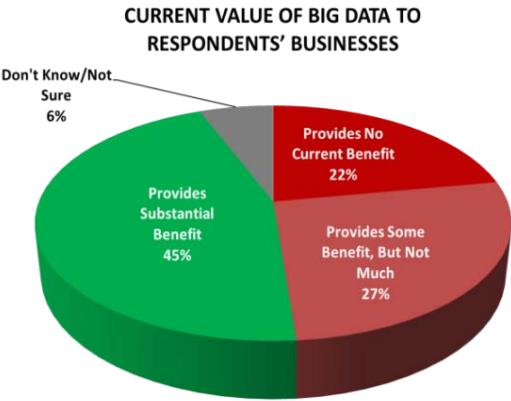


# HEALTHCARE DECISION MAKERS' PERSPECTIVES ON BIG DATA

MOST HEALTHCARE EXECUTIVES HAVE HIGH EXPECTATIONS FOR BIG DATA, BUT TALENT SHORTAGE AND LACK OF RESOURCE ARE ROADBLOCKS TO REALIZATION OF BIG DATA'S POTENTIAL

Decision makers at health insurance companies, hospitals and health systems have high expectations for the benefits that big data will bring to healthcare, with many expecting significant impacts in areas ranging from finance to population health to clinical outcomes. However, while long-term expectations are high, most of these leaders say they have yet to see substantial benefits – and in some cases, any benefits at all – from big data. They point to resources issues, including difficulty finding the right talent and lack of adequate funding, as the top barriers in the way of realizing big data's full potential.



While two-thirds of healthcare decision makers say they have high expectations for the future potential of big data (66%, data not shown), about half say big data provides little to no business benefit now (49%). In general, payers perceive greater current business value than providers, with more than half of payers saying there is substantial business benefit (53%) and less than two in five providers answering similarly (38%).

BY THE NUMBERS

Percentage of Healthcare Decision Makers Who:

- 87** Perceive big data as impactful on future business
- 84** Have had difficulty finding staff skilled in optimizing big data
- 45** Plan to hire more skilled staff within the next year

*“The key question is how do we take the massive amount of information and translate it into healthcare delivery. We have to begin by asking the right questions in order to get the right information and insights from the data. That process has begun.”*

**Robert Pearl, M.D.**  
 CEO of the Permanente Medical Group and The Mid-Atlantic Medical Group

*The Society of Actuaries conducted a survey of executives and senior directors/managers at U.S. hospitals and health systems (N=156) and executives and senior directors/managers at U.S. health insurance companies (N=102). The online survey was fielded between October 10, 2013 and October 16, 2013. Final data were weighted to ensure reported totals are equally representative of perspectives of health insurance payers and healthcare providers. The survey findings were discussed by a panel of experts at the SOA 2013 Annual Meeting during a session entitled “Will Big Data Transform Healthcare?”*

Despite ambivalence about the current value of big data, healthcare decision makers agree that big data is an important development that will have at least some impact on their business in the future (87%). Providers and payers expect to see the greatest long-term business impact in population health management (47% over the next ten years) and clinical decision support (24% over the next ten years).

Still, one-third of decision makers say they have concerns about the potential of big data (35%) and although half of respondents believe big data provides long-term business opportunity (51%), one-third see it as a double-edged sword that presents both opportunity and risk (34%). Payers (55%) are more likely than providers (47%) to perceive big data as an opportunity.

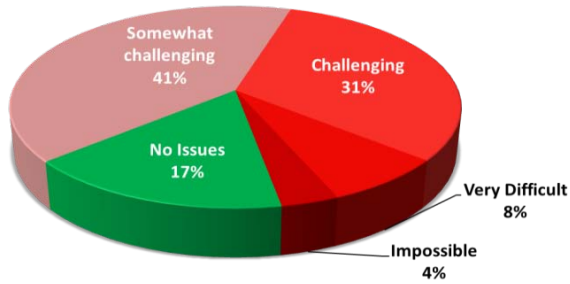
Only half of decision makers say their organization is very well-prepared to take full advantage of data growth (51%). Far fewer decision makers at hospitals and health systems feel very well -prepared (38%) than at health insurance companies (65%).

*“Right now there’s a lot of confusion; people don’t know what to do with [big data] and they are trying to figure out what is useful. Those who do understand big data and have the capabilities to pull insights will stand out.”*

**Eric Bokelberg**  
Product Manager, IBM Smarter Workforce

**LACK OF RESOURCES KEY BARRIER TO OPTIMIZATION OF BIG DATA**

**EASE/DIFFICULTY OF FINDING STAFF CAPABLE OF LEVERAGING BIG DATA**

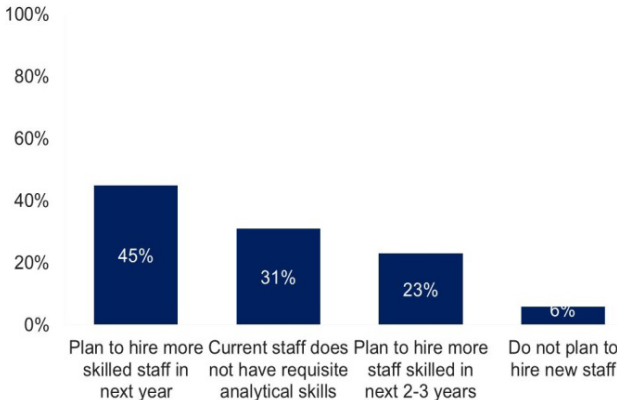


Providers and payers believe resource shortfalls, especially in staffing, budget, and infrastructure, are the biggest barriers to the adoption of big data analytics in their organization.

Not only do payers and providers say they have difficulty securing budget to hire staff skilled to reap the full benefits of big data, the vast majority of providers and payers say they have had at least some difficulty *finding* staff that can synthesize complex datasets and glean actionable information from them (84%). This sentiment spans both organization types included in this study, with roughly nine in ten payers (88%) and eight in ten providers (79%) saying it has been at least somewhat challenging to find talent who can leverage the business opportunities big data affords.

**PAYERS AND PROVIDERS SEEK TO ADD SKILLED STAFF**

In response, providers and payers have acknowledged an immediate need to hire the appropriate staff to manage and analyze large datasets. Nearly half of providers and payers say they plan to add skilled staff in the next year (45%), and one in four say they will add staff in the next 2-3 years (23%). Relative to payers, providers suggest the need to add skilled staff is more urgent: more than one in three providers say current staff do not have the analytical skills required to manage complex datasets (35%), versus one in four payers (27%).



*“To find the right talent, you have to look in non-traditional places, sometimes even different industries. As a profession, actuaries have their roots in data and analytics and are already doing the work of data scientists. However, executives don’t always think about actuaries when looking for the right talent and skillset to leverage the opportunities with Big Data, when in fact, there is no better profession to which they should look.”*

**Carol McCall, FSA, MAAA**  
Chief Strategy Officer, GNS Healthcare