BEHIND THE HEALTHCARE REVOLUTION

The Changing Scene at Point of Care





EXECUTIVE SUMMARY

We are in the midst of a healthcare revolution. Vastly different from any preceding call for change, this revolution has been fueled not by a singular problem, but instead by inexorable technological advancements, coupled with a distinct shift in cultural expectations. As a result, the long-established faces of Point of Care — especially doctor's offices—are changing. In increasing numbers, they are being replaced to appeal to "empowered patients," who are running the show.

Typically, Point of Care (POC) is defined as a location with a purpose. It is where patients (and prospective patients) not only interact with a healthcare provider, but also gather information, make decisions, and gain knowledge. More and more, that "location with a purpose" has moved beyond the limitations of a physical setting and taken on the capabilities of a virtual venue. For pharmaceutical companies, the POC represents an excellent channel for the delivery of meaningful, credible, relevant communications that reaches people when it matters the most.

In this white paper, we explore the changing landscape of POC and the promise of innovation to come. We will take a detailed look at the impact new trends are already having on the world of healthcare and what they may mean for the various roles within it.

While no one can say exactly what is around the next corner, one fact is certain: technological developments and patients are sharing the driver's seat.

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THE HEALTHCARE REVOLUTION

"For consumers, the healthcare industry needs to take note of how the technology and retail industries engage with consumers to keep up. Seamlessly, consumers should be able to learn about, decide, and buy healthcare services like they do anything else." These thoughts were expressed by Brodie Dychinco, a General Manager at Cambia Health Solutions, as he described the overall mindset of today's consumer. While it is true that today's healthcare landscape is drastically different than that of five and ten years ago, what is even more remarkable is the speed in which these industry revolutions are occurring. In addition to the growth of technology and its widespread availability to American consumers, there are numerous other factors feeding the demand for continuous change. Another element to ponder is how industry professionals, providers, and Points of Care (POC) are reacting (or not reacting) to systematic changes—all of which boil down to one greater question: What does the future look like for patients and for point of care providers?

Patient-Centric Culture and Digital Technology



More than 77 percent of adults in the U.S. own smart phones, indicating that 250M have access to online information at almost any time and in nearly any location. For better or worse, more than 80 percent of all online users instinctively turn to the internet to search for answers to their health questions. The internet is brimming over with

possible causes, treatments, professional help resources, and innumerable forums offering support.

Access to information and communication is empowerment. Digital marketing consultant Neil Patel states, "We gain instant feedback from our devices, because we're constantly plugged in and turned on. We have the ability to make things happen without having to wait. Because our devices are ubiquitous, our connectedness is constant." Today, consumers feel more comfortable searching the internet with its diverse, instantaneous content, than relying solely on the advice of one physician.

In Clinician Today, Dr. Brian Wu wrote about additional factors that encourage patient empowerment and reliance on the internet. Dr. Wu tells us, "To understand how patients become empowered patients, it is useful to note that issues of trust are largely driving their transformation. Americans, by and large, do not trust the healthcare system. The internet has helped patients become more proactive in making treatment choices, reshaping healthcare into a more 'patient- centric' industry," and states that patient advocacy groups see patient empowerment as "an integral part in the equalization of the doctor-patient relationship."

The Power of the Pharmacy as a Point of Care

As patient empowerment continues to grow, patients' paths to care and their expectations for where that care can happen are rapidly evolving. Some begin with an online search, but many others initiate their search for answers and relief at the pharmacy. On average, it can take many days or even weeks to get in to see the doctor. On the other hand, the pharmacy is readily accessible to virtually all consumers, and 90 percent of people live within two miles of a pharmacy. Patients can walk in and consult with a pharmacist within minutes or simply educate themselves as they walk through the OTC aisles. The convenience that a pharmacy offers is unprecedented within POC, and



its business as a whole is advantageous to the patient-centric movement. This reality illustrates why the average patient visits a retail pharmacy 12x more a year than they see a primary care provider. Even after patients receive a diagnosis and prescribed treatment, they continue to frequent the pharmacy. As pharmacies have added new services (such as vaccination and clinical offerings) to their long list of conveniences, they have grown into true providers of care.

ADVANCEMENTS IN POINT OF CARE

Recent advances in technology and artificial intelligence (AI) have arrived at a critical point in time within the healthcare industry. That time is marked by the readiness of a large part of the population that welcomes technology in medicine and when there are not enough physicians to go around. The Association of American Medical Colleges reports a shortage of physicians between 42,600 and 121,300 by 2030. This projected deficiency is largely a result of the size of the aging population. As people age and become afflicted with more ailments, their need for professional care rises. The number of Americans over the age of 65 will increase 50 percent by 2030. In addition, many physicians are currently at (or will soon reach) retirement age. One third of all physicians currently practicing will surpass the age of 65 within the next ten years, leaving a large void of physicians in their place. The POC landscape is rapidly evolving to fill the gaps created by this shortage while continuing to meet consumers' healthcare needs.

A wide range of technical breakthroughs continue to alter the way Point of Care looks and functions apart from the doctor's office. The early 2000s kicked off a trend of walk-in clinics boasting convenience and affordability. Today, CVS alone has more than 1,100 Minute Clinics. Although it varies by location, most of them offer extended evening hours.

Around the same time, the prominence of Point of Care Testing was emerging to afford hospitals and physicians' offices faster test results at lower costs. As quickly as electronic health monitoring

devices became mainstream, they were reincarnated and expanded into software applications to be used across various devices. These represent a mere fraction of the impact technology had on healthcare from 1990 to 2010.

Technologies Driving the POC Landscape

Today the health and science industry is churning out new devices, technologies, and discoveries at such a high rate that it can be difficult to stay abreast of the latest and greatest. Those that have been the most successful have managed to adopt new tools and technologies to put the patient center stage. A few examples of those having an impact in the POC world are:



Social Media. Social media and communication technology have been big contributing factors in patients' expectations of immediate information, and they have been significant considerations within the empowered patient movement. In 2004 Facebook was officially founded. Its usage and popularity had a major impact on communication, marketing and advertising and inadvertently the way that people now seek health information. According to WEGO Health, 87 percent of the participants in their health behavioral intent study said they share health information via Facebook posts, and 81 percent of participants said they share it through Facebook messages. Both are indicators of patient-centricity and patient empowerment and show that today's patients use online forums and tools.



Telehealth and Telemedicine. While these can take on many different forms, at their core, all help to support and promote long-distance clinical health care. Here are four examples of applications and their usage:

 Live Videoconferencing: Patient and provider care through a two-way audiovisual device.



- Store & Forward: Sending the recorded health history of a patient to a practitioner (usually a specialist).
- Remote patient monitoring (RPM):
 Applying the use of electronic devices to record personal health and medical data in a remote location to be reviewed by a health provider in another location.
- Mobile health: Providing healthcare and advice through mobile devices, usually in the form of general educational, information, disease outbreak information, and targeted text messaging.



Chatbot Technology. Al software has been a staple of the customer service sector for years and is now making its way into the POC arena. As Roeen Roashan, analyst at IHS Markit pointedly explains, "It is making waves in healthcare." Citing the impact in the mental health sector as an example, he states, "This is not to say that mental health is better delivered through chatbots but, rather, that certain aspects of care should be automated. These mental health patients actually preferred to speak with a bot, and most conversations took place between 10 p.m. and 3 a.m., often including taboo topics." The success of the bot was determined by the patient, who preferred its communication, for its convenient availability and impartial interaction.

Provider Portals

In 1996 HIPAA shook up the healthcare world and among other initiatives improved access to healthcare as well as portability and renewability as an individual changed insurance companies. This was followed by the creation of the first HIPAA Privacy and Security Rules. HIPAA has changed many times over its twenty plus year lifespan, but overall it was created to enforce transparency and to

prevent insurance fraud, ensure group coverage, and protect the privacy of patients' records. immediately after the act was passed, physicians and healthcare providers were tasked with the large responsibility of defining procedures to get patients their health records and coverage information. This created new obstacles for healthcare professionals and patients alike, since making copies and getting them safely to patients was a costly, arduous process. Some of these problems are being solved with the advent of healthcare portals, which became more widely used with the adoption of the electronic personal health record (ePHR) in 2006.

Versatility of Medical Portals as POC

- Patients and doctors confer regarding test results and/or follow-up questions
- Patients can request a prescription refill without making an appointment
- Patients can access their appointment details and pay bills



Since then, portal capabilities have expanded into a two-way communication device for patients to confer with their physicians outside of the office. Providers that have adopted these evolved applications provide much more than email access. As, Gaby Loria of softwareadvice.com states, "It's helpful to think of patient portals as the Swiss Army knives of medical software. Why? They're just so versatile."





RESISTANCE TO THE HEALTHCARE REVOLUTION

As much as we have discussed the ways that technology has advanced POC, there are still factions that are slow to adapt to change and adopt new technologies commonly citing three reasons:



Costs. These include software, equipment conducive to new software, staff training (including doctors) for safe and effective use, and the loss in productivity during training sessions.



Data Privacy. In a world of cyber threats, HIPAA and the liability if a health data breach occurs are gaining a lot of attention in the media.



Care Quality. Some healthcare providers are concerned the quality of care provided will suffer with applied technology and reduced human interaction.

These concerns may come across as overly cautious, but they have some validity. In 2018, the Office for Civil Rights (OCR) managed HIPAA settlements totaling more than \$28 million. The list of potential claims violations is expansive, ranging from very specific infractions such as failure to terminate employee access to patient data to risk analysis failures. Once an Electronic

Medical Records (EMR) system is introduced, the risk for potential violations could increase. In addition, there's the cost factor. EMR installation can exceed \$500K for set-up alone.

The loss of care quality is, perhaps, the largest overall concern for physicians, especially those from older generations. When healthcare workers are focused on learning or using a new system or piece of technology, their attention is not 100 percent on patient care. Physicians specifically show great concern in relying on the accuracy of a new tool or device. In a recent article, Sara Berg of the American Medical Association states that most physicians have four key concerns in relation to Digital Health: Does it work? Will I get paid? Will I get sued? Does it work in my practice?



TRAILBLAZERS

In contrast to the reluctance of some of these healthcare providers, there is a fleet of forwardthinking retail pharmacies, payers, and providers readily adopting new technology to accommodate the empowered patient. Across the globe, physicians are adopting enhanced communication tools to keep them in direct contact with patients, specialists, and pharmacies. Many pharmacies (independent and chain) are expanding their offerings with new screenings, in-store treatments, and clinical services. Some supermarket pharmacies are capitalizing on the trend of "life-style medicine," by promoting the natural properties of their fresh produce as an aid in disease prevention. Several pharmacies have adopted health kiosks and telehealth technology to raise the bar even higher.



iPayers cannot be excluded from the list of trailblazers, many of which are adopting technology to make patient communication more convenient, and the payment process more comprehensible. These trailblazing POCs are investing capital and faith in technology's innovators and the demands of patients. Whether POCs flow with the tide of change or hold strong to their old traditions, each one of them is taking a leap of faith.

The Changing Landscape of Retail Healthcare



Supermarket pharmacies, independents, and chain drug pharmacies have been highly receptive to the demands of the empowered patient. They are constantly expanding their offerings based on the expressed needs of their patients and customers. Services vary based on the capabilities of a specific healthcare retailer or pharmacy, but as a whole, their purpose is to improve health, provide convenience, and reward customers for loyalty.

Sometimes, pharmacists are overlooked in the large pool of healthcare providers, but in general, they have remained an esteemed source of health and wellness information for patients. In Gallup's report of Americans' Rating on the Honesty and Ethical Standards of Professions, pharmacists have consistently ranked 2nd and 3rd for more than three decades, often superseding the rank of physicians. The pharmacist is readily available to provide advice at the convenience of the patient, a factor that undoubtedly strengthens the patient-to-pharmacist bond.



Pharmacies as Healthcare Destinations



Numerous independent pharmacies are working to increase their health focused events for high level early detection screenings. Bone density scans, cholesterol tests, and hypertension are a few of the specific screenings offered by independently owned HB Pharmacy in New Jersey. In an interview conducted by Amerisource Bergen, HB Pharmacy's director of growth and operations explains, "We're trying to get more specific. We're creating ways to better individualize our approach and our care." Some niche pharmacies are already offering genetic testing at their pharmacy as part of their advanced testing services.



"Look Good, Feel Better", a program created by Walgreens to help cancer patients look and feel beautiful as they deal with the changes brought on by the disease and treatment side-effects. "Look Good, Feel Better" complements another initiative, "Feel More Like You", in which pharmacists are trained to make OTC recommendations to treat common cancer-related discomforts like mouth sores and painfully dry skin. The cherry on top: These pharmacists also underwent empathy training to help them give cancer patients an enhanced level of emotional support.





Kroger grocery stores recently announced they will be adding People - Technology -Service (PTS) Diagnostics in over 2,000 of its Kroger Health pharmacies and clinics. The company will be deploying Cardio-Chek Plus analyzers to recognize if a patient is at risk of a stroke, heart attack and diabetes in under 2 minutes. A simple finger stick provides the administer a measurement of cholesterols, triglycerides, and glucose levels. Colleen Lindholz, president of Kroger Health described the functionality of the new program by stating, "When you know if you're at risk, you can take the actions necessary whether that is with your diet, exercise or medication - to begin living a healthier life.



Buoy Health, a technology company with Al capabilities, has partnered with CVS to use analytics that can aid in earlier intervention, and help providers and patients identify the appropriate care or treatment. How does it work? Buoy's system gives patients real- time health assessments and refers patients to a CVS MinuteClinic if they find that the patient needs treatment. The company reports, "CVS Health aims to transform the consumer health care experience through a combination of digital tools and – importantly – complementing that technology with high quality, easily accessible care."

The role of the retail pharmacy in the life of a specialty patient

When it comes to retail pharmacies and specialty patients, there is still a lot misunderstanding across the pharma and consumer industry regarding biologics and specialty drugs. Questions range from, "Who takes them?" to "Where do they get them?" and "How do they take them?"

Albertson's is on a mission to help clarify the role their pharmacies play in specialty drugs and how they offer additional services to enhance patient care for those who take specialty medications. Vice President of patient, specialty wellness, Brian Hill said that the company does a good portion of mail-order fills for specialty drugs, but also offers in-store services including pickup, counseling, and administration of longacting injectables. Hill calls the program "community pharmacy augmenting", and states that, "What we offer is specialty pharmacy services for medications, with the ability to send the fill to the community pharmacy so the patient can pick up their specialty medication along with the rest of their community pharmacy medications. This makes their specialty-medication fulfillment the usual rather than the unusual." Specialty patients frequently begin their quest for relief at the pharmacy, and then inevitably circle back to pick up script, find OTC treatment for comorbidities, or seek other products related to overall wellness. Given the growth of the specialty drug sector, it's safe to say, POCs with products and services that cater to patients with specialty drug needs are strategically positioned in front of the eight ball.

Payers Joining the POC Action

In the past, competition amongst insurance companies has been largely dominated by those who can provide the most affordable options to employers, and then secondarily, to individuals. Today, intuitive insurance companies are making concerted efforts to expand online services and educational tools, which can both afford cost reductions (out of pocket) directly to customers and enhance their care.

A program from Cigna allows members to access board-certified telehealth providers through affiliates American Well and MD Live. American Well focuses on the providing the equipment that makes telemedicine possible to doctors' offices, pharmacies and various points of care. In addition, they manufacture other specialized devices that enable physicians and practitioners to conduct patient assessments virtually. MD Live is an online service application that connects patients directly to the doctors they need wherever they are at any time. By combining the offerings of these two companies, Cigna has taken a giant step in making telemedicine commercially available to its customer base of 86 million.



Convenience is the building block on which United Health Care (UHC) has built its patient centric strategy. In 2019, the company boasts that it will unveil a robust online system. Patients are encouraged to use the system to speak to a nurse, order prescriptions and make doctor's appointments. Whether customers are privy to using online services or not, UHC has made it possible for its members to access all their patient data at any time through their online portal.

Conclusion: The Future of POC

Those in the healthcare industry, regardless of role, are seeing change take place faster than ever before in the POC space. With the latest pharmacy offerings, telehealth advancements, and robust provider portals, it's easy to get overwhelmed by it all. Although the intent of each new trend is to improve care, it would be impossible and

unnecessary to adopt all the changes since each practice and POC is unique. At the same time, it is clear that the healthcare professionals and POCs who've made reasonable changes are thriving in the new landscape.

Is there an answer or solution to how one should react to the healthcare revolution and all the changes circling within it? It seems the best ways to proceed are to twofold. Maintain an open mind regarding the definition of POC and stay up-to-date on new technological advancements. Following these best practices can help prevent a missed opportunity. Because whether you are a proponent of the healthcare revolution or reacting more tentatively, it's undeniable that patients and technology are playing a much larger role in shaping today's healthcare landscape than they ever have before.

ABOUT RX EDGE

For more than 17 years, Rx EDGE has been successfully delivering the messages of pharma brands to customer's in America's most frequented Point of Care location, the pharmacy.

Summary...

