hacking, theft, and other malicious data appropriations.

In a post-EMR world, healthcare data must be available, integrated, and comprehensive. These new data basics will determine how we as an industry succeed in advancing patient care and providing value. EMC will continue its commitment to advancing this new healthcare information model, working with HealthLeaders Media and its executive councils to bring further insights to the critical issues the industry faces. Adopting these new information models will bring more collaborative, analytical, and connected care to healthcare enterprises—a winning combination for patients, providers, and administrators alike.

Discussion

Combining People, Process, and Technology

SCOTT MACE

True population health management is a combination of people, process, and technologies. Physician leaders must reorient primary care. Technology leaders must implement data and workflow solutions. Entire organizations must commit to using analytics.

"We're taking a look at the clinically integrated network strategy to more comprehensively align with our physicians across service lines for possibility of managing risk," says Sam Bagchi, MD, chief quality officer and chief medical informatics officer at Methodist Health System in Dallas. "But in Dallas, that's hard. Our doctors are very autonomous and want to stay that way, and so they're going through the stages of grief right now with us."

Bagchi and other multidisciplinary health IT and quality leaders who gathered at HealthLeaders Media's first Health IT and Quality Exchange shared ideas on how to redesign the delivery of healthcare to achieve population health and healthcare's other Triple Aim objectives.

TAKEAWAYS

- **Defining and implementing change**
- **Organizational redesign**
- **Integrating outside information**

Defining and implementing change

Part of the challenge of transforming healthcare through clinical redesign turns out to be defining essential concepts, even population health itself. Some definitions revolve around populations defined by state government agencies and payers, and others spring from efforts at managing chronic diseases, but the most prevalent definitions stem from presently covered lives and the process of evolving to responsibility for the entire population of a geographic community.

"The definition of population health is evolving, starting from those in which we have fully delegated risk, or who are part of our health plan," says Ken Lawonn, senior vice president and chief information officer of Sharp HealthCare in San Diego. "It will evolve to be managing the overall health of the populations we serve in the community or county."

Once defined, population health concepts must bring physician practices and workflows into alignment with the information systems and analytics powering these concepts.

"Our workflow has changed considerably," says Linda Bahrke, RN, BSM, MAOM, FABC, senior vice president and chief medical officer of Community Health Improvement Solutions (CHIS), a St. Joseph, Missouri, company responsible for Heartland Regional Medical Center's accountable care organization as well as Heartland's employer-focused health and productivity programs, all part of Mosaic Life Care.

"Initially, we invested in risk-adjusting software [so we could] insist in all of our risk contracts that we are given claim-level detailed data, which some of the insurance companies are not real comfortable with," Bahrke says. "They'd rather send us something in the format they want, but we just refuse to sign risk contracts unless we are allowed to have that claim-level detail.

"So we combine that risk-adjusted methodology and embed it directly in the EMR for the physicians and the

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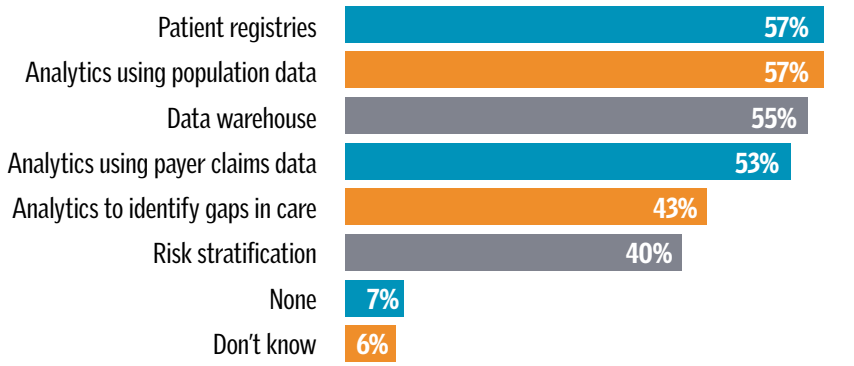
INFRASTRUCTURE INVESTMENTS

In which areas have you invested in IT infrastructure capabilities that are directed toward population health management?



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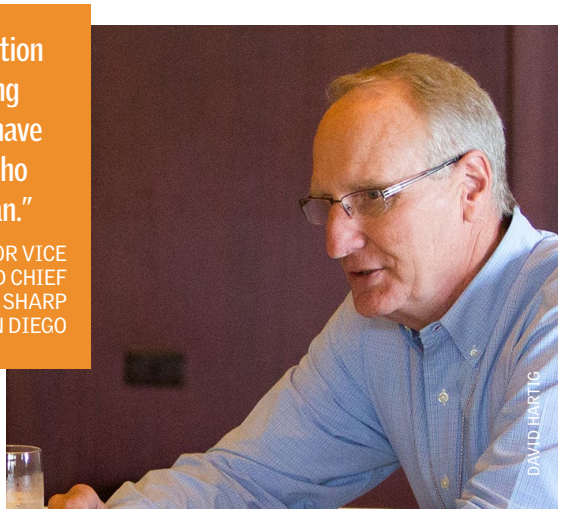
Multi-response
SOURCE: HealthLeaders Media Intelligence Report, *Population Health: Are You as Ready as You Think You Are?,* October 2014

caregivers so they have that real time, and that's been very helpful," she says. "We made some significant changes in our EMR so that the data that's important for population health management, like standards of care and testing, are available to the physicians on what we call our M-Page, which is the immediate page they see when the patient comes in."

Bahrke says CHIS created a simple, stoplight-coded dashboard format, so that a red signal indicates that a patient needs some standard of care testing done, or a lab result is worthy of attention.

> "The definition of population health is evolving, starting from those in which we have fully delegated risk, or who are part of our health plan."
>
> **KEN LAWONN,** SENIOR VICE PRESIDENT AND CHIEF INFORMATION OFFICER, SHARP HEALTHCARE, SAN DIEGO



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Vice President and Chief Information Officer
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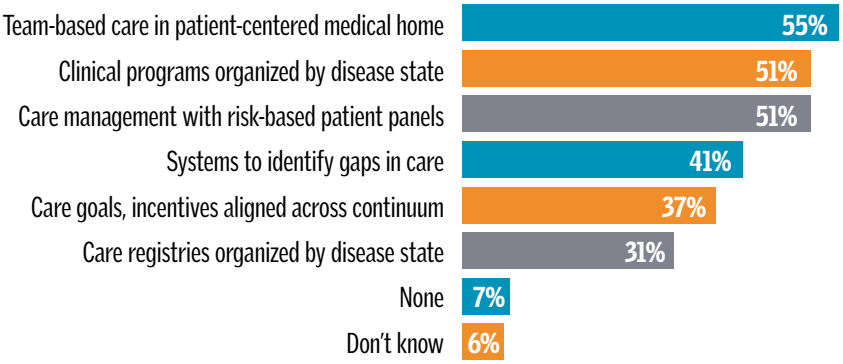
CARE REDESIGN EFFORTS

In which areas have you redesigned the delivery of care with the intent of supporting population health management?



Multi-response
SOURCE: HealthLeaders Media Intelligence Report, *Population Health: Are You as Ready as You Think You Are?*, October 2014

Bagchi emphasizes the importance of incorporating information from all patient encounters, wherever they occur. "A portal strategy basically presumes that your patient is [like] cattle, that they'll live inside the fence rather than [that] they'll wander to your competitor or to an unaffiliated provider, and so [the organization] ends up with a very incomplete dashboard," he says. "If you really want to get into population management, you have to have a view of the world: the 99% outside of your system."

"We're relying upon our partnership with the largest Blue in the region, which is Independence Blue Cross, and so we have to work really closely with them because they do the measurement," says Michael Restuccia, vice president and chief information officer of Penn Medicine in Philadelphia.

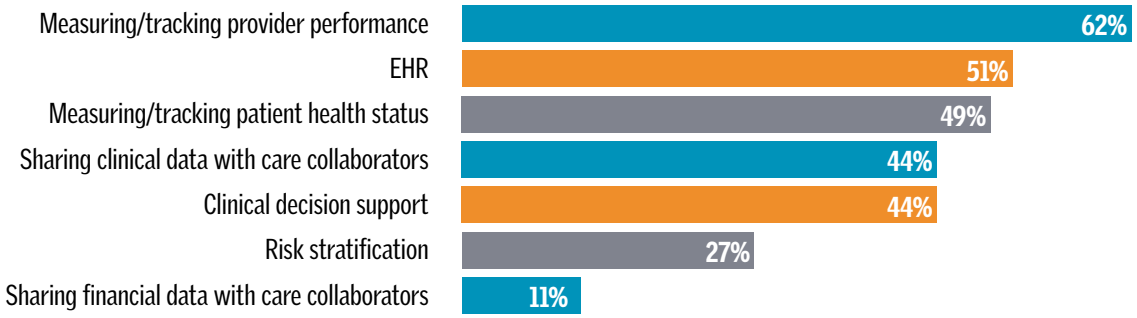
One Exchange participant also is investigating patient management technology by borrowing from the customer relationship management software used outside of healthcare to keep tabs on customers and prospects. "It's really hard to find something that allows you to do that in any kind of organized process," says Alan Pitt, MD, professor of neuroradiology at Dignity Healthcare in Phoenix. "It takes IT infrastructure to do that. We're somewhat at the beginning of that journey. The typical nurse manages follow-ups on sticky notes and spreadsheets today. We've got some better tools in place and are just starting with others."

Organizational redesign

Making innovative use of data, avoiding workarounds, and advancing the best population health initiatives

PRIMARY CARE REDESIGN INVESTMENTS

What are the top three IT investments or developments your organization expects to make over the next three years to support primary care redesign?



Multi-response

SOURCE: HealthLeaders Media Intelligence Report, *The New Primary Care Model: A Patient-Centered Approach to Care Coordination,* April 2014

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hinges on the leadership of a variety of players in healthcare.

"Our CMO/COO/president has said very clearly that any new IS initiatives must come at the request of our clinical leadership," says Tiffany Berry, MD, chief patient experience officer at Baylor Scott & White Health in Temple, Texas, referring to Bob Pryor, MD, who holds those three titles. "The caveat to that, however, is sometimes our CIO and the IS team knows some really cool things that are happening that we—as clinicians—may not even know to ask about. It's really hard to keep up with all the new things out there, so I'm constantly amazed by what the IS team brings to the table.

"I don't want IS to develop or implement something our clinical teams aren't going to support, but I also want them to be bringing the latest, greatest new thing to the table to at least make it known to us."

"Organizations are starting to understand the value of data and how these insights can inform good business decisions," says Jack Wolf, vice president and chief information officer of Montefiore Medical Center in New York City. "IT plays an important role in this process. Where the disconnect lies is in the communication, as IT people tend to speak a different language than their clinical or financial peers. It is imperative that business-focused analysts play a role to help


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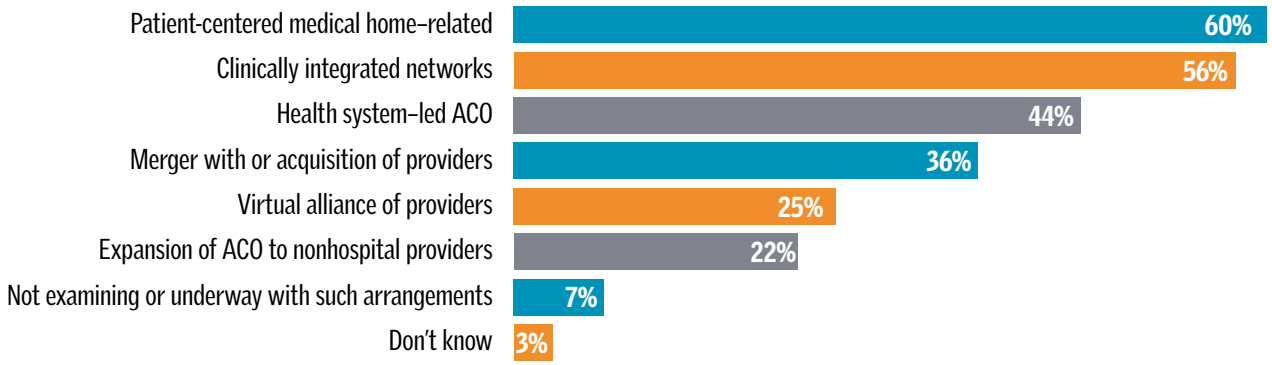
"So we combine that risk-adjusted methodology and embed it directly in the EMR for the physicians and the caregivers so they have that real time, and that's been very helpful."

LINDA BAHRKE, RN, BSM, MAOM, FABC, SENIOR VICE PRESIDENT AND CHIEF MEDICAL OFFICER, COMMUNITY HEALTH IMPROVEMENT SOLUTIONS, ST. JOSEPH, MISSOURI

RISK-SHARING ARRANGEMENTS

What risk-sharing arrangements is your organization engaged in or exploring to improve the health of a defined population?



Multi-response
SOURCE: HealthLeaders Media Intelligence Report, *Population Health: Are You as Ready as You Think You Are?,* October 2014

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translate data into practical use."

According to Wolf, having the right analyst based in the operations department can eliminate what can be a tedious process of back-and-forth between the analytics group and executives. "The time and discipline to get through this process is what will drive informed population health efforts that will significantly reduce costs and improve outcomes," he says.

Integrating outside information

Health information technology increasingly deals with the explosion of clinical data from EHRs, sensors, telemetry, remote monitoring, and health information exchanges. Each of these is in its early stages and presents considerable challenges to healthcare leaders.

"HIEs, the way they are structured right now, are, in 9 out of 10 cases, aimed to meet meaningful use requirements and other mandates" and little else, says Sameer Badlani, MD, FACP, chief health information officer at Intermountain Healthcare System in Salt Lake City. "If you are doing a private HIE, it is to create an information backbone for your business, which makes great sense."

HIEs in their current state have little to do with population health, Badlani says, because even if clinicians are able to transfer continuity of care documents, they are in a format that discourages general use for population


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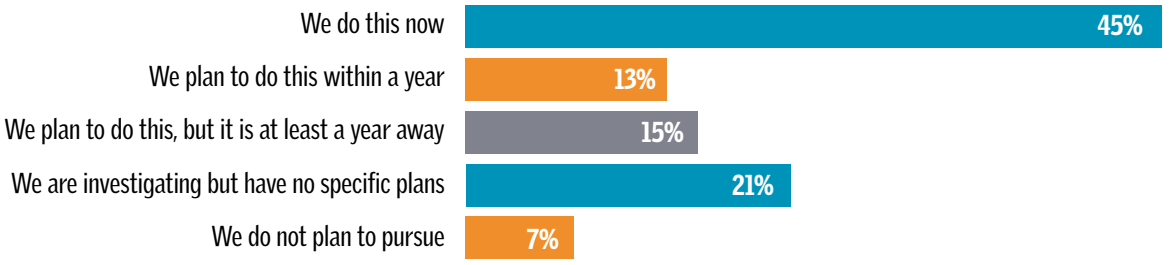
> **JACK WOLF,** VICE PRESIDENT AND CHIEF INFORMATION OFFICER, MONTEFIORE MEDICAL CENTER, NEW YORK CITY

PATIENT PANEL RESPONSIBILITY

What is the status of your organization's efforts to assign responsibility or accountability for a panel of patients to a particular physician or physician group?



SOURCE: HealthLeaders Media Intelligence Report, *Population Health: Are You as Ready as You Think You Are?*, October 2014

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health management. "I find CCDs quite low on usability, and most physicians are not looking at these consistently," he says.

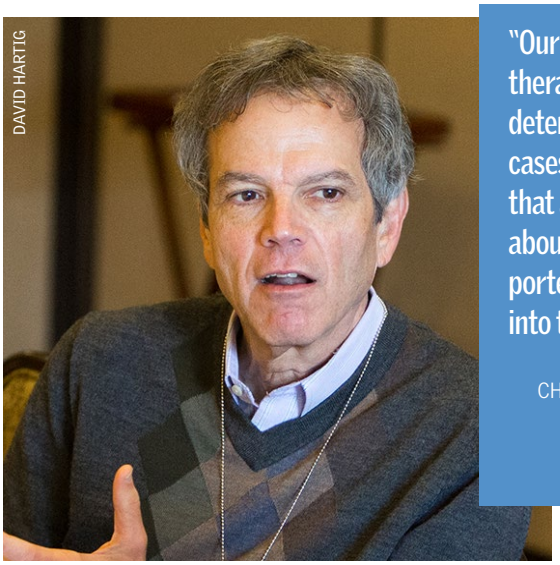
Health measurements being gathered by patients themselves are in a similarly primitive state in terms of being ready to be incorporated into managing the health of a population, and the data requires considerable staff involvement today to achieve some measure of early success.

"We'd certainly like to know their blood pressures for certain things, but we don't want every blood pressure in the longitudinal record, especially on the inpatient side, so we're not pulling all the monitor data into our EHR system," says Harris Stutman, MD, chief medical information officer at MemorialCare Health System in Fountain Valley, California.

"Our nurses or respiratory therapists make determinations or, in some cases, we have algorithms that assist in determinations about what actually gets ported from the monitors into the EHR," Stutman says.

This represents an example of recognizing the need to integrate clinical technology and processes in a way that provides meaningful benefits to the people involved: providers and patients.

Scott Mace is senior technology editor for HealthLeaders Media. He may be contacted at *smace@healthleadersmedia.com*.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