HealthLeaders Intelligence

FREE SUMMARY REPORT

FEBRUARY 2014

Healthcare Analytics: The New Business Currency

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Healthcare Analytics: The New Business Currency

Providers must master data analytics to succeed in the new world of healthcare. This report explores the gains and gaps in this race to the future.

- Find out why analytics skills alone aren't enough—and which management skills are needed to bridge the IT/business divide
- Discover which leading-edge data analytics capabilities are deemed most critical to a provider's success
- Get actionable strategies, analysis, and segmented peer data to benchmark your organization against competitors
- Learn from case study examples: Cedars-Sinai Health System,





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About the Premium and Buying Power Editions

This is a summary of the Premium edition of the February 2014 HealthLeaders Media Intelligence Report, *Healthcare Analytics*: The New Business Currency. In the full report, you'll find a wealth of additional information, including the results of all the survey questions. For each question, the Premium edition includes overall response information, as well as a breakdown of responses by various factors: setting (e.g., hospital, health system, physician organization), number of beds (hospitals), number of sites (health systems), net patient revenue, and region.

Available separately from HealthLeaders Media is the Buying Power edition, which includes additional data segmentation based on purchase involvement, dollar amount influenced, and types of products or services purchased.

In addition to this valuable survey data, you'll also get the tools you need to turn the data into decisions:

- A Foreword by Darren Dworkin, senior vice president and chief information officer for Cedars-Sinai Health System in Los Angeles and Lead Advisor for this Intelligence Report
- Three Case Studies featuring initiatives by UPMC in Pittsburgh, Swedish Medical Group in Seattle, and Cedars-Sinai Health System in Los Angeles
- · A list of Recommendations drawing on the data, insights, and analysis from this report
- A Meeting Guide featuring questions to ask your team

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Methodology

The 2014 Healthcare IT and Analytics Study was conducted by the HealthLeaders Media Intelligence Unit, powered by the HealthLeaders Media Council. It is part of a series of monthly Thought Leadership Studies. In November 2013, an online survey was sent to the HealthLeaders Media Council and select members of the HealthLeaders Media audience. A total of 309 completed surveys are included in the analysis. The bases for the individual questions range from 189–309 depending on whether the respondent had the knowledge to provide an answer to a given question. The margin of error for a sample size of 309 is +/-5.6% at the 95% confidence interval.

Each figure presented in the report contains the following segmentation data: setting, number of beds (hospitals), number of sites (health systems), net patient revenue, region, purchase involvement, dollar amount influenced, and types of products/services purchased. Please note cell sizes with a base size of fewerthan 25 responses should be used with caution due to data instability.

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Executive Vice President and Chief Medical Officer UPMC Pittsburgh



Upcoming Intelligence Report Topics

MARCH: Cardiovascular Service Line

APRIL: Primary Care Redesign

MAY: Emergency Department Strategies

ABOUT THE HEALTHI FADERS MEDIA INTELLIGENCE UNIT

The HealthLeaders Media Intelligence Unit, a division of HealthLeaders Media, is the premier source for executive healthcare business research. It provides analysis and forecasts through digital platforms, print publications, custom reports, white papers, conferences, roundtables, peer networking opportunities, and presentations for senior management.



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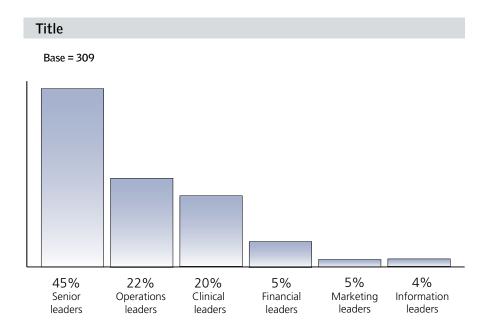
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Respondent Profile

Respondents represent titles from across the various functions at healthcare organizations.



Senior leaders CEO, Administrator, Chief
Operations Officer, Chief Medical Officer, Chief
Financial Officer, Executive Dir., Partner, Board
Member, Principal Owner, President, Chief of Staff,
Chief Information Officer

Clinical leaders | Chief of Orthopedics, Chief of Radiology, Chief Nursing Officer, Dir. of Ambulatory Services, Dir. of Clinical Services, Dir. of Emergency Services, Dir. of Nursing, Dir. of Rehabilitation Services, Service Line Director, Dir. of Surgical/Perioperative Services, Medical Director, VP Clinical Informatics, VP Clinical Quality, VP Clinical Services, VP Medical Affairs (Physician Mgmt/MD)

Operations leaders | Chief Compliance Officer, Asst. Administrator, Dir. of Patient Safety, Dir. of Quality, Dir. of Safety, VP/Dir. Compliance, VP/Dir. Human Resources, VP/Dir. Operations/Administration, Other VP

Financial leaders | VP/Dir. Finance, HIM Director, Director of Case Management, Director of Revenue Cycle

Marketing leaders | VP/Dir. Marketing/Sales, VP/Dir. Media Relations

Information leaders | Chief Medical Information Officer, Chief Technology Officer, VP/Dir. Technology/MIS/IT

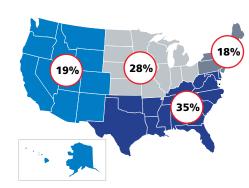
Type of organization	
Base = 309	
Hospital	36%
Health system	28%
Physician org.	17%
Long-term care/SNF	7%
Health plan/insurer	5%
Ancillary, allied provider	5%
Government, education/academic	2%

Number of beds				
Base = 110 (Hospitals)				
1–199	41%			
200–499	39%			
500+	20%			
Number of sites				
Base = 86 (Health systems)				
1–5	17%			

6-20

21+

Region



WEST: Washington, Oregon, California. Alaska, Hawaii, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

30% 52%

MIDWEST: North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Illinois, Indiana, Michigan, Ohio, Wisconsin

SOUTH: Texas, Oklahoma, Arkansas, Louisiana, Mississippi, Alabama, Tennessee, Kentucky, Florida, Georgia, South Carolina, North Carolina, Virginia, West Virginia, DC, Maryland, Delaware

NORTHEAST: Pennsylvania, New York, New Jersey, Connecticut, Vermont, Rhode Island, Massachusetts, New Hampshire, Maine

ANALYSIS

Analytics Offers a New View of Data and a Path to Providing Better Care for Lower Cost

MICHAEL ZEIS

For the healthcare industry, a key to unlocking the value formula is to manage the healthcare enterprise in a more targeted way. Analytics can provide a basis for making the quality and value decisions that healthcare reform is bringing to the forefront by grinding through a diverse set of detailed information that can include virtually all of the financial and clinical details of delivering care.

Indeed, that is a principal finding from the 2014 HealthLeaders Media survey on healthcare IT and analytics: Organizations are going to depend on data in new ways, and the way to stay on top of it instead of being bowled over will be to approach analytics with a comprehensive understanding of how one's healthcare business operates.

Moving toward an at-risk environment. All segments of the industry are involved in analytics: Nearly half of physician organizations (49%), twothirds of hospitals (67%), and fully 74% of health systems say they are doing analytics now. But analytics can be quite complex, so advisor Steven D. Shapiro, MD-chief medical officer and chief scientific officer of UPMC, an integrated healthcare delivery system that operates more than 20

WHAT HEALTHCARE LEADERS ARE SAYING

"To address integrating clinical and business data, we are creating representative teams from business and clinical backgrounds to design data reporting and establish benchmark matrices."

—Director of provider services for a small health system

"Integrating clinical and business data is the top challenge. We are evaluating analytics tools and developing methods to integrate siloed information."

—CFO for a large health system

"Integrating payer data is the challenge. We are evaluating software solutions and training staff."

—CMO for a medium health system

"The main challenge is obtaining payer data. We are researching cost and availability of the data for our market."

-President of a medium hospital

"The biggest challenge is integrating clinical and business data. We are looking at solutions to harness big data and make smart strategic plans."

—Vice president of clinical relations for a health plan

"We have insufficient skills in analytics. We are building new skills with staff that have recognized potential."

—Director of provider services for a small health system

"Insufficient skills in analytics is a top concern. We are hiring skilled staff and we are training clinically experienced staff to use analytical skills for their quality and safety review functions."

—President of a medium hospital

Analysis (continued)

academic, community, and specialty hospitals and 400 outpatient sites in the Pittsburgh area—wonders how much challenge people are actually taking on. "I'm not sure they fully realize the opportunities available with analytics, or the extent of the commitment they're going to need," Shapiro says.

The most common analytics applications today examine internal siloed business data (71% of those doing analytics), internal siloed clinical data (68%), and clinical data from the respondents' own EHRs (62%). As one might expect, if the most common current data sets are mainstream, so are the most common analytics applications: Four-fifths (82%) use analytics to improve clinical quality. Nearly as many (75%) are supporting cost-containment efforts with their analytics work. While such applications are fundamental and have their own complexity, they are not as ambitious as the analytics work healthcare organizations must face as they take on risk in in a value-based environment.

Indeed, an important motivation for pursuing analytics is that as the foundation for reimbursement for providers shifts from volume to value, a portion of revenue from payers will be at risk, and that risk will be shared by a set of care collaborators. A sizeable portion of healthcare leaders, 25%, say they are at risk now, and another 20% expect to be at risk in the next 12 months.

Only one-fifth (21%) now use partners' data to support bundled payments, but is the analytics application mentioned most frequently—by 42%—as the one respondents expect to add within the next three years. Population risk assessment (35%), assessing the quality and efficiency of care partners (31%), and assessing population health needs (29%) also are near the top of the list of expected new analytics applications in the three-year time frame. We count only 17% now perform-

"While we're doing analytics for strategic reasons, I think that we're really moving toward population health management, which will have benefits on the individual level."

-Steven D. Shapiro, MD, chief medical officer and chief scientific officer of Pittsburgh-based UPMC

ing analytics on clinical data from care partners' EHRs, an important activity when one is sharing risk. That said, 24% say they expect to be doing analytics on care partners' EHRs within a year, and one-third are investigating doing so. Also near the top of the list of pending applications are examining health data for a defined population (48%), integrating internal clinical and business data (45%), and working with business data from care partners (45%). In balance, says Shapiro, "The priorities are pretty laudable."

Analysis (continued)

Don't guess, **know**. What analytics offers leaders is a degree of confidence that their decisions are based on an understanding of healthcare clinical and business factors. Survey responses indicate that 90% of healthcare leaders say their goal with analytics is to guide business leadership, and 87% say their goal is to guide clinical leadership. Those goals sound broader than analytics—supporting the decisions of business and clinical leadership are time-honored objectives of healthcare IT groups.

David Delafield, chief financial officer of Swedish Medical Group, a division of Swedish Health Services, a nonprofit healthcare provider that has five hospitals in the Seattle area and almost 900 providers in more than 100 primary care and specialty care clinics, helps us understand that what is involved with analytics is different from conventional financial and clinical reporting. "For us, one of the biggest drivers for our analytics effort is to be able to analyze and manage risk contracts. We're building a foundation now for managing populations that are at risk, while driving down the costs of utilization."

Analytics provides a method to ensure that quality objectives are met in an environment that strives to reduce costs. Shapiro uses analytics to investigate clinical outcomes, formulate hypotheses for clinical trials, and determine characteristics of patient populations that may benefit from advances in treatment. The main focus remains on clinical outcomes, but the financial consequences are part of the discussion too. Shapiro says,

"Before we even look at the costs. let's see if it helps or not."

Says report advisor Delafield, "First, like every industry that has been faced with an apparent conflict between cost and quality, we can't just start placing guesses. We have to have a better understanding of the details behind our business. And the way to do that is to

"For us, one of the biggest drivers for our analytics effort is to be able to analyze and manage risk contracts."

> —David Delafield, chief financial officer of Seattle-based Swedish **Medical Group**

have information, which in this context is analytics. Second, we need to look at risk-based contracts. If you're going to take on risk, you're going to want to mitigate that risk. One of the fundamental ways you mitigate risk is by having more information."

Just what we need: more information. More information, Delafield says? Don't we have enough in our EHRs? Darren Dworkin-senior vice president and chief information officer at Cedars-Sinai Medical Center, a Los Angeles-based nonprofit academic medical center with 896 licensed beds-says the EHR is insufficient. "From my perspective," he says, "the EHR is necessary, but not sufficient. It is a wonderful, important, creative, and agile tool. Once you have that in place, you can begin to build more layers on top of it."

Analysis (continued)

Shapiro explains the need to extend beyond the rudimentary. "Some EHRs have [data warehouse capability] so you can collect data within an EHR," he says. "What you can't do, though, is to get the payer data, provider data, genetics information, and financial [data] into a single EHR-type warehouse." Three-quarters of healthcare leaders (74%) include integrating internal data among their near-term analytics investments, and 60% expect to invest in integrating data from external sources within the coming year as well.

There is a high degree of interest in pursuing analytics to support efforts in population health, with health systems leading the way. Overall, twothirds (62%) include supporting population health management among the goals for their analytics efforts, including 71% of health systems. "While we're doing analytics for strategic reasons," Shapiro notes, "I think that we're really moving toward population health management, which will have benefits on the individual level. It will actually lead to better care for the individual, which is where the real opportunities are."

Just what we need: more spending. Over the next year, half of respondents (51%) expect to invest in specialized analytics software, while 26% expect to acquire an analytics platform or module. The decision is not easy: More than one-third (38%) include the platform decision among their top three tactical challenges, and 30% include the software decision among their top challenges. Says Dworkin, lead advisor for this intelligence

report, "It is a big investment, in dollars and time. But many large organizations need to shift away from implementing EHRs to leveraging and optimizing those same EHRs from a data and analytics standpoint." He notes that analytics software does not yet share the degree of stability he sees in EHR offerings. "Analytics now is where

"Analytics now is where EHR was several years ago."

> —Darren Dworkin, senior vice president and chief information officer at Los Angeles-based **Cedars-Sinai Medical Center**

EHR was several years ago. Addressing the EHR market, several principal software suppliers have emerged, which simplifies the EHR investment decision. People are looking for that kind of certainty in analytics, and it's just not there."

IT budgets are expected to increase in response to analytics and other initiatives. Overall, one-third (32%) expect a major increase in their IT operating budget over the next three years, and another 43% expect a minor increase. With many healthcare initiatives such as population health, health systems are outpacing hospitals. But there are indications that hospitals recognize that it is time to move forward: 43% of hospitals expect to see a major increase in their IT budgets over the next three years, compared to only 23% of health systems. The scale of the investment

Analysis (continued)

required can be forbidding to an independent hospital. Shapiro says, "The IT investment is one of the daunting challenges of remaining a hospital. Hospitals keep seeing their expenses going up and revenues going down and say, 'We need to look for a partner. This is huge, and I need to get in the game."

Take your first steps. Data integration and the emerging need to extend one's view of data and analytics to care partners figure strongly when leaders focus on the data-related challenges they expect to face over the next three years. More than half (54%) say that EHR interoperability is a challenge, and the same percentage are challenged by integrating clinical and business data. Delafield observes, "I think people are really going to struggle trying to integrate data from care partners. Whether it is an EHR or other types of data, it's going to take a while to get it right."

Dworkin advocates making a start, even if the specifics have not yet crystalized. "We have to find ways to better understand how to impact the cost curve before the costs are incurred. That takes very sophisticated analytics. The good news is that there's a growing body of information that shows that you can use algorithms and predictors to risk-stratify your patients, to become really good guessers, and to begin to position yourself. There are lots of places we can jump in and begin to get intelligent."

Moving forward is important, but moving forward in haste may not be

the best idea. Shapiro is leading a five-year analytics deployment at UPMC. "Five years for me is an eternity," he admits. "For me it's going slow, but we do know that we have to do it carefully to get it right." Indeed, as Dworkin suggests, one's second step is made better by the things one learns making the first step.

Analytics is an enterprise

resource. "Before making that first step, though, Dworkin

understanding of the details behind our business. And the way to do that is to have information, which in this context is analytics." —David Delafield, chief financial

"We have to have a better

Medical Group

officer of Seattle-based Swedish

recommends earning the organization's support for developing data and analytics as an enterprise resource. Doing so allows decision-makers to examine a variety of views of the data instead of requesting an expanding set of individual application packages and custom reports.

"You should always think of a strategy of building analytics as an enterprise resource," Dworkin advises, "because you will quickly drown if you keep supporting niche solutions. If you make an investment in an enterprise platform, it won't take you any longer. But what you'll get is a building block toward the future. But there has to be a meeting of the

Analysis (continued)

minds at a C-level forum. There has to be the belief that analytics isn't a one-time need; it's going to be a new currency of our business going forward."

Dworkin tells of the wrong way and the right way to gain agreement about the direction to take with enterprisewide deployment. "The wrong way is to thump the chest of corporate IT and say, 'We have the standard and we have a process.' Instead, the stakeholders of the organization's initiatives need to get into a room and have a discussion around the process of how new solutions and technology will be acquired."

Know the business. Although we tend to zero in on technology decisions, Delafield reminds us that technology itself does not solve problems. "If you buy a population health tool and you use it for your entire organization and it tells you that you're too expensive or your utilization is too high or your readmissions are too high, make sure you have an infrastructure behind the scenes to operationally move in the direction that you need."

Dworkin encourages collaboration when internal customers ask IT to deploy a solution. "The business side has to learn to present the business problem to IT, and not just say they need a particular application. And the way that IT can help the dialogue with business leaders is always to

ask the next question, which is, 'Let's assume that if we install the solution you're asking for and it works perfectly, what would be the next thing you would want to do?' That way we collaborate and come up with a best way to solve the business problem by combining the business experts with the technology experts." Dworkin's IT team participates in meetings covering the organization's core initiatives. "They participate in each other's dialogue and under-

"If you're going to take on risk, you're going to want to mitigate that risk. One of the fundamental ways you mitigate risk is by having more information"

—David Delafield, chief financial officer of Seattle-based **Swedish Medical Group**

stand not just the pressing problems but, more important, the context around them."

Data and new executive skills. Leaders note a shortage of analytics-savvy staffers-53% cite insufficient skill in analytics among their organization's near-term tactical challenges in performing analytics. We should not be surprised by a shortage of talent in a hot technology field. But Delafield notes that new leadership skills are required, too.

Analysis (continued)

As we ask our data to do more, healthcare leaders need to be able to simplify. Delafield asks, "How do you take ... more data than anyone could ever use and simplify it down to information that an organization can use to align itself and move in a common direction? In my opinion, that's the biggest problem any healthcare company needs to solve around analytics, whether they know it or not. And that's a really hard skill set to find, because it's not just a technical skill set, it's an executive skill set, it's a personality skill set, and it's a skill set that requires a broad understanding of the business."

Delafield cautions against an autocratic approach. "It can't just be one person sitting there saying no to everything. The idea is to build one report that matches a strategic priority for the organization, and then drive it out to all the physicians in the company and hold them and their staff accountable." To make this work, he says, "There needs to be someone or some structure in place that has a deep understanding of the business."

Shapiro notes how much information we have, starting with the EHR. "As we move from the paper record to the electronic record, we have the ability to capture all of this information. And yet all of it is information, it's not intelligence. But we also have the ability to harness it like never before, to be able to really get a handle on so many elements of data that we can really start to change the way that we generate knowledge and do research." This new view of data that yields knowledge can support healthcare reform. He continues, "Frankly, it's driven by cost. We need to figure out better ways to take care of our patients and improve quality at the lowest possible cost. Analytics will inform us of how to give the best value of medicine possible."

"The IT investment is one of the daunting challenges of remaining a hospital."

-Steven D. Shapiro, MD, chief medical officer and chief scientific officer of Pittsburgh-based UPMC

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FIGURE 7 Kinds of Analytics Expect to Perform Within Three Years

Q | What kinds of analytics are you not performing now but expect to be performing within three years? Multi-response. Among those performing, expecting to perform, or investigating data analytics.

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FIGURE 9 Top Data-Related Analytics Challenge

Q Of the top three data-related challenges your organization faces in performing data analytics over the next three years, which is the top data-related analytics challenge? Among those with data-related challenges.

BUYING POWER REPORT SAMPLE CHARTS Click here to order!

FIGURE 9 (continued) **Top Data-Related Analytics Challenge**

Q | Of those, which is the top data-related analytics challenge? Among those with data-related challenges.

DATA SEGMENTATION TOOL

Click on these icons to dig deeper

Indicates the type of goods or services the respondent is involved in purchasing

making purchasing decisions

Indicates the role of the respondent in Indicates the total dollar amount the respondent influences

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