

Healthcare's Consumer Engagement

The Shift from Patient to Consumer

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Re-Innovating Healthcare



TABLE OF CONTENTS

Revolutionary Changes in Healthcare	1.
Healthcare's Consumer Technology	2.
The Rise of Healthcare's Marketing Technologist	4.
The Payers	6.
The Providers	7.
The Healthcare Consumer	8.
Patient Engagement Basics	9.
Patient Engagement 2.0	10.
Healthcare Technical Solutions	14.

Re-Innovating Healthcare



Revolutionary Changes in Healthcare

The Disruption

The healthcare sector has reached that critical point in an ever-evolving condition of core structural alterations inside the way it delivers care, runs its business, receives payment and communicates with patients. Now and more than ever, it is driven by a newly empowered consumer. The critical mass of technology serves as its foundation. The healthcare information technology (H.I.T.) market is driving the opportunity but it is not the only force in the field affecting change. The predictability of its long term transformation relates to the reimbursement models, public policy framework, payer / provider dynamics, information essentials and inherent data issues, unique workflow of the marketplace and demand-side consumerisms entering the sector. This is the new health economy.

Brief History: HITECH and ACA



The main instigator for all this sector disruption was the passage of HITECH as part of the 2009 stimulus package that provided the economic incentive and framework to get the H.I.T. market to critical

mass. The passage of the Affordable Care Act (A.C.A.) created the catalyst for innovation in payment and its management processes. For many years prior, it had been discussed but never implemented on a broad basis and largely because of the cost to coordinate. Now we are inside the launch of the new payment models like Medicare Shared Savings programs, the first generation of Accountable Care Organizations (A.C.O.).

Health Information Management Systems and Information Technology



The implementation of electronic health records, (E.H.R.), and health information systems (H.I.S.) opened the door to the most unprecedented time in human history of what Klaus Schwab, Founder and Executive Chairman of the World Economic Forum has named *The Fourth Industrial Revolution*.

Health information management systems and information technology offer providers and patients with a bond that unites them unlike any other time before. Families and care givers are able to electronically carry with them the essential documents, current and historical, through the E.H.R and its patient portal while in some cases, providers are able to easily access this interoperable and shared information. Although the patient portal is underutilized, many other communication tools are being used to exchange information with secure messaging, while social media allows for engaging communities to form. An abundance of emerging health related technologies continues to come to the market that empower and support.

Genetic modifications, brain enhancements using technology, mobile hyper-computing, cars that drive themselves, and robots with emotional intelligence is the short list. The evidence of dramatic change is all around us and it's happening at exponential speed. As Schwab stated, the revolution has only just begun and will continue to "fundamentally change the way we live, work and relate to one another."



Healthcare's Consumer Technology



The Health Information Management Systems Society (HIMSS) has categorized the main areas below for the impetus of the health consumer to evolve.

We have added to these areas the need for data collection, usage and security.

Health Management - technologies like the patient portal, secure messaging and patient generated health data.

Social and Behavioral - social media, texting and gaming, wearables and mobile and the social determinants of health to include the availability of resources to meet daily needs, access to educational, economic and employment opportunities and infrastructure.

Home Health - telehealth, patient education, think: "smart" homes.

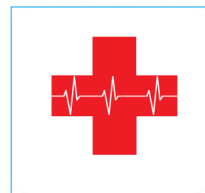
Financial Health - health insurance and expenses, health savings accounts, pricing transparency and financial options like extending credit.

Information and Big Data

- Data Collection – the electronic health record acts as data collector and a data delivery system.
- Data Warehouse – clinical encounters, physician notes, lab results, images, and all information collected and stored inside a repository on each patient.
- Data Scrubbing – structure and standards are a source of contention in this field. The lexicon is the crux of the issue. This is a very big issue.
- Analytical Tools – creating meaningful value from the massive amounts of data for decision support and business intelligence.
- Application – integrating the information from disparate sources to deliver essential value.

Consumers, state-by-state are being requested to either opt into or opt out of the gathering, the use and the availability of their record inside a Health Information Exchange, (H.I.E.). The data has been a concern as to who actually owns it and what it can be used for. Policy makers are working with vendors to define who actually owns the data. The collection, share, use of this information is valuable and some would argue that the data becomes even more valuable if the data collected was not de-identified. A portion of de-identified data today is allowed to be shared and offers stratified results for research and inquiry.

Identifying and personalizing the data becomes even more powerful. The retailers are aware of this and experimenting with requesting permission of its consumers.



For example, at CVS, consumers can get \$5 back for every 10 prescription refills, if they waive the right to health care privacy protected under HIPAA. Rite Aid is experimenting to collect data by offering special lockers to freely charge cell phones in exchange of phone number, insurance costs and shopping preferences.

Cyber Security and HIPAA

Consumers have the right to security of health information. HIPAA addresses the security issue but unfortunately the healthcare sector has been attacked on many levels and breaches occur regularly. It's a big target for cyber criminals. The scams are multiplying and the attacks have put some hospital systems to a halt. The topic of cyber security is massive. The important point that must be raised as it relates to the healthcare consumer engagement is about trust, credibility and certainty. As a part of its continued efforts to assess compliance with the HIPAA Privacy, Security and Breach Notification Rules, the HHS Office for Civil Rights (OCR) has begun its next phase of audits of covered entities and their business associates.

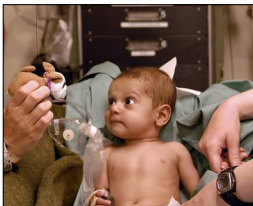


Healthcare's Consumer Technology

Personal—Tech Care

The growing industry of personal tech care is changing medicine. When a patient has a device in their hand that gives immediate feedback, it really changes their perspective and engagement. Start-ups across the country are creating technology for patients that can feedback prescription compliance, heart rate breathing and movements. Here are a few others:

Pain-Free Blood Testing Technology: without any pain, patients will be able to take blood from themselves in about two minutes. After collecting the sample, patients can simply take it to the clinical lab to have their tests done. Some Point of Care Testing kits can give results at that moment.



Smart, Huggable Bear to Comfort Children in Hospitals: an interactive teddy bear helps ease children's anxiety in the hospital by asking the children questions, joking with them, and playing games. The bear's name is Huggable and it's equipped with sensors that can tell how hard it's being squeezed, which could be a measure of a child's pain.

Implant that Accurately Predicts Which Cancer Drugs Work: researchers at MIT have developed and tested a tiny, implantable device that could accurately predict which drugs would work on a specific tumor. Once the device is implanted, it releases minute amounts of different cancer medications. Each of these medications affects only a slice of the tumor. Doctors can identify which parts of the tumor reacted best and determine a course of action.

Diabetes Technology we are getting closer to an artificial pancreas but for now, the U.S. FDA approved a mobile app-based system that can monitor a person's sugar levels remotely.

Wearables: smartwatches to virtual reality headsets, all are part of the emerging landscape of wearable technology.

Healthcare I.T. Solutions



It should be expected that with the increase of effective software tools, it will make certain jobs and functions obsolete.

According to the 2012 JAMA article, "Eliminating Waste in US Health Care," a reduction of healthcare administrative costs could save \$250 billion per year.

mHealth

Mobile health is driving the consumer disruption in healthcare. The major appeal is its enabling communication in motion, allowing individuals to contact each other irrespective of time and place. This is particularly beneficial for work in remote areas where the mobile phone, and now increasingly wireless infrastructure, is able to reach more people, faster. As a result of the capacity for improved access to information and two-way communication becomes more available at the point of need. A great example is the Ebola outbreak in Nigeria which has since been declared free of transmission. Many put claim that the mobile health initiative was largely responsible for the success.

Telemedicine

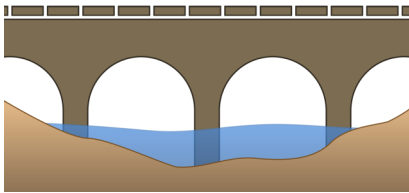
For patients and physicians, telemedicine has brought back the house call. Telemedicine is now on the top of the list of the most essential communication tools. It is helping patients living in remote parts, elderly, those too sick to travel with clinical contact, follow up consults and ambulatory rescue missions. The advancements of cellular and satellite technology has made this a viable alternative for those who are challenged with person-to-person care. Ontario Telemedicine Network (OTN), is the longest running programs in the world. After more than a decade of innovation, it is a global leader in telemedicine and connected care. The results have proven a reduction in hospital readmissions, transformation of primary care, and expansion of home and community care across Ontario.



The Rise of Healthcare's Marketing Technologist

To address the gap in healthcare between current state adoption (and readiness) and the future vision relative to consumerization of healthcare, a new type of discipline has emerged at the center of the transformation: healthcare's marketing technologist. The marketing technologists sets the technology vision for marketing. They champion innovation, experimentation and agile project management. They are part of the growing group of change agents.

Bridging the gap between marketing and IT



In the digital marketing world, software is the primary tool to engage prospects and customers. For

marketing, relevant usage of these software tools is directly linked to how the organization is perceived and influences its users, i.e. patients. In healthcare, the process is more complex and regulated. This creates a need to bridge the gap between marketing and IT.

The healthcare delivery has not kept up with consumer marketing or its technology and as a result, there is some catching up to do. Addressing key communication's issues will change the attitude, perception and cynicism among certain population segments.

To create an easier, faster, more personalized and more convenient healthcare system where patient information and efficiencies would be a priority for the patient experience is quite different from the patient workflow of today. It would be a relief to any patient and caregiver if these major points of services were to be streamlined offering a stronger sense of competence and credibility.

To begin marketing preparations for the new healthcare consumer is a competitive advantage. As the system may not have the right resources in place today, it may be best to outsource this area to experts in the field. These resources would be acting upon the best interest of the organization and in collaboration with existing teams to attract, acquire, and retain.

Healthcare's Digital Communications



Digital strategy success in healthcare depends on understanding patients' digital preferences with appropriate channels, timing and services. Market research will fine tune the understanding as this market shift moves quickly.

Many healthcare organizations feel it is important to make a 'large effort' in the digital environment. Rolling out behemoth plans and campaigns all at once in perfect succession and targeting mass or large audiences. In the digital environment, this is not the case. In healthcare as with most other industries, digital is intended to be used with agile thinking. Some important points:

- Start with small, incremental launches but make it fast.
- It does not have to be innovative to be effected. Matter of fact, based upon the campaign itself, less innovative might be the best path.
- Like turning on the light switch, patients want ease of use and one hundred percent function, all the time.
- Apps are cool but know your audience before building.
- Digital is not for only the young.
- Everyone of all ages are turning to it for information.
- Now is the time to get ready because digital health services are soon to be the expected services.

•The Time Is Now. If you are a/an:

- provider of health services and care directly for patients;
- insurance provider working directly with patients;
- employer based insurance program;
- pharma selling OTC/prescription to the patient;
- retailer extending its services to the patient; or
- vendor of healthcare services, products and new innovations.

Your patient's expectations of the way you conduct your business, the way you treat them, the way you share information, the way you communicate, the way you educate and what you are charging them is changing...
FAST!



The Rise of Healthcare's Marketing Technologist



Traditional marketing for hospital institutions has been watered down to the most basic model of communicating. For example, a new

wing, a new donor, a new technique or to promote a healthy lifestyle, a health fair or community effort. The regulatory environment of HIPAA has forced the culture to communicate in a systematic process in a highly controlled environment. The resources to include budgets have been tight and because of the lack of 'free-market' competition, there was never a reason to change its strategy or tactical execution.

One of the main challenges today is to make information useful to patients in order to make good decisions. It is the responsibility of healthcare to simplify the information so that it can be interpreted accurately.

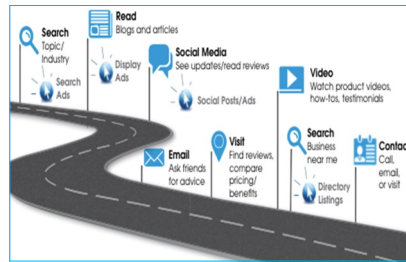


The profession of marketing is based on thinking about the business in terms of customer needs and satisfaction. Marketing differs from selling because there is a deeper concern to relating to the values between seller and buyer for long term sustainability. Identifying the problem and then

communicate the solution; that is marketing.

The one time exchange of tender for product is the concern for sales. The marketers concern is to generate multiple exchanges over and over with the retained customer as well as acquire new customers. It is for this reason that marketing leans more into the idea of business strategy and then tactical execution. Marketing views the entire business process as a tightly integrated effort to discover, create, entice and satisfy customer needs. Marketing supports the sales process to persuade a customer to pay for something but more of its concern is with developing a demand for that product and fulfilling the customers' needs.

Healthcare's Inbound Marketing Journey



There is an age-old marketing technique named the push / pull strategy. Inbound / outbound marketing has taken it a few steps further to include

internet technology, digital strategy, online data collection and analysis, market research and CRM tools. Inbound marketing refers to marketing activities that bring visitors into the domain rather than reaching out to them with persuasive attention-getting methods. When a patient is seeking knowledge regarding specific medical information, inbound marketing has content on the web that is poignant to that patient at the time of search. With a credible and truthful hand, the content works as part of the inbound strategy.

Medical organizations and those that serve them are in a perfect place to capitalize on efforts to include inbound marketing. Over 80% of health information sought by patients is online. That number is on the rise. With so many ways to connect with patients and prospective patients online, healthcare organizations are finding more ways to market.

To seize the opportunity of competitive advantage, there are many nuances and challenges to move this forward.

Areas where Social Media meets Healthcare

- Helpful / truthful education
- Clinical trials – recruit / share information
- Interoperable E H R – one place and in sync
- Lifestyle and wellness condition awareness
- The underused patient portal
- Identify key opinion leaders
- Patient and provider relationship
- Patients seeking new provider referrals
- Creator, curator, listener
- Support selective engagement
- Being understood and received well
- Secure alternatives for documents
- Communities: PatientsLikeMe.com



The Payers

The public and private insurers have been preparing for the quickly changing landscape as well. Uniquely positioned with claims data related to the enrollees (patients) and the providers that they frequent, payers have analytics and revenue cycle technologies evolving rapidly. Payers have been pulling together different provider networks in an effort to offer the broadest range of insurance options. Specific frameworks will soon be developed:

Data and enhanced analytics integrate clinical information into existing actuarial models.

Consumer-driven healthcare marketing uses data to target healthcare consumers with innovative insurance products designed to their needs.

New products meet the needs of an increasingly educated healthcare consumer.

Consumer outreach and engagement.

Advanced revenue cycle services beyond ICD-10 coding system that will manage payments from consumers, HSAs, etc.

The cost and use of healthcare



The lifetime cost of healthcare is high and continues to grow at staggering rates. The average American worker spent about \$1,000 p/year on healthcare in the

1950s, compared to about \$9,000 today's. Baby Boomers are beginning to enter entitlement age. We found that the average Gen Y worker will spend at least twice as much on their healthcare in their lifetime compared to the average Baby Boomer worker. However, the average Gen Y will use almost 3X as much healthcare as they paid for, while the Baby Boomer will use about 2X as much as they paid for.

Time to face the facts



According to The Health Management Academy 2013 Report on Health Policy Research Brief:

- 70% of all healthcare is spent on Medicare.
- The partial non-sustainable issue is that only 40-50% was put into Medicare.
- Baby Boomers will use about \$61 trillion in unpaid healthcare.
- Gen Y will use \$135 trillion in unpaid healthcare.
- 50-60% of the largest healthcare systems will be most impacted by the unpaid bills and they are preparing today for this in the way it approaches payment models and patient risk.
- The ACO can be modelled for payment risk aversion.

The employers form an alliance

According to a recent report published the Wall Street Journal in 2016, as health care costs continue to increase, twenty major corporations to include American Express, Macy's and Verizon have formed a consortium to use data and collectively leverage negotiations related to health benefits for their employees. In speculation, the bond towards a movement like this is only the beginning. As the heavy hand of health costs expenses and its burden places on employees, more and more employers will speak up. As a primary conduit for the private insurance agencies, they will most likely be the most effective in making change at that level. However, insurance companies have undergone their own set of mergers and acquisitions of late. Announced mergers and acquisitions of insurance agents and brokers in the United States and Canada totaled nearly 300 transactions in 2012, with nearly one-third occurring in the fourth quarter alone. The health insurance industry continues to be tilted with the recent announcement of three large mergers: Aetna/Humana, Anthem/Cigna, and Centene/HealthNet. The Centene/HealthNet merger is finalized. Aetna is to acquire Humana for \$37B and Anthem is to acquire Cigna in \$54.2 billion deal.



The Providers

Market Consolidation and Shifts



Since 2009, provider organizations have engaged in consolidation at a rate unprecedented in the industry. The need to scale on a geographic, facilities, service-offerings, under new management or on a “physicians owned” basis,

has been a consistent trend around the country. The urgency behind these activities seemed critical for provider organizations to achieve scale, gain bargaining power and maintain relevance in negotiating their economic share and structural influence over this rapidly changing healthcare industry landscape.

Hospitals buying hospitals, hospitals buying practices, hospitals acquiring and partnering with alternate site care providers, health systems partnering with health systems – essentially, a provider “asset grab” has been underway since the passage of the A.C.A., in an effort by providers and health systems to position themselves as the biggest integrated-delivery network (IDN) presence in their given market. With consolidation may come improved buying power where supply chain, inventory and other shared services are executed and purchased at a bargain. The merged hospital that consolidated has now become a powerhouse buying group. They can realize savings and efficiencies by aggregating purchasing and negotiate discounts. The provider will drive down costs to operate but will that be realized by the customer? Some economists say the benefit to community will never be realized.

With physicians and medical organizations, comes a great deal of oversight, scrutiny and regulations. More auditing bodies and legislation is put into place with more coming down the pipeline to protect consumers from fraud and breaches. It is hard to tell if fraud is on the rise or if these newer governing bodies are more effective at catching criminal activity.

Retail clinics



Retail clinics are medical clinics located in pharmacies, grocery stores, and “big box” stores, such as Target. They offer care for simple acute conditions and preventive care. The care is typically

delivered by a nurse practitioner. Retail clinics emphasize convenience, with extended weekend and evening hours, no appointments, and short wait times. When positioned inside a retailer, the information / data collected than deduced is more immense than any provider could imagine. Further, the sophistication of tools readily available for analysis, research and targeting is beyond fathomable in the traditional healthcare sector.

Urgent care

One of the fastest-growing segments of health care is urgent care. Urgent care is now an estimated \$14.5 billion business made up of walk-in clinics threatening the provider base. While some states require clinics to be licensed, most do not. It is unclear whether such urgent care centers offer better or worse care than other providers. But some family physicians who stand to lose business speculate that patients are trading quality for convenience. Large chains with powerful, national brands are being built across the country to serve the newly insured or those who can not deal with ER wait times or wait until regular doctor’s hours are available.



VA and DoD

Through collaborative initiatives to improve access, quality, and cost-effectiveness of care, while also reducing duplication between programs, the VA and DoD are making extraordinary changes. The system is broken and the process is presently being overhauled. This is very worth of study and a model to watch.



The Providers

Ancillary Care



Ancillary care refers to the wide range of healthcare services provided to support the work of a primary physician. Ancillary care is currently one of the fastest growing sectors of healthcare, representing nearly 30% of medical spending today. With today's rising healthcare costs, ancillary providers are frequently a prudent and cost-saving alternative to outpatient hospital and physician services. Classified into three categories as follows:

Diagnostic services: laboratory tests, radiology, genetic testing, diagnostic imaging, and more.

Therapeutic services: range from rehabilitation to physical and occupational therapy, massage, chiropractic services, and speech therapy.

Custodial services: hospice care and long-term acute care to nursing facilities and urgent care.

Behavioral Health

Supporting the adoption and exchange of health information among behavioral health providers is top of list for government and regulatory agencies. To improve patient care outcomes, understanding the whole picture is in the best interest of each provider and the patient. In the near term, the governmental goals set forth are:

1. Facilitate adoption of national clinical data exchange standards for behavioral health, especially in the areas of substance abuse treatment and recovery.
2. Facilitate adoption of standardized privacy and confidentiality policy, including consent management, with patient data segmentation; and
3. Facilitate the creation of exemplar projects that use national data standards to demonstrate the use of current behavioral health best practices and standard data collection.

The Healthcare Consumer



The importance and influence of the consumer should not be underestimated in this new century of healthcare. Patients are taking charge of their healthcare in ways that would have never been imagined, even a few years ago. The traditional systems are being challenged to adjust towards the patient empowerment

while still providing the best care. Providers are also meeting the patients where the patients are obtaining their information. There was a time when the majority of information was physician-focused. Now, people get information from multiple sources, like the Internet and from friends and family. (Physicians, of course, are still a main resource).

From the perspective of the healthcare provider, population health or health outcomes of a group of individuals, has become a large mission of hospitals. Identifying and figuring out how to serve the populace and target certain goals is the role of IT, the business analyst and marketing.

These targeted groups are often geographic populations. The objective is to transform the healthcare organization's value. By tapping the new and unprecedented amounts of data across populations and drill down to levels of the individuals, will bring deeper insight, personalization and earlier interventions.

As population health becomes more fine tuned, new business models and efficiencies will be pulled into the forefront. The expectations are:

- High quality health care.
- Cost efficiencies.
- Customer loyalty with providers and patients.
- Cost management.
- New levels of collaboration between medical professionals.



Patient Engagement Basics



Meet your patients where they are. It's not news to say the patient portal isn't enough. It's probably not news either to state that 91% of patients own a mobile phone. As a result, there is one centralized channel to connect with patients and this is a tremendous opportunity to engage with them as consumers.

Ensure access to information — any time, any place, any device. The patient's mobility and ability to facilitate asynchronous communication means the opportunity to make information available to patients in new ways.

Engage your care team. Your patients should never feel alone. Not in the age of lightening speed communications. As a trusted provider, that trust comes with a cost. As we move closer into a demand-side environment, leveraging that trust will be essential to successful patient engagement initiatives. Involve the entire care team in strategic planning and make sure they understand all the patient-facing initiatives.

“Please send me my records.” It's the ultimate trigger that the patient is leaving the practice. Is there any plan in mind to attempt to bring them back? To understand why they are leaving? Could it be more than an insurance policy switch?

“You should see my doctor?” Referrals from a friend are one of the most powerful business growth strategies for many providers. Have you put into place patient engagement and referral strategies?

Patient Engagement 2.0

Leadership. A future that centers on patients will require leadership to be actively invested in developing and implementing patient-centered strategies.

Treat your patients like customers. Today, this concept is likely somewhat foreign to people at every level of the organization, but to transition into a future of patient-centered health, start making the shift today.

Balance and center technology. Leverage patient's existing engagement *with* technology as a platform. BYOD security, accessibility and ease of use, user experience, must be the main focus.



Consider health literacy to be the degree to which all individuals have the capacity to obtain, process, and understand basic health information and services. The definition of *literacy* has changed but there was a time

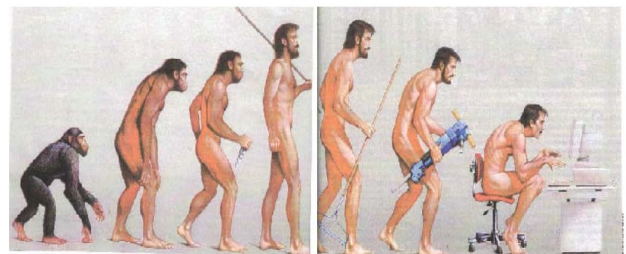
when ‘*making your mark*’ with an ‘X’ meant you were literate and understood what you were signing. Health literacy and literacy are joined in that a person who has good literacy skills may be better able to understand health information. But not everyone is able to understand. Health IT may be the solution to translate the difficult to simpler terms.

Language translation is a barrier for many patients and technology can ease the user experience for those not necessarily fluent in English as their first language.

Engage the patients and families to improve care transitions. Patient-centered care communities include a collaboration with patients and families, physicians and caregivers. It encourages and supports patients and families to be active participants in their care and decision-making at whatever level they feel comfortable.

The patient advisory board. Patients and families need to voice their opinions and assigning a board of advisors is one of the most powerful ways to ensure opinions are heard, shared and the experiences are told.

Homo Informaticus



(Picture adapted from “Der Spiegel 5/2006

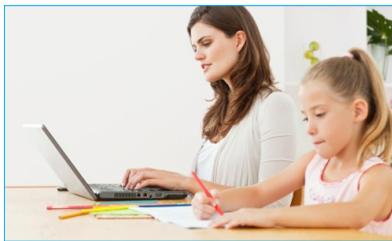
“Not all patients are the same, so there are many different ways to engage them, depending on a patient's skills and interests.” Robert Wood Johnson Foundation, 3-14.



Patient Engagement 2.0

The precursors are in place: the timing of systematic changes are queued; the engines are tuned up and ready and some of the major hospital institutions are lining up and preparing to be well-positioned in the groundswell of consumer patient engagement.

Hospital enterprises, many of which have dozens of centers, thousands of employees and many more patients, know that access to information is one of the most important services they can provide to enhance patient-centered care. Clinically proven with evidence-based quantitative research, care givers all around the globe understand that if the patient has greater involvement in their own healthcare, it does contribute to improve health outcomes. Information technologies can support this engagement by making information, communication, education, (pharma, care and referral), support (clinical and peer), and reminders more accessible. Patients want to be engaged in their healthcare decision-making process, and those who are engaged as decision-makers in their care tend to be healthier and have better outcomes.



In marketing for consumer packaged goods, females are the key decision maker and the *all-knowing force* inside the household directing the kids and family's health scenarios, budget and most daily buying decisions. Technology plays a huge role in their everyday health and life, making things accessible, quicker and easier. Community support groups, social media platforms and other online communities are increasingly making their place on the list of essential social outlets.

Skepticism runs high with this group. They take little issue with questioning the moral and ethical premise of big business and healthcare companies. The relationship with their physicians is essential and must revolve around trust.



HCAHPS - Competitive Customer Service

For hospitals and its customer service initiatives, HCAHPS has affected the course of payment to hospitals. Further, CMS has come down heavily upon readmissions, treatment and care transition

HCAHPS or Hospital Consumer Assessment of Healthcare Providers and Systems specifically is a

standardized survey of hospital patients that captures patients' unique perspectives on hospital care for the purpose of providing the public with comparable information on hospital quality. If the randomized survey gets a negative review (less than perfect), it may be financially penalized by public insurance payers (Medicare/Medicaid).

It is argues that the survey is ambiguous and does not take into account clinical care as much as it takes into account hospitality of care. On the other hand, the survey is to revolve around the strength of patient centered care and the attitude and perception of the patient regarding customer service.



The Patient Centered Medical Home

is a care delivery model whereby patient treatment is coordinated through the primary care physician. It is

a team-based model of care led by a personal physician who provides continuous and coordinated care throughout a patient's lifetime to maximize health outcomes. The objective is to have a centralized setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient's family. Remote care plays a big role in this so user experience of technical tools may affect its the success.



Patient Engagement 2.0

The Patient Pathway

One of the better definitions of patient engagement is from The Center for Advancing Health: patient engagement are the “actions individuals must take to obtain the greatest benefit from the healthcare services available to them.” This definition focuses on behaviors of people themselves rather than actions of professionals or institutional policies.

Patient engagement is a key component in managing health and wellness. The influence of the patient to take the responsibility upon their own lifestyle and their own behaviors towards positive health outcome has five times the influence of the efforts of providers or health plans. It is in the best interest to influence these self-directed positive behaviors and medical providers have the opportunity to follow this through.

Although considered a sub-standard tool by many in the clinical profession to acquire medical information in general, the internet is an automatic ‘go-to’ resource of data and education for the individual who suffers from an ailment. Rather than push it away and deny its usage and extraordinary power, healthcare marketing has the opportunity to deliver education while meeting the patient during their progressive journey to recovery. The internet, and specifically inbound marketing, allows the medical organizations to touch a patient from the first stages of awareness through the process of finding and locating a provider with possible solutions to the follow through and ongoing self-management.

There are touch points that are well documented as to what to say, when to say it and how to present it per each milestone of patient encounter. Healthcare Technical Solutions coined the phrase “The Patient Pathway.”

Three opportunities exist (among many) to engage patients for better results.

1. Patients within the episode of care—aligning the patient as part of the care team, engaging with them early in the episode and in the hospital, preventing readmissions and providing them with tools for self-care.
2. Patients with chronic conditions—addressing the segments of the population that generate the highest cost, yet are often motivated and open to patient engagement, by providing the tools for ongoing care management in the home.
3. Healthy patients—engaging them around wellness and health maintenance and promoting fitness and positive behaviors to prevent health episodes and cost.

DIY-Self Service Care



On the government and regulatory front, the Affordable Care Act (ACA), The HITECH Act’s MU incentives (noted above), quality reporting, and the Blue Button each are driving the growth of PHIT. Adoption of digital technologies has gone main-

stream in the U.S., and self-service behaviors are coming to health care. The catalysts for change is activated. Engaged consumers, who are motivated to maintain a healthy state, manage chronic conditions or alter lifestyle choices upon a new diagnosis are stepping up and into managing their own care. Additional catalysts include increased financial burdens put on the patient and the demand for greater transparency on price and quality of health services.



Patient Engagement 2.0



Personal health information technology, (PHIT), can be the linchpin for health providers moving into value-based care. This model shifts financial incentives and pushes health care out to

patients and their caregivers in their communities, Patients' and caregivers' increased adoption of PHIT can help providers alleviate growing pressures on practice economics and work / life balance.

Early adopting consumers across various patient personae are currently using PHIT. Consumers appreciate the idea of remote health monitoring and 89% of physicians would prescribe a mobile health app to patients. Patients continue to trust their personal physicians above most other professionals, following nurses and pharmacists for recommendations. These professionals all play a crucial role in recommending ("prescribing") PHIT to patients and caregivers.

To help smart PHIT design, consider the various examples of archetypes of people who could benefit from such tools:

- Sandwich-generation caregiver caught in the midst of caring for his/her children and aging parents.
- Medication adherence tool for parent or child.
- Personal emergency response system for parents.
- Asthma therapy reminder text message for children.
- Food allergy mobile app.
- More convenient and lower-cost health encounters.
- Clinical trial awareness.
- Real time access to health data.
- Improve their experience of interacting with the healthcare system and providers.
- Shared support.
- Manage medical financial tools.

Changing Behaviors



The concept of influencing behavior is a blend of the "-ology sciences." Social marketers are expert in the field. It is their job to influence and change behavior.

Persuasion techniques and changing long term behavior is typically a process of small steps towards a bigger goal. Here are some ways to approach a behavioral-shift type marketing campaign.

- Understand social norms and emotional triggers that drive your audience.
- Frame issues in a way that resonates with your audience.
- Be aware of barriers to behavior change and try to overcome them.
- Make participation fun, easy and popular.
- Reach people with the right message and when they are most in need.



Patient Engagement 2.0

Patient Generated Health Data (PGHD)

“Healthcare providers will need to weave digital capabilities into the core of their business model so that it becomes embedded in everything they do.”

Kaveh Safavi, M.D., J.D.,
Accenture Global Health

As information is created, recorded and/or collected by or from patients to help address health concerns, this data becomes increasingly more relevant to completing the whole wellness picture. The data including health history, treatment history, biometric data, symptoms and lifestyle choices but it could also include nutritional choices, environmental,

work, stress levels, socio-economics, and living situations, etc. The information is not collected from the clinical side as it is patient generated. It is up to the patient to decide what is collected and then what is shared.

Meaningful Use Stage 3 is the policy enforcer driving the initiation of PGHD formally into the clinical setting. As recent as 2016, the federal government began drawing out the framework for collecting and using PGHD in both research and clinical care. This will create standards to interoperability and learn best pathway to bring data in the medical record. And use in research. Then the best use for data to improve patient care and improve research outcomes.

Many government programs and initiatives continue to drive these programs: MACRA’s Merit-based Incentive Payments System (MIPS); Alternative Payment Models (APMs); CMS’ bundled payments programs, like Comprehensive Care for Joint Replacement (CJR); CMS’ Chronic Care Management fee-for-service billing.

More than 72% of adults now have a smartphone which makes it much easier to stay connected. The Apps are abundant in supply. To turn the corner more fully, PGHD must prove its value.

The studies are just starting to develop. However, to delineate between useful information and information overload is a slippery slope. Much can be gleaned by such research. The obvious areas are: if the patient is taking their medications or How the patient is doing between visits, and so on. Prospectively, what may become clearer over time is the correlation between lifestyle and disease and biocognitive sciences.

Precision Medicine

Precision medicine is about individualized care. The new medical model outlook proposes true customization of healthcare, with medical decisions, practices, and / or products / medications tailored to the individual patient. It is an emerging approach for disease treatment and prevention that includes variability in genes, environment, and lifestyle for each person.

\$215 million has been put into programs from the Federal government in 2016 to support the initiative. The monies are distributed as such: NIH will build a \$130 million national, large-scale research participant group. \$70 million is allocated to the National Cancer Institute to lead efforts in cancer genomics.

The projects are moving quickly to build the infrastructure so that participants can begin enrolling in late 2016. The far reaching challenge to meet these goals lies inside its objective: how to we make this whopper of a data mining project possible with the massive amounts of data collected and ultimately generating useful information?

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