The healthcare IT landscape continues to change. One minute you’re convinced the world is round and then a series of new technological advancements, entrants into the market, and mergers and acquisitions give it the appearance of being flat. Then news breaks and it becomes a Rubik’s cube with twists and turns so complex it’s unclear if you’ll ever be able to solve it.

Because of the flurry of activity in the last few months, Reaction Data went out to provider organizations and garnered feedback from nearly a hundred leaders.

In this report, we find out which companies these leaders think will have the biggest impact on healthcare and why. We also look at some of the areas the key players are trying to break into.

We then focus on emerging technologies. It’s interesting to compare what we’ve heard and read (Blockchain is on many analyst’s lists of contenders) with what providers are telling us (Blockchain is an also-ran in their eyes). The data suggests that providers are more comfortable with what they know and may already be using rather than the flavor of the week.

Shifting gears, participating organizations shared their plans for the future - are they planning to purchase, merge with, or partner with another organization. In the past 18 months alone, we have seen a slew of high profile provider activity in the M&A space so this research is particularly apropos.

Buckle up. It’s going to be a bumpy, but fun, ride.
Demographics

Approximately 80% of the professionals Reaction queried were C-Level. Almost half of the total respondents were from hospitals. The questions posed to these decision makers were specifically regarding market disruption.

Participant’s Titles

N = 97

- 27% CEO
- 17% CIO
- 17% CNO
- 17% CFO
- 7% RCM Director
- 5% COO
- 5% Director of Quality
- 5% Director of Patient Financial Services

Participant’s Hospital Type

<table>
<thead>
<tr>
<th>Hospital Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>41%</td>
</tr>
<tr>
<td>Critical Access Hospital</td>
<td>27%</td>
</tr>
<tr>
<td>Academic Medical Center</td>
<td>6%</td>
</tr>
<tr>
<td>Govt. Hospital</td>
<td>6%</td>
</tr>
<tr>
<td>Imaging Center</td>
<td>6%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>6%</td>
</tr>
<tr>
<td>Long Term Care</td>
<td>4%</td>
</tr>
<tr>
<td>Short Term Acute</td>
<td>2%</td>
</tr>
<tr>
<td>Specialty Clinic</td>
<td>2%</td>
</tr>
</tbody>
</table>
New Entrants to The Market

Nearly two-thirds of participants selected Amazon, with 75% of CEO’s saying they thought the internet pioneer would make the biggest splash.

Which Entrant Will Have The Biggest Impact?

“[Amazon has] visionary leadership and the ability to make the change happen.”
-CEO

“Amazon has a huge market they can use to distribute materials. They are already a household name and the users are not specific to Apple or Android.”
-CEO
What Executives Are Saying

The chart below shows the number of comments each vendor received per category, indicating that providers feel Amazon and Apple have more diversity than the others mentioned.

Not surprisingly, providers had more to say about Amazon than any other company and, at this point, they appear to have the most diverse attributes.

Based on the overwhelming attention given to Amazon, it can feel like some of the other household names mentioned appear to be also-rans. But there’s no question that companies such as Apple, Google, Microsoft, and even Walmart are investing significant time and money into the healthcare space.

Who Was Mentioned Most Per Topic?

- Resources Available
- Current Influence
- Name Recognition
- Distribution Ease
- Ability To Commodify
- Progressive/innovative
- Single-mindedness
- Affordable
- Brand Loyalty
- Technology
- Predictive Analytics
- Convenience
- User-friendliness
- Patient Engagement
Here is a quick rundown on some of the things these entrants are working on (that we KNOW about):

- In addition to leveraging its distribution channels and continuing to dominate the cloud market with its AWS business, Amazon CEO Jeff Bezos has partnered with business and finance titans Warren Buffett (Berkshire Hathaway) and Jamie Dimon (JPMorgan Chase) to form a venture aimed at lowering healthcare costs for the provider and consumer.

- Amazon is also leveraging voice assistant Alexa, has partnered with Ethereum blockchain, and is providing business intelligence.

- Apple and Google are continuing to develop their devices & apps and are looking at continued development of AI.

- Microsoft is working with St. Jude Children's Research on genomics and advancing cloud and AI.

- IBM offers cloud, encryption, and data mining.

- Salesforce allows providers to utilize their cloud CRM tool to manage patients and store data.

The list of non-traditional healthcare players doesn’t stop there. Ride-sharing pioneers Uber and Lyft have announced plans to help patients get to their appointments. One question we don’t have an easy answer to is, who isn’t planning on getting into the healthcare space?
Combined, virtual services/telehealth and artificial intelligence accounted for almost half of the responses. This isn’t surprising due to almost three-quarters of providers indicating they are already using telemedicine. This, coupled with the fact that the patient community is becoming more tech savvy with voice assistants provided by Apple and Android smartphones and tablets.

“The possibilities of uses are virtually limitless with technological progression, especially at the recent pace of technological advancement. These three (AI, mobile, telehealth), particularly when used in tandem, can analyze and evaluate the status of a patient from anywhere, at any time, and transmit that data back to a provider who can then communicate recommendations to patients on their mobile devices.” - CNO
Where is Telemedicine Used Most?

- Reaching Patients Who Live In Rural Areas: 24%
- Follow-up Care: 23%
- Managing Specific Patient Populations: 24%
- After Hours Patient Consults: 12%
- Preventative Care: 9%
- Primary Care Visits: 8%

In terms of practicality, providers felt that telehealth would be most effective in rural or remote areas, for follow-up care, and managing specific patient populations.

What Are The Financial Benefits of Telemedicine?

- Revenue Neutral: 51%
- Not Sure: 21%
- Revenue Positive: 14%
- Revenue Negative: 14%

“Tele-office visits are beginning to reduce the workload of primary care physicians, who are in short supply in the USA. IBM will be the behind the scenes driver of these new methods of population health management and decreased need for clinical services.” CFO

While telemedicine is at the top of the list in terms of overall impact, 50% of respondents in this Telemedicine study indicated it has been financially neutral for them. Only 14% have seen a positive financial effect, thus far. That said, they do indicate it has been beneficial in allowing them to see more patients and allowed them to deliver simpler and more cost effective care. CMS recently announced new rules to boost telehealth payments, which should certainly encourage those skeptical about the financial benefit of the technology.
While artificial intelligence and machine learning came in a close second to telemedicine, and providers clearly feel it’s an important area, it isn’t being adopted as quickly.

**How Important is Artificial Intelligence?**

- Important: 65%
- Neutral: 19%
- Not Important: 16%

**When Do Respondents Plant To Adopt AI?**

- We’re 1-2 years away from adopting AI
- We’re 3+ years away from adopting AI
- I don’t think we’ll ever utilize AI
- We’ve been using AI for a while now
- We’re planning on adopting AI in the next 12 months
- We just adopted some AI
Artificial Intelligence

Regardless of the technology, in order to gain acceptance, vendors will have to deliver cutting edge solutions that make the provider’s job easier and integrate with their existing environment.

**Where is AI Being Adopted The Most?**

Artificial Intelligence is mainly being adopted in imaging, predominantly in women’s health. However, both providers and industry experts in this study see multiple opportunities. Healthcare provider leaders specifically mentioned several areas they say AI will make measurable impacts on their organizations such as data mining, performing repetitive jobs, drug creation, precision medicine, and system analysis.

**What Providers Are Looking For in AI?**

- Convenience - 33.3%
- Interoperability - 27.4%
- Technology - 17.9%
- Predictive Analytics - 10.7%
- Affordability - 4.8%
- Progressive/innovative - 2.4%
- Distribution Ease - 1.2%
- User-friendliness - 1.2%
- Resources Availability - 1.2%
There have been dozens of mergers and acquisitions recently. These include provider/provider, vendor/vendor, and payer/payer relationships. Now the lines are being blurred as entities are criss-crossing into new spaces. Examples include CVS acquiring Aetna, Optum purchasing Advisory Board, PinnacleHealth getting picked up by UPMC, Walgreens partnering with NewYork-Presbyterian, Apollo buying LifePoint Health and merging it with RCCH HealthCare Partners, and many others.

Due to all of this activity, we asked provider leadership if they are planning to stay independent, acquire another organization, look to be acquired, or consider a merger.

With 40% of provider organizations seriously considering some of M&A activity over the next few years, this points to a dynamic market becoming even more in flux. The impacts to the vendors who sell to these organizations, to the payers who negotiate with them, to the care providers who work for them, and to the patients who are treated by them, could be significant. It isn't an overstatement to say that it is critical to keep a very close watch on this market dynamic.
Conclusion

Providers have made their predictions. Most sound like safe bets. But will Amazon transform healthcare or will an entrant not thought of carry the torch? Or will these exciting new players decide, as countless companies before them have before them, that healthcare is just too complicated and different of a market to stick around for the long haul.

Telemedicine and AI continues to advance but what about blockchain? It is getting buzz in journals but it’s only on a handful of providers’ radar. And what about the provider M&A market? A surprisingly large portion of organizations will change their ownership structure and make-up over the next few years leading to even more opportunities, upheaval, and a fair amount of pain. But if we had polled those acquired in the past two years, five years ago, would they have answered the same thing? One fact is for certain: despite healthcare’s slow technology adoption rates of the past, outside forces are prepared and, it appears, more than willing, to shake up the status quo.