Beyond Meaningful Use: Harnessing Data's Potential in the Post-Reform Era

Executive Perspectives

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Background

Of all the truisms associated with healthcare reform, the "transformative power of big data" remains one of the most overused. For all the talk of data's promise, many hospital systems, health plans, and healthcare companies struggle to unlock the value from the numerous data sources at their disposal. Moreover, sweeping fears persist regarding the data requirements that reform will place on hospitals and health plans. In this context, HEP conducted an industry survey with the goal of identifying how the most progressive organizations are innovating ahead of legislative mandates to reap the rewards of data.

The key findings of this survey were presented in a webinar on November 25th, 2013. The webinar involved a discussion with a panel of experts: **Dr. William Morris**, Associate Chief Medical Information Officer of the Cleveland Clinic, **Dan Mendelson**, the Founder and CEO of Avalere Health, and **Anne Tumlinson,** SVP of Avalere Health.
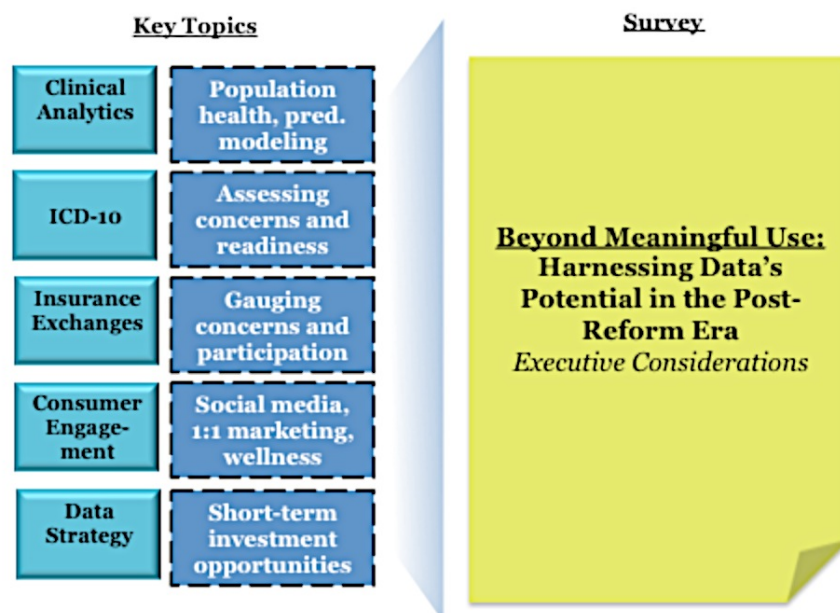
Research Methodology

Survey

The cornerstone of our research was a survey that HEP distributed, in collaboration with Avalere Health, to over 2,000 hospital system and integrated delivery network (IDN) administrators, health plan executives, and health care companies. The survey, which is reproduced in its entirety in the final section of our report, examined some of the most vexing topics related to health care reform and data. These include clinical analytics and population health, new payment methodologies and the implications for data strategy, the elusive search for consumer engagement, and how organizations are equipping themselves for the exchange and ICD-10. *Exhibit 1* captures the key topics from the survey.

Exhibit 1: Survey Focus Areas

The following recommendations were distilled from our survey research, and complemented by interviews with health care executives.

#1— *Most organizations view healthcare reform as having a positive financial impact.*

On the heels of our 2012 survey, we began this year's market work by posing the philosophical question, "*Is reform good for your business?*" By and large, we found that the majority of respondents regard reform as having a positive impact on their organizations, with only 13% viewing reform negatively (as depicted in **Exhibit 2**).[1] Note that this represents a more favorable perception than last year, where 17% of

Exhibit 2: How Would You Rate Health Reform's Impact on the Financial Performance of Your Institution?
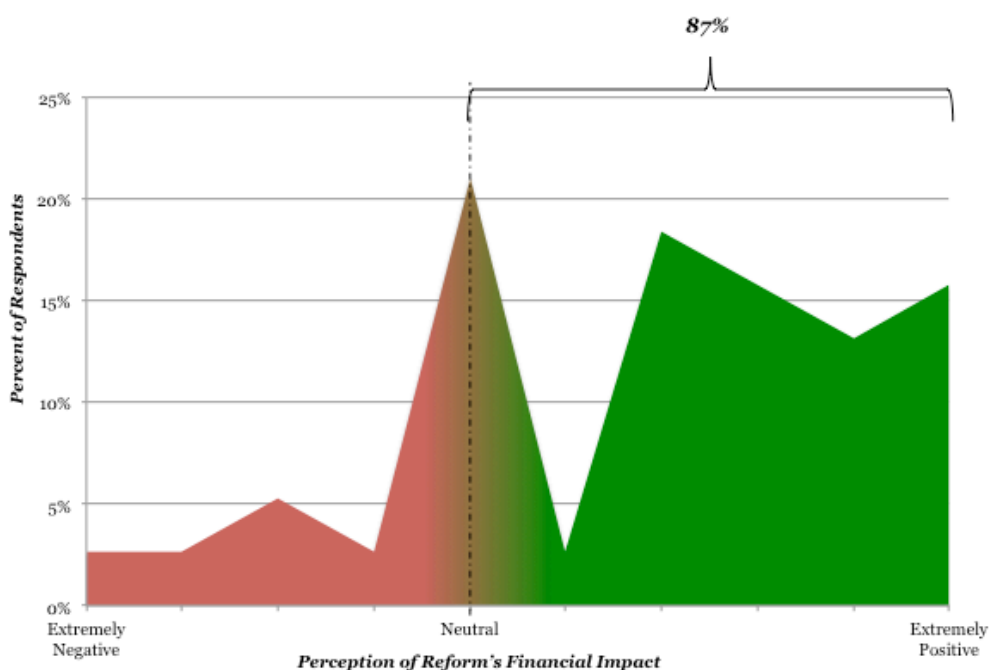
respondents viewed reform negatively. It is important to consider these findings in light of our survey sample, which consists largely of the most progressive institutions in healthcare. HEP contends that many of the highest performing institutions view reform as an opportunity to apply technology to accomplish goals in ways that may be less accessible to less sophisticated organizations. In the words of US Chief Technology Officer Todd Park, "The future is here, it's just not evenly distributed yet."[2]

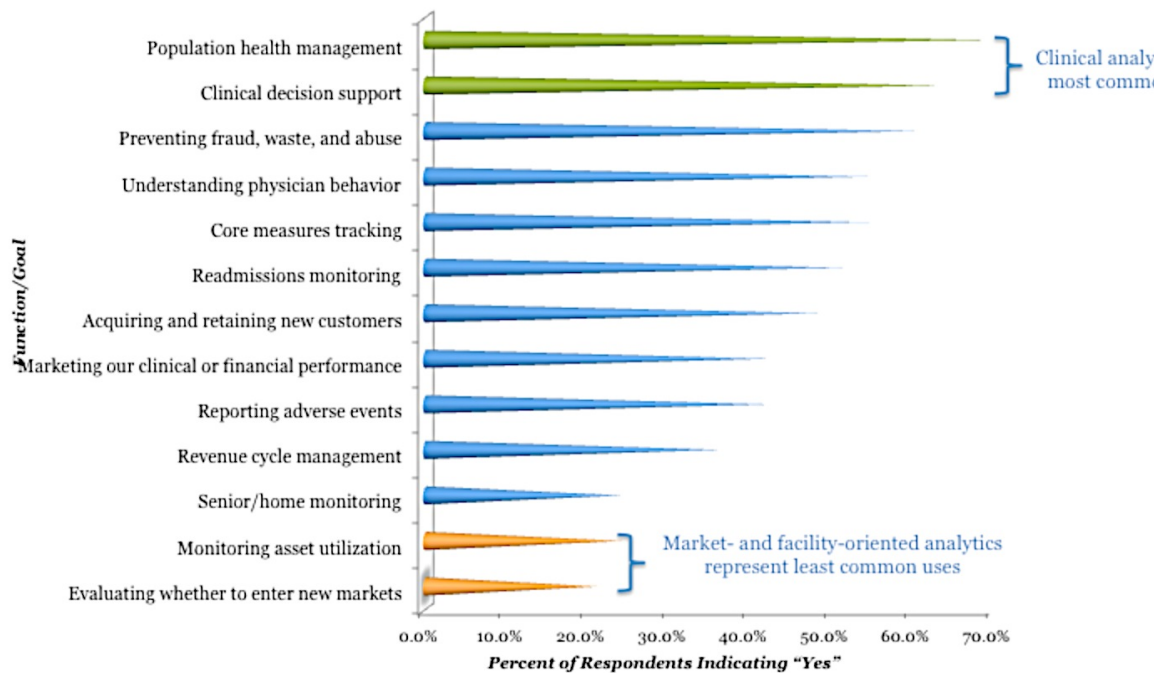[1] HEP Research and Analysis. "Seizing Opportunity in the Wake of Reform." November 2012.
[2] Todd Park, April 4, 2012, Chicago, quoting William Gibson, the acclaimed science fiction writer

#2— Clinical analytics far more prevalent than financial analytics. Narrowing our attention to the topic of analytics, one of our goals in conducting this survey was to assess which uses of data are most prevalent among healthcare payers and providers. To this end, we asked executives to identify for which goals and business purposes they leverage data. In **Exhibit 3,** we see that clinical analytics are more common than financial applications of data.

As an example, the majority of respondents cited that they apply data for the use of population health management and clinical decision support, while only 20 percent use analytics for monitoring asset utilization and evaluating whether to enter new markets. It is clear that data is underutilized in certain business settings.

Exhibit 3: Our institution uses analytics to accomplish the following

#3— We are on a slow march to clinical integration. As healthcare organizations equip themselves with the data infrastructure to better understand their patient populations, we were interested in the extent to which providers were building ACOs or clinically integrated networks. While slightly more respondents than last year reported pursuing these initiatives, 40 percent are abstaining from any type of risk-sharing arrangement (as displayed in **Exhibit**


Exhibit 4: Which of the following describes your ACO strategy?
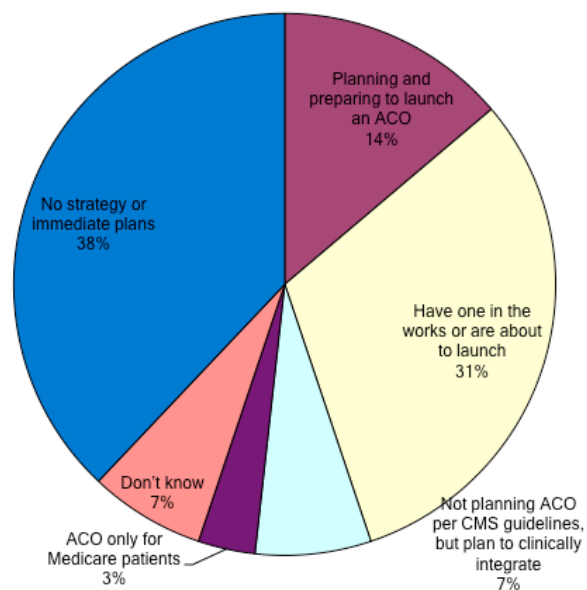
4). Despite the investments in clinical analytics platforms, which enable the migration to new payment methodologies, the ramp has been a bit slower than we may have expected.

#4— Bundled payments and ICD-10 represent key data concerns across payers and providers. In this world of business model ambiguity, data-related concerns emerge as fundamental forces coloring the worldview of payers and providers. Asking respondents to identify the extent to which they agree or disagree with several assertions related to data and analytics, we find that only a slight majority of respondents indicated that they were equipped to handle bundled payments. (***Exhibit 5).*** Similarly, the assertion that ICD-10 will yield gains in quality or efficiency received a tepid response. These indicators illustrate certain sensitivity to new payment models among survey respondents. Given this caution, it is perhaps unsurprising that meaningful investments in ACO and clinical integration have been slow to come.

Exhibit 5: To what extent do you agree with the following statements
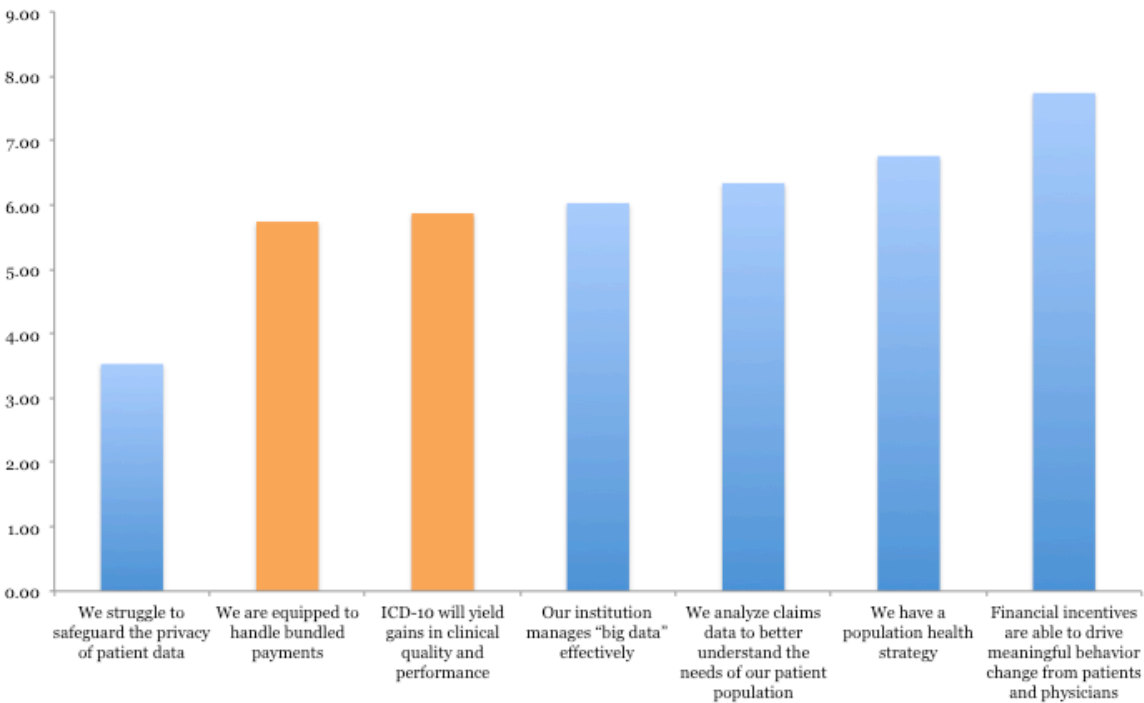
#5— *While enterprise data warehouses are increasingly common, external data exchange is limited.* Narrowing our scope to the hospital market, we were interested in probing data warehousing and data sharing. One of the key findings from last year's survey was that the majority of administrators believed that enterprise data warehouses are a foundational building block of any big data initiative.[3] This year, in ***Figure 6a***, we see this trend reinforced: the vast majority of providers have developed or purchased an enterprise data warehouse. Yet, while institutions are making the investments in their own data infrastructures, very few—30%--share data with other hospitals and post-acute care providers online. This illuminates the root of a problem affecting the delivery system. If the purpose of a data warehouse is to run more sophisticated analytics upon one's patient population with the goal of providing more proactive care, it is the lack of information sharing between institutions that results in data—and thus care—gaps.

Exhibit 6a: Does Your Institution Have an Enterprise Data Warehouse?
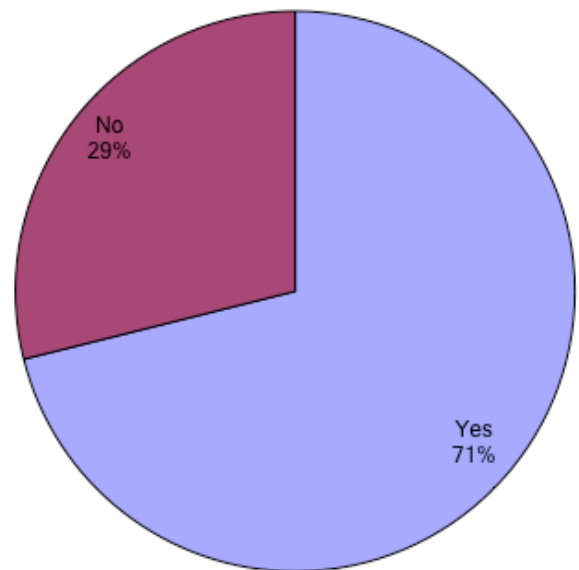
Exhibit 6b: Does Your Institution Share Data Online with Post-Acute Providers or Other Hospitals?

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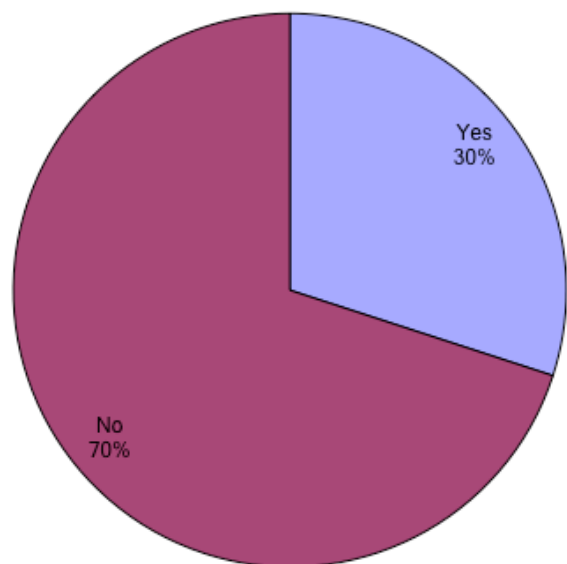
[3] HEP Research and Analysis. "Seizing Opportunity in the Wake of Reform." November 2012.

#6: There is an elusive search for social media ROI. Any survey on big data would be remiss not to touch upon the use of social media by healthcare organizations. As displayed in *Exhibit 7*, 82% of institutions believe that they are getting no return on investment from their social media efforts, or that they could be doing more in this space. Many organizations view social media as the primary conduit for achieving consumer engagement. Judging by the perceptions of social media displayed *in Exhibit 7*, it is clear that there is massive room for improvement

Exhibit 7: Which of the Following Best Describes Your Social Media Strategy
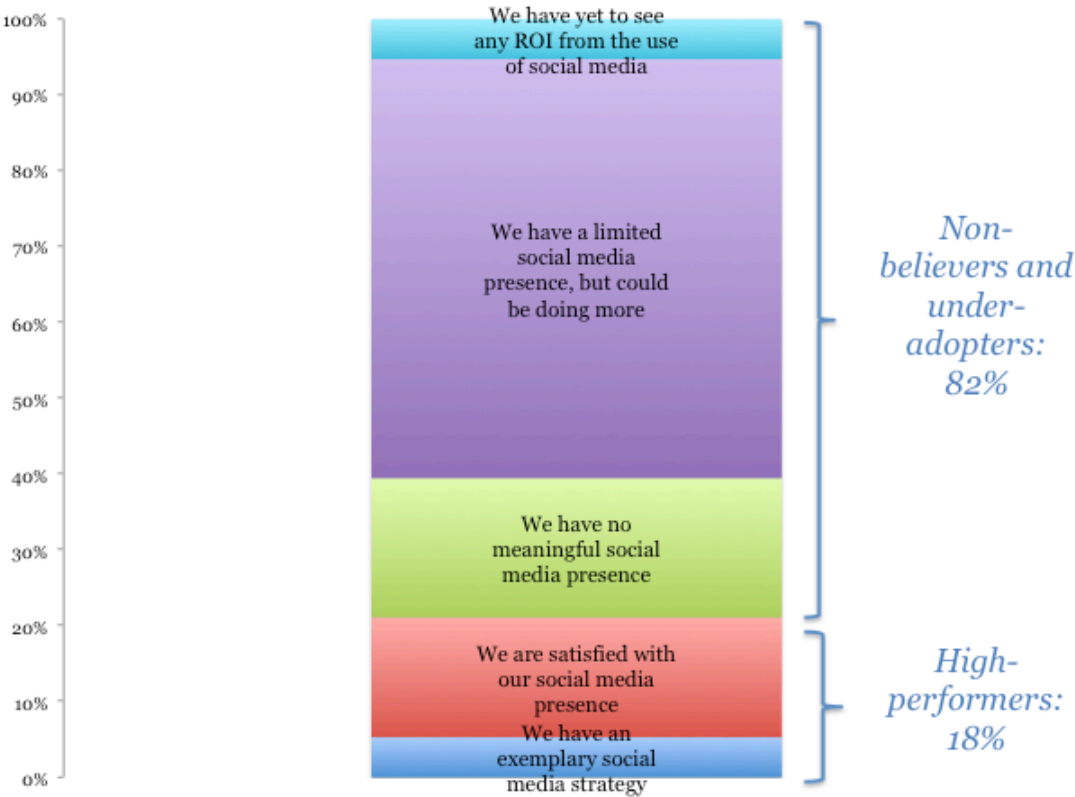
#7: 2014 Executive Playbook: consumer engagement and BI & analytics top the list. The final point in particular is notable when viewed against the areas that hospitals and health plans plan to target for investment in the next 12 months (**Exhibit 8**). In the survey, we laid out several sectors that we looked at and asked respondents to rank them. Sorting these subsectors from highest to lowest, we have constructed a prioritization scheme, or an executive

Exhibit 8: Which of the Following Subsectors Will You Target for Investment in the Next 12 Months?
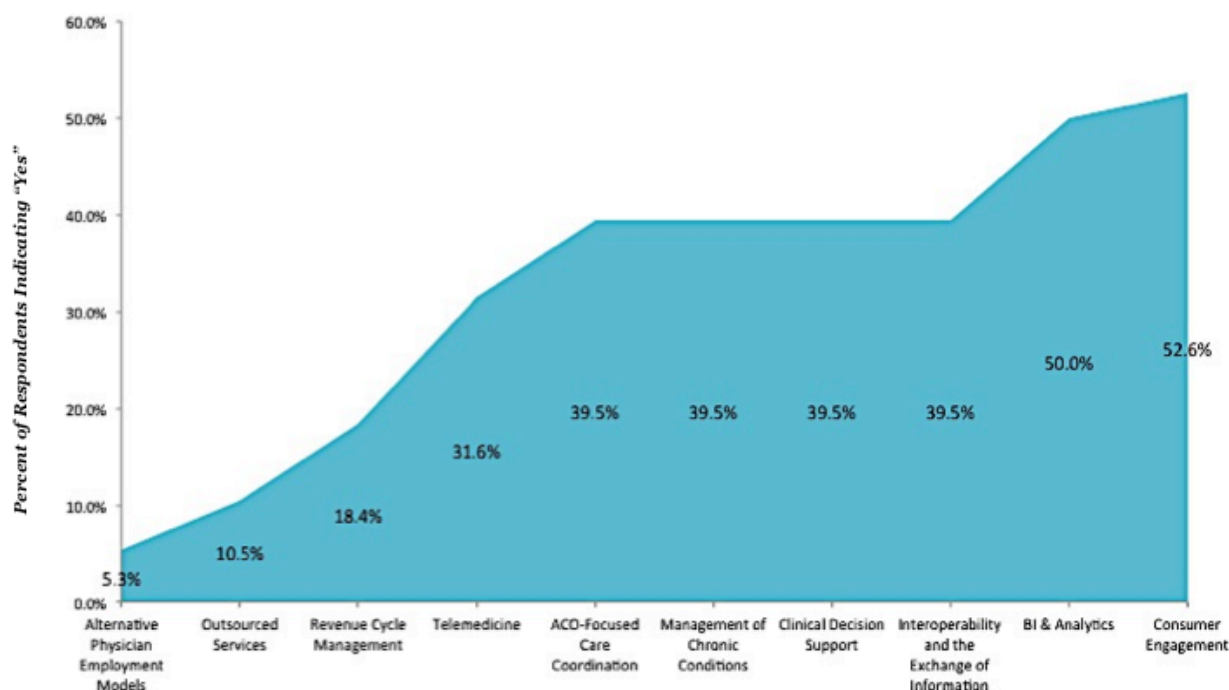
playbook for 2014. Consumer engagement tops the list, followed by BI & Analytics platforms—with half of institutions saying that they will make investments in this area. A number of sectors which have generated mounting interest, but have yet to experience the same ramp, include clinical decision support and telemedicine.

Conclusions

In reflecting on the research, four essential conclusions emerge.

- #1: Population health has become one of the most frequently used buzzwords in healthcare, and the vast majority of survey re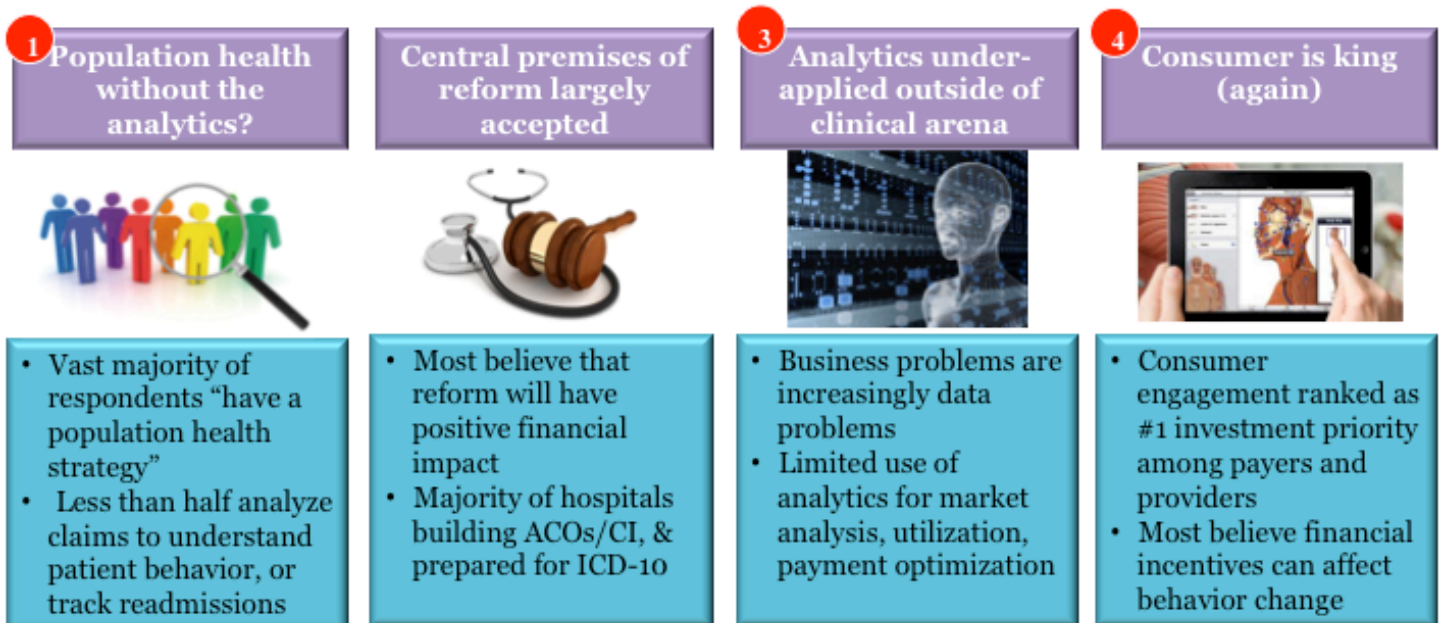spondents claim that they have a population health program. However, if we unpackage this concept into its component parts—we find that many institutions may have underinvested in the analytics needed to pursue a population health strategy, such as analyzing claims to understand patient behavior.

- #2: Most institutions have begun to accept the philosophy of healthcare reform. For all the talk of reform's problematic rollout, most respondents believe that it will have a positive financial impact on their institutions. Furthermore, the majority of providers have began pursuing clinical integration initiatives or accountable care organizations.

- #3: While clinical applications of analytics are increasingly prevalent, fewer institutions crunch data to lend insight into core business goals, such as utilization management, market analysis and payment optimization

- #4: Finally, we see consumer engagement, once again, as a top priority for health plans and providers. While many struggle to unlock value from social media, the majority of respondents will continue to target consumer engagement for investment and believe in the core principles, such as incentives driving behavior change.

Exhibit 9 summarizes these themes.

1 Population health without the analytics?	**Central premises of reform largely accepted**	**3 Analytics under-applied outside of clinical arena**	**4 Consumer is king (again)**
• Vast majority of respondents "have a population health strategy" • Less than half analyze claims to understand patient behavior, or track readmissions	• Most believe that reform will have positive financial impact • Majority of hospitals building ACOs/CI, & prepared for ICD-10	• Business problems are increasingly data problems • Limited use of analytics for market analysis, utilization, payment optimization	• Consumer engagement ranked as #1 investment priority among payers and providers • Most believe financial incentives can affect behavior change

Survey Questions

The following questions comprised our survey, which we conducted over 3 weeks in October.

1. *First Name [free text field]*
2. *Last Name [free text field]*
3. *Title [free text field]*
4. *Institution [free text field]*
5. *My organization is best described as a (Select one):*
   a. *Hospital System*
   b. *Health Plan*
   c. *Physician Network*
   d. *Other (please specify)*
6. *On a scale of 1 to 10, how would you rate health care reform's effect on the future financial performance of your organization?*
   a. *[1-10 Number drop down] (1: extremely negative, 5: neutral, 10: positive)*
   b. *(Free text field.)Please elaborate in 1-2 sentences below.*
7. *To what extent do you agree or disagree with the following statements, please rank each 1-10 (1: strongly disagree, 10: strongly agree). If desired, feel free to elaborate in adjacent text field:*
   a. *Our institution manages "big data" effectively [1-10 Number drop down]*
   b. *We struggle to safeguard the privacy of patient data [1-10 Number drop down]*
   c. *We analyze claims data to better understand the needs of our patient population [1-10 Number drop down]*
   d. *Incentives are able to drive meaningful behavior change from patients and physicians [1-10 Number drop down] We have a population health strategy [1-10 Number drop down]*
   e. *We are equipped to handle bundled payments [1-10 Number drop down]*
   f. *ICD-10 will yield gains in clinical quality and performance [1-10 Number drop down]*
8. *Our institution uses analytics to achieve the following goals and execute the following functions (check all that apply)*
   a. *Population health management*
   b. *Revenue cycle management*

c. Clinical decision support

d. Preventing fraud, waste, and abuse

e. Readmissions monitoring

f. Core measures tracking

g. Monitoring asset utilization

h. Enhancing clinical decision support

i. Reporting adverse events

j. Acquiring and retaining new customers

k. Understanding physician behavior

l. Senior/Home Monitoring

m. Evaluating whether to enter new markets

n. Marketing our clinical or financial performance

9. **Providers only: Please prioritize the following challenges in terms of relevance to your organization (1: most important, 6: least important):**

a. Optimizing patient payer mix [1-6 Number drop down]

b. Aligning more closely with affiliated physicians [1-6 Number drop down]

c. Preparing for risk-based payments [1-6 Number drop down]

d. Bolstering IT Infrastructure/Preparing for MU 3 [1-6 Number drop down]

e. Converting to ICD-10 [1-6 Number drop down]

f. Acquiring or partnering with hospitals [1-6 Number drop down]

10. **We have an enterprise data warehouse (Select One):**

a. Yes

b. No

11. **Providers Only: Our institution shares patient data with post acute-care providers or hospitals online:**

a. Yes

b. No

12. **Providers only: ACO Strategy: Which of the following best describes your current ACO strategy (Select One)?**

a. Talking about an ACO, not doing anything yet

b. Planning and preparing to launch an ACO

c. Have one in the works or are about to launch

d. Not planning ACO per CMS guidelines, but plan to clinically integrate

    e.   *ACO only for Medicare patients*

    f.   *Don't know*

    g.   *No strategy or immediate plans*

13. *To what extent do you agree with the following statement: "Our organization is challenged in recruiting experienced data staff"*

    a.   *[1-10 Number drop down] (1: disagree strongly, 5: neutral, 10: agree strongly)*

14. *How would you describe your organization's application of social media: Choose the selection which best describes your strategy:*

    a.   *We have no meaningful social media presence*

    b.   *We have a limited social media presence, but could be doing more*

    c.   *We are satisfied with our social media presence*

    d.   *We have an exemplary social media strategy*

    e.   *We have yet to see any ROI from the use of social media*

15. *Providers only: What are your top concerns as they relate to ICD-10 (please rank the following 1-5, 1=most important, 5=least important):*

    a.   *Resourcing the transition*

    b.   *Training staff*

    c.   *Maintaining two coding systems simultaneously*

    d.   *Cost of upgrading software*

    e.   ***Avoiding payment delays***

16. *Which of the following areas, if any will you target for investment in the next year? (Please mark as many choices as apply)*

    a.   *ACO-Focused Care Coordination*

    b.   *Consumer Engagement*

    c.   *BI & Analytics*

    d.   *Management of Chronic Conditions*

    e.   *Outsourced Services*

    f.   *Revenue Cycle Management*

    g.   *Clinical Decision Support*

    h.   *Interoperability and the Exchange of Information*

    i.   *Physician Employment*

    j.   *Mobility*

    k.   *Other (please describe)*

Acknowledgements

HEP would like to thank the following individuals, who were instrumental to our examination of the market: