

A hand holding a stethoscope against a blue background with white geometric patterns. The stethoscope is silver and black, and the hand is holding it in a way that the chest piece is visible. The background features a blue gradient with white lines forming circles, squares, and other geometric shapes, some with dots at their centers.

Reshaping the
patient experience:
**Optimizing customer
service for better health
outcomes**



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Introduction

Delivering exceptional customer service is challenging regardless of industry, but in healthcare, it can mean the difference in a patient's outcome.

Studies have proven time and time again that a better patient experience correlates highly with positive clinical results, emphasizing the critical need for a patient-centric approach. For example, research conducted by Press Ganey found that health organizations prioritizing customer service delivery have patients with lower lengths of stay and fewer hospital acquired conditions, while a study published in the Journal of General Internal Medicine linked the patient experience to a better adherence of treatment plans.

But improved clinical outcomes are not the only benefit related to the patient experience; prioritizing the human side of healthcare is also linked with key financial indicators. Research from the Gallup Management Journal found that patient engagement predicts hospital performance on EBITA as well as net revenue. Similar studies have also found that a patient-centered model of care leads to lower costs thanks to fewer complications and shorter lengths of stay.

The case for an improved patient experience is clear, but it would not be possible without today's advancements in technology. Modern health-tech is focused on empowering individuals to take control of their own health journey. From wearable health monitoring devices and online hospital reviews, to artificial intelligence and mobile apps,

all are designed to enhance the patient experience at a more personal level.

Although valuable, technology has also contributed to the now exceedingly high expectations of the modern consumer. Across all industries, customers have come to expect physical/digital integration, personalization and mobile capabilities — and these demands are no different in healthcare. But just as poor customer service drives customers to switch brands, relationship quality serves as a significant predictor of patient loyalty. This new frontier requires highly skilled agents who can solve more complex customer support cases and provide cross-channel consistency of service; all while maintaining a high degree of privacy and security certification and training, given their regular access to sensitive information.

Backed by TELUS Health, Canada's largest healthcare IT provider, TELUS International serves the customer experience and digital services needs of today's healthcare leaders. Our Patient Experience E-Book looks at current trends and best practices, with a focus on turning information and customer interactions into better health outcomes. Each section functions as part of a holistic view of industry trends and insights, but is also designed to stand on its own, so please feel free to use the table of contents to find a specific area of interest.

Thanks for reading!

The top five patient experience trends in healthcare



In the near future, the way we interact with healthcare providers will change dramatically.

No longer will patients wait in long lines for minor visits with the family doctor; instead they'll speak with health practitioners virtually by way of video conferencing, text messaging or phone calls. And, as opposed to the standard Q&A about your current state, medical professionals will already be well-informed thanks to the latest data generated by a bevy of health apps.

Industry experts believe these types of customer oriented services, if executed properly, will be transformational for both patient and provider. Here are some of the current trends driving healthcare tech today and how they'll change the customer experience going forward.

Telemedicine

With an aging population and an increasing comfort level with technology, the remote diagnosis and treatment of patients by means of telecommunications is set to be a fast-growing trend in the digital health market – and it's already proving favorable among users. A survey funded by the National Institute of Health found that between 94 percent and 99 percent were “very satisfied” with telehealth, while one-third of respondents preferred the telehealth experience to an in-office doctor visit.

Kathleen Sidenblad, former VP of engineering at Amplify Health and current CTO of a stealth-stage healthcare tech start-up, agrees telemedicine has the potential to change the industry, but notes that there's still work to do. "Telemedicine really increases doctors' efficiency," she says. "However, the way the system works now, the doctor often has to see the patient in person in order to get paid, so it's all in its infancy." In this case, policy needs to catch up with technology in order for patients to better reap the rewards of telemedicine.

Data-driven medical care

There's been a lot of talk in recent years about applying big data principles to improve how healthcare — particularly preventative medicine and predictive modeling — is delivered. However, innovation with broad appeal has been hard to come by.

Jan Oldenburg, a leader in consumer health information and patient engagement, believes healthcare providers now have the opportunity to do what insurers have been doing all along — predictive modelling based on data. "Providers should be looking at their patient data and not only helping those with diabetes or heart disease right now, but also putting themselves in a forward-thinking mindset," says Oldenburg. "We know who is sick this year, but let's use all of the available

data to understand who will be sick next year so that we can help those patients start avoiding those diseases before they get out of control."

The best marketing companies in the world use the same datasets available to healthcare providers to learn everything about consumers for a profit. In Oldenburg's opinion, the healthcare industry needs to tap into that pool of information to start getting wise about not just the clinical health of their patients, but also who they are as people. Doing so will result in a better overall experience and help to engage patients in their own health.

Connected consumers

While wearables have certainly become a tech trend of choice as of late, a Rock Health study has acknowledged that the primary demographics of users has begun to shift. Contrary to the popular assumption that health fanatics or tech geeks are the main clientele, the most frequent buyers of wearables are considered to be unhealthier than the average consumer, with higher rates of hospitalization collectively.

People are adopting the technology for the clinical benefit it provides instead of the sheer novelty of being connected. Kathleen Sidenblad says that wearables can be incredibly empowering to the patient. "For



an educated patient to monitor themselves and their own data, to know they are keeping their doctor-recommend parameter within the right band, or to know to call the doc when they see something out of whack — that's incredibly powerful and useful from a customer experience perspective,” she says.

Trusted relationships

The PwC healthcare predictions report for 2018 acknowledges the threat of new security breaches and encourages health organizations and companies to prepare for cybersecurity attacks “with robust defenses and remediation plans — and be able to respond if their networks, or devices, are breached.”

Christine Sublett, former chief security officer at Stanford Children’s Hospital who now runs her own health-tech privacy consulting firm, says there’s no doubt in that patients are savvier about their data than ever before. “People now understand that their data can be breached, and although they might not know exactly what that means, it’s a scary prospect to anyone,” she says.

In this environment, ensuring patients are being engaged by friendly, knowledgeable and trustworthy reps will go a long way to building loyalty. In the customer service field, this means agents will need to act more like account managers than service reps.



People don't just
Google health
information for fun.

Lidia Sienkowska
Healthcare Entrepreneur
& Consultant

Patient-centered care

Refocusing the industry to go beyond the confines of the doctor’s office and center around the patient will prove revolutionary for the industry. It’s no secret that people are already turning to online resources for additional help with their health and the health of their families — both as a way to avoid the doctor and to feel in control. “People don’t just Google health information for fun,” says Lidia Sienkowska, healthcare entrepreneur

and consultant. “They’re doing it for a variety of reasons, from looking up personal symptoms to figuring out how to take care of the newborn at home.”

A Rock Health report asserts that about 40 percent of its respondents act upon the information they find online. With such high conversion rates, it’s imperative healthcare providers and insurance carriers embrace and engage patients where they live and through the digital tools they already use.



Improving care and reducing cost through a high-tech, high-touch approach

Patients engaging with healthcare organizations are looking for guidance, along with convenience and discretion. The personal and private nature of healthcare-related conversations obliges companies and their agents to employ a high level of sensitivity, while also administering top-notch service and customer care – all while controlling cost and reducing waste.

In the United States alone, health expenditures accounted for \$3.2 trillion in 2015 — nearly 18 percent of the country's total GDP, according to a 2016 report by the Obama Administration published in the *Health Affairs* journal. Many healthcare economists estimate that up to 30 percent of that spend was wasted.

Increasingly, healthcare companies are attempting to improve care and reduce waste through a high-tech, high-touch approach to customer service. Whether a caller is uncertain about how to upload a bill from a healthcare provider, or needs help navigating their online medical history, this strategy combines technology with a human component to provide effective yet personal interactions.

The increased use of technology means an increased production of data — data that holds the key to the personalization of healthcare. However, doing personalization effectively — and in compliance with privacy

laws — requires a concerted effort and additional innovation across medical centers, billing companies, insurance firms and other players.

The following technologies are gaining traction as companies merge a functional, high-quality experience with the empathy consumers are looking for.

Mobile first

According to the Pew Research Center, more than three-quarters of Americans own a smartphone. With its ability to deliver ease and convenience, it's no wonder mobile-first design has become a go-to strategy for healthcare companies.

The “one-to-one” conversations that mobile allows means consumers can reach medical professionals or customer care agents wherever, whenever. And while a patient may not feel entirely comfortable making a healthcare-related phone call from work, sending a text message is often quick and confidential.

In 2015, the Kaiser Permanente nonprofit hospital chain conducted more interactions between patients and healthcare providers virtually than through in-person visits, according to CEO Bernard J. Tyson, adding that 52 percent of them were done via smartphone, videoconferencing, kiosks, and other technology tools.

As an example, the secure messaging platform, PingMD, allows doctors to follow up with patients and staff to inquire about symptom progression, provide pre-and post-op checklists, or even secure an electronic signature on medical documents. The app encourages patients to interact with their doctor through text message and image sharing, similar to how they might communicate with a friend or colleague.

Screen sharing

The complexity of the healthcare industry requires that companies constantly work to help their customers navigate plan-related information. Enter screen sharing, in which an agent views a customer's screen from a remote location to guide them through their issues.

According to Tom Martin, CEO of customer-experience technology company Glance Networks, his clients report that a customer enrolling in a new healthcare plan will call their new provider an average of six to seven times, and that each of those calls can last 20 to 30 minutes. “Reducing the average handle time and number of callbacks takes technology,” Martin says.

While consumers want the human component to be high-value, Martin explains that screen sharing creates a rich experience that can also speed up the customer service



process. “It helps businesses connect with clients online or on any device with a single click,” he says.

Online comments and forums

They’ve long been an integral part of online shopping, but comments and reviews are now enhancing the healthcare patient experience as well. By measuring ratings from sites in the healthcare vertical, patient-experience and reputation-management company Binary Fountain has found comments are a key component of the new “experience economy.”

Today’s healthcare companies are paying closer attention to the patient experience, and investing in technology that puts the power to pick the right provider directly into patients’ hands. “Clinical outcomes like ‘I got better’ are now augmented with more information about the experience of getting a hip replaced, from the nursing staff to the medications a patient had to take,” says Aaron Clifford, Binary Fountain’s VP of marketing. “While those clinical outcomes are still the most important component, other touchpoints along the patient journey are being measured, too.”

Clifford adds that he’s seen conversion rates go up when companies have implemented star ratings on their hospital and physical websites. “Many top healthcare



systems now have Chief Patient-Experience officers who are using data from surveys and customer feedback to improve the experience overall.”

Agent video

Along with video-based telemedicine, where patients connect remotely with doctors, nurses and other caregivers through secured video lines, healthcare providers are also experimenting with agent video. In essence, agent video combines an intimate call center experience with video technology to show customers that agents are available, present and eager to help.

As agent video integrates a human component into the patient experience, Tom Martin notes the critical importance of high agent empathy quotients. Connecting with



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VP of Marketing
Binary Fountain

consumers and patients on a deeper level also serves to de-escalate calls. “There’s a lot of self-service being pushed in the healthcare industry right now, but when a customer actually reaches a human being, you need to be able to connect with them where they are in the journey,” Martin says. “And also meet them wherever they happen to be — whether that’s on a desktop application, or browser on a mobile device.”

With the help of technology, healthcare organizations are better able to resolve customers’ issues and answer their healthcare-related questions. But tech needs to be balanced with touch. In other words, if your goal is to effectively produce positive patient outcomes, a human element is always a must.



Leveraging artificial intelligence for proactive healthcare customer service

Anyone who has ever had a major surgery, dealt with a chronic illness or just wanted answers to basic medical questions, knows that the patient experience is not always an easy or streamlined one. Fortunately, artificial intelligence (AI) may change that — and it may be sooner than imagined. A recent study by Markets and Markets estimated that AI in healthcare will be worth nearly \$8 billion by 2022.

The potential for AI's role in improving the patient experience is helping to drive innovation, enabling healthcare companies and research institutions to develop cutting-edge ways of solving some of the most cumbersome problems facing the industry today.

On the surface, AI's ability to analyze and learn from troves of data, then draw predictions, appears to be a natural benefit for hospitals. One of the greatest advantages, however, actually lies outside the institution's walls with the improvement of treatment outcomes. The growing popularity and acceptance of smart devices, such as wearables and mobile health apps, has led to the kind of data collection that lets AI — specifically machine learning — shine.

For example, PeerWell is a company which uses AI to improve the outcomes of total joint replacement surgeries before a patient ever sets foot in a hospital. "Our goal is to optimize



[patient] health before they have surgery, so that they have reduced risk throughout the procedure, [and] faster recovery times,” says Manish Shah, the CEO of PeerWell.

Through the PeerWell app, patients receive customized daily lessons and tasks which require them to input their results directly into the app. The machine learning algorithm then makes adjustments to their pre-and post-recovery plans based on the findings. The AI can also study patient’s surgical results and recommend further action for better outcomes.

Medical apps like PeerWell can help people take more of a proactive role in



There’s a huge shift to personalized consumer-based healthcare where patients are going to be able to do most of the things that doctors can do on demand.

Dean Sawyer
CEO
Sentrian

their own health. “It’s that companion that’s saying, ‘OK, here’s some things you can do today that’s going to help you have a good outcome,’ that’s driving the interest of the patient to be this active participant in the procedure itself,” says Shah.

Diagnosing common ailments

While there are many condition-specific applications for AI, such as diabetes management, palliative care and congenital heart disease, AI offers solutions for more general health issues as well. “There’s a huge shift to personalized consumer-based healthcare where patients are going to be

able to do most of the things that doctors can do on demand,” says Dean Sawyer, CEO of Sentrian, a company that uses biometric devices to monitor chronic diseases and predict hospitalization.

Self-diagnosis technologies, for example, could change the game for patients and providers. In 2017, participants in the Qualcomm Xprize contest produced a prototype of a real-life Tricorder, based on a once-fictional diagnostic device used in Star Trek. At the time of its competition reveal, the device could diagnose 34 conditions, including stroke, tuberculosis and Hepatitis A.

To understand how a device like that might work in practice, imagine a patient has a suspicious mole. They could take a picture of it and use a diagnostic AI — which has studied millions of photos of moles — to learn if it’s benign or requires further medical consultation.

How customer service will adapt to AI

The growth of artificial intelligence might imply a future of automated interactions, but many experts believe the patient experience will simply evolve to encompass a more high-tech, high-touch approach. “It won’t necessarily be the patient calling the contact center, but the call center calling the patient based on the information from the AI,” says



Sawyer. For example, the AI may be passively monitoring the health of the patient and determine that the patient is pre-diabetic. A health coach might then reach out to the patient to help them understand this new diagnosis and how to manage it, Sawyer adds.

Indeed, rather than automating and dehumanizing healthcare, AI will inform richer and more personalized interactions between patients, nurse practitioners and others staffing health phone lines, says Prashanth Kini, vice-president and head of product at Ayasdi.

But in the best-case scenario, technology can help determine which interactions are most important, and what can be automated. Kini sees the role of chatbots expanding with the growth of AI. “[Technologies like] chatbots will undoubtedly play a big part in facilitating self-service interactions with patients,” he predicts. “AI will be baked into every patient interaction, from chatbots on medical sites, to population management care protocols that prompt, aid and direct behavior, to integration with digital assistants for scheduling of follow-up appointments,” Kini says.

The road ahead

Currently many of the AI healthcare applications are semi-passive, requiring customers to actively input data into a

program or app, but this approach will change in the near future. As Sentrion CEO Sawyer puts it, technology will become so advanced that patients won’t have to do much at all to have their health continuously monitored. “They will have wearable sensors on their body, in their body, in their bloodstream, in their car, in their bathroom, in their house,” he says.

The concept of AI in healthcare may still seem like a novelty to many, but as Jonathan Symonds, CMO of Ayasdi, concludes, it’s just a matter of time before patients become accustomed to — and begin to demand — the kind of high-tech, high-touch healthcare service AI can help to provide. “AI will become so ubiquitous that it will essentially become invisible and, as a result, will permeate all of the applications and devices that we engage with both inside and outside the hospital,” he says. The AI revolution in healthcare is coming, and it is coming to a device — and a contact center — near you.

A hand with a finger pointing at a tablet displaying a grid of medical scan images, likely CT or MRI slices of a human torso. The background is dark and blurred.

Two fast-growing health-tech companies that are reshaping the patient experience

Healthcare is one of the last industries to transition to a more customer-centric model. In the past, insurance restrictions and a prior lack of information have meant that patients have little choice in where they get help. Medical providers and insurance companies had no incentive to innovate or to differentiate.

Advancements in technology have forced almost every business to serve customers across more and more channels, and healthcare is no exception. “It’s not enough for the physician to deliver high-quality medical services. The patient [also] needs to have an overall positive experience at every touchpoint,” says Katie Bourke, a partner at the healthcare consulting and marketing agency Points Group.

There are a number of new players, including medical care scheduling services like Zocdoc, and tech focused health insurance start-ups like Oscar Health, who understand how to leverage customer service to deliver a better product and improved patient experience.

Thanks to Zocdoc, Oscar and a growing crop of companies like them, power dynamics are shifting, and patients are increasingly empowered to pick the best medical providers for them, while booking appointments instantly via easy-to-use online platforms.

While technology is a core enabler, delivering the best patient experience has to be central to a healthcare company or provider's mission, vision and values, says Brian Reich, marketing strategist and author of *The Imagination Gap*.

But it's not too late for larger, more established players to get on board with using technology to transform the patient experience. "It may take time for traditional players to catch up with newer firms, but ultimately, those who are proactive about making the shift will win," Reich adds.

Zocdoc and Oscar Health's customer service standards

Both Zocdoc and Oscar have developed an extensive on-boarding process to help medical practices establish a seamless office workflow and build patient profiles on their platforms. They also vet doctors to ensure quality standards. The result is happier patients who gain access to the best doctors in a more efficient way.

To maintain service level standards, Zocdoc holds medical practices strictly accountable to instant bookings. If a doctor cancels, a contact center agent will personally reach out and help the patient reschedule. They may even offer an Amazon gift card when things don't go right, and they'll follow up with the doctor to prevent

future scheduling snafus.

The Zocdoc customer service team even tracks local weather to get ahead of factors that might prevent an appointment from happening. If they perceive any weather related threats, they will reach out to medical practitioners directly to confirm that they'll be able to meet their appointments, and then contact patients to ensure no one is left stranded. This proactive approach opens the lines of communication with users on both sides, and establishes service expectations in addition to customer loyalty.

Similarly, Oscar offers a dedicated concierge team for every patient, allowing patients to speak with the same agent every time for personalized and consistent service. Oscar also reduces the number of office visits by facilitating consultations and prescriptions through its mobile app. The company





has struck a balance between leveraging technology to automate certain parts of the healthcare journey, while not losing sight of the importance of customized support.

Building loyalty through reviews and feedback

Despite these high-touch efforts, health-tech firms who are brokering the provider-patient connection are only as good as the level of service from the medical practitioners themselves. Continuous feedback and reviews are key to this strategy. It's the same formula used by Airbnb, Uber and nearly



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Partner
Points Group

every two-sided technology platform to encourage good behavior on both sides of the customer service equation and to build brand trust.

For Zocdoc users, medical provider reviews help patients make more informed decisions and establish accountability, while incentivizing providers to deliver the best service possible. Reviews also help medical providers get a pulse on how their business is doing compared to their peers and shed light on any under-performing practitioners, or problems in their workflow.

High-touch customer service has helped

Zocdoc drive repeat engagement and build loyalty on their platform, as well as increasing visits to medical practices with the best reviews. But in order to grow its business through new patient referrals, Zocdoc will have to continue to find innovative ways to engage patients and providers while simultaneously outpacing competitors.

In the end, Zocdoc and Oscar Health are two young healthcare companies offering a blueprint for more traditional healthcare companies looking to use a combination of high-tech tools and high-touch approaches to drive world-class patient experiences.



How wearables are bringing health insurers closer to customers

When employers first began offering fitness devices as part of their corporate wellness programs at the start of this decade, they received an overwhelming response.

Now, life and health insurers have jumped in with nationwide plans to link policyholders that track their exercise with cash rewards. For example, John Hancock is offering Fitbit devices to life-insurance customers and promising discounts on premiums of up to 15 percent to stay active. United HealthCare Group will pay nearly \$1,500 annually to health-plan members who hit certain wellness and fitness goals. And Oscar Health Insurance rewards members who track their fitness data with Amazon gift cards.

Health insurers in the United States are not alone. Australian life insurance company MLC Ltd and South African health insurer Discovery Health are measuring users' heart rates, sleep patterns and physical activity to offer them discounts. Several insurers are even experimenting with new models to use fitness data to set prices and engage customers.

What started as employers offering fitness devices to participate in health challenges is now promising to reinvent insurance companies' relationship with their customers.

Angela McIntyre, Gartner research director, is responsible for assessing emerging trends for wearable electronic devices and advising

executives on how to leverage these for new business and customer engagement. McIntyre says wearables are challenging the status quo when it comes to insurance and believes that “this is promising to be much bigger than just throwing a Fitbit at your employee to offer incentives.”

Here are the biggest changes insurers are currently exploring to push their members to a healthier, non-sedentary life.

Tapping into online communities

Online support communities designed to keep track of members’ workouts, calories and goals are sprouting up everywhere. Some insurers, are exploring how to tap into these communities to motivate their customers using wearable fitness devices, says McIntyre. “I expect to see insurance companies [using] such communities to encourage their policyholders to compete with their friends in fitness challenges and events like charity runs,” says McIntyre.

Providing real-time health advice

Insurance companies are gradually moving beyond step-count goals to track enrollees’ health profiles continually. The next logical step should be to dole out health advice, maybe on a real-time basis. “The idea is not far-fetched,” says McIntyre, who expects insurers to use members’ fitness and



wellness data to provide insights on diet and exercise. “It might take some time, but as analytics gets better, insurance companies could build apps that advise you to run faster or slower and to keep your heart rate in the right zone,” she says.

Personalizing goals and rates

Health and life insurance premiums are typically set based on aggregate profiles, but fitness devices could play a big role in changing that. As insurers come to know more and more about customers’ health, firms could determine customers’ risk factors better and price them accordingly.

The one-size-fits-all health premiums could give way to customized pricing, and that’s not all – they could soon set personalized goals for people. “Right now, insurance companies expect all participants to meet the same goals. What about people who have health problems? We might have personalized and very complicated plans when insurance companies start incentivizing goals based on your health or fitness profile,” explains McIntyre.

Partnering with fitness clubs

Fitness clubs and gyms seem to be a natural ally to an insurance company trying to motivate people to use wearable health-tracking devices. Several gyms already

use these sensor-embedded devices to offer incentive and rewards programs. For example, Humana tracks members' health data and awards gift certificates for reaching predefined goals.

"I have heard from insurance companies that are considering partnering with health clubs. And some are thinking of setting up their own," McIntyre says.

The pros and the cons

Better health outcomes and lower prices are beneficial to both insurance companies and customers. Wearables will help insurers drive a deeper engagement with their customers, with real-time advice that might also help their customers be more proactive about their health. And the healthier customers get, the less an insurance company needs to spend on them.

However, there are some important questions to consider as this becomes the new norm. Customers will have to consider the privacy risks — online and otherwise — they're taking by using a third-party app or device to provide detailed health information to a health-insurance company.

And for insurance companies, there are substantial ethical and legal headaches to be mindful of with detailed and real-time access to employees' personal health data. Insurance companies will need to install the



necessary safeguards to protect the influx of personal information being received through wearables, and the government may need to oversee this process to ensure compliance.

Redefining the customer experience

Whether wearables in healthcare and health insurance are an enduring trend will be a test of time, but for now they're changing the game. Fitbit CEO James Park has described insurance companies as "the holy grail of

this whole category." According to Park, the partnership between wearables and insurance providers is "going to be a huge inflection point for the business."

What's clear is that what's happened so far in this space — namely rewards programs and building customer health profiles — is only the beginning of how insurance companies are redefining their relationships to customers.



Healthcare and IoT: Balancing patient privacy, innovation and customer service

How do you provide customer support to someone who has ingested a tiny health-monitoring sensor? How do you reboot an internet-connected pacemaker that has lost its WiFi signal? How can a company making consumer-facing connected medical technology navigate the complex maze of patient-privacy laws while still delivering top-notch customer service?

These are questions more and more companies are facing as the popularity of connected medical devices explodes. According to a report by Markets and Markets, the global medical- and healthcare-related Internet of Things (IoT) market is expected to grow from \$41.2 billion in 2017 to \$158.1 billion by 2022.

Delivering patient care and customer service in a hyperconnected era is complicated — but it can be done successfully.

The case for connected medical technology

One of the primary reasons IoT is seen as a tentative savior in the medical community is because it enables the kind of preventive healthcare and remote monitoring that has never been possible before.

Significant benefits are already emerging, says David Wattling, vice-president and chief corporate development officer at



Providing healthcare support to connected patients

There's no doubt that more complex products require more skilled customer service agents. Contact centers handling IoT products — especially medical IoT — will need to have a deep knowledge and understanding of how the products work, as well as what level of service is permitted under privacy laws. This means companies and contact centers will have to take great care to develop continuous employee-training programs.

In many cases, navigating this relationship also requires setting extremely clear boundaries between companies, governments and patients about who handles what information, says Wattling. He notes a clear division of labor in handling healthcare-related customer service. The contact center addresses product-related issues while a dedicated medical-care team — usually composed of local nurses and doctors — handles everything else.

Despite the increased contact center complexities, patients should only have one number to call for support, which should be quickly routed to the appropriate team. That isn't to say some patients won't volunteer sensitive health data to any and all contact center staff. But to that end, the onus is on the care team and the contact center to continually reiterate the limits of their support.



We've seen reduction in emergency visits, we've seen reduced length of stay in hospital — so, the patient can be discharged earlier, and we've seen nurse productivity increase.

David Wattling
VP & Chief Corporate
Development Officer
TELUS Health

and when an anomaly arises — for instance, if someone's heart rate suddenly spikes. The care team can then phone, message or video-conference a patient to rapidly address the problem.

Wattling says the program has saved thousands of dollars per patient in the 90 days following heart failure. "We've seen reduction in emergency visits, we've seen reduced length of stay in hospital — so, the patient can be discharged earlier, and we've seen nurse productivity increase," says Wattling.

After the monitoring period, patients also reported being more self-aware and proactive in the handling of their own health.

TELUS Health, a firm dedicated to providing support and technology for healthcare-related companies and services (disclosure: TELUS International shares the same parent company, TELUS Corporation, as TELUS Health). As an example, the TEC4Home health-monitoring initiative in British Columbia (a public-private partnership between the provincial government, Canadian research institutes and TELUS Health) has yielded impressive results.

Post-heart failure patients participating in the program are asked to provide daily health metrics using a dedicated touchscreen tablet, a blood-pressure cuff, weight scale and pulse oximeter. Remote medical staff are alerted if



[Privacy is] a shared responsibility. It'll be incumbent on us to do the right thing.

Ed Cabrera
VP of Cybersecurity
Strategy
Trend Micro

Medical IoT innovation and security

There are an unfathomable number of connected medical devices on the market today; all it takes is imagination and capital to make a new product.

Fitbit, the maker of an extremely popular suite of wearable devices that monitor sleep, heart rate and activity levels, was created by two people from outside of the medical community. The 2011 arrival of its first product helped revolutionize the wearables market, easing consumers into the idea that exchanging certain information for perceived health benefits had value.

Still, most — if not all — IoT devices are in some way vulnerable to privacy breaches. Earlier this year, the Food and Drug Administration concluded that an implantable cardiac device made by St. Jude Medical

could be hacked to deplete the battery or deliver incorrect pacing and shocks.

That danger to life and safety is “the ultimate risk,” says Ed Cabrera, vice-president of cybersecurity strategy at multinational technology firm Trend Micro, making it critical for companies delivering medical IoT products to promote the safety and security of the devices and ensure the stringent training and vetting of agents.

Legal and ethical considerations of medical IoT

There are laws around the world with detailed patient-privacy provisions, such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States and the European Union's new General Data Protection Regulation, which

spell out patients' and companies' rights and obligations when it comes to data privacy.

Consumer privacy, especially in the medical device field should be automatic for any kind of device, says Cabrera of Trend Micro. But because of jurisdictional divisions in the realms of healthcare, privacy and technology, many parts of the world still have a patchwork of laws rather than a cohesive strategy to address data privacy in the connected era.

Absent of consistent regulation, the direct-to-consumer health IoT market remains something of an experiment in privacy, chiefly because anyone is free to purchase off-the-shelf devices, often agreeing to terms and conditions that could compromise the confidentiality of their data. As a result, prudent companies are developing more stringent privacy rules for themselves while they wait for official regulations. “It's a shared responsibility,” says Cabrera. “It'll be incumbent on us to do the right thing.”

Providing quality care and excellent customer service while honoring data privacy in the medical IoT market is complicated, but not impossible. Fortunately, the contact center can serve as an innovative meeting point, bridging internal and external teams to provide holistic, personalized care to connected healthcare customers.

Conclusion

Never before have consumers been so empowered when it comes to their health. Not only are they using technology to monitor their health and wellness, but the increased access to information is providing consumers with more options when it comes to their medical service providers. Online reviews, wearables, mobile apps, telemedicine and more, are all contributing to a better informed patient, and a more competitive marketplace. In turn, customer service has become a differentiator, with consumers carefully contemplating and selecting healthcare and insurance providers based on the overall patient experience and the level of customer service delivered.

Backed by TELUS Health in Canada, TELUS International delivers better and more efficient health outcomes via our global customer experience and leading next-gen IT solutions. If you're interested in discussing how to launch or improve your customer experience programs, please reach out:

telusinternational.com/contact

About TELUS International

TELUS International is a global customer experience and digital transformation services provider with delivery centers around the world, including in Canada, the United States, Central America, Europe and Asia. TELUS International is the global arm of TELUS, one of Canada's largest telecom companies serving 13 million subscriber connections.

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