Social media “likes” healthcare
From marketing to social business
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## What this means for your business

*Social media enables organizations to expand their role with customers*
The heart of the matter

Liking, following, linking, tagging, stumbling: social media is changing the nature of health-related interactions
When I was in the ER last night, I tweeted about the interminable wait. It seemed as though people who weren’t that sick got whisked in ahead of me! Guess what? Someone from the hospital heard me! They spotted my tweet and responded. And even sent someone down to talk to me in person.

That’s what I love about social media. I can write what I want when I want, and send it to all my friends, groups, and followers in an instant. And, all of them can send it to all of their friends, groups, and followers. It’s like my personal electronic megaphone.

Ever since I found out I had diabetes, I’ve posted monthly on Facebook about my struggles managing my blood sugar and energy level, and lots of people — some I don’t even know — have swapped healthy recipes, sent me tips on where to buy test strips, and even recommended doctors. Some even had links to YouTube videos.

I feel like the healthcare industry is finally getting it. My hospital has a Facebook page where they post lifestyle advice, the drug company shares newly released treatment studies through its Twitter account, and my insurer even has these interactive games that help manage my diet and exercise. Best of all, I’ve joined a few patient communities where I share how I’m doing on certain treatments and see how I compare to others.

Savvy businesses know they must go where the customers are. And in 2012, a rapidly growing number are on social media, the space that enables instantaneous self-expression and a shared community experience—at any hour of the day with someone in the house next door or halfway across the globe. The rise of social networking has been phenomenal. Use of social networking sites has grown from 5% of all adults in 2005, to half of all adults (50%) in 2011. For example, Facebook, which began with 11.7 million unique U.S. users, growing to 45 million participants, more than the entire population of Europe. Pinterest, a social image-sharing site using a virtual “pinboard” interface, just hit 11.7 million unique U.S. users, growing from 1.2 million only six months earlier. Twitter has also shown tremendous growth, reporting 460,000 new accounts created on average per day.

While industries such as retail and hospitality quickly saw the potential, the health sector has been slower to move. According to a new survey by PwC’s Health Research Institute (HRI), hospitals, insurers, and pharmaceutical manufacturers can benefit from this new form of interactive communication.

With a single key stroke, individuals can broadcast their attitudes on physicians, drugs, devices, treatments, hospitals, and health plans. HRI found that one-third of consumers are using social media for health-related matters. Most tellingly, they are choosing “community” sites over industry-sponsored sites. In a week’s snapshot of several health-related companies and consumer sites, HRI found that daily activity numbered in the thousands for community sites versus in the hundreds on company sites.

Early adopters in the health industry tell PwC that despite concerns about integrating social media into data analytics and measuring its effectiveness, they are incorporating social media into their business strategy. More than 1,200 hospitals participate in 4,200 social networking sites.

With these new opportunities come challenges and the likely threat of agile new entrants into the market. With transparency, patient expectations rise. And as health organizations collect more detailed information on its patients, proper safeguards will be needed to ensure privacy and security.

Not long ago, terms such as liking, following, tagging, and stumbling all had very different meanings. But in the era of social media, they provide the clues that could lead to higher quality care, more loyal customers, efficiency, and even revenue growth.

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2 Facebook, December 2011
3 techcrunch.com/2012/02/07/pinterest-monthly-unique/
4 blog.twitter.com/2011/03/numbers.html
5 Ed Bennett, Found in Cache, ebennett.org/hsni/
An in-depth discussion

Savvy adopters are tapping into social media to foster new relationships
An in-depth discussion

**Executive summary**

According to PwC’s consumer survey of 1,060 U.S. adults, about one-third of consumers are using the social space as a natural habitat for health discussions. Social media typically consists of four characteristics that have changed the nature of interactions among people and organizations: user generated content, community, rapid distribution, and open, two-way dialogue. This report dives into the social world of the health industry and provides insights into new and emerging relationships between consumers and the biggest health companies that serve them. It examines how individuals think about and use the social channel; how some providers, insurers, medical device, and pharmaceutical companies are responding; and discusses specific implications for organizations to take advantage of with this new view into the 21st century patient.

**How consumers are using social media**

Consumers are finding answers to their wants, needs and preferences. According to HRI’s survey, 42% of consumers have used social media to access health-related consumer reviews (e.g. of treatments or physicians). Nearly 30% have supported a health cause, 25% have posted about their health experience, and 20% have joined a health forum or community.

**Willingness to share information depends on trust.** Sixty-one percent of consumer respondents are likely to trust information posted by providers, and 41% are likely to share with providers via social media, compared to 37% trusting information posted by a drug company, and 28% likely to share information with a drug company.

**Age is the most influential factor in engaging and sharing through social media.** More than 80% of individuals ages 18–24 would be likely to share health information through social media, while nearly 90% of individuals would engage in health activities or trust information found via social media. Less than half (45%) of individuals ages 45–64 would be likely to share via social media, while 56% would be likely to engage in health activities.

**Consumers are willing to have their conversations monitored if they get something in return.** One-third of consumers surveyed said they would be comfortable having their social media conversations monitored if that data could help them identify ways to improve their health or better coordinate care.

**A new expectation is being set on response time.** More than 75% of consumers surveyed would expect healthcare companies to respond within a day or less to appointment requests via social media, while nearly half would expect a response within a few hours.
Social media information is influencing decisions to seek care. For example, 45% of consumers said information found via social media would affect their decisions to seek a second opinion. More than 40% of respondents reported that information found via social media would affect the way they coped with a chronic condition or their approach to diet and exercise.

How organizations are using social media
Social media activity by industry organizations is dwarfed by consumer activity. Although eight in 10 companies evaluated by HRI have some presence on various social media sites, the volume of activity for companies is in the hundreds versus the thousands of posts, comments, and overall activity observed in community sites in a week’s snapshot analysis. In fact, community sites had 24 times more social media activity on average than any of the health industry companies over that one-week timeframe. Two out of three organizations in the provider and insurer arena allow individuals to initiate posts on their Facebook pages, known as “walls.” But fewer than one in three pharmaceutical companies, which operate under stricter regulations, have walls available for individuals to initiate posts.

Marketing/communications leaders tend to manage social media strategies. The majority of HRI interviewees and members from the eHealth Initiative (eHI), a national association of health information and health technology companies, reported that their social media efforts were decentralized and managed by their marketing and communications departments. IT departments and digital teams were also identified as owning social media. Organizations that are strategic about their use of social sites have differentiated between social media and social business. Social media was defined as the external-facing component that gives and receives customer input, and social business was defined as the place where core operations, like customer service, data analytics, and product development, could use social data.

Healthcare businesses started to listen, but aren't translating social media conversations into practice. One in two eHI members surveyed worry about how to integrate social media data into their businesses and how to connect social media efforts to a return on investment. Some organizations are capturing sentiment and standard volume numbers on various sites, while others know that they need to go beyond capturing “likes” and “followers” to collecting qualitative engagement metrics.

Data from interactions in social media can complete the patient profile. Patients know how they feel, providers know how they treat, insurers know what they cover, and drug manufacturers know what therapeutics they’ve developed. But who has a full view of the individual? Completing the patient profile is the likely next step in moving toward higher-quality outcomes-based care, although the prospect raises concerns about privacy protection and who owns and controls the information. Life activities and behaviors that individuals report in social networks open up a new view of patient health.

What this means for the health industry
Business strategies that include social media can help health industry companies to take a more active, engaged role in managing individuals’ health. Social marketing can evolve into social business with the right leadership and investment of resources. Organizations that are strategic about their use of social sites have differentiated between social media and social business. Social media was defined as the external-facing component that gives and receives customer input, and social business was defined as the place where core operations, like customer service, data analytics, and product development, could use social data.
An in-depth discussion

Social media changes online dialogue from one-to-many to many-to-many, at a phenomenal speed

The term “social media” is used widely, but remains ill-defined. This instantaneous communication channel consists of four unique characteristics that have changed the nature of interactions among people and organizations: user generated content, community, rapid distribution, and open, two-way dialogue. Common platforms are Facebook, Twitter, and YouTube. In health, examples of community sites include Caring Bridge, Daily Strength, and BabyCenter.

The health industry has been slow to embrace social media, but is beginning to see the benefits. In extensive interviews with industry leaders, HRI found many social media converts. Aetna, one of the nation’s largest insurers, is among them. “Engagement is so important, but can be hard to achieve,” said Meg McCabe, Aetna’s head of consumer solutions. “We’ve been piloting several new social health platforms, and we’re seeing that they can really make a difference. Building connections among people with similar health challenges gives us a much better shot at helping them achieve their goals.” For example, last year Aetna partnered with a social media company to offer members Life Game, an online social game to help engage people to achieve their personal health and wellness goals.

In the past, a company would connect with its customers via mail or a website, but today’s dialogue has shifted to open, public forums that reach many more individuals. Early adopters of social media in the health sector are not waiting for customers to come to them. “If you want to connect with people and be part of their community, you need to go where the community is. You need to be connecting before you are actually needed,” explained Ed Bennett, who oversees social media efforts at the University of Maryland Medical Center.

And social media is becoming a platform for internal discussions as well. “Our employees and physicians have had fruitful and provocative discussions using IdeaBook, our internal social collaboration tool. The capacity for this candid internal collaboration is crucial for our organization and essential to effectively running an organization in the 21st century,” said Vince Golla, digital media and syndication director, Kaiser Permanente.

“If you want to connect with people and be part of their community, you need to go where the community is.”

Ed Bennett, University of Maryland Medical Center
Consumers are broadcasting and finding answers to their wants, needs, and preferences through social media

Social media presents new opportunities for how individuals manage their health, whether researching a particular illness or joining a support group to share experiences. The virtual aspect of social media enhances communications by creating a comfortable, often anonymous, environment for engaging and exchanging information. “People like to access and connect with other people’s stories, even if they’re unwilling to share their own,” said Ellen Beckjord, assistant professor at the University of Pittsburgh Medical Center and Hillman Cancer Institute, whose research has focused on how making health information available electronically can affect disease management.

HRI’s consumer survey found that Facebook and YouTube are the most commonly used social media channels for viewing health-related information. A 2011 National Research Corp. survey of approximately 23,000 respondents produced similar results.6

Social animals: Young invincibles are most willing to share, baby boomers are least likely

Based on age factor alone, the “young invincibles” ages 18–24 lead with the most social media activity, while the baby boomers ages 45–64 are least likely to post or comment on any channel. More than 80% of individuals ages 18–24 would be likely to share health information through social media, while nearly 90% of individuals would engage in health activities or trust information found via social media. Less than half (45%) of individuals ages 45–64 would be likely to share via social media, while 56% would be likely to engage.

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Figure 1: Impact of age level and health status on likelihood to engage, trust, and share about health using social media

<table>
<thead>
<tr>
<th>Age</th>
<th>15</th>
<th>18-24</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Excellent** health

**Poor** health

- **Most likely**
- **Least likely**

**Share**: How likely are you to share health information through social media with health-related companies/individuals?*

**Trust**: How likely are you to trust health information posted online through social media by health-related companies/individuals?

**Engage**: Have you ever viewed health related information or done health-related activities using social media?

*Health-related companies/individuals include hospitals, doctors, pharmacies, health insurers, drug companies, etc. 

Source: PwC HRI Social Media Consumer Survey, 2012
When considering both age and health status, respondents ages 18-24 in good health were also more likely to share via social media and trust information posted via social media (See Figure 1.) Alternatively, those ages 18-24 in poor health were most likely to engage. Respondents over age 65 in poor health were the least likely to trust, share, and engage using social media.

In addition, lower-income Medicaid beneficiaries were the most willing to share at 64%, while individuals with employer-based insurance were the least willing to share via social media at 51%. Those with individual insurance and no insurance were also among those who are most likely to share and engage in health-related social media activities.

Social studies: Patients are using social media to better educate themselves

When consumers are faced with a health decision, social media can provide a new avenue of information and dialogue. Some may share a health goal to generate support or engage in a patient community to interact with other patients. At Children’s Hospital Boston—which had nearly 700,000 Facebook “likes” as this report was released—prospective patients use disease-specific support groups to learn more about the hospital’s treatment or clinical divisions from other patients. “Our patient support groups serve as a real-time referral network, which is very different than giving people a list

of quotes regarding our patient care,” said Ryan Paul, social media specialist at the hospital. “This serves as the best type of validation for new patients looking for a hospital and for people to connect with others like them.”

According to the HRI survey, 42% of consumers have used social media to access health-related consumer reviews. (See Figure 2.) Thirty-two percent of respondents have used social media to view family/friend health experiences, and 29% have sought information related to other patients’ experiences with their disease. 
Beyond viewing health-related information through social media, nearly 30% of respondents said they supported a health-related cause or commented on others’ health experiences. (See Figure 3.) Although some organizations fear that creating a social media presence will open a flood of negative comments, individuals are more likely to share positive health-related experiences via social media than negative experiences. (See Figure 4.) HRI interviews also found that most consumer comments online tend to be positive.

Although health activity on social media lags behind non-health related activity, it’s expected to catch up in the future. Twenty-seven percent of consumers reported posting reviews of restaurants, hotels or products, while 17% said they posted reviews of doctors.

The accessibility of social media comes at an auspicious time for consumers who now pay significantly higher portions of their care. With insurance deductibles at an all-time high, consumers are more prone to shop around. “The democratization of information through social media is shaping the clinical encounters and the patient/provider relationship. It continues to bridge the information divide,” said Wen-ying Sylvia Chou, program director for the National Cancer Institute’s Health Communication and Informatics Research Branch. Social media also helps satisfy a patient’s desire for self-service and access to information at multiple touchpoints.

**Social skills: Increased access creates new expectations for transparency**

Social media has raised consumer expectations. “As more people go online to interact with their banks and make purchases, they want to do this with their doctors, health plans, and condition and disease management as well. Social media has brought an expectation for a different kind of connection that already exists in their daily lives,” said Laura Clapper, MD, chief medical officer of the online community OneRecovery. (See more on OneRecovery in Case study 1.)

Several industry interviewees pointed to social media sites such as PatientsLikeMe, an eight-year-old health data-sharing platform, which help patients connect with each other and access relevant health information. PatientsLikeMe connects more than 140,000 patients with others who have life changing conditions, such as Parkinson’s and Lou Gehrig’s disease. “Social networks will peel back every corner of the health system and drive transparency on cost, value, and outcomes. The information asymmetry that patients experience will be levelled, allowing the average patient to evaluate and improve his or her conditions as well as the system’s performance,” said Jamie Heywood, co-founder and chairman of PatientsLikeMe.

The popular site tackles information and healing needs with peer care and health data tools. “We’re capturing the relationship of caring for the individual by building a new kind of partnership between the patient, their data, and enterprises with the products that need to learn from them,” Heywood said. Perhaps most significantly, PatientsLikeMe works with pharmaceutical companies to use patient-reported outcomes to inform the research and development processes.
Figure 3: Percentage of consumers who use social media for health-related activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support health-related cause</td>
<td>28%</td>
</tr>
<tr>
<td>Comment on others' health experiences</td>
<td>27%</td>
</tr>
<tr>
<td>Post about health experiences</td>
<td>24%</td>
</tr>
<tr>
<td>Join health forum or community</td>
<td>20%</td>
</tr>
<tr>
<td>Track and share health symptoms/behavior</td>
<td>18%</td>
</tr>
<tr>
<td>Post reviews of doctors</td>
<td>17%</td>
</tr>
<tr>
<td>Post reviews of medications/treatments</td>
<td>16%</td>
</tr>
<tr>
<td>Share health-related videos/images</td>
<td>16%</td>
</tr>
<tr>
<td>Post reviews of health insurers</td>
<td>15%</td>
</tr>
</tbody>
</table>

n = 1,060

Source: PwC HRI Social Media Consumer Survey, 2012

Figure 4: Likelihood of sharing positive and negative health experiences via social media*

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care received at hospital/medical facility</td>
<td>44%</td>
</tr>
<tr>
<td>Experience with medication/treatment</td>
<td>43%</td>
</tr>
<tr>
<td>Specific doctor, nurse, healthcare provider</td>
<td>42%</td>
</tr>
<tr>
<td>Health insurer customer service</td>
<td>40%</td>
</tr>
<tr>
<td>Cost of health insurance</td>
<td>37%</td>
</tr>
<tr>
<td>Coverage by health insurer</td>
<td>36%</td>
</tr>
<tr>
<td>Cost of care at a hospital/healthcare provider</td>
<td>36%</td>
</tr>
</tbody>
</table>

*Consumers responding likely or very likely to share an experience using social media

n = 1,060

Source: PwC HRI Social Media Consumer Survey, 2012
Behavioral health is an area in which the round-the-clock support of social media fits well. “Substance abuse is one of those things that can negatively impact the course of anything else you need to manage medically (e.g. diabetes can be complicated by an alcohol addiction),” noted Yan Chow, MD, director of Innovation and Advanced Technology at Kaiser Permanente. “Recurrent cycles of cure and relapse make the management of other conditions more challenging and expensive.”

More than 20 online sites such as In the Rooms, Recovery Realm, and Addiction Tribe provide virtual tools to supplement treatment programs by connecting individuals to the support they need around the clock. OneRecovery is an example of a company that has created a consumer model that uses the mobile phone to connect individuals with a community of people who share their experiences. This type of program can scale up self care without necessarily scaling up traditional medical resources.

Motivated by his own experience with addiction and recovery, David Metzler combined his expertise around gaming and technology into OneRecovery, a “social solutioning” company aimed at recovering addicts.” OneRecovery is an invitation-only community of more than 40,000 members. Unlike traditional treatment models in which health plans, physicians, or treatment providers may call to “check in” on patients, through OneRecovery, “Members really are in control of how they share and participate. People can really feel like they own this process,” said Laura Clapper, MD, chief medical officer.

The model is changing how providers track patients’ progress. “OneRecovery provides a behavioral record about how individuals and populations are doing post treatment,” said chief marketing officer Drew Paxton. “Organizations focused on quality and patient outcomes now have access to a new level of analytics.” OneRecovery recently launched a platform which allows connected health plans and providers to access patients’ health reports (with the patients’ approval).

Although a member may initially get referred for an addiction-related disorder, they can join additional communities where they can get support for other conditions, such as depression or anxiety.

How it works
- Members are invited by health plans, treatment centers, or other members “in good standing.” The company has partnerships with five health plans and numerous employers, treatment centers, and other providers.
- Members can tap into various specialists and peer networks through their smartphones or computers. And, they can aspire to help others as well. Members active for at least one year who have an established reputation on the site can become senior peers, offering one-on-one support.
- Evidence-based clinical tools combined with interactive social and gaming technologies help members manage their recovery. More than 80% of members use a tool called the “recovery clock”, which allows them to start their timekeeping from the beginning of recovery and alerts the network when someone needs to “restart” their clock due to a relapse. Members can check in with emoticons to inform others about how they are feeling. This allows the members’ peers to intervene when there’s a “high risk” emoticon selected.
PatientsLikeMe demonstrates that despite privacy concerns, many consumers are open to sharing information via social media if it holds the potential to improve their health. More than half of consumer survey respondents told HRI they would be comfortable with their doctor going to an online physician community to seek advice if the doctor were to gain information to treat them better. (See Figure 5.)

Online physician communities like Sermo, a community of 130,000 doctors, have realized the power of sharing information. The site allows physicians to join free of charge and is funded by companies interested in surveying physicians for treatment or business research. “This is more than networking—it’s collaboration and interacting for learning and treatment purposes. Our physician members share information with the end goal of enabling better patient outcomes,” said Richard Westelman, Sermo’s chief operating officer. “The next evolution is how healthcare providers and patients start interacting with each other. When, and in what setting, will they come together?”

HRI also found that about one-third of consumers would be comfortable having their social media conversations monitored if it were to help improve their health, treatment, coordination of care, or management of their chronic illnesses.

**Social speed: Healthcare is on a new response clockwatch**

As consumers take advantage of social media to instantly and publicly express their opinions, experiences, and reactions, they expect faster responsiveness from healthcare organizations. “Truly social brands will listen to what customers are saying and feeling and use that insight to adapt and create products and services,” said Kelly Colbert, director of strategic advertising at the insurer WellPoint.
More than 75% of consumers surveyed would expect healthcare companies to respond within a day or less to a request for an appointment via social media, while nearly half would expect a response within a few hours. (See Figure 6.) In addition, 70% of consumers would expect healthcare companies to respond within a day to a request for information via social media, while just over 40% would expect a response within a few hours. Josh Goldstein, director of social media at Thomas Jefferson University Hospitals, was monitoring the Jefferson brand on Twitter and saw that a patient in the Hospitals’ Headache Center was complaining on the social media site of his long wait. Goldstein, who was off campus, texted the interactive marketing team to check out the waiting room and found that the patient had not signed in at the computer kiosk. Within a matter of minutes, they were able to resolve the matter. The incident highlighted the value of monitoring the Jefferson brand on social media channels.

Figure 6: Expectations for how quickly a healthcare company should respond when contacted through social media

<table>
<thead>
<tr>
<th>Request an appointment or follow up</th>
<th>Request information</th>
<th>Post a complaint about a service, product, or experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within 1 hour</strong></td>
<td><strong>Within a few hours</strong></td>
<td><strong>Within a day or less</strong></td>
</tr>
<tr>
<td>29%</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>49%</td>
<td>42%</td>
<td>39%</td>
</tr>
<tr>
<td>76%</td>
<td>70%</td>
<td>66%</td>
</tr>
</tbody>
</table>

n = 1,060

Source: PwC HRI Social Media Consumer Survey, 2012
Social networks: Information is influencing decisions about how and when to select treatments and providers

Consumers are increasingly using information from social media to assist in making healthcare choices. For example, 45% of consumers said it would affect their decision to seek a second opinion. (See Figure 7.) More than 40% of respondents reported that information found via social media would affect the way they coped with a chronic condition, their approach to diet and exercise, and even their selection of a specific doctor.

Education levels may also play a role in determining whether a facility’s social media presence affects purchasing decisions. Individuals with lower education levels tended to be more influenced by a hospital’s social media presence when making treatment decisions than those with higher education levels.

Figure 7: Likelihood of information found via social media affecting health decisions

<table>
<thead>
<tr>
<th>Decision</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeking second opinion from another doctor</td>
<td>45%</td>
</tr>
<tr>
<td>Coping with chronic condition or pain</td>
<td>42%</td>
</tr>
<tr>
<td>Approach to diet, exercise, or stress management</td>
<td>42%</td>
</tr>
<tr>
<td>Choosing specific hospital/medical facility</td>
<td>41%</td>
</tr>
<tr>
<td>Choosing specific doctor</td>
<td>41%</td>
</tr>
<tr>
<td>Taking certain medication</td>
<td>34%</td>
</tr>
<tr>
<td>Undergoing specific procedure or test</td>
<td>33%</td>
</tr>
<tr>
<td>Choosing health insurance plan</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: PwC HRI Social Media Consumer Survey, 2012

45% of consumers said information from social media would affect their decisions to seek a second opinion.
Across the health industry, consumers seem to value information and services that will help make their healthcare easier to manage. More than 70% of consumer survey respondents would appreciate receiving assistance from healthcare providers via social media with referrals and appointment scheduling, while 69% would value offers to save money and receive support post-discharge. (See Figure 8.) Regarding the services offered by insurers and drug companies via social media, consumers find similar value, with the most interest being ways to save money and seek customer service. (See Figure 9.)

![Figure 8: Percentage of respondents finding value in services offered by healthcare providers via social media](image)

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of doctor appointments</td>
<td>72%</td>
</tr>
<tr>
<td>Appointment reminders</td>
<td>71%</td>
</tr>
<tr>
<td>Referral to specialists</td>
<td>70%</td>
</tr>
<tr>
<td>Discounts or coupons for services</td>
<td>69%</td>
</tr>
<tr>
<td>Continued support post-treatment/discharge</td>
<td>69%</td>
</tr>
<tr>
<td>Voice complaints/seek customer service</td>
<td>68%</td>
</tr>
<tr>
<td>Patient reviews of doctors</td>
<td>68%</td>
</tr>
<tr>
<td>Treatment reminders</td>
<td>68%</td>
</tr>
<tr>
<td>Current ER wait times</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Source: PwC HRI Social Media Consumer Survey, 2012*

![Figure 9: Percentage of respondents finding value in services offered by health insurers and drug companies via social media](image)

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discounts or coupons</td>
<td>68%</td>
</tr>
<tr>
<td>Voice complaints/seek customer service</td>
<td>67%</td>
</tr>
<tr>
<td>Appointment reminders</td>
<td>58%</td>
</tr>
<tr>
<td>Information to find cheapest medication</td>
<td>67%</td>
</tr>
<tr>
<td>Treatment reminders</td>
<td>60%</td>
</tr>
<tr>
<td>Support groups for similar patients</td>
<td>56%</td>
</tr>
<tr>
<td>Share positive experiences with other patients</td>
<td>53%</td>
</tr>
<tr>
<td>Games/contests encouraging healthy behavior</td>
<td>42%</td>
</tr>
</tbody>
</table>

*Source: PwC HRI Social Media Consumer Survey, 2012*
Social currency: Providers have the highest trust, drug companies the lowest

Consumer survey respondents said they would be most likely to trust information posted via social media from providers (doctors, hospitals), and would be most likely to share information with providers via social media, over health insurance or drug companies. (See Figure 10.)

Why do individuals trust their doctors the most? Human relationships. “You want to trust and connect with the people providing you the care. It’s easier to trust a person than an organization,” said Kathryn Armstrong, senior producer of web communications at Lehigh Valley Health Network. While insurance and drug companies might try to communicate with their customers through the Internet or telephone, very few have direct, personal interactions with their customers. And while medical technology companies will disseminate information via their product sites, very few have actually engaged with patients due to regulatory concerns.7 Healthcare providers have the ability to form human relationships and connections with their patients, which ultimately leads to increased trust.

Mark Brooks, chief technology officer at Health Net, sees social media as a bridge: “In this business, we facilitate relationships, so we really think about social media as not just a technology and a process, but also as a capability that can help drive connections in the value chain more effectively.” As building these relationships becomes increasingly important to establishing trust and credibility with consumers, healthcare companies will need to reconsider their approach to these relationships.

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7 PricewaterhouseCoopers Med Tech Focus: Social media opens new interaction channel for medtech companies and their customers, enhancing innovation opportunities, 2011

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Figure 10: Likelihood to trust or share information via social media

<table>
<thead>
<tr>
<th>Doctor</th>
<th>Hospital</th>
<th>Health insurer</th>
<th>Drug company</th>
</tr>
</thead>
<tbody>
<tr>
<td>61%</td>
<td>55%</td>
<td>42%</td>
<td>37%</td>
</tr>
<tr>
<td>41%</td>
<td>39%</td>
<td>34%</td>
<td>28%</td>
</tr>
</tbody>
</table>

n = 1,060

Source: PwC HRI Social Media Consumer Survey, 2012
Social media “likes” healthcare much more than media, it’s a social strategy.” (See Figure 11 for individual and company benefits of the digital social environment.)

Aetna is approaching social media in three ways, said McCabe: “Becoming a social business in how we leverage social technologies to collaborate within the organization, developing a social brand in the way we communicate and engage with our customers, and encouraging social health within public or private communities to empower others to lead healthier lives.”

Another example of converting social media into business strategy is Mercy’s experiment with the customer referral concept. “We’re trying to capture the word-of-mouth referral patients use all the time and make it easy to do via social media,” said Brad Herrick, director of digital marketing at the 28-hospital system in the Midwest. Mercy is creating an application that allows people to “share” their doctors on Facebook, and the physician’s Mercy profile will appear on an individual’s Facebook page. “Once our physicians agree to have their Mercy profile shared, they don’t need to do anything else — this allows them to be somewhat social media savvy even if they don’t have their own professional Facebook page.”

How health organizations are evolving from social media marketing to social business strategy

Marketing typically owns social media in the beginning, but that soon evolves. In HRI’s survey of eHI members, 82% of respondents said their social media efforts are managed by marketing/communications. However, as an organization’s social media use grows, its purpose quickly morphs into customer service, innovation, and service/product development. “As people go through life events and their health journey, they have changing interests in health,” said Ann Sherry, senior director of Kaiser Permanente’s Internet services. “They want and need different tools and different interactions. To say we are going to have a social media strategy would not be enough — it’s

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Healthcare companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>– View what others are experiencing in terms of symptoms, reactions to treatments</td>
<td>– Demonstrate timely and thoughtful responses to problems</td>
</tr>
<tr>
<td>– Feel supported and not alone</td>
<td>– Understand in-between visit conversations, behaviors, feelings</td>
</tr>
<tr>
<td>– Research information to help ask better questions to providers, insurers and others</td>
<td>– Reach a new audience for health education and service</td>
</tr>
<tr>
<td>– Find real-time information and exchange for a network of information</td>
<td>– Delegate spokespeople and lay referral agents</td>
</tr>
</tbody>
</table>

Source: PwC Health Research Institute
Listen, participate and engage through external forums

Markets can shift quickly, and social media enables organizations to gauge the pulse of the public to diffuse a problem or tap new opportunities. (See Figure 12.)

Listen

“One of the greatest risks of social media is ignoring social media,” said Don Sinko, chief integrity officer of Cleveland Clinic. “It’s out there, and people are using it whether you like it or not. You don’t know what you don’t know.” “Listening” is the start to knowing—it can involve looking at company or brand sentiment, tracking touchpoints to various social media sites, and analyzing comments and discussions for qualitative patterns.

Here’s an example. Nurses within a social network were discussing defects with a specific drug. The drug maker’s executives had no knowledge of the defects—or the nurses’ discussions—until the chatter was discovered by regulatory authorities on one of the drug company’s social media sites. After this experience, the company quickly established a capability to mine information from the social online community to get a handle on negative chatter. On a positive note, companies that “listen” well draw new ideas for services and use patient-reported health information to inform the business.

“No one has fully tapped into the explosion of socially generated data to understand what it means,” said Kevin Noble, director of interactive marketing at Genentech. “My perception is that the next level of interconnectedness will be between pools of people who weren’t previously that close. Social media has the ability to pull together a fragmented industry, with the patients and their information in the center.”

Figure 12: Social media participation model for businesses

<table>
<thead>
<tr>
<th>Listen</th>
<th>Participate</th>
<th>Engage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actively monitor and capture conversations to analyze and understand the meaning of what is being said, the sentiment of the discussion, and what influence it has over audiences</td>
<td>Proactively post and publish content on social media-enabled platforms to communicate a message to an audience, but not necessarily engage them in a conversation</td>
<td>Actively interact in one-to-one, one-to-many or many-to-many conversations within social media in order to freely exchange information and advance a discussion</td>
</tr>
<tr>
<td>- Company/brand sentiment</td>
<td>- Sponsor education</td>
<td>- Customer service</td>
</tr>
<tr>
<td>- New discoveries</td>
<td>- Corporate messaging</td>
<td>- Fundraising</td>
</tr>
<tr>
<td>- Patient outcomes</td>
<td></td>
<td>- Champion a health related event or condition</td>
</tr>
</tbody>
</table>

Source: PwC Health Research Institute
Participate

Listening is just the first step for healthcare businesses. As social media use increases, new opportunities for innovation emerge as consumer insights and ideas become more accessible. Companies need to actively manage the data collected to capture potential opportunities and respond appropriately. This may require taking action to remedy negative activity or information shared in the social space. If there’s a negative post on any of Cleveland Clinic’s social media forums, including Facebook, Twitter, and blogs, there’s a process to respond both privately and publicly within a designated amount of time.

Even with the potential for negative publicity, Lee Aase, director of Mayo Clinic’s Center for Social Media, argues there can still be benefits to engaging. “If you’re concerned about the ‘give and take’ aspect, then just ‘give.’ This is half of it—you can use these tools to spread your message farther and at least start to create a connection with your organization.”

The response to negative feedback can carry equal or more weight than positive consumer engagement programs. “Today, your organization’s digital identity is your identity,” said Mark Langsfeld, co-founder of the social business intelligence company ListenLogic. “The press is following what people do on the web. Before, the press is what drove these insights, and now it’s flip-flopped. Consumers are driving what they want as a whole community.”

Engage

Engaging means having a meaningful, active presence in the social space. “That kind of relationship is different than the old model of coming in when the patient is sick. The new model is about connecting into the member’s life decisions when they’re healthy—about what food to buy or what type of physical activity to participate in,” said Chow of Kaiser Permanente. Before engaging, organizations need to think about what they’re looking for and why they want to be there. Social media invites interaction, unlike a static webpage, where content can be developed once and revisited and refreshed later.

“Facebook is turning into a behind-the-scenes customer service forum for answering people’s questions,” explained Paul of Children’s Hospital Boston. “When people have trouble finding what they need on our website (or sometimes they don’t even check the website), they will come to Facebook and ask for help, including how to change an appointment, how to find a certain doctor, etc.” Children’s encourages people to participate in its various social media forums including Facebook, YouTube, Twitter, and its blogs, but warns them against posting medical information and considering information posted as medical advice. (See Figure 13: “Week in the life of social health” for other ways organizations are engaging in social media.)

Extend the customer experience beyond a clinical encounter

In the retail world, good customer experience leads to retention and, better yet, recommendation and loyalty. Historically, the health industry has not had to compete for customers in the same way, but the rising demand for value is forcing companies to find different ways to get closer to their customers. (See Case study 2.) “Companies need to use health-oriented versus product-oriented social media. They need to start communicating with the patient need in mind,” said Greg Simon, former senior vice president of patient engagement at Pfizer.
**Case study 2**

**Health system internalizes social media to improve operations**

What started as a social media experiment for Arlington, Texas-based Texas Health Resources nearly three years ago has resulted in a cultural transformation. Despite initial reservations, Texas Health embraced the strategic view that “social media reflects the kind of future where healthcare is headed and can offer new ways and delivery mechanisms to reach out to the community to encourage personal health responsibility,” said Edward Marx, chief information officer for Texas Health and an active blogger and Twitter enthusiast.

But before Texas Health could be effective in engaging customers externally, they wanted to develop an internal culture of collaborating from operations issues to customer service related issues. The effort started with an interdisciplinary committee that developed a simple social media policy based on trust of employees with access to social media. “Once the gates were open, people joined in. There was an untapped desire to do a lot with social media,” said Marx.

Social media has become a way of life for the multi-hospital system and is embedded in many aspects of its business. (See Figure.) The system engages with patients and community through Facebook, Twitter, and blogs, connects with employees and physicians through an internal social platform, and recruits talent through LinkedIn.

Although internal social networking is voluntary, more than 3,500 employees out of Texas Health’s 21,500 employees are active members. Following are ways it’s being used:

- **Crowd-sourced problem solving:** For example, when there was an unexpected surge in emergency room visits, the chief nursing officer reached out to the staff to determine if additional support was needed.
- **Creating affinity groups:** More than 100 “affinity” groups have been formed, including ones around weight loss, innovation, and sports. “We have formed a sports team where each member is from a different entity in our health system. Four out of the five team members were picked up via the network,” said Marx.

### Texas Health Resources social media model

**Cross-functional social media steering committee**

- CIO
- CMIO
- President
- Sr. VP Marketing & Communications
- Sr. VP Compliance
- Sr. VP Legal
- Sr. VP Human Resources
- Director of Marketing
- Director of Communications
- Director of Public Relations

**Internal social media**

- Knowledge sharing
- Innovation
- Communication and team building

**External social media**

- Disease education and support
- Community building
- Employee recruitment

**Community**

- Physicians
- Sites
- Potential patients
- Employees

**Source:** Texas Health Resources, 2012

- Business partners

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**An in-depth discussion**
Over one week in February 2012, PwC’s Health Research Institute tracked the social media activity of healthcare companies (providers, insurers, pharma companies) and online consumer communities to create a “week in the life of social health” snapshot. The communities had the largest membership and interaction — by both the community moderators and the consumer members. Community sites had 24 times more social media activity on average than any of the health industry companies — a single post in a community could generate several hundred comments. Communities remained active on the weekends and were mostly driven by their consumer members; whereas, provider, pharmaceutical, and insurer groups had minimal activity on the weekends. Although there were lower overall membership counts among the healthcare companies than communities, on average more than 100 new members engaged with each company throughout the week. Further, the interactions that did take place were high-quality touchpoints between organizations and consumers, where they shared an educational resource or resolved a customer service issue. Despite concerns by industry leaders that social media triggers negative conversation, more than 80% of interactions were neutral and only 5% were negative.

**Community sites had 24 times more social media activity on average than any of the health industry companies.**

**5%**

Despite concerns that social media will solicit negative conversations, the majority of mentions across all organization types were neutral and only 5% were negative.

### Average new likes, followers and views per organization

<table>
<thead>
<tr>
<th>Organization</th>
<th>Likes</th>
<th>Followers</th>
<th>Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider</td>
<td>110</td>
<td>267</td>
<td>3,327</td>
</tr>
<tr>
<td>Pharma</td>
<td>148</td>
<td>109</td>
<td>17,119</td>
</tr>
<tr>
<td>Insurers</td>
<td>103</td>
<td>12</td>
<td>120</td>
</tr>
<tr>
<td>Communities</td>
<td>711</td>
<td>158</td>
<td>53,822</td>
</tr>
</tbody>
</table>

### Sentiment analysis*

<table>
<thead>
<tr>
<th>Organization</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider</td>
<td>72</td>
<td>305</td>
<td>18</td>
</tr>
<tr>
<td>Pharma</td>
<td>110</td>
<td>681</td>
<td>50</td>
</tr>
<tr>
<td>Insurers</td>
<td>67</td>
<td>416</td>
<td>16</td>
</tr>
</tbody>
</table>

*Average sentiment in social media mentions per organization

Source: HRI Week in the Life Of Analysis, 2012
A community posted a question to members: “When did you deliver your baby?—early, late, or on time?” and received:
61 likes
766 comments

A provider used quizzes to engage its members. A quiz about Vitamin D had:
35 likes
3 shares
35 comments

An insurer gained new members by hosting a contest to reach its 15,000th page like.
The contest post received:
321 likes
5 shares
16 comments

A pharma manufacturer alerted members about a product recall which resulted in:
12 likes
47 shares
12 comments

Consumer interactions with organizations via Facebook and Twitter
Activity measured in likes, shares, and comments

Providers Pharma Insurers Communities

Consumer activity
high: 6,778
low: 4,987

Consumer activity
high: 633
low: 6

Consumer

Engagement with organizations’ Facebook sites
Consumers use provider sites to connect and share, but they treat insurer, pharma, and communities as a forum to give feedback.

Organization

Activity on their own Facebook sites
Providers, insurers, pharma companies and communities use their sites to provide health information or answer questions.

Consumer interactions with organizations via Facebook and Twitter
Activity measured in likes, shares, and comments

Providers Pharma Insurers Communities

Consumer activity
high: 6,778
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Engagement with organizations’ Facebook sites
Consumers use provider sites to connect and share, but they treat insurer, pharma, and communities as a forum to give feedback.

Organization

Activity on their own Facebook sites
Providers, insurers, pharma companies and communities use their sites to provide health information or answer questions.
Tune up internal collaboration processes to meet external demands

Health companies are responding to employees’ needs to collaborate and connect through internal (enterprise) social media as well. Several organizations interviewed are using internal collaboration tools to connect on personal interests and work-related issues. For example, Mercy is using one such tool called Yammer to encourage and study collaboration for a medical home pilot.

Enterprise social network services are changing organizational culture and increasing employee engagement.

“There is this shift from hoarding knowledge to sharing what you know as a way to both help others and build your personal brand as an employee,” said Dee Anna McPherson, Yammer’s vice president of marketing. “This knowledge can be used to enhance things like product development, customer service, or on-boarding.” Several interviewees said that personal interest forums have led to work-related communications such as collaboration drills on handling customer service inquiries that require input from several departments within an organization. (See Case study 3 for more information on enterprise social media use.)

Consider the privacy, security and other regulatory risks

Privacy and security are top consumer concerns when sharing their health information through social media. Consumers are most concerned with personal health information being shared in public (63%) and information on social media being hacked or leaked (57%). (See Figure 14.)

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Figure 14: Consumer concerns of sharing health information through social media

<table>
<thead>
<tr>
<th>Personal health information being shared in public</th>
<th>Information being hacked or leaked</th>
<th>Making a decision based on incorrect information</th>
<th>Health insurance coverage being impacted due to information shared</th>
<th>None of these</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>57%</td>
<td>52%</td>
<td>41%</td>
<td>20%</td>
<td>2%</td>
</tr>
</tbody>
</table>

n = 1,060

Source: PwC HRI Social Media Consumer Survey, 2012
An in-depth discussion

Understanding that customers prefer to communicate and connect in different ways, Health Care Service Corporation (HCSC), a four-state Blue Cross Blue Shield insurer, has used Facebook and Twitter to expand its relationship with members. Its philosophy of offering members their “channel of choice” prompted HCSC to extend its one-to-one phone and web customer service to a broader public forum.

Since HCSC began using social media for customer service in 2008, its approach has evolved into a broader strategy that provides information to raise health literacy and improve disease prevention. “Health insurance is something people don’t think about or don’t want to think about until something goes wrong,” said Lynde O’Brien, director of electronic media strategy. “Connecting to members via social media before they need care is a way to change that perception. We see social media as a way to change the conversation and establish a relationship with members in a way that’s timely, relevant, and maybe even fun.”

For example, O’Brien tells of a young adult member who, after paying his first bill, tweeted negatively, saying on Jan. 26 at 7:27pm: “Just got my BCBSTX insurance card. It’s confusing and I can’t afford it.” HCSC’s social media community manager immediately contacted the customer service team to coordinate a response. They invited the unhappy customer to call so they could provide additional information and support. The next day, the member re-tweeted the entire exchange and the help HCSC had provided to him. His final tweet a day later at 5:54pm ended with “Great talking to you too! All my questions were answered and my worries relieved.”

Lessons learned:

1. Consider the implications of a real-time communication channel. Responding thoughtfully and timely to negative comments is just as important as offering new services.

2. Educate departments so they’re prepared to resolve issues.

3. Start small and ramp up strategically. As companies learn more about their audience and demand increases, they need to be prepared to scale up services quickly.

4. Build excitement within the organization about the strategy, but make sure there’s an appreciation for the amount of work that goes into managing a social media channel.

5. Look for opportunities to educate your customer community about health benefits, processes, and programs while being vigilant about protecting their privacy.

6. Finally, O’Brien said the communications must be “responsible and consistent. Members who decide to reach out via social media should get an experience consistent with other channels, such as a call center, which offer an immediate response.”

Source: Health Care Service Corporation
As healthcare companies and third parties start using social media-related information to inform business, it’s important to be transparent with consumers. Social media can present risks such as information being stolen through online fraud, known as phishing, abbreviated URLs, data mining of information from social networking sites, employees voluntarily disclosing critical business information, and data leakage violating confidentiality mandates. For more information on privacy and security of health information, see Old data learns new tricks: Managing privacy and security on a new data-sharing playground.

Health industry organizations should have policies on business and personal use of social media. For example, data should be classified so employees understand what sensitive information is, how it can be used, and who is authorized to access and share corporate content. Company policies should specify who owns relationships when employees engage in social media as representatives. For example, an employee working at a pharmaceutical company develops a diabetes website. The employee becomes “friends” with doctors who are interested in hearing about the latest technology. If the employee leaves the firm, who owns the physician relationships?

Strategies should include a remediation plan and training needs to be continual, detailing the consequences of noncompliance on an individual and company level. Recent HRI research showed that less than 40% of health industry organizations surveyed have included social media in company privacy trainings. In the HRI survey, pharmaceutical/life science companies were more likely than providers and insurers to report social media as a top privacy/security concern (35% compared to 27% and 21%, respectively). But approximately 23% of drug makers said they have not begun to address the privacy and security implications of social media. Intense regulatory scrutiny of marketing practices and stringent adverse-event reporting requirements have made the industry reluctant to assume an active voice in the social media conversation. Although the industry is keenly aware of its obligations when sharing information about products, their uses, and side effects, industry regulators have yet to fully define the rules for social media engagement. “Social media is an area of excitement, but there’s little activity given the industry landscape,” said Bob Rhatigan, senior vice president of facial aesthetics at Allergan. “We can have a very controlled and regulated one-way dialogue, but to have a two-way dialogue in social media channels is very difficult. This is one of those mechanisms that cannot be optimized to its full potential by pharmaceutical companies without further clarification and guidelines from the FDA.”

8 Old data learns new tricks: Managing patient privacy and security on a new data-sharing playground, PricewaterhouseCoopers Health Research Institute, 2011.
Recent HRI research showed that healthcare companies are struggling with how to integrate and analyze data from their own clinical systems, let alone new data sources such as personal health records, remote monitoring devices, and social media. Health sector professionals surveyed by HRI cited big data integration and interoperability issues among providers and health insurers, 71% of respondents said integrating data from multiple sources was the top technical goal of their informatics program over the next two years. For more information, see Needles in a haystack: Seeking knowledge with clinical informatics.

All sectors view patient engagement as a way to drive better financial performance, either through cost reduction or revenue increases. But few, if any, providers are including patient self-reported data in any type of analysis — only 12% of provider respondents said they are feeding it into their informatics to drive research or the development of care protocols. Nearly one-third of provider professionals said they were not doing anything with patient-reported data. Data integrity — trust that the information is from the actual patient and reliability that the information is accurate — was cited as the primary challenge.

A future look

Data generated from individuals can help complete the patient profile

The ultimate goal for healthcare companies under an outcomes-based reimbursement system is to positively impact patient behavior in order to both improve health and reduce costs. But caregivers lack valuable information for effectively doing so. “There is a lot of patient data — clinical and soon genomics as well. But what is really happening in our patients’ lives is missing to us and their record — what’s happening in their lives is happening in the social space,” said Ferdinand Velasco, Texas Health’s chief medical information officer. “If we understand the life factors that impact when and who they select for care and what challenges they face after receiving care, there is a lot of potential for merging analytics with the clinical side and improving care.”

Some organizations are starting to think about how to harness social media data and integrate it with other information to complete their view of the patient. “Many chronic diseases are very hard to measure just with lab data. But, what’s most important is how the patient feels and how they’re getting along day to day — that’s something we are in a good position to capture from social media and trend over time,” said Arash Mostaghimi, MD, research fellow in medicine at Beth Israel Deaconess Medical Center in Boston.
A key issue is the massive amount of unstructured data. For example, structured data such as diagnosis codes and procedure codes is captured, but data such as how much pain an individual is feeling is not. They require more sophisticated data mining techniques, such as natural language processing or other “listen and interpret” technology. And given that organizations have yet to take full advantage of the structured data available (i.e. databases, flat files), developing ways to understand these less structured sources may be quite difficult, time-consuming and still require much human intervention. Social media data presents similar challenges. (See Figure 15.)

**How to start integrating social data**

Patient perceptions, knowledge, and behaviors that influence a patient’s health could be gleaned by properly integrating social media data. “Through social media, we can learn what people want to do to make their health better—what their obstacles are, what their motivations and interests are, what they struggle with, and what information they need,” said Kevin Abramson, director of marketing planning for OptumHealth, a health management solutions company that serves both individuals and organizations. “The question is: how can we use this information to better understand the outcomes we see in the claims data?”

As discussed in this report, patient-reported data is already being captured within online communities, where individuals are made aware that their data is aggregated and shared with interested parties. They are also able to see their progress compared to other patients who have similar conditions. Companies interested in taking advantage of patient self-reported data must proceed with transparency and the proper individual permissions. This would include a review of how to incorporate social data use into the company’s privacy and security policies.

**Define the social elements of a complete patient profile**

Even within one health organization, there are multiple, one-dimensional views of a patient. Having a single view of the patient creates opportunities for improved care. Companies must first understand stakeholder demands for this information. For example, in a provider setting, physicians and other caregivers may find lifestyle information helpful to create a care plan. Pharmaceutical companies may find self-reported data helpful on how an individual is...

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### Figure 15: Top concerns for organizations related to social media in descending order from top concerns to least concerns

<table>
<thead>
<tr>
<th>Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrating social media data/analytics into your organization</td>
</tr>
<tr>
<td>Measuring the effectiveness/linking to ROI</td>
</tr>
<tr>
<td>Educating staff on how to effectively use social media</td>
</tr>
<tr>
<td>Keeping up with the pace of technology change</td>
</tr>
<tr>
<td>Responding to information identified via social media</td>
</tr>
<tr>
<td>Sharing of patient identifiable information/HIPAA violations</td>
</tr>
<tr>
<td>Identifying qualified staff to work on social media</td>
</tr>
<tr>
<td>Decreased staff productivity</td>
</tr>
</tbody>
</table>

Source: PwC e-Health Initiative Survey, 2011
An in-depth discussion

guide the physician to have the most valuable, informed interaction possible at that time,” said Allison Orenstein, director of physician connectivity and marketing at CVS Caremark.

The key is determining how to integrate the social intelligence. For providers, this could be a module within an electronic health record that receives and displays social data that is relevant to the patient or allows the provider to pull the information. Vendors might see this as an opportunity to provide a solution.

Feeling pre and post-treatment. What gaps are they looking to fill? The complete patient profile should contain several elements that are currently not found in the patient’s medical records. (See Figure 16.)

Information regarding lifestyle and behavior could provide additional insight to factors that affect a patient’s health. For example, Centene Corporation, a Medicaid managed care company, envisions a consolidated member profile that would integrate three types of information: risk, quality, and care management, said Phil Mainquist, vice president of finance and business intelligence. A member services representative could then easily see overall gaps affecting a diabetes patient due for a wellness exam. The member profile would show how the wellness exam would affect their risk score and HEDIS scores, which compare health plan quality measures.

Determine how the complete patient profile integrates into workflows

Caregivers can use patient-reported data to help modify behavior and determine which strategies work best for which patients. For example, BJC HealthCare, a St. Louis-based hospital system, is modeling aggregate socioeconomic data to identify populations with higher rates of readmission to create specific and targeted patient strategies. “Our leadership is increasingly interested in understanding the impact of patient lifestyles on outcomes,” said David Weiss, the health system’s senior vice president and chief information officer.

The more information those interfacing with patients have to work with, the more they can potentially offer them. “If we can offer physicians critical information about their patients’ care—from adherence alerts to savings opportunities, we can help guide the physician to have the most valuable, informed interaction possible at that time,” said Allison Orenstein, director of physician connectivity and marketing at CVS Caremark.

The key is determining how to integrate the social intelligence. For providers, this could be a module within an electronic health record that receives and displays social data that is relevant to the patient or allows the provider to pull the information. Vendors might see this as an opportunity to provide a solution.

Figure 16: Data elements to complete the patient profile

<table>
<thead>
<tr>
<th>Medical information</th>
<th>Insurer data</th>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-rays, Test results, Physician notes</td>
<td>All claims regardless of health insurers, Financial situation</td>
<td>Drugs (OTC and prescribed), Dosages, Adherence, All medications regardless of pharmacy filled</td>
</tr>
<tr>
<td>All instances of care regardless of location</td>
<td></td>
<td></td>
</tr>
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<th>Clinical trials</th>
<th>Lifestyle/Behaviors</th>
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<td>Connection to clinical research trials</td>
<td>Patient self-reported data, Social media posts, Mobile monitors/telehealth, Socioeconomic data</td>
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<td>Results of clinical trials and changes to treatment plans</td>
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Source: PwC Health Research Institute
What this means for your business

Social media enables organizations to expand their roles with customers
Whether you’re a provider, insurer, medical device, or pharmaceutical/life science company, you can benefit from more active online engagement with consumers. In the coming years, thoughtful and deliberate use of social media will be an increasingly important element of a health industry organization’s business strategy.

**Embrace social media as a mindset, not just a channel**

- **Take a disciplined approach to planning your investment**: Consider the following factors when determining the value of social media to your business—What is the financial impact on revenue or costs? Has brand image and engagement improved? Is the organization better prepared to manage reputational risk with an established social media presence? Have digital assets been increased or enhanced?

- **Establish goals focused on trust and transparency, not just ROI**: The immediate return of social media may not be quantifiable in profits, visits or sales. However, it can impact a brand by establishing trust and transparency with customers.

- **Focus on being accessible and relevant**: Combine social media plans with an online and mobile strategy to ensure you are with patients when they need you. Starting a relationship with consumers when they are healthy builds a foundation for when they are ill.

**Adapt internal operations**

- **Shift from silos to networks**: Social media is not just a marketing tool. Invest in a social media “hub” to coordinate with legal, IT, clinical, customer service, and other functions.

- **Revamp processes to be relevant at the point of need**: Healthcare tends to work in linear and often lengthy processes, but social media promotes a non-linear, instantaneous experience. Market research, customer service, and IT staff may need to be retrained and new skill sets may need to be procured.

**Turn social conversations into insights**

- **Don’t just talk and listen; analyze and integrate**: Listen beyond your organization’s Facebook page or blog, and develop a strategy for ensuring that conversations are viewed as insights and transformed into action.

- **Sift through the noise of social data**: Companies have an opportunity to engage IT and work with analytics to discover ways to integrate social data with existing systems, databases, and tools.

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9 The Power of social media: How CIOs can build business value using social media, PricewaterhouseCoopers Technology Consulting Services, 2011

**Innovate**

- **Establish enterprise social media**: Internal collaboration forums can help organizations test the social media concept within the walls of the organization before establishing an external presence.

- **Create a forum to turn listening into innovation**: Companies need to make sure there is a process for innovation to be heard and adopted.

- **Collaborate across the industry**: Take advantage of social tools to exchange ideas and coordinate care inside and outside the traditional healthcare system.
**Pharmaceutical and life sciences**

With little regulatory guidance on how manufacturers may engage in social media for promotional and other customer engagement purposes, use of social media for pharmaceutical and life sciences businesses will continue to be challenging. Although the FDA’s December 2011 draft guidance provides some direction on social media use, it was limited in scope to requests for off-label information and usage. Pharmaceutical and life sciences businesses should move forward in ways that benefit the company while minimizing regulatory and legal risk.

- **Set the stage for proper risk management and new opportunities:**
  Develop an infrastructure that includes a strategic approach to social media, the proper governance to manage risks and opportunities, and operational processes that can adapt to a new social structure.

- **Move beyond marketing:**
  Improve clinical trial recruitment by tapping into social communities, mine social media for product or company complaints and respond by inviting consumers to an offline conversation, or create closed social communities to engage other customers, such as providers or insurers, to improve collaboration and innovation.

- **Listen and improve:**
  Invest in monitoring targeted conversations and integrating data into product decisions across research and development, drug safety, product complaints, sales and marketing, market research, and other business operations. Treat social media as another source of business intelligence that can provide insights at the aggregate level (e.g., how is your product working, is there an untapped market, and what improvements can be made?).

**Providers**

The industry is shifting toward outcomes-based measurement in part due to provisions in the Affordable Care Act such as Medicare’s Value-Based Purchasing and accountable care. Social media can offer a unique mechanism for collaborating with other organizations/partners to coordinate care.

- **Support meaningful use efforts:**
  Stage 2 of the federal government’s “meaningful use” regulations sets higher standards for communicating health information to patients. This represents a big leap from what hospitals and providers have been doing. In Stage 1, eligible hospitals and providers needed only to provide patients with an electronic copy of their health information—including diagnostic test results, medication lists, and medication allergies—upon request, and just 50% of the time. However, Stage 2 may require eligible hospitals to offer 80% of patients the ability to view and download relevant information via a web-based portal within 36 hours of discharge and have at least 20% of their patient populations accessing information that way.

- **Define your digital identity:**
  A hospital or physician’s first encounter with a patient is often through its online presence. Providers should take advantage of the trust consumers have for them over other health companies. Determine how you will define your identity in the digital space through avenues such as promoting your hospital or practice by offering discounts, assisting with appointment scheduling and referrals, and providing forums for patient reviews.

- **Create clear usage guidelines:**
  Patients are increasingly reaching out to physicians in the social media space, creating increased risks around privacy and the sharing of patient identifiable information. Set clear guidelines on the use of social channels for patient

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10 Food and Drug Administration, Responding to Unsolicited Requests for Off-Label Information About Prescription Drugs and Medical Devices, fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM285145.pdf
interactions to help maintain professionalism and protect patient information. Consider enforcing a standard communication policy outlining which requests and interactions are appropriate.

**Health insurers**

Health insurers understand that focusing on the individual population will be key as more partnerships in population health are formed and insurance exchanges bring in 12 million newly-insured individuals in 2014 and up to 28 million by 2019.11

• **Cast your company as a patient advocate:**
  The individual health insurance exchange market will have organizations vying for the attention of new customers. Start now by understanding the needs of potential members and then determining which needs can be fulfilled by incorporating social media into your member strategy. Insurers have started working with vendors in the gaming industry and companies who provide social support in between clinical visits.

• **Determine approach to data aggregation:**
  Evaluate current member data and determine what information will fill the gap to fully understanding member needs and experiences. Think outside of current databases to lifestyle data (e.g., what members like to eat, what activities they like to do). Consider the aggregation of self-reported data on health status from communities suffering from a specific illness and how that will feed into health management programs for employer clients or new populations.

• **Understand direct and indirect benefits of social media:**
  Increase in membership can be a direct benefit of using social media to engage, educate, and advocate for individuals looking for the right coverage. Metrics such as increased customer satisfaction, loyalty, and brand value may not be easily tied to increases in revenue but are indirect benefits that should be recognized.

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11 Congressional Budget Office March 2011 baseline health insurance exchange estimates, cbo.gov/budget/factsheets/2011b/HealthInsuranceExchanges.pdf
Health Research Institute
PwC’s Health Research Institute provides new intelligence, perspectives, and analysis on trends affecting all health-related industries. The Health Research Institute helps executive decision makers navigate change through primary research and collaborative exchange. Our views are shaped by a network of professionals with executive and day-to-day experience in the health industry. HRI research is independent and not sponsored by businesses, government or other institutions.

About this research

Social media likes healthcare: From marketing to social business represents the most in-depth research to date of social media’s impact on the healthcare industry by PwC’s Health Research Institute (HRI). HRI conducted more than 30 interviews with executives and thought leaders representing pharmaceutical and biotech companies, insurers, providers, patient advocacy organizations, and community health companies. HRI also tracked the social media activity of health organizations and consumer communities to create a “Week in the life of social health” snapshot. HRI conducted a consumer survey of 1,060 adults representing the demographics of the US population, along with surveying members of the eHealth Initiative (eHI), a national association of health information and technology organizations.

Serena Foong
Senior Manager
serena.h.foong@us.pwc.com
(617) 530 6209

Christopher Khoury
Senior Manager
christopher.m.khoury@us.pwc.com
(202) 312 7954

Sarah Haflett
Manager, Health Information Technology Research
sarah.e.haflett@us.pwc.com
(267) 330 1654

Marcy Rebello
Research Analyst
marcy.rebello@us.pwc.com
(617) 530 4827

Erin Manalo
Research Analyst
erin.m.manalo@us.pwc.com
(213) 356 6118

Kelly Barnes
Partner
Health Industries Leader
kelly.a.barnes@us.pwc.com
(214) 754 5172

David Chin, MD
Principal (retired)
david.chin@us.pwc.com
(617) 530 4381

Ceci Connolly
HRI Managing Director
ceci.connolly@us.pwc.com
(202) 312 7910

Sandy Lutz
Managing Editor
sandy.lutz@us.pwc.com
(214) 754 5434

Benjamin Isgur
Director
benjamin.isgur@us.pwc.com
(214) 754 5091

Advisory team
Karla Anderson
Principal
karla.s.anderson@us.pwc.com
(703) 674 6020

Jeff Auker
Director
jeff.auker@us.pwc.com
(860) 597 2206

Maxim Duprat
Director
maxim.m.duprat@us.pwc.com
(917) 405 4816

Fadi Khuri
Director
fadi.khuri@us.pwc.com
(646) 408 3343

Kenneth Madrigal
Manager
kenneth.l.madrigal@us.pwc.com
(757) 343 3227

Chetan Paydenkar
Manager
chetan.paydenkar@us.pwc.com
(408) 239 9779

Robin Settle
Director
robin.m.settle@us.pwc.com
(267) 330 4006

Lloyd Smith
Principal
lloyd.smith@us.pwc.com
(678) 419 2328

Andrew Sofield
Director
andrew.sofield@us.pwc.com
(702) 691 5493

Contributors
Paul Ceverha
Director
paul.ceverha@us.pwc.com
(214) 616 2432

Paul D’Alessandro
Principal
paul.dalessandro@us.pwc.com
(847) 910 5763

James Koenig
Director
james.h.koenig@us.pwc.com
(610) 246 4426

Jamie Marks
Former Research Analyst, HRI
rani.radhakrishnan@us.pwc.com
(510) 300 7050

Ted Shelton
Managing Director
ted.shelton@us.pwc.com
(415) 763 5820

Gurpreet Singh
Principal
gurpreet.x.singh@us.pwc.com
(312) 298 2160

Christopher Wasden
Managing Director
christopher.wasden@us.pwc.com
(832) 816 3606

Health Industries marketing
Todd Hall
Director	
todd.w.hall@us.pwc.com
(617) 530 4185

Attila Karacsony
Director
attila.karacsony@us.pwc.com
(973) 236 5640

Nadia Leather
Director
nadia.m.leather@us.pwc.com
(646) 471 7536
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Acknowledgements

Lee Aase
Director, Center for Social Media
Mayo Clinic
facebook.com/MayoClinic
twitter.com/#!/mayoclinic
youtube.com/user/mayoclinic

Kevin Abramson
Director of Marketing Planning
OptumHealth
facebook.com/myoptumhealth
facebook.com/myoptumhealthstore
twitter.com/myOHstore

Kathryn Armstrong
Senior Producer, Web Communications
Lehigh Valley Health Network
facebook.com/lvh
youtube.com/lvh

Ellen Beckjord
Assistant Professor
University of Pittsburgh Medical Center and Hillman Cancer Institute

Ed Bennett
Director, Web & Communications Technology
University of Maryland Medical Center
facebook.com/MedCenter
facebook.com/marylandnursing
medcenterblog.org/

Mark Brooks
Chief Technology Officer
Health Net

Melissa Burke
Director, Strategic Partnerships
Sermo
facebook.com/Sermo
twitter.com/#!/sermo
linkedin.com/company/33697

Wen-ying Sylvia Chou
Program Director, Health Communication and Informatics Research Branch
National Cancer Institute
facebook.com/cancer.gov
twitter.com/#!/NCICancerCtrl
youtube.com/ncigov

Yan Chow, MD, MBA
Director, Innovation and Advanced Technology group
Kaiser Permanente
facebook.com/kpthrive
twitter.com/#!/KPNewscenter
youtube.com/kaiserpermanenteorg

Laura Clapper, MD,MPPA,CPE
Chief Medical Officer
OneRecovery
facebook.com/onerecovery
twitter.com/#!/OneRecovery

Kelly Colbert
Director of Strategic Advertising
WellPoint
facebook.com/healthjoinin
twitter.com/healthjoinin
youtube.com/healthjoinin

Brad Crotty, MD
Instructor of Medicine,
General Medicine division
Beth Israel Deaconess Medical Center
facebook.com/BIDMC
twitter.com/#!/bidmchealth
youtube.com/tophospital

Charlie Dierker
Marketing Manager
Texas Health Resources
facebook.com/texashealth
twitter.com/#!/texashealth
youtube.com/texashealthresources

Janice Fang
Customer Success Manager
Yammer

Arnie Friede
Independent lawyer
Arnold I. Friede and Associates

Josh Goldstein
Director of Social Media
Thomas Jefferson University Hospitals
facebook.com/JeffersonHospital
youtube.com/user/JeffersonHospital
JeffersonHospital.org/TheDailyDose.aspx

Vince Golla
Digital Media and Syndication Director
Kaiser Permanente

Brad Herrick
Director of Digital Marketing
Mercy
facebook.com/MercyHealth
twitter.com/#!/FollowMercy
youtube.com/user/theMercyChannel

James Heywood
Co-Founder, Chairman
PatientsLikeMe
facebook.com/patientslikeme
twitter.com/patientslikeme
youtube.com/patientslikeme

Richard Hutsell
Vice President & Chief Information Officer
Daughters of Charity Health System
facebook.com/stfrancismedicalcenter
facebook.com/oconnorhospital
facebook.com/setonmedicalcenter

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Acknowledgements
Continued

Dawn Koffler
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Allergan

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Co-Founder
ListenLogic
twitter.com/#!/ListenLogic

Alex Lemheney
Administrator, Division of Education
Lehigh Valley Health Network

Laurie Litt-Robbins
Chief Executive Officer
New Jersey AIDS Service
facebook.com/pages/
New-Jersey-AIDS-Services/391361594358
linkedin.com/company/new-jersey-aids-services

Mary Luthy
Director, Communications
Medical device company

Phil Mainquist
Vice President of Finance, Business Intelligence
Centene Corporation

Ed Marx
Chief Information Officer
Texas Health Resources

Meg McCabe
Head of Consumer Solutions
Aetna
twitter.com/aetna
twitter.com/aetnahelp

Dee Anna McPherson
Vice President of Marketing
Yammer

Lars Merk
Director of Digital Platforms
McNeil Consumer Healthcare

Joe Milicia
Senior Public Relations Manager
Cleveland Clinic
facebook.com/clevelandclinic
twitter.com/clevelandclinic
youtube.com/clevelandclinic

Arash Mostaghami, MD
Research Fellow in Medicine Beth Israel Deaconess Medical Center

James Murray
Vice President, Information Technology
MinuteClinic

Kevin Noble
Director of Interactive Marketing
Genetech

Lynde O’Brien
Director, Electronic Media Strategy
Health Care Service Corporation (HCSC)
www.facebook.com/
bluecrossblueshieldofillinois
twitter.com/bcbsil
youtube.com/bcbsil

Allison Orenstein
Director, Physician Connectivity and Marketing
CVS Caremark

Ryan Paul
Social Media Specialist
Children’s Hospital Boston
facebook.com/ChildrensHospitalBoston
twitter.com/ChildrensBoston
youtube.com/ChildrensHospital

Drew Paxton
Chief Marketing Officer
OneRecovery

Bob Rhatigan
Senior Vice President, Sales and Marketing for Facial Aesthetics
Allergan

Mike Ronningen, RAC
Director Global Compliance
Medical device company

Ann Sherry
Senior Director, Internet Services
Kaiser Permanente

Greg Simon
Former Senior Vice President Patient Engagement
Pfizer

Don Sinko
Chief Integrity Officer
Cleveland Clinic

Chris Smith
Senior Director for Marketing Operations
Thomas Jefferson University Hospitals

Darren Smith
Enterprise Account Executive
Yammer

Christine Theist
Independent Consultant
Hospital Administration

Ferdinand Velasco, MD
Chief Medical Information Officer
Texas Health Resources

David Weiss
Senior Vice President and Chief Information Officer
BJC Healthcare

Richard Westelman
Chief Operating Officer; Senior Vice President of Sales & Client Services
Sermo

Kevin Young
Analyst Relations
Yammer
Thoughtful and deliberate use of social media will be an increasingly important element of a health industry organization’s business strategy.
To have a deeper conversation about how this subject may affect your business, please contact:

Karla Anderson  
Principal  
PwC  
kendra.s.anderson@us.pwc.com  
(703) 674 6020

Lloyd Smith  
Principal  
PwC  
lloyd.smith@us.pwc.com  
(678) 427 6341

Daniel Garrett  
Principal, National Leader  
Health Information Technology  
PwC  
daniel.garrett@us.pwc.com  
(267) 330 8202