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Analytics for Payer-Provider Collaboration

FORUM REPORT

Deloitte.

NEJM GROUP

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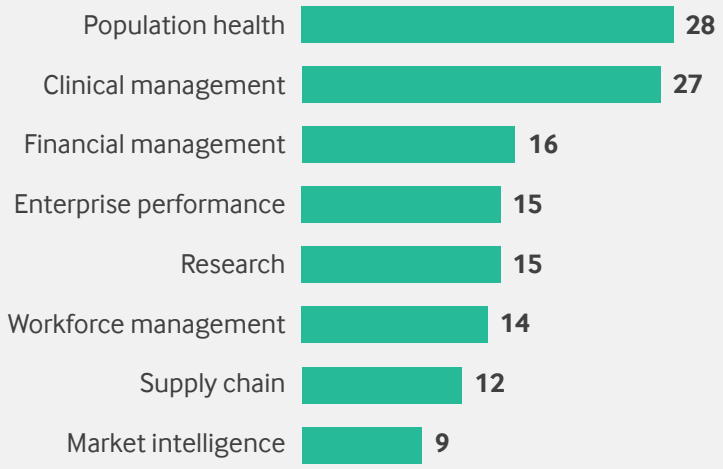
The Deloitte Center for Health Solutions has been researching value-based care over the past three years, and one theme has been consistent: Health care leaders are pursuing innovative changes to their business models around care delivery, but they need data to identify opportunities and to determine whether their strategies are working. We hear this whether we talk with health plans, health systems, physicians, or life sciences companies. The data these stakeholders need are in (at least) two places – claims and other administrative data, and electronic health records.

Analytics investment priorities within the next year, by number of respondents



Base: 50
Source: Deloitte 2015 US Health Systems Analytics Survey

Administrative and claims data reside with health plans and government payers. They can track individuals – across multiple clinicians and facilities – as they use services and fill prescriptions. This information is critical for predicting when, and how often, a patient might need services in the future. Health plans and government purchasers (Medicaid programs, the Department of Veterans Affairs, the Military Health System, and Medicare) also may know a lot about the practice patterns of physicians and other clinicians, and have enough data to compare them with each other. Health plans might have additional data derived from disease management programs and health risk appraisals.

Health systems collect a wealth of detailed clinical information from encounters and hospital stays that are stored in electronic health records (EHRs). These have the potential to provide much deeper insight into patients' clinical care and conditions than administrative data alone.

It stands to reason that if health plans and health systems could share their data, the whole will be greater than the sum of its parts. But many of these traditional adversaries have a long way to go before this promise of collaboration is realized. Some of the problems are technical, while others are managerial.

NEJM Catalyst's convening of health system and health plan analytics and population health leaders provided a wealth of insights into how progressive organizations are breaking through some of these constraints to deliver insights that can be put into action.

We wish to thank all the leaders and organizations that participated in this roundtable for sharing their experiences and goals with us. Thanks also to the team at NEJM Catalyst for the partnership and work to bring the right group to the table.

We hope readers will be inspired as they read this report to put some of the ideas into action at their own organizations and share with us their lessons learned.

The Analytics Imperative

Namita Seth Mohta
Clinical Editor,
NEJM Catalyst

Edward Prewitt
Editorial Director,
NEJM Catalyst

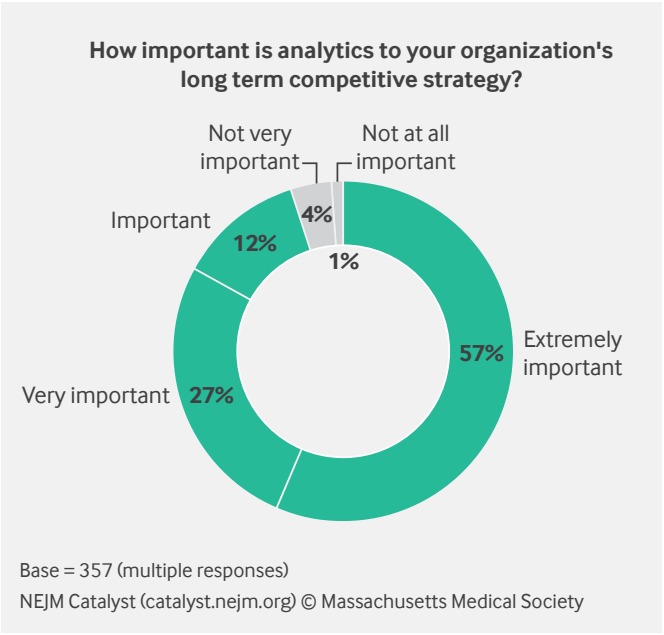
"Analytics are used in three distinct manners within organizations: to make the case for change internally or to the broader community; to drive that change by presenting information in consumable ways that encourage new behavior; and to evaluate the effectiveness of change."

Peer behind the curtain of any health care organization – payer or provider – and you're likely to see a group of clinical leaders, executives, data scientists, actuaries, finance leaders, and IT staff huddled together trying to solve one of the biggest challenges of our time: how to use data analytics to transform health care.

Surveys conducted independently by NEJM Catalyst and Deloitte demonstrate the priority that health care leaders have placed on analytics. Fully 84% of NEJM Catalyst Insights Council members say analytics are extremely important or very important to their organization's long-term competitive strategy. And Deloitte survey respondents say they are investing in a range of analytics capabilities in the next few years – led by clinical analytics for payers, and by population health and clinical management for providers.

For this reason, analytics was the subject of a remarkable gathering of health care leaders representing provider and payer organizations from across the country in September 2017. In a forum sponsored by Deloitte, NEJM Catalyst editors moderated a series of discussions with 16 industry leaders, who candidly shared their optimism, frustrations, and learnings about the power of analytics within their organizations and the industry as a whole.

The first set of breakout sessions addressed the many uses of integrated analytics (see "Uses of Integrated Analytics"). Amy Compton-Phillips, MD, Executive Vice President and Chief Clinical Officer for Providence St. Joseph Health System, a multistate health system headquartered in Renton, Washington, and Care Redesign Theme Leader for NEJM Catalyst, noted that analytics are used in three distinct manners within organizations: to make the case for change internally or to the broader community; to drive that change by presenting information in consumable ways that encourage new behavior; and to evaluate the effectiveness of change.



The second set of breakout sessions uncovered the opportunities and the very real barriers in applying analytics (see "Barriers and Opportunities for Producing Better Outcomes"). Payers and providers often don't speak the same language about data, which leads to enormous frustration. Even within an integrated delivery

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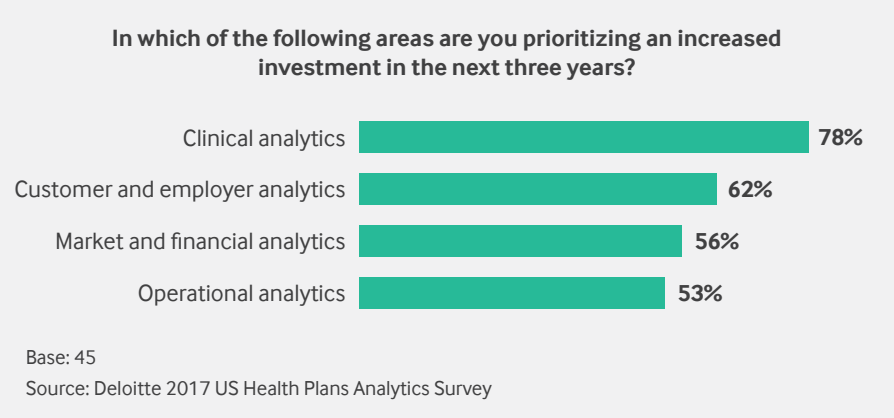

system like UPMC in Pittsburgh, which is both payer and provider, data is thought of differently across different entities, making common taxonomy and universal approaches difficult, says Pamela Peele, PhD, Chief Analytics Officer of UPMC Insurance Services Division and UPMC Enterprises.

Kurt J, Wrobel, FSA, MAAA

The path to a common nomenclature requires breaking down silos internally, the roundtable panelists agree. Dave A. Chokshi, MD, MSc, Chief Population Health Officer at OneCity Health and NYC Health + Hospitals in New York, says that pairing people with deep programmatic and clinical expertise with those with data and analytics expertise helps unravel data definition tangles and shift organizations to an intervention phase.

The roundtable convening was a meeting of minds that brought several lessons to the fore, and shows that payers and providers are not as far apart as is commonly believed. As Kurt J. Wrobel, FSA, MAAA, Chief Actuary and Chief Financial Officer at Geisinger Health Plan in Danville, Pennsylvania, notes, there is a commonality of challenges, including data interoperability, access to real-time data, behavior change, and different stakeholder needs. The panelists left the roundtable with learnings for care delivery, the financial model, and organizational infrastructure.

Care Delivery Takeaways

1. Collaboration will improve health care
Payers have data about patient visits to different sites of care that clinicians would like to know, while providers have granular clinical data that would benefit payers, notes Scott Weingarten, MD, Senior Vice President and Chief Clinical Transformation Officer at Cedars-Sinai Health System in Los Angeles. Combining the sources would lead to better patient care and potentially lower costs.

2. Analytics can simplify care delivery
Predictive and prescriptive algorithms can alert clinicians when care is needed – and avoid unnecessary care, says Chris DeRienzo, MD, Chief Quality Officer at Mission Health in Asheville, North Carolina. He adds that disseminating analytical insights depends on technology and process change.

Sree Chaguturu, MD

3. Analytics can extend care horizons
Some provider organizations, along with the clinical arms of payer organizations, use analytics today for interventions tailored to individual patients, extending even to social determinants of health. In this way, analytics can be used to encompass the whole patient, says Sree Chaguturu, MD, Vice President of

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Population Health Management at Partners HealthCare, a nonprofit hospital and physicians network based in Boston.

4. Breakthrough clinical innovations will generate invaluable new data sets
In a decade or less, precision medicine, immunotherapy, gene therapy, regenerative medicine, next-generation sequencing, and other innovations will create new data from the human genome, microbiome, and other sources. This creates an opportunity for precision health care based on phenotyping, says Richard Milani, MD, FACC, FAHA, Chief Clinical Transformation Officer at Ochsner Health System in New Orleans.

Financial Model Takeaways

1. Value-based care aligns incentives for collaboration; fee-for-service does not
While physicians and health plans have in the past fought over what is paid for and how much, people are getting sicker and the overall cost of care is going up, says Roy Beveridge, MD, Chief Medical Officer for Humana. In a value-based world, however, alignment between the health plan and the physician is essential for improving health. Physicians went into medicine to keep people healthy, and paying for outcomes or using value-based payment models, is a way to align payers' and providers' interests. But in many markets around the country, value-based payment remains an aspiration rather than reality, notes Mark J. Bethke, FSA, MAAA, Managing Director at Deloitte Consulting.

Rachael Jones; Richard Vaughn, MD

2. Analytics are the basis for care model transformation
Many health care organizations are experiencing financial strain, and forecasts are ominous for many of the rest. A sustainable footing requires care model transformation to win a greater percentage of premium dollar, says Brian Flanigan, MBA, Principal, U.S. Value-Based Care Leader for Deloitte Consulting LLP, which in turn necessitates comprehensive data and analytics expertise.

Organizational Infrastructure Takeaways

1. There is no such thing as perfect data
Physicians want perfect data on patients, and actuaries want perfect data to calculate health plan risk. But there is no end to digging for data. Rachael Jones, Staff Vice President for Payment Innovation Analytics at health insurance provider Anthem, says her goal is to not make perfect the enemy of good. Instead, she seeks to provide enough relevant data to help members make better choices about their care, optimize plan benefits, and lower the cost of care.

Benson Hsu, MD

2. Harnessing analytics calls for new leadership roles
Many provider organizations already employ Chief Data Officers, who are charged with sourcing and aggregating data, and Chief Medical Information Officers, who tend to focus on improving electronic medical records. But a new position is taking shape, titled along the lines of Chief Medical Analytics Officer or Chief Clinical Transformation Officer, which serves to build and scale platforms that adapt, interpret, and communicate data in ways that meet the practical needs of physicians. It is essential that this new leader maintain a clinical role, says Benson Hsu, MD, MBA, FAAP, Chief Medical Analytics Officer at integrated health system Sanford Health in Sioux Falls, South Dakota,

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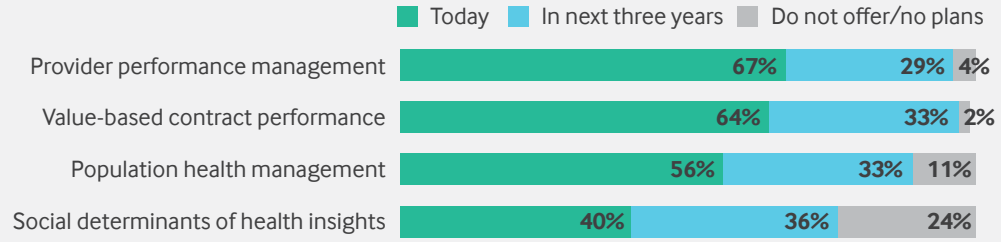
both for credibility among physicians and to innovate around the uses of analytics to support improvement in clinical care.

3. Data analysis costs money and time
Acquiring data, analyzing it, and putting the insights into practice must be done carefully lest it add to the administrative waste endemic in health care, says Richard Vaughn, MD, Chief Medical Officer for SSM Health, a Roman Catholic health system headquartered in St. Louis. Ali Keshavarz, Vice President and Head of Analytics at Aetna, advises careful selection of lead users of new analytics capabilities within organizations, to ensure care deployment and faster development.

Jian Yu

Perhaps the single biggest takeaway from the roundtable was that payers and providers don't have to be adversaries. Jian Yu, Chief Actuary and Senior Vice President of Advanced Analytics at Priority Health, the payer arm of Spectrum Health in Grand Rapids, Michigan, says providers receive a lot of data but need more actionable information. The conversations in Chicago demonstrated that health care organizations of all stripes are pointed in the same direction: toward better health for patients and populations.

Analytics tools offered to providers



Base: 45
Source: Deloitte 2017 US Health Plans Analytics Survey

Recommendations for Payer-Provider Collaboration

Here are six actions that leaders from both payer and provider organizations can take to achieve and improve collaboration, developed during the NEJM Catalyst roundtable forum on analytics, sponsored by Deloitte.

1. **Ensure you're speaking the same language.** The leaders gathered at the roundtable were surprised to uncover many commonalities among themselves in needs, approaches, and challenges in leveraging analytics. But differences in terminology impede collaboration both within and across organizations. Start by developing common definitions of data sets and goals.

2. **Work under value-based arrangements.** Sharing data becomes much easier when providers and payers also share risk. Focus collaboration around existing value-based agreements, such as bundled payments.

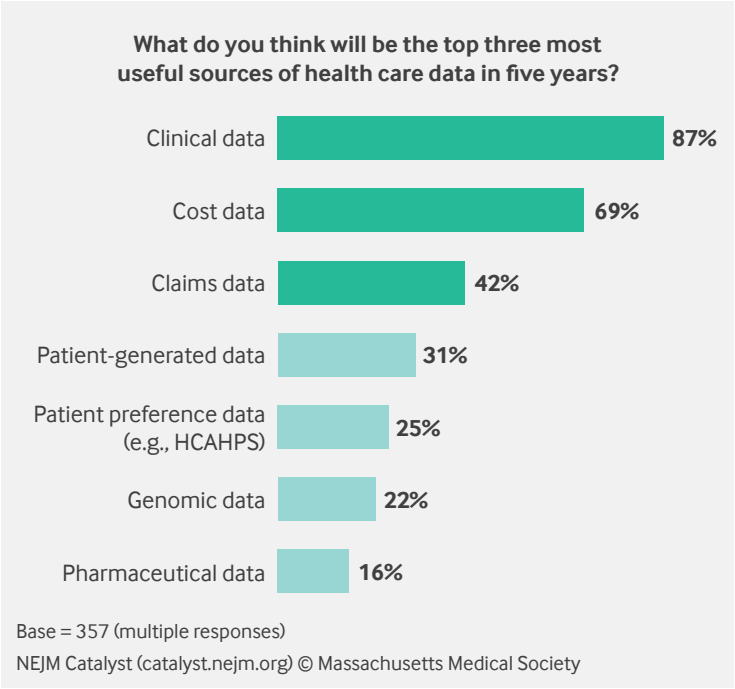
3. **Share data rather than demand it.** Health care providers need claims data so that they can track when and where patients get care, while payers would benefit from the key clinical data in medical records. Where the parties can trustworthily share data, everyone benefits – especially patients.

4. **Set realistic expectations based on analytical maturity.** Some organizations have developed sophisticated skills and technology, while others are stuck in basic "survival analytics." Set short-term realistic goals while making strategic investments in analytics capabilities.

5. **Gather data on health, not just health care.** Many data sources generate insights that are as useful or more so than EMR and claims data, including streams from pharmacies, labs, and other nontraditional clinical sources; social needs; genomic data; and "digital dust" personal data. Providers and payers should pool this supplementary data – provided they are prepared to act on it.

6. **Work together on what matters most: improvement in health.** Analytics can be applied for financial and infrastructure improvements, but the biggest goal identified by provider and payer leaders alike lies in clinical quality. Survey data from both Deloitte and NEJM Catalyst supports the forum dialogue, finding that provider and payer organizations are prioritizing clinical improvement for their analytics investments.

Uses of Integrated Analytics



Health care provider and payer organizations around the country are already sophisticated users of data and analytics for clinical, financial, and operational purposes. But applying analytics to improve patient care is an ever-present organizational challenge. That was the summation of the panelist discussion in the first session of the "Analytics for Payer-Provider Collaboration" roundtable forum, moderated by NEJM Catalyst editors and sponsored by Deloitte.

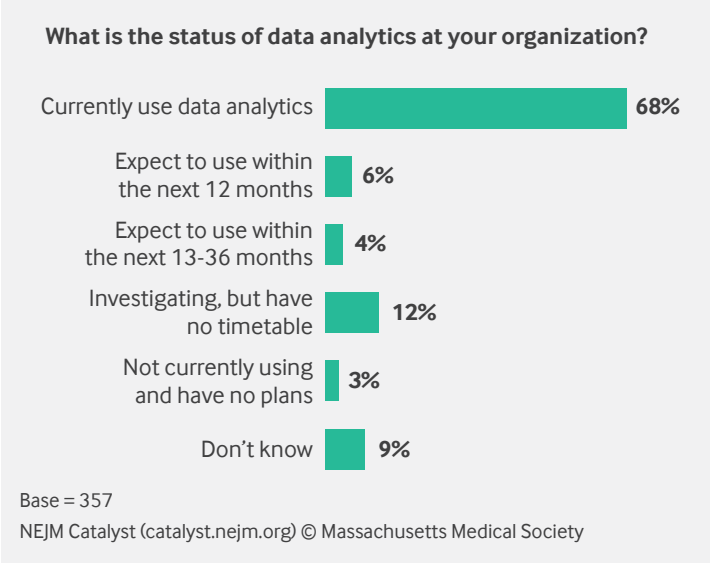
Amy Compton-Phillips, MD, Executive Vice President and Chief Clinical Officer for Providence St. Joseph Health System, and Care Redesign Theme Leader for NEJM Catalyst, likens analytics to holding up a mirror so that leaders can see actionable clinical, cost, and utilization information in the same frame. That is no small task, however.

Connecting Data to Outcomes

All the roundtable participants – no matter what type of organization they represent or how mature their analytics shops are – focus on getting actionable data into the hands of providers at the point of care and getting physicians and nurses to incorporate that data into their workflow.

Rachael Jones, Staff Vice President for Payment Innovation Analytics at health insurance provider Anthem, uses analytics to connect financial performance to health outcomes in order to "direct decisions in a way that providers care about and that we know will actually impact patient care," she says. Her team works on breaking down silos between divisions such as client management, member management, and provider management to create valuable insights for provider collaboration efforts such as building high-performing networks.

Uses of Integrated Analytics



She also uses data to develop targeted episode payment bundles that lower costs and utilization in areas such as chronic disease and maternity. "I think we all want to reduce spend and reduce premiums to save money, but the larger 'why' to me is [to be] in service of the member," she says.

Dave Chokshi, MD, MSc, FACP

Kurt J. Wrobel, FSA, MAAA, Chief Actuary and Chief Financial Officer at Geisinger Health Plan, says, "Trying to make data actionable and meaningful at the physician level is really, really important," adding that analytics must include a human element to evoke real change in behaviors out of providers and patients.

Mission Health is working with a vendor to integrate data across devices and electronic medical records (EMRs) to predict a patient's clinical decline four to six hours before it happens so a provider can appropriately intervene, says Chief Quality Officer Chris DeRienzo, MD.

Dave A. Chokshi, MD, MSc, Chief Population Health Officer at OneCity Health and NYC Health + Hospitals, wants to leverage analytics to help decipher the cost-effectiveness, particularly comparative cost-effectiveness, of interventions.

Encompassing Social Determinants of Health

At Ochsner Health System, data on social determinants of health have been found to be one of the biggest predictors of clinical outcomes, even more so than commonly used clinical parameters or even medication titration, according to Chief Clinical Transformation Officer Richard Milani, MD, FACC, FAHA.

Roy Beveridge, MD

Humana is blending its Healthy Days member data with social determinants of health data from the Robert Wood Johnson Foundation, says Chief Medical Officer Roy Beveridge, MD. In doing so, it identified food insecurity and social isolation as the top two social determinant opportunities to improve health-related quality of life (the federal HRQoL metric). In an early pilot study in Florida, food insecurity was estimated to be 18%. Screening during the pilot, however, revealed the actual food insecurity prevalence was 51%.

To address food insecurity, which is found to be related to diabetes and behavioral health issues as well as high per-member-per-month costs, Humana has since launched a randomized control trial food insecurity program that provides case management, connection to resources, and food to members to see the impact on health outcomes. The results of that trial will be available within the year.

Uses of Integrated Analytics

"Through our clinics, where we have strong relationships with primary care physicians, we test various interventions that address social determinants of health," Beveridge says.

Partners Healthcare also is incorporating social determinants of health into analytics projects, making sure to gather data that is relevant to a specific individual, according to Sree Chaguturu, MD, Vice President of Population Health Management. To ensure accuracy, Partners uses publicly available court data, legal data, and financial data. The data helps determine if the patient intervention should be led by a nurse or a social worker. Chaguturu warns that data must be collected and analyzed very carefully. "If you don't get that right, that can really turn off the patient if you start to make assumptions about race, class, ethnicity, gender, and income," he says.

UPMC is also examining data on social determinants of health, as part of "raising the health capital of a community," says Pamela Peele, PhD, Chief Analytics Officer of UPMC Insurance Services Division and UPMC Enterprises.

Benson Hsu, MD, MBA, FAAP, Chief Medical Analytics Officer at integrated health system Sanford Health, sounds a warning about social determinants data: the reimbursement structure is not yet designed to incent providers to address these issues. "In the current environment, I'm not 100% held accountable for solving all those social problems to get to the quality metric," he says, adding when the quality metric goes down, he won't get reimbursed. Since reimbursement is still based primarily on a fee-for-service structure and limited quality measures, he wants Sanford Health to be able to take on full risk so that delivering medical care and addressing social needs are fully aligned.


Benson Hsu, MD

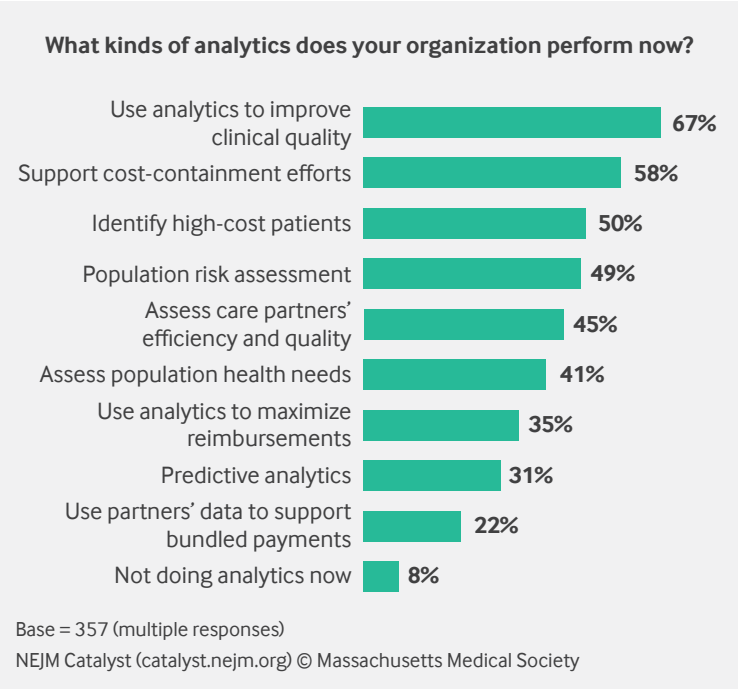

Mark Bethke, FSA, MAAA

The Need for Structural Change

Analytics cannot substitute for structural change in health care organizations or the payment system, says Mark Bethke, FSA, MAAA, Managing Director at Deloitte Consulting LLP. He believes changes in reimbursement will drive the necessary evolution, calling "loss of money" the only way, sometimes, to accomplish necessary shifts in health care organizations.

Technology is rarely the obstacle in this task, says Brian Flanigan, MBA, Principal, U.S. Value-Based Care Leader for Deloitte Consulting LLP. Instead, organizations find difficulties in strategic prioritization, governance, partnering,

Uses of Integrated Analytics



collaboration, and working together to make improvements.

Perhaps the whole health care industry is in need of disruption, wonders Ali Keshavarz, Vice President and Head of Analytics at Aetna. "It would be akin to what happens in the tech world," he says, stressing that "[health care] is fractured in terms of incentives and how it is organized."

"Responsibility for the dollar is step one," Chokshi says. "How you're actually going to allocate that dollar is going to have a much bigger impact on whether or not we're delivering on the goals we have set out for ourselves."

Organizational Limits

Developing analytics capabilities takes time and money. UPMC's Peele is eager to do more, such as prescriptive analytics, but she is limited by a lack of data integration and flexibility. "We're using data that wasn't meant to be used in the way that we want to use it. We're using the billing data to do population health management. Boy, is that a challenge," she says.

Requirements for return on investment can crimp analytics spending. Members stay with commercial health plans for two and a half years, on average, which means negative ROI for longer-term investments, says Beveridge. But Humana's Medicare Advantage members stay for just under eight years, on average. "We know that by investing in analytics now, we may not get the clinical reimbursement for five years, but for us, that's fine," he says.

An organization's size can limit how much it can do with analytics, especially as the definition of health care widens beyond episodes of care. "When does health care start in a person's life? Is it the entire life? Is it everything they do? Is it their happiness? Is it their job? Are there other cultural determinants?" asks Richard Vaughn, MD, Chief Medical Officer at SSM Health. While he agrees that all these aspects have a "massive effect" on health, he says some organizations are forced to use a much smaller definition. "I think that's where you can see a lot of differences in the room about who has pulled off what piece … because they cannot deal with the entirety of health, the entire person, and everything they do every day," he says.

Jian Yu, Chief Actuary and Senior Vice President of Advanced Analytics at Priority Health, the payer arm of Spectrum Health, says that "in addition to talent, building a predictive model requires a lot of data to train the model, plus more to validate and refine the model's predictive power. We do some internal development but also rely heavily on purchased tools," she says. Yu would like to see both payer and provider organizations become more transparent with each other to optimize the results of analytics.

Improving Technology

Enter natural language processing (NLP), which is evolving and being integrated into analytics. "We have started to work with NLP to blend free text data such as physician notes in with discrete data such as labs, medication dosages, etc.," says Scott Weingarten, MD, Senior Vice President and Chief Clinical Transformation Officer at Cedars-Sinai Health System. He gives the example of determining the appropriateness of imaging for a patient with low back pain. "You don't know

Uses of Integrated Analytics

Amy Compton-Phillips, MD

from discrete data elements how long the patient has had lower back pain, and you need to know that to determine if imaging studies may be appropriate," he says.

Compton-Phillips, who likes to use the catchphrase "no data without stories, no stories without data," is bullish on NLP because it brings narrative back to the clinical workflow. EMRs have destroyed the patient narrative, she says, because they have forced data into discrete fields. "Once we leverage natural language processing much more richly, we can get back to narrative," Compton-Phillips says, "because in health care people want and need us to know their stories."

Barriers and Opportunities for Producing Better Outcomes

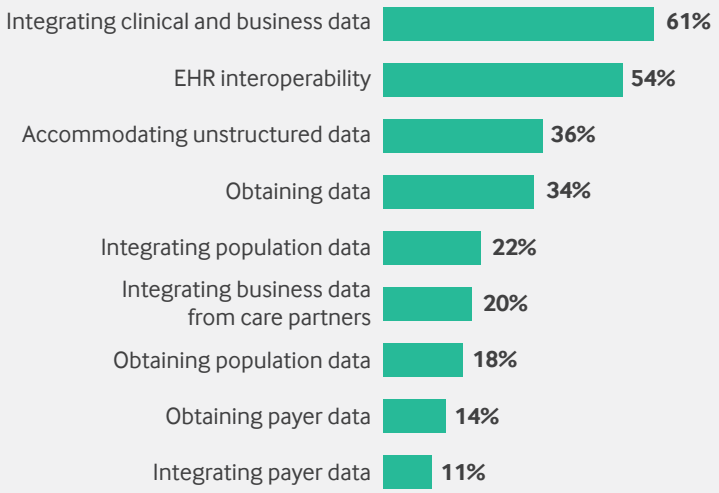
"You can spend an infinite amount of money getting the data, cleaning the data, and by the time you get that data in the perfect format, it's old, it's out of use, and the opportunity has been missed."

Data analytics provides many opportunities for better insight into health care delivery and cost efficiency, but payers and providers face many barriers in the implementation – in technology, processes, and expectations. That was the consensus of participants in the second session of the "Analytics for Payer-Provider Collaboration" roundtable, moderated by NEJM Catalyst editors and sponsored by Deloitte.

To begin with, questions surrounding data and its collection are plentiful. Do health care organizations have too little data – or too much? Is the data perfect – or is "good enough" truly good enough? Do data sets apply to individual patients, and individual clinicians? Is everyone defining data terms the same way? Can technology applications such as electronic medical records pull the proper data quickly and cleanly? And on and on.

The Importance of a Data Foundation

Please select the top three data-related challenges your organization faces in performing data analytics over the next three years.



Base = 357 (multiple responses)

"You can spend an infinite amount of money getting the data, cleaning the data, and by the time you get that data in the perfect format, it's old, it's out of use, and the opportunity has been missed," says Richard Vaughn, MD, Chief Medical Officer at SSM Health. He has come to realize that data doesn't need to be perfect; "it just needs to be better that what you're getting today to drive the correct insight moving forward."

Benson Hsu, MD, MBA, FAAP, Chief Medical Analytics Officer for Sanford Health, says the first step in implementing analytics is to develop a common data model, a uniform approach to exchanging data, and consensus around definitions. That task is more difficult than it may sound. His team spent a year defining relatively straightforward operational terms such as average length of stay, clinic visit, and inpatient stay, in addition to clinical terms such as diabetes, asthma, hypertension, and other chronic illnesses. They solicited advice from operational teams and medical specialists, including endocrinologists who helped define what is meant by diabetic quality. "We had a slow, slow, slow, fast model. Let's do all the dumb stuff, the painful stuff that nobody likes to address first. Instead of immediately jumping in with a sepsis predictive model and struggling with inconsistent language on every subsequent project, let's get through the fundamental work of defining the language first and then we'll have 20 projects at once, but at least all 20 of them are data governed," he says.

Settling on a single approach is essential, says Kurt J. Wrobel, FSA, MAAA, Chief Actuary and Chief Financial Officer for Geisinger Health Plan. "If we don't all do it the same way, we'll never figure out what works. We'll look back in 10 years from now and say that it's confusion of effort because we could not unify to a single vision."

Barriers and Opportunities for Producing Better Outcomes

Rachael Jones

Even within Geisinger, which is an integrated delivery system, there are different views about data integrity, Wrobel says. Actuaries on the payer side worry that some data is "not credible" and is "highly volatile," but the providers still want it. "Even if [data is] 40% correct or 50% correct, you've got to figure something out with it," he says.

Most organizations consider data "a competitive asset" and the organization with "the best data wins," says Rachael Jones, Staff Vice President for Payment Innovation Analytics at health insurer Anthem. Until that mindset changes, she expects the adversarial relationship between data owners such as payers and providers to continue. "As long as [data] is a competitive asset, there is no impetus to share; payers and plans must look for opportunities to collaborate and share data to achieve optimal member outcomes," she says.

Setting Expectations for Analytics

Jian Yu, Chief Actuary and Senior Vice President of Advanced Analytics at Priority Health, the payer arm of Spectrum Health, says her team provides "a lot of information to our colleagues, but only rarely is there some action follow-up from it. But they love the data and find it informational." It's a perpetual challenge to determine how to drive actions with analytics more effectively.

At Anthem, the approach to analytics is "prove it and then scale it," Jones says. She spends a lot of time with her team figuring out what data enables health care leaders to connect insights to actions. That has meant testing new reports among a group of 30 or 40 provider groups to garner feedback before opening them up for broader consumption.

Roy Beveridge, MD

Humana is studying how to get the right data to the right people in the right place at the right time. "Given our focus on physicians, we recognize that data has to align with how a physician engages with her patient, which is different than how financial people understand data," says Chief Medical Officer Roy Beveridge, MD. "We have to ensure we provide data systems

Barriers and Opportunities for Producing Better Outcomes

and ways of doing things that are beneficial and at a physician level."

"This is in our financial best interest, too," says Dr. Beveridge. "Keeping people well, managing their chronic conditions, keeping them out of the hospital – all of this helps us keep premiums stable and aligns our interests with physicians."

For example, Humana is blending claims data with electronic health record data. This integrated approach allows the company to analyze a physician's patient population to see who is most at risk – predicting who is likely to fall, have late-stage heart failure, etc. – and begin to proactively take care of that population.

"The reason we're doing it is so we can better understand the health of the population so they can improve their health, which also enables Humana and the health care system to do better," says Dr. Beveridge. "That's what we're spending time on right now. Can we predict the 20% of people who end up being the 80% of all health care costs? Because that's the group we need to get to."

Ali Keshavarz

Ali Keshavarz, Vice President and Head of Analytics at Aetna, says he tries to test new approaches where the organization is most aligned. "Can we then export that model to places where we have varying levels of risk and then eventually to models where we have no risk, like fee-for-service? I don't know that we have an answer," he says.

What Analytics Can Do

Vaughn believes that data analytics will drive care delivery transformation, offering insights of how to shift dollars from one service to another. "We're not going to get more revenue per patient, so now it becomes how do we use analytics to inform the care redesign, to shift the money from 'I need X more providers' to 'I need X more nurses or health coaches,'" he says.

Amy Compton-Phillips, MD, Executive Vice President and Chief Clinical Officer for Providence St. Joseph Health System, and Care Redesign Theme Leader for NEJM Catalyst, says care transformation will happen only if leaders work to strengthen the core of medical practice, by rooting out waste to be able to shift dollars to things that matter more; decreasing the variation in practice; and improving the safety of the care.

Analytics can be instrumental in all these areas, as well as helping to align incentives, she says. "Organizations should line up the vision, have trusted groups built to leverage the data, make sure the data is trusted, make data consumable and actionable, ensure capacity for change on the receiving end, and create alignment of incentives."

Pamela Peele, PhD

UPMC wants to use analytics to decrease variations in care, says Pamela Peele, PhD, Chief Analytics Officer of UPMC Insurance Services Division and UPMC Enterprises. Some of those variations are currently driven by provider preferences. Once care is standardized, she says, providers can then use analytics to increase variations again – but this time based on personalized medicine. "We want variations in care to be driven by the patient's characteristics," she says.

Barriers and Opportunities for Producing Better Outcomes

Scott Weingarten, MD

Physicians at Cedars-Sinai Health System don't only want data, they want actionable data, according to Scott Weingarten, MD, Senior Vice President and Chief Clinical Transformation Officer. They want to accompany the data with a strategy "to impact the data in a meaningful way," he says. When gaps in care are identified, they want to know what programs are available and which patients belong in which programs that can enable higher quality and higher value care.

Tackling the Tough Questions

Brian Flanigan, MBA, Principal, U.S. Value-Based Care Leader for Deloitte Consulting LLP, says that many health care organizations are struggling with the transition from volume to

Brian Flanigan, MBA

value, including how to manage the pace and sequencing. "All of a sudden, you are trying to change the culture and change how to operate without addressing some of these fundamental structural issues. This creates lots of conflict within lots of organizations," he says. Analytics can be the tough medicine that shows people the need for change.

Similarly, says Flanigan's colleague, Mark Bethke, FSA, MAAA, Managing Director at Deloitte Consulting LLP, analytics can drive home the need for consolidation. "Nobody wants to close wards or hospitals right now, but we need to," he says, adding that most markets have too many.

As Partners HealthCare tries to tackle the rising cost of pharmaceuticals, Sree Chaguturu, MD, Vice President of Population Health Management, says wresting control of data from pharmacy benefit managers (PBMs) has been a challenge. They know why patients are in a certain benefit, their co-insurance, the channel distribution, the potential value of drug rebates, and more. To make change in how a provider prescribes medicine, you can't just say "this drug is expensive," he says. You have to know "what other drugs should I give and what pharmacy should I prescribe them at?" That requires total pricing transparency from the PBMs.

Wrobel is trying to solve the same problems at Geisinger, where he wants reliable information that can be displayed in the EHR. "When we prescribe it, it should say, this drug is covered and it's covered at this cost at this tier," he says, acknowledging the organization hasn't gotten there yet.

Compton-Phillips wants to use analytics to figure out how to align financial incentives with good care, so that providers no longer get paid as much for delivering inappropriate care as they do for appropriate care.

Richard Milani, MD, FACC, FAHA, Chief Clinical Transformation Officer at Ochsner Health, would like to see a greater focus on digital devices that can feed real-time biologic data into analytics engines. He points out that 86% of the entire health care cost of the nation, or $2.75 trillion, is in chronic disease. "We measure the biology of what's going on with [these patients only] two or three times a year," he says. "These are disease processes that are changing daily or weekly. And you're expecting to succeed?" The most critical piece of data about these patients isn't their actuarial risk, he

Barriers and Opportunities for Producing Better Outcomes

Richard Milani, MD, FACC, FAHA;
Dave Chokshi, MD, MSc, FACP

says, it's data such as their current blood sugar and blood pressure readings.

He'd also like to see more data from payers as his organization deepens its commitment to precision cohorts and phenotyping. "The strength of the cohort would only improve by having real-time actual data from payers," he says.

Dave A. Chokshi, MD, MSc, Chief Population Health Officer at OneCity Health and NYC Health + Hospitals, says physicians may be reluctant to screen for social determinants of health such as housing insecurity because they don't know what they are going to do once they have that information. "If we know what's going to move the needle on outcomes – but we can't actually match up the intervention with a clear need in front of us – then we have to address the interventions, right?" he asks.

Freeing Up Time for Analytics

Many leaders at the roundtable agree that the plethora of quality measures must be addressed to free up time for analytics. Chokshi and colleagues conducted an exercise to figure out how many quality measures his system reported on and found 950 distinct reporting requirements, including Medicare ACO, Patient-Centered Medical Home, and Federally Qualified Health Center. They pared the list down to about 40 that would be most impactful. His team also built an all-payer risk stratification algorithm to address the fragmentation inherent in proprietary risk scores from multiple different payers. "Payer-agnostic approaches help us get closer to improving total population health. In our system, they are particularly important because we serve so many uninsured patients, for whom we don't even get claims data from payers," he says.

Documentation requirements are burdening clinicians and contributing to burnout, Chaguturu says, making them less likely to engage with analytics or change behavior. "If you can streamline documentation, you can do a lot more interesting things as a clinician," he says.

Chris DeRienzo, MD, MPP, FAAP, Chief Quality Officer at Mission Health, sounds a similar note. "We've done too much layering and not enough actual redesign. I absolutely see clinician burnout as a significant barrier to being more actionable with our data, unless we fundamentally revise how we are asking clinicians to interface with data before, during, after, and in-between patient encounters."

Vaughn sounds an optimistic note. He believes analytics – if deployed correctly – could give clinicians back time they've lost to documentation. For instance, providers will be able to pre-interview patients to help physician and care teams figure out what to address during a patient visit.

Chris DeRienzo, MD

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